Introduction

A Kaleidoscope of Care: Responding to the Challenges of HIV and Substance Use
Second Edition

Background

The curriculum, *A Kaleidoscope of Care: Responding to the Challenges of HIV and Substance Use* is a product of a larger initiative spanning four years and funded by the Health Resources and Services Administration's HIV/AIDS Bureau as a Special Project of National Significance (SPNS). The purpose of the SPNS initiative was to understand the state-of-the-art in serving HIV-infected substance users nationwide; to develop performance guidelines for HIV medical care, substance abuse treatment, case management and outreach providers serving HIV-infected substance users; to identify innovative program models and strategies to serve this population; and to develop and implement a training curriculum. Visit the website http://hdwg.org to view products related to the overall initiative.

The Training Curriculum

The Original Version

The Health and Disability Working Group (HDWG) of the Boston University School of Public Health, working with a group of content and training experts, developed the original version of *A Kaleidoscope of Care* as a cross-disciplinary training curriculum to increase knowledge and awareness of the relationship between HIV infection and substance use. The training curriculum was designed for HIV medical and substance abuse treatment providers as a Training of Trainers (TOT), with the goal of enhancing their ability to provide interdisciplinary care to their common clients, HIV-infected substance users.

The original version of *A Kaleidoscope of Care* was delivered and evaluated by a diverse national and interdisciplinary audience of sixty-two participants in January, 2003. Over a two and a half day period, participants attended three didactic sessions and two of the training modules. The curriculum is comprised of four core modules including:

- Health Promotion and Adherence
- Incorporating Harm Reduction into Our Work
- Interdisciplinary Care
- Strategies for Engagement and Retention in Care

In the seven months following the TOT, thirty-six participants replicated selected components of the curriculum by conducting trainings in their local communities of six states and Puerto Rico. Over three hundred people from interdisciplinary backgrounds in substance abuse treatment, clinical care, mental health, corrections, domestic violence, outreach, housing and faith-based programs attended and evaluated these local training sessions. The *Kaleidoscope of Care* curriculum was evaluated as having equipped both the national and local training participants

with overall increased knowledge and skills to strengthen their capacity to be more responsive in caring for their HIV-infected and substance using clients.

The Second Edition – This Version

With the intent and purpose of making the core curriculum modules as accessible and usable as possible, the modules have been revised and are contained herewith.

- II – Strategies for Engagement and Retention in Care
- III – Incorporating Harm Reduction into Our Work
- IV – Health Promotion and Adherence (three versions)
- V – Interdisciplinary Care
- Appendix A: Trainers' Tips

Following the evaluation of the original curriculum, this second edition includes:

- Adjusted time allocations to present information and conduct exercises and activities;
- Suggestions for use of the materials in shorter blocks of time;
- The identification of Trainers Tips and Teach Back opportunities when used as a TOT;
- The Health Promotion and Adherence module has been broken down into three versions; one as a TOT, and two suggested replication trainings – one for a primary audience of clinicians, and a second for a mixed audience of clinicians and non-clinicians; and
- References and resource materials, including websites to obtain relevant and current information.

Use of the Curriculum

The goal of producing this version of the cross-disciplinary curriculum is to make it widely available and promote its use by individuals and organizations involved in the care of HIV-infected substance users. All users of the curriculum are required to acknowledge the source of the curriculum materials with proper citation as follows:

"Materials used were taken from the curriculum, *A Kaleidoscope of Care: Responding to the Challenges of HIV and Substance Use*, funded by a grant from the Health Resources and Services Administration, U.S. Department of Human Services, grant #4H97HA001580201 and developed by the Health and Disability Working Group at the Boston University School of Public Health."

There is no prescribed order to the modules, and users are encouraged to select and organize modules and activities/presentations for trainings based on the needs of the intended audience. The activities and exercises build upon participants' existing knowledge and enhance this knowledge through interaction with individuals from other disciplines. You will find suggestions for cross use of module segments that relate to one another within the modules.

Case studies are used in several modules to illustrate key points or highlight issues that are particularly challenging for providers. Clients presented in these case studies are composites drawn from experiences of the curriculum development team. In adapting this curriculum, it is important for trainers to adapt these case studies to local conditions with examples from their own local practices.

Important Guidance

Presenting training materials to a cross-disciplinary audience is challenging and requires an appreciation and understanding of the principles of adult learning and the ability to translate the principles into practice when training. The modules incorporate a range of learning styles using visual slides and handouts, didactic presentations, interactive exercises and activities. Two key lessons learned from trainers who have used this curriculum are the importance of preparing for trainings in order that the materials meet the needs and engage the audience and that the trainer is adept in strong facilitation skills and conflict resolution to accommodate the diverse learning styles, backgrounds and expectations of the intended cross-disciplinary audience.

In modifying the modules for this second edition, efforts were made to better incorporate and strengthen trainers' facilitation of the module contents and materials. In addition to the original Appendix C: Trainers' Tips, we are including a set of tools to this Introduction as Attachments A – C to assist trainers in planning training sessions. They are:

A. Kaleidoscope Trainer Checklist (Page v)
B. Pre-Training Needs Assessment (Page vii)
C. Trainers Planning Form (Page viii)

Acknowledgements

This, the revised version of the curriculum, would not have been possible without the involvement and expertise of the following:

The Health Resources and Services Administration, U.S. Department of Human Services, with funding support through grant #4H97HA001580201. A special thank you for the support and guidance of the following individuals from HRSA:

Steve Young, PhD
Laura Cheever, MD
Deborah Willis-Fillinger

The National Trainers, for whom both versions of the curriculum have greatly benefited and received such resoundingly successful evaluation. Their continuous dedication to the improvement of the curriculum was remarkable.

Chinazo Cunningham, MD
Dawn Fukuda, MSPH
Laura Gillis, MS, RN

Jim Hogan
Ken Kraybill, MSW

The Local Trainers, who participated in the national TOT as trainees and then returned to their respective local communities, to plan, conduct and evaluate local replication trainings. In addition, these representative local trainers offered their time and hard work to modify the curriculum from their experience as trainees and trainers with a commitment to make it as widely available and usable as possible.

Bob Baxter, MPA
Donna Beers, RN
Lynell Clancey
Hermes Garcia, MD., M.P.H.
Michael Graham, MA
Wendall Hicks
Eric Homer
Hurley Merical
Angel Ribo, PA-C, MPAS
Luis Segundo, MD

The Health and Disability Working Group Project Team, responsible for organizing, planning and finalizing this second edition of the curriculum.

Carol Tobias, MMHS
Kate Brown
Serena Rajabiun, MPH
Kate Tierney
Rowland Yancey
Tom Mackie

Additional Credits Deserved for Involvement in the Original Version of the Curriculum, used at the national TOT and subsequently in local replication trainings, include:

Dwight Clark, MBA
Glen Fischer
Mindy Domb
Mari-Lynn Drainoni, PhD
Regina Murphy
Irene Shui
Deborah Allen, Sc.D.

For Further Information, Contact:

Health and Disability Working Group
374 Congress Street, Suite 502
Boston, MA 02210
(617) 426-4447

Attachment A
KALEIDOSCOPE TRAINER CHECKLIST

Before the event, have you (or the organizers of the training):	YES	N/A
Conducted a Pre-Training Needs Assessment? (Attachment B)		
Completed a Training Planning Form? (Attachment C)		
Prepared & Provided a Training Title, Description, and Bio?		
Arranged for the set-up and familiarized yourself with the training room?		
Arranged for any special participant accommodations?		
Developed objectives and a corresponding evaluation form?		
Arranged for the equipment you need and prepared to operate it?		
Equipment and Supplies Needed:	YES	N/A
➢ Overhead or LCD projector and screen		
➢ Overhead projector transparencies or PowerPoint slides, PC floppy discs, etc.		
➢ Flip charts and stands		
➢ Marker pens		
➢ Video player, tapes, and monitor		
➢ Extension cord for inaccessible plug sockets		
➢ Microphone/Podium		
➢ Spare pens, paper, name tags, and post-its		
➢ Evaluation Forms		
➢ Clock/Time Keeping Device		
Have back up materials in different formats (for example: have flipchart *and* overhead available)?		
Arranged Handouts, Overheads, and/or Flipcharts for ease of use during training?		
Prepared for back-up activities with corresponding materials?		
Rehearsed Your Presentation?		
Rehearsed Your Presentation Again?		
On the day of and throughout the training, will you:	YES	N/A
Arrive early enough to personally check that the equipment and room are satisfactory?		
Arrange the room in the most comfortable and effective way, laying out any materials before participants arrive?		
Tell students where restrooms, breaks and food are located?		
Post a large sheet of newsprint near the front of the room and write “Parking Lot” reminder list?		
Open with a welcome and greeting?		

Provide a rapport-building "icebreaker exercise"?		
Provide an opportunity for participants to share what they know/want to know about the training topic(s)?		
Relate training goals and objectives to participant needs?		
Gain agreement on "ground rules" with participants?		
Provide knowledge at participants level?		
Use humor and share anecdotes when they are appropriate?		
Communicate confidently and enthusiastically?		
Keep a neutral tone and moderate your voice and speed?		
Keep the group moving forward and treat participants as professionals?		
Use names when asking or responding to a question?		
Encourage involvement. Repeat questions asked by participants, and probe for clarity?		
Continuously gage participants' needs and adjust accordingly?		
Handle difficult situations?		
Review and relate to information covered previously?		
Provide lists of local resources, websites and referral information?		
Provide an opportunity for the exchange of contact information?		
Thank students for attending?		
Collect all required documentation from the participants?		
After the event, have you:	YES	N/A
Returned the room to its original layout?		
Evaluate! Read and collate the evaluation responses?		
Critically reflected on ways to improve the training?		
Followed up on participant questions you could not answer?		

Attachment B
PRE-TRAINING NEEDS ASSESSMENT TOOL

Purpose of Conducting a Pre-Training Needs Assessment:

- For learning to take place, the learner must be actively involved in the experience. Using a pre-training needs assessment engages the learners prior to the actual learning experience.
- Adults relate current learning to what they already know and Trainers benefit from knowing the background of their participants.
- Learners benefit from an opportunity to identify their own learning needs.

To gather relevant information, simply ask the following questions, and any others you would find useful, of the individual participants who will attend your training presentation. Individual input can be collected in the most convenient format (in-person, phone, email or via fax).

How long have you worked in the field of _____?

What is the highest educational level you completed?

What is the title of your job and what are the three most important tasks that you do in your job?

What do you hope to learn from the training?

What are the ways you learn best?

Are there any accommodations that would make a training session most comfortable for you?

Attachment C
TRAINER'S PLANNING FORM

Purpose of Using a Planning Form:

After conducting a Pre-Training Needs Assessment of the training participants, this form is useful to establish the goals, objectives and initial planning and development of a training session. Having thought through and answered all of the questions below will help to ensure a successful training!

1) **Who is the audience? Compile the Results of Pre-Training Participant Needs Assessment.**

2) **Determine the Overall Training Goals by answering the question:**
   As a result of this training, participants will …..

3) **Develop Overall Learning Objectives by answering the following:**
   In order to achieve the previously determined overall training goals; participants will need:
   To do what?
   To know or understand what?
   Possess Attitude(s) of?

4) **What are the specific content areas for the training?**

5) **How will the audience learn the content? What sections of the curriculum to you need and want to use to achieve the goals and objectives?**

6) **What modifications to the curriculum need to be made?**

7) **When is the training to be held? (Date, time, and length of session)**

8) **Where will it be held? Describe the location and environment for the session, including room set-up.**

9) **Structure the training? (Detail your agenda and training plan with timeframes to include breaks, meals and evaluation.)**

10) **What are the training supports, materials, and supplies needed and how will they be arranged for?**

Module II: Strategies for Engagement and Retention in Care

Table of Contents

Introduction

Purpose

This module is designed to provide participants with knowledge and strategies to engage and retain HIV-infected substance users in care. We will examine the environmental, personal, and cultural issues that impact engagement and retention in care. We also will provide a basic orientation to the skills that providers can use to motivate change in HIV-infected substance users and to help them access services that may improve their health. Finally, we will discuss strategies for enhancing provider well being in the workplace. The curriculum targets all persons who provide services to HIV-infected substance users, including medical providers, social workers, substance abuse treatment and mental health providers, outreach workers, and program directors. It is designed as a train-the-trainer (TOT) curriculum so each person can select activities to present and build the knowledge and skills of their audience around engaging HIV-infected substance users in care.

The module has been revised and includes additional options for presenting materials or conducting an activity. Tips for improving your skills as a trainer/presenter have also been added along with a recommended outline for implementing a two-hour training program. We hope you find the materials useful to your work. Enjoy!

Summary of Resource Materials for module

- Handout II-25, "Self-Assessment Tool: Self-Care" (Page 87)
- Handout II-26, "Suggested Replication Trainings" (Page 91)
- Handout II-27, "Resources & References for further learning about Strategies to Engage HIV-Infected Substance Users in Care" (Page 92)
- Slides II-1 to II-29
- Newsprint
- Markers
- Additional References and Resources
- Index Cards
- Nametags
- Colored Post-it Notes
- TV and VCR
- Video: "Motivational Interviewing Tape C: Handling Resistance," recorded in 1998 by William R. Miller and Stephen Rollnick, and directed by Theresa B. Moyers. This videotape can be ordered at the following website: http://www.motivationalinterview.org/training/miorderform.pdf

Objectives

By the end of this module, participants will be able to do the following:

- Describe the environmental, social, personal, and cultural issues that impact an HIV-infected substance user's decision to engage in care and stay engaged
- Develop strategies and practice skills that can be used to build relationships with HIV-infected substance users and that can help them remain engaged in care
- Identify methods for keeping themselves engaged in a challenging environment
- Learn techniques for training and presenting the information to your audience

Session 1: Introduction and Icebreaker (15-20 minutes)

1) Begin the session by introducing yourself. Then go around the room and ask participants to introduce themselves. This will help to establish an effective learning environment so everyone will feel comfortable participating in conversation. Ask each participant to share something with the group. It should be a non-personal item. Suggestions include:

- Where do you work?
- Why you decided to come to this session today?
- How long have you been working with HIV-infected substance users?

2) Start off by doing one of the following two activities to help set the topic for discussion during the day:

- "Top Ten Reasons Why I missed My Dentist Appointment" or
- Engagement is… Retention is….

Top Ten Reasons Why I missed My Dentist Appointment

Purpose: To introduce the major themes of the module

Time: 15 minutes

Materials:

- Name tags
- Flipchart and colored markers
- Index cards

Instructor Notes

1. Break the larger group into smaller working groups of four or five persons each.

2. Give each working group a set of ten index cards and ask them to come up with their "top ten list" of reasons for missing a dentist appointment."

3. Ask each working group to list the reasons in order of most common to least common.

4. Once the working groups have finished listing their reasons, ask them to share their lists with the entire group.

5. Close this introductory activity by drawing out some of the common themes that emerged from each working group. These might include their beliefs, fears, or competing needs or priorities. For example, people might say they are afraid that the dentist will find out they had not been flossing as instructed.

6. Explain to the group that, during the next few hours, they will have the opportunity to explore some of these themes and learn ways to identify the reasons why HIV-infected substance users do or do not receive the care and services they need. Participants will also learn about strategies to bring people into care and keep them in care. The activities and presentations in this module will also help participants cope with the issues and challenges that can impede their capacity to work effectively with HIV-infected substance users.

Engagement Is . . . Retention Is . . .

Purpose: To have participants broadly and creatively define the concepts of engagement and retention as they relate to working with HIV-infected substance users

Time: Five to seven minutes

Materials: Flipchart and colored markers

Instructor Notes

1. In preparation for this activity, review the objective, and reflect on your own responses to the phrases "Engagement is . . ." and "Retention is . . ." as these relate to working with HIV-infected substance users. Consider how *engagement* activities tend to be more provider-initiated, while *retention* activities tend to be more mutual and collaborative.

2. Write the phrase "Engagement is . . ." on a sheet of flipchart paper. Ask participants to brainstorm aloud about what words, ideas, or metaphors come to mind when they respond to this phrase. Urge them to think broadly and creatively without being self-censoring. For example, people might respond in ways similar to the following. Engagement is:
    - An invitation to care
    - A first step toward reducing HIV transmission
    - Being a hospitable presence
    - Like a slow winding river
    - Planting seeds of hope
    - A process of two steps forward, one step backward
    - Like a roller-coaster ride
    - Challenging
    - Fulfilling
    - An exercise in patience

3. Repeat the same exercise with the phrase "Retention is . . ." Participants might respond in ways similar to the following. Retention is:
    - Helping people stay in treatment
    - A predictor of decreased drug use or HIV transmission
    - An obstacle course
    - Like tending a fragile garden
    - Accompanying people on their journey
    - Maintaining CD4 levels
    - A collaborative activity

4. Close the activity by noting the variety of ways we can think about these concepts. The intent of this module is to further explore what is involved in effectively engaging and retaining HIV-infected substance users in care.

Session 2: Being an Effective Trainer
(1 hour)

Objectives of the Session

- Learn techniques for planning and facilitating a training session
- Improve your skills for building a relationship with your audience
- Managing time in your training session/presentation

Materials:

- Handout II-1, "Pre-training Needs Assessment Tool"
- Handout II-2, "Training Planning Form"
- Handout II-3, "Facilitating Learning"
- Handout II-4, "Handling Difficult Decisions"
- Trainers' Tips, Training planning forms and checklists

Instructors Notes:

1) Read the section of Trainers' Tips in the curriculum. Start with a review of the pre-trainer's assessment tool. Talk about an appropriate time frame to begin training. This is usually 2-3 weeks before a training to contact your participants so you can know your audience. Share the Handout: *Training Planning Forms #1 and #2* with your group. Ask for suggestions for other types of information they might want to collect prior to designing the training.

2) Explain the use of the form. For example, this should be filled out as a planning tool for your session. It maybe filled out in partnership with the organization that has hired you for a session. Tell folks at the end of this training program, they will be filling out the form as a way to help plan for their replication session.

3) Review the *Trainers' Checklist*, which has tips for planning, ideas to keep in mind at the training and following the event.

4) Pass out the Handouts: *"Facilitating Learning"* and *"Handling difficult situations"*
Review the points on each handout. If possible, share a personal experience when you had a hard time managing the audience and ways that you tried to connect with the audience. Ask the participants to share examples and brainstorm other ideas to add to the handouts.

Handout II-1:
Pre-Training Needs Assessment Tool
Tool #1

Rationale for conducting pre-training needs assessment:

- For learning to take place, the learner must be actively involved in the experience – engage the learners prior to the actual learning experience.
- Adults relate current learning to what they already know. Trainers benefit from knowing the background of their participants.
- Learners benefit from an opportunity to identify their own learning needs.

To gather this information, conduct a pre-training needs assessment with the intended training participants by simply asking the following questions. Conduct individual interviews (in-person or over the phone with participants or create a form to gather this information via email or hard copy.

How long have you worked in the field of _____?

What is the highest educational level you completed?

What is the title of your job and what are the three most important tasks that you do in your job?

Please rank your interest in the following topic areas (a prepared list).

Not at all interested Somewhat interested Very interested

What do you hope to learn from the training?

What are the ways you learn best? (rank these?)
Seeing _____ Hearing _____ Saying ____ Doing _____

Are there any accommodations that would make a training session most comfortable for you?

Handout II-2

Training Planning Form

Tool #2

After conducting a Pre-Training Needs Assessment of the training participants, this form can be used to establish the objectives and initial planning of a training session. Follow the steps below that lead to implementing a successful training day!

1) **<u>Who is the audience</u>? Compile the Results of Pre-Training Participant Needs Assessment**

2) **Determine the <u>Overall Training Goals</u> by answering the question:**
   As a result of this training, participants will …..

3) **Develop <u>Overall Learning Objectives</u> by answering the following:**
   In order to achieve the previously determined overall training goals; participants will need:
   To do what?
   To know or understand what?
   Possess Attitude(s) of?

4) **What are the specific content areas for the training?**

5) **How will the audience learn the content? What sections of the curriculum do you need and want to use to achieve the goals and objectives?**

6) **What modifications to the curriculum need to be made?**

7) **When is the training to be held? Date, time, and length of session.**

8) **Where will it be held? Describe the location and environment for the session, including room set-up.**

9) **Structure the training? Detail your agenda and training plan with timeframes to include breaks, meals and evaluation.**

10) **What are the training supports, materials, and supplies needed and how will they be arranged for?**

Handout II-3:
Facilitating Learning

- Remember you are responsible to manage the content, keep the group moving forward, and to treat participants as professionals.

- Try to remember people's names and use names when you ask or respond to a question. Nametags can be helpful in this regard.

- Provide pipe cleaners, small toys, or something for kinesthetic learners – people who learn more readily when they have something to do with their hands.

- Interact freely with participants and encourage involvement. Repeat questions so you can understand what is being asked and so all the group can hear. Probe for issues if something is not clear.

- Be responsive to participants. Use participant questions as cues to what they need. Be ready to adjust your presentation as needed. Ask participants for their ideas.

- Try to have resources available for participants who want to continue to learn or access information on the topic. Websites are easy to use and many people have access to the Internet. In advance of the training, prepare a list of websites and written resources with information on your topic to share with participants. Information referrals can increase the potential of training and make a continuing contribution to the lives of the participants.

Handout II-4
Handling difficult situations:

- There will be situations where "talkers" in the group do not listen to others or have their own agenda. Acknowledge their ideas and if they are not relevant to the discussion at hand, reply "that is a good point, but we are focusing on this issue now and perhaps we can address that issue during break or at the end of the session."

- There may be questions that challenge the trainer in emotional ways. Try to be prepared and think through what these questions might be and what might be some responses that help to keep the training on track.

- There may be individuals who do not want to be there. Provide something for the participants such as pads and pens for drawing that can keep these people busy without disrupting the group. If a person is disruptive, give them the choice to leave because no one is forcing a participant to learn.

- If you have a group with widely varied skill levels it can be difficult to design a training that will meet all participant needs. Through interaction and encouraging dialogue among participants everyone can learn from each other. Start the training by acknowledging the ranges of skills and knowledge but establishing ground rules that make clear that all ideas and questions are respected.

- There are times when you may need to step out of the curriculum. An exercise may go wrong or a topic may spur an emotional debate. Try to be able to read your audience and adjust the training to fit the needs of participants.

Session 3: Brief Overview of the Engagement and Retention Module (30 minutes)

Instructor's Notes;

As a train-the-trainer (TOT), remind the participants that Kaleidoscope of Care provides a menu of options for presenting materials to an audience. Review the section on Trainers' tips briefly and then walk participants through the objectives of the module, description of the 3 major sections of the module:

1) What Brings HIV-Infected Substance Users into Care
2) Interpersonal Skills to Enhance Engagement and Retention in Care
3) Keeping Ourselves in Engaged

Review the objectives of each session. Talk about how the module is set up as a menu for each presenter/trainer to pick and choose activities based on the desired learning objectives of the intended audiences. Refer to the reference section and technical resource list for participants to contact for additional information or assistance.

Session 4: Launching the Topics (7 hours)

Without conducting every activity, briefly review the objectives of each section and activity. You may choose to implement some activities with the group. Be sure to review the objectives, handouts, and suggestions for presenting the material to the group.

Section 1: What Brings HIV-Infected Substance Users Into Care?

Objectives of the Session

By the end of the session, participants will be able to:

- Identify some of the reasons why HIV-infected substance users may or may not be in care and the challenges to working with this population
- Name two methods that service providers can use to address the environmental and structural issues in their agencies and thereby enhance engagement and retention in care
- Name at least two or three methods for working effectively in the community to improve access to and use of services

Instructor's Notes:

1) Review the objectives of the section.
2) Describe the menu of activities highlighting information that could be used as part of a presentation to an audience and activities that could be done as small group exercise. Explain the use of the symbols:

 Describes a group exercise for this activity

 Describes material that could be used for a presentation to an audience.

3) For slide presentations, review the content of the slides then give a demonstration on how to use the slides as a teaching tool. Solicit ideas from the audience.
4) Review the references on websites for the audience about where to find information and demonstrations of programs to engage and retain HIV infected substance users in care.

Public Hearing 

Purpose: To identify barriers to health care from the operational, provider, and client points of view

Time: 60 minutes

Materials

- Flipchart paper, colored markers, and tape
- Handout II-5, "Public Hearing Case Study"

Instructor Notes

1. Divide participants into four subgroups:
   - Substance users
   - Care providers (substance abuse treatment providers, counselors, case managers, doctors, nurses, and so forth)
   - Clinic administrative staff
   - Peer advocates

2. Distribute the case study and questions to the participants.

3. Hold the public hearing and have each subgroup give their testimony. You will be responsible for facilitating the meeting, monitoring the time, and keeping everyone on track. All members of each of the subgroups should share in providing the testimony. Allow time for an exchange of questions and answers between those making statements and the rest of the larger group.

4. Conclude the hearing by providing a brief summary of the main themes concerning why HIV-infected substance users may not seek services in this community.
   The list below suggests some highlights to focus on:
   - Structural reasons that may prevent people from accessing medical services
   - Issues concerned with following up on referrals
   - Attitudes that substance users face when they interact with providers and other members of the community
   - Personal barriers or cultural issues that affect the level of services that are given to and received by HIV-infected substance users

After the hearing, write the following words at the top of four blank sheets of flipchart paper: "Attitudes," "Structural/Environmental," "Personal/Cultural," and "Referral/Follow-Up." Group the issues and barriers identified by the participants into the appropriate categories. (Be sure to ask the participants for their opinions about the categories under which their responses should be placed.) These four sheets should be posted in locations where the participants will be able to see them as they complete the other activities in this module.

Handout II-5

Public Hearing Case Study

The county's department of health, which funds many of your clinic services for HIV-infected persons, has asked you to report on your patient retention rate and develop a quality improvement initiative to improve this rate.

Specifically, your funding agency wants to know how many of your current HIV-infected patients have had one visit per quarter in the past year. Your program director or data manager has run the numbers, and they don't look very good. During the last year, one-third of your new patients who came in for their initial intake and blood draws never came back for the results. Of the remaining two-thirds of the new clinic patients, less than half had one visit per quarter. You are involved in other quality improvement activities to look at your performance around providing TB screens, conducting quarterly CD4 tests and viral loads, and prescribing antiretroviral treatment (ART) for eligible patients. On all of these measures, you are doing very well. In fact, you could be considered a model program.

However, the sample for the other quality improvement studies consists of patients who have been engaged in care for the past year. Now you are being asked a different kind of question. Who is coming into care and staying in care? The results are very different, and you clearly need to do something about this. When you take a look at the intakes and demographic profiles, you realize that some of these persons reported injection drug use (IDU) as a risk factor. You also know that other forms of substance abuse are highly prevalent in the community. The problem is, you are so busy seeing the patients who do come in and making sure they are getting the appropriate standard of care that there are few resources available for you to find and engage the people who don't come in.

Your county health department has convened a public hearing to present the results of the countywide and provider-specific data on patient retention and to obtain information and feedback about strategies to improve engagement and retention.

Questions for the Working Groups

Substance users: Address why people don't come back after their first visit, or don't adhere to the standard of one visit per quarter. Here are some specific questions for you to consider:

- What are some of the attitudes you face that prevent you from getting care?
- How does the use of drugs affect your adherence with treatment?
- What aspects of clinic operations help you get care?
- What aspects of clinic operations keep you from getting care?

Care providers: Address why your patients have problems staying in medical care after their first visit. Here are some specific questions for you to consider:

- What policies has your clinic adopted to help substance users access care?
- What clinic policies prevent or hinder access to care?
- Are there interpersonal relationship issues among clinic staff that either promote or hinder access to care?

- How has the issue of drug use interfered with your clinic's efforts to engage patients and retain them in care?

Clinic administrative staff: Here are some specific questions for you to consider:

- What are the problems with your clinic?
- Why do you think some people don't come back for care?
- For the people who do return, what factors help them continue to access medical care?

Peer advocates: Here are some specific questions for you to consider:

- What policies or programs help people get the services they need?
- What policies or programs keep people from accessing services?
- Does stigma play a role in keeping people from accessing services?

The Effectiveness of Bringing HIV-Infected Substance Users Into Care

Purpose: To review the evidence of the effectiveness of programs which bring HIV-infected substance users into care

Time: 10 minutes

Materials

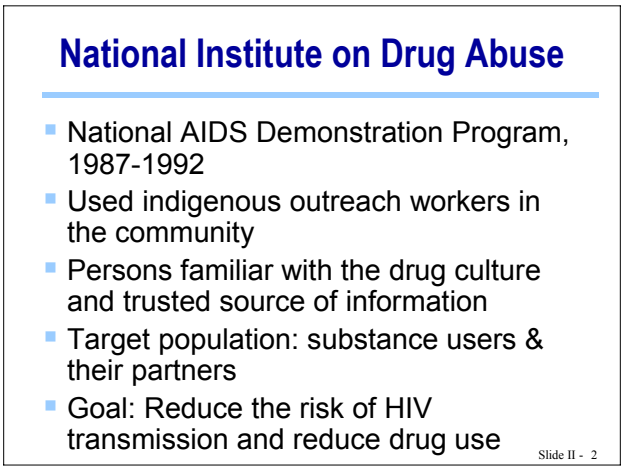
- Slide II-1, "Evidence-Based Success of Bringing HIV-Infected Substance Users Into Care"
- Slide II-2, "National Institute on Drug Abuse"
- Slide II-3, "National AIDS Demonstration Program Interventions"
- Slide II-4, "National AIDS Demonstration Program Results"
- Slide II-5, "Accessing Substance Abuse Treatment Programs"
- Slide II-6, "Accessing Substance Abuse Treatment Programs (continued)"
- Slide II-7, "Accessing Health Care Services"
- Slide II-8, "Accessing Health Care Services (continued)"
- Slide II-9, "Accessing Health Care Services (continued)"
- Slide II-10, "Accessing Health Care Services (continued)"
- Slide II-11, "Accessing Health Care Services (continued)"
- Slide II-12, "Improved Medical Adherence"

Instructor Notes

1. During this presentation, you will review and present Slides II-1 through II-12, which focus on evidence of bringing HIV-infected substance users into medical care and substance use treatment. Read through the slides and instructor notes to familiarize yourself with the material.

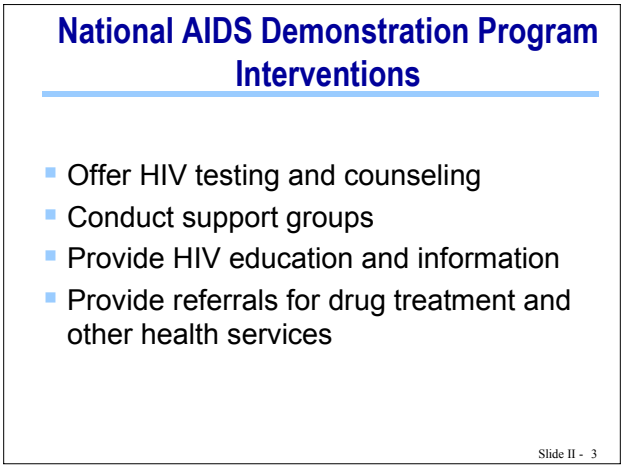
2. Point out that the studies in these slides address some of the key issues raised in the Public Hearing activity in Session 2. The following list has some points you may include:
   - The value of a having a person such as a peer or case manager help clients follow-up with appointments
   - The value of providing ancillary services, such as transportation or child care
   - The importance of frequent communication and contact with clients and their friends or families
   - The value of using peers to address some issues related to attitude and culture
3. Tell participants they may wish to pick and choose slides based on their needs of the audience and the topic of discuss. Also refer them to the resource list at the end of the module for additional resources to help them plan an activity.

4. Display Slide II-2, "National Institute on Drug Abuse."



5. Note that the National Institute on Drug Abuse (NIDA) has supported research to investigate HIV risk reduction among substance users. In 29 community demonstration projects, NIDA examined the effectiveness of community-based interventions for out-of-treatment drug users and their sexual partners.

The model programs selected people from the local community to serve as outreach workers to provide substance users with information and education about changing their behavior. In addition to being from the local community, the outreach workers were familiar with the drug culture and were seen as trusted sources of information.



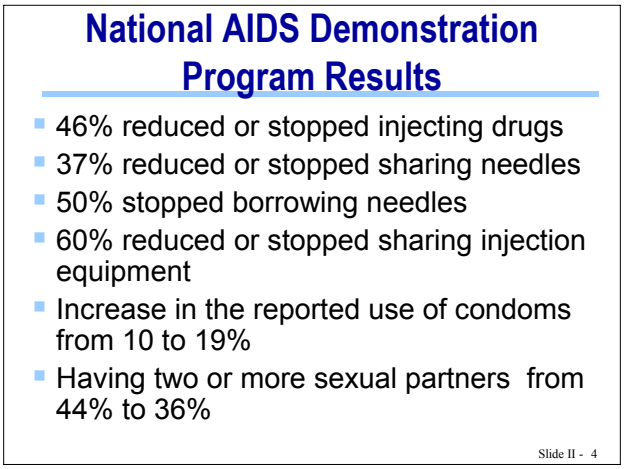
6. Display Slide II-3, "National AIDS Demonstration Program Interventions."

7. Note that the main objective of the study was to provide substance users and their partners with the means to change their risk behaviors and thereby reduce their HIV-related risks.

The services offered to substance users included HIV testing and counseling, and support groups to help people help themselves, share experiences in the drug culture, and reduce the risk of becoming infected with HIV.

Outreach workers also provided peers with information about HIV, its means of transmission, and ways to promote healthy behaviors. Since the outreach workers were seen as trusted sources from the community, they were effective in providing referrals to drug treatment and other health services to current users.

8. Display Slide II-4, "National AIDS Demonstration Program Results."



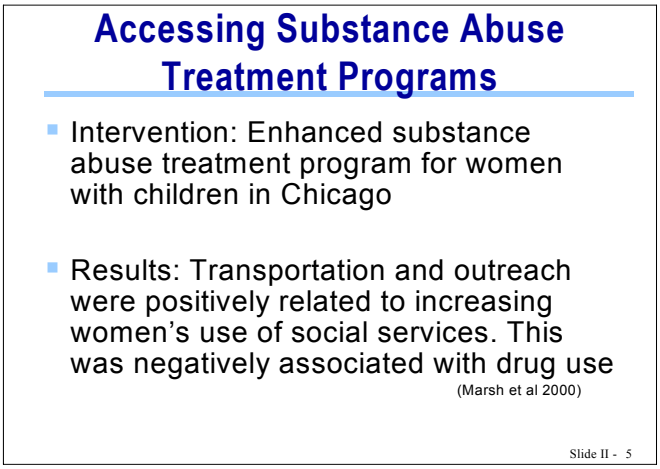
9. Note that the results from the NIDA study demonstrated that community-based programs are effective in reducing HIV-related risks. Here are some of the program highlights:
   - 46% reduced or stopped injecting drugs
   - 37% reduced or stopped sharing needles
   - 50% stopped borrowing needles

- 60% reduced or stopped sharing injection equipment

Although changes in sexual behaviors were less marked than changes in substance use behavior, they still showed improvement.

10. The results of this study led NIDA to develop a community-based outreach model that is currently being implemented with multiethnic, multiracial, male and female HIV-infected and uninfected substance users.

11. Display Slide II-5.

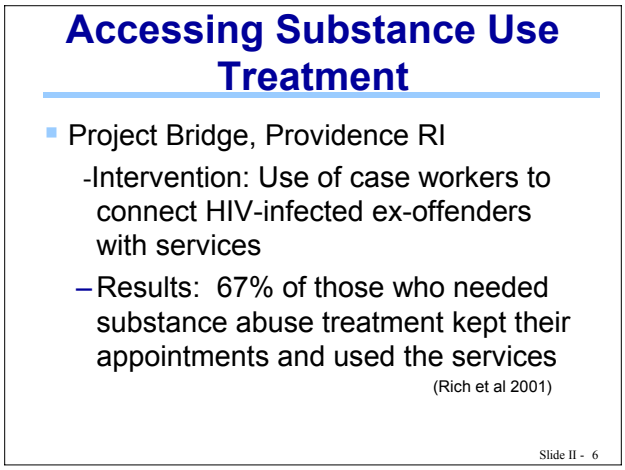


12. This study, conducted by University of Chicago, examined the effectiveness of an enhanced substance abuse treatment program for women with children.

Women with children were enrolled in an enhanced service intervention that included transportation, outreach, and childcare services in addition to substance abuse treatment. The study compared these women with a similar group enrolled in ordinary (non-enhanced) substance abuse treatment programs.

13. The study found that women in the enhanced intervention group were more likely to access services and reduce their drug use.

14. Display Slides II 6-11 and present the points drafted on the slides.



Accessing Health Care Services

- Intervention: Case managers in a HIV outpatient medical program in New Orleans working with HIV-infected women
- Results: Women with 4 or more case management visits per month were more likely to:
  - Take a protease inhibitor
  - Stay engaged in primary medical care

(Magnus et al 2001)

Slide II - 7

Accessing Health Care Services

Nursing LIGHT Program, Detroit, MI

- Intervention: Outreach and intensive case management program
  - Nurses coordinated care and provided support to HIV-infected women with substance use issues
  - Ancillary services, including transportation, support groups, and legal services were also available

(Anderson, 2001)

Slide II - 8

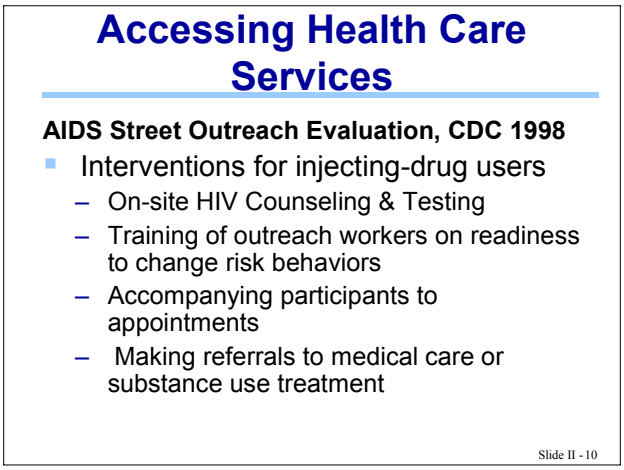
Accessing Health Care Services

Nursing LIGHT Program Detroit, MI

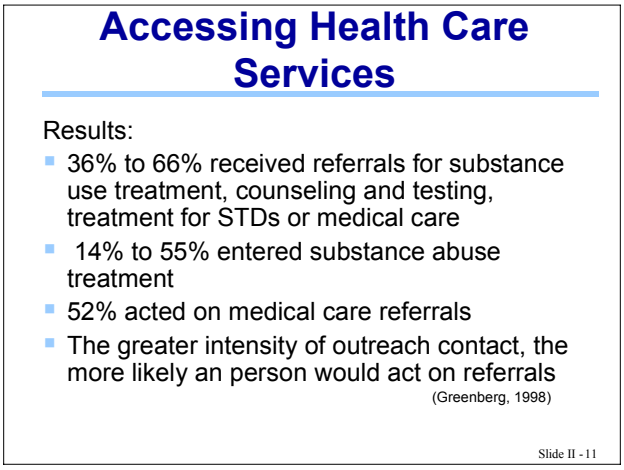
- Results
  - HIV infected women were more likely to follow-up on referrals for medical services and substance use treatment than non-participants in the program

(Anderson, 2001)

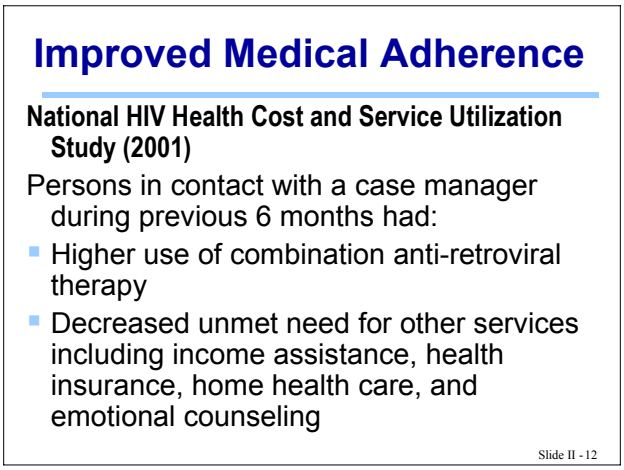
Slide II - 9



15. Note that the CDC AIDS Evaluation of Street Outreach Projects examined the effectiveness of programs in five US cities (Atlanta, Chicago, Los Angeles, New York, and Philadelphia) with outreach and service linkage program to injecting drug-using (IDU) men of color. The enhanced interventions included: on-site HIV counseling & testing, training of outreach workers on readiness to change risk behaviors based on stages of changes, accompanying participants to appointments, and making referrals for medical care and substance use treatment and documenting the use of the services by IDUs. All participants were injecting drug users and HIV infection was unknown.



16. Note that programs that established enhanced referrals systems and training for service providers could help get hard to reach populations such as IDUs to enter medical care and substance abuse treatment.
17. Display Slide II-12, "Improving Medical Adherence."



18. Note that one goal of the National HIV Health Cost and Service Utilization Study (HSUS) was to examine the effect of case management on unmet needs and the use of medical care and medications among HIV-infected persons (Katz, et al., 2001). The survey was conducted among HIV-infected persons who received medical care in hospitals or clinics in the United States. HIV-infected persons who had a case management contact in the previous six months reported higher use of two-drug and three-drug antiretroviral treatment (ART) regimens than those who were not in case management. This group also had less need for substance use treatment. In addition, people receiving sustained case management (that is, contact with a case manager at baseline and a follow-up contact six months later) were more likely to access ART and had a decrease in unmet needs for services, including the following:
    - Income assistance
    - Health Insurance
    - Home health care
    - Emotional counseling

Traditional Versus Nontraditional Settings

Purpose: To compare traditional and nontraditional settings and their differing approaches for engaging HIV-infected substance users in health care

Time: 15 minutes

Materials

- Flipchart paper and colored markers
- Slide II-13: "Traditional Versus Nontraditional Sites"
- Slide II-14: "Suggestions to Improve Traditional Sites"
- Slide II-15: "Suggestions to Improve Traditional Sites (continued)"
- Slide II-16: " Nontraditional Sites"
- Slide II-17: "Benefits of Nontraditional Sites"
- Slide II-18: "Combination of Traditional and Nontraditional Service"
- Slide II-19: "Examples of Promising Approaches to Engage and Retain People"
- Slide II-20: "Examples of Promising Approaches (continued)"

Instructor Notes

1. Describe the differences between traditional and nontraditional settings. Note that traditional sites are community health clinics, drug treatment facilities, hospitals, and community-based organizations that have a permanent or an established location where services are conducted. With nontraditional sites, services are offered in a location where a particular population congregates. The sites are not permanent, but temporary, until the needs of that population are addressed.

2. Present the information in Slides II-13 through II-17.

3. Explain to the participants that this presentation will include suggestions on how to improve services for HIV-infected substance users.

4. Ask participants to share their experiences with services that have worked with HIV-infected substance users.

Traditional versus Nontraditional Sites

- **Traditional**
  - **Established locations for services**
    - **Clinics/Hospitals**
    - **Substance abuse treatment centers**
- **Nontraditional**
  - **Meet people where they are**
  - **Temporary**
    - **Mobile**
    - **Linked with other community services**

Slide II - 13

Suggestions to Improve Traditional Sites

- Change hours of operation to accommodate the lifestyle of substance user
- Offer adult day care
- Establish HIV support groups
- Create an HIV advocate position or establish a formal relationship with an organization that provides advocacy
- Provide training on the importance of medication adherence for consumers and staff

Slide II - 14

Suggestions to Improve Traditional Sites (continued)

- Establish an incentive program where gift certificates, personal hygiene products, food coupons, disposable diapers or money is given to motivate HIV clients
- Offer training in case management on HIV, substance use, or both
- Examine clinic policies to see if barriers to treatment are created
  - Under the influence
  - Bringing children to appointments, etc

Slide II - 15

Nontraditional Sites

- Mobile Outreach
  Sites where mobile medical vehicles or vans are used to bring HIV services to different locations
- Fixed Site Outreach
  Sites where services or clinics are held in locations where people gather (shelters, soup kitchens, hotels and/or single-room occupancy hotels)

Slide II - 16

Benefits of Nontraditional Sites

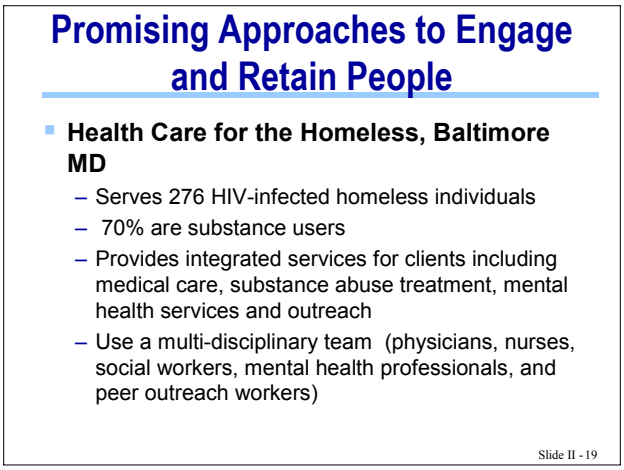
- Bring services to where HIV-infected substance users live and work
- Maintain contact with patients thereby increasing follow-up rates
- Establish a presence or goodwill within the community
- Provide access to services to persons who do not typically use traditional services

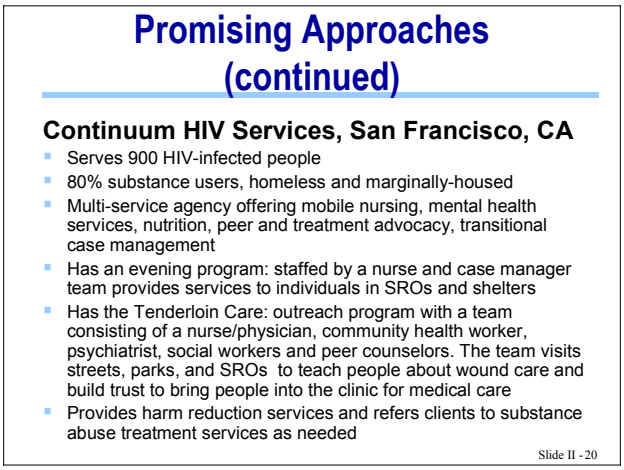
Slide II - 17

Combination of Traditional and Nontraditional Services

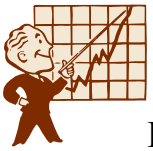
- Outreach workers can refer persons to traditional medical services and bring patients into care
- Medical care facilities can use outreach services to provide follow-up with patients

Slide II - 18





5. Display Slides 19 and 20 on Promising Approaches. Note these are examples of programs that combine both traditional and nontraditional services to engage and retain people in care.
6. Ask participants to describe the type of services provided in their organizations and to share whether they work in traditional or nontraditional programs. Write suggestions on flipchart paper, and note how these are similar to or different from the suggestions provided in the presentation.
7. Refer to comments from the flipchart sheets (Attitudes, Structural/Environmental, Personal/Cultural, and Referral/Follow-Up) developed in the Public Hearing activity in Session 2. Demonstrate how the information presented here is relevant to that earlier discussion.



Building Relationships Within the Community

Purpose: To explore approaches for building relationships within the community as we look for ways to engage HIV-infected substance users in health care

Time: 15 minutes

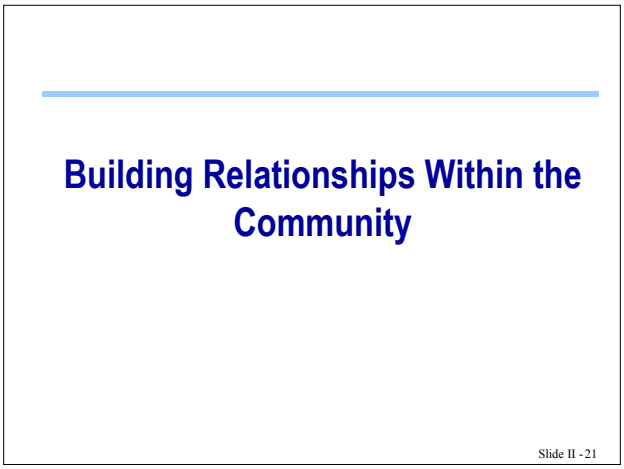
Materials

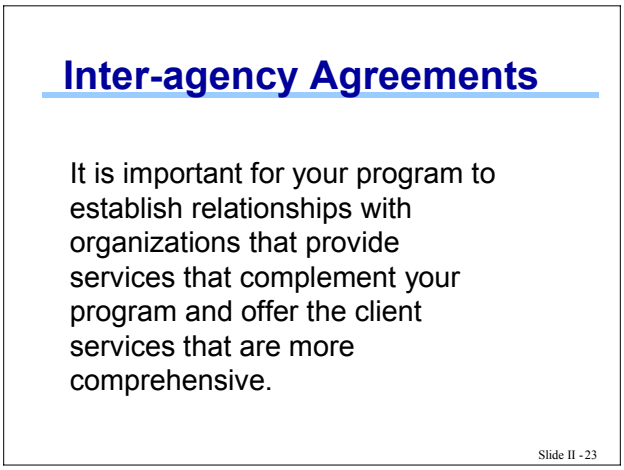
- Slide II-21, "Building Relationships Within the Community"
- Slide II-22, "Community Relations"
- Slide II-23, "Interagency Agreements"
- Slide II-24, "Agencies"

Instructor Notes

1. Ask participants how connected they are to the community and other organizations in the community. What is the nature of their relationships?
2. Who in their agency is responsible for interacting with the community? What are that person's responsibilities? How has this role evolved over time?

3. Present the information in Slides II-21 through II-24.





4. Emphasize the importance of each relationship in providing comprehensive treatment to HIV-infected substance users in traditional and nontraditional programs. Also stress the importance of having a designated contact person, and in the case of other social service agencies, developing an effective referral process.

5. If applicable, refer to comments from the flipchart sheets developed in the Public Hearing Activity in Session 2. Demonstrate how the information presented here is relevant to that earlier discussion. Note how building relationships within the community may have the following benefits:

- Addresses NIMBY (Not In My Backyard) syndrome
- Increases follow-up with clients
- Helps increase understanding of the community culture
- Helps ensure access to more comprehensive services through active referrals
- Clarifies the different job responsibilities of agency staff

Peer Advocacy

Purpose: To introduce and explore the concept of peer advocacy

Time: 15 minutes

Materials

- Slide II-25, "Peer Advocacy"
- Slide II-26, "Who Are Peers?"
- Slide II-27, "What Do Advocates Do?"
- Slide II-28, "Where Do Peer Advocates Come From?"
- Slide II-29, "Giving Back to the Community"

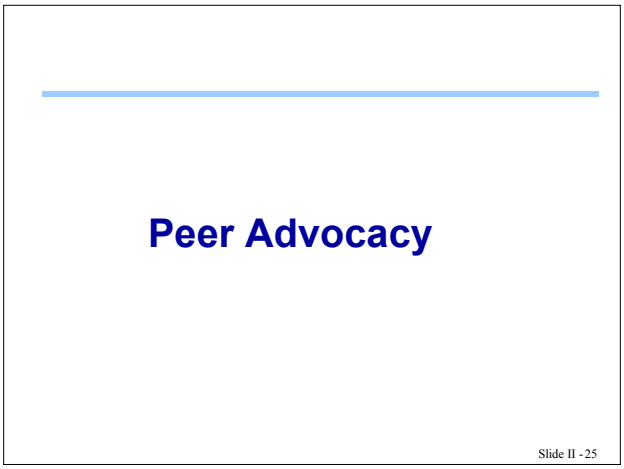
Instructor Notes

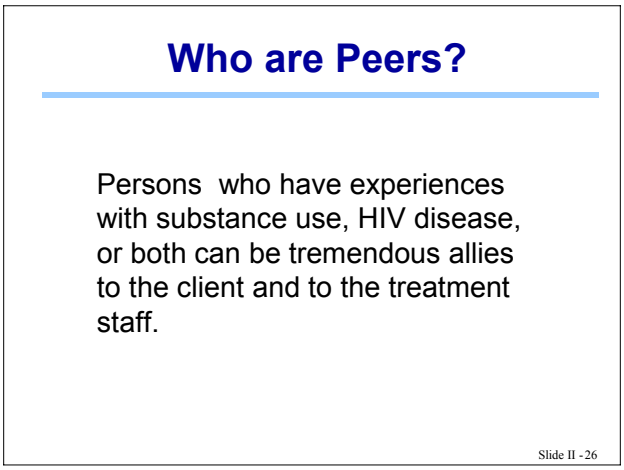
The curriculum offers two options for discussing Peer Advocacy.

Option 1: This section may be presented with slides or you may choose to select a peer that would be comfortable sharing his/her experience with the group. Ask the peer to present their role, the challenges and rewards they find with the work.

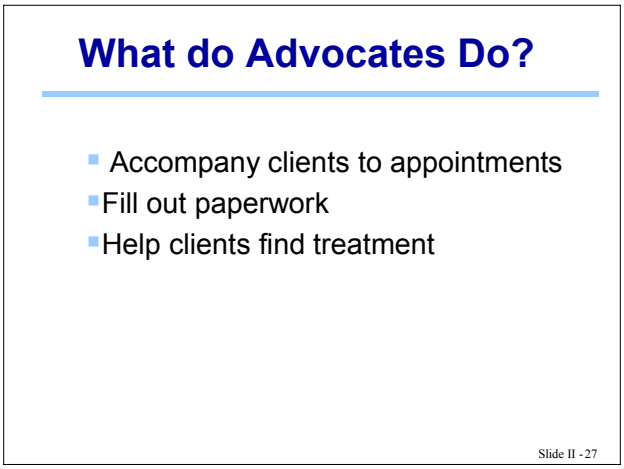
Option 2: Use the slides below to guide a interactive discussion with the group about peer advocacy.

1. Display and present Slides II-25 and II-29.

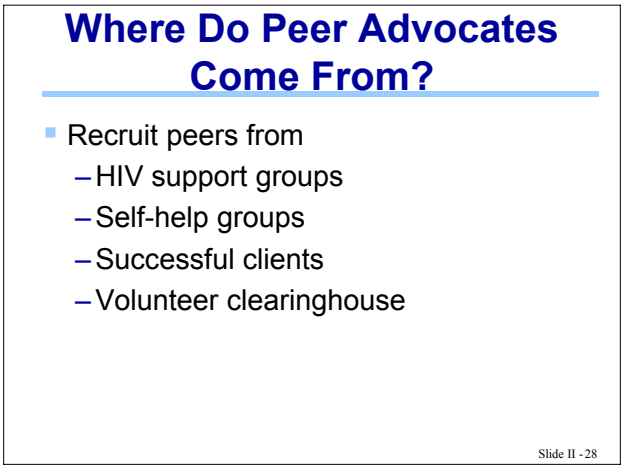


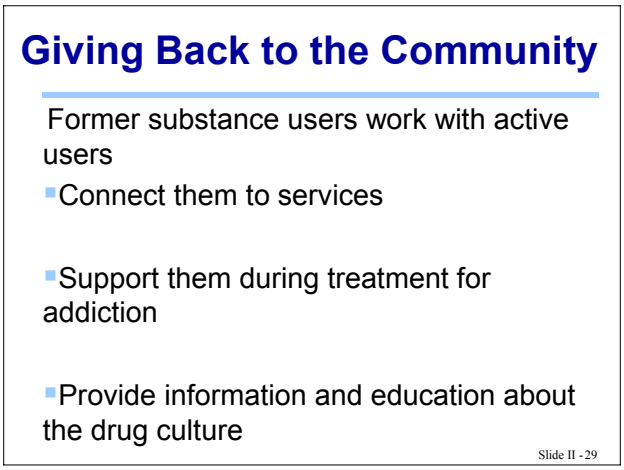


2. Display Slides II-27 "What Do Advocates Do?"



3. Explain that advocacy may be defined as follows: In the context of engaging and retaining clients, advocacy work involves assisting and accompanying clients as they access treatment or other care. Such advocacy work covers a range of activities, including filling out paperwork, taking clients to appointments, and providing other assistance as needed.
4. Display and present Slide II-28 "Where do Peer Advocates Come From?"





5. Display and present Slide II-29 "Giving back to the community." Explain that most substance abuse recovery programs urge their clients to find positive ways to give back to the community. Many clients give back by helping active substance users access and maintain treatment for their addiction and other health-related problems. Clients may also contribute by providing information on the community and drug culture.

6. Ask participants to comment on each slide presented. You might ask the questions below to elicit comments:
   - What do participants think about peer advocacy?
   - Are peer advocates used in their programs and if not, can they be used? What are the potential successes and challenges?

7. If applicable, refer to comments from the flipchart sheets developed in the Public Hearing activity in Session 2. Demonstrate how the information presented here is relevant to that earlier discussion.

8. At the end of this presentation, summarize what the participants have covered and accomplished during Session 2. Use the Session 2 objectives as a guide for your summary. Note, however, that this summary should not be done now if the optional activities described below are added to this session.

In addition to the main activities in Session 2, we are providing two optional activities. Instructors may add these activities to the session if time allows, or they may substitute them for the activities described above. We encourage instructors to conduct a brief needs assessment before starting trainings so they may tailor the activities and messages to their participants.

Cultural Awareness (Part 1)

Purpose

- Understand how to provide culturally sensitive health services
- Explore how people's culturally based beliefs and attitudes may affect their access to and use of services
- Learn how people are conditioned to perceive the world with an "us" versus "them" attitude, and see how random these distinctions are.

Time: 30 minutes

Materials:

- Stickers of various colors

Instructor Notes

1. Ask participants to close their eyes. Explain to the group that you will be walking around the room and placing a sticker on each participant's forehead.

2. Place stickers as follows:
   - Select one individual who will receive a sticker of a color different than that of anyone else in the room.
   - For the rest of the group, make sure that there are at least two but no more than five people who share the same colors.
   - If you'd like, you can vary the size of the groups. For example, you might have one orange, two greens, three or four reds, and five blues.
   - Give one person two stickers of different colors to indicate that he or she is a member of multiple groups.

3. Have the participants open their eyes and, without talking, join with the group to which they feel they belong. Explain that they may help others find their respective groups, but they may not speak.

4. Once everyone has had a chance to join a group, have everyone sit down and discuss the activity. Some of the following points may be used to stimulate the discussion:

- Explore the feelings of those who were the sole person in a "group", as well as the feelings of those who were part of larger groups. Discuss what it feels like to belong to more than one group.
- Point out that you never stated that participants could not welcome others to become a part of their group.
- Ask whether it occurred to anyone to invite a "different" person into his or her group.
- Did anyone want to break off from his or her group to join a different group?
- Try to relate this activity to our everyday interactions with others, both within and outside of our various social groups (family, friends, coworkers, teammates, and so forth).
- Ask how membership in different groups may affect people who work in health services.

Cultural Awareness (Part 2)

Purpose

- Understand how to provide culturally sensitive health services
- Explore how a person's culturally based beliefs and attitudes may affect his or her access to and use of services
- Discover that there are different ways to define the term "culture" and discuss how each of these definitions influences the ways that services are delivered

Time: 30 minutes

Materials

- Flipchart paper, colored markers, and tape
- Pens or pencils
- Handout II-6, "Cultural Awareness and Health Education: Personal Pledge"
- Handout II-7, "Cultural Awareness and Health Education: Personal Pledge"

Instructor Notes

1. Tape a few pieces of flipchart paper to a wall with the heading, "Elements of Culture." Lead a group discussion in which the participants develop a comprehensive list of the elements of culture. Address any questions or concerns that people may have about the list. Once the participants have finished adding items to the list, check to see whether the items below have been included. If not, suggest that these items be added:
   - Race
   - Ethnicity
   - Gender
   - Sexual orientation
   - Disease status (for example, infected with HIV)
   - Age
   - Religion

- Family

2. Divide the participants into small working groups of three to five people, and provide each working group with flipchart paper and a colored marker. Using the list as a guide, ask each group to develop a one- to two-sentence definition of culture.

3. Ask for volunteer from each working group to read and post his or her group's definition.

4. Emphasize the variety of thoughts, ideas, and definitions surrounding the word "culture."

5. Pass out pencils, pens, papers, and Handout II-6, "Cultural Awareness and Health Education Personal Pledge." Show Slide II-30, which has the same title as the handout. Have several participants read the pledge aloud so that it can be heard in different voices.

6. Discuss the main points of the pledge and ask for feedback. Review the role of health providers as you review the pledge. Ask the participants if they would like to sign the pledge as a personal commitment. Pledges need not be handed in.

Handout II-6

Cultural Awareness and Health Education
Personal Pledge

My Personal Commitment

Cultural background shapes a person's values, beliefs, and actions in many different ways.

Health services work best when health professionals are aware of how family, community, and culture have shaped values, beliefs, and actions about sexuality and substance use.

Effective health services are able to show a genuine sense of openness, acceptance, and respect for the cultures of all persons who participate in their program.
Personal awareness of how my cultural, ethnic, racial, and regional background has shaped my values, beliefs, and actions is an important step in becoming more aware of others.

Knowing my own biases and limits concerning other cultures will help strengthen my ability to be an effective health professional.

I embrace the statements made above and will do all that I can to promote an understanding of health and personal well-being among all people, regardless of their cultural, ethnic, racial, and regional background.

_____ _____
Signature Date

Wrap-Up

Purpose: To summarize the ideas generated regarding effective strategies to engage HIV-infected substance users in care, and provide additional resources to learn about new programs.

Time: 10 minutes

Materials

- Flipcharts
- Markers
- Handout: Resources & References

Instructor's Notes

1) On a Flipchart, ask participants to brainstorm new ways they have learned to bring people in HIV medical care.
2) Ask them to identify ways that may be feasible to adopt at their workplace.
3) Have them write down one concrete action that they can take to implement suggestions at their workplace. For example, it could be to share what they learned at this training with other staff members at a meeting, organize a support group of HIV-infected peers, or set a meeting with another agency that you would like to link your services.
4) Share the Handout 27: "Resources & References" with the group. Review the web sites and ask if there are other suggestions to add to the list. Provide your email/contact information to the group in case future questions or issues arise.
5) Thank the group for their participation and wish them luck with their work!

Section 2: Interpersonal Skills to Enhance Engagement And Retention

Objectives for the Entire Session
By the end of the session participants will be able to:

- Identify common dilemmas encountered in engagement and retention efforts, and review professional and ethical guidelines relevant to those dilemmas
- Name and describe the four stages of the Relational Model of Engagement and Retention
- Discuss three conceptual frameworks that inform the process of engagement and retention in care
- Understand the basic principles of motivational interviewing and the use of techniques specifically designed to motivate HIV-infected substance users to make positive behavioral change
- Describe at least three ways to make more effective referrals
- Model a training session with one or two of the activities for the group

Suggested Review Time for the Section: 3 hours

What Would You Do If . . . ?

"Sometimes it feels like we're trying to do brain surgery
with an axe, a screwdriver, and a cell phone."

Heather Barr, public health nurse

Purpose: To identify common dilemmas encountered in engagement and retention efforts and to review professional and ethical guidelines relevant to these dilemmas

Time: 30 minutes

Materials

- Flipchart and colored markers
- Handout II-3, "Professional and Ethical Guidelines for Care Providers"

Instructor Notes

1. Providers inevitably face situations in their work that present moral, ethical, or practical dilemmas. Identifying some of these dilemmas in advance can help to avoid being caught off guard when they arise. In addition, the relevant professional and ethical guidelines for one's work provide important guidance to providers.

2. Throughout the activity, remind participants to be aware of their reactions to the issues that come up and of the importance of consistently discussing these "sticky issues" with their peers and supervisors at work.

3. Introduce the activity by acknowledging that working with HIV-infected substance users can be challenging. Providers often encounter unique and complex situations to which the proper response is not always evident. Practical and ethical dilemmas inevitably arise. Providers sometimes feel compelled to "bend" certain rules or at least to adapt the rules to their normal way of practicing. This may leave providers with a feeling of uncertainty about whether they are doing the right thing in a given situation. This activity is designed to acknowledge these real-life concerns and to offer some basic guidelines that can help ground and give direction to providers.

4. Ask participants to brainstorm about some of the "sticky issues" and dilemmas regarding engagement and retention they have faced or might face in the course of their work. Examples might include the following:
   - Assisting a person who engages in high-risk survival sex and refuses to use protection
   - Helping a person who desperately wants to get into methadone treatment but can't because there is none is available
   - Working with a person whose active substance use interferes with his or her ability to adhere to an HIV treatment regimen.
   - Helping injection drug users who aren't ready to stop using be able to gain access to sterile needles and syringes in a location where there is no needle exchange program

5. Break into small working groups of four to six people. Explain that each working group is going to do an exercise called "What would you do if…?"

6. Ask half the people in each working group to come up with some real life dilemmas that they have encountered or could expect to encounter in the course of their work. Ask the other half of each working group to assume the role of an expert panel on a radio talk show. Ask the persons with dilemmas to take turns "calling in" to the expert panel, which will be asked, "What would you do if . . . (this particular scenario occurred)?"

7. The task of the expert panel is to discuss among themselves the relevant questions and issues raised by the case and to provide advice about the steps the caller might take. Everyone on the panel should have the opportunity to speak. Encourage a lively interchange between the callers and the panel members.

8. Have the caller and expert subgroups switch roles so that each person in each working group has an opportunity to present at least one dilemma and have a response given to it.

9. Reconvene the large group and ask several participants to comment on what came up for them during this exercise.

10. Distribute Handout II-7, "Professional and Ethical Guidelines for Care Providers." Review the guidelines with the group and invite comments about any of them, especially those that might "raise an eyebrow or two." Ask if anyone has other ideas for guidelines that were not included on the handout.

11. Conclude the activity by emphasizing the importance of consistently consulting with peers and supervisors when dilemmas arise in the course of work. Encourage regular review of these ethical guidelines or similar professional and agency guidance.

Handout II-7

Professional and Ethical Guidelines for Care Providers

"Ethics . . . are nothing but reverence for life."
Albert Schweitzer

The overriding philosophy of these guidelines is to treat other people as you yourself would want to be treated or, at the very least, to do no harm. This applies not only to interactions with the persons to whom we reach out and provide care, but also to our interactions with coworkers, supervisors, staff from other agencies, policy-makers, and others. The expectation is that providers will consistently be respectful of others and provide competent and compassionate care in whatever forms that may take.

Providers should try to anticipate and identify the ethical dilemmas that may arise in their work and to discuss these issues with supervisors and peers. Some of the guidelines below are designed to prompt such discussions and thereby increase understanding about what it means to provide care within proper boundaries. The recommendations compiled in these guidelines may be used to complement the specific codes of ethics and policies that have been developed for and accepted by various professional disciplines and organizations.

- Commit yourself to being well prepared physically, intellectually, emotionally, and spiritually for doing this work.
- Learn about the culture of the people to whom you provide care. Understand the influence that culture has on people's health beliefs and their access to health care.
- Develop an awareness of the causes, experience, patterns, and politics of HIV and substance use.
- Address the person's HIV and substance use issues as well as his or her emotional and social service needs.
- Understand the codes of ethics and relevant policies that are specific to your professional discipline and the organization in which you work.
- Be genuine and hospitable in your interactions with people.
- Strive to remain objective in your attitudes and actions. Avoid being judgmental.
- Be respectful of others' desire for privacy and their wish to keep some personal information to themselves.
- Adhere to the rules of confidentiality required in your work.

- Keep your word. Be trustworthy and reliable. Promise only what you can deliver.
- Respect people as ends, not means. Never exploit clients for personal or agency gain.
- Promote behaviors that enhance health and wellness and decrease risk or harm to self or others.
- Work within the limits of your competency, skill, and training.
- Seek supervision as soon as possible in crisis situations.
- Avoid intervening in situations in which you are not trained or competent.
- Refrain from imposing your moral or religious beliefs on others.
- Never engage in sexual activity with anyone to whom you are providing care.
- Do not accept cash gifts from clients. Accept other gifts only when it is culturally appropriate.
- Refrain from giving cash or personal gifts to clients except as may be culturally acceptable.
- Never carry weapons (with the possible exception of pepper spray).
- Never use alcohol or illegal drugs on the job.
- Take time to use your knowledge and experience to inform public planning and policy making.
- Develop practices of self-care and renewal within and outside the work setting.

Relational Model of Engagement and Retention

Purpose: To explore the four stages outlined in the Relational Model of Engagement and Retention for the care of HIV-infected substance users

Time: 20 minutes

Materials

- Flipchart and colored markers
- Handout II-8, "Relational Model of Engagement and Retention"
- Handout II-9, "Steps Along the Engagement and Retention Continuum"
- Handout II-10, "Case Study: Maria"

Instructor Notes

1. Distribute Handouts II-8 and II-9. Write the four stages of the relational model on a flipchart:
    - Making a connection
    - Developing the relationship
    - Educating and linking to services
    - Supporting wellness and stability

2. Introduce the model by noting that developing trusting relationships with HIV-infected substance users is essential if we are to successfully engage and retain them in our care. HIV-infected substance users often have difficulty accessing the services and care they need because of stigma, fear, lack of awareness, ambivalence, hopelessness, and the significant barriers presented by the health and social service system itself. One of the provider's most vital roles is to help HIV-infected substance users overcome these personal and systemic barriers. It is simply not enough to provide information and education. Establishing an ongoing, supportive relationship with a provider is often the first step people take to move in the direction of positive change.

3. Explain that the relational model is based on provider experience and the literature about effective outreach and engagement methods. It is intended to inform the process of engaging and retaining individuals in care for providers of all disciplines.

4. The stages described in the model are not necessarily discreet, nor do the stages always progress in a smooth, linear fashion. Instead, the model simply attempts to illustrate the different developmental phases of the helping relationship and the tasks common to each phase. It is important to note that some helping relationships never make it beyond the initial "making a connection" stage, and relatively few make it all the way to the fourth stage of "supporting wellness and stability." In addition, a person's movement along the relational

continuum might take a short or very long time, depending on his or her readiness and the availability of appropriate resources.

5. Distribute Handout II-10, which is entitled "Case Study: Maria." To illustrate the model, refer to the case example of Maria in Handout II-6. Ask four volunteers to read aloud one of the four sections in the case example. Invite questions and comments. Encourage participants to think about which specific activities in each stage would be most relevant in their own work situation and role.

6. Conclude the activity by encouraging participants to think about what stage(s) of relationship they are in with the various HIV-infected substance users with whom they work.

Handout II-8

Relational Model of Engagement and Retention

An important aspect of engagement and retention is the process of building and maintaining a safe, supportive relationship with someone who is HIV-infected and uses substances. The goal of this process is to help persons address their various health and social service needs and to provide them with the information needed to decrease their harm to self and others. Care providers "share a part of the journey" with the persons they serve, while providing material assistance, information, medical care, counsel, and advocacy. These efforts are designed to help persons move toward improved health and stability and prevent further transmission of HIV. This relationship generally follows a progression through the following four relational phases:

- Making a connection
- Developing the relationship
- Educating and linking to services
- Supporting wellness and stability

Making a Connection

This phase is particularly applicable to working with harder-to-reach individuals. It begins with observing a person in his or her environment followed by making some form of introduction. It is helpful, whenever possible, to spend time simply watching to see how a person acts, how he or she relate to others, what kind of space he or she needs, and how he or she seems to be experiencing their environment and responding to the world.

Careful observation helps the provider determine an appropriate way to introduce himself or herself. If the contact is occurring outside of a clinic setting such as on the street, one might simply pass by with a nod or greeting – offering a basic acknowledgment of the other person's presence. In a clinic setting, it may involve providing a warm greeting or engaging in a brief, casual conversation with someone. As trust develops, the provider moves from making a more general introduction as a neighbor/member of the community/someone who cares to introducing oneself more specifically as an outreach worker/nurse/doctor.

Developing the Relationship

Simply put, developing the relationship involves providing a caring, trustworthy presence and sharing a small part of someone's journey. This requires being able to spend time with the person. The provider creates the space for trust to grow by listening carefully and respectfully to the client's story and becoming attuned to his or her current situation, how he or she sees themselves, his or her perceptions of the world around them, and his or her ability to meet his or her personal needs. A trusting relationship is based on collaborating with a client, not by making demands. The provider must be truthful and dependable, making sure to follow through with promises made.

Educating and Linking to Services

This phase of the relationship focuses on providing education and information tailored to the client and his or her readiness to accept help. As the relationship develops, the provider links the client to other resources and clinical providers at the appropriate time. By partnering with others – case managers, medical providers, substance abuse treatment providers, social

service programs, and family members – the provider helps create a widening circle of care that the client can rely on for assistance in the various aspects of life. The provider plays an integral role during this phase by helping to coordinate care, accompanying the client as needed, resolving problems, supporting the client's follow-through with treatment plans, and continuing to enhance the client's motivation.

Supporting Health and Stability
The relationship moves into this phase when the client has established a regular pattern of using resources and services in the community and has achieved relative stability. In this stage of the relationship, there is an increased emphasis on seeing the provider and client as fellow citizens and community members. The provider's care giving role diminishes as the client becomes increasingly integrated into the life of the community. Some clients decide to reach out to others to provide similar assistance to what they once received. In time, the provider and client recognize that their relationship has met its goals and they agree to bring the formal relationship to an end.

This handout was adapted from *Relational Outreach and Engagement Model* by Craig Rennebohm, Mental Health Chaplaincy, Seattle, WA.

Handout II-9

Steps Along the Engagement and Retention Continuum

This handout was developed in particular for providers involved in engaging difficult to reach individuals in nontraditional settings. However, many of these steps can readily be adapted for providers working in clinic settings.

Making a Connection

- Observe the person: Watch the person to learn about his or her behavior, basic needs, and level of functioning. Survey the surrounding environment (when outside a traditional clinic setting) to assess for safety concerns for the provider and individual. Determine how best to make an approach that is likely to be within the person's comfort level and appropriate to the environment.

- Greet the person: Briefly greet the person with something like a nod or a "hello," but don't engage in additional conversation.

- Introduce yourself: Approach the person and introduce yourself by name, recognizing that the person may or may not respond. At first, you may choose to identify yourself in general terms – for example, as a neighbor or a person involved in reaching out to the community.

- Initiate casual conversation: Speak informally with the person about a topic or topics not specifically related to services or needs. The goal of this step is to build a relationship and increase the person's comfort level.

- Identify yourself in your specific role: Let the person know your discipline or title, and describe how you work for a local program that provides services to people with concerns related to HIV and substance abuse. In the engagement and retention model, this step is seen as a significant transitional point to the next phase, which is the development of the provider-client relationship.

Developing the Relationship

- Hear the client's story: Listen to the client's concerns, wishes, history, perceptions, feelings, and so forth. Use interviewing skills, such as asking open-ended questions, affirming strengths, listening reflectively, and summarizing.

- Do an activity together: Do something together, such as having a cup of coffee, going for a walk, eating a meal, or some other relationship-building activity.

- Identify the client's perceived needs: Find out about the client's perceived needs and determine whether or not these needs are related to HIV status or substance use.

- Provide material assistance: Give the client something tangible, such as a meal ticket, a blanket, condoms, bleach kit, or hygiene kit.

- Accompany the client when accessing short-term and survival services: Go with them to an appointment or to obtain services, such as food, shelter, or clothing**.**

- Provide information and referrals to short-term and survival services: Give information and referrals to help improve the client's immediate situation.

- Respond to emergency situations: Contact appropriate emergency services when the client's life, health, or safety is at risk.

- Client initiates contact with provider: In this step, the client contacts the care provider in person or makes contact by phoning or leaving a message.

- Meet in a public venue: When the client is ready, meet in a setting with some structure, such as a drop-in center, restaurant, or office. This step is seen as a transitional point to the next phase.

Educating and Linking to Services

- Identify mutual longer-term goals: Work together with the client to identify mutually agreeable goals, such as accessing health care, addressing substance use, reducing risk, returning to work, or accessing mental health services, income or entitlement programs, housing, or educational opportunities.

- Enhance motivation toward positive change: Assess the client's readiness to change, and use motivational enhancement skills to explore ambivalence, information and support needs, and so forth.

- Plan for meeting longer-term goals: Work together to develop a plan to achieve goals in various areas.

- Provide education: Offer the client relevant information about HIV and substance use, and educate about risk reduction practices and related topics.

- Provide information about services: Give the client information about other care providers and services that might help the client reach his or her goals.

- Connect with other longer-term services: Meet together with the client and other service providers to work on an action plan to achieve goals.

Supporting Wellness and Stability

- The HIV-infected client meets with other service providers when you are not present: Adjust your helping role as the client is able to establish working relationships with other care and service providers.

- Make outside referrals, arrange appointments, and negotiate services: Provide support to the client and facilitate his or her access to services.

- Advocate for the client within new support systems: Advocate on behalf of the client and act as bridge between the client and the long-term service system.

- Meet together to review the client's work with other long-term providers: This involves activities such as remaining in a supportive role, listening to the client's concerns, focusing on the client's stated goals, and addressing adherence issues.

- Monitor the client's progress: Remain in periodic contact with the client and his or her other service providers as needed. Help the client maintain stability.

- Terminate the formal provider-client relationship: This final step occurs when both parties agree that the client's care has been successfully transitioned to other providers. Celebrate progress the client has made, and express gratitude and grief when saying goodbye. Wish one another well in the ongoing journey.

This handout was adapted from the "Outreach and Engagement Checklist" form, published in 1996 by Northwest Resource Associates, Seattle, Washington.

Handout II-10

Case Study: Maria

The Better Health Alliance Group (BH) is a community-based clinic located on the south side of Metro City. It serves a culturally diverse and predominantly lower-income and working-class neighborhood. The clinic offers a variety of health services including pediatric, ob-gyn, general medicine, and sexually transmitted disease care. When heroin use began increasing in the community about ten years ago, BH opened a methadone clinic and began an extensive community outreach program for HIV counseling and basic medical care. Every day, BH sends a mobile van to two major parks in the area with a nurse named Angela, a physician named Pete, and an HIV and substance abuse treatment counselor named John.

Making a Connection

During the past few weeks, John has noticed a woman who occasionally sits on a bench near where the van is parked. She appears very thin and seems rather guarded. John walks by her one day and simply nods and says hello. The next day he offers her a cup of coffee but she refuses and looks away. During the next week, John continues to say hello, and one day she asks if she can now have a cup of coffee. John says "sure," and gives her a cup. He then asks if he can sit with her on the bench for a while. Over time, they start to talk, and she begins to tell John bits and pieces of her story. He learns that her name is Maria and that she's 27 years old. She's lived in the area for the past five years.

Developing the Relationship

Maria eventually tells John that she once held a steady job and that things were going well in her life until she started using heroin after her mother died. She lost her housing several months ago because most of her money went for heroin use. During the past month, Maria has been living with her 3 year-old daughter in one of the shelters in the community, but her time is limited there. She says that the people at the shelter are willing to help her find a job and a place of her own, but they say she needs to get clean first. Another resident at the shelter told her that the people in the BH van might be able to help her get clean.

Maria admits she's ambivalent about giving up heroin, because she likes the way she feels on it. However, she realizes that, for her own sake and for the sake of her daughter, she can't continue living this way. John discloses that he is a substance abuse treatment counselor and talks with Maria about some possible treatment options and the pros and cons of each. He tells her that there is unfortunately no in patient treatment program available in the Metro City area that would allow her to have her daughter with her. After considering the different options, Maria says she'd like to check out a methadone program. John describes how the methadone program works at the BH clinic. John asks Maria whether she would like to go there to arrange for a screening interview on her own or whether she would like him to go with her. Maria says she can go there on her own, provided that John makes a map for her with directions, which he does.

After two weeks of not seeing Maria, John spots her one-day sitting on the bench near the van. He knows that she never made it to the clinic. John approaches Maria and asks how she's doing. John also says that he's noticed she hasn't made it to the clinic yet. Maria says she tried to access the clinic but started using heroin heavily again after learning there was a long waiting list to get into the program.

Educating and Linking to Services
John and Maria agree to continue meeting. John follows a patient and persistent approach in which he provides Maria with information and uses his skills to help increase her motivation to get treatment. As a result of their mutual efforts, John is eventually able to help Maria complete the steps needed to start methadone treatment.

Some time later Maria shows up at the outreach van with her daughter, who has a bad cough and is not sleeping. Maria had taken her daughter to the emergency room at the local hospital during the previous weekend but decided to leave after waiting two hours without seeing anyone. John asks whether Maria would like her daughter to see a nurse named Angela in the van. After Maria agrees, Angela examines Maria's daughter and recommends that Maria take her to a pediatric clinic across town for a more thorough examination. Angela sets up a walk-in appointment for Maria at the clinic. Maria tells Angela that she doesn't have any transportation to get to the clinic and is unsure how to reach it.

John agrees to accompany Maria and her daughter to the pediatric clinic. He gives Maria his telephone extension and suggests that she ask the pediatric nurse to call him after their appointment. Maria does this, and the pediatric nurse calls John after the appointment. John later sits with Maria and asks her about her daughter's appointment. Maria says the appointment went fine, but she confides that she is worried that her daughter may be sicker than people realize. Maria tells him that she learned one year ago that she was infected with HIV, and she is afraid her daughter may also be infected. She didn't want to tell the pediatrician because she was afraid the authorities would try to take her daughter away from her. John reassures Maria that there are people at the BH clinic that can help her, and he tells her about the HIV and STD clinic services there. John says that he works with one of the case managers, Julie, and he suggests that they all meet together to set up a plan. John calls Julie and arranges for a meeting the next day.

John and Julie meet with Maria and ask what she would like to accomplish in the next few months. Maria says that she would like to find a stable place to live and perhaps find a job so she can start supporting her daughter. John also asks Maria how she learned about her HIV infection and if she has seen a doctor for it. Maria mentions that she did go to see a doctor a few months after learning she was infected with HIV. However, since she felt fine at the time, Maria didn't think she needed to return until she got sick. Now that her daughter is sick, Maria is also worried about her own HIV infection. Julie makes arrangements for both Maria and her daughter to meet with the HIV doctor in their clinic.

Supporting Wellness and Stability
It is now one year later. Maria and her daughter are both receiving the medical care they need. Maria continues on methadone treatment, and they are living in subsidized, low-income public housing. She receives some minimal case management assistance. Maria has been able to get some part-time work to supplement the public assistance she receives. Although Maria is still facing a number of challenges, she is feeling much better about her overall situation. Maria hopes someday to complete methadone treatment, go back to school, and eventually get a better-paying job so she can support herself and her daughter.

Questions for Discussion

- What are some examples of how the BH team made a connection with Maria?
- What are some examples of John and Julie's concrete actions that helped build a relationship with Maria?
- What are some of the reasons why Maria was reluctant to engage in BH services?
- How did the BH staff address some of these concerns and support Maria's stability and good health?

Frameworks of Engagement

Purpose: To explore several conceptual perspectives to enhance engagement and retention efforts

Time: 20 minutes

Materials

- Handout II-11, "Hospitality – Creating Space for the Stranger"
- Handout II-12, "Story as a Framework for Engagement"
- Handout II-13, "What Does It Mean to Care?"

Instructor Notes

1. In preparation for this activity, read each of the handouts and the related questions for discussion. Think about your own responses to the questions.

2. Write the word "Hospitality" on a sheet of flipchart paper and ask participants to briefly brainstorm about the images or ideas that word immediately evokes for them. Write down their responses. Then do a similar brief brainstorm for the word "Story" and then again with the word "Care."

3. Divide the participants into at least three small working groups with four to six participants each. Have each working group choose one of the three frameworks of engagement (hospitality, story, or care) for discussion, using the corresponding handouts to guide their discussions. If there are more than three working groups, some groups will examine the same framework of engagement.

4. Ask that someone in each working group read their handout aloud to the rest of the working group. Tell them that, once the handout has been read, each working group should discuss their responses to the questions in the handout.

5. After ten minutes, have a representative from each working group report back to the entire group on one or more key insights or examples from their discussion. The group representatives will describe how the concepts of hospitality, story, or care may be used to enhance engagement and retention activities in work with HIV-infected substance users. In this way, each participant will be exposed to each of the three frameworks of engagement.

6. Conclude the activity by asking the participants whether they know about any other helpful frameworks of engagement that might inform their work.

Handout II-11

Hospitality – Creating Space for the Stranger

Persons who are infected with HIV and are actively using substances often feel like outcasts. They are stigmatized as a result of judgmental attitudes and punitive social policies. They might also become estranged from their past relationships and activities, and may lack a sense of place and purpose in the world. Literally, they become strangers.

"Offering the gift of hospitality" is a useful approach for care providers to think about overcoming this estrangement. In his book *Reaching Out,* Henri Nouwen defines hospitality as "creating free and friendly space for the stranger." This definition goes far beyond images of tea and sandwiches being shared in a pristine setting. Instead, it points us toward new and deeper relationships in our lives.

Hospitality offered to a stranger is an invitation to enter into a relationship – a relationship that provides a welcoming face and presence and that creates a sense of refuge from an often impersonal, hostile world. Hence, a person can have a taste of what it is like to be "at home" in the context of a safe, friendly relationship.

A hospitable relationship comes with no strings attached. It does not pass judgment and does not make demands. Instead, it provides a space in which a person can freely explore his or her needs, abilities, and hopes. Such a relationship becomes both a resting place and a guiding light. It provides a place of self-reflection and restoration. It instills and renews hope.

The power of hospitality lies not in coercion but in careful listening, reflection, information-sharing, and kindly persuasion. It encourages, but does not force. It is built upon the trustworthiness, competency, and integrity of the provider.

When we think of our own experiences of being graced with the hospitable presence of another, we remember it as calming, orienting, and renewing. It is like remembering who we are – returning to our true home – so that we can once again move ahead more confidently in our lives. The absence of such a hospitable presence often leads to isolation, disorientation, confusion, and despair. Like all of us, people who are infected with HIV and using substances need hospitable relationships in their lives.

Hospitality is offered in many ways – sometimes by a simple gesture of acknowledgement, a warm smile, or a cup of coffee. Hospitality may also involve listening patiently without interrupting, offering information and a word of encouragement, or simply being present with the other person in silence. Offering hospitality requires time, patience, and kindly persistence. It cannot be rushed. It sees the "big picture" rather than seeking a quick fix.

As trust within the relationship builds, a sense of companionship develops. The provider and client spend time together on a more predictable basis. The client shares more and more of his or her story. Small tasks are shared. The client begins to ask about other resources. In time, hospitality leads to increasing the circle of care to help the client access needed resources and services. In this way, the client's medical, housing, financial, counseling, and other treatment and social service needs are met.

Over time, the client progresses toward greater wellness and stability. The relationship is no longer one-sided, moving instead into a phase of increasing mutuality. Once a stranger, the client has now become more a neighbor and friend. We discover that our stories are interwoven and that we are bonded by our common humanity. In this phase, the client and provider recognize each other for the strengths and gifts that they bring to the relationship as well as to the larger community.

In the end, hospitality that is given becomes a gift of hospitality received.

Ken Kraybill

Questions for Discussion

- What other phrases might be used to describe the idea of "providing hospitality" besides those mentioned in the handout (such as creating space and providing a welcoming face)?
- How is the concept of providing hospitality similar to and distinctive from the idea of providing service?
- In what circumstances have you been a "stranger" who was offered the gift of hospitality by someone else? What was that experience like?
- What are some specific ways you might offer hospitality to an HIV-infected substance user in your work? Consider a particular person you know.
- How could your team or organization improve upon the ways it provides "free and friendly space for the stranger?"

Handout II-12

Story as a Framework for Engagement

Everyone has a story. Sharing our stories creates a common ground on which we can meet each other as human beings. Our stories are neither right nor wrong. They are simply our stories.

Some of us can tell our stories with an unclouded memory for our past, clarity about our present situation, and a realistic understanding of where our journey is heading in life. Some of us find telling our story extremely difficult. Our past may be painful and deeply hidden from memory. We may never have had much support in putting together any real, coherent sense of ourselves in relationship to others. The current stresses in our lives may be upsetting or confusing the sense of who we are, where we have been, and where we are going.

Mental illness, intoxication, developmental disability, neurological disorders, and brain injuries can deprive persons of the capacity to tell their story and locate themselves with others and the world. In the midst of illness, a person's story may take on bizarre dimensions. Difficulty in sharing a coherent story, or the presentation of a very disjointed or strange story, may be an indication that a person is suffering from a disabling condition. A person who presents in this manner may require specialized care.

Inviting another person to share his or her story can be a non-threatening way to build mutual trust and to develop a more detailed picture of the person's situation and needs. If we are also willing to share a little of our own story, we can expand the common ground.

We end, in a sense where we began. As we share our stories over time, we are both enriched. We have walked a little way on the journey together. At best, I have been able to add a little something to another person's story – some hope, some concrete help, some encouragement. In turn, they have added something to mine – their courage, their humanness, and their experience.

Every encounter we have is a small piece of the larger story. Every encounter is an opportunity to listen and share, and to help move our stories along with care and compassion.

Craig Rennebohm

Questions for Discussion

- What is the significance of "story" in relation to engagement and retention?
- How can you elicit a person's story in the context of your work?
- What are some reasons why a person might have difficulty remembering all or part of his or her story?
- What are some reasons why HIV-infected substance users might be reluctant or fearful to tell their stories?
- Who do you ask to share their stories?
- How do you define and determine the "truth" of someone's story? To what extent is this truth dependent on factual accuracy?
- When do you suggest that a client might benefit from other professional help?

Handout II-13

What Does It Mean To Care?

The word care has become a very ambiguous word. When someone says, "I will take care of you!" it is more likely an announcement of an impending attack than an expression of tender compassion. In addition to this ambiguity**,** the word care is commonly used in a negative way. For example, in response to the question, "Do you want coffee or tea?" you might say "I don't care."

Real care is not ambiguous. Real care excludes indifference and is the opposite of apathy. The word "care" finds its roots in the Gothic "kara" which means "lament." So the root meaning of care is "to grieve, to experience sorrow, to cry out with." I am very much struck by this background of the word care, because in common usage, we tend to look at caring as an attitude of the strong toward the weak, of the powerful toward the powerless, of the haves toward the have-nots. And, in fact we feel quite uncomfortable with an invitation to enter into someone's pain before doing something about it.

Still, when we honestly ask ourselves which persons in our lives mean the most to us, we often find that they are the persons who, instead of giving much advice, solutions, or "cures," have chosen instead to share our pain and touch our wounds with a gentle and tender hand. The friend who can be silent with us in a moment of despair or confusion, which can stay with us in an hour of grief and bereavement, who can tolerate not-knowing, not-curing, and not-healing, and who can face with us the reality of our powerlessness – that is the friend who cares.

Our tendency is to run away from the painful realities or to try to change them as soon as possible. But attempting to cure without care makes us into rulers, controllers, and manipulators, and prevents a real community from taking shape. Cure without care makes us preoccupied with quick changes, impatient and unwilling to share each other's burden. And so cure can often become offending instead of liberating.

It is therefore not so strange that cure is often refused by people in need. The phenomenon of refusing help that is offered without care is not limited to individuals. Indeed, oppressed minorities have resisted support and suffering nations have declined medicine and food when they decided that it was better to suffer than to lose self-respect by accepting a gift from a non-caring hand.

Henri Nouwen

Questions for Discussion

- Why does the author say that "care" has become an ambiguous word in common usage?
- What is the root meaning of the word "care," based on its origins in the Gothic word "kara"? Does this surprise you in any way?
- The author suggests that the root meaning of care challenges the common view of caring for others as an "attitude of the strong toward the weak, the powerful toward the powerless, of the haves toward the have-nots." How does this relate to our engagement and retention efforts?

- What is meant by the phrase “cure without care?” What are some examples in your work situation that might illustrate an approach of cure without care?
- How might you work with other professionals to improve the care of an HIV-infected substance user?

Enhancing Motivation Toward Positive Change

Purpose: To develop core skills to help HIV-infected substance users increase motivation toward positive change

Time: 40-60 minutes

Materials

- Flipchart and colored markers
- Handout II-14, "Stages of Change"
- Handout II-15, "Four Principles of Motivational Interviewing"
- Handout II-16, "OARS+E: The Basic Skills of Motivational Interviewing"
- Handout II-17, "Open-Ended Questions and Affirmations"
- Handout II-18, "Reflective Listening"
- Handout II-19, "Summarizing"
- Handout II-20, "Eliciting Change Talk"
- TV and VCR
- "Motivational Interviewing Tape C: Handling Resistance," recorded in 1998 by William R. Miller and Stephen Rollnick, and directed by Theresa B. Moyers. This videotape can be ordered at the following website: http://www.motivationalinterview.org/training/miorderform.pdf

Instructor Notes

1. Preview all or part of the videotape cited above. To find the segment of the tape to be shown during this activity, fast-forward approximately 32 minutes into the tape to a 15-minute section entitled: "Case Example: Responding to Resistance." In this part of the tape, the interviewer (woman sitting on the right) effectively demonstrates the use of basic motivational interviewing skills with a client who is reluctant to address his substance use problem (middle-aged man wearing vertically striped shirt).

2. Distribute Handout II-14, "Stages of Change." Summarize the five stages: precontemplation, contemplation, preparation, action, and maintenance. Also comment on the concept of relapse. Include the following key points:
   - Behavior change can involve starting, ending, increasing, decreasing, or altering a particular behavior. Behavior is defined broadly, not only referring to physical behaviors, but also to thoughts, attitudes, and beliefs.
   - The process of change is not necessarily linear. It is often more like a spiral than a straight line. Sometimes it is "two steps forward, one step backward."
   - The stages are not totally distinct from one another.
   - It is common to be at different stages of change for various behaviors in one's life.
   - In general, stages cannot be skipped. A person must move through each stage eventually.

- People move through the stages according to their own pace and timing. For example, some people linger for years in one or more of the precontemplative, contemplative, or preparation stages. Others move very quickly through them into the action phase.
- Relapse is expected and accepted.
- Each stage (and relapse) requires a different stance and response by the care provider.

3. Distribute the Handout II-15, "Four Principles of Motivational Interviewing." Describe each of these four principles by using the talking points on the handout. Invite clarifying questions and comments from participants.

4. Distribute the following five handouts:

   - Handout II-16, "OARS +E: The Basic Skills of Motivational Interviewing"
   - Handout II-17, "Open-Ended Questions and Affirmations"
   - Handout II-18, "Reflective Listening"
   - Handout II-19, "Summarizing"
   - Handout II-20, "Eliciting Change Talk"

5. Describe these five key skills one at a time, and then review the examples provided on the handouts. Note that first four skills are focused on a client-centered approach, and the critical fifth, "Eliciting Change Talk", describes the directive nature of motivational interviewing. Spend as much time as is needed to ensure that participants are thoroughly familiar with them. Reinforce how these skills, along with the four principles of motivational interviewing, may be used to diminish resistance and promote motivation to change.

   Important: Be sure to note that, although these are the foundational skills, they are not the only skills used to enhance motivation. It is also appropriate at times to ask closed-ended questions, change the focus, provide information, state an opinion, give advice when requested, and so forth.

6. Show the motivational interviewing video segment described above. After the participants have viewed it, facilitate a discussion by asking the following questions:
   - Drawing on the principles of motivational interviewing, what types of things did the interviewer do? For example, participants might say that she generated a gap, rolled with resistance, expressed empathy, and so forth..
   - What things did the interviewer *not* do, based on the principles of motivational interviewing? For example, participants might say that she didn't pass judgment, didn't give advice, didn't argue, and so forth.
   - What examples did you observe of the interviewer using the skills: open-ended questions, affirmations, reflective listening, summarizing, and eliciting change talk?

Handout II-14

Stages of Change

Precontemplation
In the precontemplation stage, a person has no intention to change behavior in the foreseeable future. Many people in this stage are unaware or barely aware of their problems. Others might wish to change, but are not seriously considering changing within the next six months.

Contemplation
In the contemplation stage, a person is aware that a problem exists and is seriously thinking about addressing it, but is not yet committed to preparing for and taking action. People in this stage are experiencing ambivalence, weighing the pros and cons. They can remain stuck in this phase for long periods of time.

Preparation
In the preparation stage, a person is committed to taking action soon and is making concrete steps to do so. People in this stage often report small, positive behavioral changes. Although ambivalence may still be present, it is diminishing.

Action
In the action stage, a person is actively changing his or her behavior, relationships, or environment to overcome the problem. Their commitment is clear, and they are willing to devote the considerable time and energy required in this stage. Action is a critical part of behavior change, but it should not to be confused with behavior change itself, which is a broader process encompassing all of the stages of change

Maintenance
In the maintenance stage, a person continues to work at stabilizing behavioral change and consolidating the gains made during the action phase. The maintenance stage is not static, but is, in fact, very active. It often requires a great deal of hard work and perseverance. It is also a time to enjoy the rewards resulting from the change.

(Relapse)
Although relapse is not considered a stage of change, it is often part of the change process. Relapse occurs when a person reverts to the problem behavior. This may happen one or more times at any point along the change pathway. The duration of relapse may be very brief or lengthy. Relapse is viewed as a temporary loss of motivation and is regarded as a learning opportunity.

This handout was adapted from *Changing for Good* by James Prochaska, John Norcross, and Carlo DiClemente, published in 1994 by William Morrow and Company, Inc., New York; and *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York.

Handout II-15

Four Principles of Motivational Interviewing

Express Empathy

- Create atmosphere in which client can safely explore conflicts and face difficult realities
- Acceptance facilitates change, pressure to change tends to immobilize it
- Accurate, skillful reflective listening is fundamental – seeks to understand the client's feelings and perspectives without judging, criticizing, or blaming
- Ambivalence is normal, not pathological

Develop Discrepancy

- When one's own behavior is seen as conflicting with important personal goals such as health status, living situation, self-image, change is more likely to occur
- Counselor uses and amplifies discrepancy *within* the person to explore *importance* of change for him or her
- Goal is to have client, not the counselor, present reasons for change – consistent with self-perception theory – essentially that we come to know what we believe by hearing ourselves say it.
- Motivational interviewing designed to elicit and reinforce change statements. These statements include recognition of the problem, expression of concern, intention to change, and optimism for this change.

Roll with Resistance

- Avoid arguing for change.
- Resistance is not to be directly opposed. Opposing resistance generally strengthens it.
- Resistance is a signal to respond differently.
- Offer new perspectives but don't impose them.
- The client is a primary resource in finding answers and solutions.
- Client resistance is significantly influenced by the counselor's behavior.

Support Self-Efficacy

- Goal is to enhance the client's confidence in his or her capability to cope with obstacles and to succeed in change
- Assumes the client, not the counselor, is responsible for choosing and carrying out change
- Self-efficacy is a key element for motivating change and a reasonably good predictor of the treatment outcome
- The counselor's own belief in the person's ability to change can have a powerful effect on the outcome – often becomes a self-fulfilling prophecy

This handout was adapted from *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York

Handout II-16

OARS+E: The Basic Skills of Motivational Interviewing

The motivational interviewing approach is often referred to as more *a way of being with clients* than as *a series of techniques*. As such, it is not only what you do, but how you do it that is important. Motivational interviewing is not a prescriptive approach for working with people. However, certain methods are required to employ this particular approach.

There are five specific methods that are useful throughout the process of motivational interviewing. The first four, summarized by the acronym OARS (Open questions, Affirmations, Reflective listening, and Summarizing), are derived largely from client-centered counseling. In motivational interviewing they are used to explore ambivalence and clarify reasons for change.

The fifth method, Eliciting change talk (+E), is more clearly directive and is specific to motivational interviewing. It integrates and guides the use of the other four methods.

Although these five methods appear simple, they are not necessarily easy to use. They require considerable practice. Providers must consciously incorporate them into their practice. The reward for doing so is that these methods can effectively help others move in the direction of positive change.

This handout was adapted from *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York.

Handout II-17

Open-Ended Questions and Affirmations

Open-Ended Questions

Open-ended questions encourage people to talk about whatever is important to them. They help providers build rapport, gather information, and increase understanding. Open-ended questions are the opposite of closed-ended questions, which require only a limited response, such as "yes" or "no."

Open-ended questions invite people to tell their own stories in their own words from their own points of view. Their answers reveal a richness of content that goes far beyond mere facts and allows the listener to hear "what makes the person tick." Open-ended questions should be used frequently, though not exclusively, in conversation with clients.

The example below shows the contrast between an open-ended and a closed-ended question. Notice that, although the questions focus on the same topic, the second question is more likely to elicit a detailed response.

- Did you have a good relationship with your parents?
- What was your relationship with your parents like?

Here are a few more examples of open-ended questions:

- Would you tell me more about . . . ?
- Would you help me understand . . . ?
- How would you like things to be different?
- What are the positive things and what are the less good things about . . . ?
- What do you think you will lose if you give up . . . ?
- What have you tried before?
- What do you want to do next?

Affirmations

Affirmations are statements and gestures that recognize a people's strengths and acknowledge behaviors that lead in the direction of positive change, no matter how big or small. Affirmations help to build people's confidence in their ability to change. To be effective, affirmations must always be genuine and congruent.

Examples of affirmations:

- I am really impressed with the way you . . .
- That's great how you've reached your goal of cutting back on your drug use.
- Using protection shows that you have real respect for yourself and your partners.
- I was hoping I would have the opportunity to meet with you again.
- You have a quite a gift for . . .

This handout was adapted from motivational interviewing materials developed by David B. Rosengren, and from *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York.

Handout II-18

Reflective Listening

"Listening looks easy, but it's not simple. Every head is a world."
Cuban proverb

Reflective listening is a primary skill in outreach. It is a pathway for engaging others in relationship, building trust, and fostering motivation to change. Reflective listening appears deceptively easy, but it takes hard work and skill to do well.

Sometimes the approaches we use in working with individuals do not exemplify reflective listening, but instead serve as roadblocks to effective communication. Examples include misinterpreting what is said or assuming what a person needs.

To listen reflectively, it is vital to learn to *think* reflectively. This way of thinking, which accompanies good reflective listening, includes interest in what people say and respect for their inner wisdom. Hypothesis testing is a key element of reflective thinking and listening. What you think the person means may not be what they really mean. Listening may break down in any of the three ways listed below:

- The speaker does not say what is meant.
- The listener does not hear correctly.
- The listener gives a different interpretation to what the words mean.

Reflective listening is meant to close the loop in communication to ensure that breakdowns don't occur. The listener's voice turns down at the end of a reflective listening statement. This may feel presumptuous when you do it, yet it leads to clarification and greater exploration. In contrast, asking additional questions tends to interrupt the client's flow. Some people find it helpful to use some standard phrases like the following:

- "So you feel . . ."
- "It sounds like you . . ."
- "You're wondering if . . ."

There are three basic levels of reflective listening that may deepen or increase the level of intimacy and thereby change the affective tone of an interaction. In general, the depth of intimacy should match the situation. Examples of the three levels are given below:

- Repeating or rephrasing: The listener repeats or substitutes synonyms or phrases, staying close to what the speaker has said.
- Paraphrasing: The listener makes a major restatement in which the speaker's meaning is inferred.
- Reflecting feeling: The listener emphasizes emotional aspects of communication through statements that express feelings; this is the deepest form of listening.

Varying the levels of reflection is an effective approach in reflective listening. At times, there are also benefits to overstating or understating a reflection. An overstatement (that is, an amplified reflection) may cause a person to back away from a position, while an understatement may help to continue and deepen the feeling intensity.

This handout was adapted from motivational interviewing materials developed by David B. Rosengren, and from *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York.

Handout II-19

Summarizing

Summaries are special applications of reflective listening. Although they can be used throughout a conversation, they are particularly helpful at transition points. For example, summaries are often helpful after someone has finished speaking about a particular topic or recounted a personal experience, or when the encounter is nearing an end. Summarizing helps to ensure that there is clear communication between the speaker and listener. It can also provide a stepping-stone toward change.

Structure of Summaries

Begin with a statement indicating that you are making a summary. For example:

- "Let me see if I understand so far . . ."
- "Here is what I've heard. Tell me if I've missed anything . . ."

Give special attention to what are known as "change statements." These are statements that a person makes that point toward a willingness to change. There are four types of change statements, all of which overlap:

- Problem recognition: "My use has gotten a little out of hand at times."
- Concern: "If I don't stop, something bad is going to happen."
- Intent to change: "I'm going to do something, I'm just not sure what it is yet."
- Optimism: "I know I can get a handle on this problem."

If the person expresses ambivalence, it is useful to express both sides of their ambivalence in the summary statement. For example, "On the one hand, it seems that . . . while on the other hand, it sounds like . . ."

It is acceptable to include information in summary statements from other sources, such as your clinical knowledge, research, courts, or family.

Be concise.

End summary statements with an invitation. For example:

- "Did I miss anything?"
- "If that's accurate, what other points are there to consider?"
- "Is there anything you want to add or correct?"

Depending on the person's response to your summary statement, it may lead naturally to planning for or taking concrete steps toward the change goal.

This handout was adapted from motivational interviewing materials developed by David B. Rosengren, and from *Motivational Interviewing* (2nd edition) by William Miller and Stephen Rollnick, published in 2002 by Guilford Publications, New York.

Handout II-20

Eliciting Change Talk

Eliciting change talk is the consciously directive strategy on the part of the counselor for resolving ambivalence. If open questions, affirmations, reflective listening, and summarizing were the only skills used by the counselor, it would be quite possible for the client to remain stuck in ambivalence. Instead of the counselor advocating for change, which often puts the client in the position of defending against it, motivational interviewing takes a different tact. The idea is to have the counselor facilitate the client's expression of change talk, that is, for the client to present the arguments for change.

Four Categories of Change Talk

- Recognizing disadvantages of the status quo
  "I guess this is more serious that I thought."
- Recognizing advantages of change
  "I'd probably feel a lot better."
- Expressing optimism about change
  "I think I could probably do that if I decided to."
- Expressing intention to change
  "I've got do something."

Methods for Evoking Change Talk

- Asking evocative questions
  "What worries you about your current situation?"
- Using the *importance* ruler (also use regarding client's *confidence* to change)
  "How important would you say it is for you to_____? On a scale of 0 to 10, where 0 is not at all important and 10 is extremely important, where would you say you are?"

0	1	2	3	4	5	6	7	8	9	10
Not at all important									Extremely important	

- Exploring the decisional balance
  "What do you like about your present pattern?" "What concerns you about it?"
- Elaborating
  "What else?" Ask for clarification, an example, or to describe the last time this occurred.
- Querying extremes
  "What concerns you most about? What are the best results you could imagine if you made a change?"
- Looking back
  "What were things like before you? What has changed?"
- Looking forward
  "How would you like things to be different a year/three years from now?"
- Exploring goals and values
  "What things are most important to you?"

(Miller and Rollnick, Motivational Interviewing, 2nd edition, 2002, The Guilford Press)

Practicing With OARS +E

Purpose: To practice using the five methods involved in enhancing motivation

Time: 30 minutes

Materials: Handout II-21, "Scenarios"

Instructor Notes

1. In preparation for the activity, review the scenarios in Handout II-20 and separate each one. Then fold and place the scenarios in a box for the training session. Write the discussion questions on newsprint:
    - *For the client:* how it felt to be interviewed with these techniques. Did they feel heard? What techniques worked best for them? What techniques didn't work as well?
    - *For the observer*: What examples of the four principles and the methods did the provider use during the interview?
    - *For the provider*: Which techniques worked best for them? What was the most challenging aspect of the micro-skills approach?

2. Divide the participants into small working groups of three persons each. Assign a specific role to each person in the working groups. The three roles are the provider who is conducting the interview, the client being interviewed, and an observer. The people in the role of providers should handle their interviews from the stance of someone in their clinical discipline or position – for example, as a physician, a mid-level nurse, or an outreach worker.

3. Ask the people who are in the role of interviewed clients to select a scenario from the box and read it. They should not reveal the scenario ahead of time to the persons in either the provider or observer roles.

4. The persons in the provider role begin by asking an open-ended question, such as "How might I be of help?" or "What brings you here today?" The person in the client role should create a personal story around the scenario. The provider's goal is to use the micro-skills to understand the client's situation, thoughts, and feelings. The provider should try to use each of the four techniques as often as possible during the interview. Allow about eight to ten minutes for each interview.

5. The job of persons in the observer role is to jot down examples of the provider's use of the five techniques – open-ended questions, affirmations, reflective listening at various levels, summarizing, and eliciting change talk.

6. After each role-play, the three participants should debrief for about five minutes around the discussion questions listed in instructor note #1.

7. If possible, ask each working group to repeat the role-play twice more using different scenarios so that each participant has an opportunity to play all three roles.

8. At the end of the activity, thank the group for their willingness to practice these skills. Encourage them to learn more about approaches to enhance motivation and to continue practicing these core skills in their work.

Handout II-20

Scenarios

You are a 17-year-old, homeless Caucasian youth who has tested positive for HIV. To survive, you make money by having sex, usually unprotected, with various regular customers.

You are a young Latino woman who is in early pregnancy and is infected with HIV. You are afraid to see your doctor, because you are ashamed of your HIV status.

You are a 50-year-old African American man who is infected with HIV. You have remained drug-free for the three months since you successfully completed a long-term residential treatment program for your heroin addiction. You report that you've recently been having intense cravings to use again.

You are an immigrant man in your thirties from West Africa. You recently tested positive for HIV. You don't believe that you could possibly be infected, and you refuse to discuss it with anyone.

You are a formerly homeless Native American woman in your early forties living with HIV. You've recently found permanent housing, but it seems to be more of a problem than a solution. You report that you feel walled in, that you don't like being alone, and that people are constantly knocking on your door trying to sell you drugs that threaten your recovery. You report feeling more and more depressed and are considering moving out. You say you were happier living on the streets.

You are a 29-year-old Caucasia***n*** woman who is infected with HIV. You are trying to regain custody of your two young children. You recently moved into clean-and-sober transitional housing after successfully completing in-patient treatment for polysubstance use. You tell your provider in confidence that you've been drinking and using crack occasionally, but you are not doing any of that "other stuff." You report that you only use on the weekends when you are away from the transitional housing facility.

You are a man in your thirties who is infected with HIV. A few months ago you were released from prison after serving a lengthy sentence for multiple drug-related offenses. You are currently on parole with the requirement that you not use drugs. For the first month after release you went back to smoking crack almost every day, but now report feeling very proud that you've been able to cut back to smoking crack only on weekends.

You are a 28-year-old Latino male who has tested positive for HIV. You probably contracted the virus by having anonymous unprotected sex with men at gay sex clubs. You are married with a child and do not consider yourself to be homosexual. You are afraid to disclose your HIV status to your family.

You are a 25-year-old woman who is involved in a long-term abusive relationship with a partner who is infected with HIV and uses injection drugs. You are quite concerned that you might also test positive for HIV, but your partner refuses to let you get tested or seek medical help. Your partner says in a dismissing manner, "What you don't know won't hurt you."

Effective Referral and Linking

Purpose: To highlight the necessary elements for making successful referrals

Time: 20 minutes

Materials: Handout II-21, "Checklist for Making Successful Referrals"

Instructor Notes

1. In preparation for this activity, familiarize yourself with Handout II-21 and the activity instructions, and be prepared to facilitate a group discussion.

2. Introduce the activity by noting that effective referrals require more than giving someone a name and phone number and then wishing them good luck. There are many personal and systemic barriers that may hinder HIV-infected substance users' attempts to access the help they need. As needed, ask participants to name some of these barriers.

3. Refer participants to Handout II-21, "Checklist for Making Successful Referrals." This checklist presents the issues that providers should consider when making referrals. Review these items, and invite participants to make comments and ask questions.

4. Have participants break into pairs. Ask each person to think about an HIV-infected substance user to whom they are currently providing care. Ask them to identify a particular need (such as medical care, substance use treatment, public assistance, shelter, or housing) for which a referral will likely be needed. Instruct each participant to talk with their partner about the likely success of this referral with this client using the checklist and the questions below as a guide:
   - If I were to make this referral today, how successful would it probably be?
   - How ready are the client, the system, and I (as the provider) to ensure that this referral will work out? (Be sure to factor in the client's inner motivation to pursue the referral.)
   - What still needs to be learned or negotiated to prepare for a successful referral for this client?

5. Close the activity by facilitating a discussion with the large group by raising some or all of the following questions:
   - What new insights do you have about making successful referrals?
   - Are there any issues that should be considered that are not on the checklist?
   - What specific strategies can you use to ensure that clients make it to their first appointment and keep follow-up appointments?

- Do you have any thoughts about how to use the checklist as a visual reminder in the office?

Handout II-21

Checklist for Making Successful Referrals

- I have an adequate understanding of the individual's situation and perceived needs.
- The client and I have talked about how to prioritize these needs and what options exist to help address them.
- The client is willing and ready to be referred.
- We have discussed what issues might make it difficult for the individual to follow through with the referral.
- I am familiar with the agency to which I am referring the individual, including its eligibility requirements and services.
- The agency has the *capacity* and *willingness* to serve HIV-infected substance users in a respectful, culturally competent, and knowledgeable manner.
- I have a working relationship with at least one of this agency's staff persons who can provide useful information and help advocate for the individual.
- I have considered whether or not to accompany the client to this agency. My decision was based on the following qualities and capacities of the person:
  - Ability to negotiate complex social situations
  - Ability to provide and receive information
  - Ability to tolerate waiting
  - Level of ambivalence about seeking help
  - Interpersonal style (passive to argumentative)
- If the client is going alone, I have provided sufficient information and "coaching" to help make the referral successful.
- I have made a plan to follow-up with the individual to see how things went and to determine next steps.
- I have a backup plan if this referral fails to work out for any reason.

Section 3: Keeping Ourselves Engaged

This section provides a menu of activities that can be used to introduce and promote self-care activities for staff members working with HIV-infected substance users.

Objectives for the Entire Session: By the end of the session, participants will be able to:

- Describe at least three guidelines and specific practices to promote personal and collective well being in the work environment.
- Model one or two self-care activities that they can use with their own programs. Two activities that are highly encouraged to demonstrate include: the River of Life activity and the Great Care Debate

Suggested Review Time: 1 hour

Materials:
Handout II-22, "This work…"

Instructor's Notes:

1) Introduce this section by explaining the rewards and challenges in working on a daily basis with providing care to HIV-infected substance users. Use the poem in Handout II-22 to illustrate. If applicable, draw upon some of the lessons learned from earlier activities such as the Public Hearing. Taking care of ourselves and fellow colleagues to balance the demands of work and our personal lives is important if we are to be effective in our work.

2) Explain this section outlines activities that each person can do with fellow staff members or by themselves to find ways to promote a healthier work environment as well as a healthier self.

3) Encourage the group to include an exercise in their follow-up training activities and/or reference in their presentations around Strategies to engage and retain HIV-infected substance users in care. Remind them if we ourselves are not engaged in our work, it will be a challenge to engage others in care.

Handout II-22

This work…

exhilarating
and exhausting

drives me up a wall
and opens doors I never imagined

lays bare a wide range of emotions
yet leaves me feeling numb beyond belief

provides tremendous satisfaction
and leaves me feeling profoundly helpless

evokes genuine empathy
and provokes a fearsome intolerance within me

puts me in touch with deep suffering
and points me toward greater wholeness

brings me face to face with many poverties
and enriches me encounter by encounter

renews my hope
and leaves me grasping for faith

enables me to envision a future
but with no ability to control it

breaks me apart emotionally
and breaks me open spiritually

leaves me wounded
and heals me

Ken Kraybill

Promoting Well-being in the Work Environment

Purpose: To identify policies and practices which keep staff engaged in the work and motivate HIV-infected substance users to keep coming back for care

Time: 40 minutes

Materials: Flipchart and colored markers

Instructor Notes

1. Read the activity instructions below and prepare accordingly.

2. Ask the group to brainstorm about elements of the work environment that are necessary both to keep staff engaged and to motivate clients to keep coming back for care. Examples of these key elements of agency culture might include its organizational structure, policies, philosophy of care, supervision, decision-making, communications, operating procedures, cultural sensitivity, building features, aesthetics, safety, attitudes, activities, and support of personal wellness. Write down the participants' ideas on a sheet of flipchart paper.

3. Break the large group into smaller working groups of four to six participants.

4. Ask the participants to imagine that they are at a retreat that includes all agency staff, Board members, and some people who receive care from the agency. The focus of the retreat is to create and maintain a healthy work environment that promotes the well being of everyone who works for the agency and is served by it. Each working group is charged with identifying some specific ideas for policies, practices, and activities that would improve the work environment for staff and for those who receive services. Encourage the working groups to be imaginative and to come up with ideas that could be realistically implemented in the workplace. Ideas may be either big or small.

The following list has some examples of policies, practices, and activities that might be implemented:

- Personal check-ins at the beginning of staff meetings
- Regular staff potlucks
- Redesigned workspace to improve safety and aesthetics
- Regular visits from a massage therapist
- Ways to improve communication
- In-service training on "creating a respectful workplace"
- Special recognition of birthdays and work anniversaries
- Retreats to nature
- Policies that promote personal wellness

- Formation of staff softball, volleyball, and soccer teams
- Allocation of time and space for meditation or yoga
- Designation of a "De-stress the Workplace Month"
- Diverse activities in job descriptions
- Opportunities and permission to become involved in advocacy
- Flexible work schedules

5. Give working groups about 10 to 15 minutes both to brainstorm ideas and to prepare a presentation for the larger group about their recommendations. Direct the working groups to follow the guidelines below in making their presentations:
   - All members of the group must participate in the presentation in some way.
   - Presentations must take five minutes or less.
   - The presentation should include three to five specific and workable recommendations for implementation.
   - These recommendations are to be presented in an interesting and creative way – no dry, didactic speeches are permitted! The performance of skits, songs, and pantomime, and the use of props, limericks, haiku, role plays, and so forth is highly encouraged.

6. Have the small groups make their presentations. Consider giving prizes for the most creative, clever, or humorous ones.

7. Conclude the activity by discussing the most workable ideas that were raised, and challenge participants to consider ways to implement them in their own work settings.

In addition to the main activities in Section 3, we are providing five optional activities. Instructors may add these activities to the session if time allows, or they may substitute them for the activity described above.

River of Life

Purpose: To have participants reflect on the personal experiences and influences that have motivated them to become involved in this work

Time: 30 minutes

Materials: One blank piece of paper and pen for each participant

Instructor Notes

1. Familiarize yourself with the activity. In preparing for it, draw your own "river of life," as described below. Do this exercise with someone else if possible and share your experiences.

2. Acknowledge that this exercise, particularly the aspect of reflecting on the "rough waters" in our lives, may provoke unwelcome thoughts or memories for some participants. Comment on this when introducing the "River of Life" exercise and give participants permission to excuse themselves from doing the exercise if they choose.

3. Explain that a river is a meaningful symbol in many cultures and that most people find it quite natural and stimulating to think of their own lives in terms of a river. In this activity, participants are invited to use the symbol of a river to reflect on their personal lives. You may also acknowledge that many people prefer to view their lives as a pathway or roadway rather than a river. As the instructor, it is important to be flexible and to allow people to use whichever metaphor works best for them. In addition, some participants may not feel comfortable drawing. Ask those persons to write out their river of life rather than draw it. Note that the remaining notes refer only to the River of Life metaphor.

4. Write the following words on a sheet of flipchart paper:
   - River currents
   - Tributaries or streams
   - Rough waters

5. Invite each person to take a piece of blank paper and a pen and to draw a simple river. Along the course of the river, have them identify particular strengths, gifts, and passions (river currents) they possess and bring to their work. Next, they are to draw and identify "tributaries or streams" flowing into the river that correspond to the key influences in their lives. Examples might include specific people, education, books, experiences, and events. Ask the

participants to focus especially on influences that have contributed directly or indirectly to becoming involved in this work. Finally, ask the participants to draw and identify "rough waters" in the river that represent particularly challenging times that have influenced them in a significant way or have been the source of valuable learning relevant to this work.

6. Encourage participants to be as self-disclosing in this exercise as they are comfortable doing. Explain that they will be asked to share some of their experiences in small working groups of two or three people. Allow six to eight minutes for drawing the river, tributaries, and rough waters.

7. Form groups of two or three people each and invite participants to share with each other their experience of drawing the river. Allow sufficient time for this part of the activity, at least ten minutes per person. You may prompt them with questions, such as the following:
   - What did this exercise stir in you?
   - Did you have any particular insights?
   - What are some of the gifts, passions, and values that connect you to your work?

8. To provide closure to the activity, invite a few participants to share with the entire group any discoveries or insights they have gleaned from this river excursion.

This activity was adapted from the "River of Life" exercise in the *Community Organizing Curriculum* (3rd edition), published in 1994 by the New Mexico Department of Health, Public Health Division, Santa Fe, New Mexico.

Worker Safety and Precautions: What Are the Risks?

Purpose: To increase awareness of the health and safety risks in outreach and to promote prevention efforts and guidelines for intervention

Time: 10 minutes

Materials
- Flipchart and colored markers

Instructor Notes
1. The outreach setting is a unique and ever-changing environment. Taking services to "where people are" presents intriguing possibilities and may also present certain risks for the provider's health and safety. Employers need to fully inform their outreach workers about these risks, and workers need to take these matters seriously. Outreach workers must make a commitment to abide by agency policies, maintain awareness of their environment, and to take steps to reduce work-related risks to a minimum.

2. Familiarize yourself with the activity as outlined below. The approach described is an effective way to help groups brainstorm creatively and then begin to define the issues in more measurable terms.

3. Ask participants to name the various specific health and safety risks they might encounter in their work. Encourage them to think broadly about the nature of these risks. Remind them to define health risks not only in physical terms, but in relation to their psychological, emotional, and spiritual health as well.

4. After completing this brainstorm, consider grouping the ideas into general risk categories. These categories will likely include the following:
   - Exposure to diseases
   - Accidents
   - Physical violence
   - Harassment
   - Verbal and emotional abuse
   - Emotional or psychological symptoms
   - Stress
   - Burnout

5. Encourage participants to discuss with their co-workers specific ways to reduce the risks that they encounter in their work.

Safety Guidelines for Street Outreach

Purpose: To identify and generate discussion about safety guidelines for street outreach

Time: 15 to 20 minutes

Materials: Handout II-23, "Safety Guidelines for Street Outreach"

Instructor Notes

1. In preparation for this activity, review the guidelines noted on Handout II-23, "Safety Guidelines for Street Outreach." Pay special attention to the opening statement: "These safety guidelines for street outreach are adapted from guidelines developed by outreach workers in the downtown skid row area of Los Angeles. They are designed solely to assist staff in avoiding trouble on the street. They do not address how to handle difficulties once they arise. The strength of these guidelines is that they address the needs of street outreach workers who operate in a very different work environment from staff who are agency-based. The guidelines are intended as only one part of an agency's overall safety policies and procedures."

2. Review the guidelines together as a large group. Comment on selected guidelines as you see fit, and provide examples from your experience. It may be helpful to give examples of

situations in which workers did not adhere to guidelines or agency policies and experienced negative consequences as a result.

3. Review the list of risks identified in the previous activity. Ask participants how these guidelines address the risks identified earlier by the group. Invite participants to ask questions and share their own examples.

4. Even when the truth of a guideline seems self-evident, ask the participants why it was included on the list. Play the role of devil's advocate periodically to urge the group to think more deeply about these guidelines.

5. After reviewing the guidelines on the handout, ask the group to suggest other guidelines they would add to the list. Some workers who do outreach in specific settings or with specific populations will generate guidelines that may be unique to their situation.

Handout II-23

Safety Guidelines for Street Outreach

These safety guidelines for street outreach are adapted from guidelines developed by outreach workers in the downtown skid row area of Los Angeles. They are designed solely to assist staff in avoiding trouble on the street. They do not address how to handle difficulties once they arise. The strength of these guidelines is that they address the needs of the street outreach workers who operate in a very different work environment from staff who are agency-based. The guidelines are intended as only one part of an agency's overall safety policies and procedures.

1. Your supervisor needs to know where you will be at all times.

2. Learn as much as possible about the situation before setting out to do outreach.

3. Do not plan outreach in areas which you have good reason to believe are inherently dangerous.

4. Be aware of gang areas and gang colors. Avoid wearing gang colors when doing outreach in those areas.

5. Always carry business cards and identification with you.

6. Inform collaborating agencies of your presence.

7. Introduce yourself and inform people about what you are doing and why.

8. Do not argue with someone who does not agree with what you are doing.

9. Outreach is preferably conducted in two-person teams. No team member should conduct outreach activities alone unless he or she receives prior approval from the supervisor.

10. Do not approach those who are showing signs that they do not want to be bothered.

11. Do not criticize your partner in public while conducting outreach. Always present yourselves as a team.

12. Wear comfortable clothes and shoes. Do not overdress.

13. Do not carry valuables or other personal possessions, such as jewelry, large amounts of money, radios, and laptops. If you are carrying incentives, make arrangements to hold these in a secure place.

14. Do not remain in a spot where you are privy to a drug deal that is either in process or is being set up to "go down." Leave the area immediately without drawing attention to yourself or others.

15. Do not linger with a person who you know is holding illegal drugs.

16. Do not interrupt the sale of sex or drugs for money. Leave the area immediately without drawing attention to yourself or others.

17. Do not counsel or play the role of a social worker on the streets.

18. Maintain confidentiality with all clients you meet.

19. Do not accept gifts or food from clients or buy any merchandise from them.

20. Do not give or lend money to clients.

21. Do not accept or hold any type of controlled substance.

22. Never enter any clients' cars or homes or any enclosed area.

23. Tell clients approximately when you will be back and where you can be reached. Provide clients with a business card.

24. Work with your partner and supervisor to develop a contingency plan for worst-case scenarios or dangerous situations.

25. Keep your supervisor informed about any unusual developments.

26. In case of an emergency, call 911 or have another person call that number. Do not separate from your partner unless you feel that staying together would increase your danger.

Employee Statement
I acknowledge that I have received a copy of the safety guidelines for performing outreach. I certify that I have read and understand these guidelines, and I agree to comply with agency guidelines related to this issue to the best of my ability.

Print Name: _____

Signed: _____ Date: _____

Supervisor Signature: _____ Date: _____

Self-Care: The Great Debate

Purpose: To acknowledge the mixed messages we often hear about self-care in our lives and work settings

Time: 15 minutes

Materials: Handout II-23, "Self-Care: The Great Debate"

Instructor Notes

1. In preparation for this activity, make two copies of the Handout II-24, "Self-Care: The Great Debate." If you wish, supply some props for the two characters mentioned in the handout – the Voice of Self-Care Wisdom and the Voice of Work.

2. Ask for two volunteers to take part in a short skit. Give each volunteer a copy of the handout. Then assign one person to play the Voice of Self-Care Wisdom and the other to play the Voice of the Work.

3. Explain that the Voice of Self-Care Wisdom is leading a burnout prevention workshop for the group. The skit begins with the Voice of Self-Care Wisdom welcoming the group to the workshop and then beginning to offer sage advice (from the handout) to participants in an engaging, somewhat lilting voice. For example, "Stop denying. Listen to the wisdom of your body."

4. The Voice of the Work character is positioned at the back of the room and intones responses in a distant, disembodied manner. The Voice of Work says things such as, "*Work until the physical pain forces you into unconsciousness*." The two voices continue back and forth as the role players read the advice and corresponding responses.

5. When the skit has ended, invite participants to comment on their own experience of being caught in the middle of these different messages.

6. Close this activity by commenting that these messages can come from personal attitudes and beliefs as well as from external sources. Either way, it is important to acknowledge that providers and organizations have legitimate needs that are sometimes at odds. Providers will need to find a healthy balance between these competing needs and to be aware that this balance may shift at different times. Work colleagues can help monitor this balance for one another.

Handout II-24

Self-Care: The Great Debate

Voice of Self-Care Wisdom versus Voice of the Work

Wisdom: Stop denying. Listen to the wisdom of your body. Freely admit the stresses and pressures that reveal themselves physically, mentally, and emotionally.

> ***Work****: Work until the physical pain forces you into unconsciousness.*

Wisdom: Avoid isolation. Don't do everything alone! Develop or renew relationships with friends and loved ones. Closeness not only brings new insights, but also can be an antidote for agitation and depression.

> ***Work:*** *Shut your office door and lock it from the inside so no one will distract you. They are just trying to keep you from catching up on your paperwork.*

Wisdom: Change your circumstances. If your job, your relationship, a situation, or a person is dragging you under, try to change your circumstances or leave, if necessary.

> ***Work****: If you feel something is dragging you down, suppress those thoughts. Try drinking stronger coffee.*

Wisdom: Pinpoint the areas that are creating difficulties for you, and work towards alleviating that pressure.

> ***Work****: Increase intensity. Work harder. The harder you work, the more people you can help! If you find yourself working at a relaxed pace and enjoying your work, you probably need closer supervision.*

Wisdom: Stop over-nurturing. If you routinely take on other people's problems and responsibilities, learn to gracefully disengage. Try to get some nurturing for yourself.

> ***Work****: Make an effort to be everything to all people. You exist to solve other people's problems. Perhaps you haven't read your job description thoroughly.*

Wisdom: Learn to say "No." Speaking up for yourself will help diminish stress. This means refusing additional requests or demands on your time or emotions.

> ***Work****: Never say no to anything. It shows weakness and makes you look like a slacker. Never put off until tomorrow what you can do by working late today.*

Wisdom: Begin to back off and detach. Learn to delegate, not only at work, but also at home and with friends. In this case, detachment means rescuing yourself for yourself.

> ***Work****: Delegating is a bad idea. If you want it done right, do it yourself.*

Wisdom: Reassess your values. Try to sort out the meaningful values from the temporary and fleeting, the essential from the nonessential. You'll conserve energy and time, and you'll begin to feel more centered.

> ***Work**: Reflecting on such things is not only selfish but a waste of time. We will send you a memo explaining how to prioritize your values. Until then, if someone questions your priorities, tell them you are not able to comment and refer them to the Personnel Department. It will be taken care of.*

Wisdom: Learn to pace yourself. Try to take life in moderation. You only have so much energy available. Decide on what is wanted and needed in your life, then begin to balance work with love, pleasure, and relaxation.

> ***Work**: A balanced life is a myth perpetuated by so-called self-care experts trying to make a buck! They're just trying to undermine your commitment to your work. Don't be fooled by this.*

Wisdom: Pay attention to your body. Exercise regularly and take care of yourself nutritionally. Don't skip meals, disregard your need for sleep, or break your medical appointments.

> ***Work**: Yeah, whatever! Your body serves your mind; your mind serves the agency. Push the mind, and the body will follow. Drink Mountain Dew.*

Wisdom: Diminish worry and anxiety. Try to keep worrying to a minimum – it changes nothing. You'll have a better grip on your situation if you spend less time worrying and more time taking care of your real needs.

> ***Work**: If you're not worrying about work, you must not be very committed to it. We may have to find someone else who is.*

Wisdom: Keep your sense of humor. Begin to bring joy and happy moments into your life. Very few people suffer burnout when they're having fun.

> ***Work**: So, you think your work is funny? We'll discuss this with you at a special meeting on Friday at 6:00 p.m. Be there!*

This handout was adapted from a document on the Massachusetts Institute of Technology web site at http://web.mit.edu/afs/athena.mit.edu/user/w/c/wchuang/News/college/MIT-views.html

Self-Assessment Tool: Self-Care

Purpose: To use a self-assessment tool to rate yourself in the areas of physical, psychological, emotional, spiritual, and workplace self-care

Time: 15 minutes

Materials: Handout II-25, "Self-Assessment Tool: Self-Care"

Instructor Notes

1. In preparation for this activity, complete the self-assessment tool (Handout II-20) yourself and think about your responses to the follow-up questions listed below. Alternatively, do this exercise with another person or a small group, and then discuss it among yourselves.

2. Make sure that you have enough copies of the tool for each participant.

3. Distribute a copy of the self-assessment tool to each participant and request that everyone takes about five to seven minutes to complete it. Emphasize that this is representative list of self-care activities, not an all-inclusive list. In addition, note that the participants should not infer that anyone should be doing all of the things mentioned on the list. This tool simply provides a snapshot of a person's current attention to personal wellness.

4. Once participants have completed the self-assessment, ask them to discuss the ideas and issues it raised. You can ask participants to discuss this in pairs, in small groups, or in the entire group. If you wish, you may prompt the participants with questions such as the following:
   - Were there any surprises? Did the assessment present any new ideas that you hadn't thought of before?
   - Which activity ideas seem like they would be more of a burden than a benefit to you?
   - What are you already doing to practice self-care in the physical, psychological, emotional, spiritual, and workplace realms?
   - Of the activities you are not doing now, which particularly spark your interest? How might you incorporate them into your life sometime in the future?
   - What is one activity or practice you would like to "try on for size" starting now or as soon as possible?

Handout II-25

Self-Assessment Tool: Self-Care

Rate yourself, using the numerical scale below, to fill in the empty boxes:
5 = Frequently, 4 = Occasionally, 3 =Sometimes, 2 = Never, 1 = It never even occurred to me

How often do you do the following activities?

Physical Self-Care

☐ Eat regularly (that is, breakfast, lunch, and dinner)
☐ Eat healthfully
☐ Exercise or go to the gym
☐ Lift weights
☐ Practice martial arts
☐ Get regular medical care for prevention
☐ Get medical care when needed
☐ Take time off when you're sick
☐ Get massages or other body work
☐ Do physical activity that is fun for you
☐ Take time to be sexual
☐ Get enough sleep
☐ Wear clothes you like
☐ Take vacations
☐ Take day trips or mini-vacations
☐ Get away from stressful technology such as pagers, faxes, telephones, and e-mail
☐ Other:_____

Psychological Self-Care

☐ Make time for self-reflection
☐ Go to see a psychotherapist or counselor
☐ Write in a journal
☐ Read literature unrelated to work
☐ Do something at which you are a beginner
☐ Take a step to decrease stress in your life
☐ Notice your inner experience – your dreams, thoughts, imagery, and feelings
☐ Let others know different aspects of you
☐ Engage your intelligence in a new area – go to an art museum, performance, sports event, exhibit, or other cultural event
☐ Practice receiving from others
☐ Be curious
☐ Say no to extra responsibilities sometimes
☐ Spend time outdoors
☐ Other:_____

Emotional Self-Care

- ☐ Spend time with others whose company you enjoy
- ☐ Stay in contact with important people in your life
- ☐ Treat yourself kindly (for example, by using supportive inner dialogue or self-talk)
- ☐ Feel proud of yourself
- ☐ Reread favorite books and see favorite movies again
- ☐ Identify comforting activities, objects, people, relationships, and places, and seek them out
- ☐ Allow yourself to cry
- ☐ Find things that make you laugh
- ☐ Express your outrage in a constructive way
- ☐ Play with children
- ☐ Other:_____

Spiritual Self-Care

- ☐ Make time for prayer, meditation, and reflection
- ☐ Spend time in nature
- ☐ Participate in a spiritual gathering, community, or group
- ☐ Be open to inspiration
- ☐ Cherish your optimism and hope
- ☐ Be aware of nontangible (nonmaterial) aspects of life
- ☐ Be open to mystery and not-knowing
- ☐ Identify what is meaningful to you and notice its place in your life
- ☐ Sing
- ☐ Express gratitude
- ☐ Celebrate milestones with rituals that are meaningful to you
- ☐ Remember and memorialize loved ones who are dead
- ☐ Nurture others
- ☐ Have awe-ful experiences
- ☐ Contribute to or participate in the causes you believe in
- ☐ Read inspirational literature
- ☐ Listen to inspiring music
- ☐ Other:_____

Workplace/Professional Self-Care

- ☐ Take time to eat lunch with co-workers
- ☐ Take time to chat with coworkers
- ☐ Make time to complete tasks
- ☐ Identity projects or tasks that are exciting, growth-promoting, and rewarding for you
- ☐ Set limits with clients and colleagues
- ☐ Balance your caseload so that no particular day is 'too much!"
- ☐ Arrange your workspace to make it comfortable and comforting
- ☐ Get regular supervision or consultation
- ☐ Negotiate for your needs, such as benefits and pay raises
- ☐ Have a peer support group
- ☐ Other: _____

This handout was adapted from *Transforming the Pain: A Workbook on Vicarious Traumatization* by Karen Saakvitne and Laurie Anne Pearlman, published in 1996 by TSI Staff.

Session 5: Wrap-Up

What Will You Do When . ..

Purpose: To identify and summarize the ideas and insights which participants have gleaned during this module and will take back to their work settings

Time: 30 minutes

Materials:

- Handout II-26, "Suggested Replication Trainings"
- Flipchart
- Colored marker

Instructor Notes

1. Hand out the training planning assessment forms and give participants 20 minutes to fill out their suggested topics for a training on Engaging and Retaining HIV-Infected Substance Users in Care. If the group is large have them work in pairs.

2. Invite several participants to share with the group their proposed outline and how they plan to incorporate it into their work.

3. Share the Handout II-26 outlining ideas for two-hour replication training. Ask for feedback for other activities that could be done at their sites.

5. Inform the participants about the optional activities that there was not enough time to do. Ask participants whether they have any ideas for other related activities or resources. Share Handout II- 27 "Resources & References for further learning about Strategies to Engage HIV-Infected Substance Users in Care." Ask people if they have other ideas for resources to share with the group. Note the suggestions on the flip charts.

6. Conclude by thanking people for their participation and wish them well in their ongoing work.

Handout II-26:
Suggested Replication Trainings

Time: 2 hours

Session I: Introduction, Icebreaker, Objectives (15 minutes)

Session II: Framework for Engagement: (30 minutes)

a. Hospitality
b. Story

Session III: Practicing OARS

b. Review Handouts (20 minutes)
c. Practice methods in groups (40 minutes)

Session IV: Close out (15 minutes)

a. End with one of the self-care activities, such as "The Great Debate" or the Outreach poem

Handout II-27:

Resources & References for further learning about
Strategies to Engage HIV-Infected Substance Users in Care

Websites:

Please note: These websites have rich sources of information. To expedite your search, it is suggested to use key words such as: "HIV/AIDS", "Outreach", Access to care for people living with HIV/AIDS, substance abuse and HIV, behavior change strategies.

1) Health Resources & Services Administration: www.hrsa.gov

2) Substance Abuse and Mental Health Services Administration: www. Samsha.gov

3) National Health Care for the Homeless Council: www.nhchc.org

4) National Minority AIDS Council: www.nmac.org

5) Centers for Disease Control: www.cdc.org

6) Harm Reduction Coalition: www.harmreduction.org

7) New Mexico AIDS Information Network: www.aidsinfonet.org/

8) University of California at San Francisco: http://hivinsite.ucsf.edu

Reference Articles:

1. Anderson, M., G. Smereck E. Hockman, D. Ross, K Ground. (1999) Nurses Decrease Barrier to Health Care by "Hyperlinking" Multiple-Diagnosed Women Living with HIV/AIDS Into Care. *Journal of the Association of Nurses in AIDS Care*. 10 (2), 55-65.

2. Greenberg, J., R. MacGowan, M Neumann, A. Long, R. Cheney, D. Fernando, C. Sterk, W. Wiebel. (1998) Linking Injection Drug Users to Medical Services: Role of Street Outreach Referrals. *Health & Social Work* 23(4), 298-309.

3. Katz, M. W. Cunningham, V. Mor, R. Andersen, T. Kellogg, S. Ziefler, S. Crystal, M Stein, K. Cylar, S. Bozzette, and M. Shapiro. (2000) Prevalence and Predictors of Unmet need for Supportive Services Among HIV-Infected Persons: Impact of Case Management. *Medical Care* 38(1), 58-69.

4. Kraybill, K. (2002) *Outreach to People Experiencing Homelessness: A Curriculum For Training Health Care For Homeless Outreach Workers.* National Health Care for the Homeless Council.

5. Magnus, M. N. Schmidt, K. Kirkhart, C. Schieffelin, N. Fuchs, B. Brown, and P. Kissinger. (2001) Association Between Ancillary Services and Clinical and Behavioral Outcomes among HIV-Infected Women. *AIDS Patient Care and STDs* 15 (3), 137-145.

6. Marsh, J. T. D'Aunno, B. Smith. (2000) Increasing Access and Providing Social Services to Improve Drug Abuse Treatment for Women with Children. *Addiction* 95(8), 1237-1247.

7. Miller W. and Rollnick S. (2002) *Motivational Interviewing.* Guilford Publications, New York.

8. Prochaska, J. J. Norcross, C. DiClemente. (1994) *Changing Good*. William Morrow and Company, Inc., New York.

9. Rich, J. L. Holmes, C. Salas, G. Macalino, D. Davis, J. Ryczek, T. Flanigan. (2001) Successful Linkage of Medical Care and Community Services for HIV-Positive Offenders Being Released from Prison. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 78 (2) 279-288.

Module III: Incorporating Harm Reduction Into Our Work With HIV-Infected Substance Users

Table of Contents

Introduction

Background and Purpose

The content of this module is derived from three training resources: *Harm Reduction 101: The Basics*; *Harm Reduction Skills in Action*; and *Creating Harm Reduction Opportunities in Substance Abuse Treatment*. These resources were developed in 2001 and 2002 by the Statewide Partnership for HIV Education in Recovery Environments (SPHERE), a program of Health Care of Southeastern Massachusetts, Inc., in Brockton, Massachusetts.

This module is designed as a Training of Trainers (ToT) curriculum to provide participants with an overview and working knowledge of harm reduction. There is no universally accepted definition of harm reduction. However, for the purposes of this module, harm reduction may be defined as a collection of strategies and skills for reducing the harms in a person's life. In the context of substance use, harm reduction does not focus on a single aspect of drug use or a single goal, such as abstinence. Instead, harm reduction addresses the continuum of drug use as well as the continuum of activities that may reduce the harm of drug use. An important premise of this module is that harm reduction promotes options for people. Stopping substance use is seen simply as one option for reducing harm. Efforts to reduce the use of particular drugs, to use those drugs more safely, or to switch to less harmful drugs are also seen as valid options for behavior change.

This module describes harm reduction strategies and skills that are uniquely suited to HIV-infected persons who are active substance users or in recent recovery. The activities in this module are designed specifically for providers who support the harm reduction efforts of HIV-infected substance users. To deepen participants' understanding of harm reduction in this population, we will identify the spectrum of harms that are associated with substance use. With modification, this curriculum can be adapted to suit a broader population approach – working with all substance users; not only those infected with HIV.

In addition, we will explore the differences between harm reduction and traditional abstinence-based approaches for behavior change. We will also consider whether the harm-reduction approach is compatible with existing substance abuse treatment programs. Finally, we will ask participants to identify ways in which they already use harm reduction and to look for opportunities to integrate harm reduction more fully into their work. As participants identify concrete ways to incorporate harm reduction into their work, they will develop new skills to support their clients' efforts to live safer, healthier lives.

Resource Materials

- SPHERE's *Facts and Myths About Harm Reduction in Substance Abuse Treatment* Brochure*
- SPHERE's *Stages of Change Wheel**
- SPHERE's *Self-Assessment Ruler**
- Handouts III-1, "Ways We Already Incorporate Harm Reduction" (Page III-13)

- Handout III-2, "Continuum of Drug Use" (Page III-27)
- Handout III-3, "Behavior Change Worksheet" (Print-out slide III-15)
- Handout III-4, "Case Studies" (Page III-34)
- Handout III-5, "ABCDE Decision-Making Model" Worksheet (Page III-51)
- Slides III -1 to III - 41
- Adhering Newsprint and Colored Markers
- Slide Projection Equipment

* Visit www.HCSM.org/sphere.htm to obtain.

Objectives

By the end of this module, participants will be able to:

- Describe harm-reduction approaches and techniques
- List the range of harms created by substance use
- Identify practical harm-reduction skills and tools that are tailored to the needs of HIV-infected substance users
- Consider ways in which participants already incorporate harm reduction into their personal and professional lives
- Integrate the principles of harm reduction into their work with HIV-infected clients
- Use the TOT training experience, including Teach Back sessions*, and the curriculum to create replication trainings. See "Replication Training Suggestions" below.

* When using the module as a Training of Trainers (TOT), it is strongly recommended that the trainees have the opportunity to participate in Teach Backs. Suggested timing of teach back opportunities have been designated, although they have not been factored into the timeframes noted.

Key Facts

- There is no universal definition of harm reduction, nor does it represent a single activity or dynamic.
- Harm reduction focuses on supporting people's efforts to make positive changes in their lives.
- To be effective, harm reduction must be client-centered. Any positive change must be defined and prioritized by the client.
- Harm reduction is based on the premise that each client is the expert on his or her life. This means that clients must play an active role in identifying the behavior change they would like to make and in developing a plan to implement that change.
- The life circumstances of drug users, as well as their reasons for drug use, are varied, diverse, and complex.

Important Note: The term *harm reduction* can provoke intense emotional reactions from medical providers and substance abuse treatment providers. For some providers, these reactions

reflect the belief that a harm reduction approach will undermine their work. For example, certain professionals, many of whom have achieved personal sobriety through abstinence models of recovery, may be staunch advocates of abstinence and view harm reduction as a threat to abstinence. It is important for you as a trainer to bring out and be comfortable in dealing with these perspectives. When you facilitate these sessions, it will be important to acknowledge, manage, and respond to the participants' personal and professional concerns about harm reduction. Be prepared for controversy when you first train on this topic.

Trainer Tips

- It is strongly suggested that you do not attempt to train with these materials for a duration of less than 2.5 hours.
- Offer CEUs for trainings.
- Whenever you are rushed for time, use the slides to present the information, offer your personal story/experience of how you relate to the information being presented, and ask the audience to "brainstorm" on the slide content as a substitute for suggested activities.
- Whenever possible, offer tangible take-a ways to the participants. Suggested items include: local resource lists for client referrals to drug treatment and HIV medical programs, including 12 step meetings, website address lists, hand-outs of printed materials, supply kits (i.e., bags filled with floss, condoms, hand wash, etc.)
- When using the Case Studies, preview and edit them accordingly to ensure relevance to the audience and local conditions.
- Integrate Prevention for Positives messages wherever possible.
- When using the curriculum with an exclusive audience of substance abuse treatment professionals, you may want to consider removing the "HIV-infected" modifier throughout the materials.
- Visit relevant websites for updated information, training materials and tools, and participant handouts. Suggested websites include:

    - **www.anypositivechange.org**
    - **www.motivationalinterview.org**
    - **www.harmreduction.org**
    - **www.treatment.org/Externals/tips.html**
    - **www.HCSM.org/sphere.htm**
    - **www.aidsinfo.net.org/Fact** Sheet Number 155
    - **www.adulted.about.com**
    - **www.trainingdepot.org**

Suggested Training Replications

The module can be offered in two overview segments of 2 – 2.5 hours* as follows:

Sessions 1 – 6; Introduction to Harm Reduction followed by a concluding presentation/activity.

Sessions 7 – 9; Skills Orientation in Harm Reduction preceded by a review activity of previous sessions (1-6).

* The two-segment approach does not allow time for Session 8 skills building activities.

Session 7: What Do People Need to Change Behavior? Can be applied in tandem/integrated with other modules of the Kaleidoscope curriculum.

Session 1: Icebreaker and Introduction

Activity: What Do You Think About Harm Reduction?

Purpose: To introduce the participants and trainer to each other and to give participants the opportunity to state personal beliefs about harm reduction

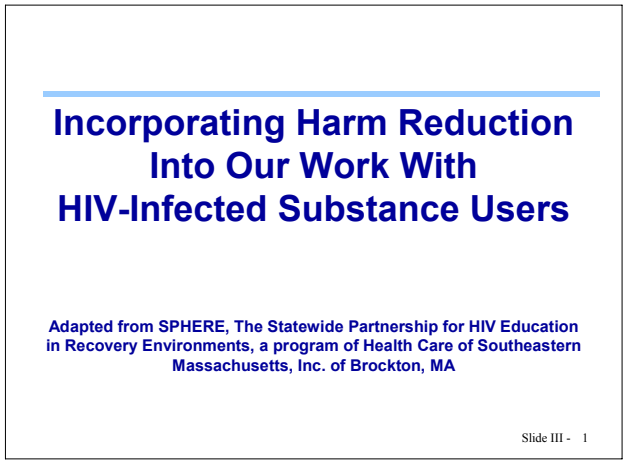
Time: 10 minutes

Materials:

- Newsprint paper and colored markers
- Slide III-1, "Incorporating Harm Reduction Into Our Work With HIV-Infected Substance Users."
- Slide III-2, "What Do You Think About Harm Reduction?"

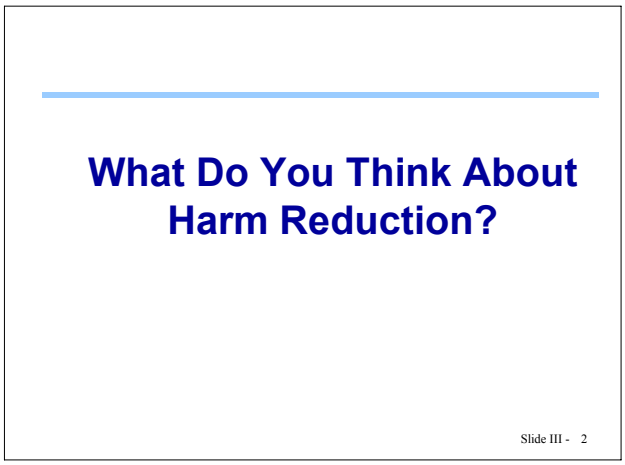
Instructor Notes:

1. Before you begin the training session, display Slide III-1, "Incorporating Harm Reduction Into Our Work With HIV-Infected Substance Users."



2. Before you begin this activity, write "Harm Reduction" at the top of a piece of newsprint paper, and post the paper on a wall or easel.

3. Display Slide III-2, "What Do You Think About Harm Reduction?"



4. Introduce yourself to the group, and then introduce the terms *harm reduction* and *risk reduction*. Tell the participants that these two terms are often used interchangeably.

5. Ask participants to introduce themselves by giving their name, their position (job title), and the type of organization where they work. Also ask them to say the first word or phrase they think of when they hear the words "harm reduction."

6. Record the participants' responses on the "Harm Reduction" newsprint sheet.

7. Once everyone has had a chance to respond, review the list and comment on the range of opinions and ideas reflected there. Identify and comment on which words reflect:
   - **Programs or services**, such as needle- or syringe-exchange programs and services to provide condoms
   - **Skills**, such as client-centered skills
   - **Opinions**, which would include phrases, such as "encourages drug use" or "prevents recovery"
   - **Feelings**, such as "distrust" or "embrace"

8. After you have grouped the participants' responses into these four categories, you will be ready to introduce a fundamental principle of harm reduction: Drug use and its associated activities and behaviors must be viewed on a continuum.

Activity: Pocket Your Beliefs About Drug Use and Drug Users

Purpose: To give participants the opportunity first to identify their personal beliefs about drug use and drug users and then to set those beliefs aside during the training session

Time: 10 minutes

Materials: Enough pieces of paper and pens or pencils for each participant

Instructor Notes:

1. Distribute a piece of paper and a pen or pencil to each participant.

2. Ask participants to write a word or phrase that reflects their beliefs about drug use or drug users. For example, their responses might include statements such as the following:

- "Drug use is a chronic disease."
- "Drug use is a sign of weakness."
- "Drug use is caused by society."
- "The only way that drug users can get clean is to abstain completely."

3. Once everyone has finished writing, ask the participants to stand.

4. Give the participants detailed directions for folding their paper into a small square. You might say something like the following: "Fold the paper in half once, again, and then one more time." When all participants have finished folding, ask them to put their papers into their pockets. This action dramatizes the process of putting away their beliefs.

5. Explicitly ask participants to be open-minded and to put aside their opinions about drug use and drug users for the duration of the training session.

6. Acknowledge how harm reduction can challenge our notions about substance use and substance users. Sometimes a person's beliefs about drug use and drug users will lead them to dismiss the harm-reduction approach. For example, adherents to some traditional "risk-elimination" models, such as abstinence, may completely reject risk reduction. It is important to acknowledge that abstinence is included in the harm reduction approach, as one of many options for drug users along a continuum.

7. Note that these preconceptions can undermine our relationships with clients and impede our efforts to support them.

8. **Introduce the following key concept about harm reduction: Harm reduction is a client-centered approach, which means that providers must see things from the client's perspective. By pocketing our personal beliefs about addiction and drug use, we will be in a better position to understand and meet our client's needs.**

Session 2: Describing Harm Reduction

Activity: What Is Harm Reduction?

Purpose: To create a general definition of harm reduction and then tailor this definition to HIV-infected substance users

Time: 25 minutes

Materials:

- Newsprint paper and colored markers
- Slide III-3, "What Is Harm Reduction?"

Instructor Notes:

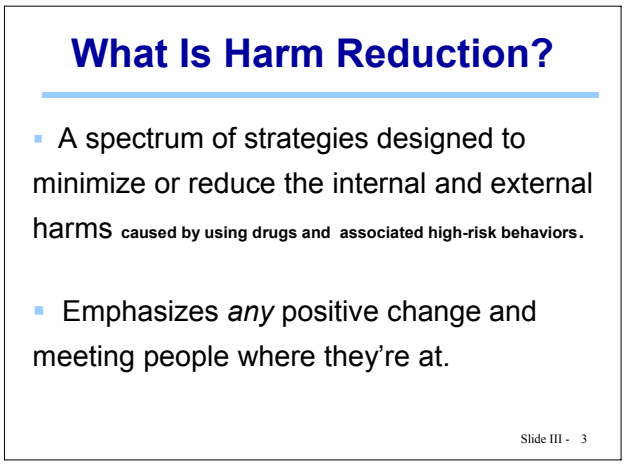
1. Review the newsprint sheet entitled "Harm Reduction," which was completed in the icebreaker activity in Session 1. Ask participants to recall their associations with the words "harm reduction." If most or all of the participants' responses were focused on needle- or syringe-exchange programs, encourage them to think more broadly. You might stimulate discussion by suggesting other possibilities, such as reducing substance use or changing the route of administration. You might point out that harm reduction can also be applied to sexual decision-making.

2. Introduce the following key points about harm reduction:
   - Harm reduction includes a spectrum of techniques and programs that support our work with HIV-infected substance users.
   - We already practice harm reduction in a variety of ways.

3. Ask the group to develop a one- or two-sentence working definition of harm reduction that the group can agree on. The following are examples of some good working definitions:
   - Harm reduction focuses on supporting people as they attempt to make any positive change.
   - Harm reduction must be client-centered, which means that any harm-reduction steps must be defined and prioritized by the client.

4. Record the group's definition of harm reduction on a newsprint sheet and post it.

5. Display and review Slide III-3, "What Is Harm Reduction?" Note that the smaller sized print in the first bulleted definition is specific to the HIV-infected substance-using population. Alternatively, the larger sized print applies to all individuals and a variety of applications.



Ask participants how they would revise or expand the definition of harm reduction for HIV-infected substance users. In other words, what is a more specific definition of harm reduction for persons dealing with both HIV and substance use? To stimulate discussion, you might make suggestions such as the following:

- Strategies to reduce the harm or risk of transmitting HIV or becoming re-infected with HIV when a person is using substances
- Strategies to reduce the risk of more rapid HIV progression as a result of substance use

6. Write the group's adapted definition on a sheet of newsprint paper and then post it.

Session 3: Harm Reduction in Our Lives

Activity: Ways We Already Incorporate Harm Reduction

Purpose: To explore how we already incorporate harm reduction into our lives

Time: 10 minutes

Materials:

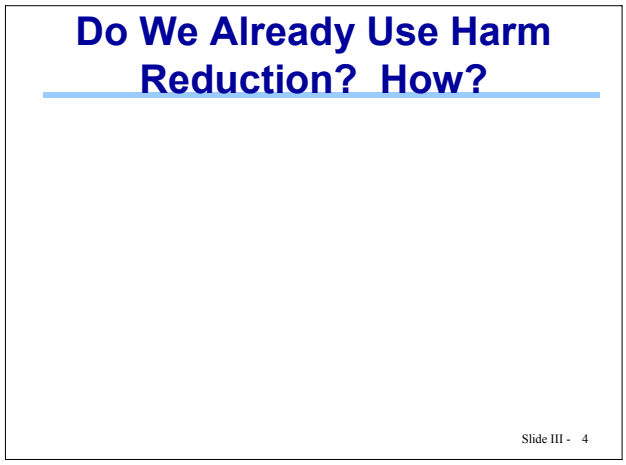
- Newsprint paper and colored markers
- Slide III-4, "Do We Already Use Harm Reduction? How?"
- Handout III-1, "Ways We Already Incorporate Harm Reduction"

Instructor Notes:

1. Before you begin the session, prepare a newsprint sheet with the title "Ways We Already Incorporate Harm Reduction" at the top.

2. Divide participants into small groups of three to five persons.

3. Display Slide III-4, "Do We Already Use Harm Reduction? How?"



4. Give each group Handout III-1 "Ways We Already Incorporate Harm Reduction".

Handout III – 1

Ways We Already Incorporate Harm Reduction

Personal	Professional

5. Ask each small group to come up with a list of ways in which they already integrate harm reduction into their lives – both personal and professional.

6. Ask each small group to share their list with the entire group. Write down their responses on the "Ways We Already Incorporate Harm Reduction" newsprint sheet.

7. Discuss the list, being sure to reinforce the ways in which participants already incorporate harm reduction in their lives and to validate any challenges they have identified.

8. Add the following everyday activities if they are not already on the group's list:

   - Wearing a bicycle helmet
   - Using a seatbelt
   - Flossing teeth
   - Using nicotine patches
   - Placing child locks on cabinets
   - Getting vaccinations
   - Designating a driver who will not drink alcohol at a party or meal

Activity: Reasons to Incorporate Harm Reduction and Reasons Not to Incorporate Harm Reduction

Purpose: To identify participants' concerns about and resistance to the concept of harm reduction

Time: 5 minutes

Materials:

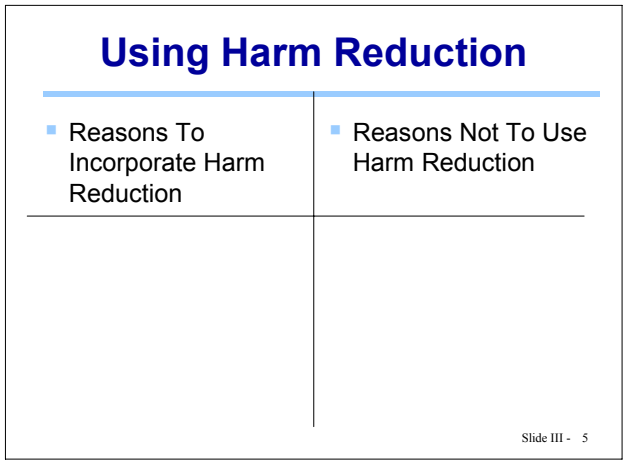
- Newsprint paper and colored markers
- Slide III-5, "Using Harm Reduction"
- SPHERE's *Facts and Myths About Harm Reduction in Substance Abuse Treatment* brochure

Instructor Notes:

1. In preparation for this activity, review SPHERE's *Facts and Myths About Harm Reduction in Substance Abuse Treatment* brochure. Available at www.HCSM.org/sphere.htm

2. Prepare a two-column table on a sheet of newsprint paper. Write "Reasons to Incorporate Harm Reduction" at the top of one column and "Reasons Not to Use Harm Reduction" at the top of the other column.

3. Display Slide III-5, "Using Harm Reduction." Ask participants to share their ideas concerning the reasons why harm reduction should or should not be integrated into their work with clients.



4. Write down the participants' responses in the appropriate columns on the prepared newsprint sheet.

   If the participants have not brought up some of the most important issues about integrating or not integrating harm reduction, then you should suggest additions to the two lists. The following reasons should be added, if needed, to the "Reasons to Incorporate Harm Reduction" column:
   - Challenging populations require many tools to make behavior change.
   - Harm reduction may support a client's behavior change in a nonjudgmental way.
   - Harm reduction is client-centered.
   - Harm reduction keeps clients in care.

   The following concerns should be added, if needed, to the "Reasons Not to Use Harm Reduction" column:
   - Harm reduction gives people permission to use drugs.
   - Harm reduction undermines drug treatment.
   - Harm reduction doesn't really help people.

5. Review the list of reasons and identify which concerns are based on myths. Distribute SPHERE's brochure entitled *Facts and Myths About Harm Reduction in Substance Abuse Treatment*. Clarify and correct any misunderstandings, as needed.

6. Emphasize the following points:

   - Harm reduction involves more than just needle- or syringe-exchange.
   - We each come to the concept of harm reduction with attitudes and judgments. As trainers, we need to be aware of and challenge misconceptions that are presented as facts.

- We each bring preconceived notions about success, challenges, and problems to our understanding of harm reduction. It is important to remind participants of the baggage they may bring to their trainings and to encourage them to identify and challenge their preconceptions.

TEACHBACK OPPORTUNITY

When the curriculum is used, as a Training of Trainers, here is an opportunity to allow for teach back exercises and activities.

Session 4: Naming Harms

Activity: Naming the Harm

Purpose:

- To increase understanding of the variety of harms caused by substance using behavior
- To demonstrate that providers are promoting public health prevention with positives when they support their clients' efforts to reduce substance use harms
- To increase understanding of the many complex factors that are involved with behavior change
- To help participants more effectively support their clients' efforts to change harmful behaviors

Time: 2-5 minutes

Materials:

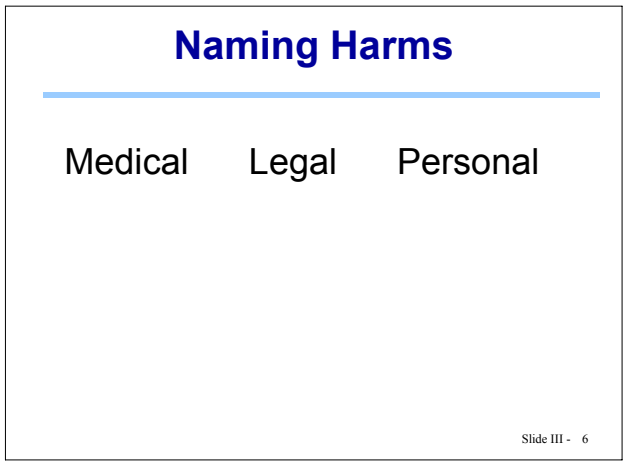
- Newsprint paper and colored markers
- Large index cards
- Slide III-6, "Naming Harms"
- Slide III-7, "Strategies"

Instructor Notes:

1. Before you begin this session, take a sheet of newsprint paper and draw three columns on it. Write "Medical" at the top of the left column, "Legal" at the top of the middle column, and "Personal" at the top of the right column. Do not show the participants this sheet until after they have done their brainstorming work (described in note 3 below).

2. Ask the participants to break into groups of three to five people, and then distribute an index card to each group.

3. Display Slide III-6, "Naming Harms." Ask each group to brainstorm and write down as many drug use related harms as they can in three to five minutes.



4. Show the three-column newsprint sheet to the group.

5. Go around the room, and ask each group to share one item from their list. As each group shares a harm, write it down in the appropriate column.

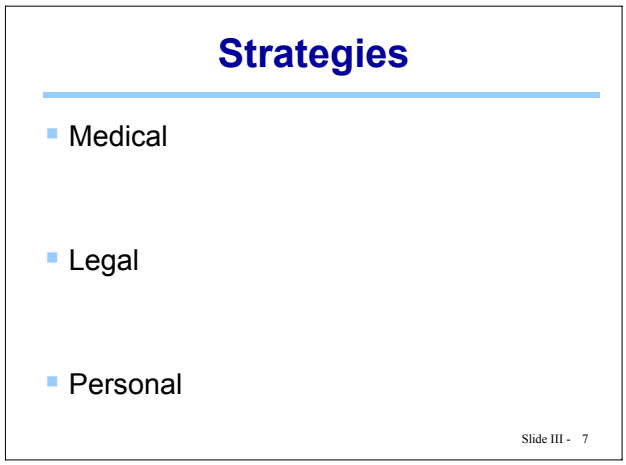
6. When one group mentions a harm, ask the other groups whether they also have that harm on their list. If they do list the same harm, then ask them to cross it off their list. Continue going around the room in this way until the groups have shared all of the different harms on their lists. For example, the medical harms column might include HIV infection, hepatitis, sexually transmitted diseases, overdose, and death. The legal harms column might include incarceration, arrest, stealing, loss of driver's license, and court appearances. The personal harms column might include abandonment by family, loss of children, loss of job, loss of housing, and reduced sexual gratification.

7. Congratulate the group for creating a thorough list as you post the newsprint paper.

8. Expand the list, if necessary, to include the medical, legal, and personal harms listed above in # 6.

9. Emphasize that harms cover a wide range and that each person has a unique set of harms. Consequently, no single strategy should be expected to reduce all harms in all people. Note that reviewing these harms is an important aspect of our work with clients. By reviewing these harms with clients, we can better understand the challenges in their lives and help them focus on changing the behaviors that are most important to them.

10. Display Slide III-7, "Strategies." Ask the participants to discuss strategies for responding to the three types of harm (medical, legal, and personal) listed in the slide. For example, medical harm reduction strategies include the use of bleach kits and condoms, safer sex education, needle-exchange programs, counseling and testing programs, and methadone programs.



Activity: HIV-Infected Substance Users and the Unique Harms They Encounter

Purpose:

- To increase understanding of the unique harms encountered by HIV-infected substance users
- To identify the ways in which personal judgments can become barriers to service

Note: When training an predominant audience of substance abuse treatment professionals, emphasize the word "unique" as a qualifier.

Time: 3-13 minutes

Materials:

- Newsprint paper and colored markers
- Slide III-8, " HIV-Infected Substance User Harms"
- Slide III-9, "Do HIV-Infected Substance Users Have the Right to . . ."
- Newsprint sheet from the previous "Naming the Harm" activity

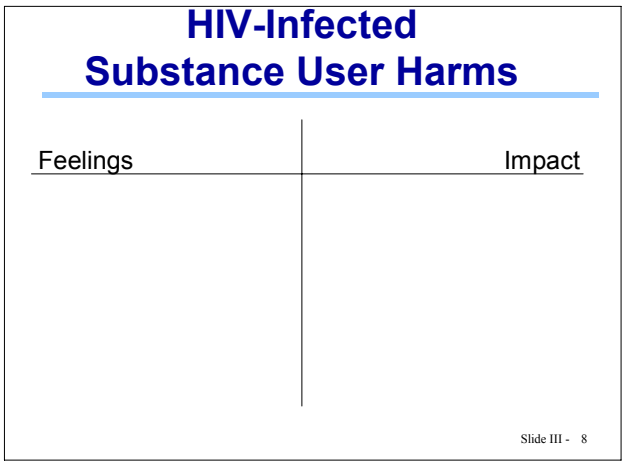
Instructor Notes:

1. Before you begin this session, take a sheet of newsprint paper and use a colored marker to copy Slide III-8, "HIV-Infected Substance User Harms." This sheet will be used later in the session (see notes 4 and 6).

2. Begin the session by acknowledging that our beliefs and feelings about the potential harm of certain sexual and substance-use behaviors may lead us to make judgments about the persons who engage in such behaviors. These judgments may be a barrier to practicing harm reduction.

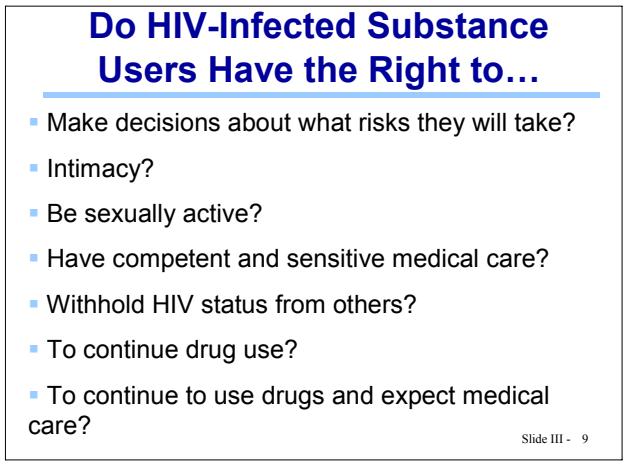
3. Ask participants to think about the unique harms that HIV-infected substance users face. How do these harms differ from the harms faced by uninfected substance users? Be sure to add: risks to personal health (faster progression of HIV disease) and risks to other people's health (through transmission) if these are not already identified.

4. Display Slide III-8, "HIV-Infected Substance User Harms." Ask the participants to share how they feel about HIV-specific harms when they work with HIV-infected substance users. For example, do they feel judgmental, impatient, or frustrated? Do they trust what their clients say and believe that their clients can avoid these HIV-specific harms? What impact do these feelings have on their work? Record both the feelings and the impacts on the sheet of newsprint paper entitled "HIV-Infected Substance User Harms."



5. Encourage participants to distinguish the difference between having an opinion or judgment and allowing that opinion or judgment to impact their work.

6. Display Slide III-9, "Do HIV-Infected Substance Users Have the Right to . . ." This slide contains a series of statements in the form of questions about HIV-infected substance users.



7. Facilitate a discussion about the role that judgments and opinions play in our responses to each of these statements. What impacts do these judgments and opinions have on our work with HIV-infected substance users? Record these impacts on the newsprint sheet entitled "HIV-Infected Substance User Harms".

   Optional: Designate one part of the room as an "Agree" area and another part as a "Disagree" area. Read aloud the statements in the slide one by one. After each statement, ask the participants to go to the part of the room that indicates whether they agree or disagree with it.

8. Ask participants how their judgments and opinions might create barriers in their work with HIV-infected substance users. Then ask the participants to brainstorm on ways to overcome these barriers. Discuss the benefits, from a harm reduction perspective, of addressing the judgments and opinions that undermine our relationships with clients.

Session 5: Harm Reduction Approach with HIV-Infected Substance Users

Presentation: How Does Harm Reduction Take Shape in Service Development and Delivery?

Purpose:

- To review harm reduction and compare and contrast it with approaches used in traditional substance abuse treatment programs

- To explore harm reduction as a model for service delivery

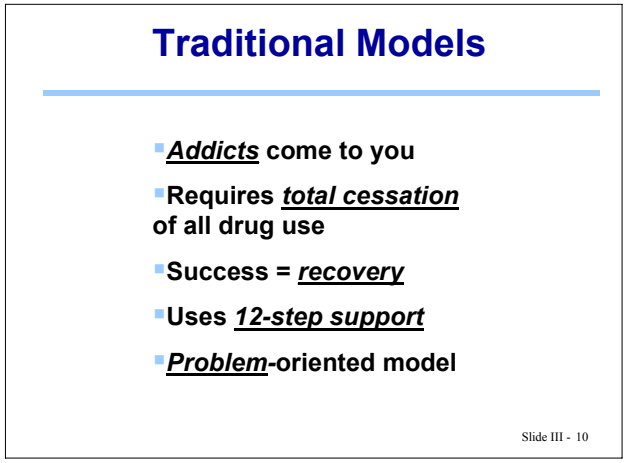
Note: In this presentation, we will review the service components of harm reduction and traditional programs. Some participants may feel strongly that HIV-infected substance users should abstain from all risky behaviors. Be prepared for a lively discussion as this session is designed to bring out the personal values and beliefs of the training audience.

Time: 30 minutes

Materials: Slide III-10, "Traditional Models"
Slide III -11, "Harm-Reduction Based Models"

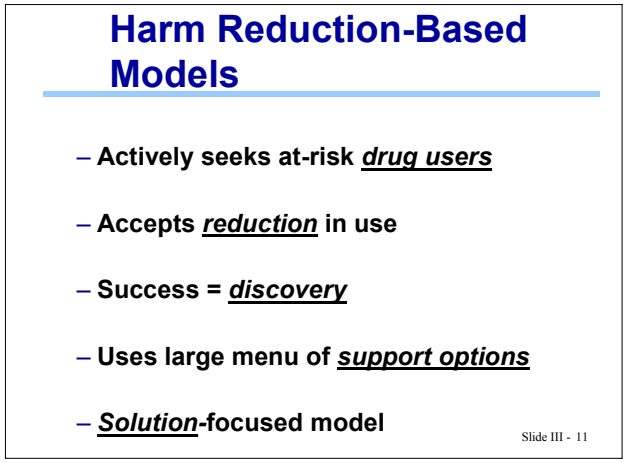
Instructor Notes:

1. Display and review Slide III-10, "Traditional Models" which displays common characteristics of traditionally-based service delivery models, and service components.



2. Note how the language we use can be judgmental, such as referring to substance users as "addicts."

3. Display and review Slide III- 11, "Harm-Reduction-Based Models" displaying the common characteristics of harm-reduction based service delivery models and service components.



4. Note that, by identifying the key service components, we can see how we already incorporate harm reduction into our work.

5. Note the differences between traditional service delivery models and the harm reduction-based models. Talk in more detail about some of these differences. Here are some examples:

   - In the traditional approach, we wait for clients to make and keep appointments. They come to our offices, and sit in our chairs. In contrast, one element of harm reduction is to actively reach out to substance users at locations where they congregate, such as street corners or coffee shops. We might also move our offices or co-locate in these settings.
   - Traditional, abstinence-based drug treatment programs require participants to completely stop all substance use as a precondition for program entry. In contrast, harm reduction does not make abstinence a criterion for service. Harm reduction accepts and supports any reduction in substance use or any attempt to reduce the risks associated with substance use.
   - Traditional programs define success as recovery from substance use. In contrast, in the harm reduction model, any progress toward incorporating harm reduction behaviors into one's life is seen as a success. In the harm reduction model, clients are encouraged to consider the variety of options they have for reducing risk. As they explore different options, clients often make valuable discoveries about their strengths and needs.
   - Traditional programs use 12-step support and counseling, and some also incorporate group work. The harm reduction model offers a broader menu of options, including complementary therapies such as acupuncture.
   - Traditional programs see drugs as the problem and stopping them as the solution. In contrast, from a harm reduction perspective, drug use is seen as just one aspect of a person's life. Harm reduction programs focus on the whole person and personalized approaches for reducing harm.

6. Ask participants whether they can think of other similarities and differences between traditional and harm reduction models. Some aspects of Alcoholics Anonymous (AA) provide examples of how traditional approaches and harm reduction can work together. For example, if someone is high when they show up at an AA meeting, they are allowed to stay and benefit from the program. Ask the participants whether they can think of any other examples that combine traditional and harm reduction approaches.

7. Reinforce the concept of a continuum that incorporates the characteristics of both approaches.

TEACHBACK OPPORTUNITY

When the curriculum is used, as a Training of Trainers, here is an opportunity to allow for teach back exercises and activities.

Session 6: Harm Reduction and Our Notions About Drug Use

Presentation: Thinking About Why People Use and How They Can Change?

Purpose:

- To consider the variety of reasons why people use substances
- To describe substance use on a continuum

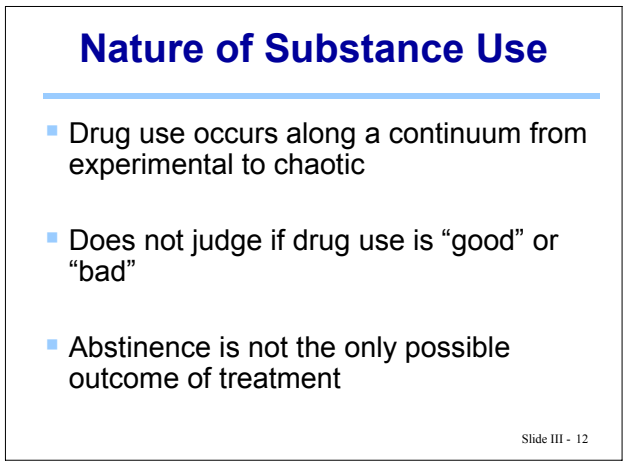
Time: 5 minutes

Materials:

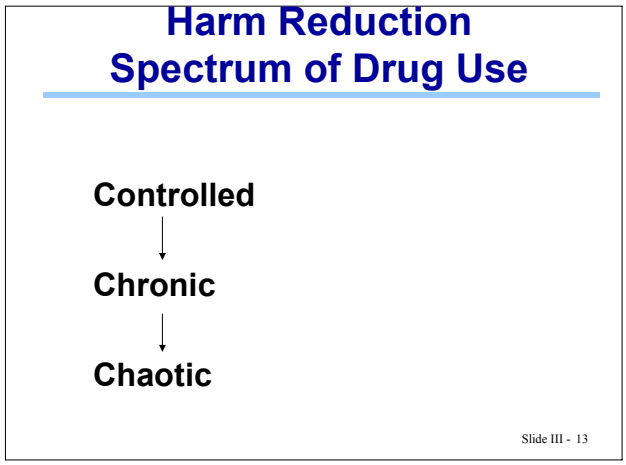
- Slide III-12, "Nature of Substance Use"
- Slide III-13, "Harm Reduction Spectrum of Drug Use"
- Slide III-14, "Being Nonjudgmental"
- Handout III-2, "Continuum of Drug Use"

Instructor Notes:

1. Display Slide III-12, "Nature of Substance Use." Refer back to the activity about drug use and drug users from Session 4. Remind the participants that harm reduction challenges some common notions about drug use by looking at drug-use behaviors in a variety of ways.



2. Display Slide III-13, "Harm Reduction Spectrum of Drug Use." Explain that, in harm reduction, drug use is viewed as a continuum from controlled through chronic to chaotic.



3. Display and review Slide III-14, "Being Nonjudgmental." Note that moral judgments are avoided in the harm reduction model. The nonjudgmental approach of harm reduction allows clients to pursue any of a variety of goals, including abstinence, reduced use, and different or safer use.

4. Distribute Handout III-2, "Continuum of Drug Use" to all participants as a reference.

Handout III-2

Continuum of Drug Use

RECREATIONAL			AT RISK*	
Experimental	**Occasional**	**Regular**	**Heavy**	**Chaotic/Out of Control**

Experimental: Try a drug once or twice or more. 30-70% of all high school students

Occasional: Once a week or now and then. Most Americans use in this way

Regular: Three times a week. At risk of developing physical or psychological dependence

Heavy: Daily or more than once a day. May be addicted or dependent

Chaotic/Out of Control: Compulsive, obsessive, life focused on drugs, loss in other areas of life

* **At Risk: 1.** Addiction **2.** Coping Use, Dependency/Compulsive Use

Session 7: What Do People Need to Change Behavior?

Activity: How Do We Change?

Purpose:

- To identify the variety of supports that people need to change their risk behaviors
- To examine our beliefs about the factors involved in behavior change
- To discuss how we set priorities and make decisions about behavior change
- To provide participants the opportunity to discuss their personal experiences with behavior change.

Time: 20 minutes

Materials:

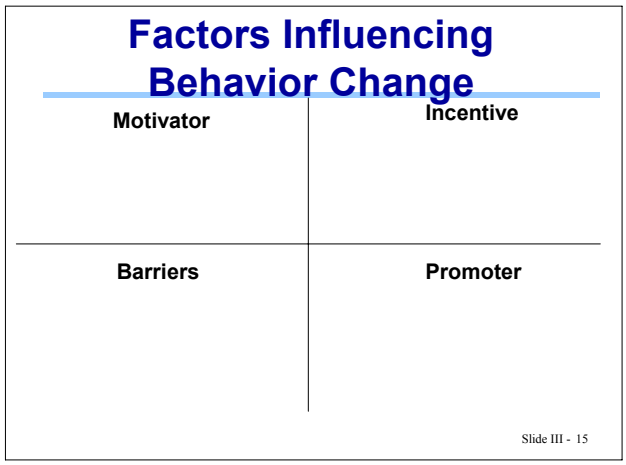
- Newsprint paper and colored markers
- Handout III-3, "Behavior Change Worksheet" for each participant
- Slide III-15, "Factors That Influence Behavior Change: Motivator/Incentive/Barriers/Promoter"

Instructor Notes:

11. Before you begin the session, use a colored maker to copy the contents of the Behavior Change worksheet onto a sheet of newsprint paper. Take another sheet of newsprint paper and write "What People Need to Support Change" across the top.

11. Comment on how common beliefs about behavior change – as represented in drug/alcohol treatment programs, healthcare delivery systems, and other institutions – often lead to an "all-or-nothing" approach to behavior change. The "Just Say No" drug campaign is a perfect example of this "all-or-nothing" approach. Changing behavior is more much complicated than "just saying no."

11. Display Slide III-15, "Factors That Influence Behavior Change." Distribute copy of Slide III-15 as Handout III-3, "Behavior Change Worksheet" to each participant.



11. Share a personal example of an attempt you've made to change your behavior. For example, you might talk about your efforts to eat better, sleep better, or get more exercise. Discuss how the four influences on behavior change listed in Slide III-15 (motivator, incentive, barriers, and promoter) affected you.

11. Ask each participant to consider a health behavior that they have tried to change in the past year, either successfully or not. Assure participants they will not have to reveal the particular behavior they were trying to change. No one will know the behavior unless the participant chooses to disclose it. Instead, they will be asked to share some of the feelings evoked by their effort to change their behavior.

11. Ask the participants to consider the following questions and then write their answers in the appropriate box on the "Behavior Change Worksheet"

    - What was your *motivator* for attempting this change? In other words, what prompted you to think about changing this behavior?
    - What *incentive* kept you working on this behavior change? As you began to change the behavior, what kept you working toward behavior change?
    - What *barriers* did you face as you began to change your behavior? List any obstacles that made your effort more difficult.
    - What *promoter* helped you overcome these barriers? Describe anything that removed some of the barriers.

11. Once everyone has completed the worksheet, ask participants to identify and place an asterisk (*) next to the most significant motivator, incentive, barrier, and promoter listed on their worksheet. Ask participants to share these critical influences on their behavior. Write down the participants' responses on the newsprint sheet entitled "Factors that Influence Behavior Change."

11. Acknowledge that the lists represent the variety of feelings that people have about making changes, as well as the diverse tactics, barriers, and supports that participants encountered. These four contributing factors – motivator, incentive, barriers, and promoter – are unique for each person.

11. Summarize the key concepts about behavior change by focusing on the range of supports that people need. Simply reading a brochure or hearing a piece of information is seldom enough to change a person's behavior. Note that we all change in different ways, so no single approach will work for everyone. Some people make changes quickly, some change slowly, and others change only when they feel in control of a situation. In some cases, personal reasons are the primary motivator for change. In other cases, external conditions are the primary motivator. For example, a person may exercise to enhance their appearance (a personal reason) or because their job requires a certain level of fitness (an external reason).

11. Ask participants to think and talk about attitudes and beliefs that support behavior change. Record their responses on the sheet of newsprint paper entitled "What People Need to Support Change." The list should include the following:

- Focusing on things that are "doable"
- Recognizing that change often occurs slowly and gradually
- Building one's confidence to make a change
- Recognizing that changes often involve losses as well as benefits
- Emphasizing strengths
- Identifying barriers and approaches for overcoming them

11. Note that a person's feeling of vulnerability is often a key factor in their decision to change. Their sense of internal power is often a key factor in their efforts to make a change. Developing skills, using tools, and gaining the support of others can also help a person make a change.

Optional Activity: What Do Substance Users Need for Change?

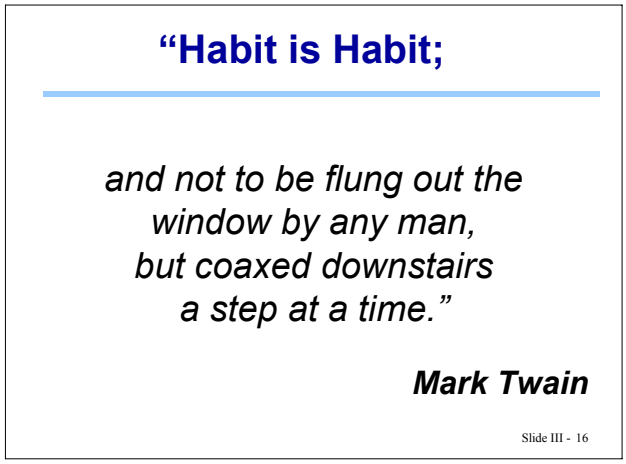
Purpose: To examine in greater detail what HIV-infected substance users need to adopt risk-reducing behaviors

Time: 5 minutes

Materials: Slide III-16, "Habit Is Habit"

Instructor Notes:

1. Display Slide III-16, "Habit Is Habit." Read it aloud for participants.



2. Ask participants whether they think that substance users can change their risk behaviors. What do they think substance users need in order to change? What do providers find frustrating when trying to help their clients change?

Activity: Stages of Change and Harm Reduction

Purpose:

- To review the Stages of Change model and its relevance to harm reduction
- To explore the harm reduction premise that the client is the expert and is responsible for choosing the type and timing of behavior change
- To apply the Stages of Change model as a way of "locating" clients along the continuum of change
- To use the Stages of Change model to support clients as they progress from one stage of change to another, regardless of where they are on the continuum
- To recognize strategies for each stage of change
- To understand the relevance of ambivalence to behavior change and to recognize the cues that ambivalence can offer the provider

Time: 20 minutes

Materials:

- Newsprint paper and colored markers
- SPHERE's *Stages of Change Wheel* for each participant
- Handout III-4, "Case Studies"
- Slide III-17, "Stages of Change"
- Slide III-18, "What Is Ambivalence, and What Is Its Role in Behavior Change?"
- Slide III-19, "Meeting People Where They're At"
- Slide III-20, "Meeting People Where They're At (continued)"
- Slide III-21, "Beliefs About Behavior Change"
- Slide III-22, "Stages of Change – Good for Providers because"
- Optional Handout II-11; GRACE: Five Principles of Motivational Interviewing in Kaleidoscope Curriculum Module – Strategies for Engagement & Retention in Care.

Instructor Notes:

1. Distribute and introduce SPHERE's *Stages of Change Wheel*, and show participants how to use it. The wheel not only defines the stages of change but also provides a means for clients to "hear" the stages. The wheel also offers some suggestions for supporting people as they

move between the stages, including relapse. Providers can use the wheel to share both the theory and language of the Stages of Change model with their clients.

2. Show the participants how they can use the wheel to explain the different stages of change to their clients. When working with a client on a particular change, a provider can ask the client to think about where they fall on the wheel and to identify factors that might help them progress to the next stage.

3. Divide participants into small groups of mixed disciplines (e.g., medical and substance abuse treatment providers).

4. Provide one Handout III-4, “Case Studies” to each small group.

Handout III-4
Case Studies

Melissa

Melissa is a 25-year-old woman living with HIV. She is a heroin user, has never been in a methadone maintenance program, has been incarcerated intermittently, and smokes about a pack of cigarettes each day. She works in the commercial sex industry, and lives with roommates in a small apartment. Only one of her roommates is aware of her HIV status. She uses heroin three to four times a day. Melissa receives her HIV care from a local community health center, and goes to the doctor at least every three months when she's is not in jail. Most of her visits to the doctor are prompted by symptoms consistent with either sexually transmitted diseases (STDs) or upper respiratory infections. Melissa has health insurance coverage through the state's Medicaid program.

Melissa's most recent CD4 count was 480/mm^3 and her viral load was 45,000 copies/Ml. Her current health problems include genital herpes and recurrent upper respiratory infections. Melissa has been on and off antibiotics for the past year during episodes of pneumonia, and she takes acyclovir to manage the herpes infection. Melissa is also on combination therapy. She comes to meet with you and states that she wants to stop taking her meds because of the side effects.

Raymond

Raymond is a 50-year-old man living with HIV and Hepatitis C (HCV). He works full time as a corporate manager, and is married with two teenage children. His family is aware of his HIV status. Raymond is an alcoholic and occasionally uses cocaine. He was first diagnosed with HCV in 1990, when it was referred to as non-A non-B Hepatitis. Raymond first tested positive for HIV in 1995, while in drug treatment. Raymond has excellent health insurance through his employer. No one at work is aware of his HIV or HCV status.

Raymond is prone to relapse, especially during periods of stress at home or work. When relapsing, he often drops out of contact for days at a time. Sober from alcohol and cocaine for the last six months, at Raymond's last appointment, his doctor suggested he begin antiretroviral therapy since his numbers were "taking a turn for the worse." Raymond's CD4 count was 350/mm^3 and his viral load was 85,000 copies/Ml. His liver function tests remained stable.

Anxious to stay healthy for his wife and kids, Raymond wants to start antiretroviral therapy. He is concerned that he won't be able to stick with a regimen. He comes to you asking if you think he can handle it and mentions that he has been feeling "very vulnerable lately and really wants to drink."

Krista

Krista is a 35-year-old woman living with HIV. She is currently homeless and typically stays on the street in "crack houses" or "wet" shelters. Krista sometimes stays with her mother. She is only allowed to stay with her mother when she is sober. Krista uses crack cocaine and is an alcoholic. She drinks whatever she can get her hands on and typically uses crack in the evenings when she is bored, lonely, and "hits the streets."

Although she considers herself a "loner", she has connected with a local street outreach program that provides free lunches and day services in the winter. At one point she was also connected with the local Department of Mental Health. She was diagnosed with manic depression, but never followed up on the suggested mental health supports.

Krista receives her HIV care from the public health clinic at an urban medical center. She goes to the doctor's office often because her doctor is very kind, she likes the center staff, and she appreciates being able to hang out in the waiting room and watch TV. Krista informs you that her AIDS is "under control" and she is feeling very depressed.

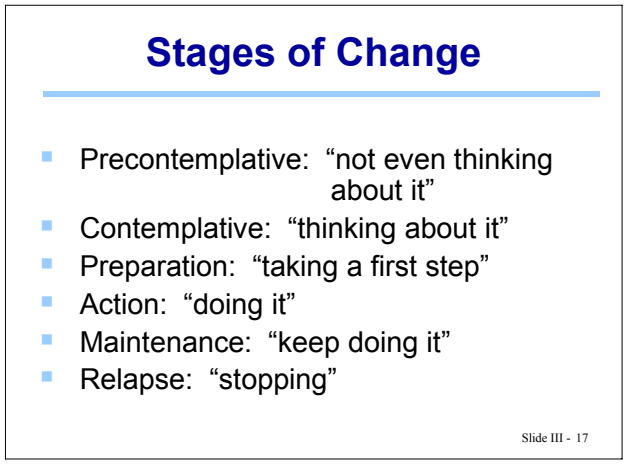
Marlon

Marlon is a 21-year-old man who has unprotected sex with other men and is living with HIV. He works for a landscaping company and often takes on construction work as well. Marlon likes to attend circuit parties because they make him feel that his life is "normal". He also likes to have anonymous sex, and uses recreational drugs only at the parties.

Marlon has a steady boyfriend who is also HIV-infected. They live together in a studio apartment. Neither feels that they need to use condoms when they have sex since they are both HIV-infected. They use condoms most of the time when they have anonymous sex with others.

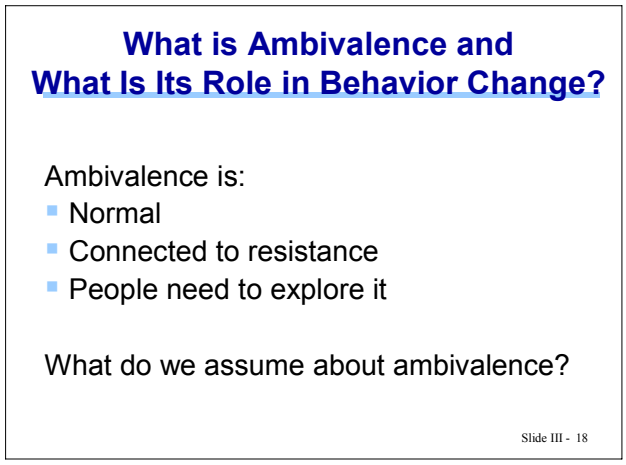
Marlon was diagnosed with HIV four years ago. At that time, he had a CD4 count of 180/mm^3 and a viral load of 80,000 copies/Ml. His doctor started him on therapy immediately. Until recently, his treatment has been very successful. Marlon's viral load has been climbing over his past few appointments. His most recent viral load was 90,000 copies/Ml and his CD4 count is at 300/mm^3. His doctor performs a genotype test indicating he is in fact resistant to some of his HIV meds. He asks for your advice on what he should do.

5. Display Slide III-17, "Stages of Change." Ask each group to review their case study and decide what stage they believe the person is in. What strategies could be used to support this person? Ask the groups to identify the local resources of organizations and agencies that can and will support persons in each of the stages?



6. Ask each small group to share their findings and strategies. Then ask the entire group whether they can suggest any additional strategies that might be helpful to the individual in their case study. Note for the participants that they will be coming back together as a case study group later in the module and will need to refer to their group assigned case study.

7. Display Slide III-18, "What Is Ambivalence, and What Is Its Role in Behavior Change?"



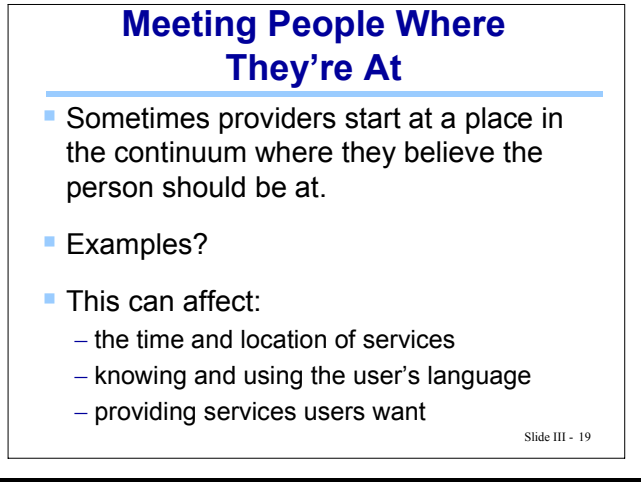
8. Ask participants to share their knowledge and assumptions about the role of ambivalence in behavior change. Are ambivalence and resistance the same? Ask participants whether they think ambivalence means that a person does not want to change. Does it indicate that something is wrong with the person? Does it mean that the person is in denial?

9. Suggest that, in a harm reduction framework, resistance and ambivalence are signals that the provider may need to change his/her strategy. Ambivalence may mean that the client no longer feels in control of the agenda or the timeframe. The client may no longer feel invested in making the change, or he/she may feel that they are being rushed to complete it. When a provider encounters ambivalence or resistance, he/she should reassess their role and closely examine the approaches and support being offered to the client. The provider can then work with the client to modify the goals and the timetable for change.

10. Recap the essentials of behavior change by displaying and reviewing the following slides:

    - Slide III-19, "Meeting People Where They're At"
    - Slide III-20, "Meeting People Where They're At (continued)"
    - Slide III-21, "Beliefs About Behavior Change"
    - Slide III-22, "Stages of Change"

11. Optional Handout: Distribute Handout II – 11; GRACE: Five Principles of Motivational Interviewing from Kaleidoscope curriculum.



Meeting People Where They're At

- Harm reduction lets the patient/client say where s/he is at – providers discover this through open conversation.
- Understanding the Stages of Change can be helpful in "finding" the patient/client and helping the person talk about where they're at.

Slide III - 20

Beliefs About Behavior Change

- Behavior change is slow
- Incremental change is measured
- "Stages of Change" model is used
- Success around change celebrates small changes

Slide III - 21

Stages of Change

Good for providers because:

- Tailored interventions
- Evaluates by measuring a patient's/client's progress from stage to stage
- Change is GRADUAL
- Patient/Client controls timing

Slide III - 22

TEACHBACK OPPORTUNITY

When the curriculum is used as a Training of Trainers, here is an opportunity to allow for teach back exercises and activities.

Session 8: Redefining the Provider-Client Relationship

Activity: Harm Reduction and Provider-Client Relationships

Purpose:

- To review the ways in which harm reduction may affect provider-client relationships
- To identify ways that providers can incorporate harm reduction skills into their relationships with clients

Time: 10 minutes

Note: This session can be shortened and conducted as an overview rather than a skills building training. To do so, only use the Activity: Harm Reduction Provider and Client Relationships followed by a review of the two presentations: Harm Reduction Skills and Tools and Self-Assessment Scales.

Materials:

- Newsprint paper and colored markers
- Slide III-23, "Redefining the Relationship"
- Slide III-24, "Harm Reduction Relationships"
- Slide III-25, "Harm Reduction Relationships (continued)"
- Slide III-26, "Harm Reduction Equation"

Instructor Notes:

1. Before you begin this session, prepare a newsprint sheet with the title "Skills We Use" at the top.

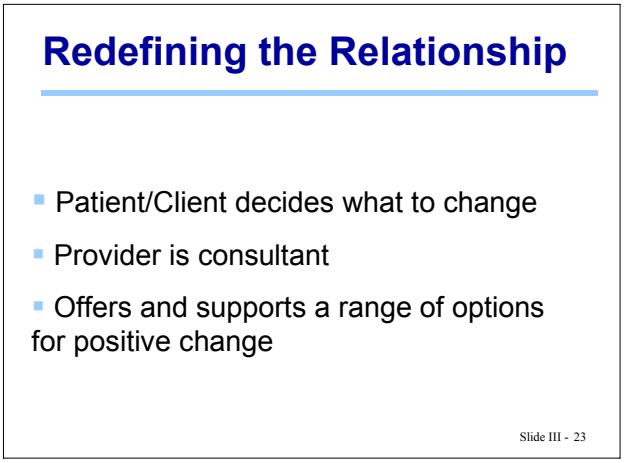
2. Ask participants to name some of the effective skills they already use with clients. Write down their responses on the prepared newsprint sheet entitled " Skills We Use."

3. Review the list and add any important skills that the participants have not mentioned. The following skills should be included on the final list:
   - Creating and supporting options
   - Asking open-ended questions
   - Assessing the pros and cons of making a change
   - Reaching and supporting clients "where they're at"
   - Using motivational interviewing techniques

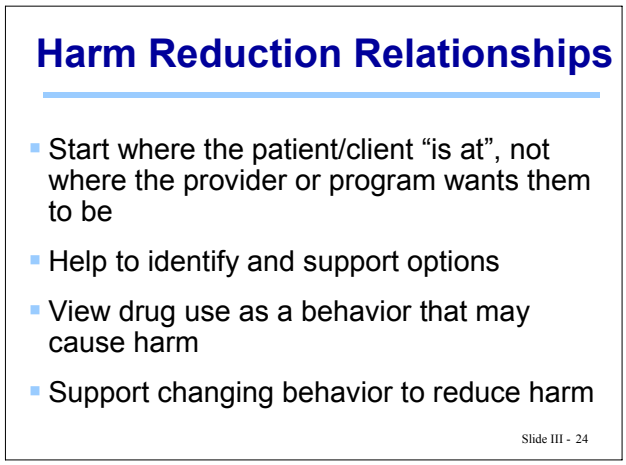
4. Remind the participants that harm reduction involves the use of a diverse collection of strategies and skills to help people reduce the harms in their lives.

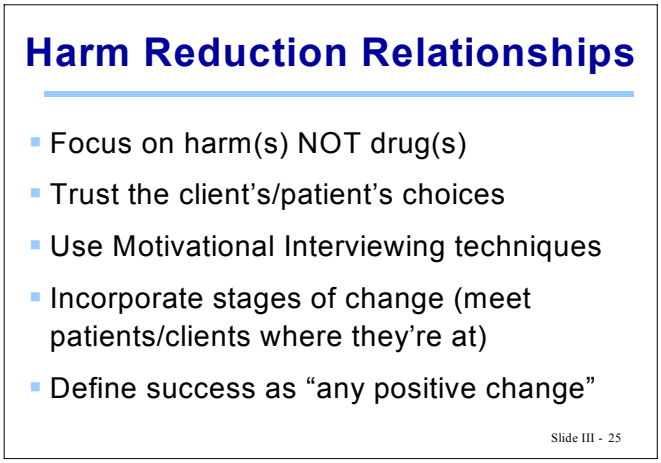
5. At this point, it will be useful to introduce the motivational interviewing (MI) technique. MI is a collection of counseling techniques specifically designed to support a client's desire for change. People often attend weeklong trainings to acquire MI skills. Since we have a very limited amount of time, we will simply describe the basic MI techniques and discuss how these techniques can help create a climate for change. However, before we try out some of these techniques, we will review how the roles of providers and clients in the harm reduction model and the ways in which these roles differ from those in traditional models.

6. Display Slide III-23, "Redefining the Relationship". Explain that there are three key aspects to harm reduction relationships. Acknowledge that some participants may have already fully integrated the harm reduction approach into their relationships with clients, while others may have incorporated some aspects of model. In the harm reduction relationship, the provider is not seen as the client's surrogate parent or boss. Instead, the provider is viewed as a consultant who can clarify information for the client and offer alternatives and options. The client, rather than the provider, is seen as responsible for the success of harm reduction efforts.

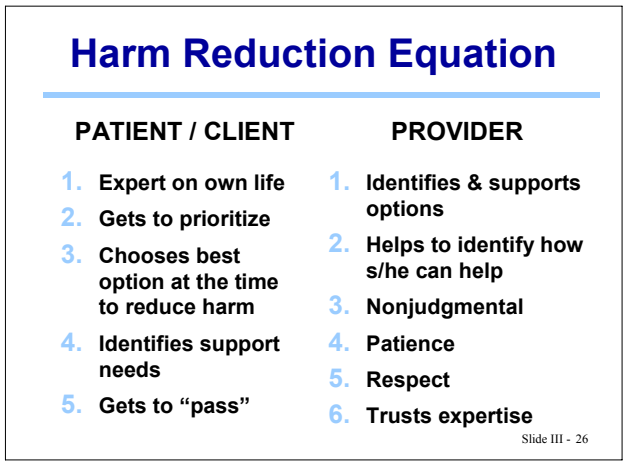


7. Display and review Slides III-24, and III-25, "Harm Reduction Relationships". Ask participants to consider whether they already incorporate the harm reduction approach into their relationships with clients.





8. Display Slide III-26, "Harm Reduction Equation." Note that, in harm reduction, the provider-client relationship is seen as a collaboration. The provider and the client work together to assess the harms or behaviors that the client wants to change. Slide III-26 summarizes the expertise that the client and provider each bring to this collaborative relationship.



Presentation: Harm-Reduction Skills and Tools

Purpose: To offer tools and strategies for incorporating harm reduction into our work

Time: 5 minutes

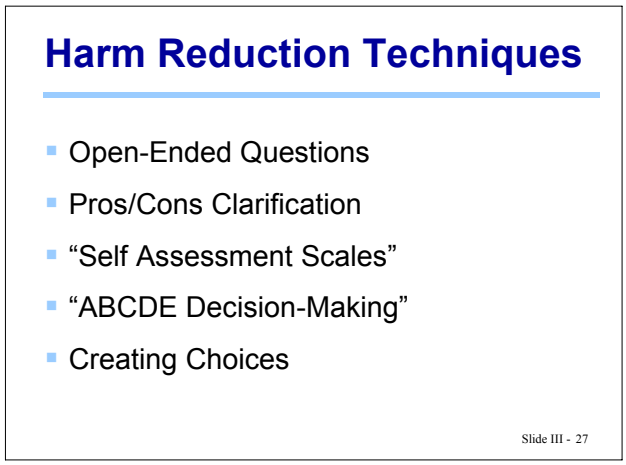
Materials:

- Slide III-27, "Harm Reduction Techniques"

Instructor Notes:

1. Acknowledge the wealth and diversity of experience in the room.

2. Display and review Slide III-27, "Harm Reduction Techniques".



3. Tell the participants that they will learn about and have the opportunity to practice the harm reduction techniques listed in Slide III-27 later in this session.

Activity: Open-Ended Questions

Purpose:

- To emphasize the importance of asking open-ended questions
- To give participants the opportunity to practice this interviewing technique

Time: 20 minutes

Materials

- Newsprint paper and colored markers
- Slide III-28, "What Is an Open-Ended Question?"
- Slide III-29, "Developing Open-Ended Questions"

Instructor Notes:

1. Display and review Slide III-28, "What Is an Open-Ended Question?"

What Is an Open-Ended Question?

- Prompts patients/clients to respond with answers other than "yes" or "no"
- Questions start with "why" or "how"
- Benefits:
  - Responses help you understand
    - Don't ask a question that invites a negative response
    - Ask questions that demonstrate no value judgments

Slide III - 28

2. Divide the participants into small groups of three to five people.

3. Give one piece of newsprint paper and one colored marker to each small group.

4. Display Slide III-29, "Developing Open-Ended Questions" and assign each group one topic from the slide.

Developing Open-Ended Questions

TOPICS:

- Hepatitis
- Sexually Transmitted Diseases
- Sexual History
- Sexual Risk Reduction
- Drug and Alcohol Use
- Needle Use
- Experience with Risk Reduction

Slide III - 29

5. Ask each group to develop as many open-ended questions as they can for their topic. Strongly encourage them to practice asking open-ended questions. Note the difficulty of asking open-ended questions, especially in the environments that we all work in where closed-ended questions are promoted (i.e., reporting formats)

6. When the small groups have completed this task, ask the participants about the process of developing open-ended questions. Ask one person from each group to select and read one opened-ended question from their assigned topic. If the question presented is not open-ended, ask all of the participants how they might change the question to be open-ended.

Activity: Pros and Cons – Decisional Balance Questions

Purpose:

- To review the usefulness of developing pro and con questions
- To introduce decisional balance questions and the ABCDE model for decision-making

Time: 15 minutes

Materials:

- Newsprint paper and colored markers
- Slide III-30, "Pros and Cons of Making a Change"

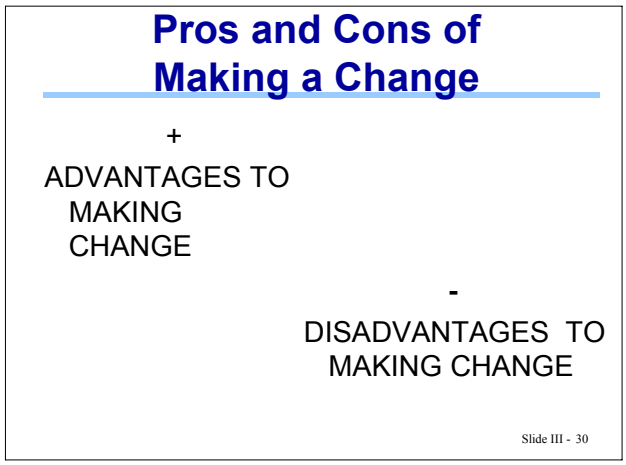
Instructor Notes:

1. Before you begin the session, prepare a newsprint sheet with a two-column table. Write "To Use" at the top of the left column and "Not to Use" at the top of the right column.

2. Ask participants to identify the benefits of using pro and con questions when working with clients. Tell participants that these types of questions help clients:
   - Consider the advantages and disadvantages of a particular course of action
   - Determine the barriers to a course of action
   - Identify what they need to support behavior change
   - Begin to develop strategies that either create supports or overcome barriers

3. Discuss the value of asking questions as clients progress through the stages of change. Well-worded questions can help clients sort out the pros and cons of particular behaviors. These directed questions also give clients the opportunity to identify and express any ambivalence they may be feeling about a behavior change. The Stages of Change model described in Session 7 calls these kinds of questions "decisional balance questions." Decisional balance questions are particularly useful when someone is expressing ambivalence. Responding to these questions can help clients clarify their needs and help them make a more informed decision about their next steps.

4. Display Slide III-30, "Pros and Cons of Making a Change".



5. Refer to and briefly review the newsprint sheet created in Session 3 – "Reasons to Incorporate Harm Reduction" and "Reasons Not to Use."

6. Now post the new newsprint sheet with the "To Use" and "Not to Use" columns. Ask participants the question, "What are the reasons to use condoms during sexual activity, and what are the reasons not to use condoms?"

7. Note: If you prefer, you can substitute other decisional balance questions for the condom use example in note 6. Here are a few possibilities:
   - What are the reasons to tell/not to tell a sexual partner or family member that you're infected with HIV?
   - What are the reasons to reduce/not to reduce your drug use?
   - What are the reasons to visit/not to visit a doctor?

8. Write down the participants' responses in the appropriate columns on the newsprint sheet. Providers can use similar decisional balance questions when talking with their clients about behavior change. When clients articulate their reasons for making or not making a change, their providers may gain a deeper understanding of their point of view. In the process, providers will have the opportunity to offer information, dispel myths, and provide support and referrals.

Presentation: Self-Assessment Scales

Purpose:

- To review the role of self-assessment scales in our interactions with clients

- To review how we measure success and how our evaluation of success can reflect and support behavior change

Time: 15 minutes

Materials:

- Slide III-31, "Self-Assessment Scales"
- SPHERE'S *Self-Assessment Ruler*
- Slide III-32, "Outcome Measures"
- Slide III-33, "Outcome Measures (continued)"

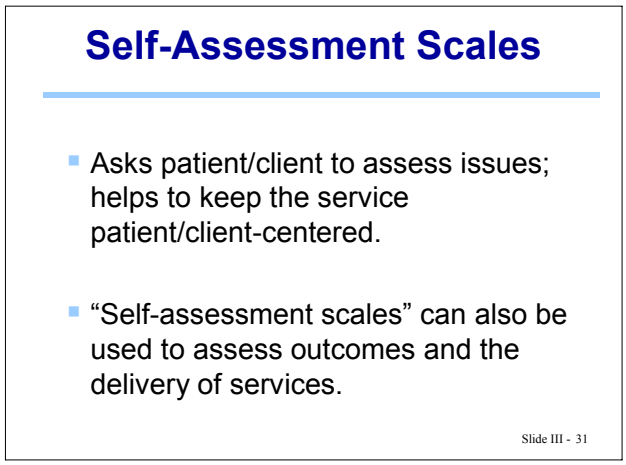
Instructor Notes:

1. Remind participants that the way we measure success is often different in a harm reduction model compared to traditional models.

2. Ask participants how they currently measure success in their work. Their responses might include statements like the following:
   - Client gets sober
   - Provider sets goal
   - Client takes all their medicine
   - Client abstains from all substance use

3. Explain that, in a harm reduction model, the outcomes and the ways we measure them are client-centered and take into account the slow and gradual nature of behavior change. In addition, a concerted effort is made to identify the ways in which clients have been successful and to celebrate the strengths they have demonstrated. Continued engagement with the client is considered a "success."

4. Display Slide III-31, "Self-Assessment Scales". Note that the use of self-assessment scales can be important tools for measuring success in a client-centered way. These evaluation tools allow clients to measure their success subjectively. Self-assessment scales can also help clients clarify where they want to be – their "goals."



5. Note that providers don't always check in with clients about their concerns, beliefs, attitudes, and goals in behavior change. Self-assessment scales offer clients this opportunity. These scales also yield valuable information that providers can use when discussing change with clients identifying ways to more effectively support their clients efforts to implement behavior change.

6. Exhibit SPHERE'S *Self-Assessment Ruler* as an example of a self-assessment scale.

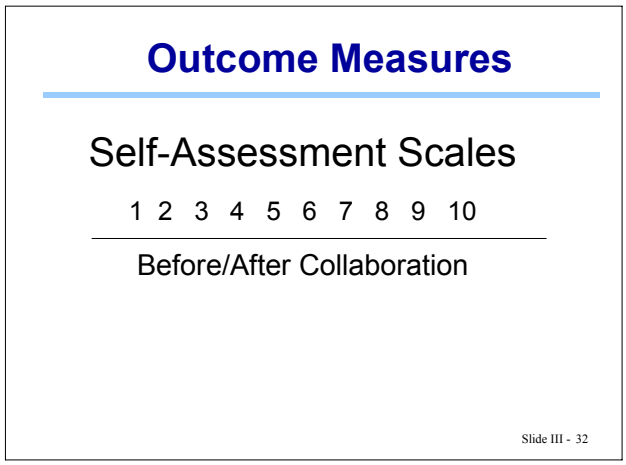
7. Identify some questions providers can ask clients or clients can ask themselves. Describe how questions can be used to:
   - Identify where clients are at and where they want to be

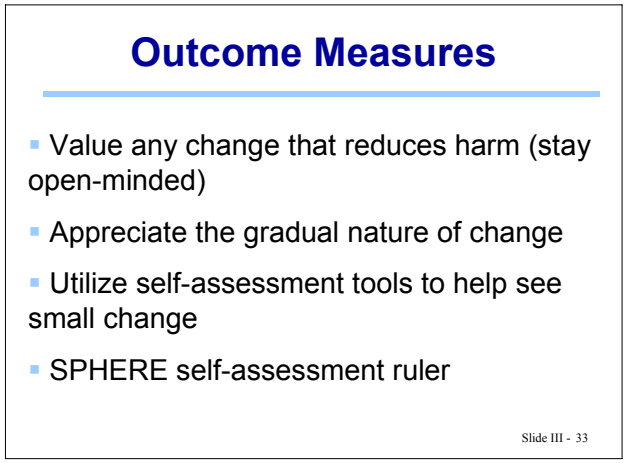
   Help clients prioritize the behaviors they want to change
   Identify supports that clients need to make the change
   Create an agenda for the provider

8. Explain how self-assessment scales can be used to measure success and remind clients of how far they have come.

9. You can also use self-assessment scale questions to help your clients "measure" their efforts. Keep a record of where clients place themselves on the scales. Refer to these numbers in subsequent conversations when you use the scales again. For example, if a client reports that a problem has decreased in size, you can support his/her efforts to reduce that problem. If a client reports that the problem has increased, you can work with the client to develop strategies for decreasing the problem and discuss ways to better support his/her efforts. These are some of the ways in which self-assessment scales can serve as client-centered evaluation tools.

10. Display and review Slides III-32,"Outcome Measures" and III-33, "Outcome Measures (continued)" as a recap.





11. Summarize as follows: when we accept the client's view of the problem we can use it to guide his/her efforts for behavior change. Providers can ask the following questions:
    - How much do you think your substance use is a problem?
    - How much do you think using a condom is a problem?
    - How much of a problem is it for you to follow your medication regimen?
    - How much of a problem is it to clean your "works"?
    - How much of a problem is your nutritional health?
    - How much of a risk is your substance use?
    - How much of a risk is sharing your works?
    - What's your risk for transmitting HIV through sex?

Activity: ABCDE Model for Decision-Making

Purpose: To review the ABCDE decision-making model, emphasizing how this model can be used to identify a person's options

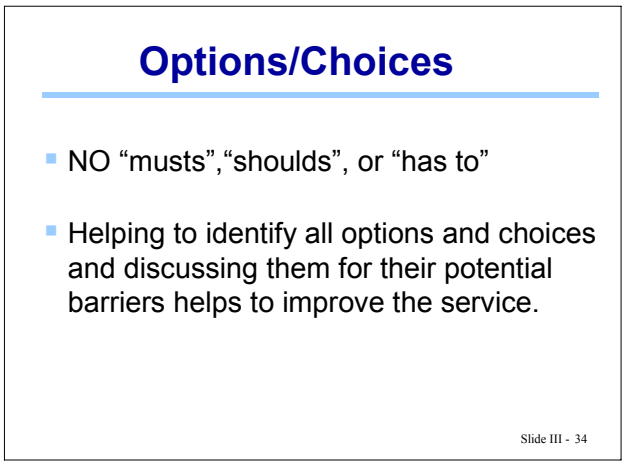
Time: 30 minutes

Materials:

- Newsprint paper and colored markers
- Slide III-34, "Options/Choices"
- Handout III-5, "ABCDE Decision-Making Model" Worksheet
- Slide III-35, "Options/Choices – ABCDE Model: **A**ssess"
- Slide III-36, "Options/Choices – ABCDE Model: **B**rainstorm"
- Slide III-37, "Options/Choices – ABCDE Model: **C**onsider and **D**ecide"
- Slide III-38, "Options/Choices – ABCDE Model: **E**valuate"
- Handout III-4, "Case Study"

Instructor Notes:

1. Display Slide III-34, "Options/Choices". Reinforce that helping clients consider options is a key harm reduction skill. By considering their options in detail, clients are better able to prioritize the changes they wish to make. They can decide which behaviors to change first, how they want to make the changes, and when to start.



2. Distribute Handout III-5, "ABCDE Decision-Making Model" Worksheet. Draw a copy of the model on a sheet of newsprint paper. Tell the participants that they will complete the model as a group. You will record their responses on the newsprint sheet and track how the decision-making process unfolds.

Handout III-5

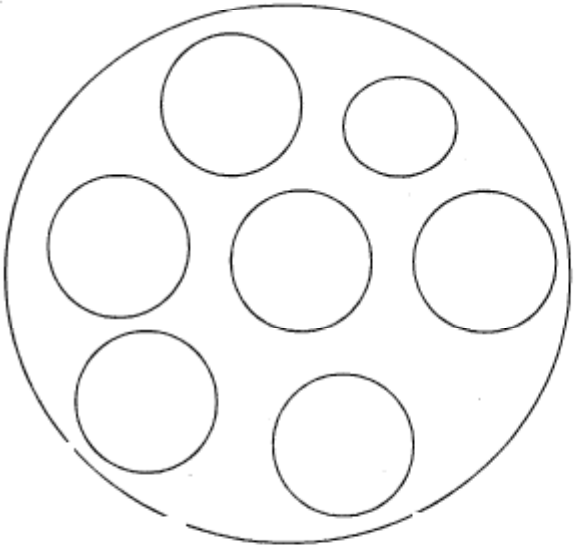
"ABCDE Decision-Making Model" Worksheet

Assess

A- Assess
B- Brainstorm
C- Consider
D- Decide
E- Evaluate

Write harm to be addressed in box

Brainstorm Write possible options to reduce harm in small circles.



Consider- Cross out options you think would not be a good idea.

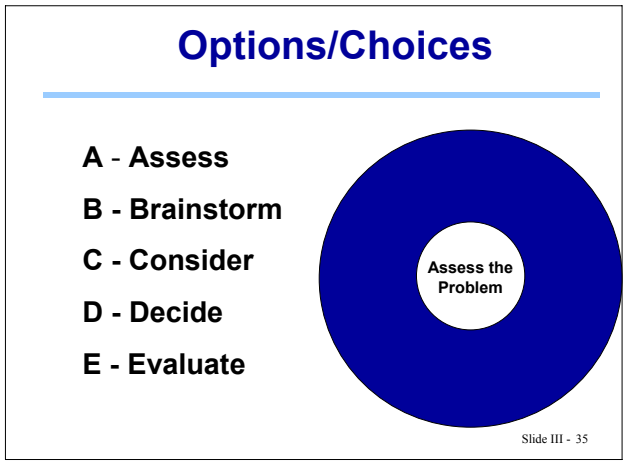
Decide- Place a star on your best option

Evaluate- Evaluate your decision. Is this the best decision I can make?

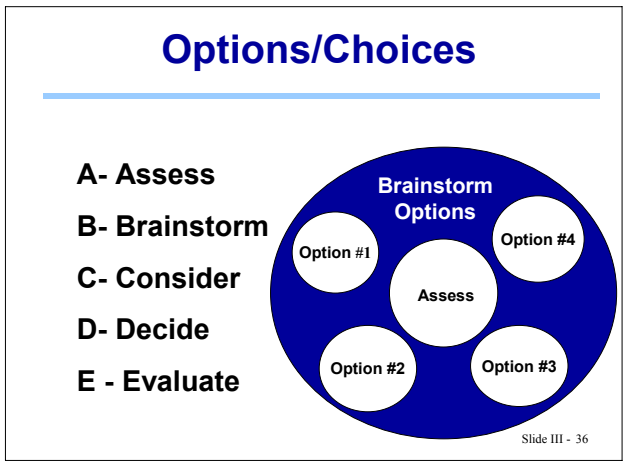
ABCDE Model adapted by SPHERE, The Statewide Partnership for HIV Education in Recovery Environments
A program of Health Care of Southeastern Massachusetts, Inc.
1-800-530-2770 extension 224

3. Ask participants to regroup into the previous case study groups they were in for the Stages of Change exercise.

4. Display Slide III-35, "Options/Choices: **A**ssess." Ask each of the groups to identify (**A**ssess) a harm for reduction from their respective Case Study.

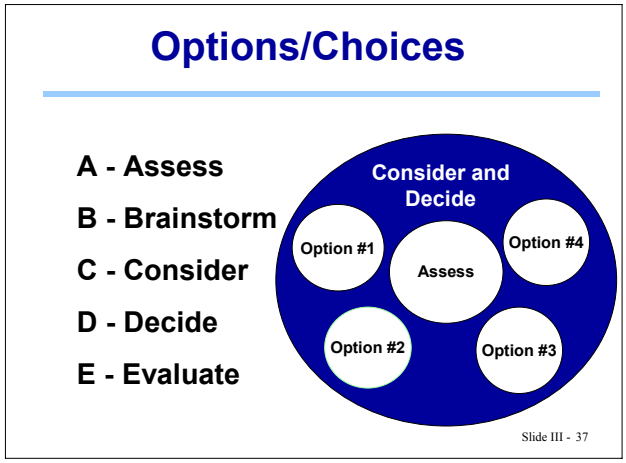


5. Display Slide III-36, "Options/Choices: **B**rainstorm." Ask participants to brainstorm all ideas to reduce the harm, remembering not to make judgments about the client. Write each of these ideas in its own small circle as shown in the slide.



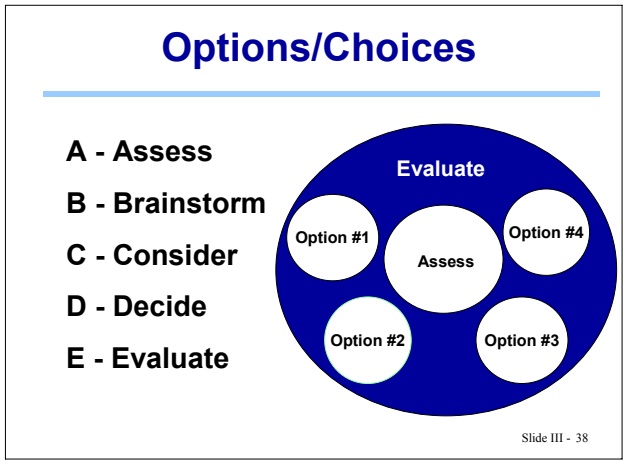
6. Display Slide III-37, "Options/Choices: **C**onsider and **D**ecide." Ask the group to consider each of the circled options for change that they identified during the brainstorm. The following questions can help the group screen the different options:
    - How effective would this option be in reducing the harm they've chosen?
    - Is the person likely to try this approach?
    - Does the person have the capacity to use this approach?

Place an "X" through all options that the group believes would be ineffective or unworkable.



7. From the remaining circles, determine which option for change is the most viable. For the purpose of this activity, we will assume that the client decides to adopt this option. The following issues and strategies are pertinent to each of the case studies:
   Melissa: Heroin may/may not be the priority harm – use of open-ended questions; Significance of her desire to stop taking meds – use of decisional balance questions.
   Raymond: Ability to stick with regimen – use of open-ended questions and reflective listening.
   Krista: Multiple issues: medical, housing, drug use and transmission risks – use of risk assessment scales.
   Marlon: Inconsistent use of condoms with boyfriend and anonymous sex – use of decisional balance questions.

8. Display Slide III-38, "Options/Choices: **E**valuate." Assess what other supports the person may need and consider how effective they are likely to be.



9. Ask participants whether the ABCDE model could be applied effectively in their work with clients. Could they use this approach to help clients reduce harm in their lives? Could this model also be used for other purposes, such as helping clients take their medications properly or improving provider-client communication skills?

10. You can end this activity by noting that the ABCDE model supports the following harm-reduction principles:
    - The client prioritizes the behaviors that will be changed.
    - The client sets the timetable for behavior change.
    - The provider's role is to be the client's advisor and cheerleader.
    - The provider gives the client the opportunity to explore ambivalence.

TEACHBACK OPPORTUNITY

When the curriculum is used, as a Training of Trainers, here is an opportunity to allow for teach back exercises and activities.

Session 9: Harm-Reduction Approaches and Barriers

Activity: Approaches and Barriers to Using Harm Reduction in Our Work

Purpose:

- To reinforce key concepts and skills learned in the earlier sessions of this training module
- To help participants identify the relevant approaches and barriers to using harm reduction techniques with their patients/clients

Time: 20 minutes

Materials:

- Newsprint sheet entitled "Ways We Already Incorporate Harm Reduction" from Session 3
- Newsprint and colored markers
- Slide III-39, "Ways We Can Integrate Harm Reduction and Barriers to Doing So"

Instructor Notes:

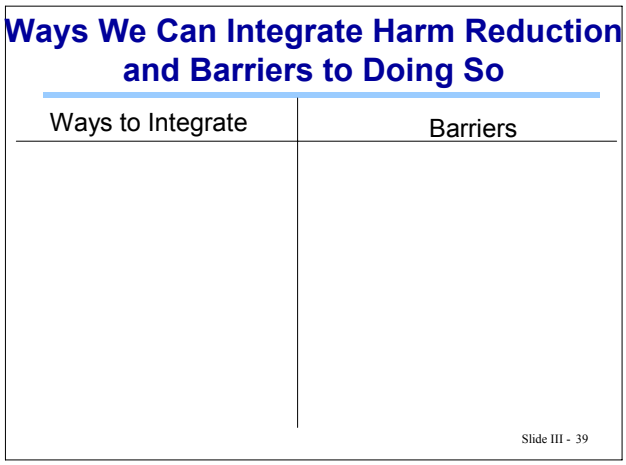
1. Refer to the newsprint sheet "Ways We Already Incorporate Harm Reduction" from Session 3. Ask participants to review the list they made earlier in the training on how they incorporate harm reduction.

2. Check in with participants about the applicability and appropriateness of harm reduction approaches in their work. Discuss which techniques could be easily adapted to their work setting.

3. Divide participants into small groups of three to five persons.

4. Give a sheet of newsprint paper and colored markers to each small group.

5. Display Slide III-39, "Ways We Can Integrate Harm Reduction and Barriers to Doing So". Ask the participants to write the contents of the slide on their newsprint sheets.



6. Ask each group to brainstorm about the ways to integrate harm reduction into their work and the barriers they either have encountered or might encounter. Ask them to write down their ideas on their newsprint sheets.

7. Ask the small groups to share their lists with the entire group. Ask the entire group to suggest strategies for addressing and overcoming these barriers.

8. Use this discussion as an opportunity to reinforce some of the important concepts covered in this training module. As you lead the discussion, you can model some of the techniques that have been described. For example, you can acknowledge and support the efforts that the participants have already made to incorporate harm reduction into their work. You can express empathy and validate the participants' concerns about the challenges they have identified. You can remind the participants that this training module has given them some new tools that they can bring back to their workplace. You can also point out that professional change, such as the integration of harm reduction into their work, is likely to occur slowly and gradually. Encourage the participants to focus on one thing they can do to integrate harm reduction into their work. Remind them to think small and to celebrate their small changes.

Presentation: Key Takeaways

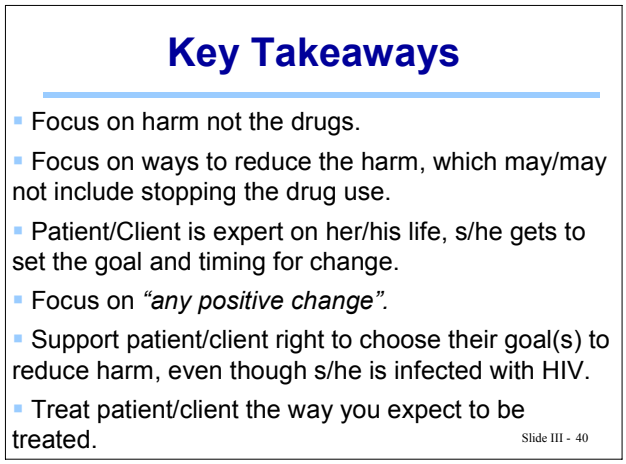
Purpose: To summarize the most important elements of harm reduction as simply as possible

Time: 2 minutes

Materials: Slide III-40, "Key Takeaways"

Instructor Notes:

1. Display and review Slide III-40, "Key Takeaways"



2. Remind participants of the skills they already incorporate into their work, as discussed in Session 3 and in the previous activity.

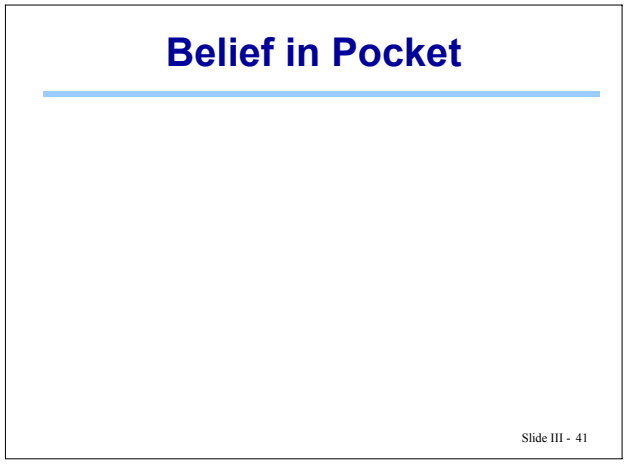
Activity: Is That a Belief in Your Pocket?

Purpose: To give participants the opportunity to examine whether their experience of this training module has affected their personal beliefs.

Time: 1 minute
Materials: Slide III-41, "Belief in Pocket"

Instructor Notes:

1. Display Slide III-41, "Belief in Pocket". Ask participants to remove from their pockets the sheet of folded papers on which they described their beliefs about drug use and drug users at the beginning of this training.



2. Ask participants to review what they wrote.

3. Tell the participants that if they still think their beliefs about drug use and drug users are true, then they are welcome to take their pocketed belief home with them. However, if the participants have changed their beliefs, ask them to leave their pocketed belief on your desk.

Module IV: Health Promotion and Adherence

Table of Contents

Introduction

Background and Purpose

The purpose of this training is to provide participants with strategies and tools to promote the health of HIV-infected substance users.

Providing HIV medical care to persons with past or present substance use presents special challenges. First, drug and alcohol use complicate the planning and delivery of care. Providers must be aware of biological issues, including interactions between HIV medications and recreational drugs, as well as changes that prolonged drug or alcohol use can have on the absorption and effectiveness of medications. In addition, HIV-infected substance users often have comorbid conditions, such as hepatitis C infection, which may complicate the management of HIV disease and create competing healthcare priorities. Providers must also be knowledgeable about the social context of different kinds of substance use. Social factors may affect the ways that people become engaged in medical care, their retention in care, and their adherence to treatment.

The second major challenge of providing HIV medical care to this population is that providers may have preconceptions about drug and alcohol use. Like everyone else, providers are exposed to and influenced by the many media portrayals of people who use alcohol or drugs. Almost all of these images are negative; even the relatively few sympathetic or compassionate portrayals rarely show substance users as whole, complex human beings. Stereotypes and myths about substance use and substance users can limit a provider's capacity to support adherence and provide optimal care.

As providers, we have the responsibility to acknowledge and analyze our preconceptions, and then consciously put them aside. We need to recognize that these negative images may make substance users feel powerless to adopt changes that will promote their health. Consequently, we also need to help HIV-infected substance users recognize that they have the capacity to protect and improve their health. We can raise their awareness of the behavioral and environmental resources that promote health. We can also work with them to develop dynamic strategies for HIV adherence that fit into the context of their lives.

A third, and perhaps even larger challenge, is to distinguish the true biological and social challenges from the harmful stereotypes of substance use and substance users. In this training, we deal with both the truths and the myths that affect the quality of care that substance users receive and their ability to adhere to HIV treatment. However, it is important to recognize that learning the distinctions between these truths and myths is a difficult, ongoing process – certainly not something that can be fully sorted out and mastered in the short time allotted for this training. We can better understand that HIV-infected substance users do not fit any stereotype, can explore the adherence challenges substance users face and consider the vast range of adherence interventions that may promote their health.

Resource Materials

Slides:
A PowerPoint presentation for this adherence module is included in the curriculum. This presentation should be run concurrently with the module. To help participants follow the presentation, we have listed the specific slides that correspond to each session in the module.

References and Reading Packet:
Full citations for the data presented in this training are provided in the "References" section at the end of the module. A reading packet may be given to participants, and the suggested items include information about:

- Addressing the challenges of adherence. Navigating emerging challenges in long-term HIV therapy
- Factors affecting adherence to antiretroviral therapy
- The challenge of adherence
- Adherence: Keeping up with your meds
- Building a cooperative doctor/patient relationship
- Medical progress: Medical care for injection-drug users with HIV infection

Handouts:

- Handouts IV-1 to IV-3, List of HIV medications (Pages IV-7 to IV-9)
- Handout IV-4, *Adherence Now* packets (See page IV-14)*
- Handout IV-5, "Indications for the Initiation of Antiretroviral Therapy in the Chronically HIV-Infected Patient" (See page IV-24)*
- Handout IV-6, "Areas of Challenge Worksheet" (Page IV-28)
- Handout IV-7, "Factors That Influence Adherence" (Page IV-29)
- Handouts IV-8 to IV-10, Drug interaction fact sheets (Pages IV-41, IV-42 and see page IV-43*)
- Handout IV-11, Self-administered adherence reporting tool (Page IV-48)
- Handout IV-12, "Case studies" (Page IV-54)

**The facilitator needs to acquire these resources in advance of the training.*

Other Materials Needed:

- Self-stick notes
- Flipcharts
- LCD projector
- Screen
- Color Markers
- Tape

Objectives

By the end of this module, participants will be able to

- Define adherence broadly and understand its significance

- Recognize that substance users may experience different medical complications of HIV infection than those experienced by other risk groups
- Learn about drug interactions
- Assess persons' readiness for starting and maintaining antiretroviral therapy
- Develop approaches for tailoring health promotion interventions to the specific needs of substance-using patients

Key Facts

- Health promotion is more than just adherence to medications.
- A broad view of adherence actively engages patients in health care and treatment and provides them with more opportunities for success.
- In order to be effective, providers need to recognize their biases and judgments about adherence issues—especially for substance users.
- Substance users are not a homogeneous population—each individual has unique needs and challenges to overcome.
- With the proper support services and primary care, substance users can achieve equal levels of success as non-substance users.

Session 1: Introductions and Icebreaker

Purpose: To introduce training participants to each other and the instructor, to gain an initial "read" on the participants, and to start the interactive process.

Time: 20 minutes

Materials

- Handout IV-1, "Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment"
- Handout IV-2, "Drug Listing by Generic Name"
- Handout IV-3, "Drug Listings by Trade Name"

Instructor Notes

1. Once the participants have arrived, take about three to five minutes to introduce yourself, talk briefly about the presentation style, remind people to approach the day with an open mind, encourage interaction, and add any personal touch that you feel is appropriate. If you wish, you may also talk briefly about the terminology you will use throughout the presentation. For example, the use of the words "patient" versus "client," "ART" (antiretroviral therapy) versus "HAART" (highly active antiretroviral therapy), and "substance user" versus "substance abuser" or "addict."

2. Ask the participants to introduce themselves by name, agency, and job.

3. Use a brief icebreaker of your choosing to get an initial "read" on the participants and begin the interactive process. Here are two suggestions:
   - Ask each of the participants to give a one-sentence description of what they believe adherence to be, as part of their introduction – or-
   - Following the introductions, ask for a show of hands among the group of any people who have taken every single dose of all of their 7-10 day antibiotic prescriptions that they have had in their lives.

4. Explain that the main challenge in developing a training on Health Promotion and Adherence is tailoring the information and presentation to the interests and needs of your target audience. Although the entire curriculum is designed for a cross-disciplinary audience, the needs of different disciplines vary when it comes to some of the information available here, and the ways in which they use it may be different.

5. Note that some trainings may be provided to more homogenous groupings – such as physicians, or staff at a health center, or staff of a drug treatment program. Therefore, we offer two ideas for "replication training" models, one that targets medical providers and a second that targets a mixed audience or non-clinical audience. However, your challenge will be to tailor what you teach and how you teach it to even more specific audiences. Many of the teach-back sessions in this training ask you to tailor the curriculum to different audiences using the materials provided as well as your own experiences.

6. Distribute Handouts IV-1 to IV-3 and note one or more of these lists may be useful to distribute at the beginning of any training as an easy reference on the many different antiretroviral drugs that are now used. Explain their potential uses with different audiences, and ask for comments/feedback from participants about which list they prefer and for what type of audience.

Hand-Out IV-1 – Alphabetical Drug Listing

Protease Inhibitors

- Agenerase (Amprenavir)
- Crixivan (Indinavir)
- Fortovase (Saquinavir)
- Invirase (Saquinavir)
- Kaletra (Lopinavir/ritonavir)
- Lexiva (Fosamprenavir)
- Norvir (Ritonavir)
- Reyataz (Atazanavir)
- Viracept (Nelfinavir)

Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs or "non-nukes")

- Rescriptor (Delvirdine)
- Sustiva (Efavirenz)
- Viramune (Nevirapine)

Nucleoside Reverse Transcriptase Inhibitors (NRTIs or "nukes")

- Combivir (Lamivudine/3TC + zidovudine/AZT)
- Emtriva (Emtricitabine)
- Epivir (Lamivudine/3TC)
- Hivid (Zalcitabine)
- Retrovir (Zidovudine/AZT)
- Trizivir (Abacavir + lamivudine/3TC + zidovudine/AZT)
- Videx (Didanosine/DDI)
- Viread (Tenofovir)
- Zerit (Stavudine/D4T)
- Ziagen (Abacavir)

Fusion Inhibitor

Fuzeon (Enfuvirtide/T-20)

Note that lopinavir is actually only available in combination with a small dose of ritonavir and sold under the trade name Kaletra.

Handout IV-2 – Drug Listing By Generic Name

The following table was developed to reduce confusion concerning the different names of drugs used for HIV treatment. It is derived from the publication "Antiviral Drug Names" (Fact Sheet 401) from the New Mexico AIDS InfoNet.

Part 1: Drug Listings by Generic Name

Generic Name	Trade Name	Also Known As	Drug Class
Abacavir	Ziagen	1592U89	NRTI
Amprenavir	Agenerase	APV, 141W94	PI
Delavirdine	Rescriptor	DLV	NNRTI
Didanosine	Videx	DdI	NRTI
Efavirenz	Sustiva	EFV, DMP-266	NNRTI
Indinavir	Crixivan	IDV	PI
Lamivudine	Epivir	3TC	NRTI
Lopinavir	Kaletra	ABR-378/r	PI
Nelfinavir	Viracept	NFV	PI
Nevirapine	Viramune	NVP, BI-RG-587	NNRTI
Ritonavir	Norvir	RTV	PI
Saquinavir	Fortovase, Invirase	SQV	PI
Stavudine	Zerit	d4T	NRTI
Tenofovir	Viread	PMPA	NRTI
Zalcitabine	Hivid	ddC, dideoxycytidine	NRTI
Zidovudine	Retrovir	AZT, ZDV	NRTI

Handout IV-3 – Drug Listings by Trade Name

Part 2: Drug Listings by Trade Name

Trade Name	Generic Name	Also Known As	Drug Class
Agenerase	Amprenavir	APV, 141W94	PI
Combivir	Lamivudine + zidovudine		NRTI
Crixivan	Indinavir	IDV	PI
Epivir	Lamivudine	3TC	NRTI
Fortovase	Saquinavir	SQV	PI
Hivid	Zalcitabine	ddC, dideoxycytidine	NRTI
Invirase	Saquinavir	SQV	PI
Kaletra	Lopinavir	ABR-378/r	PI
Norvir	Ritonavir	RTV	PI
Rescriptor	Delavirdine	DLV	NNRTI
Retrovir	Zidovudine	AZT, ZDV	NRTI
Sustiva	Efavirenz	EFV, DMP-266	NNRTI
Trizivir	Abacavir + lamivudine + zidovudine		NRTI
Videx	Didanosine	ddI	NRTI
Viracept	Nelfinavir	NFV	PI
Viramune	Nevirapine	NVP, BI-RG-587	NNRTI
Viread	Tenofovir	PMPA	NRTI
Zerit	Stavudine	d4T	NRTI
Ziagen	Abacavir	1592U89	NRTI

Session 2: A Broad Perspective on Adherence: Part 1

Purpose

- To identify the medical definition of adherence.
- To illustrate that adherence is *not only* about taking one's medications; in some cases, a patient is not ready to be on a regimen but can still be "adherent" to medical treatment in many other ways
- To show that nonadherence to medications is pervasive in both substance-using and non-substance-using populations
- To show how thinking about adherence broadly gives a patient more opportunity for success

Time: 15 minutes

Materials

- Flipchart, colored markers, and tape
- Slide IV-2, "Medical Definition of Adherence"
- Slide IV-3, "Expanded Definition of Adherence"
- Slide IV-4, "Why Adopt a Broad View of Adherence?"
- Slide IV-5, "What is Health Promotion?"
- Slide IV-6, "Adherence Support = Health Promotion"
- Slide IV-7, "Why Focus on HIV Adherence in Substance Users?"

Instructor Notes

1. Explain the purpose of this session, and the learning objectives as listed above.

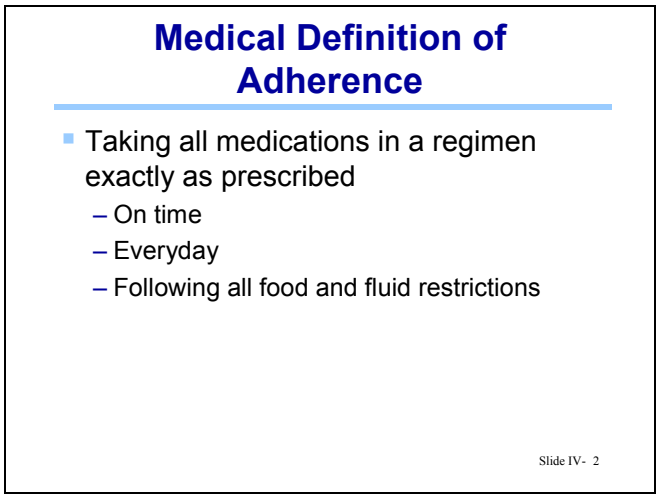
2. Mention that one way to get the ball rolling with this session is to ask participants to raise their hands if they had difficulty completing the last course of 7-10 day antibiotics they were prescribed (if not asked as part of the ice-breaker).

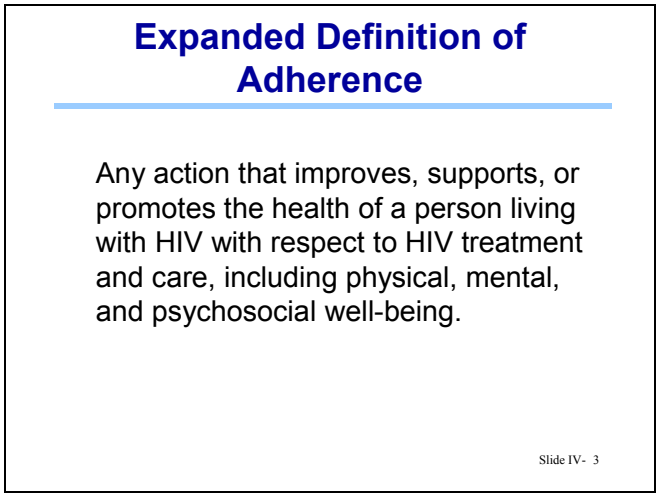
3. Review the six slides included in the slide pack briefly, and how they might be used.
   - For example you can use slides IV-2 and IV-3 to compare the medical definition of adherence with an expanded definition, and ask training participants to volunteer what kinds of health issues might be included in an expanded definition.
   - Slides IV-4 to IV-6 provide information about how a broad view of adherence provides more opportunities for success and is more likely to engage patients in care.
   - Slide IV-7 summarizes the discrimination that substance users face in trying to access care and treatment.

4. Ask participants if and how they think this session might be relevant for clinicians and non-clinicians. What are some of the different things they might stress with

different groups? How would they talk about this with a mixed audience? Do people have ideas about other ways to engage an audience on this topic or is it enough to cover it briefly? Record comments on the flip chart.

5. Note that adherence comes up throughout this training session, and that this is just the introduction to a broad view of adherence.





Why Adopt a Broad View of Adherence?

- A broad view of adherence
  - Recognizes that adherence is not only about taking one's medications
  - Actively engages patients in health care and treatment
  - Values the health impacts of "non-medical" interventions, including controlled drug use, stable housing, social supports, harm reduction, and good nutrition
  - Improves patients' self-efficacy
  - Provides more opportunities for success

Slide IV- 4

What is Health Promotion?

- Taking antiretrovirals
- Taking meds to prevent opportunistic infections
- Getting primary and preventive care (paps)
- Keeping regular medical appointments
- Eating a nutritious diet
- Exercising regularly
- Participating in a drug treatment program
- Controlling drug use or sobriety
- Practicing safer sex and drug injection
- Taking a multivitamin
- Stopping smoking
- Connecting with a support network

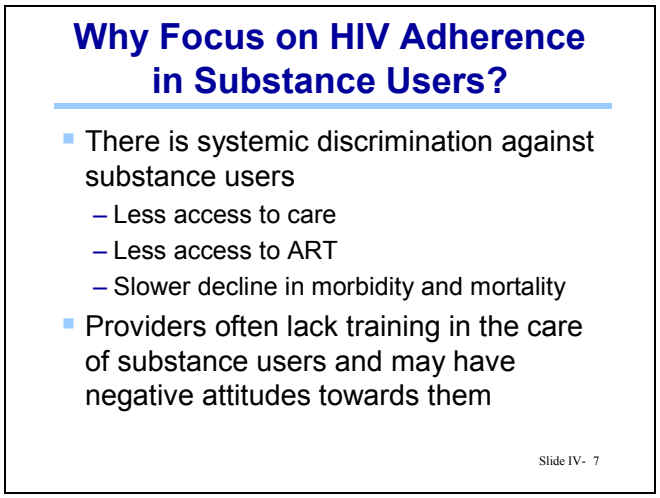
Slide IV- 5

Adherence Support = Health Promotion

"..helping a patient who uses drugs adhere to a complex medical regimen can support an upward spiral of self-esteem and the adoption of healthier practices."

Eldin, 2001

Slide IV- 6



6. Ask participants if any of them have observed this discrimination in practice. Use their comments to sum up Slide IV-7 and re-enforce the importance of this kind of training.

Session 3: Why Is Adherence to Antiretroviral Medications So Important?

Presentation: The Importance of Adherence to Antiretroviral Medications

Purpose:

- To illustrate why adherence to antiretroviral medications is so important if an individual is ready to take them;
- To explain that treatment failure is not patient failure;
- To help providers help patients understand how to manage their own adherence in the context of drug use, if they are ready to start ART.

Time: 15 minutes and 30 minutes Teach Back.

Materials

- Handout IV-4, "'Adherence Now' Teaching Cards" (from "Adherence Now" packet)
- Slide IV-8, "Why Is Adherence to Antiretroviral Medications So Important?"
- Slide IV-9, "Problems With Poor Adherence"
- Slide IV-10, "Goals of Medical Adherence"
- Slide IV-11, "Medication Adherence is Not Easy!"
- Slide IV-12, "How Much Adherence Is Enough?"
- Slide IV-13, "Treatment Failure"
- Slide IV-14, "What Do We Know About HIV Drug Resistance?"
- Slide IV-15, "Relationship Between Level of Adherence and Risk of Resistance"
- Slide IV-16, "What Are the Practical Implications?"
- Slide IV-17, "Take Control of Nonadherence"

Instructor Notes

1. Explain the objectives of this session as noted above. Talk a little bit about the ways in which different types of providers/advocates might use this information. Ask for suggestions from participants about how this information might be used by different audiences, and if they think medical providers really need this part of the training.

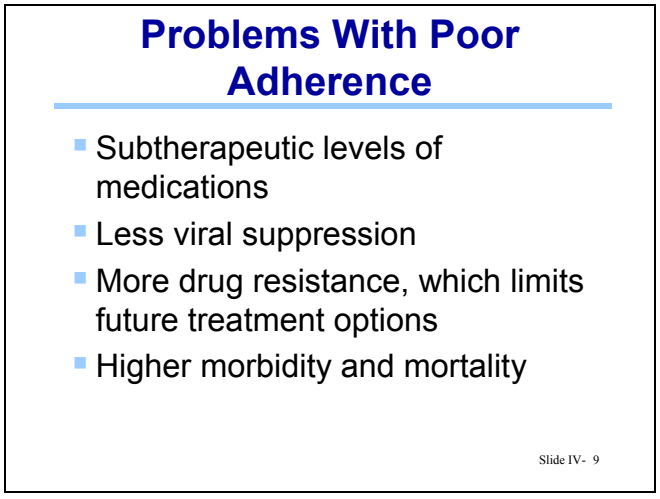
2. Distribute Handout IV-4, "'Adherence Now' Teaching Cards" (from "Adherence Now" packet) and explain how these can be used in working with patients. This series of laminated cards can help you illustrate the benefits of adherence to your patients. The front of each card contains a graphic image demonstrating the benefits of adherence, while the back of the card contains bullet points that a provider can emphasize. Additional copies of the "Adherence Now" materials can be obtained at no cost from:

World Health CME
41 Madison Ave
New York, NY 10010-2202

Tel: (800) 433-4584, ext. 1776
e-mail: erivera@whcom.com

3. Review the 10 slides that accompany this session, and explain that people probably would not use all of them in any particular training, but all are available to choose from as needed.

4. Slides IV-8 to IV-13 address the importance of adherence, the goals of adherence, what happens if a person does not adhere to ART, and the research data on how much adherence is needed. The last of these slides addresses treatment failure. The main points here are (1) If this adherence goal is not presented to HIV-infected patients in a sensitive way, then it may set them up for failure, and (2) Treatment failure is not patient failure. You may want to provide an example from your own experience at this point to model "telling a story" to make a point.



Goals of Medical Adherence

- Maximally suppress viral load
- ↓ drug resistance
- ↑ length of regimen effectiveness
- All of the above leading to …
  - ↓ HIV disease progression
  - ↑ survival

Slide IV-10

Medication Adherence Is Not Easy!

- Rate of nonadherence to ART is generally 50% to 70%
- Substance users' adherence rates are lower (inconsistent data)
- Even >95% adherence is associated with treatment failure almost 20% of time

Golin, 2002; Samet, 1992; Broers, 1994; Gordillo, 1999; Arnsten, 2002; Chesney, 2000

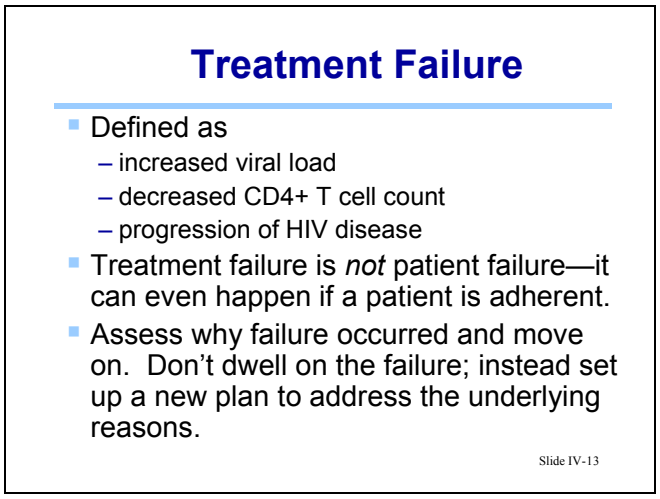
Slide IV-11

How Much Adherence Is Enough?
(After 3 Months)

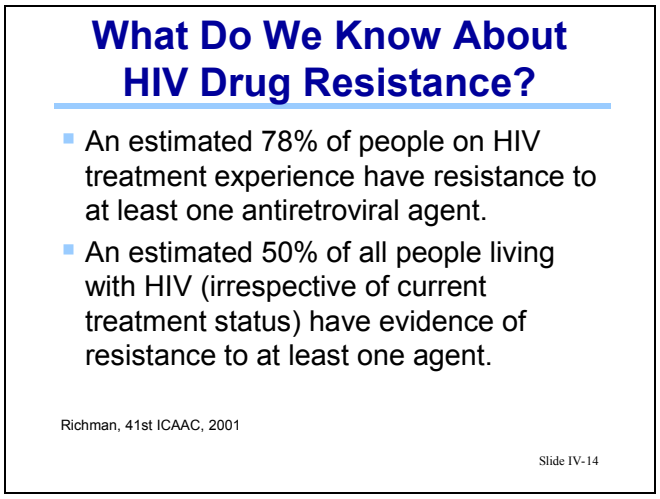
% of doses taken correctly	% with viral suppression
>95%	81%
90% - 95%	64%
80% - 90%	50%
70% - 80%	25%
<70%	6%

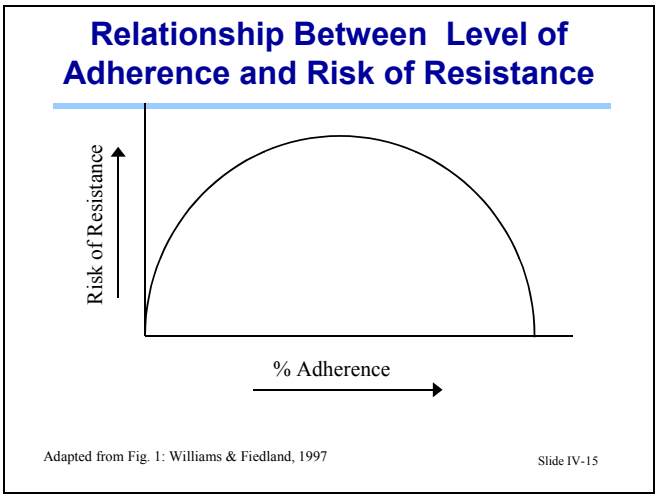
Chesney, 2000

Slide IV-12

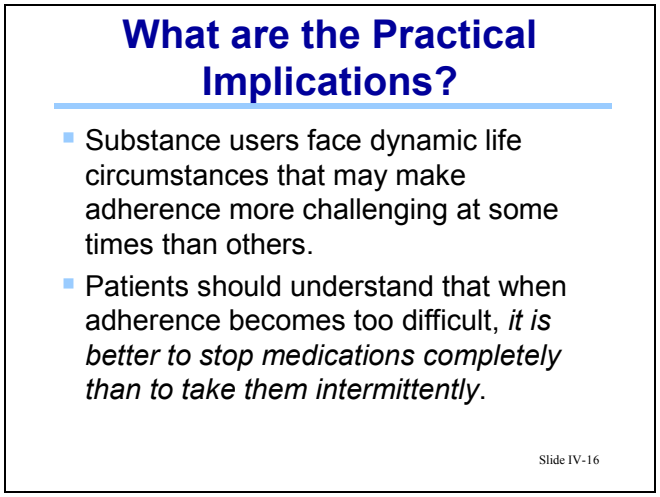


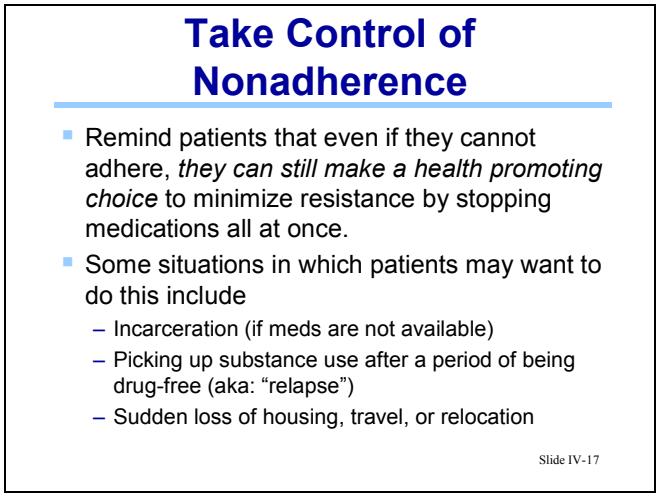
5. Slides IV-14 and IV-15 provide more detailed information about drug resistance and adherence. Note that one of the main arguments that is made against prescribing ART to drug users is that they won't adhere and that, as a result, their HIV infection will become resistant to HIV meds. This in turn will lead to the transmission of drug-resistant HIV to others. These slides help demonstration that
   - If a person is completely nonadherent, the chances of drug resistance are extremely low, because the virus is not exposed to any antiretroviral drug to become resistant to.
   - Of person's adherence is very high (takes close to 100% of his or her medications correctly), then the risk of drug resistance is quite low.
   - The greatest risk for drug resistance occurs when a person takes his or her HIV medications intermittently. Taking medications intermittently gives the virus the perfect opportunity to develop resistance, because it has an opportunity to multiply in the presence of medications.





6. Slides IV-16 and IV-17 talk about the practical implications of all of this information for substance users and their providers. The take-home message is that if people start using recreational drugs again or feel for any reason that they cannot stick with their regimen, they should stop all their medications at once and not "wean" themselves off.





7. Ask participants again if they think medical providers need this training (if some people said ‘no’ the first time.

8. Teach Back
   Break participants into 2-3 groups. Ask one group what they would use from this material to train doctors and nurses; another group what they would use to train substance abuse treatment providers and case managers; and another groups what they would use to train a mixed audience of clinicians and non-clinicians.
   Give the groups 10 minutes to discuss.
   Have each group report back what they would use and why they would use it, for five minutes each.

Session 4: The Politics of Adherence

Activity: Agree or Disagree?

Purpose: To raise some controversial issues and allow participants to express their opinions about these issues

Time: 20 minutes to present, 30 minutes for Teach Back, 10 minutes to summarize

Materials

- Colored markers, newsprint paper, and tape
- Slide IV-18, "Politics of Adherence"
- Slide IV-19, "Agree or Disagree?"
- Slide IV-20, "Agree or Disagree?"
- Slide IV-21, "Nonmedical Providers' Roles"
- Slide IV-22, "Agree or Disagree?"
- Slide IV-23, "Abstinence and Antiretroviral Therapy"

Instructor Notes

1. Select one of the three "Agree" or "Disagree" statements for this exercise (Slides IV-19, IV-20 or IV-22) to model for the group.
   - "Nonmedical providers should counsel HIV-infected substance users about antiretroviral therapy."
   - "Conversations about HIV treatment adherence belong in the substance use treatment setting."
   - "A person should be drug free for ___ before they can start antiretroviral therapy." If you select this "Agree" or "Disagree" statement, ask participants to fill in the blank with an amount of time that they think is appropriate, such as one month, three months, or six months.

2. In preparation for the session, make three signs that say "Agree," "Disagree," and "Both Agree and Disagree." Post these signs in three different parts of the room.

3. Introduce the activity. Acknowledge that some of the issues related to adherence and substance use will be controversial and that this exercise gives participants a forum to discuss their opinions. You may use Slide IV-18 to introduce the activity. Let participants know that you will facilitate one version of the exercise and then ask for volunteers to facilitate two other versions of the exercise.

Politics of Adherence

- What are your opinions about these controversial adherence issues?
- Decide whether you
  - Agree
  - Disagree
  - Both agree and disagree
- Let us know what you think!

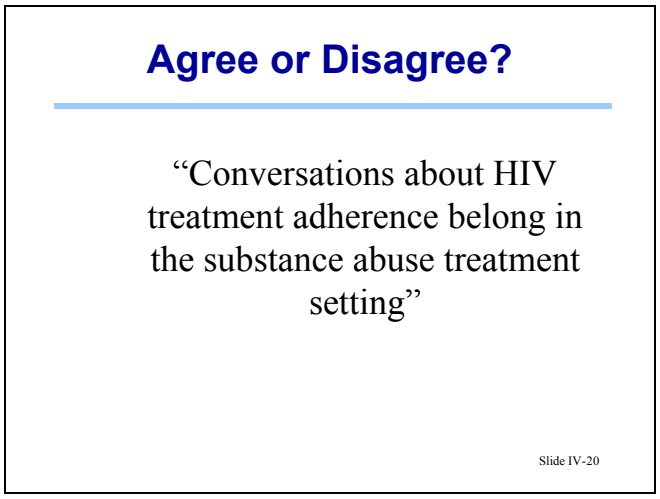
Slide IV-18

4. Explain that you had 3 choices of controversial statements to select from, and selected this one because it brings out: participants' opinions on the roles and qualifications of non-medical providers (Slide IV-19); or the issue of priorities in substance use treatment settings. Should HIV issues be paramount in early recovery, or should there be a narrow focus on concerns directly related to substance use? (Slide IV-20); or the different opinions people have about abstinence from drug use as a prerequisite for initiating ART (Slide IV-22).

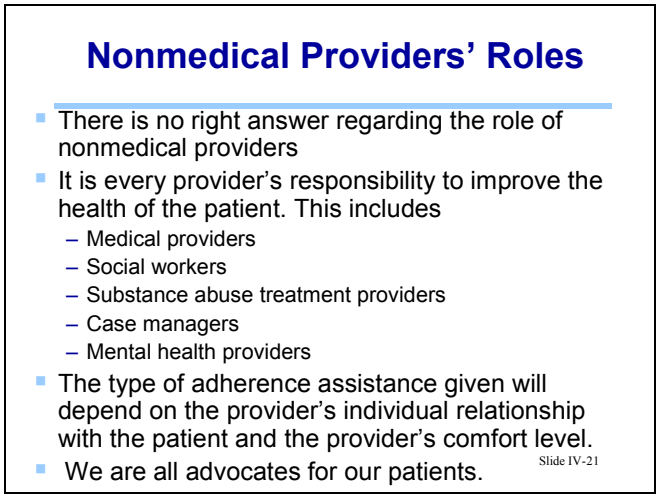
Agree or Disagree?

"Nonmedical providers should counsel HIV-infected substance users about antiretroviral therapy."

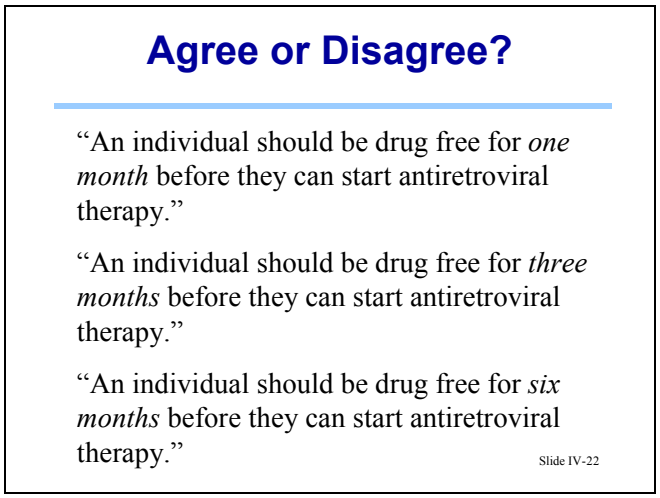
Slide IV-19

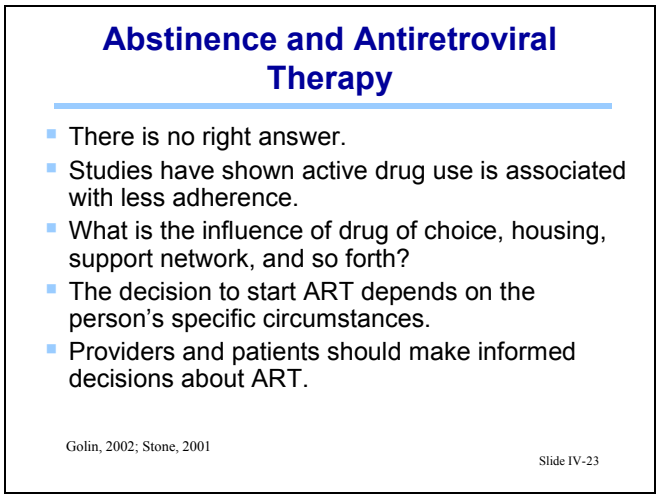


5. Read the slide you have chosen, and ask participants to move to the part of the room that matches their opinion about that statement – agree, disagree, or both agree and disagree. Once participants have moved to their respective positions, facilitate a discussion by asking the people in each position to explain some of the reasons for their stance. Let participants know that the position they pick does not have to be permanent; that is, they can later change their minds and switch to another position.



6. Slides IV-21 and IV-23 can be used to summarize and facilitate discussion about peoples' views.





7. Do not feel you have to address all the myths and misconceptions that may come up during this discussion. Some of these issues will be addressed later in the training.

8. **Teach Back**
   Ask for volunteers to facilitate the exercise with the two remaining "Agree or Disagree" statements.

9. **Summary**
   Ask participants if they can think of other "Agree or Disagree" statements that could be used with specific training audiences.

Session 5: A Broad Perspective on Adherence

Presentation: Evaluating Readiness to Begin ART

Purpose:

- To emphasize that *it is rarely, if ever, an emergency to start ART*
- To identify the different factors that should be examined in evaluating an individual's readiness to start treatment or treatment decisions.

Time: 60 minutes, including time for Teach Back

Materials

- Handout IV-5, Table 6 from *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*.
- Handout IV-6, "Areas of Challenge Worksheet"
- Handout IV-7, "Factors That Influence Adherence"
- Slide IV-24, "HIV Treatment Guidelines"
- Slide IV-25, "Treatment Readiness"
- Slide IV-26, "Considerations When Evaluating Treatment Readiness"
- Slide IV-27, "Factors That Affect Adherence"
- Slide IV-28, "Adherence Issues to Consider for Substance Users"
- Slide IV-29, "Medication Adherence and Drug of Choice"
- Prepare Teach Back packets that include each handout, and each slide on a separate page, for each participant in the training

Instructor Notes

1. Review the learning objectives for this session. Explain that after you review the materials and resources, you are going to ask participants to design their own training, making use of any of these materials that they choose and their own ideas, for specific training audiences.

2. Pass out Handout IV-5, Table 6 from *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*. These guidelines are updated every six months. Let people know that they can access the latest version of the guidelines before each training from **http://www.aidsinfo.nih.gov/guidelines/default_db2.asp?id=50)**

3. Review the other two handouts, IV-6 and IV-7, and explain how they might be used. For example, Handout IV-6, "The Areas of Challenge Worksheet," can be used in this exercise to brainstorm potential adherence challenges, and will also be used as a worksheet for the Case Study exercises later. Handout IV-7, "Factors that Influence Adherence," is a take-home chart for training participants.

4. Review the first five slides for this session (Slides IV-24 to IV-28) that cover treatment guidelines, the types of issues people may encounter, a typology for grouping these

issues, and a description of the factors that influence decisions. Point out that you don't necessarily need to use all of these slides, and that sometimes it is more productive if you elicit suggestions from training participants and write them on a flip chart rather than showing a slide. You can have your own list, and fill in any important blanks after participants give you their ideas.

HIV Treatment Guidelines

The best time to start therapy in individuals with a CD4 count ≥200 and no symptoms is unknown. Below are general guidelines:

Symptomatic (AIDS)	Treat
No symptoms, CD4<200	Treat
No symptoms, 200<CD4≤350	Offer treatment, but controversial
No symptoms, CD4>350, VL>55,000	Some recommend treating, others recommend waiting
No symptoms, CD4>350, VL<55,000	Wait and continued monitoring of CD4 counts

The most recent treatment guidelines can be found at: CDC, MMWR 2002 http://www.aidsinfo.nih.gov/guidelines/default_db2.asp?id=50

Slide IV-24

Treatment Readiness

Remember…

- HIV treatment with antiretrovirals is rarely if ever an emergency.
- There is always time to consider a treatment decision before starting therapy.

Slide IV-25

Considerations When Evaluating Treatment Readiness

- Degree of Immunodeficiency (CD4 count, viral load, symptoms of AIDS)
- Client's attitudes and beliefs about treatment (Willingness, ability, and readiness to begin therapy)
- Lifestyle challenges and supports
- Risk of disease progression (for example comorbidities)
- Mental health concerns
- Potential risks and benefits of initiating therapy
- Likelihood of adherence

Slide IV-26

Factors That Affect Adherence

- **Patient Factors**: social support and isolation, knowledge, beliefs and attitudes, self-confidence in the ability to stick to treatment, substance use, and mental health status
- **Clinical Care/Provider Factors:** access to care, interdisciplinary care, provider biases, communication, and trust
- **Regimen Factors**: complexity of regimen, dosing schedule, side effects, pill size, food and water restrictions, and drug interactions

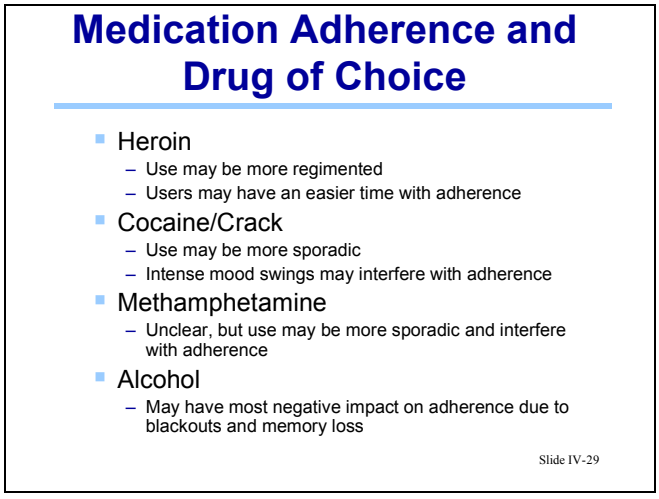
Slide IV-27

Adherence Issues to Consider for Substance Users

- Relationship to the medical sector
  - Access to care
  - Access to ART
  - Discrimination
- Drug interactions
- Side effects and Pain
- Drug of choice variations
- Scheduling doses

Slide IV-28

4. Slide IV-29 provides information on what is known about how drugs of choice influence adherence. You may want to review this information directly with training participants. You can refer to a study (Arnsten, 2002) in which active cocaine use was associated with a 41% decline in median adherence and was a strong predictor of failure to maintain viral suppression. In this study, active heroin users also had lower adherence than nonusers, but the difference was not statistically significant.



6. **Teach Back**
   - Break participants into small groups and ask them to draw from these materials and their own experience to design a 10-15 minute training on these issues.
   - Assign each group a target audience such as: Doctors and Nurses; general clinic staff including social workers and case managers and advocates; staff at a substance abuse treatment program.
   - Give the groups 15 minutes to plan a session.
   - Give the groups 5-10 minutes each to describe their plan to the group as a whole, explaining why they chose specific materials, and what they added to the curriculum.

Handout IV-6: "Areas of Challenge" Worksheet

	Issues	Interventions
Client Focused		
Regimen Focused		
Care Provider Focused		

Handout IV-7: Factors That Influence Adherence

Patient Factors	Clinical care and Provider Factors	Regimen Factors
Social support versus isolation (family, friends, and peers)	Availability of services and access to care	Side effects
Knowledge, beliefs, and attitudes regarding therapy	Interdisciplinary care (outreach, education, mental health, case management, etc.)	Drug interactions
Culture and stigma	Provider biases or discrimination	Regimen complexity
Mental health	Provider-patient communication	Food restrictions
Substance use and drug of choice	Provider-patient relationship (trust and confidence)	Scheduling doses and cues
Housing		

Session 6: What is Health Promotion?

Presentation: Health Promotion and Medical Issues

Purpose:

- To think about health promotion broadly
- To learn about drug interactions
- To learn about medical complications that may impact HIV-infected substance users

Time: 60 minutes training and 2-4 hours Teach Back, depending on the number of participants.

Materials

- Handout IV-8, "Interactions Between HIV-Related Medications and Methadone"
- Handout IV-9, "Interactions Between Antiretroviral Medications and Recreational Drugs"
- Handout IV-10, "Commonly Abused Substances and Possible Interactions With HIV Drugs"
- Slide IV-30, "Special Medical Issues"
- Slide IV-31, "Drug Interactions: What Do We Know?"
- Slide IV-32, "How Do Drug Interactions Affect Medication Adherence?"
- Slide IV-33, "Methadone Interactions With PIs"
- Slide IV-34, "Methadone Interactions With NNRTIs"
- Slide IV-35, "Methadone Interactions With NRTIs"
- Slide IV-36, "Methadone Interactions"
- Slide IV-37, "Buprenorphine Interactions with ART"
- Slide IV-38, "Recreational Drug Interactions With ART"
- Slide IV-39, "Illicit Drug Interactions with ART"
- Slide IV-40, "Talking About Recreational Drug Interactions
- Slide IV-41, "Hepatitis C (HCV) Infection"
- Slide IV-42, "HCV and HIV"
- Slide IV-43, "HCV Treatment Issues"
- Slide IV-44, "Tuberculosis (TB)"
- Slide IV-45, "TB and HIV"
- Slide IV-46, "TB and HIV Drug Interactions"
- Slide IV-47, "HIV and Mental Illness"
- Slide IV-48, "Other Complications of Substance Use"
- Slide IV-49, "Priorities and Motivations"

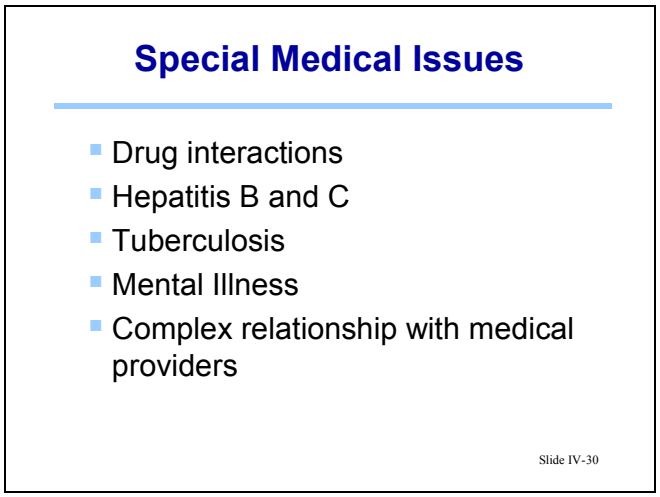
Instructor Notes

1. Present the learning objectives for this session.

2. Note that this is the most didactic of the sessions because it focuses on medical information. Also note that since this information is always being updated by new research, it is important to review the literature and periodically update materials.

3. In contrast with other sessions, mention that you are going to conduct this session as a lecture, both as a refresher for participants and to give them the opportunity to ask questions.

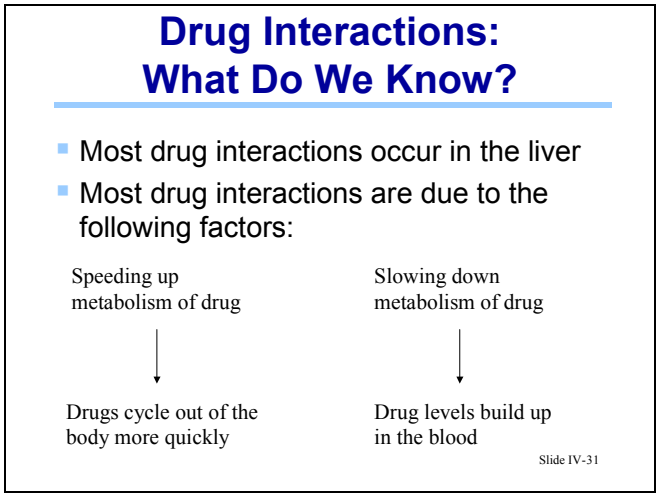
4. Let participants know at the end of the lecture you will ask them to develop a plan, using these materials, to train different audiences for different amounts of time.

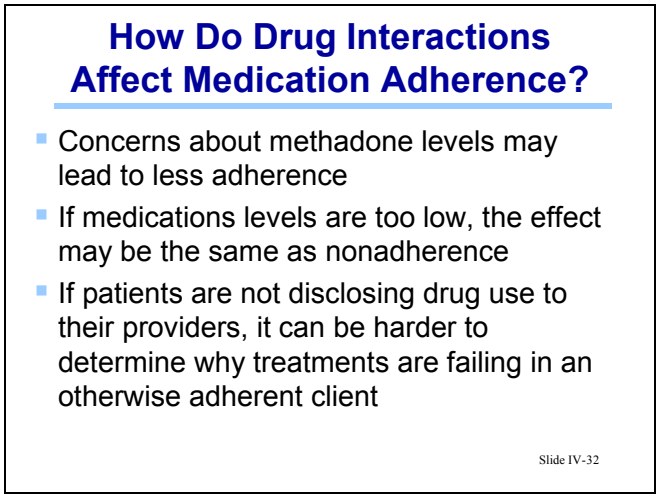


5. Recognize that competing health priorities and drug interactions can complicate both access to ART and adherence if people are feeling ill or if they have other health conditions that may urgently require treatment. A few examples of such conditions are presented below:
   - Hepatitis C (HCV) co-infection is common among HIV-infected injection drug users. In this population, HIV infection has been linked to more aggressive progression of HCV disease (Lauer, 2001; Soto, 1997; Bruno, 2002; Landau, 2001; Nasti, 2001).
   - Mental illness may also create significant adherence barriers if a person's mental health status interferes with memory or motivation. For example, depression, which is the most common mental illness among substance users, may affect both memory and motivation (Stone, 2001; Sherer, 1998; Elliot, 1997).

6. Present the material in Slides IV-31 to IV-40, and refer participants to Handouts IV-8, IV-9, and IV-10 as good sources of additional information about drug interactions. It is important to note that there are many drugs that have not yet been studied and also that many of the studies have been conducted are on a small number of patients making it hard to generalize from them.
   - Explain how drug interactions may affect adherence, and talk about the basic science behind the interactions. Focus on a few common interactions, and then refer participants to their handouts for more information.

- Note that the coadministration of methadone with protease inhibitors (PIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) often leads to significantly decreased methadone levels.
- Also note that the coadministration of methadone with nucleoside reverse transcriptase inhibitors (NRTIs) generally does not affect methadone levels, although the effects of some NRTIs have not yet been determined. Methadone may also effect the levels of some NRTI, but in clinical practice the only change in dosing that may be required is with didanosine. (If participants ask about the increased clearance of methadone for abacavir, let them know that in clinical practice it is still generally not necessary to change methadone dose).





Methadone Interactions with PIs

Protease Inhibitor	Effect on Methadone
Indinavir	No change
Ritonavir	↓37%
Nelfinavir	↓ level
Amprenavir	↓ 13-35%
Fosamprenavir	↓ level
Lopinavir/ritonavir	↓28-53%
Saquinavir	↓ 0-40%
Atazanavir	No data

Beauverie, Gourevitch, Antoniou, Clarke 2002, Bart, Shelton, Stevens, McCance-Katz 2003, Gerber, DHHS

Slide IV-33

Methadone Interactions With NNRTIs

NNRTI	Effect on Methadone
Nevirapine	↓ by 46%
Efavirenz	↓ by 48-52%
Delavirdine	No data (expect ↑ or no change)

Altice, 1999; Staszewski, 1998; Gourevitch, 2000; Antoniou, 2002; Clarke, 2001

Slide IV-34

Methadone Interactions With NRTIs

NRTI	Effect on NRTI
Zidovudine	↑ 40%
Stavudine	↓ 18-27%
Didanosine	↓ 41-60% *
Abacavir	↓
Tenofovir	No data
Lamivuidine	No change
Zalcitabine	No data
Emtricitabine	No data

Rainey, Gourevitch, Antoniou, McCance-Katz, 1998; Bart, Rainey 2000 & 2002, DHHS

Slide IV-35

Methadone Interactions

Antiretroviral Medication	Drug Interaction
Protease Inhibitors	↓ Methadone 35-53%
NNRTI's	↓ Methadone 46-52%
NRTI's	May ↓ or ↑ NRTI No effect on methadone

Beauverie, 1998;Gourevitch, 2000; Antoniou, 2002, Clarke, 2002

Slide IV-36

7. Note that Slide IV-36 is a summary of the 3 previous slides, and may be more appropriate for certain audiences.

Buprenorphine Interactions with ART

- NRTIs
  - No change in AZT
- NNRTIs
  - Likely ↓ buprenorphine levels
- PIs
  - ↑ Buprenorphine with ritonavir > indinavir > saquinavir
- Fusion inhibitor
  - No data

McCance-Katz 2001, Iribarne, Sullivan

Slide IV-37

8. We know very little about the interactions between HIV medications and recreational drugs. However, most of the interactions that have been reported involve ritonavir. You can mention the following examples of interactions if people are very interested in this topic:
   - Amphetamines may increase by 2-3 times when someone is taking ritonavir
   - Cocaine increases HIV replication and decreases immune system function
   - Ecstasy, when taken with ritonavir, may result in overdose or death
   - GHB (liquid X) increases in potency with ritonavir or saquinavir
   - Heroin levels may decrease by 50% or increase with ritonavir.

Recreational Drug Interactions With ART

- Interactions are complex, inconsistent, and difficult to predict.
- Interactions may be affected by drug purity, mode of ingestion, and baseline liver and kidney function.
- Interactions with HIV meds may be extremely dangerous or even fatal, especially with ritonavir and kaletra.
- "Take heed, club lovers - there's no map for these trips." (Horn, 1998)

Slide IV-38

Illicit Drug Interactions With ART

Drug	Effect
Amphetamines	may ↑ level 2-3 fold with **ritonavir**
Methamphetamine	↑ HIV replication, fatal OD with **ritonavir**/saquinavir
Cocaine	↑ HIV replication, ↓ immune system function
Ecstasy (MDMA)	Over dose or death with **ritonavir**
GHB (liquid X)	↑ levels with **ritonavir** or saquinavir
Heroin	levels may ↓ or ↑ with **ritonavir**

Antoniou, Henry, Harrington, Roth, Bagasra, Peterson 1991 & 1992, Ellis, Gavrilin, Urbina, Hales

Slide IV-39

9. The most important point to emphasize about drug interactions is that little is known. One of the reasons is that it is very difficult to do controlled clinical trials with recreational drugs, so we can only make educated guesses based on limited research, medical records, and anecdotal reports. Note that some of the drug interaction information is conflicting. Fortunately, the data are better for legal substances, such as methadone and alcohol. The take-home message is that drug interaction information is not always clear. In addition, the interactions may vary, based on such factors as the person's metabolism, the mode of injection, and the purity of the drug.

10. Introduce the topic of comorbidities, referring to the information in Slides IV-41 to IV-47. Explain how comorbidities, such as Tuberculosis (TB) and Hepatitis C, are fairly common among substance users and should be considered in their treatment plans. Here are some other points to raise:
    - HCV infection is very common among drug users – much more common than HIV infection.
    - Note some of the challenges of current treatment for HCV. For example, some HCV medications are administered through injection, which may be problematic for some substance users. In addition, HCV treatment has a low to moderate success rate, and the side effects are very difficult to tolerate.
    - Note that the TB drug rifampin has such significant drug interactions with PIs and NNRTIs that it is contraindicated for nearly all of these antiretroviral agents. Rifampin also dramatically reduces methadone levels. Rifabutin is the preferred choice in the treatment of TB, because it has fewer drug interactions with PIs and NNRTIs and causes no change in methadone levels.

11. Note that this presentation is very long and technical. Thus, people may want to omit the information about TB in parts of the country where it is not prevalent.

HCV Infection

Epidemiology

- 5 times more widespread than HIV
- Leading cause of liver disease in the U.S.
- Up to 88% of HIV-infected IDUs are coinfected with HCV

Lauer, NEJM 2001

Slide IV-41

HCV and HIV

- HIV's effect on HCV
  - Accelerates hepatitis C disease
  - Leads to cirrhosis more quickly
  - No difference in response to HCV treatment
- HCV's effect on HIV
  - Conflicting data about HIV disease progression
  - Liver disease may complicate ART

Slide IV-42

HCV Treatment Issues

- Peginterferon injections weekly for 6 to 12 months
- Cure rate approximately 56% overall
- Severe side effects—Flu-like symptoms, depression, irritability, emotional lability, severe anemia
- Up to 1/3 of patients stop treatment due to intolerance

Fried, 2002

Slide IV-43

Tuberculosis (TB)

Epidemiology

- TB is common in IDUs before HIV.
- Up to 23% of IDUs have TB exposure (PPD+).
- TB and HIV coinfection is concentrated among IDUs and minorities.
- HIV infection is the strongest risk factor for the progression of TB exposure to active disease.

CDC, 2002; Selwyn, 1989

Slide IV-44

TB and HIV

- TB's effect on HIV
  - – ↑ HIV replication
  - – accelerate the progression of HIV disease
  - – ↑ risk for opportunistic infections and death
- HIV's effect on TB
  - – Clinical presentation of TB may be different
  - – Early response to TB therapy is no different
  - – Unknown relapse rates of TB

Slide IV-45

CDC, 2002; Whalen, 1995

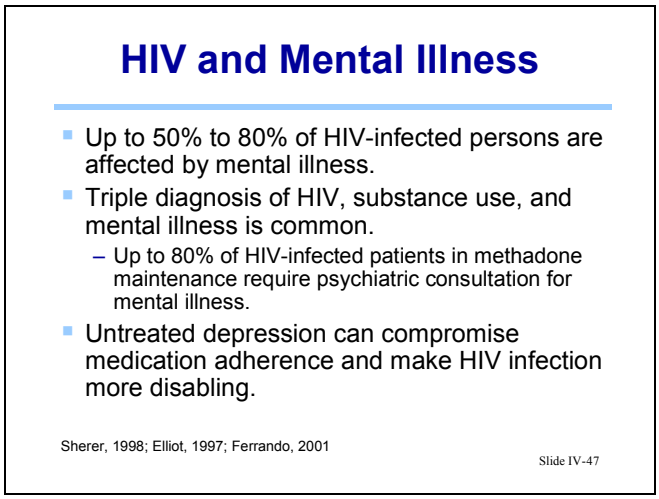
TB and HIV Drug Interactions

Numerous complex drug interactions between ART and TB medications

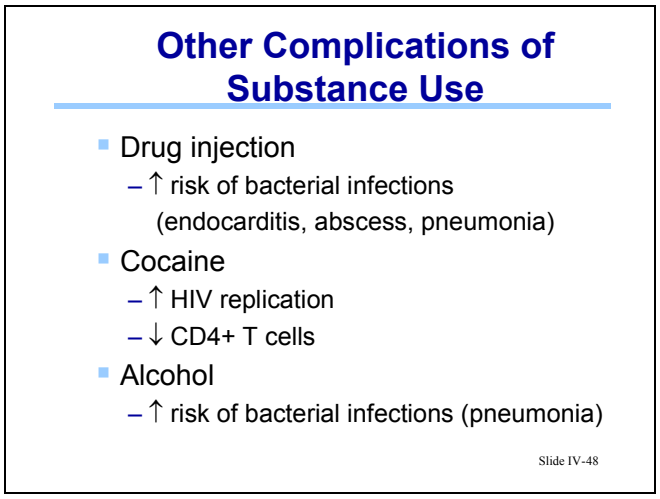
- Rifampin
  - – *Cannot use* in most patients on NNRTIs and PIs
  - – ↓ NNRTI and PI levels, making them ineffective
  - – ↓ methadone levels
- Rifabutin
  - – More favorable for use with HIV medications
  - – Still needs dose modification with many NNRTIs and PIs
  - – No effect on methadone levels

Slide IV-46

12. Note the prevalence of mental illness, and briefly discuss the implications this has for treatment. Although this module does not consider this topic in detail, it is essential to mention the importance of screening for mental illness and providing the necessary referrals and treatment (Slide IV-47).



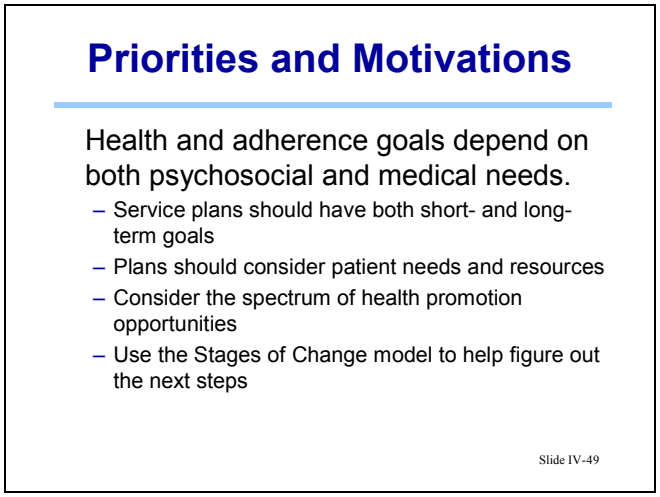
13. Introduce the other complications of substance use, referring to the information in Slide IV-48. Talk about the environmental and behavioral correlates of substance use such as depression and unstable housing. These may be immune suppressive themselves, and they can contribute to other negative health outcomes.



14. The most important implication of the medical issues raised in this session may be summed up as follows: *Providers need to pay special attention to tailoring medication and treatment regimens to each patient's specific situation and needs.*

15. Note that a patient's readiness to start, continue, or resume ART should be considered in light of their other personal and health priorities. For example, a patient who considers securing housing, resolving an acute illness, and reconnecting with his or her hepatitis C doctor as his or her top three priorities may not yet be ready to start ART. Similarly, education and support can often help patients who are not yet considering ART – or are only just beginning to contemplate ART – to move to the next level of readiness. The Stages of Change model provides a template for talking with patients about their degree of readiness and the steps they might take to improve their health, even if they are not ready to start ART.

In this respect, each step towards readiness is viewed as a healthy behavior change. Patients are not set up for "failures" if they are not yet ready or able to adhere to therapy. On the contrary, they are given more opportunities for "success" in their health-promotion efforts (Slide IV-49).



16. **Teach Back**

The Teach Back for this session could come at the end, where you present a different scenario to each individual, such as "You have been given one hour/90 minutes/two hours to talk about HIV and drug interactions with methadone and recreational drugs to a group of doctors/nurses/case managers/treatment providers. Your Teach Back will be to plan the training, deciding which of these materials to use, and what other parts of this entire curriculum you would like to integrate into your primarily didactic presentation in order to underscore certain points or build a skill or two (if there is time). You will have 15-20 minutes to tell us how you would conduct the training in the time allotted, and actually practice before the group how you would integrate some other part of the curriculum into this didactic presentation. In your Teach Back, spend 5-7 minutes describing what materials you would use and why, and the remainder of the time demonstrating to use how and when you would introduce other materials, and then make the transition back to the didactic training.

Handout IV-8: Interactions Between HIV-Related Medications and Methadone

HIV Medication	Effect on Methadone	Effect on HIV Medication	Clinical Effect
Pis			
Indinavir	Unchanged		
Ritonavir	↓levels by 37%		Monitor and titrate methadone dose, if needed; might require increase in methadone dose
Saquinavir[§]	-		
Nelfinavir	↓ levels		Has minimal effect on maintenance dose; monitor and titrate dose, if needed; might require increased methadone dose
Amprenavir	↓ by 35%		Monitor and titrate dose, if needed; might require increase in methadone dose
Lopinavir	↓ AUC by 36%, level by 53%		Monitor and titrate dose if needed; might require increased methadone dose
NNRTIs			
Nevirapine	↓ by 46%	Unchanged	Withdrawal symptoms may occur if dosage is not adjusted; titrate methadone dose to effect; might require increased methadone dose
Efavirenz	↓ by 48-52%		Titrate methadone dose to effect; might require increased methadone dose
Delavirdine	Not studied		
NRTIs			
Zidovudine	Unchanged	↑ AUC by 40%	Unclear; methadone may increase zidovudine-related toxicities
Stavudine	Unchanged	↓ AUC by 18%, level by 27%	No dose adjustment
Didanosine	Unchanged	↓ AUC by 41%, level by 60%	Consider increasing dose of didanosine
Tenofovir	Not studied		
Lamuvidine	Unchanged		
Abacavir	↑clearance	↓ peak concentration	
Zalcitabine	Not studied		
Other Medications Sometimes Used by HIV-Infected Persons			
Rifampin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Rifabutin	Unchanged		
Fluconazole	↑ level by 30%		Unknown clinical significance
Phenytoin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Phenobarbital	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Carbamazepine	↓ levels		Titrate methadone dose to effect; might require increased methadone dose

[§]Drug interaction studies were conducted with the Invirase formulation of saquinavir; therefore, the observations and recommendations might not apply to the Fortovase formulation of saquinavir.
AUC = Area under the curve
Adapted from the following sources:
Centers for Disease Control and Prevention, 2002
Gourevitch, M.N., Friedland, G.H., 2000

Handout IV-9: Interactions Between Antiretroviral Medications and Recreational Drugs

Drug	Effect	Comment
Alcohol	↑ abacavir level	Unknown significance
Amphetamines	Ritonavir may ↑ amphetamine level two- to three-fold	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of amphetamine
Methamphetamine	↑ HIV replication, overdose with ritonavir/saquinavir[1234]	Avoid combining with ritonavir
Cocaine	Possibly ↑ HIV replication and ↓ immune system[5678]	Studies conducted only in test tubes and mice
Ecstasy (MDMA)	Overdose and death with ritonavir[910] Possibly ↑ levels with other PIs and NNRTIs	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of MDMA and watch for signs of toxicity
GHB (liquid X)	↑ levels and toxicity with ritonavir/saquinavir[5], possibly ↑ with delavirdine	Use cautiously with PIs, as well as delavirdine and efavirenz
Heroin	Ritonavir may ↓ levels by 50%; Ritonavir and other PIs may also ↑ levels	
Ketamine	Possibly ↑ levels with ritonavir, delavirdine, and efavirenz	Use cautiously with ritonavir, nelfinavir, and efavirenz
LSD	Unknown	Use cautiously with PIs, delavirdine, and efavirenz
Marijuana	PIs may ↑ levels	Efavirenz may cause false-positive screening test for marijuana
PCP	Possibly ↑ levels with antiretrovirals	Use cautiously with PIs, delavirdine, and efavirenz

[A]dapted from: Antoniou, T., Tseng, A.L., 2002

[1] Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

[2] Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

[3] Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

[4] Urbina A, Jones K. Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. 2004 Mar 15;38(6):890-4.

[5] Roth, M.D., Tashkin, D.P., Choi, R., et al., 2002

[6] Bagasra, O., Pomerantz, R.J., 1993

[7] Peterson, P.K., Gekker, G., Chao, C.C., et al, 1991

[8] Peterson, P.K., Gekker, G., Chun, C.C., et al., 1992

[9] Harrington, R.D., Woodward, J.A., Hooton, T.M., et al., 1999

[10] Henry, J.A., Hill, I.R., 1998

Handout IV-10: Commonly Abused Substances and Possible Interactions With HIV drugs (From STATSCRIPT Pharmacy – The Boston Living Center Medication Adherence Program and the Treatment Information Clinic, September, 2000)

(The instructor will hand this out.)

Session 7: Talking with Patients About HIV and Substance Use

Presentation: Improving Provider-Patient Communication

Purpose: To improve provider-patient communication in general, as well as in the specific areas of substance use and adherence to medications

Time: 30 minutes

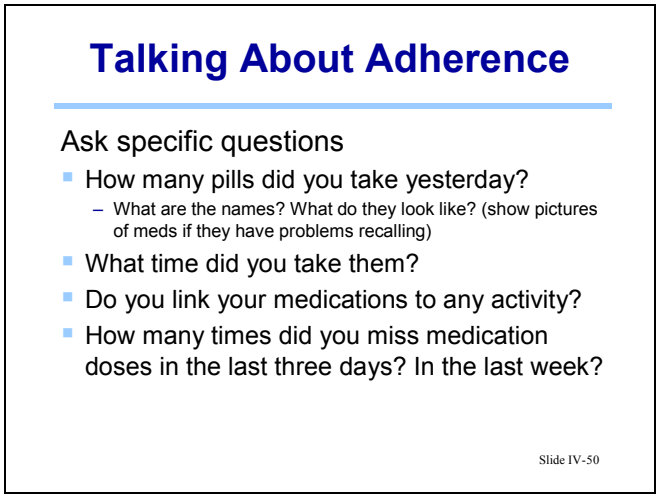
Materials

- Handout IV-11, "Preappointment Questionnaire" from 'Adherence Now' Materials
- Slide IV-50, "Talking About Adherence"
- Slide IV-51, "Talking About Adherence (continued)"
- Slide IV-52, "Different Perspectives on Adherence"
- Slide IV-53, "Talking About Substance Use"
- Slide IV-54, "Talking About Substance Use (continued)"
- Slide IV-55, "Provider-Patient Relationship"
- Slide IV-56, "Communication Tips for Patients"

Instructor Notes

1. Present the learning objectives for this session. Now that we know so much, it's important to begin to practice talking about it.

2. Review the first five slides in the packet, and note that they mainly discuss ways to talk with patients about sensitive or difficult topics such as adherence, substance use and drug interactions so as to not seem judgmental and encourage dialogue.



Talking About Adherence (continued)

Probe about missed doses

- Why do you think you missed doses?
- Are you using again?
- How much are you using?
- Do you bring your meds with you when you leave home?
- Can you link your meds to activities you do regularly in your life?

Slide IV-51

Different Perspectives on Adherence

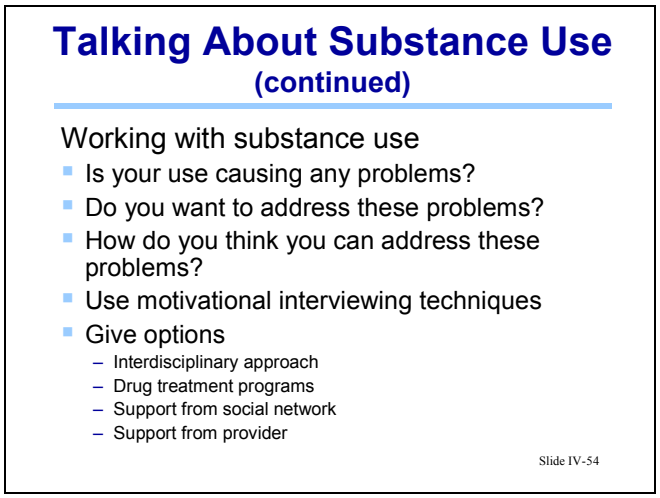
- Physicians and patients often disagree about the reasons for nonadherence.
- Patients are more likely to identify the negative impacts of ART on lifestyle: meal restrictions, lack of privacy, busy schedule, and cost.
- Physicians put more weight on medical and regimen-related issues: number of doses and side effects.

Slide IV-52

Talking About Substance Use

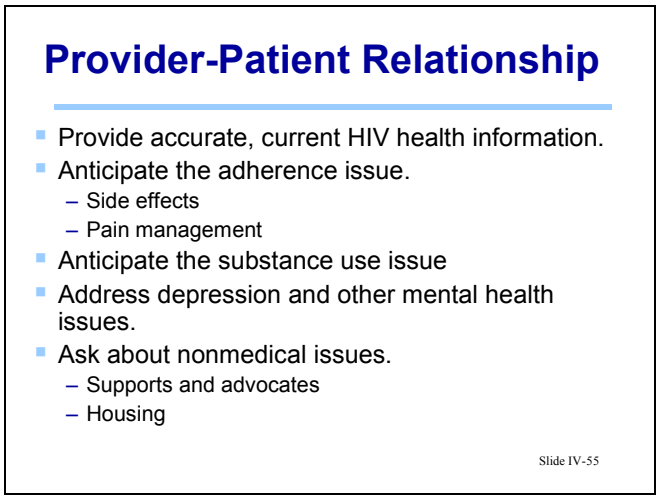
- Nonjudgmental attitude is crucial!
- Some questions to ask
  - When is the last time you used? (*Not* "Are you using drugs?"--different mindsets)
  - What is the pattern of your use?
  - Why do you think you use?
  - How are you using--injecting, snorting, inhaling, eating, or drinking?
  - Are you sharing needles or "works"?
  - How do you get the money to use?

Slide IV-53



3. Refer participants to Handout IV-11 as an example of a tool that can help them ask specific questions about adherence. This is questionnaire is also part of the "Adherence Now" packet that was handed out earlier in this module.

4. Note that the last two slides provide some general points on establishing a good provider-patient relationship – the first is for providers, and the second includes some tips for patient and advocates to use when talking with their providers about treatment concerns and health care needs. Keep in mind that some substance users have an extraordinarily difficult time with communicating with their providers as a result of past negative experiences with the medical system. Providers can help their patients advocate more effectively for themselves in medical settings by providing access to health information, reviewing treatment options, and encouraging patients to discuss their questions and concerns.



5. Teach Back

There are many different options for teach-back brainstorming for this session.

- One is for people to develop trainings using these materials for different audiences.
- Another is to ask people to work in teams to develop "practice communication exercises," for different kinds of providers such as an advocate, a physician, a social worker, or a nurse.
- A third is to use one or two of the case studies (Melissa would be good), and ask people to model an interaction using the tips provided in the slides above when performing the role of provider (doctor, nurse, substance abuse counselor, case manager) and patient.
- A fourth is to use an Active Listening or Open-Ended Questions exercise from another module.

Handout IV-11: Adherence Now Questionnaire

ADHERENCE NOW

PREAPPOINTMENT QUESTIONNAIRE

Please complete this questionnaire prior to seeing your provider, to address important issues about your care that have come up since your last visit.

SECTION ONE

Are you currently taking HIV medications? (please circle) Yes No

If no, why not?_____

If you are not taking medications, please proceed to Section Two.

Do you find your HIV drugs easy to take? (please circle) Yes No

If no, why not?_____

Please list your HIV medications below:

Trade name	Generic name	Number of pills per dose	Number of doses per day	What times do you take your doses? (ie, 12 AM / 12 PM)	Special instructions (eg, with/without food)

Please estimate the number of doses you have missed (if any): Today_____ Yesterday_____ Last week_____ Last month___

Why did you miss the dose? Forgot_____ Sleeping_____ Side effects/felt sick_____ Other_

How much of your HIV medications do you estimate that you take? (circle one)

None (0%)	Some (10%-30%)	Less than half (30%-50%)	About half (50%)	More than half (60%-75%)	Most (80%-85%)	Almost all (90%-95%)	All (100%)

Some people forget to take their pills on the weekends. Did you forget a dose last weekend? Yes No

Do you have family or friends who remind you to take your HIV medications? Yes No

Do you have transportation or any means of getting to the pharmacy to fill a prescription? Yes No

Would you like an alarm or reminder device to help you to remember to take your medications? Yes No

Would you be interested in receiving a pillbox with dividers for each dose and day to help you to remember to take your medications? Yes No

Would you be interested in learning about ways to take your medications better? Yes No

SECTION TWO *OPTIONAL QUESTIONS*

Have you had unprotected sex since your last visit? Yes No

How many alcoholic drinks (can of beer, glass of wine, mixed drink) have you had in the past week?

Have you used any drugs to get high since your last visit? Yes No

Do you think you might be depressed? Yes No Maybe

Comments:_____

_____

Provider name: _____ Provider signature:_____

Patient name:_____ Date:_____

Session 8: Managing HIV in the Context of Drug Use

Activity: Case Study Exercise

Purpose:

- To synthesize what participants have learned in this module
- To illustrate that health promotion is a multidimensional challenge for all parties involved and requires an interdisciplinary approach
- To practice skills in promoting the health of HIV-infected substance users

Time: 35 minutes for training, and 30 for the Teach Back.

Materials

- Handout IV-12, "Case Studies for Small Group Exercise"
- Handout IV-6, "Areas of Challenge Worksheet"
- Slide IV-57, "Some Strategies for Improving Health and Adherence"
- Slide IV-58, "Managing HIV and Substance Use: Case Studies"
- Slide IV-59to IV-63, "Case Studies"

Instructor Notes

1. Present the learning objectives for this session.

2. Tell participants that they will be working with case presentations. This activity will help them synthesize the knowledge and skills they have gained through this module and apply them to hypothetical patient situations. Ask participants to consider how they can best develop a plan to promote the patient's health. Remind participants to consider lifestyle, substance use, and medical information in determining an appropriate response plan for each person in the cases.

3. Once the case studies are complete, 2 participants will facilitate discussion of other case studies.

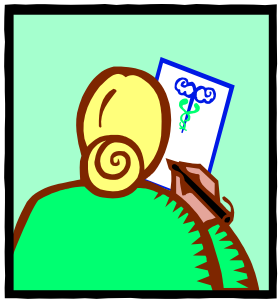
4. The first two slides introduce the exercise. Then people will break into two groups, and read and discuss one case study/group.

Some Strategies for Improving Health and Adherence

- Clarify the regimen
- Identify the patient's motivation
- Make medications part of daily routine
- Manage side effects
- Address alcohol and drug use
- Build good provider-patient communication
- Identify social supports

Slide IV-57

Managing HIV and Substance Use: Case Studies



- Identify key adherence issues
- Consider adherence barriers and supports
- Set realistic goals
- Highlight HIV health concerns
- Develop a tailored HIV health and adherence plan

Slide IV-58

5. In each of the five cases, participants should try to identify the following types of issues:
   - *Lifestyle and psychosocial issues* that present barriers or supports to medication adherence and HIV health.
   - *Medical issues* that may affect the person's access to health care, his or her baseline health status, or the appropriateness of treatment recommendations or present therapy in his or her particular situation.
   - *Specific issues related to substance use*, including the drug of choice, drug interactions, timing of drug use, and stage of recovery.

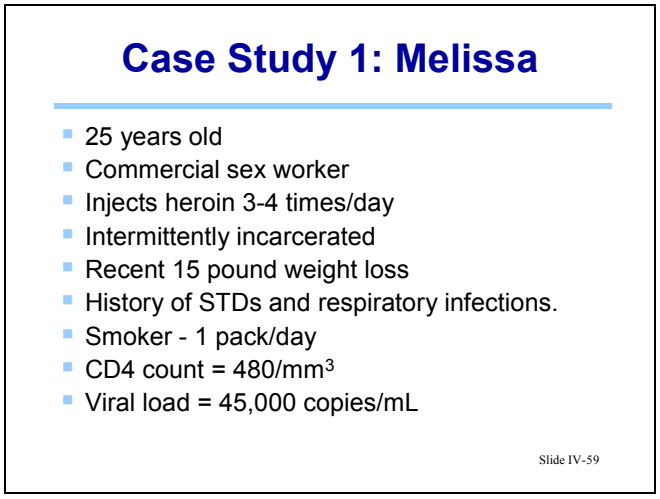
   Following each case, a list of suggested questions and planted issues are given to help facilitate discussion.

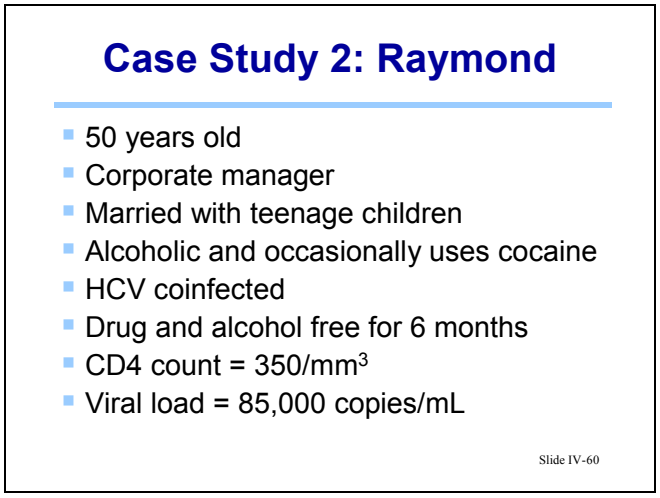
6. Note that the case studies do not give information on the race and ethnicity of the persons discussed. This was done intentionally to allow instructors to adjust the scenarios in ways that address the circumstances of different population groups. However, the case studies do include information about each person's age, gender, sexuality, incarceration history, housing status, and drug of choice. For each case, the participants should be encouraged to consider the extent to which social and cultural issues are relevant to HIV adherence and health promotion.

7. Note that these cases do not necessarily reflect the standard of care for prescribing HIV medications, including the timing of therapy and the specific medications selected by the health care provider in each scenario. Part of the challenge of this exercise is to determine what role the social service provider has in responding to medical information.

8. Give the participants 10-15 minutes to work on their cases, using Handout IV-4, Areas of Challenge Worksheet to identify issues and potential interventions.

9. When the groups reconvene, allow five minutes each for the small groups to present their cases and the factors affecting adherence to the entire group. To save time, use the relevant summary Slides (from IV-59 to IV-63) to provide brief synopses of the cases and ask participants to focus mainly on the information and issues contained in the slides. As the facilitator, ask a few questions as mentioned in the Instructor Notes for the case studies (these should not be distributed to participants until the Teach Back).





Case Study 3: Krista

- 35 years old
- Homeless
- Smokes crack daily
- Alcoholic
- Connected with shelter/meal program
- Earlier connection with Department of Mental Health
- CD4 count = 50/mm^3
- Viral load = 380,000 copies/mL

Slide IV-61

Case Study 4: Marlon

- 21 years old
- MSM with HIV-infected partner
- Attends circuit parties and has anonymous sex
- Diagnosed at age 17 years
- Recent genotype test indicates resistance
- Feels like a “failure”
- CD4 count = 300/mm^3
- Viral load = 90,000 copies/mL

Slide IV-62

Case Study 5: Rosanna

- 60 years old
- Living with AIDS and HCV
- Recovery from heroin for 8 years
- Currently on MMTP (120 mg)
- Raising grandchildren who are not aware of her health status
- Involved with church
- Attending college classes to obtain degree
- Viral load = undetectable on treatment
- Interested in HCV therapy

Slide IV-63

10. Also, note that each case also has specific instructor's notes that the participants should not receive.

11. Teach Back
    At the end of the exercise, select two participants to facilitate the discussion of two additional case studies. Break the remaining group into two smaller groups and give each group a new case study, and the designated facilitator both the case study and the instructor notes. Repeat the case study review, presentation and discussion again with the participant facilitators leading the question section.

Handout IV-12: Case Studies

Case Study 1: Melissa

Melissa is a 25-year-old woman living with HIV. She is a heroin user, has never been in a methadone maintenance program, has been incarcerated intermittently, and smokes about a pack of cigarettes each day. She works in the commercial sex industry and lives with roommates in a small apartment. Only one of her roommates is aware of her HIV status. She uses heroin three to four times a day. Melissa receives her HIV care from a local community health center, and goes to the doctor at least every few months when she's not in jail. Most of her visits to the doctor are prompted by symptoms consistent with either sexually transmitted diseases (STDs) or upper respiratory infections. Melissa has health insurance coverage through the state's Medicaid program.

Melissa's most recent CD4 count was 480/mm^3 and her viral load was 45,000 copies/mL. Her current health problems include genital herpes and an upper respiratory infections. Melissa has been on and off antibiotics for the past year during episodes of pneumonia, and she takes acyclovir to manage the herpes infection. Melissa went to see her doctor last week because she was concerned about a weight loss of 15 pounds during the past month. At that appointment, her doctor suggested that she "just start eating more and try to stay out of jail." The doctor also recommended that she begin antiviral therapy "right away" and gave her a prescription for efavirenz and Combivir (lamivudine plus zidovudine). Melissa thinks her doctor may be angry with her because she recently started using heroin again. Melissa also isn't sure whether she should trust her doctor's advice. Melissa comes to meet with you and asks what you think about her situation.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Melissa to begin HIV medications?
- What factors would make you want her to start medications?
- What are some ways in which you could help Melissa adhere to treatment (in the broadest sense of the word)?

Planted Issues

- Safer sex with a sex worker's "clients"
- Confidentiality and Melissa's nondisclosure of her status at home
- Symptom-driven contact with medical sector
- Doctor-patient communication issues, including trust and access to care
- Health care plan during incarceration
- Connection to methadone maintenance program

Case Study 2: Raymond

Raymond is a 50-year-old man living with HIV and Hepatitis C (HCV). He works full time as a corporate manager and is married with two teenage children. His family is aware of his HIV status. He is an alcoholic and occasionally uses cocaine. He was first diagnosed with HCV in 1990, when it was still referred to as non-A, non-B hepatitis. He first tested positive for HIV during a stay in drug treatment in 1995.

Raymond has excellent health insurance through his employer, but no one at work is aware of either his HIV or HCV status. He is prone to relapse, especially during periods of stress at home or work, and often drops out of contact for days at a time. He's been sober from alcohol and cocaine for six months. At his last appointment, Raymond's doctor suggested he begin antiviral therapy because his numbers were "taking a turn for the worse." His most recent CD4 count was 350/mm^3, and his viral load was 85,000 copies/mL. Raymond's liver function tests remain within a normal range. Raymond wants to start therapy and is anxious to stay healthy for his wife and kids, but he is concerned that he won't be able to stick with a regimen. His doctor has prescribed indinavir, ritonavir, lamivudine, and stavudine. Raymond comes to meet with you and asks whether you think he can handle the suggested ART regimen. He confides that he's been feeling "very vulnerable lately" and that he "really wants to drink."

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Raymond to begin HIV medications?
- What factors would make you want him to start medications?
- How should you talk with Raymond about his concerns about being able to "handle" an HIV regimen?
- What are some ways you could help Raymond adhere to treatment?

Planted Issues

- HCV coinfection
- Alcohol use and adherence
- Cocaine use and adherence
- Relapse planning
- Sobriety and decision-making about ART
- Doctor's selection of a regimen containing indinavir and ritonavir; concerns about fluid requirements for indinavir and storage of ritonavir in a refrigerator
- Unstable lifestyle and adherence

Case Study 3: Krista

Krista is a 35-year old woman living with HIV. She is currently homeless, and typically stays on the street, in crack houses, or in "wet" shelters. Krista sometimes stays at her mother's home, but she can only go there when she is sober. Krista uses crack cocaine and is an alcoholic. She drinks whatever she can get, and she typically uses crack in the evenings when she gets bored and lonely and "hits the streets." Krista considers herself a loner, but she has connected with a local street outreach program that provides free lunches, as well as day shelter services in the winter. At one point, Krista was also connected with the local Department of Mental Health (DMH) and was diagnosed with bipolar disorder, but she did not follow up with mental health support treatment. She is not on psychotropic medications.

Krista receives her HIV care from the public health clinic connected with a major urban medical center. She goes to the doctor often because she thinks he is very kind, she likes the medical staff, and she appreciates being able to hang out in the waiting room and watch TV. Krista's doctor is very concerned about her plummeting CD4 count (now at 50/mm^3) and her high viral load, which is 380,000 copies/mL. Last year, her doctor put her on trimethoprim/sulfamethoxazole (more commonly known by the trade name Bactrim) and now wants to add antiretrovirals. He gives her a prescription for nelfinavir and Combivir (lamivudine plus zidovudine), in addition to the antibiotic azithromycin. He also tells her to keep taking the trimethoprim/sulfamethoxazole. Krista is scared and doesn't understand why she needs this treatment. She asks you for help.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Krista to begin HIV medications?
- What factors would make you want Krista to start medications?
- What are some ways you could help Krista adhere to treatment (in the broad sense of the word)?

Planted Issues

- Challenges of homelessness
- Mental illness and adherence
- Potential to build on the positive relationship with her doctor and other medical staff
- Urgency of prophylaxis because of low CD4 count
- Potential to incorporate street supports into adherence plan
- Fear, anxiety, and lack of understanding about treatment need to be addressed

Case Study 4: Marlon

Marlon is a 21-year-old man who has unprotected sex with other men who are infected with HIV. He works at a fast-food restaurant. He attends circuit parties, likes to have anonymous sex, and uses recreational drugs at parties only. He has a steady boyfriend who is also infected with HIV and taking ART. They live together in a studio apartment. Marlon was diagnosed with HIV infection when he was 17 years old. At that time, he had a CD4 count of 180/mm^3 and a viral load of 80,000 copies/mL.

His doctor started him on therapy almost immediately with zidovudine, lamivudine, and nevirapine, as well as trimethoprim/sulfamethoxazole. Until recently, Marlon's HIV treatment was very successful. His viral load was undetectable, and his CD4 count was back up to 400/mm^3. In fact, Marlon was doing so well that his doctor told him he could stop taking trimethoprim/sulfamethoxazole. Unfortunately, Marlon's last few blood tests have indicated that his viral load is rising. Marlon's most recent viral load was 90,000 copies/mL, and his CD4 count is down to 300/mm^3. Marlon's doctor performs a genotype test, which shows that his HIV infection is now resistant to nevirapine and lamivudine. His doctor suggests a switch in therapy to stavudine, abacavir, ritonavir, and indinavir. Marlon is devastated and feels like a failure, especially when he compares himself with his partner, who is still doing very well on his medications. Marlon doesn't understand what he's doing wrong.

Discuss the Following Questions

- How would you approach Marlon when you discuss adherence with him?
- How would you assess his adherence?
- What specific questions would you ask him?
- What are some ways in which you could help Marlon improve his adherence to treatment?

Planted Issues

- Drug interactions between recreational drugs and ritonavir
- Feelings concerning "treatment failure"
- Individual responses to therapy
- Possibility of HIV superinfection and the importance of safer sex between HIV-infected partners.
- Significance of genotype test

Case Study 5: Rosanna

Rosanna is a 60-year-old woman living with AIDS and HCV infection. She is a heroin addict who has been is recovery for eight years. Rosanna is currently in a methadone maintenance program and is dosed every morning at 7 a.m. She had to increase her methadone dose to 120 mg last year when she started getting dope sick. Rosanna is also a grandmother and has been raising her three grandchildren on her own since her daughter died two years ago. She receives a monthly SSDI check and also has a Section 8 subsidy to help pay the rent on her spacious three-bedroom apartment.

Rosanna is very busy attending to her grandkids' school and activities, maintaining the household on her own, and volunteering at her church. She has also been taking classes at a local community college with the goal of obtaining an associate degree. Rosanna hopes to go back to work as a human service professional or a community organizer. She is very closeted about her HIV status, especially in church and around the grandchildren. However, the staff at the methadone clinic are aware of her status, and she also told some fellow classmates at school. Rosanna started taking antiretroviral drugs last year, but she has had a hard time sticking to her complex regimen of didanosine, stavudine, ritonavir, and amprenavir. Even though Rosanna's viral load is now undetectable, she would like to change to an easier HIV regimen, but she's afraid to ask her doctor about this. Rosanna also thinks that her doctor is not paying attention to her HCV. She has heard about interferon-based combination therapy for her HCV infection, but her doctor has never brought it up. She asks for your advice.

Discuss the Following Questions

- How would you approach Rosanna when you discuss adherence with her?
- How would you assess her adherence?
- What specific questions would you ask her?
- What are some of Rosanna's potential barriers to adherence? What supports for adherence does she have?
- What could you suggest to make it easier for Rosanna to adhere to her HIV medications?

Planted Issues

- Drug interactions between methadone and antiretrovirals
- HCV coinfection
- Adherence challenges and supports associated with a busy lifestyle (juggling the demands of kids, work, and household)
- Support and confidentiality in various settings – and their impact on adherence
- Doctor-patient communication about the complexity of the regimen and options for change

Instructor Notes

Instructor Notes for Melissa

The goal in this case is to facilitate a discussion about the variety of issues facing Melissa. Some of the key lifestyle and psychosocial issues include Melissa's intermittent incarceration and commercial sex work. Both of these issues may have serious health implications. Incarceration can interfere with adherence to both antiretroviral and preventive medications if medications are stopped or unavailable during periods of incarceration. Since Melissa is involved with commercial sex work, her provider should try to engage her in a discussion about prevention issues for people infected with HIV (also called "positive prevention"). The provider should also try to talk with Melissa about the specific health risks she may face as a commercial sex worker (evidenced by her recurrent STDs) as well as her options for negotiating safer sex.

It should also be noted that, according to her most recent blood work, Melissa does not meet the current guidelines for antiretroviral therapy: her CD4 count is greater than 350/mm^3 and her viral load is below 55,000 copies/mL. Participants should be encouraged to discuss why Melissa's doctor might think therapy is appropriate at this time, including the possibility that Melissa's provider is not an HIV specialist and may not be familiar with current clinical recommendations.

Other medical issues that the participants should consider include the antiretroviral medications chosen for Melissa, the significance of her recent weight loss, her continued smoking, and her history of respiratory infections. Participants should also be encouraged to be critical of the provider-patient relationship in this case, since Melissa may be receiving suboptimal care. Also ask participants to identify Melissa's opportunities and barriers to accessing high-quality HIV care.

In addition, we know from her case that Melissa has taken antibiotics in the past and currently uses acyclovir for herpes. When assessing Melissa's readiness to start HIV medications, it would be worthwhile to ask about her adherence experience with antibiotics and acyclovir. It would also be useful to ask whether Melissa's ongoing substance use affects her ability to adhere to medications and access medical care. We know that Melissa uses heroin three to four times a day. The participants may note the Melissa could use her heroin use as cues for taking her HIV medications. Participants should also consider how Melissa feels about starting ART, as well as her willingness to consider drug treatment as part of her HIV health and adherence plan.

Instructor Notes for Raymond

Raymond's case is complex because of the psychosocial and medical issues he faces, including his polysubstance use (both alcohol and cocaine). As the instructor, it is important not to have the unrealistic expectation that all of Raymond's issues will be addressed in the short time available. Instead, this case should be seen as a rich opportunity to explore a wide variety of issues.

Participants should pay special attention to Raymond's work and family situation and consider the impact that his "disclosure status" concerning his HIV and HCV infection may have on his ability to adhere to medications. Participants should also consider the unique challenges related to his corporate lifestyle, the adherence barriers associated with full-time employment, and the strategies Raymond might adopt to help him adhere to ART in a workplace where he is not open about his status.

Clearly, one of the major issues facing Raymond is the nature of his substance use. Cocaine and alcohol have negative affects on adherence rates because of the way they are used (sporadically and inconsistently). In addition, heavy alcohol use can lead to memory lapse and periods of blackout. Although Raymond has been drug-free for six months, participants should still pay special attention to his risk for relapse, the importance of stress as a trigger for his drug use, and his tendency to "disappear" when he picks up. Participants should discuss strategies for determining other aspects of Raymond's "treatment readiness."

Participants should also be encouraged to consider the variety of medical issues that Raymond faces. He is coinfected with HCV and HIV, which places him at risk for accelerated HCV disease progression. His alcohol consumption presents a major health risk. Another point to notice is the selection of ritonavir as part of his treatment regimen. Ritonavir is known to be especially hard on the liver and is probably not an ideal choice for someone with pre-existing liver disease and a history of alcohol abuse.

On the other hand, ritonavir is a powerful antiretroviral in terms of efficacy, and may be more forgiving than other protease inhibitors in terms of missed doses and the risk of viral resistance. Although some providers would elect to start ART when the CD4 count and viral load have reached the levels seen in Raymond, others would not. The most recent guidelines indicate that treatment should be offered, but controversy exists. Participants should carefully consider his provider's decision to prescribe therapy at this stage and may question whether the provider is aware of the extent of Raymond's substance use.

Instructor Notes for Krista

The challenge in this case is to identify both the barriers and – perhaps more important – the supports for HIV adherence and health promotion in Krista's life. For example, we know that Krista has a relationship with her mother, is connected with outreach and shelter services, had a previous connection with DMH, and seems to have an open and positive relationship with her medical provider. However, both her homelessness and mental health status are important psychosocial challenges that participants need to recognize and discuss.

Krista also has some complex and urgent medical issues: Her CD4 count is low (50/mm^3), and her viral load is high (380,000 copies/mL). Because we know that Krista's doctor prescribed trimethoprim/sulfamethoxazole last year, we can assume that her CD4 count has been low at least since then. Encourage participants to consider why Krista's doctor decided to prescribe ART now even though he didn't prescribe it earlier. Also ask them to think about approaches for determining Krista's readiness for ART. For example, how well has she been adhering to her trimethoprim/sulfamethoxazole? Guide the participants to ensure that they spend some time devising strategies to support Krista's efforts to stay healthy and to determine whether antiretroviral therapy is right for her at this stage. Also ask participants to consider interventions that might help Krista adhere to her medications if she decides to start ART at this time. For example, they might suggest linking adherence cues with Krista's participation in the outreach program, and helping her reconnect with DMH services, and encouraging her to try a "mock or rehearsal regimen." By 'rehearsing' their regimen, people can see whether they are ready to start treatment and learn ways to improve their adherence before starting the actual drugs.

Participants might lose sight of Krista's substance use issues when they consider everything else she is facing. Encourage participants to talk about the nature of her substance use, to discuss whether drug treatment is appropriate for her, whether she should initiate psychiatric treatment, and to consider the specific health and adherence challenges arising from Krista's continuing alcohol and crack use. Remind them that the focus should be on adherence challenges, supports, and interventions.

Instructor Notes for Marlon

A discussion of adherence in Marlon's case can focus on his experience with taking medications during the past four years. Since Marlon was able to maintain an undetectable viral load until recently, in all likelihood he had been adherent to his medications. Participants should consider what factors may have contributed to the current failure of his treatment. The possibilities include recent nonadherence to his regimen or the development of viral resistance despite excellent adherence. It is important that participants discuss the latter possibility – that even "perfect" adherence does not lead to viral suppression 100% of the time.

Participants should be prompted, if necessary, to discuss some other important medical issues about Marlon's case. Marlon's doctor stopped his trimethoprim/sulfamethoxazole treatment when his CD4 count rose back to a safe level – typically over 300/mm^3 or 400/mm^3. Marlon may not understand why this medication was stopped and then later restarted when his CD4 count declined. The rapid and sudden increase in Marlon's viral load is evidence that his HIV infection has developed resistance to his current medications, which is further evidenced by the results of his genotype test. Make sure that participants understand what a genotype test is – a blood test that looks at the genetic structure of a person's virus to identify mutations that are believed to confer resistance to specific antiretroviral medications.

Marlon is also facing some psychosocial issues, including his relationship with his partner and his feelings of personal failure since his medications stopped working. There is an opportunity here for participants to identify important information to pass on to Marlon, such as how people may respond to medications differently (his experience versus his partner's experience), and how it is the medications that "fail," not the people who take them. In addition, Marlon's disclosure about anonymous sex and recreational drug use should prompt a discussion about the possible health risks of these behaviors.

Marlon's doctor is proposing a new treatment regimen that includes ritonavir, a medication that is known to have potentially dangerous interactions with recreational drugs. Because Marlon is also engaging in unprotected sex with people whose HIV status he does not know, he risks transmitting the virus to others and potentially re-exposing himself to HIV, which can result in "superinfection" and possible accelerated HIV disease progression. Remind participants that, although there is only limited information about superinfection and interaction between ART and recreational drugs, these are important possibilities to consider.

Instructor Notes for Rosanna

There is no shortage of issues to discuss here. Don't expect that the participants will be able to address all issues in the limited time available. Participants should be guided, if necessary, to discuss some key psychosocial issues, including Rosanna's disclosure of her HIV and HCV status: She has told people at the methadone clinic and some friends at school, but not her grandchildren or members of her church. Be sure that the participants discuss how Rosanna's disclosure may affect her current and future adherence. Keep in mind that her current regimen seems to be working well (her viral load is undetectable), which indicates that she is probably adhering well but that she wants to change to something easier.

Participants may also question why Rosanna is taking such a complex regimen of HIV medications in the first place, since the case indicates that this is her first treatment combination. In addition, participants should pay special attention to the provider-patient relationship. The case indicates that Rosanna feels afraid to talk with her doctor about changing medications, and she also seems to think that her doctor may not be paying adequate attention to her HCV coinfection. Other medical issues in this case include the following: assessing the need for education about HIV and HCV coinfection, drug interactions between antiretrovirals and methadone, and strategies to talk with her medical provider about next steps. Regarding drug interactions, it is important to note that the increase in Rosanna's methadone dose may have been necessitated by drug interactions with ritonavir and amprenavir. Encourage participants to develop strategies to help Rosanna advocate for herself in the medical setting – perhaps by doing role plays with her or helping her develop a list of questions before her next appointment.

Other than Rosanna's participation in a methadone maintenance program, substance use issues are not paramount in this case. However, participants may consider ways to connect Rosanna's HIV and HCV health promotion behaviors with her successful recovery program. Participants should note that Rosanna has a lot going on in her life, including her commitments to her grandchildren, school, church, methadone maintenance, antiretroviral therapy – and now she is considering switching her HIV medications and starting interferon-based therapy for HCV. If necessary, prompt participants to consider what barriers to adherence Rosanna may face in the future, what existing supports she has, and what interventions might provide additional support for her health promotion efforts.

Session 9: Conclusion

Presentation: Take-Home Points

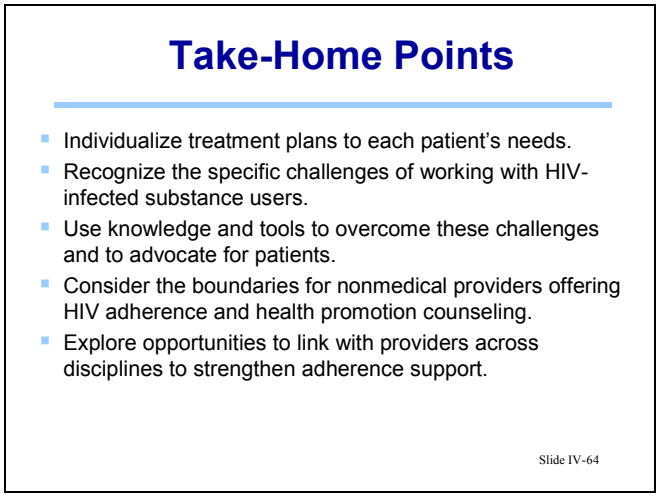
Purpose: To summarize the main points of this module

Time: 5 minutes

Materials: Slide IV-64, "Take-Home Points"

Instructor Notes
Briefly summarize the main themes concerning health promotion and adherence in HIV-infected substance users. Be sure to include the following points:

- Individualize treatment plans to each patient's needs.
- Recognize that there are specific challenges when working with HIV-infected substance users, but that these challenges can be overcome.
- Consider the boundaries that nonmedical providers face when they offer counseling on HIV adherence and health promotion.
- Explore opportunities to link with providers across disciplines to strengthen adherence support for substance-using patients.



References

Altice, F.L., Friedland, G.H., Cooney, E.L. (1999). Nevirapine induced opiate withdrawal among injection drug users with HIV infection receiving methadone. *AIDS*, 13(8), 957-962.

Antoniou, T., Tseng, A.L. (2002). Interactions between recreational drugs and antiretroviral agents. *Annals of Pharmacotherapy*, 36(10), 1598-1613.

Arnsten, J.H., Demas, P.A., Farzadegan, H., et al. (2001). Antiretroviral therapy adherence and viral suppression in HIV-infected drug users: Comparison of self-report and electronic monitoring. *Clinical Infectious Diseases*, 33(8), 1417-1423.

Arnsten, J.H., Demas, P.A., Grant, R.W., et al. (2002). Impact of active drug use on antiretroviral therapy adherence and viral suppression in HIV-infected drug users. *Journal of General Internal Medicine*, 17(5), 377-381.

Bagasra, O., Pomerantz, R.J. (1993). Human immunodeficiency virus type 1 replication in peripheral blood mononuclear cells in the presence of cocaine. *Journal of Infectious Diseases*, 168(5), 1157-1164.

Bamberger, J., Bangsberg, D., Chamber, D., et al. (June 2000). Adherence to HIV therapies: Critical issues. *Science to Community, Clinical #1*. University of California-San Francisco, San Francisco, California.

Bart PA, Rizzardi PG, Gallant S, et al. Methadone blood concentrations are decreased by the administration of abacavir plus amprenavir.Ther Drug Monit. 2001 Oct;23(5):553-5.

Broers, B., Morabia, A., Hirschel, B. (1994). A cohort study of drug users' compliance with zidovudine treatment. *Archives of Internal Medicine*, 154(10), 1121-1127.

Beauverie, P., Taburet, A. M., Dessalles, M. C., et al. (1998). Therapeutic drug monitoring of methadone in HIV-infected patients receiving protease inhibitors. *AIDS*, 12(18), 2510-2511.

Bruno, R., Sacchi, P., Puoti, M., et al. (2002). HCV chronic hepatitis in patients with HIV: Clinical management issues. *American Journal of Gastroenterology*, 97(7), 1598-1606.

Carmona, A., Knobel, H., Guelar, A., et al. (2000). Factors influencing survival in HIV-infected patients treated with HAART [Abstract TuOrB417]. Presented at 13th International AIDS Conference, Durban, South Africa, July 9-14, 2000.

Cedars-Sinai Medical Center. (2001). *Adherence Now: Best Practices and Practical Tools. Proceedings of a roundtable symposium in November 2001*. World Heath CME, New York, New York.

Centers for Disease Control and Prevention. (2002). Guidelines for using antiretroviral agents among HIV-infected adults and adolescents: Recommendations of the Panel on Clinical

Practices for Treatment of HIV. *MMWR*, 51(RR-7), 1-55. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5107a1.htm)

Centers for Disease Control and Prevention. (1998). Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: Principles of therapy and revised recommendations. *MMWR*, 47(RR-20), 1-58. (http://www.cdc.gov/mmwr/preview/mmwrhtml/00055357.htm)

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

Clarke S., Mulcahy F., Bergin C., et al. (2002). Absence of opioid withdrawal symptoms in patients receiving methadone and the protease inhibitor lopinavir-ritonavir. *Clinical Infectious Diseases*, 34(8), 1143-1145.

Clarke, S., Mulcahy, F., Tija, J., et al. (2001).The pharmacokinetics of methadone in HIV-positive patients receiving the non-nucleoside reverse transcriptase inhibitor efavirenz. *British Journal of Clinical Pharmacology*, 51(3), 213-217.

Department of Health and Human Services (DHHS). Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. March 23, 2004: 1-97. Accessed at http://www.aidsinfo.nih.gov/guidelines/adult/AA_032304.pdf on July 21, 2004.

Eldin, B.R., Seal, K., Lorvick, J., et al. (2001). Is it justifiable to withhold treatment for hepatitis C from illicit injection drug users? *New England Journal of Medicine*, 345(3), 211-214.

Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

Elliot, A. Depression and HIV. (1997). Retrieved December 2002 at the Project Inform website at http://www.projectinform.org.

Ferrando, S.J. (2001). Substance abuse and HIV infection. *Psychiatric Annals*, 31(1), 57-62.

Fried, M.W., Shiffman, M.L., Reddy, K.R., et al. (2002). Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *New Journal of Medicine*, 347(13), 975-982.

Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

Gerber JG, Rosenkranz S, Segal Y, et al. Effect of ritonavir/saquinavir on stereoselective pharmacokinetics of methadone: results of AIDS Clinical Trials Group (ACTG) 401. J Acquir Immune Defic Syndr. 2001 Jun 1;27(2):153-60.

Gordillo V., del Amo, J., Soriano, V., et al. (1999). Sociodemographic and psychological variables influencing adherence to antiretroviral therapy. *AIDS*, 13(13), 1763-1769.

Golin, C.E., Liu, H., Hays, R.D., et al. (2002). A prospective study of predictors of adherence to combination antiretroviral medication. *Journal of General Internal Medicine*, 17(11), 756-765.

Gourevitch, M.N., Friedland, G.H. (2000). Interactions between methadone and medications used to treat HIV infection: A review. *Mount Sinai Journal of Medicine*, 67(5-6), 429-436.

Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

Henry, J.A., Hill, I.R. (1998). Fatal interaction between ritonavir and MDMA. *Lancet*, 352(9142), 1751-1752.

Harrington, R.D., Woodward, J.A., Hooton, T.M., et al. (1999). Life-threatening interactions between HIV-1 protease inhibitors and the illicit drugs MDMA and γ -hydroxybutyrate. *Archives of Internal Medicine*, 159(18), 2221-2224.

Horn, G. (1998). Party favors – Do yourself one: Get the dope on the protease effect. *POZ***,** 36. Available on the *POZ* web site at http://www.poz.com/archive/june1998/partner/warning.html)

Horn, T. (2001). HIV drug resistance and drug resistance testing: Just the FAQ's. *CRIA Update*, 10(4).

Iribarne C, Berthou F, Carlhant D, et al. Inhibition of methadone and buprenorphine N-dealkylations by three HIV-1 protease inhibitors. Drug Metab Dispos. 1998 Mar;26(3):257-60.

Landau, A., Batisse, D., Piketty, C., et al. (2001). Long-term efficacy of combination therapy with interferon-alpha 2b and ribavirin for severe chronic hepatitis C in HIV-infected patients. *AIDS*, 15(16), 2149-2155.

Lauer, G.M., Walker, B.D. (2001). Hepatitis C virus infection. *New England Journal of Medicine*, 345(1), 41-51.

McCance-Katz, E.F., Rainey, P.M., Jatlow, P., et al. (1998). Methadone effects on zidovudine disposition (AIDS Clinical Trials Group 262). *Journal of Acquired Immune Deficiency Syndrome Human Retrovirology*, 18(5), 435-443.

McCance-Katz EF, Rainey PM, Friedland G, Kosten TR, Jatlow P. Effect of opioid dependence pharmacotherapies on zidovudine disposition. Am J Addict. 2001 Fall;10(4):296-307.

McCance-Katz EF, Rainey PM, Friedland G, Jatlow P. The protease inhibitor lopinavir-ritonavir may produce opiate withdrawal in methadone-maintained patients. Clin Infect Dis. 2003 Aug 15;37(4):476-82. Epub 2003 Aug 01.

Murphy, E.L., Collier, A.C., Kalish, L.A., et al. (2001). Highly active antiretroviral therapy decreases mortality and morbidity in patients with advanced HIV disease. *Annals of Internal Medicine*, 135(1), 17-26.

Nasti, G., DiGennaro, G., Tavio, M., et al. (2001). Chronic hepatitis C in HIV infection: Feasibility and sustained efficacy of therapy with interferon alfa-2b and ribavirin. *AIDS*, 15(14), 1783-1787.

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Paterson, D.L., Swindells, S., Mohr, J., et al. (2000). Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine*, 133(1), 21-30.

Peterson, P.K., Gekker, G., Chao, C.C., et al. (1991). Cocaine potentiates HIV-1 replication in human peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 146(1), 81-84.

Peterson, P.K., Gekker, G., Chun, C.C., et al. (1992). Cocaine amplifies HIV-1 replication in cytomegalovirus-stimulated peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 149(2), 676-680.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 at the Project Inform website http://www.projectinform.org/pdf/doctorpatient.pdf.

Rainey, P.M., Friedland, G., McCance-Katz, E.F., et al. (2000). Interaction of methadone with didanosine and stavudine. *Journal of AIDS*, 24(3), 241-248.

Rainey PM, Friedland GH, Snidow JW, et al. The pharmacokinetics of methadone following co-administration with a lamivudine/zidovudine combination tablet in opiate-dependent subjects. Am J Addict. 2002 Winter;11(1):66-74.

Reiter, G.S., Stewart, K.E., Wojtusik, L., Hewitt, R., Segal-Maurer, S., Johnson, M., et al. (2000). Elements of success in HIV clinical care: Multiple interventions that promote adherence. *Topics in HIV Medicine*. 8(5), 21-30.

Richman, D. D., Bozette, S., Morton, S., Chien, S., Wrin, T., Dawson, K., Hellmann, N. "The Prevalence of Antiretrviral Drug Resistance in the U.S." (Abstract LB-17), 41st Intersceince Conference on Antimicrobial Agents and Chemotherapy, 2001.

Roth, M.D., Tashkin, D.P., Choi, R., et al. (2002). Cocaine enhances human immunodeficiency virus replication in a model of severe combined immunodeficient mice implanted with human peripheral blood leukocytes. *Journal of Infectious Diseases*, 185(5), 701-705.

Samet, J.H., Libman, H., Steger, K.A., et al. (1992). Compliance with zidovudine therapy in patients infected with human immunodeficiency virus, type 1: A cross-sectional study in a municipal hospital clinic. *American Journal of Medicine*, 92(5), 495-502.

Selwyn, P.A., Hartel, D., Lewis, V.A., et al. (1989). A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. *New England Journal of Medicine*, 320(9), 545-550.

Selwyn, P.A., Feingold, A.R., Hartel, D., et al. (1988). Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. *AIDS*, 2(4), 267-272.

Shapiro, M.F., Morton, S.C., McCaffrey, D.F., et al. (1999). Variations in the care of HIV-infected adults in the United States: Results from the HIV Cost and Services Utilization Study. *JAMA*, 281(24), 2305-2315.

Shelton MJ, Cloen D, DiFrancesco R, et al. The effects of once-daily saquinavir/minidose ritonavir on the pharmacokinetics of methadone. J Clin Pharmacol. 2004 Mar;44(3):293-304.

Sherer, R. (1998). Adherence and antiretroviral therapy in injection drug users. *JAMA*, 280(6), 567-568.

Soto, B., Sanchez-Quijano, A., Rodrigo, L., et al. (1997). Human immunodeficiency virus infection modifies the natural history of chronic parenterally-acquired hepatitis C with an unusually rapid progression to cirrhosis. *Journal of Hepatology*, 26(1), 1-5.

Strathdee, S.A., Palepu, A., Cornelisse, P.G., et al. (1998). Barriers to use of free antiretroviral therapy in injection drug users. *JAMA*, 280(6), 547-549.

Staszewski, S., Haberl, A., Gute, P., et al. (1998). Nevirapine/didanosine/lamivudine once daily in HIV-1-infected intravenous drug users. *Antiviral Therapy*, 3(Suppl 4), 55-56.

Stein, J.A., Gelberg L. (1997). Comparability and representativeness of clinical homeless, community homeless, and domiciled clinic samples: Physical and mental health, substance use, and health services utilization. *Health Psychology*, 16(2), 155-162.

Stevens RC, Rapaport S, Maroldo-Connelly L, Patterson JB, Bertz R. (2003). Lack of methadone dose alterations or withdrawal symptoms during therapy with lopinavir/ritonavir. J Acquir Immune Defic Syndr.Aug 15;33(5):650-1.

Stone, V.E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases*, 33(6), 865-872.

Sullivan L. Drug interaction guide: Opioids and HIV antiretroviral agents. Draft. July 22, 2004. Supported by NY/NJ AETC, HRSA.

Urbina A, Jones K. (2004). Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. Mar 15;38(6):890-4.

Walsh, J.C., Hertogs, K., Gazzard, B. (2000). Viral drug resistance, adherence and pharmacokinetic indices in HIV-1 infected patients on successful and failing protease inhibitor (PI) based highly active antiretroviral therapy (HAART) [Abstract 699]. Presented at the 40th Interscience Conference of Antimicrobial Agents and Chemotherapy, Toronto, Canada, September 17-20, 2000, 294.

Whalen, C., Horsburgh, C.R., Hom, D., et al. (1995). Accelerated course of human immunodeficiency virus infection after tuberculosis. *American Journal of Respiratory Critical Care Medicine*, 151(1), 129-135.

Williams, A., Friedland, G. (1997). Adherence, compliance, and HAART. *AIDS Clinical Care*, 9(7), 51-54, 58.

Reading List

University of California San Francisco. (2002). *Addressing the challenges of adherence. Navigating emerging challenges to long-term HIV therapy*. World Heath CME, New York, New York.

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Project Inform. (October 2002). Adherence: Keeping up with your meds. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/adherence.pdf.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/doctorpatient.pdf

Suggested Replication Training:
Health Promotion and Adherence for Clinicians

Table of Contents

Introduction

Background and Purpose

The purpose of this module is to provide participants with strategies and tools to promote the health of HIV-infected substance users. Specifically, this module focuses on the importance of adherence and emphasizes the need to consider adherence within the broader context of overall health promotion for this population.

Providing HIV medical care to persons with past or present substance use presents special challenges. First, drug and alcohol use complicate the planning and delivery of care. Providers must be aware of biological issues, including interactions between HIV medications and recreational drugs, as well as changes that prolonged drug or alcohol use can have on the absorption and effectiveness of medications. In addition, HIV-infected substance users often have co-morbid conditions, such as hepatitis C infection, which may complicate the management of HIV disease and create competing healthcare priorities. Providers must also be knowledgeable about the social context of different kinds of substance use. Social factors may affect the ways that people become engaged in medical care, their retention in care, and their adherence to treatment.

The second major challenge to providing HIV medical care to this population is that providers may have preconceptions about drug and alcohol use. Like everyone else, providers are exposed to and influenced by the many media portrayals of people who use alcohol or drugs. Almost all of these images are negative; even the relatively few sympathetic or compassionate portrayals rarely show substance users as whole, complex human beings. Stereotypes and myths about substance use and substance users can limit a provider's capacity to support adherence and provide optimal care.

As trainers, we have the responsibility to help the people we train acknowledge and analyze their preconceptions, and then consciously put them aside. We – and the people we train – need to recognize that these negative images may make substance users feel powerless to adopt changes that will promote their health. Consequently, we also need to help HIV-infected substance users recognize that they have the capacity to protect and improve their health. We can raise their awareness of the behavioral and environmental resources that promote health. We can also work with them to develop dynamic strategies for HIV adherence that fit into the context of their lives.

A third, and perhaps even larger challenge, is to distinguish the true biological and social challenges from the harmful stereotypes of substance use and substance users. In this module, we deal with both the truths and the myths that affect the quality of care that substance users receive and their ability to adhere to HIV treatment. However, it is important to recognize that learning the distinctions between these truths and myths is a difficult, ongoing process – certainly not something that can be fully sorted out and mastered in the short time allotted for this training. What we can accomplish is to help participants understand that HIV-infected substance users do not fit any stereotype. We can encourage participants to explore the adherence challenges substance users face and to consider the vast range of adherence interventions that may promote their health.

Resource Materials

Slides:
A PowerPoint presentation for this adherence module is included in the curriculum. This presentation should be run concurrently with the module. To help participants follow the presentation, we have listed the specific slides that correspond to each session in the module.

Suggested Reading List:
A reading list has also been prepared for participants. A full citation provided in the "References" section at the end of the module, includes the items listed below.

- *Addressing the challenges of adherence. Navigating emerging challenges in long-term HIV therapy*
- *Factors affecting adherence to antiretroviral therapy*
- *The challenge of adherence*
- *Adherence: Keeping up with your meds*
- *Building a cooperative doctor/patient relationship*
- *Medical progress: Medical care for injection-drug users with HIV infection*

Handouts:

1. Alphabetical lists of HIV medications (Page 6)
2. *Adherence Now* packets (See Page 13*)
3. Reprint: *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents* (See Page 16*)
4. Worksheet for participant notes(Page 19)
5. Interactions between Antiretroviral Medications and Methadone (Page 30)
6. Interactions between Antiretroviral Medications and Recreational Drugs (Page 31)
7. Commonly Abused Substances and Possible Interactions with HIV drugs (Page 32*)
8. Pre-Appointment Questionnaire from *Adherence Now* (Page 36)
9. Case presentation summaries (Pages 42-46)

**The facilitator needs to acquire these resources in advance of the training.*

Other Materials Needed:

- Self-stick notes
- Flipcharts
- LCD projector
- Screen
- Colored Markers
- Tape

Objectives

By the end of this module, participants will be able to:

- Define adherence broadly and understand its significance
- Recognize that substance users may experience different medical complications of HIV infection than those experienced by other risk groups
- Assess persons' readiness for starting and maintaining antiretroviral therapy
- Identify effective techniques and useful resources for supporting adherence
- Develop approaches for tailoring health promotion interventions to the specific needs of substance-using patients

Key Facts

- Health promotion is more than just adherence to medications.
- A broad view of adherence actively engages patients in health care and treatment and provides them with more opportunities for success.
- In order to be effective, providers need to recognize their biases and judgments about adherence issues—especially for substance users.
- Substance users are not a homogeneous population—each individual has unique needs and challenges to overcome.
- With the proper support services and primary care, substance users can achieve equal levels of success as non-substance users.

Session 1: Introductions and Icebreaker

Activity: Defining Adherence

Purpose: To introduce training participants to each other and the instructor, to gain an initial "read" on the participants, and to start the interactive process.

Time: 10 minutes

Materials

- Handout 1, "Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment"

Instructor Notes

1. Once the participants have arrived, take three minutes to introduce yourself, talk briefly about the presentation style, remind people to approach the day with an open mind, encourage interaction, and add any personal touch that you feel is appropriate. If you wish, you may also talk briefly about the terminology you will use throughout the presentation. For example, the use of the words "patient" versus "client," "ART" (antiretroviral therapy) versus "HAART" (highly active antiretroviral therapy), and "substance user" versus "substance abuser" or "addict."

2. Ask the participants to introduce themselves by name, agency, and job.

3. Use a brief ice-breaker of your choosing to get an initial "read" on the participants and begin the interactive process. Here is one suggestion:

    - Ask each of the participants to give a one-sentence description of what they believe adherence to be, as part of their introduction.

4. Distribute Handout 1**,** "Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment" and note that it will be useful throughout the training as an easy reference on the many different antiretroviral drugs that are now used.

Handout 1: Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment

The following table was developed to reduce confusion concerning the different names of drugs used for HIV treatment. It is derived from the publication "Antiviral Drug Names" (Fact Sheet 401) from the New Mexico AIDS InfoNet.

Protease Inhibitors

- Agenerase (Amprenavir)
- Crixivan (Indinavir)
- Fortovase (Saquinavir)
- Invirase (Saquinavir)
- Kaletra (Lopinavir/ritonavir)
- Lexiva (Fosamprenavir)
- Norvir (Ritonavir)
- Reyataz (Atazanavir)
- Viracept (Nelfinavir)

Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs or "non-nukes")

- Rescriptor (Delvirdine)
- Sustiva (Efavirenz)
- Viramune (Nevirapine)

Nucleoside Reverse Transcriptase Inhibitors (NRTIs or "nukes")

- Combivir (Lamivudine/3TC + zidovudine/AZT)
- Emtriva (Emtricitabine)
- Epivir (Lamivudine/3TC)
- Hivid (Zalcitabine)
- Retrovir (Zidovudine/AZT)
- Trizivir (Abacavir + lamivudine/3TC + zidovudine/AZT)
- Videx (Didanosine/DDI)
- Viread (Tenofovir)
- Zerit (Stavudine/D4T)
- Ziagen (Abacavir)

Fusion Inhibitor

Fuzeon (Enfuvirtide/T-20)

Note that lopinavir is actually only available in combination with a small dose of ritonavir and sold under the trade name Kaletra.

Session 2: A Broad Perspective on Adherence: Part 1

Purpose

- To illustrate that adherence is *not only* about taking one's medications; in some cases, a patient is not ready to be on a regimen but can still be "adherent" to medical treatment in many other ways
- To show that non-adherence to medications is pervasive in both substance-using and non-substance-using populations
- To introduce the wide variety of psychosocial factors that impact adherence
- To show how thinking about adherence broadly gives a patient more opportunity for success
- To establish the need to improve adherence, in the broad sense, for HIV-infected substance users
- To illustrate why adherence to antiretroviral medications is so important if an individual is ready to take them

Materials

- Flipchart, colored markers, and tape
- Handout 2, "'Adherence Now' Teaching Cards" (from "Adherence Now" packet)
- Slide 2, "Expanded Definition of Adherence"
- Slide 3, "Why Adopt a Broad View of Adherence?"
- Slide 4, "What is Health Promotion?"
- Slide 5, "Adherence Support = Health Promotion"
- Slide 6, "Why Focus on HIV Adherence in Substance Users?"
- Slide 7, "Why Is Adherence to Antiretroviral Medications So Important?"
- Slide 8, "Problems With Poor Adherence"
- Slide 9, "Goals of Medical Adherence"
- Slide 10, "Medication Adherence Is Not Easy!"
- Slide 11, "How Much Adherence Is Enough?"
- Slide 12, "Treatment Failure"
- Slide 13, "What Do We Know About HIV Drug Resistance?"
- Slide 14, "Relationship Between Level of Adherence and Risk of Resistance"

Time: 10 minutes

Instructor Notes

1. Slide 2 is a sample of an expanded definition of adherence. Use Slide 3 to summarize the importance of adopting a broad view of adherence. Slide 4 provides examples of a broad perspective of adherence. You may want to ask participants if they can offer other examples.

Expanded Definition of Adherence

Any action that improves, supports, or promotes the health of a person living with HIV with respect to HIV treatment and care, including physical, mental, and psychosocial well-being.

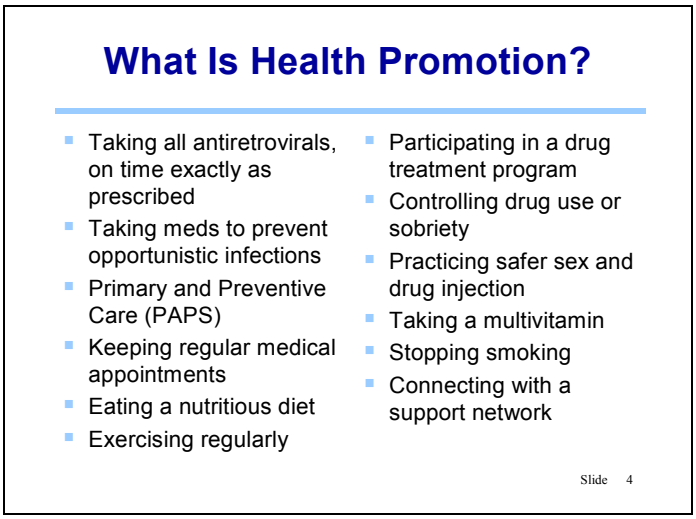
Slide 2

Why Adopt a Broad View of Adherence?

A broad view of adherence:

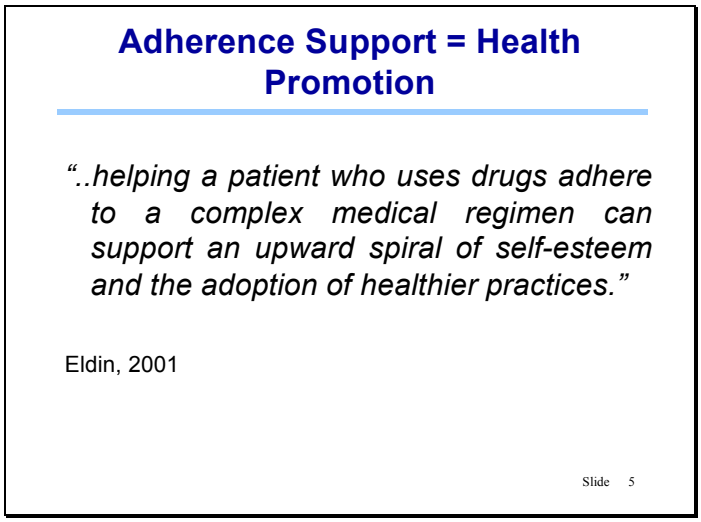
- recognizes that adherence is not only about taking one's medications
- actively engages patients in health care and treatment
- values the health impacts of "non-medical" interventions, including controlled drug use, stable housing, social supports, harm reduction, and good nutrition
- improves patients' self-efficacy
- provides more opportunities for success

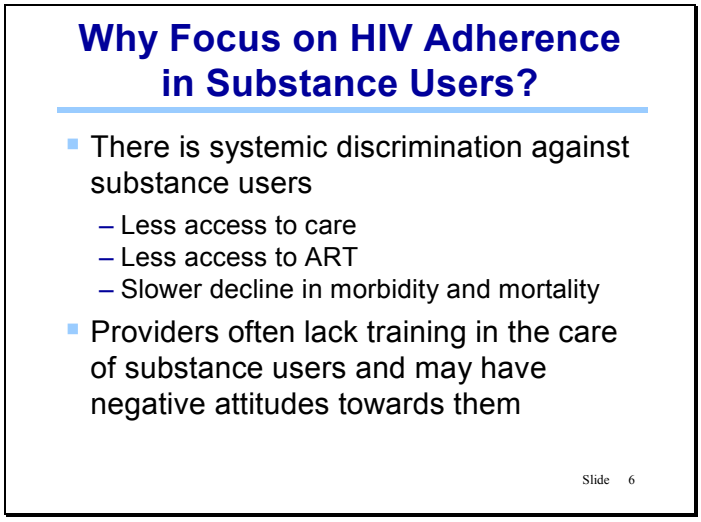
Slide 3



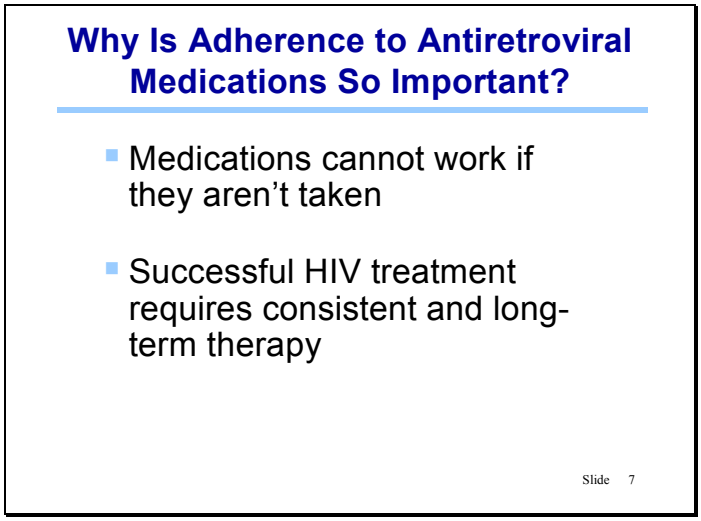
2. Present slides 5 and 6. Emphasize that substance users are often discriminated against and have:
   - Less access to care
   - Less access to ART
   - Slower decline in morbidity and mortality

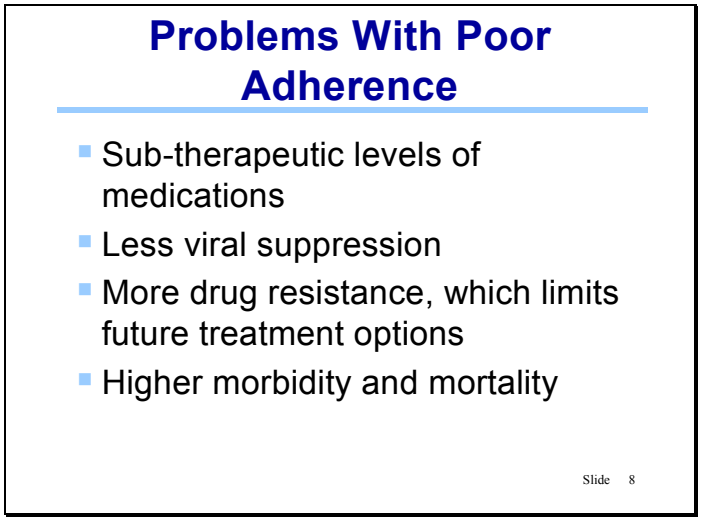
Part of the reason for substance users' reduced access and poorer response to care is that providers lack training to care for this special population and may have negative attitudes toward substance users.

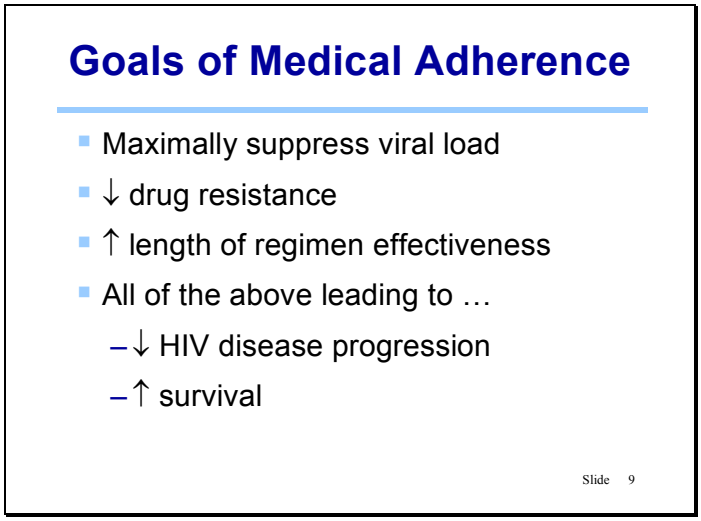




3. Tell the participants that, with proper support, substance users can achieve better outcomes.







4. Emphasize that adherence is not an easy task and that the high adherence standard of 95%—that has been established by research—is extremely difficult for most people to achieve. If this adherence goal is not presented to HIV-infected patients in a sensitive way, then it may set them up for failure. It is also important to note that, even when people achieve 95% adherence, they can still experience treatment failure (Slides 10 and 11). It is important to educate patients on the importance of adherence, but also make it known to them that treatment failure is not patient failure (Slide 12). In addition, patients need to know that many supports are available to help them meet the challenge of adherence. We will talk about supports shortly.

Medication Adherence Is Not Easy!

- Rate of nonadherence to ART is generally 50% to 70%
- Substance users' adherence rates are lower (inconsistent data)
- Even >95% adherence is associated with treatment failure almost 20% of time

Golin, 2002; Samet, 1992; Broers, 1994; Gordillo, 1999; Arnsten, 2002; Chesney, 2000

Slide 10

How Much Adherence Is Enough? (After 3 Months)

% of doses taken correctly	% with viral suppression
>95%	81%
90% - 95%	64%
80% - 90%	50%
70% - 80%	25%
<70%	6%

Chesney, 2000

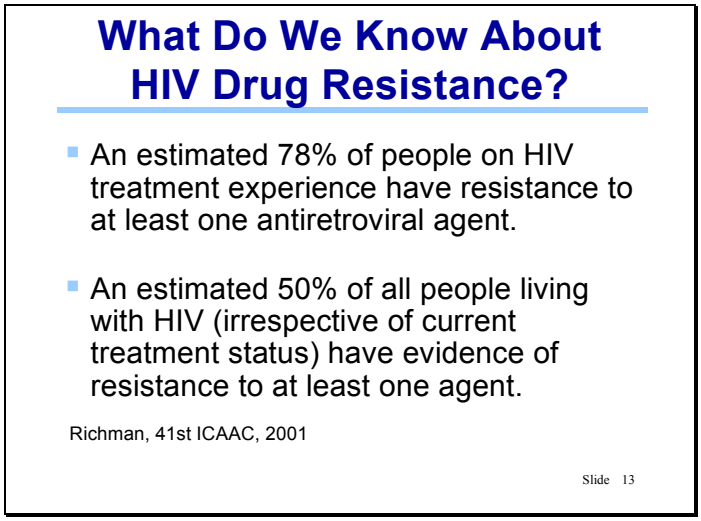
Slide 11

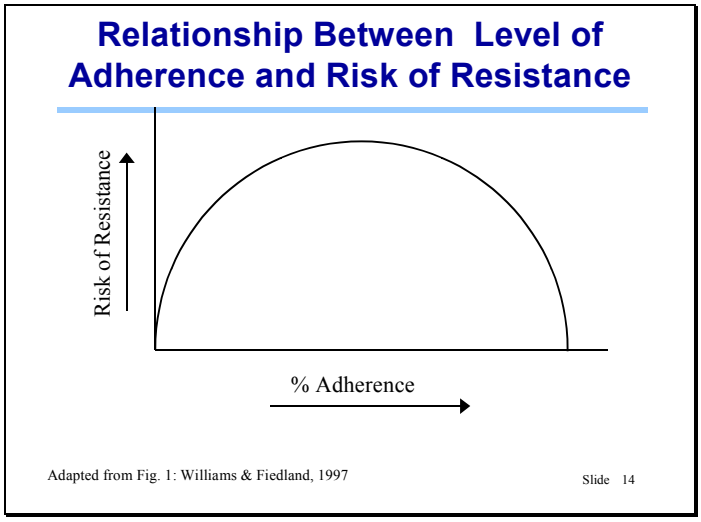
Treatment Failure

- Defined as
  - increased viral load
  - decreased CD4+ T cell count
  - progression of HIV disease
- Treatment failure is *not* patient failure—it can even happen if a patient is adherent.
- Assess why failure occurred and move on. Don't dwell on the failure; instead set up a new plan to address the underlying reasons.

Slide 12

5. Remind participants about antiretroviral drug resistance, transmission of resistant strains of HIV, and the relationship between adherence and drug resistance (Slides 13 to 14). Note that one of the main arguments that is made against prescribing ART to drug users is that they won't adhere and that, as a result, their HIV infection will become resistant to HIV meds. This in turn would lead to the transmission of drug-resistant HIV to others. Be sure to cover the following points:
   - If a person is completely nonadherent (takes none of his or her medications), the chances of drug resistance are extremely low, because the virus is not exposed to any antiretroviral drug to become resistant to.
   - Conversely, if person's adherence is very high (takes close to 100% of his or her medications correctly), then the risk of drug resistance is quite low. This is because an effective regimen should suppress viral replication to such an extent that very few viruses are produced.
   - The greatest risk for drug resistance occurs when a person takes his or her HIV medications intermittently. Taking medications intermittently gives the virus the perfect opportunity to develop resistance, because it has an opportunity to multiply in the presence of medications.
   - To summarize, if there is no medication in the body, there is nothing for the virus to work with to become resistant. Conversely, if there is a consistently high level of medication around, the virus has little opportunity to grow and change. Use Slide 14 to illustrate these points graphically. The take-home message is that, if people start using recreational drugs again or feel for any reason that they cannot stick with their regimen, they should stop all their medications at once and not "wean" themselves off.





6. Distribute Teaching Cards from the Adherence Now packet.
   These laminated cards can help you illustrate the benefits of adherence to your patients. The front of each card contains a graphic image demonstrating the benefits of adherence, while the back of the card contains bullet points that a provider can emphasize. Additional copies of the "Adherence Now" materials can be obtained at no cost from:

   World Health CME
   41 Madison Ave
   New York, NY 10010-2202

   Tel: (800) 433-4584, ext. 1776
   E-mail: erivera@whcom.com

7. Finally, remind participants that it is crucial to remember the broader perspective on adherence when thinking about adherence to antiretroviral medications. Each element of a patient's treatment plan will have a direct impact on his or her ability to adhere to the medications. Taking HIV medications is only part of the patient's overall well-being. *It is rarely, if ever, an emergency to start antiretroviral therapy.* In fact, it may be more harmful than helpful to prescribe antiretroviral medications if a person is not ready to take them.

Session 3: The Politics of Adherence

Activity: Agree or Disagree?

Purpose: To raise some controversial issues and allow participants to express their opinions about these issues

Time: 15 minutes

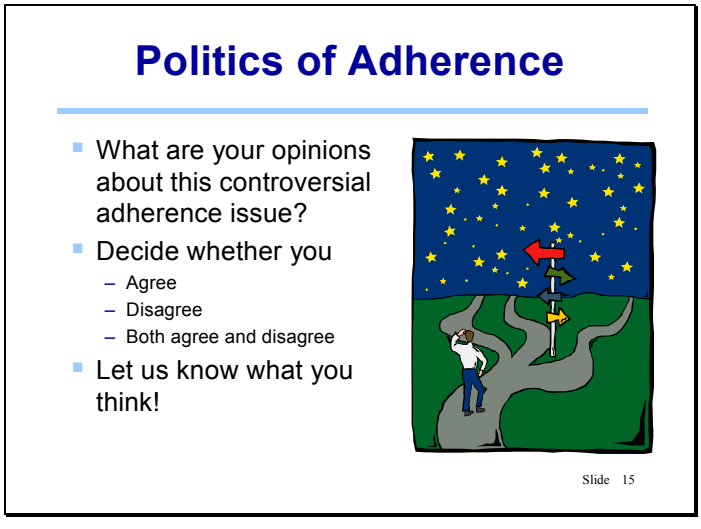
Materials

- Colored markers, newsprint paper, and tape
- Slide 15, "Politics of Adherence"
- Slide 16, "Agree or Disagree? "
- Slide 17, "Abstinence and Antiretroviral Therapy"

Instructor Notes

1. In preparation for the session, make three signs that say "Agree," "Disagree," and "Both Agree and Disagree." Post these signs in three different parts of the room.

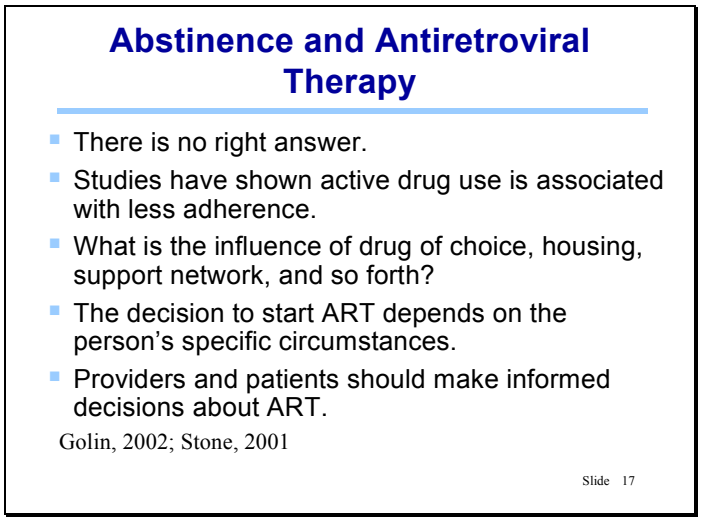
2. Introduce the activity. Acknowledge that some of the issues related to adherence and substance use will be controversial and that this exercise gives participants a forum to discuss their opinions. You may use Slide 16 to summarize the main points.



3. Tell participants that you are going to put up a series of statements. When they read each statement, they should move to the part of the room that matches their opinion about that statement – agree, disagree, or both agree and disagree. Once participants have moved to

their respective positions, facilitate a discussion by asking the people in each position to explain some of the reasons for their stance. Let participants know that the position they pick does not have to be permanent; that is, they can later change their minds and switch to another position.

4. Slide 16 gets at the issue of priorities in substance use treatment settings. Should HIV issues be paramount in early recovery, or should there be a narrow focus on concerns directly related to substance use? Use Slide 17 to help facilitate your discussion.



Session 4: A Broad Perspective on Adherence: Part 2

Activity: Factors Affecting Adherence

Purpose: To emphasize that *it is rarely, if ever, an emergency to start ART*; that one must consider patients' specific needs when evaluating their readiness to start treatment; and to help participants identify what factors may facilitate or hinder a patient's adherence

Time: 10 minutes

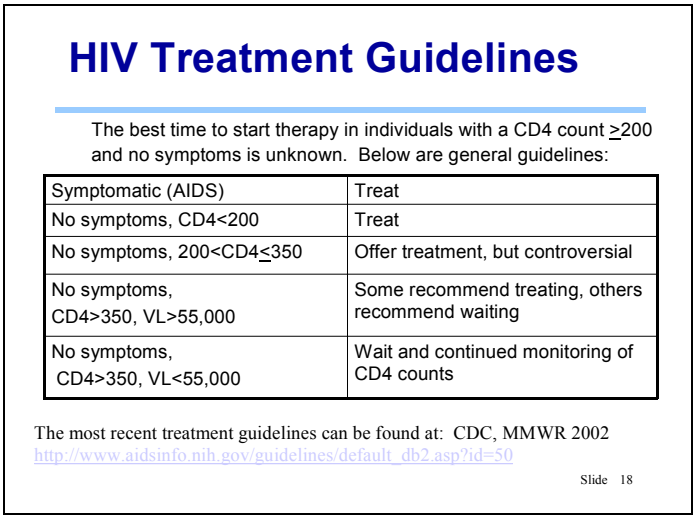
Materials

- Handout 3, Table 6 from *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*
- Handout 4, "Worksheet for Participant Notes"
- Large copy of Handout 4, written on newsprint
- Self-stick notes (3-5 sheets per participant)
- Slide 18, "HIV Treatment Guidelines"
- Slide 19, "Adherence Issues to Consider for Substance Users"
- Slide 20, "Medication Adherence and Drug of Choice"

Instructor Notes

1. Pass out Handout 3, Table 6 from *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*. Obtain the most recent version of the guidelines from http://www.aidsinfo.nig.gov/guidelines/default db2.asp?id=50 before the training.

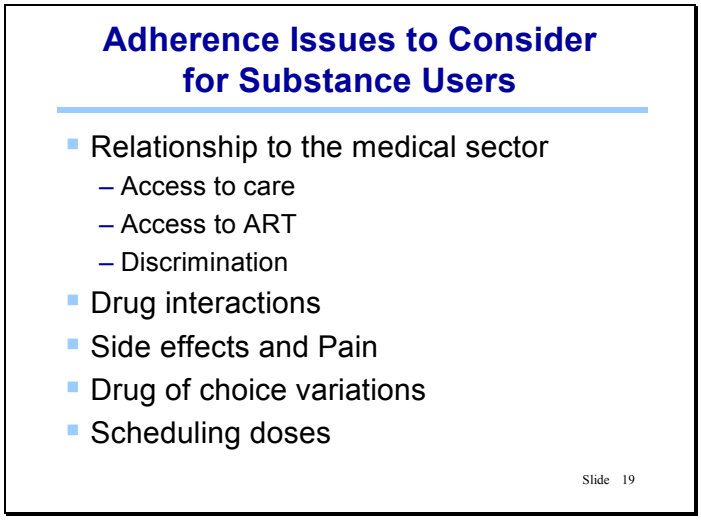
2. Show Slide 18 and note where the most recent treatment guidelines can be obtained.



3. Ask participants to write down 3-5 potential adherence barriers to or facilitators of adherence. Then post on these comments on the appropriate area of the large newsprint copy of the Handout 4 worksheet. Note those challenges that are client-focused, regimen-focused, and clinical care/provider focused.

4. Remind participants that medication is not the only important part of a patient's treatment plan, and that initiation of anti-retroviral therapy is rarely, if ever, an emergency.

5. Also, emphasize that factors that influence adherence vary from person to person (Slide 19). One important factor that influences adherence is the drug or drugs of choice. Slide 20 shows some of the ways in which the drug of choice may affect adherence. In this discussion, you may refer to a study (Arnsten, 2002) in which active cocaine use was associated with a 41% decline in median adherence and was a strong predictor of failure to maintain viral suppression. In this study, active heroin users also had lower adherence than nonusers, but the difference was not statistically significant.



Medication Adherence and Drug of Choice

- Heroin
  - Use may be more regimented
  - Users may have an easier time with adherence
- Cocaine/Crack
  - Use may be more sporadic
  - Intense mood swings may interfere with adherence
- Methamphetamine
  - Unclear, but use may be more sporadic and interfere with adherence
- Alcohol
  - May have most negative impact on adherence due to blackouts and memory loss

Slide 20

Handout 4: Worksheet for Participant Notes

Areas of Challenge Worksheet

	Client Focused	Regimen Focused	Clinical Care/Provider Focused
Issues			
Interventions			

Session 5: Medical Issues Specific to HIV-Infected Substance Users

Presentation: Medical Issues

Purpose: To learn about medical complications that may be relevant when treating HIV-infected substance users

Time: 40 minutes

Materials

- Handout 5, "Interactions Between HIV-Related Medications and Methadone"
- Handout 6, "Interactions Between Antiretroviral Medications and Recreational Drugs"
- Handout 7, "Commonly Abused Substances and Possible Interactions With HIV Drugs"
- Slide 21, "Medical Issues Related to HIV and Substance Use"
- Slide 22, "Drug Interactions: What Do We Know?"
- Slide 23, "How Do Drug Interactions Affect Medication Adherence?"
- Slide 24, "Methadone Interactions With PIs"
- Slide 25, "Methadone Interactions With NNRTIs"
- Slide 26, "Methadone Interactions With NRTIs"
- Slide 27, "Buprenorphine Interactions with ART"
- Slide 28, "Recreational Drug Interactions With ART"
- Slide 29, "Illicit Drug Interactions with ART"
- Slide 30, "Talking About Recreational Drug Interactions"
- Slide 31, "Hepatitis C (HCV) Infection"
- Slide 32, "HCV and HIV"
- Slide 33, "HCV Treatment Issues"
- Slide 34, "HCV Treatment Issues (continued)"
- Slide 35, "Tuberculosis (TB)"
- Slide 36, "TB and HIV"
- Slide 37, "TB and HIV Drug Interactions"
- Slide 38, "HIV and Mental Illness"
- Slide 39, "Priorities and Motivations"

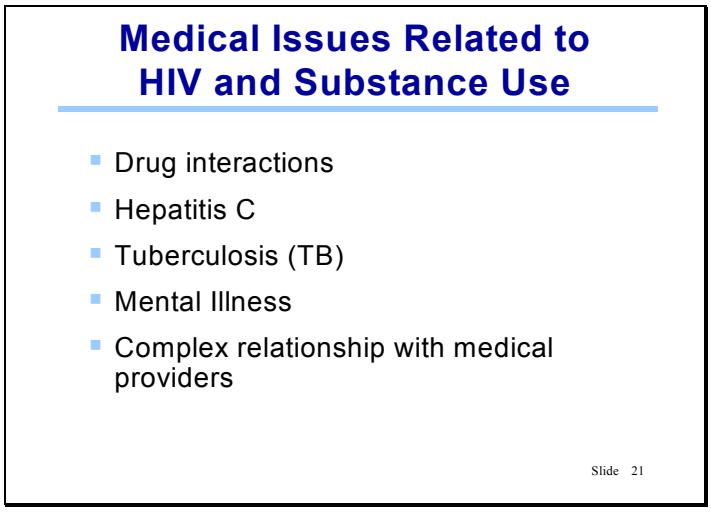
Instructor Notes

1. Introduce the topic by noting that HIV-infected substance users may experience medical complications that are specific to their substance use. As we have already seen, there are many factors to consider when assessing a patient's readiness for antiretroviral therapy. Substance use does not necessarily preclude a patient from receiving – or adhering to –

antiretroviral therapy, especially if he or she has formed a good relationship with a provider and is prepared to take on the challenge.

2. Recognize that competing health priorities can complicate both access to ART and adherence if people are feeling ill or if they have other health conditions that may urgently require treatment. A few examples of such conditions are presented below:
   - Hepatitis C (HCV) coinfection is common among HIV-infected injection drug users. In this population, HIV infection has been linked to more aggressive progression of HCV disease (Lauer, 2001; Soto, 1997; Bruno, 2002; Landau, 2001; Nasti, 2001).
   - Mental illness may also create significant adherence barriers if a person's mental health status interferes with memory or motivation. For example, depression, which is the most common mental illness among substance users, may affect both memory and motivation (Stone, 2001; Sherer, 1998; Elliot, 1997).

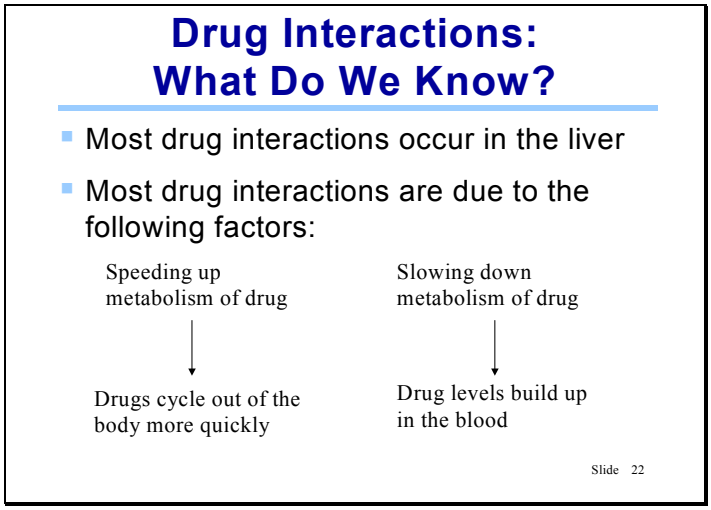
3. Present the material in Slides 21 to 37, and refer participants to Handouts 5 to 7 as good sources of additional information.

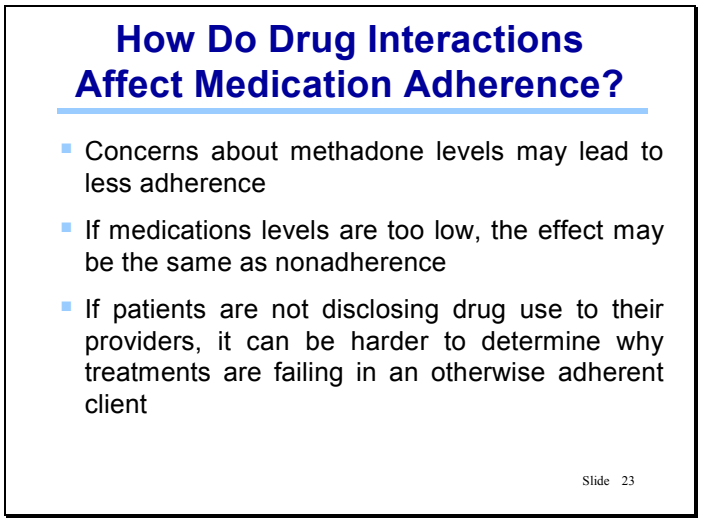


4. In general, research has shown that active substance users are less adherent than former users or nonusers. Consequently, it may be prudent to defer ART until a person's substance use and psychosocial climate have stabilized. However, this does not mean that a person must stop using before starting ART. If a person is using and wishes to begin ART, then stabilizing the environment can be helpful in promoting adherence. Each person's situation should be assessed individually. Flexibility is essential when tailoring a treatment plan to meet the needs of an active substance user.

5. Introduce the discussion of drug interactions, referring to the relevant information in Handouts 5 through 7 and Slides 22 through 30. It is important to note that there are many drugs that have not yet been studied and also that many of the studies have been conducted are on a small number of patients making it hard to generalize from them.
   - Explain how drug interactions may affect adherence, and talk about the basic science behind the interactions. Focus on a few common interactions, and then refer participants to their handouts for more information.

- Note that the coadministration of methadone with protease inhibitors (PIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) often leads to significantly decreased methadone levels.
- Also note that the coadministration of methadone with nucleoside reverse transcriptase inhibitors (NRTIs) generally does not affect methadone levels, although the effects of some NRTIs have not yet been determined. Methadone may also effect the levels of some NRTI, but in clinical practice the only change in dosing that may be required is with didanosine. (If participants ask about the increased clearance of methadone for abacavir, let them know that in clinical practice it is still generally not necessary to change methadone dose).





Methadone Interactions with PIs

Protease Inhibitor	Effect on Methadone
Indinavir	No change
Ritonavir	↓37%
Nelfinavir	↓ level
Amprenavir	↓ 13-35%
Fosamprenavir	↓ level
Lopinavir/ritonavir	↓28-53%
Saquinavir	↓ 0-40%
Atazanavir	No data

Beauverie, Gourevitch, Antoniou, Clarke 2002, Bart, Shelton, Stevens, McCance-Katz 2003, Gerber, DHHS

Slide 24

Methadone Interactions With NNRTIs

NNRTI	Effect on Methadone
Nevirapine	↓ by 46%
Efavirenz	↓ by 48-52%
Delavirdine	No data (expect ↑ or no change)

Altice, 1999; Staszewski, 1998; Gourevitch, 2000; Antoniou, 2002; Clarke, 2001

Slide 25

Methadone Interactions With NRTIs

NRTI	Effect on NRTI
Zidovudine	↑ 40%
Stavudine	↓ 18-27%
Didanosine	↓ 41-60% *
Abacavir	↓
Tenofovir	No data
Lamivuidine	No change
Zalcitabine	No data
Emtricitabine	No data

Rainey, Gourevitch, Antoniou, McCance-Katz, 1998; Bart, Rainey 2000 & 2002, DHHS

Slide 26

Buprenorphine Interactions with ART

- NRTIs
  - No change in AZT
- NNRTIs
  - Likely ↓ buprenorphine levels
- PIs
  - ↑ Buprenorphine with ritonavir > indinavir > saquinavir
- Fusion inhibitor
  - No data

McCance-Katz 2001, Iribarne, Sullivan

Slide 27

Recreational Drug Interactions With ART

- Interactions are complex, inconsistent, and difficult to predict.
- Interactions may be affected by drug purity, mode of ingestion, and baseline liver and kidney function.
- Interactions with HIV meds may be extremely dangerous or even fatal.
- "Take heed, club lovers - there's no map for these trips." (Horn, 1998)

Slide 28

Illicit Drug Interactions With ART

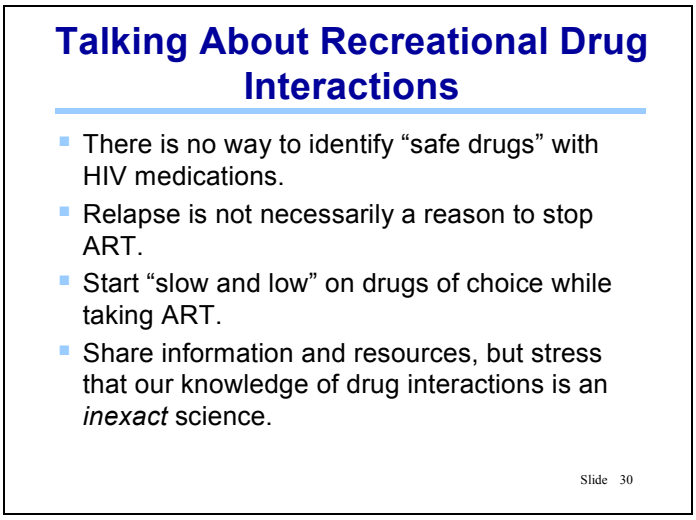
Drug	Effect
Amphetamines	may ↑ level 2-3 fold with **ritonavir**
Methamphetamine	↑ HIV replication, fatal OD with **ritonavir**/saquinavir
Cocaine	↑ HIV replication, ↓ immune system function
Ecstasy (MDMA)	Over dose or death with **ritonavir**
GHB (liquid X)	↑ levels with **ritonavir** or saquinavir
Heroin	levels may ↓ or ↑ with **ritonavir**

Antoniou, Henry, Harrington, Roth, Bagasra, Peterson 1991 & 1992, Ellis, Gavrilin, Urbina, Hales

Slide 29

6. We know very little about the interactions between HIV medications and recreational drugs. However, most of the interactions that have been reported involve ritonavir.

7. The most important point to emphasize about drug interactions is that little is known. One of the reasons is that it is very difficult to do controlled clinical trials with recreational drugs, so we can only make educated guesses based on limited research, medical records, and anecdotal reports. Note that some of the drug interaction information is conflicting. Fortunately, the data are better for legal substances, such as methadone and alcohol. The take-home message is that drug interaction information is not always clear. In addition, the interactions may vary, based on such factors as the person's metabolism, the mode of injection, and the purity of the drug.



8. Introduce the topic of co-morbidities, referring to the information in Slides 31 through 38. Explain how co-morbidities, such as Tuberculosis (TB) and Hepatitis C, are fairly common among substance users and should be considered in their treatment plans. Note to Instructor: Discussion of TB is optional depending on location of training

9. Here are some other points to raise:
   - HCV infection is very common among drug users – much more common than HIV infection.
   - Note some of the challenges of current treatment for HCV. For example, some HCV medications are administered through injection, which may be problematic for some substance users. In addition, HCV treatment has a low to moderate success rate, and the side effects are very difficult to tolerate.

HCV Infection

Epidemiology

- 5 times more widespread than HIV
- Leading cause of liver disease in the U.S.
- Up to 88% of HIV-infected IDUs are coinfected with HCV

Lauer, NEJM 2001

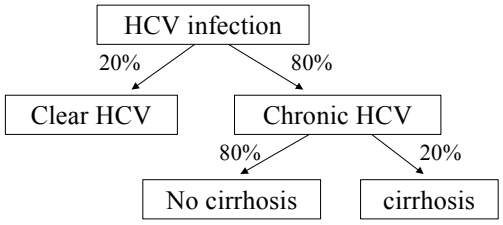
Slide 31

HCV and HIV

- HIV's effect on HCV
  - Accelerates hepatitis C disease
  - Leads to cirrhosis more quickly
  - No difference in response to HCV treatment
- HCV's effect on HIV
  - Conflicting data about HIV disease progression
  - Liver disease may complicate ART

Slide 32

HCV Treatment Issues



Lauer, NEJM 2001

Slide 33

HCV Treatment Issues
(continued)

- Peginterferon injections weekly for 6 to 12 months
- Cure rate approximately 56% overall
- Severe side effects—Flu-like symptoms, depression, irritability, emotional lability, severe anemia
- Up to 1/3 of patients stop treatment due to intolerance

Fried, 2002

Slide 34

Explain how the comorbidity of Tuberculosis (TB) is fairly common among substance users and should be considered in their treatment plans

- TB's epidemiology, interaction of TB and HIV, and TB's effect on HIV drugs
- Note that the TB drug rifampin has such significant drug interactions with PIs and NNRTIs that it is contraindicated for nearly all of these antiretroviral agents. Rifampin also dramatically reduces methadone levels. Rifabutin is the preferred choice in the treatment of TB, because it has fewer drug interactions with PIs and NNRTIs and causes no change in methadone levels.

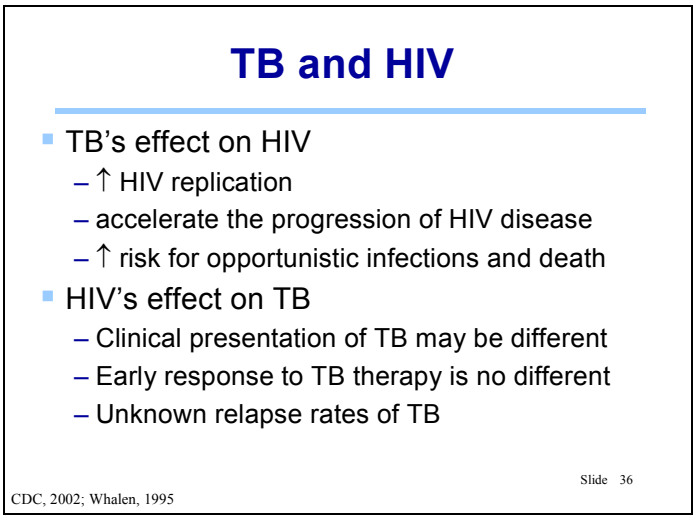
Tuberculosis (TB)

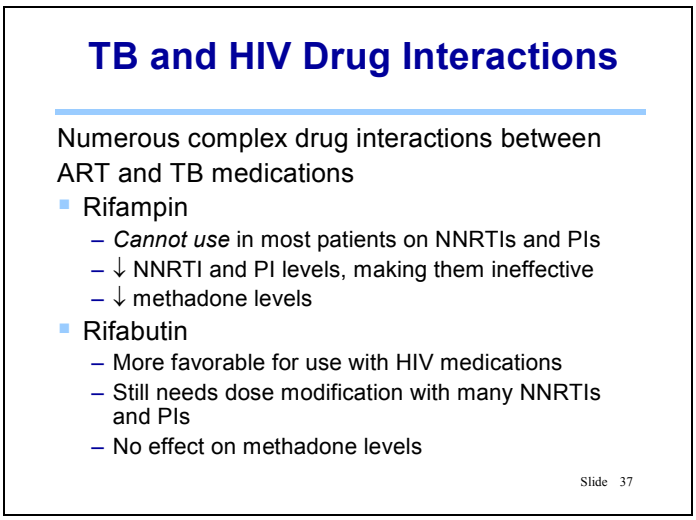
Epidemiology

- TB is common in IDUs before HIV.
- Up to 23% of IDUs have TB exposure (PPD+).
- TB and HIV coinfection is concentrated among IDUs and minorities.
- HIV infection is the strongest risk factor for the progression of TB exposure to active disease.

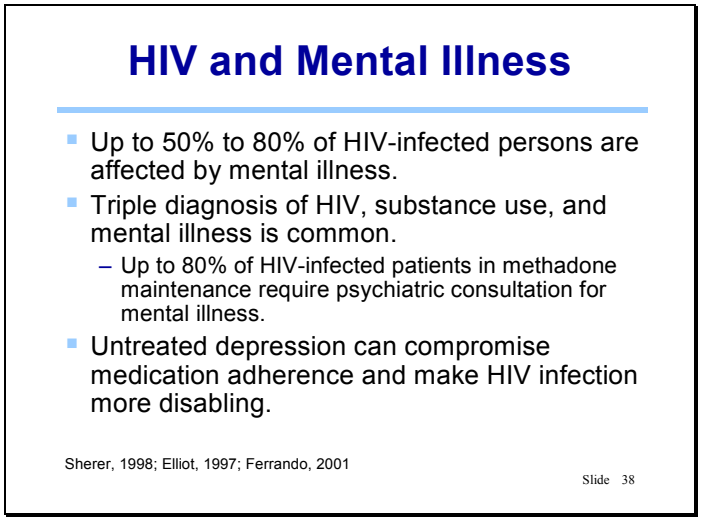
CDC, 2002; Selwyn, 1989

Slide 35



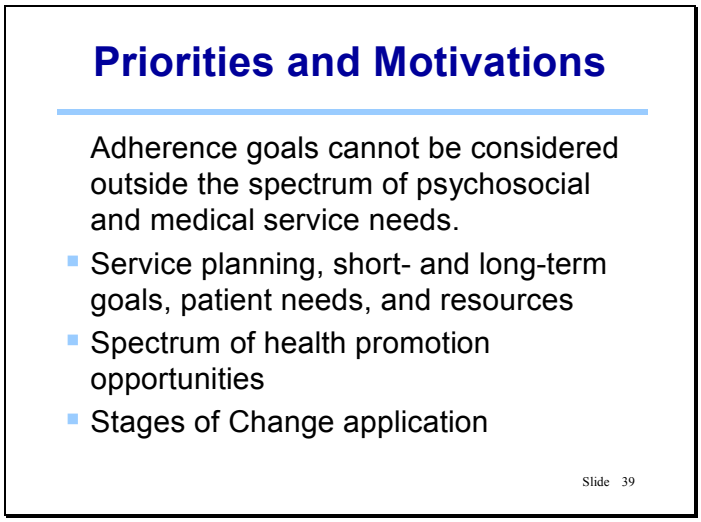


10. Note the prevalence of mental illness, and briefly discuss the implications this has for treatment. Although this module does not consider this topic in detail, it is essential to mention the importance of screening for mental illness and providing the necessary referrals and treatment (Slide 38).



11. The most important implication of the medical issues raised in this session may be summed up as follows: *Providers need to pay special attention to tailoring medication and treatment regimens to each patient's specific situation and needs.*

12. A patient's readiness to start, continue, or resume ART should be considered in light of their other personal and health priorities. For example, a patient who considers securing housing, resolving an acute illness, and reconnecting with his or her hepatitis C doctor as his or her top three priorities may not yet be ready to start ART. After some of these "front-burner" concerns are addressed, that patient might feel more ready to consider ART. Similarly, education and support can often help patients who are not yet considering ART – to move to the next level of readiness. The Stages of Change model provides a template for talking with patients about their degree of readiness and the steps they might take to prepare for treatment, even if they are not ready to start ART now. In this respect, each step towards readiness is viewed as a healthy behavior change. Patients are not set up for "failures" if they are not yet ready or able to adhere to therapy. On the contrary, they are given more opportunities for "success" in their health-promotion efforts (Slide 39).



Handout 5: Interactions Between HIV-Related Medications and Methadone

HIV Medication	Effect on Methadone	Effect on HIV Medication	Clinical Effect
Pis			
Indinavir	Unchanged		
Ritonavir	↓levels by 37%		Monitor and titrate methadone dose, if needed; might require increase in methadone dose
Saquinavir[§]	-		
Nelfinavir	↓ levels		Has minimal effect on maintenance dose; monitor and titrate dose, if needed; might require increased methadone dose
Amprenavir	↓ by 35%		Monitor and titrate dose, if needed; might require increase in methadone dose
Lopinavir	↓ AUC by 36%, level by 53%		Monitor and titrate dose if needed; might require increased methadone dose
NNRTIs			
Nevirapine	↓ by 46%	Unchanged	Withdrawal symptoms may occur if dosage is not adjusted; titrate methadone dose to effect; might require increased methadone dose
Efavirenz	↓ by 48-52%		Titrate methadone dose to effect; might require increased methadone dose
Delavirdine	Not studied		
NRTIs			
Zidovudine	Unchanged	↑ AUC by 40%	Unclear; methadone may increase zidovudine-related toxicities
Stavudine	Unchanged	↓ AUC by 18%, level by 27%	No dose adjustment
Didanosine	Unchanged	↓ AUC by 41%, level by 60%	Consider increasing dose of didanosine
Tenofovir	Not studied		
Lamuvidine	Unchanged		
Abacavir	↑clearance	↓ peak concentration	
Zalcitabine	Not studied		
Other Medications Sometimes Used by HIV-Infected Persons			
Rifampin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Rifabutin	Unchanged		
Fluconazole	↑ level by 30%		Unknown clinical significance
Phenytoin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Phenobarbital	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Carbamazepine	↓ levels		Titrate methadone dose to effect; might require increased methadone dose

[§]Drug interaction studies were conducted with the Invirase formulation of saquinavir; therefore, the observations and recommendations might not apply to the Fortovase formulation of saquinavir.
AUC = Area under the curve
Adapted from the following sources:
Centers for Disease Control and Prevention, 2002
Gourevitch, M.N., Friedland, G.H., 2000

Handout 6: Interactions Between Antiretroviral Medications and Recreational Drugs

Drug	Effect	Comment
Alcohol	↑ abacavir level	Unknown significance
Amphetamines	Ritonavir may ↑ amphetamine level two- to three-fold	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of amphetamine
Methamphetamine	↑ HIV replication, overdose with ritonavir/saquinavir[1234]	Avoid combining with ritonavir
Cocaine	Possibly ↑ HIV replication and ↓ immune system[5678]	Studies conducted only in test tubes and mice
Ecstasy (MDMA)	Overdose and death with ritonavir[910] Possibly ↑ levels with other PIs and NNRTIs	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of MDMA and watch for signs of toxicity
GHB (liquid X)	↑ levels and toxicity with ritonavir/saquinavir[5], possibly ↑ with delavirdine	Use cautiously with PIs, as well as delavirdine and efavirenz
Heroin	Ritonavir may ↓ levels by 50%; Ritonavir and other PIs may also ↑ levels	
Ketamine	Possibly ↑ levels with ritonavir, delavirdine, and efavirenz	Use cautiously with ritonavir, nelfinavir, and efavirenz
LSD	Unknown	Use cautiously with PIs, delavirdine, and efavirenz
Marijuana	PIs may ↑ levels	Efavirenz may cause false-positive screening test for marijuana
PCP	Possibly ↑ levels with antiretrovirals	Use cautiously with PIs, delavirdine, and efavirenz

Adapted from: Antoniou, T., Tseng, A.L., 2002

[1] Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

[2] Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

[3] Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

[4] Urbina A, Jones K. Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. 2004 Mar 15;38(6):890-4.

[5] Roth, M.D., Tashkin, D.P., Choi, R., et al., 2002

[6] Bagasra, O., Pomerantz, R.J., 1993

[7] Peterson, P.K., Gekker, G., Chao, C.C., et al, 1991

[8] Peterson, P.K., Gekker, G., Chun, C.C., et al., 1992

[9] Harrington, R.D., Woodward, J.A., Hooton, T.M., et al., 1999

[10] Henry, J.A., Hill, I.R., 1998

Handout 7: Commonly Abused Substances and Possible Interactions With HIV drugs (From STATSCRIPT Pharmacy – The Boston Living Center Medication Adherence Program and the Treatment Information Clinic, September, 2000)

(The instructor will hand this out.)

Session 6: Talking with Patients About HIV and Substance Use

Presentation: Improving Provider-Patient Communication

Purpose: To improve provider-patient communication in general, as well as in the specific areas of substance use and adherence to medications

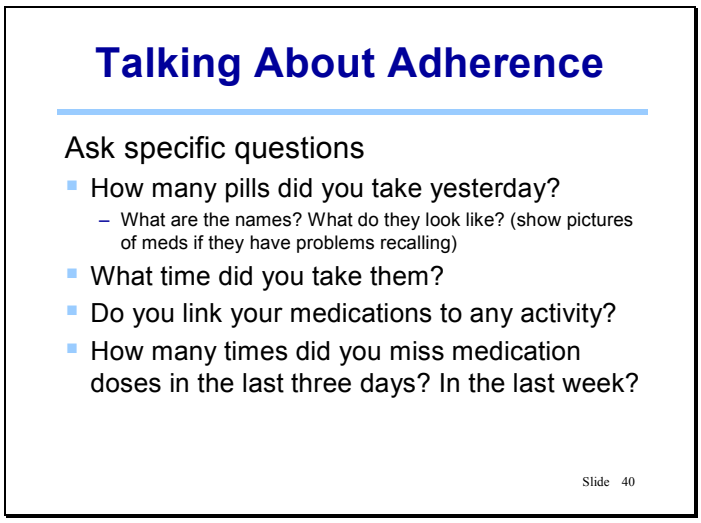
Time: 10 minutes

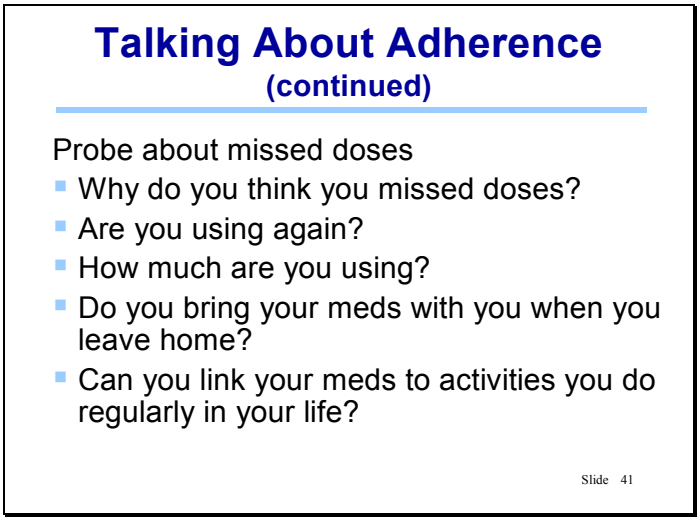
Materials

- Handout 8, "Pre-appointment Questionnaire From 'Adherence Now' Materials"
- Slide 40, "Talking About Adherence"
- Slide 41, "Talking About Adherence (continued)"
- Slide 42, "Talking About Substance Use"
- Slide 43, "Talking About Substance Use (continued)"
- Slide 44, "Provider-Patient Relationship (continued)"

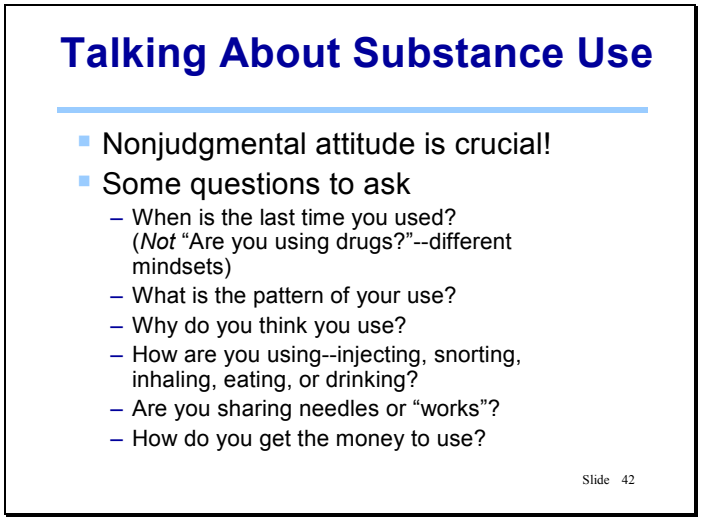
Instructor Notes

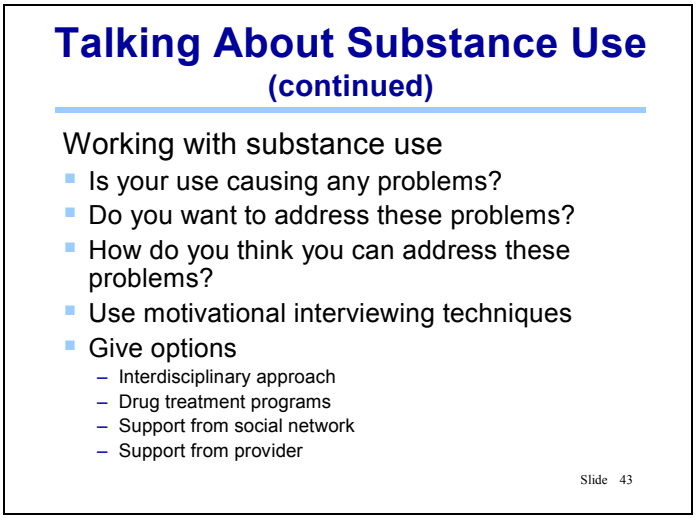
1. Introduce why it is important for providers to talk with their patients about adherence. Focus on how assessing adherence is an important way for providers to tailor interventions to their patients' needs (Slides 40 and 41).



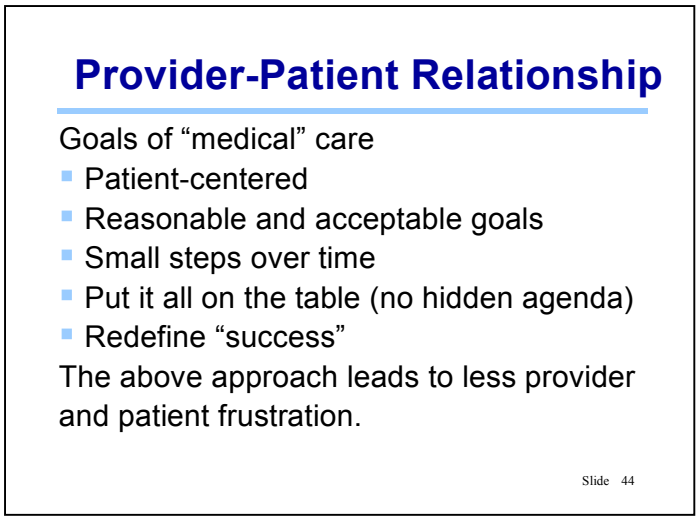


2. Next, focus on talking about substance use and finding out more about the patient's patterns of use (Slides 42-43).

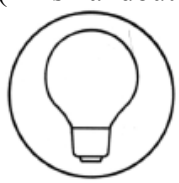




3. End the presentation with some general points on establishing a good provider-patient relationship (Slide 44). Keep in mind that some substance users have an extraordinarily difficult time with communicating with their providers as a result of past negative experiences with the medical system. Providers can help their patients by reviewing treatment options, and encouraging patients to discuss their questions and concerns.



Handout 8: Preappointment Questionnaire From "Adherence Now" Materials
(This handout is included in the "Adherence Now" materials that were passed out earlier.)



ADHERENCE NOW

PREAPPOINTMENT QUESTIONNAIRE

Please complete this questionnaire prior to seeing your provider, to address important issues about your care that have come up since your last visit.

SECTION ONE

Are you currently taking HIV medications? (please circle) Yes No

If no, why not?_____

If you are not taking medications, please proceed to Section Two.

Do you find your HIV drugs easy to take? (please circle) Yes No

If no, why not?_____

Please list your HIV medications below:

Trade name	Generic name	Number of pills per dose	Number of doses per day	What times do you take your doses? (ie. 12 AM / 12 PM)	Special instructions (eg. with/without food)

Please estimate the number of doses you have missed (if any): Today_____ Yesterday_____ Last week_____ Last month___

Why did you miss the dose? Forgot_____ Sleeping_____ Side effects/felt sick_____ Other_

How much of your HIV medications do you estimate that you take? (circle one)

None (0%) | Some (10%-30%) | Less than half (30%-50%) | About half (50%) | More than half (60%-75%) | Most (80%-85%) | Almost all (90%-95%) | All (100%)

Some people forget to take their pills on the weekends. Did you forget a dose last weekend?	Yes	No
Do you have family or friends who remind you to take your HIV medications?	Yes	No
Do you have transportation or any means of getting to the pharmacy to fill a prescription?	Yes	No
Would you like an alarm or reminder device to help you to remember to take your medications?	Yes	No
Would you be interested in receiving a pillbox with dividers for each dose and day to help you to remember to take your medications?	Yes	No
Would you be interested in learning about ways to take your medications better?	Yes	No

SECTION TWO *OPTIONAL QUESTIONS*

Have you had unprotected sex since your last visit?		Yes	No
How many alcoholic drinks (can of beer, glass of wine, mixed drink) have you had in the past week?			
Have you used any drugs to get high since your last visit?		Yes	No
Do you think you might be depressed?	Yes	No	Maybe

Comments:_____

_____

Provider name: _____ Provider signature:_____

Patient name:_____ Date:_____

Session 7: Managing HIV in the Context of Drug Use

Activity: Case Study Exercise

Purpose:
- To synthesize what participants have learned in this module
- To illustrate that adherence is a multidimensional challenge for all parties involved and requires an interdisciplinary approach

Time: 20-60 minutes

Materials
- Handout 9, "Case Studies for Small Group Exercise"
- Slide 45, "Some Strategies for Improving Health and Adherence"
- Slide 46, "Managing HIV and Substance Use: Case Studies"
- Slide 47, "Case Study 1: Melissa"
- Slide 48, "Case Study 2: Raymond"
- Slide 49, "Case Study 3: Krista"
- Slide 50, "Case Study 4: Marlon"
- Slide 51, "Case Study 5: Rosanna"

Instructor Notes
1. For this exercise, allow 20 minutes to conduct one case study, and 10-15 minutes for each additional case study.

2. Introduce the exercise (Slide 44-46) by telling participants that they will be working with a case study as a way to help synthesize the knowledge and skills they have gained through this module and apply them to hypothetical patient situations. Ask participants to consider how they can best develop a plan to promote the patient's health. Remind participants to consider lifestyle, substance use, and medical information in determining an appropriate response plan for each case.

Some Strategies for Improving Health & Adherence

- Clarify the regimen
- Identify the patient's motivation
- Make medications part of daily routine
- Manage side effects
- Address alcohol and drug use
- Build good provider-patient communication
- Identify social supports

Slide 45

Managing HIV and Substance Use: Case Studies

- Identify key adherence issues
- Consider adherence barriers and supports
- Set realistic goals
- Highlight HIV health concerns
- Develop a tailored HIV health and adherence plan

Slide 46

3. Divide the participants into groups of five to seven people. In forming the groups, try to ensure that each group includes people representing a range of disciplines, such as physicians, nurses, substance abuse treatment providers, case managers, and so forth. This approach will give participants the opportunity to practice working as part of an interdisciplinary team.

4. Depending on time examine 1-3 case studies. Give the participants 12 minutes to work on their cases, and allow five minutes each for the small groups to present their cases to the entire group. To save time, use Slides 47 through 51 to provide brief synopses of the cases and ask participants to focus mainly on the information and issues contained in the slides.

Case Study 1: Melissa

- 25 years old
- Commercial sex worker
- Injects heroin 3-4 times/day
- Intermittently incarcerated
- Recent 15 pound weight loss
- History of STDs and respiratory infections.
- Smoker - 1 pack/day
- CD4 count = 480/mm^3
- Viral load = 45,000 copies/mL

Slide 47

Case Study 2: Raymond

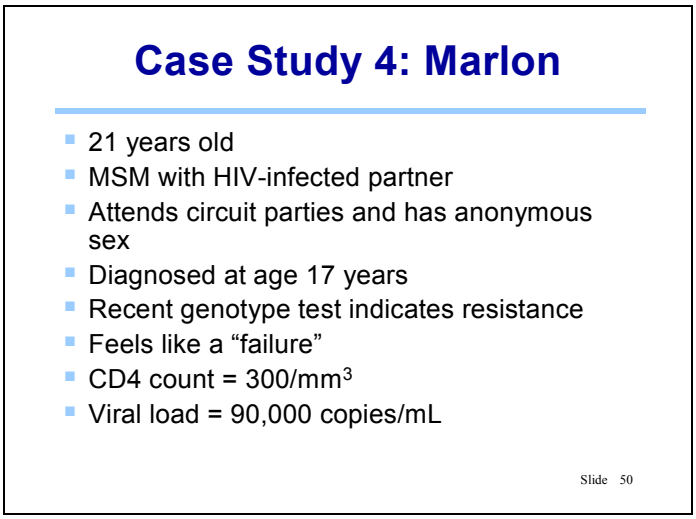
- 50 years old
- Corporate manager
- Married with teenage children
- Alcoholic and occasionally uses cocaine
- HCV co-infected
- Drug and alcohol free for 6 months
- CD4 count = 350/mm^3
- Viral load = 85,000 copies/mL

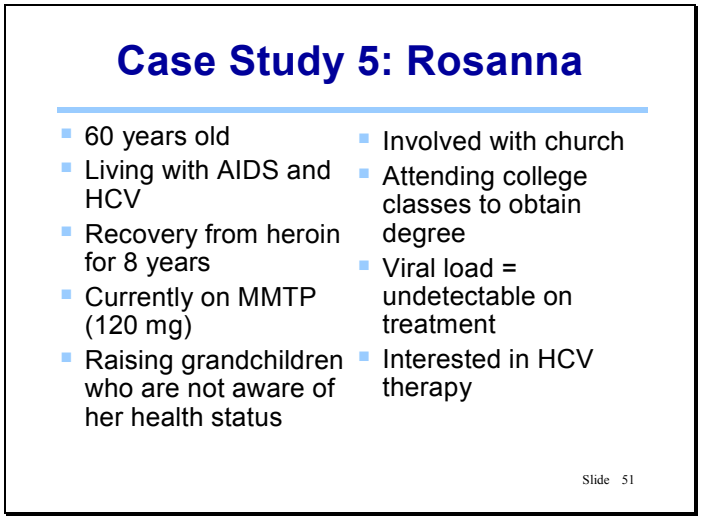
Slide 48

Case Study 3: Krista

- 35 years old
- Homeless
- Smokes crack daily
- Alcoholic
- Connected with shelter/meal program
- Earlier connection with Department of Mental Health
- CD4 count = 50/mm^3
- Viral load = 380,000 copies/mL

Slide 49





5. In each of the five cases, participants should try to identify the following types of issues:
   - *Lifestyle and psychosocial issues* that present barriers or supports to medication adherence and HIV health.
   - *Medical issues* that may affect the person's access to health care, his or her baseline health status, or the appropriateness of treatment recommendations or present therapy in his or her particular situation.
   - *Specific issues related to substance use*, including the drug of choice, drug interactions, timing of drug use, and stage of recovery.

   Following each case, a list of suggested questions and planted issues are given to help facilitate discussion.

6. Note that the case studies do not give information on the race and ethnicity of the persons discussed. This was done intentionally to allow instructors to adjust the scenarios in ways that address the circumstances of different population groups. However, the case studies do include information about each person's age, gender, sexuality, incarceration history, housing

status, and drug of choice. Participants should be encouraged to consider the extent to which social and cultural issues are relevant to HIV adherence and health promotion.

7. Keep in mind that these cases do not necessarily reflect the standard of care for prescribing HIV medications, including the timing of therapy and the specific medications selected by the health care provider in each scenario. Part of the challenge of this exercise is to determine what role the social service provider has in responding to medical information.

8. Also, note that each case also has specific instructor's notes that the participants should not receive.

Handout 9: Case Studies for Small Group Exercise

Case Study 1: Melissa

Melissa is a 25-year-old woman living with HIV. She is a heroin user, has never been in a methadone maintenance program, has been incarcerated intermittently, and smokes about a pack of cigarettes each day. She works in the commercial sex industry and lives with roommates in a small apartment. Only one of her roommates is aware of her HIV status. She uses heroin three to four times a day. Melissa receives her HIV care from a local community health center, and goes to the doctor at least every few months when she's not in jail. Most of her visits to the doctor are prompted by symptoms consistent with either sexually transmitted diseases (STDs) or upper respiratory infections. Melissa has health insurance coverage through the state's Medicaid program.

Melissa's most recent CD4 count was 480/mm^3 and her viral load was 45,000 copies/mL. Her current health problems include genital herpes and an upper respiratory infections. Melissa has been on and off antibiotics for the past year during episodes of pneumonia, and she takes acyclovir to manage the herpes infection. Melissa went to see her doctor last week because she was concerned about a weight loss of 15 pounds during the past month. At that appointment, her doctor suggested that she "just start eating more and try to stay out of jail." The doctor also recommended that she begin antiviral therapy "right away" and gave her a prescription for efavirenz and Combivir (lamivudine plus zidovudine). Melissa thinks her doctor may be angry with her because she recently started using heroin again. Melissa also isn't sure whether she should trust her doctor's advice. Melissa comes to meet with you and asks what you think about her situation.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Melissa to begin HIV medications?
- What factors would make you want her to start medications?
- What are some ways in which you could help Melissa adhere to treatment (in the broadest sense of the word)?

Planted Issues

- Safer sex with a sex worker's "clients"
- Confidentiality and Melissa's nondisclosure of her status at home
- Symptom-driven contact with medical sector
- Doctor-patient communication issues, including trust and access to care
- Health care plan during incarceration
- Connection to methadone maintenance program

Case Study 2: Raymond

Raymond is a 50-year-old man living with HIV and Hepatitis C (HCV). He works full time as a corporate manager and is married with two teenage children. His family is aware of his HIV status. He is an alcoholic and occasionally uses cocaine. He was first diagnosed with HCV in 1990, when it was still referred to as non-A, non-B hepatitis. He first tested positive for HIV during a stay in drug treatment in 1995.

Raymond has excellent health insurance through his employer, but no one at work is aware of either his HIV or HCV status. He is prone to relapse, especially during periods of stress at home or work, and often drops out of contact for days at a time. He's been sober from alcohol and cocaine for six months. At his last appointment, Raymond's doctor suggested he begin antiviral therapy because his numbers were "taking a turn for the worse." His most recent CD4 count was 350/mm^3, and his viral load was 85,000 copies/mL. Raymond's liver function tests remain within a normal range. Raymond wants to start therapy and is anxious to stay healthy for his wife and kids, but he is concerned that he won't be able to stick with a regimen. His doctor has prescribed indinavir, ritonavir, lamivudine, and stavudine. Raymond comes to meet with you and asks whether you think he can handle the suggested ART regimen. He confides that he's been feeling "very vulnerable lately" and that he "really wants to drink."

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Raymond to begin HIV medications?
- What factors would make you want him to start medications?
- How should you talk with Raymond about his concerns about being able to "handle" an HIV regimen?
- What are some ways you could help Raymond adhere to treatment?

Planted Issues

- HCV coinfection
- Alcohol use and adherence
- Cocaine use and adherence
- Relapse planning
- Sobriety and decision-making about ART
- Doctor's selection of a regimen containing indinavir and ritonavir; concerns about fluid requirements for indinavir and storage of ritonavir in a refrigerator

Unstable lifestyle and adherence

Case Study 3: Krista

Krista is a 35-year old woman living with HIV. She is currently homeless, and typically stays on the street, in crack houses, or in "wet" shelters. Krista sometimes stays at her mother's home, but she can only go there when she is sober. Krista uses crack cocaine and is an alcoholic. She drinks whatever she can get, and she typically uses crack in the evenings when she gets bored and lonely and "hits the streets." Krista considers herself a loner, but she has connected with a local street outreach program that provides free lunches, as well as day shelter services in the winter. At one point, Krista was also connected with the local Department of Mental Health (DMH) and was diagnosed with bipolar disorder, but she did not follow up with mental health support treatment. She is not on psychotropic medications.

Krista receives her HIV care from the public health clinic connected with a major urban medical center. She goes to the doctor often because she thinks he is very kind, she likes the medical staff, and she appreciates being able to hang out in the waiting room and watch TV. Krista's doctor is very concerned about her plummeting CD4 count (now at 50/mm^3) and her high viral load, which is 380,000 copies/mL. Last year, her doctor put her on trimethoprim/sulfamethoxazole (more commonly known by the trade name Bactrim) and now wants to add antiretrovirals. He gives her a prescription for nelfinavir and Combivir (lamivudine plus zidovudine), in addition to the antibiotic azithromycin. He also tells her to keep taking the trimethoprim/sulfamethoxazole. Krista is scared and doesn't understand why she needs this treatment. She asks you for help.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Krista to begin HIV medications?
- What factors would make you want Krista to start medications?
- What are some ways you could help Krista adhere to treatment (in the broad sense of the word)?

Planted Issues

- Challenges of homelessness
- Mental illness and adherence
- Potential to build on the positive relationship with her doctor and other medical staff
- Urgency of prophylaxis because of low CD4 count
- Potential to incorporate street supports into adherence plan
- Fear, anxiety, and lack of understanding about treatment need to be addressed
-

Case Study 4: Marlon

Marlon is a 21-year-old man who has unprotected sex with other men who are infected with HIV. He works at a fast-food restaurant. He attends circuit parties, likes to have anonymous sex, and uses recreational drugs at parties only. He has a steady boyfriend who is also infected with HIV and taking ART. They live together in a studio apartment. Marlon was diagnosed with HIV infection when he was 17 years old. At that time, he had a CD4 count of 180/mm^3 and a viral load of 80,000 copies/mL.

His doctor started him on therapy almost immediately with zidovudine, lamivudine, and nevirapine, as well as trimethoprim/sulfamethoxazole. Until recently, Marlon's HIV treatment was very successful. His viral load was undetectable, and his CD4 count was back up to 400/mm^3. In fact, Marlon was doing so well that his doctor told him he could stop taking trimethoprim/sulfamethoxazole. Unfortunately, Marlon's last few blood tests have indicated that his viral load is rising. Marlon's most recent viral load was 90,000 copies/mL, and his CD4 count is down to 300/mm^3. Marlon's doctor performs a genotype test, which shows that his HIV infection is now resistant to nevirapine and lamivudine. His doctor suggests a switch in therapy to stavudine, abacavir, ritonavir, and indinavir. Marlon is devastated and feels like a failure, especially when he compares himself with his partner, who is still doing very well on his medications. Marlon doesn't understand what he's doing wrong.

Discuss the Following Questions

- How would you approach Marlon when you discuss adherence with him?
- How would you assess his adherence?
- What specific questions would you ask him?
- What are some ways in which you could help Marlon improve his adherence to treatment?

Planted Issues

- Drug interactions between recreational drugs and ritonavir
- Feelings concerning "treatment failure"
- Individual responses to therapy
- Possibility of HIV superinfection and the importance of safer sex between HIV-infected partners.
- Significance of genotype test

Case Study 5: Rosanna

Rosanna is a 60-year-old woman living with AIDS and HCV infection. She is a heroin addict who has been is recovery for eight years. Rosanna is currently in a methadone maintenance program and is dosed every morning at 7 a.m. She had to increase her methadone dose to 120 mg last year when she started getting dope sick. Rosanna is also a grandmother and has been raising her three grandchildren on her own since her daughter died two years ago. She receives a monthly SSDI check and also has a Section 8 subsidy to help pay the rent on her spacious three-bedroom apartment.

Rosanna is very busy attending to her grandkids' school and activities, maintaining the household on her own, and volunteering at her church. She has also been taking classes at a local community college with the goal of obtaining an associate degree. Rosanna hopes to go back to work as a human service professional or a community organizer. She is very closeted about her HIV status, especially in church and around the grandchildren. However, the staff at the methadone clinic are aware of her status, and she also told some fellow classmates at school. Rosanna started taking antiretroviral drugs last year, but she has had a hard time sticking to her complex regimen of didanosine, stavudine, ritonavir, and amprenavir. Even though Rosanna's viral load is now undetectable, she would like to change to an easier HIV regimen, but she's afraid to ask her doctor about this. Rosanna also thinks that her doctor is not paying attention to her HCV. She has heard about interferon-based combination therapy for her HCV infection, but her doctor has never brought it up. She asks for your advice.

Discuss the Following Questions

- How would you approach Rosanna when you discuss adherence with her?
- How would you assess her adherence?
- What specific questions would you ask her?
- What are some of Rosanna's potential barriers to adherence? What supports for adherence does she have?
- What could you suggest to make it easier for Rosanna to adhere to her HIV medications?

Planted Issues

- Drug interactions between methadone and antiretrovirals
- HCV coinfection
- Adherence challenges and supports associated with a busy lifestyle (juggling the demands of kids, work, and household)
- Support and confidentiality in various settings – and their impact on adherence
- Doctor-patient communication about the complexity of the regimen and options for change

Instructor Notes for Melissa

The goal in this case is to facilitate a discussion about the variety of issues facing Melissa. Some of the key lifestyle and psychosocial issues include Melissa's intermittent incarceration and commercial sex work. Both of these issues may have serious health implications. Incarceration can interfere with adherence to both antiretroviral and preventative medications if medications are stopped or unavailable during periods of incarceration. Since Melissa is involved with commercial sex work, her provider should try to engage her in a discussion about prevention issues for people infected with HIV (also called "positive prevention"). The provider should also try to talk with Melissa about the specific health risks she may face as a commercial sex worker (evidenced by her recurrent STDs) as well as her options for negotiating safer sex.

It should also be noted that, according to her most recent blood work, Melissa does not meet the current guidelines for antiretroviral therapy: her CD4 count is greater than 350/mm^3 and her viral load is below 55,000 copies/mL. Participants should be encouraged to discuss why Melissa's doctor might think therapy is appropriate at this time, including the possibility that Melissa's provider is not an HIV specialist and may not be familiar with current clinical recommendations.

Other medical issues that the participants should consider include the antiretroviral medications chosen for Melissa, the significance of her recent weight loss, her continued smoking, and her history of respiratory infections. Participants should also be encouraged to be critical of the provider-patient relationship in this case, since Melissa may be receiving suboptimal care. Also ask participants to identify Melissa's opportunities and barriers to accessing high-quality HIV care.

In addition, we know from her case that Melissa has taken antibiotics in the past and currently uses acyclovir for herpes. When assessing Melissa's readiness to start HIV medications, it would be worthwhile to ask about her adherence experience with antibiotics and acyclovir. It would also be useful to ask whether Melissa's ongoing substance use affects her ability to adhere to medications and access medical care. We know that Melissa uses heroin three to four times a day. The participants may note the Melissa could use her heroin use as cues for taking her HIV medications. Participants should also consider how Melissa feels about starting ART, as well as her willingness to consider drug treatment as part of her HIV health and adherence plan.

Instructor Notes for Raymond

Raymond's case is complex because of the psychosocial and medical issues he faces, including his polysubstance use (both alcohol and cocaine). As the instructor, it is important not to have the unrealistic expectation that all of Raymond's issues will be addressed in the short time available. Instead, this case should be seen as a rich opportunity to explore a wide variety of issues.

Participants should pay special attention to Raymond's work and family situation and consider the impact that his "disclosure status" concerning his HIV and HCV infection may have on his ability to adhere to medications. Participants should also consider the unique challenges related to his corporate lifestyle, the adherence barriers associated with full-time employment, and the strategies Raymond might adopt to help him adhere to ART in a workplace where he is not open about his status.

Clearly, one of the major issues facing Raymond is the nature of his substance use. Cocaine and alcohol have negative affects on adherence rates because of the way they are used (sporadically and inconsistently). In addition, heavy alcohol use can lead to memory lapse and periods of blackout. Although Raymond has been drug-free for six months, participants should still pay special attention to his risk for relapse, the importance of stress as a trigger for his drug use, and his tendency to "disappear" when he picks up. Participants should discuss strategies for determining other aspects of Raymond's "treatment readiness."

Participants should also be encouraged to consider the variety of medical issues that Raymond faces. He is coinfected with HCV and HIV, which places him at risk for accelerated HCV disease progression. His alcohol consumption presents a major health risk. Another point to notice is the selection of ritonavir as part of his treatment regimen. Ritonavir is known to be especially hard on the liver and is probably not an ideal choice for someone with pre-existing liver disease and a history of alcohol abuse.

On the other hand, ritonavir is a powerful antiretroviral in terms of efficacy, and may be more forgiving than other protease inhibitors in terms of missed doses and the risk of viral resistance. Although some providers would elect to start ART when the CD4 count and viral load have reached the levels seen in Raymond, others would not. The most recent guidelines indicate that treatment should be offered, but controversy exists. Participants should carefully consider his provider's decision to prescribe therapy at this stage and may question whether the provider is aware of the extent of Raymond's substance use.

Instructor Notes for Krista

The challenge in this case is to identify both the barriers and – perhaps more important – the supports for HIV adherence and health promotion in Krista's life. For example, we know that Krista has a relationship with her mother, is connected with outreach and shelter services, had a previous connection with DMH, and seems to have an open and positive relationship with her medical provider. However, both her homelessness and mental health status are important psychosocial challenges that participants need to recognize and discuss.

Krista also has some complex and urgent medical issues: Her CD4 count is low (50/mm^3), and her viral load is high (380,000 copies/mL). Because we know that Krista's doctor prescribed trimethoprim/sulfamethoxazole last year, we can assume that her CD4 count has been low at least since then. Encourage participants to consider why Krista's doctor decided to prescribe ART now even though he didn't prescribe it earlier. Also ask them to think about approaches for determining Krista's readiness for ART. For example, how well has she been adhering to her trimethoprim/sulfamethoxazole? Guide the participants to ensure that they spend some time devising strategies to support Krista's efforts to stay healthy and to determine whether antiretroviral therapy is right for her at this stage. Also ask participants to consider interventions that might help Krista adhere to her medications if she decides to start ART at this time. For example, they might suggest linking adherence cues with Krista's participation in the outreach program, and helping her reconnect with DMH services, and encouraging her to try a "mock or rehearsal regimen." By 'rehearsing' their regimen, people can see whether they are ready to start treatment and learn ways to improve their adherence before starting the actual drugs.

Participants might lose sight of Krista's substance use issues when they consider everything else she is facing. Encourage participants to talk about the nature of her substance use, to discuss whether drug treatment is appropriate for her, whether she should initiate psychiatric treatment, and to consider the specific health and adherence challenges arising from Krista's continuing alcohol and crack use. Remind them that the focus should be on adherence challenges, supports, and interventions.

Instructor Notes for Marlon

A discussion of adherence in Marlon's case can focus on his experience with taking medications during the past four years. Since Marlon was able to maintain an undetectable viral load until recently, in all likelihood he had been adherent to his medications. Participants should consider what factors may have contributed to the current failure of his treatment. The possibilities include recent nonadherence to his regimen or the development of viral resistance despite excellent adherence. It is important that participants discuss the latter possibility – that even "perfect" adherence does not lead to viral suppression 100% of the time.

Participants should be prompted, if necessary, to discuss some other important medical issues about Marlon's case. Marlon's doctor stopped his trimethoprim/sulfamethoxazole treatment when his CD4 count rose back to a safe level – typically over 300/mm^3 or 400/mm^3. Marlon may not understand why this medication was stopped and then later restarted when his CD4 count declined. The rapid and sudden increase in Marlon's viral load is evidence that his HIV infection has developed resistance to his current medications, which is further evidenced by the results of his genotype test. Make sure that participants understand what a genotype test is – a blood test that looks at the genetic structure of a person's virus to identify mutations that are believed to confer resistance to specific antiretroviral medications.

Marlon is also facing some psychosocial issues, including his relationship with his partner and his feelings of personal failure since his medications stopped working. There is an opportunity here for participants to identify important information to pass on to Marlon, such as how people may respond to medications differently (his experience versus his partner's experience), and how it is the medications that "fail," not the people who take them. In addition, Marlon's disclosure about anonymous sex and recreational drug use should prompt a discussion about the possible health risks of these behaviors.

Marlon's doctor is proposing a new treatment regimen that includes ritonavir, a medication that is known to have potentially dangerous interactions with recreational drugs. Because Marlon is also engaging in unprotected sex with people whose HIV status he does not know, he risks transmitting the virus to others and potentially re-exposing himself to HIV, which can result in "superinfection" and possible accelerated HIV disease progression. Remind participants that, although there is only limited information about superinfection and interaction between ART and recreational drugs, these are important possibilities to consider.

Instructor Notes for Rosanna

There is no shortage of issues to discuss here. Don't expect that the participants will be able to address all issues in the limited time available. Participants should be guided, if necessary, to discuss some key psychosocial issues, including Rosanna's disclosure of her HIV and HCV status: She has told people at the methadone clinic and some friends at school, but not her grandchildren or members of her church. Be sure that the participants discuss how Rosanna's disclosure may affect her current and future adherence. Keep in mind that her current regimen seems to be working well (her viral load is undetectable), which indicates that she is probably adhering well but that she wants to change to something easier.

Participants may also question why Rosanna is taking such a complex regimen of HIV medications in the first place, since the case indicates that this is her first treatment combination. In addition, participants should pay special attention to the provider-patient relationship. The case indicates that Rosanna feels afraid to talk with her doctor about changing medications, and she also seems to think that her doctor may not be paying adequate attention to her HCV coinfection. Other medical issues in this case include the following: assessing the need for education about HIV and HCV coinfection, drug interactions between antiretrovirals and methadone, and strategies to talk with her medical provider about next steps. Regarding drug interactions, it is important to note that the increase in Rosanna's methadone dose may have been necessitated by drug interactions with ritonavir and amprenavir. Encourage participants to develop strategies to help Rosanna advocate for herself in the medical setting – perhaps by doing role plays with her or helping her develop a list of questions before her next appointment.

Other than Rosanna's participation in a methadone maintenance program, substance use issues are not paramount in this case. However, participants may consider ways to connect Rosanna's HIV and HCV health promotion behaviors with her successful recovery program. Participants should note that Rosanna has a lot going on in her life, including her commitments to her grandchildren, school, church, methadone maintenance, antiretroviral therapy – and now she is considering switching her HIV medications and starting interferon-based therapy for HCV. If necessary, prompt participants to consider what barriers to adherence Rosanna may face in the future, what existing supports she has, and what interventions might provide additional support for her health promotion efforts.

Session 8: Conclusion

Presentation: Take-Home Points

Purpose: To summarize the main points of this module

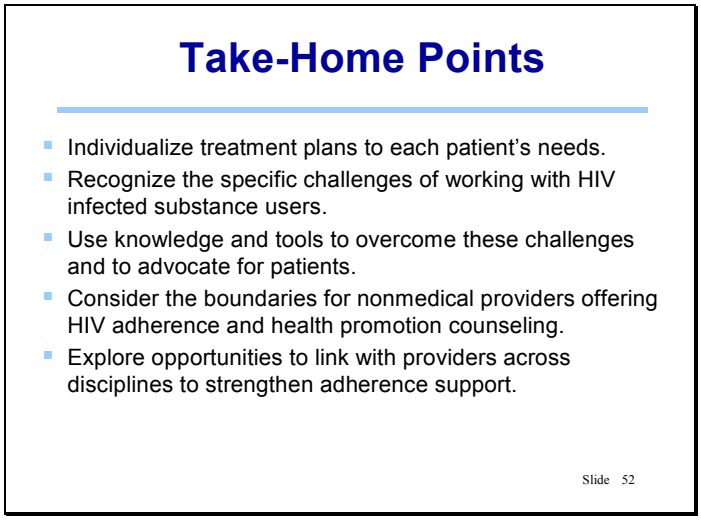
Time: 5 minutes

Materials: Slide 52, "Take-Home Points"

Instructor Notes

1. Briefly summarize the main themes concerning adherence in HIV-infected substance users (Slide 52). Be sure to include the following points:
   - Individualize treatment plans to each patient's needs.
   - Recognize that there are specific challenges when working with HIV-infected substance users, but that these challenges can be overcome.
   - Consider the boundaries that non-medical providers face when they offer counseling on HIV adherence and health promotion.
   - Explore opportunities to link with providers across disciplines to strengthen adherence support for substance-using patients.

2. Take Q & A.



References

Altice, F.L., Friedland, G.H., Cooney, E.L. (1999). Nevirapine induced opiate withdrawal among injection drug users with HIV infection receiving methadone. *AIDS*, 13(8), 957-962.

Antoniou, T., Tseng, A.L. (2002). Interactions between recreational drugs and antiretroviral agents. *Annals of Pharmacotherapy*, 36(10), 1598-1613.

Arnsten, J.H., Demas, P.A., Farzadegan, H., et al. (2001). Antiretroviral therapy adherence and viral suppression in HIV-infected drug users: Comparison of self-report and electronic monitoring. *Clinical Infectious Diseases*, 33(8), 1417-1423.

Arnsten, J.H., Demas, P.A., Grant, R.W., et al. (2002). Impact of active drug use on antiretroviral therapy adherence and viral suppression in HIV-infected drug users. *Journal of General Internal Medicine*, 17(5), 377-381.

Bagasra, O., Pomerantz, R.J. (1993). Human immunodeficiency virus type 1 replication in peripheral blood mononuclear cells in the presence of cocaine. *Journal of Infectious Diseases*, 168(5), 1157-1164.

Bamberger, J., Bangsberg, D., Chamber, D., et al. (June 2000). Adherence to HIV therapies: Critical issues. *Science to Community, Clinical #1*. University of California-San Francisco, San Francisco, California.

Bart PA, Rizzardi PG, Gallant S, et al. Methadone blood concentrations are decreased by the administration of abacavir plus amprenavir.Ther Drug Monit. 2001 Oct;23(5):553-5.

Broers, B., Morabia, A., Hirschel, B. (1994). A cohort study of drug users' compliance with zidovudine treatment. *Archives of Internal Medicine*, 154(10), 1121-1127.

Beauverie, P., Taburet, A. M., Dessalles, M. C., et al. (1998). Therapeutic drug monitoring of methadone in HIV-infected patients receiving protease inhibitors. *AIDS*, 12(18), 2510-2511.

Bruno, R., Sacchi, P., Puoti, M., et al. (2002). HCV chronic hepatitis in patients with HIV: Clinical management issues. *American Journal of Gastroenterology*, 97(7), 1598-1606.

Carmona, A., Knobel, H., Guelar, A., et al. (2000). Factors influencing survival in HIV-infected patients treated with HAART [Abstract TuOrB417]. Presented at 13th International AIDS Conference, Durban, South Africa, July 9-14, 2000.

Cedars-Sinai Medical Center. (2001). *Adherence Now: Best Practices and Practical Tools. Proceedings of a roundtable symposium in November 2001*. World Heath CME, New York, New York.

Centers for Disease Control and Prevention. (2002). Guidelines for using antiretroviral agents among HIV-infected adults and adolescents: Recommendations of the Panel on Clinical

Practices for Treatment of HIV. *MMWR*, 51(RR-7), 1-55. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5107a1.htm)

Centers for Disease Control and Prevention. (1998). Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: Principles of therapy and revised recommendations. *MMWR*, 47(RR-20), 1-58. (http://www.cdc.gov/mmwr/preview/mmwrhtml/00055357.htm)

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

Clarke S., Mulcahy F., Bergin C., et al. (2002). Absence of opioid withdrawal symptoms in patients receiving methadone and the protease inhibitor lopinavir-ritonavir. *Clinical Infectious Diseases*, 34(8), 1143-1145.

Clarke, S., Mulcahy, F., Tija, J., et al. (2001).The pharmacokinetics of methadone in HIV-positive patients receiving the non-nucleoside reverse transcriptase inhibitor efavirenz. *British Journal of Clinical Pharmacology*, 51(3), 213-217.

Department of Health and Human Services (DHHS). Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. March 23, 2004: 1-97. Accessed at http://www.aidsinfo.nih.gov/guidelines/adult/AA_032304.pdf on July 21, 2004.

Eldin, B.R., Seal, K., Lorvick, J., et al. (2001). Is it justifiable to withhold treatment for hepatitis C from illicit injection drug users? *New England Journal of Medicine*, 345(3), 211-214.

Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

Elliot, A. Depression and HIV. (1997). Retrieved December 2002 at the Project Inform website at http://www.projectinform.org.

Ferrando, S.J. (2001). Substance abuse and HIV infection. *Psychiatric Annals*, 31(1), 57-62.

Fried, M.W., Shiffman, M.L., Reddy, K.R., et al. (2002). Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *New Journal of Medicine*, 347(13), 975-982.

Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

Gerber JG, Rosenkranz S, Segal Y, et al. Effect of ritonavir/saquinavir on stereoselective pharmacokinetics of methadone: results of AIDS Clinical Trials Group (ACTG) 401. J Acquir Immune Defic Syndr. 2001 Jun 1;27(2):153-60.

Gordillo V., del Amo, J., Soriano, V., et al. (1999). Sociodemographic and psychological variables influencing adherence to antiretroviral therapy. *AIDS*, 13(13), 1763-1769.

Golin, C.E., Liu, H., Hays, R.D., et al. (2002). A prospective study of predictors of adherence to combination antiretroviral medication. *Journal of General Internal Medicine*, 17(11), 756-765.

Gourevitch, M.N., Friedland, G.H. (2000). Interactions between methadone and medications used to treat HIV infection: A review. *Mount Sinai Journal of Medicine*, 67(5-6), 429-436.

Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

Henry, J.A., Hill, I.R. (1998). Fatal interaction between ritonavir and MDMA. *Lancet*, 352(9142), 1751-1752.

Harrington, R.D., Woodward, J.A., Hooton, T.M., et al. (1999). Life-threatening interactions between HIV-1 protease inhibitors and the illicit drugs MDMA and γ -hydroxybutyrate. *Archives of Internal Medicine*, 159(18), 2221-2224.

Horn, G. (1998). Party favors – Do yourself one: Get the dope on the protease effect. *POZ***,** 36. Available on the *POZ* web site at http://www.poz.com/archive/june1998/partner/warning.html)

Horn, T. (2001). HIV drug resistance and drug resistance testing: Just the FAQ's. *CRIA Update*, 10(4).

Iribarne C, Berthou F, Carlhant D, et al. Inhibition of methadone and buprenorphine N-dealkylations by three HIV-1 protease inhibitors. Drug Metab Dispos. 1998 Mar;26(3):257-60.

Landau, A., Batisse, D., Piketty, C., et al. (2001). Long-term efficacy of combination therapy with interferon-alpha 2b and ribavirin for severe chronic hepatitis C in HIV-infected patients. *AIDS*, 15(16), 2149-2155.

Lauer, G.M., Walker, B.D. (2001). Hepatitis C virus infection. *New England Journal of Medicine*, 345(1), 41-51.

McCance-Katz, E.F., Rainey, P.M., Jatlow, P., et al. (1998). Methadone effects on zidovudine disposition (AIDS Clinical Trials Group 262). *Journal of Acquired Immune Deficiency Syndrome Human Retrovirology*, 18(5), 435-443.

McCance-Katz EF, Rainey PM, Friedland G, Kosten TR, Jatlow P. Effect of opioid dependence pharmacotherapies on zidovudine disposition. Am J Addict. 2001 Fall;10(4):296-307.

McCance-Katz EF, Rainey PM, Friedland G, Jatlow P. The protease inhibitor lopinavir-ritonavir may produce opiate withdrawal in methadone-maintained patients. Clin Infect Dis. 2003 Aug 15;37(4):476-82. Epub 2003 Aug 01.

Murphy, E.L., Collier, A.C., Kalish, L.A., et al. (2001). Highly active antiretroviral therapy decreases mortality and morbidity in patients with advanced HIV disease. *Annals of Internal Medicine*, 135(1), 17-26.

Nasti, G., DiGennaro, G., Tavio, M., et al. (2001). Chronic hepatitis C in HIV infection: Feasibility and sustained efficacy of therapy with interferon alfa-2b and ribavirin. *AIDS*, 15(14), 1783-1787.

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Paterson, D.L., Swindells, S., Mohr, J., et al. (2000). Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine*, 133(1), 21-30.

Peterson, P.K., Gekker, G., Chao, C.C., et al. (1991). Cocaine potentiates HIV-1 replication in human peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 146(1), 81-84.

Peterson, P.K., Gekker, G., Chun, C.C., et al. (1992). Cocaine amplifies HIV-1 replication in cytomegalovirus-stimulated peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 149(2), 676-680.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 at the Project Inform website http://www.projectinform.org/pdf/doctorpatient.pdf.

Rainey, P.M., Friedland, G., McCance-Katz, E.F., et al. (2000). Interaction of methadone with didanosine and stavudine. *Journal of AIDS*, 24(3), 241-248.

Rainey PM, Friedland GH, Snidow JW, et al. The pharmacokinetics of methadone following co-administration with a lamivudine/zidovudine combination tablet in opiate-dependent subjects. Am J Addict. 2002 Winter;11(1):66-74.

Reiter, G.S., Stewart, K.E., Wojtusik, L., Hewitt, R., Segal-Maurer, S., Johnson, M., et al. (2000). Elements of success in HIV clinical care: Multiple interventions that promote adherence. *Topics in HIV Medicine*. 8(5), 21-30.

Richman, D. D., Bozette, S., Morton, S., Chien, S., Wrin, T., Dawson, K., Hellmann, N. "The Prevalence of Antiretrviral Drug Resistance in the U.S." (Abstract LB-17), 41st Intersceince Conference on Antimicrobial Agents and Chemotherapy, 2001.

Roth, M.D., Tashkin, D.P., Choi, R., et al. (2002). Cocaine enhances human immunodeficiency virus replication in a model of severe combined immunodeficient mice implanted with human peripheral blood leukocytes. *Journal of Infectious Diseases*, 185(5), 701-705.

Samet, J.H., Libman, H., Steger, K.A., et al. (1992). Compliance with zidovudine therapy in patients infected with human immunodeficiency virus, type 1: A cross-sectional study in a municipal hospital clinic. *American Journal of Medicine*, 92(5), 495-502.

Selwyn, P.A., Hartel, D., Lewis, V.A., et al. (1989). A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. *New England Journal of Medicine*, 320(9), 545-550.

Selwyn, P.A., Feingold, A.R., Hartel, D., et al. (1988). Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. *AIDS*, 2(4), 267-272.

Shapiro, M.F., Morton, S.C., McCaffrey, D.F., et al. (1999). Variations in the care of HIV-infected adults in the United States: Results from the HIV Cost and Services Utilization Study. *JAMA*, 281(24), 2305-2315.

Shelton MJ, Cloen D, DiFrancesco R, et al. The effects of once-daily saquinavir/minidose ritonavir on the pharmacokinetics of methadone. J Clin Pharmacol. 2004 Mar;44(3):293-304.

Sherer, R. (1998). Adherence and antiretroviral therapy in injection drug users. *JAMA*, 280(6), 567-568.

Soto, B., Sanchez-Quijano, A., Rodrigo, L., et al. (1997). Human immunodeficiency virus infection modifies the natural history of chronic parenterally-acquired hepatitis C with an unusually rapid progression to cirrhosis. *Journal of Hepatology*, 26(1), 1-5.

Strathdee, S.A., Palepu, A., Cornelisse, P.G., et al. (1998). Barriers to use of free antiretroviral therapy in injection drug users. *JAMA*, 280(6), 547-549.

Staszewski, S., Haberl, A., Gute, P., et al. (1998). Nevirapine/didanosine/lamivudine once daily in HIV-1-infected intravenous drug users. *Antiviral Therapy*, 3(Suppl 4), 55-56.

Stein, J.A., Gelberg L. (1997). Comparability and representativeness of clinical homeless, community homeless, and domiciled clinic samples: Physical and mental health, substance use, and health services utilization. *Health Psychology*, 16(2), 155-162.

Stevens RC, Rapaport S, Maroldo-Connelly L, Patterson JB, Bertz R. (2003). Lack of methadone dose alterations or withdrawal symptoms during therapy with lopinavir/ritonavir. J Acquir Immune Defic Syndr.Aug 15;33(5):650-1.

Stone, V.E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases*, 33(6), 865-872.

Sullivan L. Drug interaction guide: Opioids and HIV antiretroviral agents. Draft. July 22, 2004. Supported by NY/NJ AETC, HRSA.

Urbina A, Jones K. (2004). Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. Mar 15;38(6):890-4.

Walsh, J.C., Hertogs, K., Gazzard, B. (2000). Viral drug resistance, adherence and pharmacokinetic indices in HIV-1 infected patients on successful and failing protease inhibitor (PI) based highly active antiretroviral therapy (HAART) [Abstract 699]. Presented at the 40th Interscience Conference of Antimicrobial Agents and Chemotherapy, Toronto, Canada, September 17-20, 2000, 294.

Whalen, C., Horsburgh, C.R., Hom, D., et al. (1995). Accelerated course of human immunodeficiency virus infection after tuberculosis. *American Journal of Respiratory Critical Care Medicine*, 151(1), 129-135.

Williams, A., Friedland, G. (1997). Adherence, compliance, and HAART. *AIDS Clinical Care*, 9(7), 51-54, 58.

Reading List

University of California San Francisco. (2002). *Addressing the challenges of adherence. Navigating emerging challenges to long-term HIV therapy*. World Heath CME, New York, New York.

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Project Inform. (October 2002). Adherence: Keeping up with your meds. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/adherence.pdf.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/doctorpatient.pdf

Suggested Replication Training:
Health Promotion and Adherence for a Mixed Audience

Table of Contents

TOTAL TIME: 2 – 2.5 Hours, depending on the number of case studies selected.

Introduction

Background and Purpose

The purpose of this training is to provide participants with strategies and tools to promote the health of HIV-infected substance users.

Providing HIV medical care to persons with past or present substance use presents special challenges. First, drug and alcohol use complicate the planning and delivery of care. Providers must be aware of biological issues, including interactions between HIV medications and recreational drugs, as well as changes that prolonged drug or alcohol use can have on the absorption and effectiveness of medications. In addition, HIV-infected substance users often have comorbid conditions, such as hepatitis C infection, which may complicate the management of HIV disease and create competing healthcare priorities. Providers must also be knowledgeable about the social context of different kinds of substance use. Social factors may affect the ways that people become engaged in medical care, their retention in care, and their adherence to treatment.

The second major challenge of providing HIV medical care to this population is that providers may have preconceptions about drug and alcohol use. Like everyone else, providers are exposed to and influenced by the many media portrayals of people who use alcohol or drugs. Almost all of these images are negative; even the relatively few sympathetic or compassionate portrayals rarely show substance users as whole, complex human beings. Stereotypes and myths about substance use and substance users can limit a provider's capacity to support adherence and provide optimal care.

As providers, we have the responsibility to acknowledge and analyze our preconceptions, and then consciously put them aside. We need to recognize that these negative images may make substance users feel powerless to adopt changes that will promote their health. Consequently, we also need to help HIV-infected substance users recognize that they have the capacity to protect and improve their health. We can raise their awareness of the behavioral and environmental resources that promote health. We can also work with them to develop dynamic strategies for HIV adherence that fit into the context of their lives.

A third, and perhaps even larger challenge, is to distinguish the true biological and social challenges from the harmful stereotypes of substance use and substance users. In this training, we deal with both the truths and the myths that affect the quality of care that substance users receive and their ability to adhere to HIV treatment. However, it is important to recognize that learning the distinctions between these truths and myths is a difficult, ongoing process – certainly not something that can be fully sorted out and mastered in the short time allotted for this training. We can better understand that HIV-infected substance users do not fit any stereotype, can explore the adherence challenges of substance users and consider the vast range of adherence interventions that may promote their health.

Resource Materials

Slides:
A PowerPoint presentation for this adherence module is included in the curriculum. This presentation should be run concurrently with the module. To help participants follow the presentation, we have listed the specific slides that correspond to each session in the module.

References and Reading Packet:
Full citations for the data presented in this training are provided in the "References" section at the end of the module. A reading packet may be given to participants, and the suggested items include information about:

- Addressing the challenges of adherence. Navigating emerging challenges in long-term HIV therapy
- Factors affecting adherence to antiretroviral therapy
- The challenge of adherence
- Adherence: Keeping up with your meds
- Building a cooperative doctor/patient relationship
- Medical progress: Medical care for injection-drug users with HIV infection

Handouts:

1. List of HIV medications (Page 6)
2. *Adherence Now* teaching cards (See page 15*)
3. Reprint: *Guidelines for the Use of Antiretroviral Agents in HIV Infected Adults and Adolescents* (See page 11*)
4. "Areas of Challenge" Worksheet (Page 18)
5. Interactions between Antiretroviral Medications and Methadone (Page 31)
6. Interactions between Antiretroviral Medications and Recreational Drugs (Page 32)
7. Commonly Abused Substances and Possible Interactions with HIV drugs (See page 33*)
8. Pre-Appointment Questionnaire from *Adherence Now* (Page 36)
9. Case studies (Pages 42-46)

**The facilitator needs to acquire these resources in advance of the training.*

Other Materials Needed:

- Self-stick notes
- Flipcharts
- LCD projector
- Screen
- Colored Markers
- Tape

Objectives

By the end of this module, participants will be able to

- Define adherence broadly and understand its significance

- Recognize that substance users may experience different medical complications of HIV infection than those experienced by other risk groups
- Identify effective techniques and useful resources for promoting health
- Develop approaches for tailoring health promotion interventions to the specific needs of substance-using patients

Key Facts

- Health promotion is more than just adherence to medications.
- A broad view of adherence actively engages patients in health care and treatment and provides them with more opportunities for success.
- In order to be effective, providers need to recognize their biases and judgments about adherence issues—especially for substance users.
- Substance users are not a homogeneous population—each individual has unique needs and challenges to overcome.
- With the proper support services and primary care, substance users can achieve equal levels of success as non-substance users.

Session 1: Introductions and Icebreaker

Purpose: To introduce training participants to each other and the instructor, to gain an initial "read" on the participants, and to start the interactive process.

Time: 10 minutes

Materials
- Handout 1, "Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment"

Instructor Notes
1. Once the participants have arrived, take three minutes to introduce yourself, talk briefly about the presentation style, remind people to approach the day with an open mind, encourage interaction, and add any personal touch that you feel is appropriate. If you wish, you may also talk briefly about the terminology you will use throughout the presentation. For example, the use of the words "patient" versus "client," "ART" (antiretroviral therapy) versus "HAART" (highly active antiretroviral therapy), and "substance user" versus "substance abuser" or "addict."

2. Ask the participants to introduce themselves by name, agency, and job.

3. Use a brief ice-breaker of your choosing to get an initial "read" on the participants and begin the interactive process. Here is one suggestion:

    - Ask each of the participants to give a one-sentence description of what they believe adherence to be, as part of their introduction

4. Distribute Handout 1**,** "Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment" and note that it will be useful throughout the training as an easy reference on the many different antiretroviral drugs that are now used.

Handout 1: Alphabetical Lists of Antiretroviral Drugs Used in HIV Treatment

The following table was developed to reduce confusion concerning the different names of drugs used for HIV treatment. It is derived from the publication "Antiviral Drug Names" (Fact Sheet 401) from the New Mexico AIDS InfoNet.

Protease Inhibitors

- Agenerase (Amprenavir)
- Crixivan (Indinavir)
- Fortovase (Saquinavir)
- Invirase (Saquinavir)
- Kaletra (Lopinavir/ritonavir)
- Lexiva (Fosamprenavir)
- Norvir (Ritonavir)
- Reyataz (Atazanavir)
- Viracept (Nelfinavir)

Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs or "non-nukes")

- Rescriptor (Delvirdine)
- Sustiva (Efavirenz)
- Viramune (Nevirapine)

Nucleoside Reverse Transcriptase Inhibitors (NRTIs or "nukes")

- Combivir (Lamivudine/3TC + zidovudine/AZT)
- Emtriva (Emtricitabine)
- Epivir (Lamivudine/3TC)
- Hivid (Zalcitabine)
- Retrovir (Zidovudine/AZT)
- Trizivir (Abacavir + lamivudine/3TC + zidovudine/AZT)
- Videx (Didanosine/DDI)
- Viread (Tenofovir)
- Zerit (Stavudine/D4T)
- Ziagen (Abacavir)

Fusion Inhibitor

Fuzeon (Enfuvirtide/T-20)

Note that lopinavir is actually only available in combination with a small dose of ritonavir and sold under the trade name Kaletra.

Session 2: Adherence and Health Promotion

Purpose

- To identify the medical definition of adherence.
- To illustrate that adherence is *not only* about taking one's medications; in some cases, a patient is not ready to be on a regimen but can still be "adherent" to medical treatment in many other ways
- To show that nonadherence to medications is pervasive in both substance-using and non-substance-using populations
- To introduce the variety of psychosocial factors that impact adherence
- To show how thinking about adherence broadly gives a patient more opportunity for success

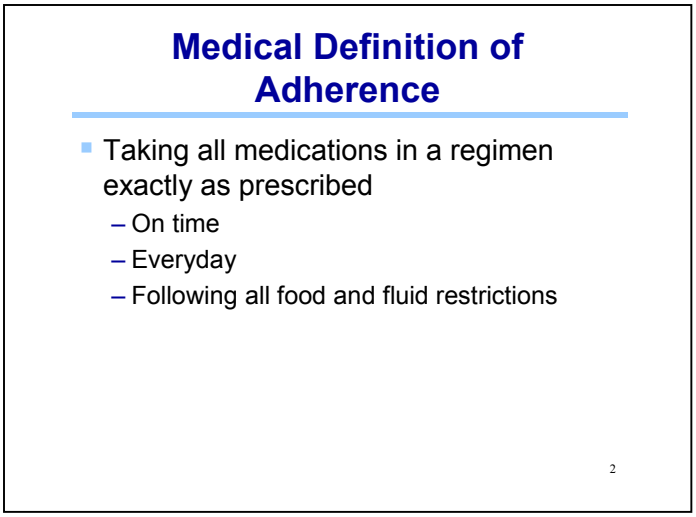
Time: 15 minutes

Materials

- Flipchart, colored markers, and tape
- Slide 2, "Medical Definition of Adherence"
- Slide 3, "Expanded Definition of Adherence"
- Slide 4, "What is Health Promotion?"
- Slide 5, "Why Adopt a Broad View of Adherence?"
- Slide 6, "Why Focus on HIV Adherence in Substance Users?"
- Slide 7, "Factors Leading to Poor Adherence to ART"

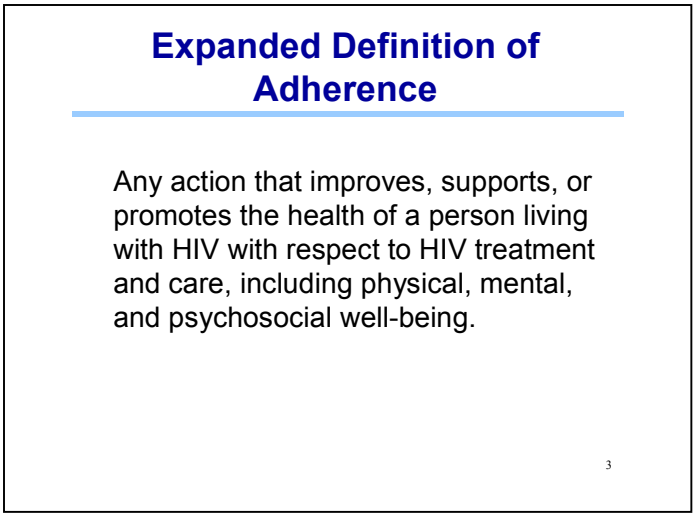
Instructor Notes

1. Slide 2 indicates what most people already know about medication adherence. Emphasize that this is only *one part* of adherence.

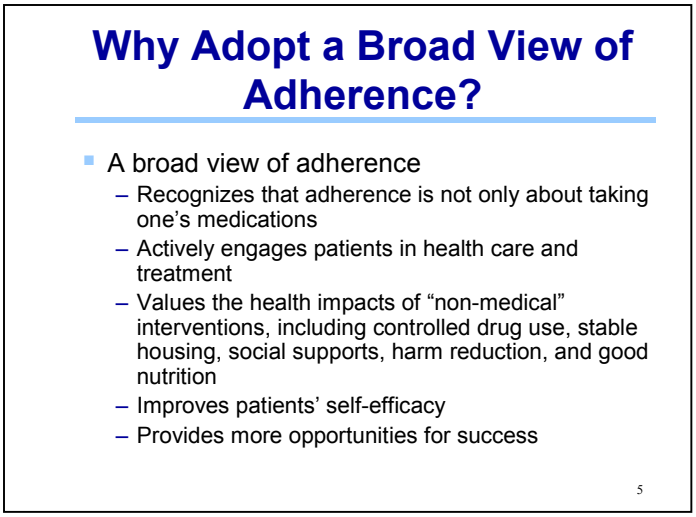


2. Ask participants to raise their hands if they have ever had to take a 7-10 day dose of antibiotics. Then ask how many people missed taking *any of doses* at the right time of day to keep their hands raised. Make the point that nonadherence to HIV medications is common even among persons who are not substance users.

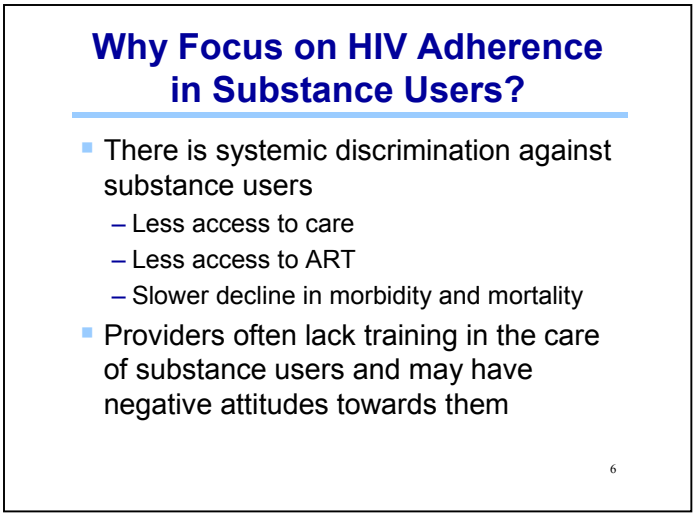
3. Slide 3 is a sample of an expanded definition of adherence, and Slide 4 gives specific components of this definition. Ask participants to name other health promotion activities that would fit under this broader definition. Record responses on the flip chart.



4. Use Slide 5 to summarize the importance of adopting a broad view of adherence.



5. Present slides 6-7. Emphasize that substance users are often discriminated against and have less access to care, less access to ART, and a slower decline in morbidity and mortality.



6. Part of the reason for substance users' reduced access and poorer response to care is that providers lack training to care for this special population and may have negative attitudes toward substance users. Highlight the fact that nonenrollment in drug treatment and active injection drug use top the list of factors that reduce access to ART (Slide 7).
7. Ask participants if they can think of other factors that lead to poor access to ART.

Factors Leading to Poor Access to ART

- Not in drug treatment
- Active injection drug use
- Lack of primary medical care
- Uninsured
- Physicians with little HIV experience
- Women
- Youth

Strathdee, 1998

7

Session 3: Why Is Adherence to Antiretroviral Medications So Important?

Presentation: The Importance of Adherence to Antiretroviral Medications

Purpose: To illustrate why adherence to antiretroviral medications is so important if an individual is ready to take them, and to emphasize that it is *rarely, if ever, an emergency* to start ART.

Time: 15 minutes

Materials

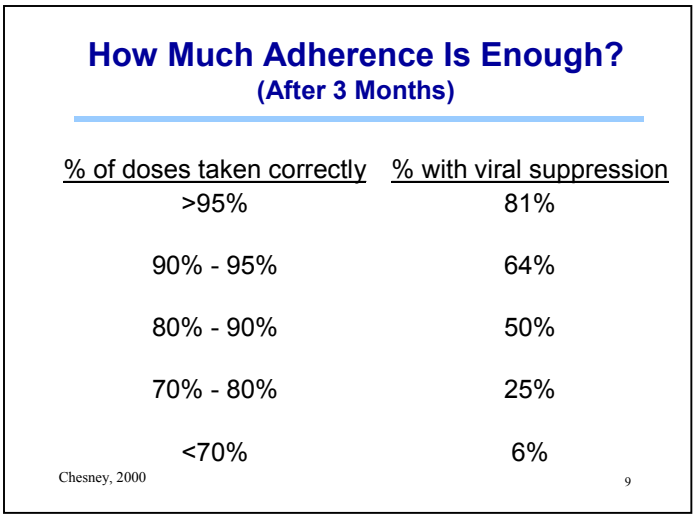
- Handout 2, "'Adherence Now' Teaching Cards" (from "Adherence Now" packet)
- Handout 3, *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*. Obtain a new copy of Table 6 from *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents*. These guidelines are updated every six months. Before the training you can access the latest version of the guidelines from **http://www.aidsinfo.nih.gov/guidelines/default_db2.asp?id=50)**.
- Handout 4, "Areas of Challenge Worksheet"
- Slide 8, "Why Is Adherence to Antiretroviral Medications So Important?"
- Slide 9, "How Much Adherence Is Enough?"
- Slide 10, "Treatment Failure"
- Slide 11, "Relationship Between Level of Adherence and Risk of Resistance"
- Slide 12, "What Are the Practical Implications?"
- Slide 13, "Take Control of Nonadherence"
- Slide 14, "Treatment Readiness"
- Slide 15, "Considerations When Evaluating Treatment Readiness"
- Slide 16, "Medication Adherence and Drug of Choice"
- Flip Chart, markers, newsprint

Instructor Notes

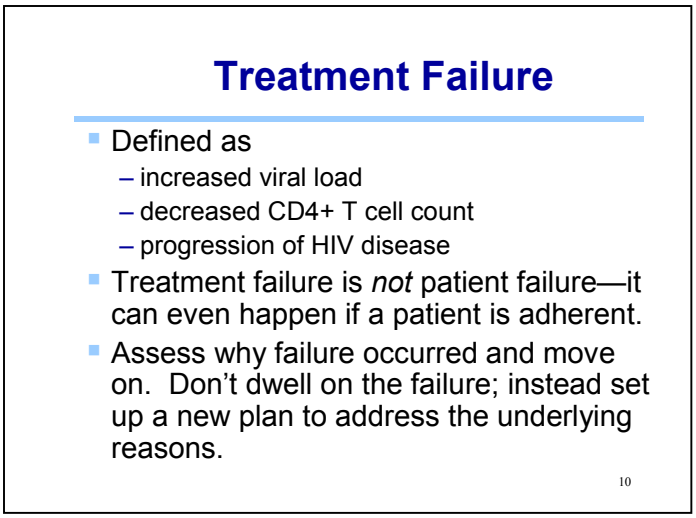
1. On newsprint, write out the 3 main areas of challenges: Client focused, Regimen focused; and Provider focused. Place on the flip chart or the wall.

2. Present Slide 8 and note that this is the cornerstone of HIV treatment – for everyone, not just substance users.

3. Emphasize that adherence is not an easy task and that the high adherence standard of 95%—that has been established by research—is extremely difficult for most people to achieve (Slide 9).

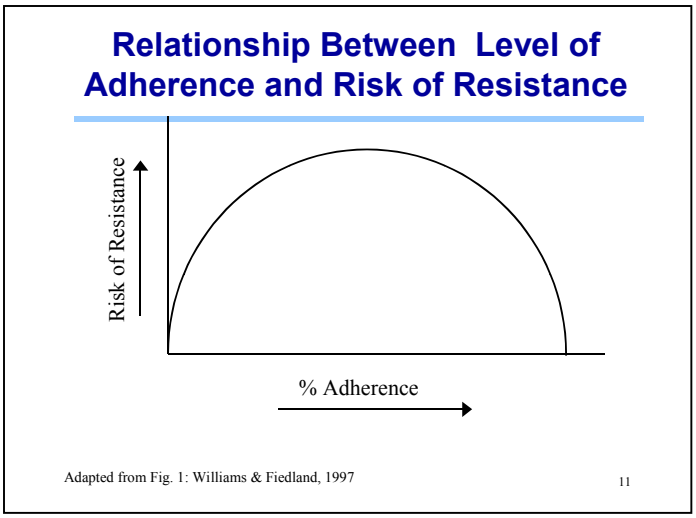


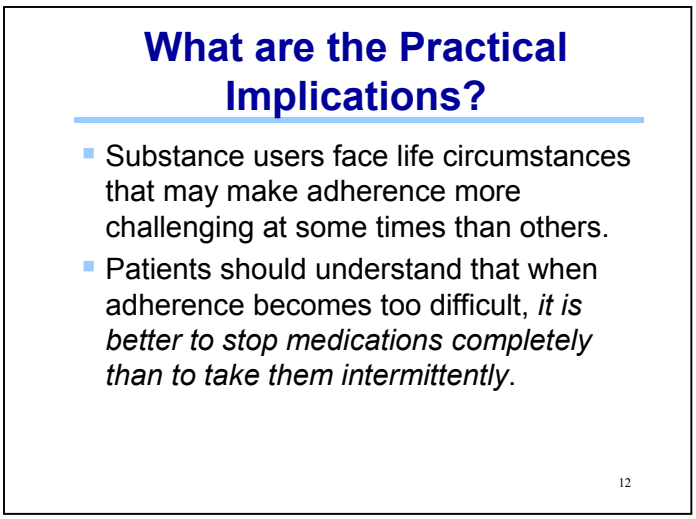
4. If this adherence goal is not presented to HIV-infected patients in a sensitive way, then it may set them up for failure. It is also important to note that, even when people achieve 95% adherence, they can still experience treatment failure. It is important to educate patients on the importance of adherence, but also make it known to them that treatment failure is not patient failure (Slide 10). In addition, patients need to know that many supports are available to help them meet the challenge of adherence. We will talk about supports shortly.



5. Give an example from your own experience to illustrate these points to the audience.

6. Introduce the concepts of antiretroviral drug resistance, transmission of resistant strains of HIV, and the relationship between adherence and drug resistance (Slide 11). Note that one of the main arguments that is made against prescribing ART to drug users is that they won't adhere and that, as a result, their HIV infection will become resistant to HIV meds. This in turn will lead to the transmission of drug-resistant HIV to others. Be sure to cover the following points:
   - If a person is completely nonadherent (takes none of his or her medications), the chances of drug resistance are extremely low, because the virus is not exposed to any medication to become resistant to.
   - Conversely, if person's adherence is very high (takes close to 100% of his or her medications correctly), then the risk of drug resistance is quite low. This is because an effective regimen should suppress viral replication to such an extent that very few viruses are produced.
   - The greatest risk for drug resistance occurs when a person takes his or her HIV medications intermittently. Taking medications intermittently gives the virus the perfect opportunity to develop resistance, because it has an opportunity to multiply in the presence of medications.
   - To summarize, if there is no medication in the body, there is nothing for the virus to work with to become resistant. Conversely, if there is a consistently high level of medication around, the virus has little opportunity to grow and change. Use Slide 11 to illustrate these points graphically. The take-home message is that, if people start using recreational drugs again or feel for any reason that they cannot stick with their regimen, they should stop all their medications at once and not "wean" themselves off (Slide 12).





7. Although there is a narrow window of opportunity for the development of drug resistance when someone stops medications, in all likelihood a complete cessation of medications will not result in the selection of drug resistance variants. In fact, stopping medications in this fashion increases the likelihood that a client could resume the same combination of medications when they were able/prepared to commit to ART adherence again (Slide 13).

Take Control of Nonadherence

- Remind patients that even if they cannot adhere, *they can still make a health promoting choice* to minimize resistance by stopping medications all at once.
- Some situations in which patients may want to do this include
  - Incarceration (if meds are not available)
  - Picking up substance use after a period of being drug-free (aka: "relapse")
  - Sudden loss of housing, travel, or relocation

13

8. Distribute Handout 2: "Teaching Cards" from the 'Adherence Now' packet. These laminated cards can help you illustrate the benefits of adherence to your patients. The front of each card contains a graphic image demonstrating the benefits of adherence, while the back of the card contains bullet points that a provider can emphasize. Write down on the flip chart where additional copies of the "Adherence Now" materials can be obtained at no cost:
   World Health CME
   41 Madison Ave.
   New York, NY 10010-2202
   Tel: (800) 433-4584, ext. 1776
   e-mail: erivera@whcom.com

Treatment Readiness

Remember…

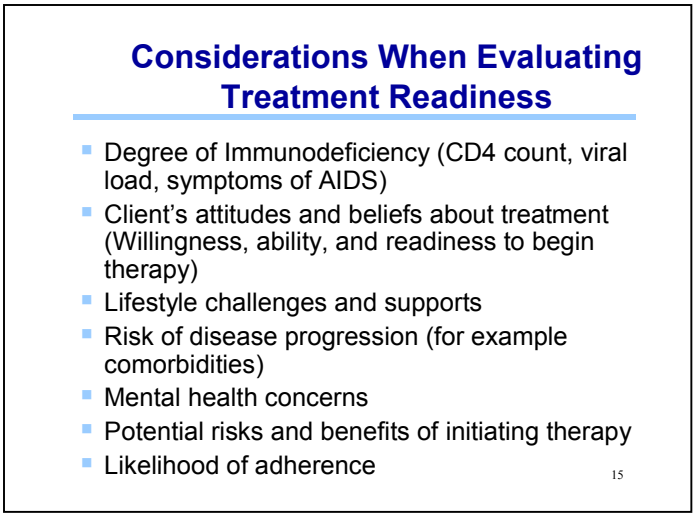
- HIV treatment with antiretrovirals is rarely if ever an emergency.
- There is always time to consider a treatment decision before starting therapy.

14

9. Remind participants that it is crucial to remember the broader perspective on adherence when thinking about adherence to antiretroviral medications. Taking HIV medications is only part of the patient's overall well-being. *It is rarely, if ever, an emergency to start antiretroviral*

therapy (Slide 14). In fact, it may be more harmful than helpful to prescribe antiretroviral medications if a person is not ready to take them.

10. Present Slide 15 and distribute Handout 3. Explain that the handout is the most current recommended treatment guidelines for HIV antiretrovirals.



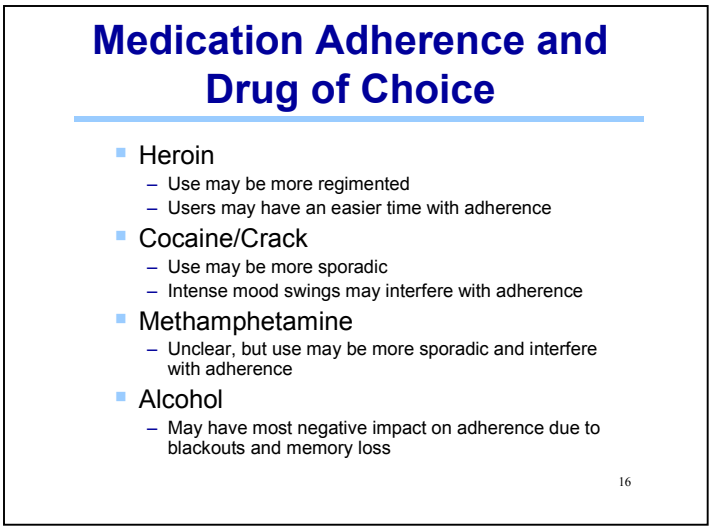
11. Note that assessing the likelihood of adherence is a controversial issue, and that physicians are not much better than anyone else in figuring this out.

12. Talk briefly about three broad categories of factors that impact adherence (Patient Factors, Regimen Factors and Provider Factors) and distribute Handout 4: Areas of Challenge Worksheet. Note that they will use this worksheet later on, during the case studies. Ask participants to write down 3-5 factors that impact adherence, and put them in one of the 3 main categories.

13. Then go around the room and ask people what they wrote, and record the answers on the flip chart or newsprint. Be sure that the following issues get mentioned, or mention them yourself at the end:
    - Patient factors (including social support and isolation, knowledge, beliefs, and attitudes, self-confidence in the ability to stick to treatment, substance use, and mental health status)
    - Provider factors (access to care, interdisciplinary care, provider biases, communication, trust)
    - Regimen factors (complexity of regimen, dosing schedule, pill size, side effects, food and water restrictions and drug interactions).

14. Conclude this session by emphasizing that factors that influence adherence vary from person to person. That is, different people have different facilitators and barriers. One important factor that influences adherence is the drug or drugs of choice. Slide 16 shows some of the ways in which the drug of choice may affect adherence. In this discussion, you may refer to a study (Arnsten, 2002) in which active cocaine use was associated with a 41% decline in

median adherence and was a strong predictor of failure to maintain viral suppression. In this study, active heroin users also had lower adherence than nonusers, but the difference was not statistically significant.



Handout 4: Areas of Challenge Worksheet

	Issues	Interventions
Client Focused		
Regimen Focused		
Care Provider Focused		

Session 4: The Politics of Adherence

Activity: Agree or Disagree?

Purpose: To raise some controversial issues and allow participants to express their opinions about these issues

Time: 10 minutes

Materials

- Colored markers, newsprint paper, and tape
- Slide 17, "Politics of Adherence"
- Slide 18-19, "Agree or Disagree?" (Note: pick one of these slides)
- Slide 20, "Nonmedical Providers' Roles" (if you select Slide 17 or 18)
- Slide 21 "Agree or Disagree?"
- Slide 22 "Abstinence and Antiretroviral Therapy" (if you select Slide 21)

Instructor Notes

1. Select one of the three "Agree" or "Disagree" statements for this exercise (Slides 18, 19, or 21), based on your assessment of the training audience and the relevance of these issues to them.
   - "Nonmedical providers should counsel HIV-infected substance users about antiretroviral therapy."
   - "Conversations about HIV treatment adherence belong in the substance use treatment setting."
   - "A person should be drug free for ___ before they can start antiretroviral therapy." If you select this "Agree" or "Disagree" statement, ask participants to fill in the blank with an amount of time that they think is appropriate, such as one month, three months, or six months.

2. In preparation for the session, make three signs that say "Agree," "Disagree," and "Both Agree and Disagree." Post these signs in three different parts of the room.

3. Introduce the activity. Acknowledge that some of the issues related to adherence and substance use are controversial and that this exercise gives participants a forum to discuss their opinions. You may use Slide 17 to introduce the activity.

Politics of Adherence

- What are your opinions about these controversial adherence issues?
- Decide whether you
  - Agree
  - Disagree
  - Both agree and disagree
- Let us know what you think!

17

4. Show the selected slide for the "Agree or Disagree" exercise and read it, and then ask participants to move to the part of the room that matches their opinion about that statement – agree, disagree, or both agree and disagree. Once participants have moved to their respective positions, facilitate a discussion by asking the people in each position to explain some of the reasons for their stance. Let participants know that the position they pick does not have to be permanent; that is, they can later change their minds and switch to another position.

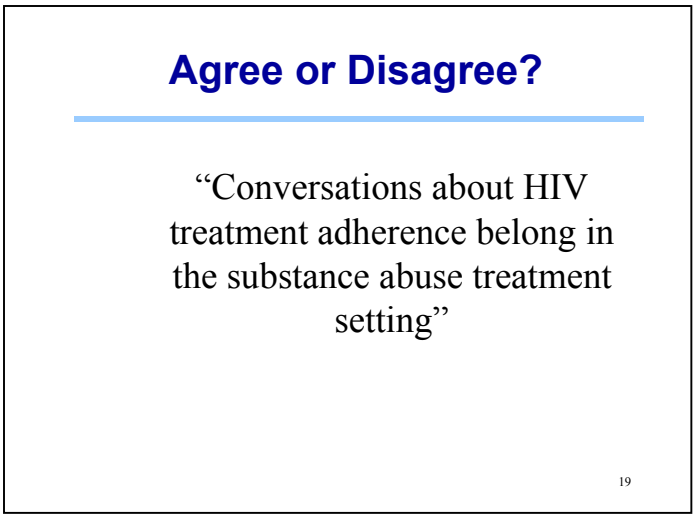
5. Slides 18 and 19 are designed to bring out participants' opinions on the roles and qualifications of non-medical providers. Slide 20 can be used to facilitate discussion on these issues.

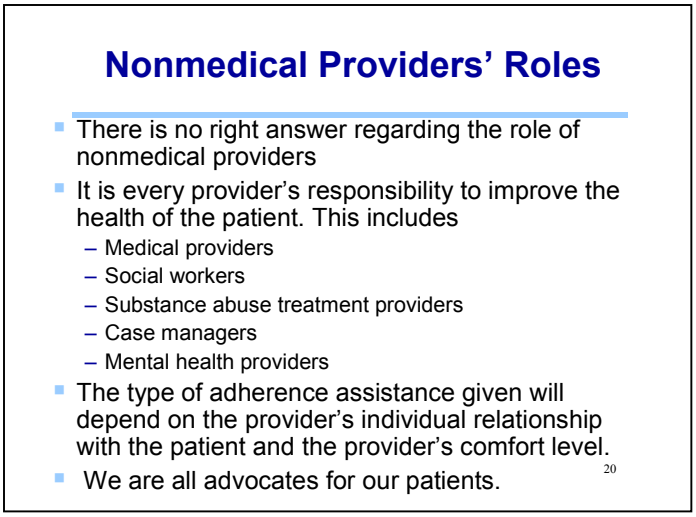
Agree or Disagree?

"Nonmedical providers should counsel HIV-infected substance users about antiretroviral therapy."

18

6. Slide 19 gets at the issue of priorities in substance abuse treatment settings. Should HIV issues be paramount in early recovery, or should there be a narrow focus on concerns directly related to substance use?





7. Slide 21 explores peoples' beliefs about how long a person should be abstinent from drugs before starting ART. Use Slide 22 to help facilitate this discussion.

Agree or Disagree?

"An individual should be drug free for *one month* before they can start antiretroviral therapy."

"An individual should be drug free for *three months* before they can start antiretroviral therapy."

"An individual should be drug free for *six months* before they can start antiretroviral therapy."

21

Abstinence and Antiretroviral Therapy

- There is no right answer.
- Studies have shown active drug use is associated with less adherence.
- What is the influence of drug of choice, housing, support network, and so forth?
- The decision to start ART depends on the person's specific circumstances.
- Providers and patients should make informed decisions about ART.

Golin, 2002; Stone, 2001

22

Instructor Notes:

Do not feel you have to address all the myths and misconceptions that may come up during this discussion. Some of these issues will be addressed later in the training.

Session 5: The Broader Context of Health for HIV-Infected Substance Users

Presentation: Medical Issues

Purpose: To learn about the broader context of health and medical complications for HIV-infected substance users

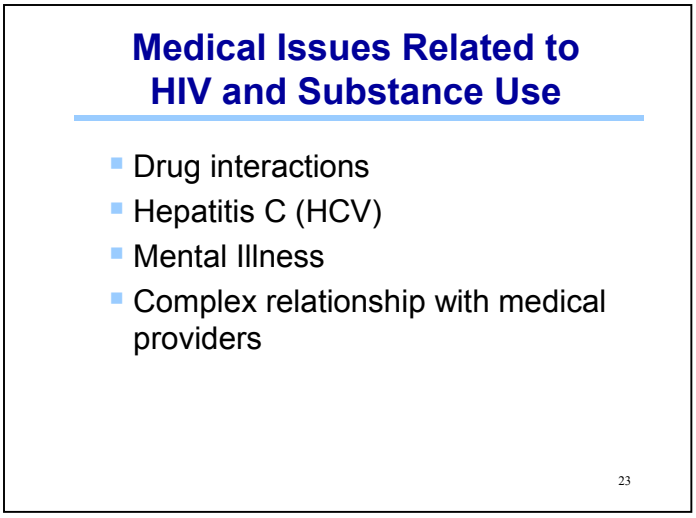
Time: 30 minutes

Materials

- Handout 5, "Interactions Between HIV-Related Medications and Methadone"
- Handout 6, "Interactions Between Antiretroviral Medications and Recreational Drugs"
- Handout 7, "Commonly Abused Substances and Possible Interactions With HIV Drugs"
- Slide 23, "Medical Issues Related to HIV and Substance Use"
- Slide 24, "Methadone Interactions"
- Slide 25, "Recreational Drug Interactions With ART"
- Slide 26, "Illicit Drug Interactions with ART"
- Slide 27, "Talking About Recreational Drug Interactions"
- Slide 28, "HCV Infection"
- Slide 29, "HCV and HIV"
- Slide 30, "HCV Treatment Issues"
- Slide 31, "HCV Treatment"
- Slide 32, "HIV and Mental Illness"
- Slide 33, "Other Complications of Substance Use"
- Slide 34, "Priorities and Motivations"

Instructor Notes

1. Note that HIV-infected substance users may experience drug interactions and other medical complications that are specific to their substance use (Slide 23). A few examples of such conditions are presented below:
   - Hepatitis C (HCV) coinfection is common among HIV-infected injection drug users. In this population, HIV infection has been linked to more aggressive progression of HCV disease (Lauer, 2001; Soto, 1997; Bruno, 2002; Landau, 2001; Nasti, 2001).
   - Mental illness may also create significant adherence barriers if a person's mental health status interferes with memory or motivation. For example, depression, which is the most common mental illness among substance users, may affect both memory and motivation (Stone, 2001; Sherer, 1998; Elliot, 1997).



3. Introduce basic information about drug interactions, referring to the relevant information in Handouts 5-7 and Slides 24-25. It is important to note that there are many drugs that have not yet been studied and also that many of the studies have been conducted are on a small number of patients making it hard to generalize from them. Note that most drug interactions occur in the liver and are due to speeding up or slowing down the metabolism of the drug.

4. Note the interaction between methadone and protease inhibitors (PIs) and NRTIs often leads to a significant decrease in methadone levels. Talk about how that might impact a person's drug treatment (Slide 24). Also note that the co-administration of methadone with nucleoside reverse transcriptase inhibitors (NRTIs) generally does not affect methadone levels, although it may increase or decrease some NRTI levels. However, the clinical effect is minimal.

Methadone Interactions

Antiretroviral Medication	Drug Interaction
Protease Inhibitors	↓ Methadone 35-53%
NNRTI's	↓ Methadone 46-52%
NRTI's	May ↓ or ↑ NRTI No effect on methadone

Beauverie, 1998;Gourevitch, 2000; Antoniou, 2002, Clarke, 2002

24

Recreational Drug Interactions With ART

- Interactions are complex, inconsistent, and difficult to predict.
- Interactions may be affected by drug purity, mode of ingestion, and baseline liver and kidney function.
- Interactions with HIV meds may be extremely dangerous or even fatal.
- "Take heed, club lovers - there's no map for these trips." (Horn, 1998)

25

5. We know very little about the interactions between HIV medications and recreational drugs (Slide 25). However, **most of the interactions that have been reported involve ritonavir.** You can mention the following examples of interactions if people express more interest in this topic:
    - Amphetamines may increase by 2-3 times when someone is taking ritonavir
    - Cocaine increases HIV replication and decreases immune system function
    - Ecstasy, when taken with ritonavir, may result in overdose or death
    - GHB (liquid X) increases in potency with ritonavir or saquinavir
    - Heroin levels may decrease by 50% or increase with ritonavir.

Illicit Drug Interactions With ART

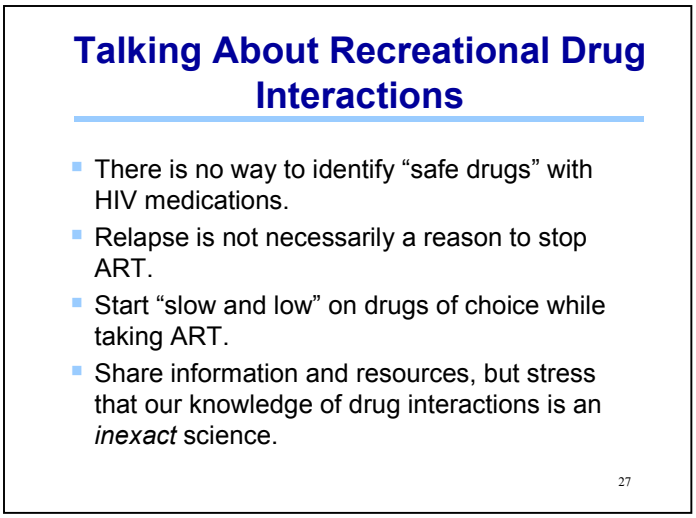
Drug	Effect
Amphetamines	may ↑ level 2-3 fold with **ritonavir**
Methamphetamine	↑ HIV replication, fatal OD with **ritonavir**/saquinavir
Cocaine	↑ HIV replication, ↓ immune system function
Ecstasy (MDMA)	Over dose or death with **ritonavir**
GHB (liquid X)	↑ levels with **ritonavir** or saquinavir
Heroin	levels may ↓ or ↑ with **ritonavir**

Antoniou, Henry, Harrington, Roth, Bagasra, Peterson 1991 & 1992, Ellis, Gavrilin, Urbina, Hales

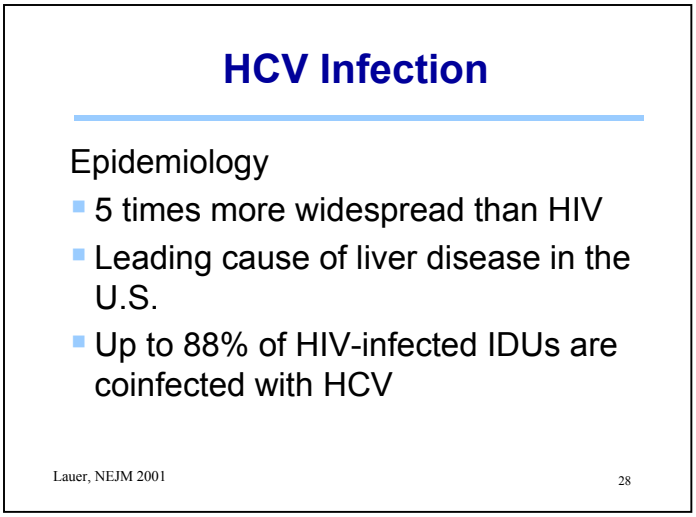
26

6. The most important point to emphasize about drug interactions is that while little is known about them, it is really important for patients to discuss their drug use with their health care providers so that where information is known about interactions, the right drugs and right

doses can be prescribed (Slide 27). This may be hard for them to do, and it is a very important area where advocates, peers and others can provide support and help.



7. Introduce the topic of comorbidities, referring to the information in Slides 28-30. Explain how comorbidities, such as hepatitis B and C, are fairly common among substance users and should be considered in their treatment plans. Here are some other points to raise:
   - HCV infection is very common among drug users – much more common than HIV infection.
   - Note some of the challenges of current treatment for HCV (Slides 31). For example, some HCV medications are administered through injection, which may be problematic for some substance users. In addition, HCV treatment has a low to moderate success rate, and the side effects are very difficult to tolerate.

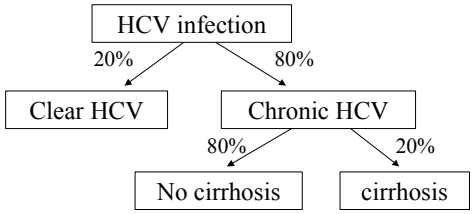


HCV and HIV

- HIV's effect on HCV
  - Accelerates hepatitis C disease
  - Leads to cirrhosis more quickly
  - No difference in response to HCV treatment
- HCV's effect on HIV
  - Conflicting data about HIV disease progression
  - Liver disease may complicate ART

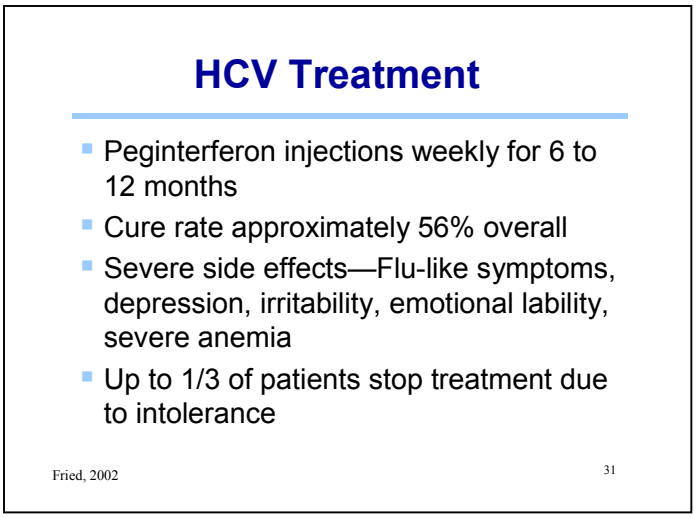
29

HCV Treatment Issues

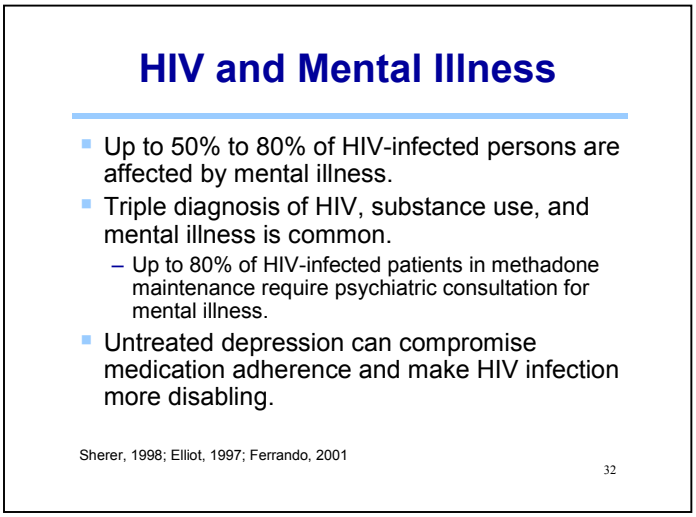


Lauer, NEJM 2001

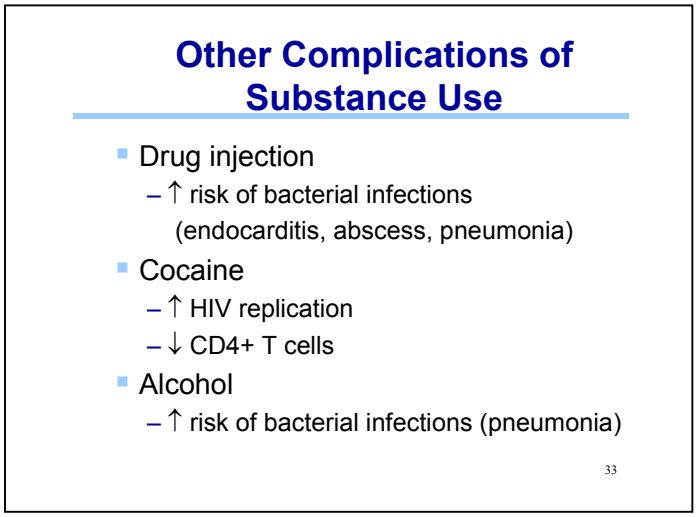
30



8. Note the prevalence of mental illness, and briefly discuss the implications this has for treatment. Although this module does not consider this topic in detail, it is essential to mention the importance of screening for mental illness and providing the necessary referrals and treatment (Slide 32).

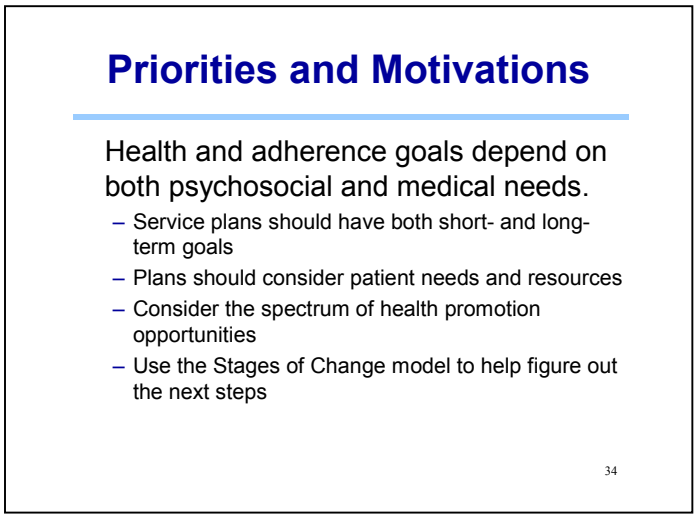


9. Introduce the other complications of substance use, referring to the information in Slide 33.
   - Discuss some specific ways in which drug use may affect the immune system. Note, however, that the data on this topic are very limited. Discuss ways in which substance use increases risk factors for medical complications in general.
   - Talk about the environmental and behavioral correlates of substance use such as unstable housing and mental illness. These may be immune suppressive themselves, and they can contribute to other negative health outcomes.



10. The most important implication of the medical issues raised in this session may be summed up as follows: *Advocates need to know about these issues so that can support their clients, and empower clients to advocate around these issues with providers, discuss their drug use honestly with providers, and maximize their treatment opportunities.*

11. A client's readiness to start, continue, or resume ART should be considered in light of their other personal and health priorities. For example, a client who considers securing housing, resolving an acute illness, and reconnecting with his or her hepatitis C doctor as his or her top three priorities may not yet be ready to start ART. After some of these "front-burner" concerns are addressed, that client might feel more ready to consider ART. Similarly, education and support can often help clients who are not yet considering ART – or are only just beginning to contemplate ART – to move to the next level of readiness. The Stages of Change model provides a template for talking with clients about their degree of readiness and the steps they might take to prepare for treatment, even if they are not ready to start ART now. In this respect, each step towards readiness is viewed as a healthy behavior change. Clients are not set up for "failures" if they are not yet ready or able to adhere to therapy. On the contrary, they are given more opportunities for "success" in their health-promotion efforts (Slide 34).



12. Discuss this notion with participants. Can adherence goals be integrated into service planning? What parties need to be at the table for this to happen? Underscore link to Interdisciplinary module.

Handout 5: Interactions Between HIV-Related Medications and Methadone

HIV Medication	Effect on Methadone	Effect on HIV Medication	Clinical Effect
Pis			
Indinavir	Unchanged		
Ritonavir	↓levels by 37%		Monitor and titrate methadone dose, if needed; might require increase in methadone dose
Saquinavir[§]	-		
Nelfinavir	↓ levels		Has minimal effect on maintenance dose; monitor and titrate dose, if needed; might require increased methadone dose
Amprenavir	↓ by 35%		Monitor and titrate dose, if needed; might require increase in methadone dose
Lopinavir	↓ AUC by 36%, level by 53%		Monitor and titrate dose if needed; might require increased methadone dose
NNRTIs			
Nevirapine	↓ by 46%	Unchanged	Withdrawal symptoms may occur if dosage is not adjusted; titrate methadone dose to effect; might require increased methadone dose
Efavirenz	↓ by 48-52%		Titrate methadone dose to effect; might require increased methadone dose
Delavirdine	Not studied		
NRTIs			
Zidovudine	Unchanged	↑ AUC by 40%	Unclear; methadone may increase zidovudine-related toxicities
Stavudine	Unchanged	↓ AUC by 18%, level by 27%	No dose adjustment
Didanosine	Unchanged	↓ AUC by 41%, level by 60%	Consider increasing dose of didanosine
Tenofovir	Not studied		
Lamuvidine	Unchanged		
Abacavir	↑clearance	↓ peak concentration	
Zalcitabine	Not studied		
Other Medications Sometimes Used by HIV-Infected Persons			
Rifampin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Rifabutin	Unchanged		
Fluconazole	↑ level by 30%		Unknown clinical significance
Phenytoin	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Phenobarbital	↓ levels sharply		Titrate methadone dose to effect; might require increased methadone dose
Carbamazepine	↓ levels		Titrate methadone dose to effect; might require increased methadone dose

[§]Drug interaction studies were conducted with the Invirase formulation of saquinavir; therefore, the observations and recommendations might not apply to the Fortovase formulation of saquinavir.
AUC = Area under the curve
Adapted from the following sources:
Centers for Disease Control and Prevention, 2002
Gourevitch, M.N., Friedland, G.H., 2000

Handout 6: Interactions Between Antiretroviral Medications and Recreational Drugs

Drug	Effect	Comment
Alcohol	↑ abacavir level	Unknown significance
Amphetamines	Ritonavir may ↑ amphetamine level two- to three-fold	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of amphetamine
Methamphetamine	↑ HIV replication, overdose with ritonavir/saquinavir[1234]	Avoid combining with ritonavir
Cocaine	Possibly ↑ HIV replication and ↓ immune system[5678]	Studies conducted only in test tubes and mice
Ecstasy (MDMA)	Overdose and death with ritonavir[910] Possibly ↑ levels with other PIs and NNRTIs	Avoid combining with ritonavir; alternatively, use one-quarter to one-half the amount of MDMA and watch for signs of toxicity
GHB (liquid X)	↑ levels and toxicity with ritonavir/saquinavir[5], possibly ↑ with delavirdine	Use cautiously with PIs, as well as delavirdine and efavirenz
Heroin	Ritonavir may ↓ levels by 50%; Ritonavir and other PIs may also ↑ levels	
Ketamine	Possibly ↑ levels with ritonavir, delavirdine, and efavirenz	Use cautiously with ritonavir, nelfinavir, and efavirenz
LSD	Unknown	Use cautiously with PIs, delavirdine, and efavirenz
Marijuana	PIs may ↑ levels	Efavirenz may cause false-positive screening test for marijuana
PCP	Possibly ↑ levels with antiretrovirals	Use cautiously with PIs, delavirdine, and efavirenz

Adapted from: Antoniou, T., Tseng, A.L., 2002

[1] Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

[2] Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

[3] Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

[4] Urbina A, Jones K. Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. 2004 Mar 15;38(6):890-4.

[5] Roth, M.D., Tashkin, D.P., Choi, R., et al., 2002

[6] Bagasra, O., Pomerantz, R.J., 1993

[7] Peterson, P.K., Gekker, G., Chao, C.C., et al, 1991

[8] Peterson, P.K., Gekker, G., Chun, C.C., et al., 1992

[9] Harrington, R.D., Woodward, J.A., Hooton, T.M., et al., 1999

[10] Henry, J.A., Hill, I.R., 1998

Handout 7: Commonly Abused Substances and Possible Interactions With HIV drugs

(From STATSCRIPT Pharmacy – The Boston Living Center Medication Adherence Program and the Treatment Information Clinic, September, 2000)

(The instructor will hand this out.)

Session 6: Talking with Patients About HIV and Substance Use

Purpose: To learn how to help clients interact with health care providers and get the most out of their visits.

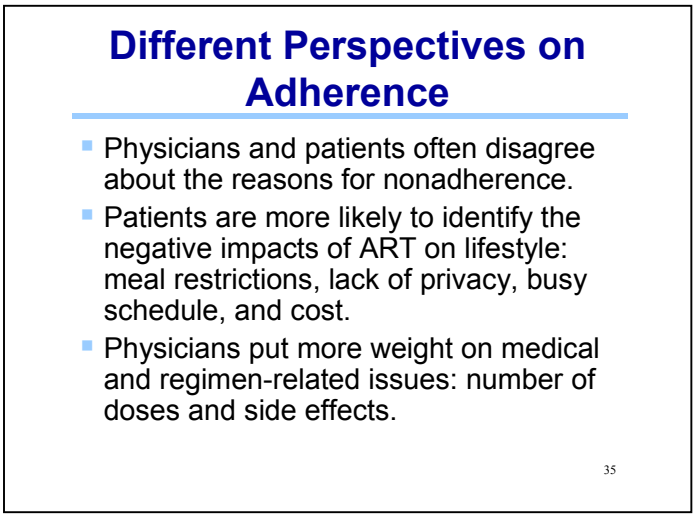
Time: 10 minutes

Materials

- Handout 8, "Preappointment Questionnaire From 'Adherence Now' Materials"
- Slide 35, "Different Perspectives on Adherence"
- Slide 36, "Communication Tips for Patients"

Instructor Notes

1. Refer participants to the handout for additional resources. Slide 35 draws attention to the different concerns of patients and physicians.



2. Reiterate the importance of working with clients to disclose their recreational drug use, alcohol use, and methadone use with HIV primary care providers so they can develop a realistic plan for the best care possible, and be successful. Keep in mind that some substance users have an extraordinarily difficult time with communicating with their providers as a result of past negative experiences with the medical system. They may need real support in having these conversations, and providers/advocates can help their clients advocate more

effectively for themselves in medical settings by providing access to health information, reviewing treatment options, and encouraging clients to discuss their questions and concerns.

3. End the presentation with some general points on establishing a good provider-patient relationship. Slide 36 lists some tips for patients when talking with their providers about treatment concerns and health care needs.

Handout 8: Preappointment Questionnaire (This handout is included in the "Adherence Now" materials that were passed out earlier.)

ADHERENCE NOW

PREAPPOINTMENT QUESTIONNAIRE

Please complete this questionnaire prior to seeing your provider, to address important issues about your care that have come up since your last visit.

SECTION ONE

Are you currently taking HIV medications? (please circle) Yes No

If no, why not?_____

If you are not taking medications, please proceed to Section Two.

Do you find your HIV drugs easy to take? (please circle) Yes No

If no, why not?_____

Please list your HIV medications below:

Trade name	Generic name	Number of pills per dose	Number of doses per day	What times do you take your doses? (ie. 12 AM / 12 PM)	Special instructions (eg. with/without food)

Please estimate the number of doses you have missed (if any): Today_____ Yesterday_____ Last week_____ Last month___

Why did you miss the dose? Forgot_____ Sleeping_____ Side effects/felt sick_____ Other_

How much of your HIV medications do you estimate that you take? (circle one)

None (0%)	Some (10%-30%)	Less than half (30%-50%)	About half (50%)	More than half (60%-75%)	Most (80%-85%)	Almost all (90%-95%)	All (100%)

Some people forget to take their pills on the weekends. Did you forget a dose last weekend? Yes No

Do you have family or friends who remind you to take your HIV medications? Yes No

Do you have transportation or any means of getting to the pharmacy to fill a prescription? Yes No

Would you like an alarm or reminder device to help you to remember to take your medications? Yes No

Would you be interested in receiving a pillbox with dividers for each dose and day to help you to remember to take your medications? Yes No

Would you be interested in learning about ways to take your medications better? Yes No

SECTION TWO *OPTIONAL QUESTIONS*

Have you had unprotected sex since your last visit? Yes No

How many alcoholic drinks (can of beer, glass of wine, mixed drink) have you had in the past week?

Have you used any drugs to get high since your last visit? Yes No

Do you think you might be depressed? Yes No Maybe

Comments:_____

_____

Provider name: _____ Provider signature:_____

Patient name:_____ Date:_____

Session 7: Managing HIV in the Context of Drug Use

Activity: Case Study Exercise

Purpose:

- To synthesize what participants have learned in this module
- To illustrate that adherence is a multidimensional challenge for all parties involved and requires an interdisciplinary approach

Time: 25-40 minutes, depending on the number of group presentations. For a 2 hour session, use 1-2 case studies. For a 2.5 hour session, use 3-4 case studies.

Materials

- Handout 9, "Case Studies for Small Group Exercise"
- Handout 4, "Areas of Challenge Worksheet"
- Slide 37, "Some Strategies for Improving Health and Adherence"
- Slide 38, "Managing HIV and Substance Use: Case Studies"
- Slide 39-43, "Case Studies"

Instructor Notes

1. Introduce the exercise using Slides 37-8. Tell participants that they will be working with case presentations. This activity will help them synthesize the knowledge and skills they have gained through this module and apply them to hypothetical patient situations. Ask participants to consider how they can best develop a plan to promote the patient's health. Remind participants to consider lifestyle, substance use, and medical information in determining an appropriate response plan for each person in the cases.

Some Strategies for Improving Health and Adherence

- Clarify the regimen
- Identify the patient's motivation
- Make medications part of daily routine
- Manage side effects
- Address alcohol and drug use
- Build good provider-patient communication
- Identify social supports

37

Managing HIV and Substance Use: Case Studies

- Identify key adherence issues
- Consider adherence barriers and supports
- Set realistic goals
- Highlight HIV health concerns
- Develop a health promotion plan

38

2. You can divide the group into subgroups, or keep the group whole, if small. Select a case study for each group from Handout 9.

3. Give the participants 15 minutes to work on their cases, using Handout 4, Areas of Challenge Worksheet to identify issues and potential interventions.

4. Allow five minutes each for the small groups to present their cases and the factors affecting adherence to the entire group. To save time, use the relevant summary Slides (from 39-43) to provide brief synopses of the cases and ask participants to focus mainly on the information and issues contained in the slides.

Case Study 1: Melissa

- 25 years old
- Commercial sex worker
- Injects heroin 3-4 times/day
- Intermittently incarcerated
- Recent 15 pound weight loss
- History of STDs and respiratory infections.
- Smoker - 1 pack/day
- CD4 count = 480/mm^3
- Viral load = 45,000 copies/mL

39

Case Study 2: Raymond

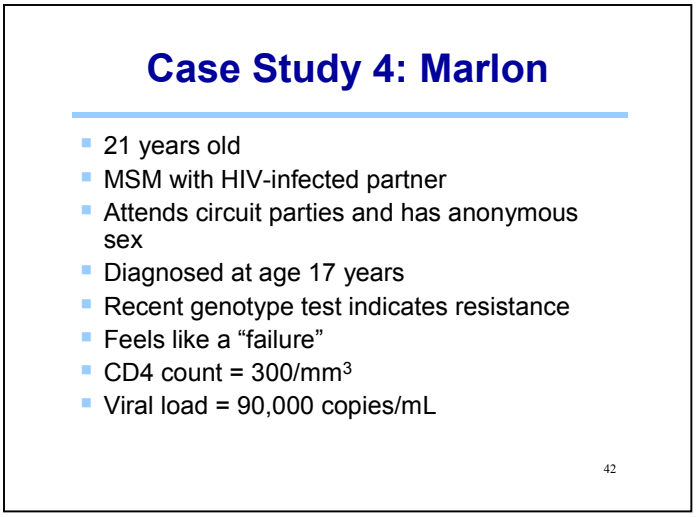
- 50 years old
- Corporate manager
- Married with teenage children
- Alcoholic and occasionally uses cocaine
- HCV coinfected
- Drug and alcohol free for 6 months
- CD4 count = 350/mm^3
- Viral load = 85,000 copies/mL

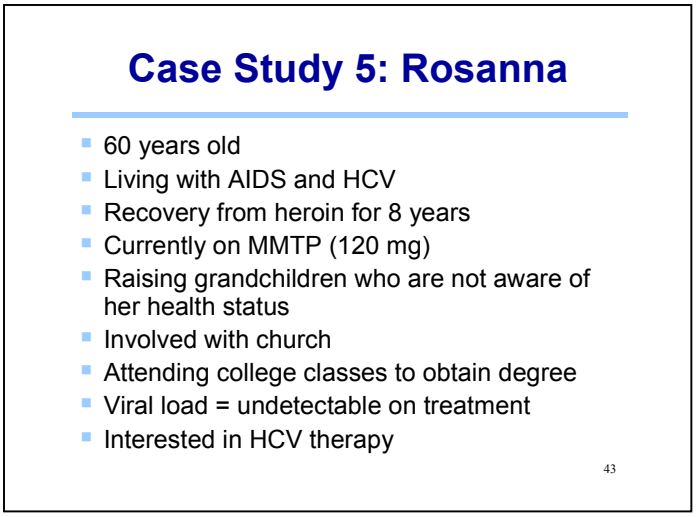
40

Case Study 3: Krista

- 35 years old
- Homeless
- Smokes crack daily
- Alcoholic
- Connected with shelter/meal program
- Earlier connection with Department of Mental Health
- CD4 count = 50/mm^3
- Viral load = 380,000 copies/mL

41





5. For each case study, participants should try to identify the following types of issues:
    - *Lifestyle and psychosocial issues* that present barriers or supports to medication adherence and HIV health.
    - *Medical issues* that may affect the person's access to health care, his or her baseline health status, or the appropriateness of treatment recommendations or present therapy in his or her particular situation.
    - *Specific issues related to substance use*, including the drug of choice, drug interactions, timing of drug use, and stage of recovery.

6. Following the case studies, you will find Instructor Notes, a list of suggested questions and planted issues to help facilitate discussion.

7. Note that the case studies do not give information on the race and ethnicity of the persons discussed. This was done intentionally to allow instructors to adjust the scenarios in ways that address the circumstances of different population groups. However, the case studies do include information about each person's age, gender, sexuality, incarceration history, housing

status, and drug of choice. For each case, the participants should be encouraged to consider the extent to which social and cultural issues are relevant to HIV adherence and health promotion.

8. Keep in mind that these cases do not necessarily reflect the standard of care for prescribing HIV medications, including the timing of therapy and the specific medications selected by the health care provider in each scenario. Part of the challenge of this exercise is to determine what role the social service provider has in responding to medical information.

9. Also, note that each case also has specific instructor's notes that the participants should not receive.

Handout 9: Case Studies

Case Study 1: Melissa

Melissa is a 25-year-old woman living with HIV. She is a heroin user, has never been in a methadone maintenance program, has been incarcerated intermittently, and smokes about a pack of cigarettes each day. She works in the commercial sex industry and lives with roommates in a small apartment. Only one of her roommates is aware of her HIV status. She uses heroin three to four times a day. Melissa receives her HIV care from a local community health center, and goes to the doctor at least every few months when she's not in jail. Most of her visits to the doctor are prompted by symptoms consistent with either sexually transmitted diseases (STDs) or upper respiratory infections. Melissa has health insurance coverage through the state's Medicaid program.

Melissa's most recent CD4 count was 480/mm^3 and her viral load was 45,000 copies/mL. Her current health problems include genital herpes and an upper respiratory infections. Melissa has been on and off antibiotics for the past year during episodes of pneumonia, and she takes acyclovir to manage the herpes infection. Melissa went to see her doctor last week because she was concerned about a weight loss of 15 pounds during the past month. At that appointment, her doctor suggested that she "just start eating more and try to stay out of jail." The doctor also recommended that she begin antiviral therapy "right away" and gave her a prescription for efavirenz and Combivir (lamivudine plus zidovudine). Melissa thinks her doctor may be angry with her because she recently started using heroin again. Melissa also isn't sure whether she should trust her doctor's advice. Melissa comes to meet with you and asks what you think about her situation.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Melissa to begin HIV medications?
- What factors would make you want her to start medications?
- What are some ways in which you could help Melissa adhere to treatment (in the broadest sense of the word)?

Planted Issues

- Safer sex with a sex worker's "clients"
- Confidentiality and Melissa's nondisclosure of her status at home
- Symptom-driven contact with medical sector
- Doctor-patient communication issues, including trust and access to care
- Health care plan during incarceration
- Connection to methadone maintenance program

Case Study 2: Raymond

Raymond is a 50-year-old man living with HIV and Hepatitis C (HCV). He works full time as a corporate manager and is married with two teenage children. His family is aware of his HIV status. He is an alcoholic and occasionally uses cocaine. He was first diagnosed with HCV in 1990, when it was still referred to as non-A, non-B hepatitis. He first tested positive for HIV during a stay in drug treatment in 1995.

Raymond has excellent health insurance through his employer, but no one at work is aware of either his HIV or HCV status. He is prone to relapse, especially during periods of stress at home or work, and often drops out of contact for days at a time. He's been sober from alcohol and cocaine for six months. At his last appointment, Raymond's doctor suggested he begin antiviral therapy because his numbers were "taking a turn for the worse." His most recent CD4 count was 350/mm^3, and his viral load was 85,000 copies/mL. Raymond's liver function tests remain within a normal range. Raymond wants to start therapy and is anxious to stay healthy for his wife and kids, but he is concerned that he won't be able to stick with a regimen. His doctor has prescribed indinavir, ritonavir, lamivudine, and stavudine. Raymond comes to meet with you and asks whether you think he can handle the suggested ART regimen. He confides that he's been feeling "very vulnerable lately" and that he "really wants to drink."

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Raymond to begin HIV medications?
- What factors would make you want him to start medications?
- How should you talk with Raymond about his concerns about being able to "handle" an HIV regimen?
- What are some ways you could help Raymond adhere to treatment?

Planted Issues

- HCV coinfection
- Alcohol use and adherence
- Cocaine use and adherence
- Relapse planning
- Sobriety and decision-making about ART
- Doctor's selection of a regimen containing indinavir and ritonavir; concerns about fluid requirements for indinavir and storage of ritonavir in a refrigerator
- Unstable lifestyle and adherence

Case Study 3: Krista

Krista is a 35-year old woman living with HIV. She is currently homeless, and typically stays on the street, in crack houses, or in "wet" shelters. Krista sometimes stays at her mother's home, but she can only go there when she is sober. Krista uses crack cocaine and is an alcoholic. She drinks whatever she can get, and she typically uses crack in the evenings when she gets bored and lonely and "hits the streets." Krista considers herself a loner, but she has connected with a local street outreach program that provides free lunches, as well as day shelter services in the winter. At one point, Krista was also connected with the local Department of Mental Health (DMH) and was diagnosed with bipolar disorder, but she did not follow up with mental health support treatment. She is not on psychotropic medications.

Krista receives her HIV care from the public health clinic connected with a major urban medical center. She goes to the doctor often because she thinks he is very kind, she likes the medical staff, and she appreciates being able to hang out in the waiting room and watch TV. Krista's doctor is very concerned about her plummeting CD4 count (now at 50/mm^3) and her high viral load, which is 380,000 copies/mL. Last year, her doctor put her on trimethoprim/sulfamethoxazole (more commonly known by the trade name Bactrim) and now wants to add antiretrovirals. He gives her a prescription for nelfinavir and Combivir (lamivudine plus zidovudine), in addition to the antibiotic azithromycin. He also tells her to keep taking the trimethoprim/sulfamethoxazole. Krista is scared and doesn't understand why she needs this treatment. She asks you for help.

Discuss the Following Questions

- Is it appropriate for the provider to prescribe ART now?
- What factors would make you *not* want Krista to begin HIV medications?
- What factors would make you want Krista to start medications?
- What are some ways you could help Krista adhere to treatment (in the broad sense of the word)?

Planted Issues

- Challenges of homelessness
- Mental illness and adherence
- Potential to build on the positive relationship with her doctor and other medical staff
- Urgency of prophylaxis because of low CD4 count
- Potential to incorporate street supports into adherence plan
- Fear, anxiety, and lack of understanding about treatment need to be addressed

Case Study 4: Marlon

Marlon is a 21-year-old man who has unprotected sex with other men who are infected with HIV. He works at a fast-food restaurant. He attends circuit parties, likes to have anonymous sex, and uses recreational drugs at parties only. He has a steady boyfriend who is also infected with HIV and taking ART. They live together in a studio apartment. Marlon was diagnosed with HIV infection when he was 17 years old. At that time, he had a CD4 count of 180/mm^3 and a viral load of 80,000 copies/mL.

His doctor started him on therapy almost immediately with zidovudine, lamivudine, and nevirapine, as well as trimethoprim/sulfamethoxazole. Until recently, Marlon's HIV treatment was very successful. His viral load was undetectable, and his CD4 count was back up to 400/mm^3. In fact, Marlon was doing so well that his doctor told him he could stop taking trimethoprim/sulfamethoxazole. Unfortunately, Marlon's last few blood tests have indicated that his viral load is rising. Marlon's most recent viral load was 90,000 copies/mL, and his CD4 count is down to 300/mm^3. Marlon's doctor performs a genotype test, which shows that his HIV infection is now resistant to nevirapine and lamivudine. His doctor suggests a switch in therapy to stavudine, abacavir, ritonavir, and indinavir. Marlon is devastated and feels like a failure, especially when he compares himself with his partner, who is still doing very well on his medications. Marlon doesn't understand what he's doing wrong.

Discuss the Following Questions

- How would you approach Marlon when you discuss adherence with him?
- How would you assess his adherence?
- What specific questions would you ask him?
- What are some ways in which you could help Marlon improve his adherence to treatment?

Planted Issues

- Drug interactions between recreational drugs and ritonavir
- Feelings concerning "treatment failure"
- Individual responses to therapy
- Possibility of HIV superinfection and the importance of safer sex between HIV-infected partners.
- Significance of genotype test

Case Study 5: Rosanna

Rosanna is a 60-year-old woman living with AIDS and HCV infection. She is a heroin addict who has been is recovery for eight years. Rosanna is currently in a methadone maintenance program and is dosed every morning at 7 a.m. She had to increase her methadone dose to 120 mg last year when she started getting dope sick. Rosanna is also a grandmother and has been raising her three grandchildren on her own since her daughter died two years ago. She receives a monthly SSDI check and also has a Section 8 subsidy to help pay the rent on her spacious three-bedroom apartment.

Rosanna is very busy attending to her grandkids' school and activities, maintaining the household on her own, and volunteering at her church. She has also been taking classes at a local community college with the goal of obtaining an associate degree. Rosanna hopes to go back to work as a human service professional or a community organizer. She is very closeted about her HIV status, especially in church and around the grandchildren. However, the staff at the methadone clinic are aware of her status, and she also told some fellow classmates at school. Rosanna started taking antiretroviral drugs last year, but she has had a hard time sticking to her complex regimen of didanosine, stavudine, ritonavir, and amprenavir. Even though Rosanna's viral load is now undetectable, she would like to change to an easier HIV regimen, but she's afraid to ask her doctor about this. Rosanna also thinks that her doctor is not paying attention to her HCV. She has heard about interferon-based combination therapy for her HCV infection, but her doctor has never brought it up. She asks for your advice.

Discuss the Following Questions

- How would you approach Rosanna when you discuss adherence with her?
- How would you assess her adherence?
- What specific questions would you ask her?
- What are some of Rosanna's potential barriers to adherence? What supports for adherence does she have?
- What could you suggest to make it easier for Rosanna to adhere to her HIV medications?

Planted Issues

- Drug interactions between methadone and antiretrovirals
- HCV coinfection
- Adherence challenges and supports associated with a busy lifestyle (juggling the demands of kids, work, and household)
- Support and confidentiality in various settings – and their impact on adherence
- Doctor-patient communication about the complexity of the regimen and options for change

Instructor Notes

Instructor Notes for Melissa

The goal in this case is to facilitate a discussion about the variety of issues facing Melissa. Some of the key lifestyle and psychosocial issues include Melissa's intermittent incarceration and commercial sex work. Both of these issues may have serious health implications. Incarceration can interfere with adherence to both antiretroviral and preventive medications if medications are stopped or unavailable during periods of incarceration. Since Melissa is involved with commercial sex work, her provider should try to engage her in a discussion about prevention issues for people infected with HIV (also called "positive prevention"). The provider should also try to talk with Melissa about the specific health risks she may face as a commercial sex worker (evidenced by her recurrent STDs) as well as her options for negotiating safer sex.

It should also be noted that, according to her most recent blood work, Melissa does not meet the current guidelines for antiretroviral therapy: her CD4 count is greater than 350/mm^3 and her viral load is below 55,000 copies/mL. Participants should be encouraged to discuss why Melissa's doctor might think therapy is appropriate at this time, including the possibility that Melissa's provider is not an HIV specialist and may not be familiar with current clinical recommendations.

Other medical issues that the participants should consider include the antiretroviral medications chosen for Melissa, the significance of her recent weight loss, her continued smoking, and her history of respiratory infections. Participants should also be encouraged to be critical of the provider-patient relationship in this case, since Melissa may be receiving suboptimal care. Also ask participants to identify Melissa's opportunities and barriers to accessing high-quality HIV care.

In addition, we know from her case that Melissa has taken antibiotics in the past and currently uses acyclovir for herpes. When assessing Melissa's readiness to start HIV medications, it would be worthwhile to ask about her adherence experience with antibiotics and acyclovir. It would also be useful to ask whether Melissa's ongoing substance use affects her ability to adhere to medications and access medical care. We know that Melissa uses heroin three to four times a day. The participants may note the Melissa could use her heroin use as cues for taking her HIV medications. Participants should also consider how Melissa feels about starting ART, as well as her willingness to consider drug treatment as part of her HIV health and adherence plan.

Instructor Notes for Raymond

Raymond's case is complex because of the psychosocial and medical issues he faces, including his polysubstance use (both alcohol and cocaine). As the instructor, it is important not to have the unrealistic expectation that all of Raymond's issues will be addressed in the short time available. Instead, this case should be seen as a rich opportunity to explore a wide variety of issues.

Participants should pay special attention to Raymond's work and family situation and consider the impact that his "disclosure status" concerning his HIV and HCV infection may have on his ability to adhere to medications. Participants should also consider the unique challenges related to his corporate lifestyle, the adherence barriers associated with full-time employment, and the strategies Raymond might adopt to help him adhere to ART in a workplace where he is not open about his status.

Clearly, one of the major issues facing Raymond is the nature of his substance use. Cocaine and alcohol have negative affects on adherence rates because of the way they are used (sporadically and inconsistently). In addition, heavy alcohol use can lead to memory lapse and periods of blackout. Although Raymond has been drug-free for six months, participants should still pay special attention to his risk for relapse, the importance of stress as a trigger for his drug use, and his tendency to "disappear" when he picks up. Participants should discuss strategies for determining other aspects of Raymond's "treatment readiness."

Participants should also be encouraged to consider the variety of medical issues that Raymond faces. He is coinfected with HCV and HIV, which places him at risk for accelerated HCV disease progression. His alcohol consumption presents a major health risk. Another point to notice is the selection of ritonavir as part of his treatment regimen. Ritonavir is known to be especially hard on the liver and is probably not an ideal choice for someone with pre-existing liver disease and a history of alcohol abuse.

On the other hand, ritonavir is a powerful antiretroviral in terms of efficacy, and may be more forgiving than other protease inhibitors in terms of missed doses and the risk of viral resistance. Although some providers would elect to start ART when the CD4 count and viral load have reached the levels seen in Raymond, others would not. The most recent guidelines indicate that treatment should be offered, but controversy exists. Participants should carefully consider his provider's decision to prescribe therapy at this stage and may question whether the provider is aware of the extent of Raymond's substance use.

Instructor Notes for Krista

The challenge in this case is to identify both the barriers and – perhaps more important – the supports for HIV adherence and health promotion in Krista's life. For example, we know that Krista has a relationship with her mother, is connected with outreach and shelter services, had a previous connection with DMH, and seems to have an open and positive relationship with her medical provider. However, both her homelessness and mental health status are important psychosocial challenges that participants need to recognize and discuss.

Krista also has some complex and urgent medical issues: Her CD4 count is low (50/mm^3), and her viral load is high (380,000 copies/mL). Because we know that Krista's doctor prescribed trimethoprim/sulfamethoxazole last year, we can assume that her CD4 count has been low at least since then. Encourage participants to consider why Krista's doctor decided to prescribe ART now even though he didn't prescribe it earlier. Also ask them to think about approaches for determining Krista's readiness for ART. For example, how well has she been adhering to her trimethoprim/sulfamethoxazole? Guide the participants to ensure that they spend some time devising strategies to support Krista's efforts to stay healthy and to determine whether antiretroviral therapy is right for her at this stage. Also ask participants to consider interventions that might help Krista adhere to her medications if she decides to start ART at this time. For example, they might suggest linking adherence cues with Krista's participation in the outreach program, and helping her reconnect with DMH services, and encouraging her to try a "mock or rehearsal regimen." By 'rehearsing' their regimen, people can see whether they are ready to start treatment and learn ways to improve their adherence before starting the actual drugs.

Participants might lose sight of Krista's substance use issues when they consider everything else she is facing. Encourage participants to talk about the nature of her substance use, to discuss whether drug treatment is appropriate for her, whether she should initiate psychiatric treatment, and to consider the specific health and adherence challenges arising from Krista's continuing alcohol and crack use. Remind them that the focus should be on adherence challenges, supports, and interventions.

Instructor Notes for Marlon

A discussion of adherence in Marlon's case can focus on his experience with taking medications during the past four years. Since Marlon was able to maintain an undetectable viral load until recently, in all likelihood he had been adherent to his medications. Participants should consider what factors may have contributed to the current failure of his treatment. The possibilities include recent nonadherence to his regimen or the development of viral resistance despite excellent adherence. It is important that participants discuss the latter possibility – that even "perfect" adherence does not lead to viral suppression 100% of the time.

Participants should be prompted, if necessary, to discuss some other important medical issues about Marlon's case. Marlon's doctor stopped his trimethoprim/sulfamethoxazole treatment when his CD4 count rose back to a safe level – typically over 300/mm^3 or 400/mm^3. Marlon may not understand why this medication was stopped and then later restarted when his CD4 count declined. The rapid and sudden increase in Marlon's viral load is evidence that his HIV infection has developed resistance to his current medications, which is further evidenced by the results of his genotype test. Make sure that participants understand what a genotype test is – a blood test that looks at the genetic structure of a person's virus to identify mutations that are believed to confer resistance to specific antiretroviral medications.

Marlon is also facing some psychosocial issues, including his relationship with his partner and his feelings of personal failure since his medications stopped working. There is an opportunity here for participants to identify important information to pass on to Marlon, such as how people may respond to medications differently (his experience versus his partner's experience), and how it is the medications that "fail," not the people who take them. In addition, Marlon's disclosure about anonymous sex and recreational drug use should prompt a discussion about the possible health risks of these behaviors.

Marlon's doctor is proposing a new treatment regimen that includes ritonavir, a medication that is known to have potentially dangerous interactions with recreational drugs. Because Marlon is also engaging in unprotected sex with people whose HIV status he does not know, he risks transmitting the virus to others and potentially re-exposing himself to HIV, which can result in "superinfection" and possible accelerated HIV disease progression. Remind participants that, although there is only limited information about superinfection and interaction between ART and recreational drugs, these are important possibilities to consider.

Instructor Notes for Rosanna

There is no shortage of issues to discuss here. Don't expect that the participants will be able to address all issues in the limited time available. Participants should be guided, if necessary, to discuss some key psychosocial issues, including Rosanna's disclosure of her HIV and HCV status: She has told people at the methadone clinic and some friends at school, but not her grandchildren or members of her church. Be sure that the participants discuss how Rosanna's disclosure may affect her current and future adherence. Keep in mind that her current regimen seems to be working well (her viral load is undetectable), which indicates that she is probably adhering well but that she wants to change to something easier.

Participants may also question why Rosanna is taking such a complex regimen of HIV medications in the first place, since the case indicates that this is her first treatment combination. In addition, participants should pay special attention to the provider-patient relationship. The case indicates that Rosanna feels afraid to talk with her doctor about changing medications, and she also seems to think that her doctor may not be paying adequate attention to her HCV coinfection. Other medical issues in this case include the following: assessing the need for education about HIV and HCV coinfection, drug interactions between antiretrovirals and methadone, and strategies to talk with her medical provider about next steps. Regarding drug interactions, it is important to note that the increase in Rosanna's methadone dose may have been necessitated by drug interactions with ritonavir and amprenavir. Encourage participants to develop strategies to help Rosanna advocate for herself in the medical setting – perhaps by doing role plays with her or helping her develop a list of questions before her next appointment.

Other than Rosanna's participation in a methadone maintenance program, substance use issues are not paramount in this case. However, participants may consider ways to connect Rosanna's HIV and HCV health promotion behaviors with her successful recovery program. Participants should note that Rosanna has a lot going on in her life, including her commitments to her grandchildren, school, church, methadone maintenance, antiretroviral therapy – and now she is considering switching her HIV medications and starting interferon-based therapy for HCV. If necessary, prompt participants to consider what barriers to adherence Rosanna may face in the future, what existing supports she has, and what interventions might provide additional support for her health promotion efforts.

Session 8: Conclusion

Presentation: Take-Home Points

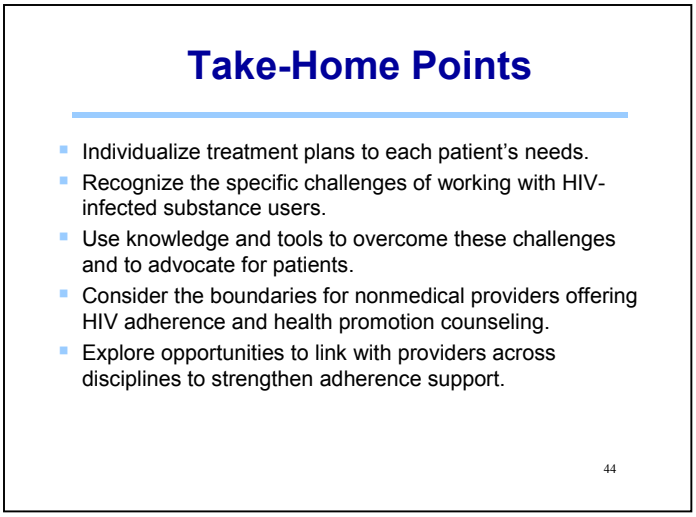
Purpose: To summarize the main points of this module

Time: 5 minutes

Materials: Slide 44, "Take-Home Points"

Instructor Notes
Briefly summarize the main themes concerning health promotion and adherence in HIV-infected substance users. Be sure to include the following points:

- Individualize treatment plans to each patient's needs.
- Recognize that there are specific challenges when working with HIV-infected substance users, but that these challenges can be overcome.
- Consider the boundaries that nonmedical providers face when they offer counseling on HIV adherence and health promotion.
- Explore opportunities to link with providers across disciplines to strengthen adherence support for substance-using patients.



References

Altice, F.L., Friedland, G.H., Cooney, E.L. (1999). Nevirapine induced opiate withdrawal among injection drug users with HIV infection receiving methadone. *AIDS*, 13(8), 957-962.

Antoniou, T., Tseng, A.L. (2002). Interactions between recreational drugs and antiretroviral agents. *Annals of Pharmacotherapy*, 36(10), 1598-1613.

Arnsten, J.H., Demas, P.A., Farzadegan, H., et al. (2001). Antiretroviral therapy adherence and viral suppression in HIV-infected drug users: Comparison of self-report and electronic monitoring. *Clinical Infectious Diseases*, 33(8), 1417-1423.

Arnsten, J.H., Demas, P.A., Grant, R.W., et al. (2002). Impact of active drug use on antiretroviral therapy adherence and viral suppression in HIV-infected drug users. *Journal of General Internal Medicine*, 17(5), 377-381.

Bagasra, O., Pomerantz, R.J. (1993). Human immunodeficiency virus type 1 replication in peripheral blood mononuclear cells in the presence of cocaine. *Journal of Infectious Diseases*, 168(5), 1157-1164.

Bamberger, J., Bangsberg, D., Chamber, D., et al. (June 2000). Adherence to HIV therapies: Critical issues. *Science to Community, Clinical #1*. University of California-San Francisco, San Francisco, California.

Bart PA, Rizzardi PG, Gallant S, et al. Methadone blood concentrations are decreased by the administration of abacavir plus amprenavir.Ther Drug Monit. 2001 Oct;23(5):553-5.

Broers, B., Morabia, A., Hirschel, B. (1994). A cohort study of drug users' compliance with zidovudine treatment. *Archives of Internal Medicine*, 154(10), 1121-1127.

Beauverie, P., Taburet, A. M., Dessalles, M. C., et al. (1998). Therapeutic drug monitoring of methadone in HIV-infected patients receiving protease inhibitors. *AIDS*, 12(18), 2510-2511.

Bruno, R., Sacchi, P., Puoti, M., et al. (2002). HCV chronic hepatitis in patients with HIV: Clinical management issues. *American Journal of Gastroenterology*, 97(7), 1598-1606.

Carmona, A., Knobel, H., Guelar, A., et al. (2000). Factors influencing survival in HIV-infected patients treated with HAART [Abstract TuOrB417]. Presented at 13th International AIDS Conference, Durban, South Africa, July 9-14, 2000.

Cedars-Sinai Medical Center. (2001). *Adherence Now: Best Practices and Practical Tools. Proceedings of a roundtable symposium in November 2001*. World Heath CME, New York, New York.

Centers for Disease Control and Prevention. (2002). Guidelines for using antiretroviral agents among HIV-infected adults and adolescents: Recommendations of the Panel on Clinical

Practices for Treatment of HIV. *MMWR*, 51(RR-7), 1-55. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5107a1.htm)

Centers for Disease Control and Prevention. (1998). Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: Principles of therapy and revised recommendations. *MMWR*, 47(RR-20), 1-58. (http://www.cdc.gov/mmwr/preview/mmwrhtml/00055357.htm)

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

Clarke S., Mulcahy F., Bergin C., et al. (2002). Absence of opioid withdrawal symptoms in patients receiving methadone and the protease inhibitor lopinavir-ritonavir. *Clinical Infectious Diseases*, 34(8), 1143-1145.

Clarke, S., Mulcahy, F., Tija, J., et al. (2001).The pharmacokinetics of methadone in HIV-positive patients receiving the non-nucleoside reverse transcriptase inhibitor efavirenz. *British Journal of Clinical Pharmacology*, 51(3), 213-217.

Department of Health and Human Services (DHHS). Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. March 23, 2004: 1-97. Accessed at http://www.aidsinfo.nih.gov/guidelines/adult/AA_032304.pdf on July 21, 2004.

Eldin, B.R., Seal, K., Lorvick, J., et al. (2001). Is it justifiable to withhold treatment for hepatitis C from illicit injection drug users? *New England Journal of Medicine*, 345(3), 211-214.

Ellis RJ, Childers ME, Cherner M, et al. Increased human immunodeficiency virus loads in active methamphetamine users are explained by reduced effectiveness of antiretroviral therapy. J Infect Dis. 2003 Dec 15;188(12):1820-6.

Elliot, A. Depression and HIV. (1997). Retrieved December 2002 at the Project Inform website at http://www.projectinform.org.

Ferrando, S.J. (2001). Substance abuse and HIV infection. *Psychiatric Annals*, 31(1), 57-62.

Fried, M.W., Shiffman, M.L., Reddy, K.R., et al. (2002). Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *New Journal of Medicine*, 347(13), 975-982.

Gavrilin MA, Mathes LE, Podell M. Methamphetamine enhances cell-associated feline immunodeficiency virus replication in astrocytes. J Neurovirol. 2002 Jun;8(3):240-9.

Gerber JG, Rosenkranz S, Segal Y, et al. Effect of ritonavir/saquinavir on stereoselective pharmacokinetics of methadone: results of AIDS Clinical Trials Group (ACTG) 401. J Acquir Immune Defic Syndr. 2001 Jun 1;27(2):153-60.

Gordillo V., del Amo, J., Soriano, V., et al. (1999). Sociodemographic and psychological variables influencing adherence to antiretroviral therapy. *AIDS*, 13(13), 1763-1769.

Golin, C.E., Liu, H., Hays, R.D., et al. (2002). A prospective study of predictors of adherence to combination antiretroviral medication. *Journal of General Internal Medicine*, 17(11), 756-765.

Gourevitch, M.N., Friedland, G.H. (2000). Interactions between methadone and medications used to treat HIV infection: A review. *Mount Sinai Journal of Medicine*, 67(5-6), 429-436.

Hales G, Roth N, Smith D. Possible fatal interaction between protease inhibitors and methamphetamine. Antivir Ther. 2000 Mar;5(1):19.

Henry, J.A., Hill, I.R. (1998). Fatal interaction between ritonavir and MDMA. *Lancet*, 352(9142), 1751-1752.

Harrington, R.D., Woodward, J.A., Hooton, T.M., et al. (1999). Life-threatening interactions between HIV-1 protease inhibitors and the illicit drugs MDMA and γ -hydroxybutyrate. *Archives of Internal Medicine*, 159(18), 2221-2224.

Horn, G. (1998). Party favors – Do yourself one: Get the dope on the protease effect. *POZ***,** 36. Available on the *POZ* web site at http://www.poz.com/archive/june1998/partner/warning.html)

Horn, T. (2001). HIV drug resistance and drug resistance testing: Just the FAQ's. *CRIA Update*, 10(4).

Iribarne C, Berthou F, Carlhant D, et al. Inhibition of methadone and buprenorphine N-dealkylations by three HIV-1 protease inhibitors. Drug Metab Dispos. 1998 Mar;26(3):257-60.

Landau, A., Batisse, D., Piketty, C., et al. (2001). Long-term efficacy of combination therapy with interferon-alpha 2b and ribavirin for severe chronic hepatitis C in HIV-infected patients. *AIDS*, 15(16), 2149-2155.

Lauer, G.M., Walker, B.D. (2001). Hepatitis C virus infection. *New England Journal of Medicine*, 345(1), 41-51.

McCance-Katz, E.F., Rainey, P.M., Jatlow, P., et al. (1998). Methadone effects on zidovudine disposition (AIDS Clinical Trials Group 262). *Journal of Acquired Immune Deficiency Syndrome Human Retrovirology*, 18(5), 435-443.

McCance-Katz EF, Rainey PM, Friedland G, Kosten TR, Jatlow P. Effect of opioid dependence pharmacotherapies on zidovudine disposition. Am J Addict. 2001 Fall;10(4):296-307.

McCance-Katz EF, Rainey PM, Friedland G, Jatlow P. The protease inhibitor lopinavir-ritonavir may produce opiate withdrawal in methadone-maintained patients. Clin Infect Dis. 2003 Aug 15;37(4):476-82. Epub 2003 Aug 01.

Murphy, E.L., Collier, A.C., Kalish, L.A., et al. (2001). Highly active antiretroviral therapy decreases mortality and morbidity in patients with advanced HIV disease. *Annals of Internal Medicine*, 135(1), 17-26.

Nasti, G., DiGennaro, G., Tavio, M., et al. (2001). Chronic hepatitis C in HIV infection: Feasibility and sustained efficacy of therapy with interferon alfa-2b and ribavirin. *AIDS*, 15(14), 1783-1787.

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Paterson, D.L., Swindells, S., Mohr, J., et al. (2000). Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine*, 133(1), 21-30.

Peterson, P.K., Gekker, G., Chao, C.C., et al. (1991). Cocaine potentiates HIV-1 replication in human peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 146(1), 81-84.

Peterson, P.K., Gekker, G., Chun, C.C., et al. (1992). Cocaine amplifies HIV-1 replication in cytomegalovirus-stimulated peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 149(2), 676-680.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 at the Project Inform website http://www.projectinform.org/pdf/doctorpatient.pdf.

Rainey, P.M., Friedland, G., McCance-Katz, E.F., et al. (2000). Interaction of methadone with didanosine and stavudine. *Journal of AIDS*, 24(3), 241-248.

Rainey PM, Friedland GH, Snidow JW, et al. The pharmacokinetics of methadone following co-administration with a lamivudine/zidovudine combination tablet in opiate-dependent subjects. Am J Addict. 2002 Winter;11(1):66-74.

Reiter, G.S., Stewart, K.E., Wojtusik, L., Hewitt, R., Segal-Maurer, S., Johnson, M., et al. (2000). Elements of success in HIV clinical care: Multiple interventions that promote adherence. *Topics in HIV Medicine*. 8(5), 21-30.

Richman, D. D., Bozette, S., Morton, S., Chien, S., Wrin, T., Dawson, K., Hellmann, N. "The Prevalence of Antiretrviral Drug Resistance in the U.S." (Abstract LB-17), 41st Intersceince Conference on Antimicrobial Agents and Chemotherapy, 2001.

Roth, M.D., Tashkin, D.P., Choi, R., et al. (2002). Cocaine enhances human immunodeficiency virus replication in a model of severe combined immunodeficient mice implanted with human peripheral blood leukocytes. *Journal of Infectious Diseases*, 185(5), 701-705.

Samet, J.H., Libman, H., Steger, K.A., et al. (1992). Compliance with zidovudine therapy in patients infected with human immunodeficiency virus, type 1: A cross-sectional study in a municipal hospital clinic. *American Journal of Medicine*, 92(5), 495-502.

Selwyn, P.A., Hartel, D., Lewis, V.A., et al. (1989). A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. *New England Journal of Medicine*, 320(9), 545-550.

Selwyn, P.A., Feingold, A.R., Hartel, D., et al. (1988). Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. *AIDS*, 2(4), 267-272.

Shapiro, M.F., Morton, S.C., McCaffrey, D.F., et al. (1999). Variations in the care of HIV-infected adults in the United States: Results from the HIV Cost and Services Utilization Study. *JAMA*, 281(24), 2305-2315.

Shelton MJ, Cloen D, DiFrancesco R, et al. The effects of once-daily saquinavir/minidose ritonavir on the pharmacokinetics of methadone. J Clin Pharmacol. 2004 Mar;44(3):293-304.

Sherer, R. (1998). Adherence and antiretroviral therapy in injection drug users. *JAMA*, 280(6), 567-568.

Soto, B., Sanchez-Quijano, A., Rodrigo, L., et al. (1997). Human immunodeficiency virus infection modifies the natural history of chronic parenterally-acquired hepatitis C with an unusually rapid progression to cirrhosis. *Journal of Hepatology*, 26(1), 1-5.

Strathdee, S.A., Palepu, A., Cornelisse, P.G., et al. (1998). Barriers to use of free antiretroviral therapy in injection drug users. *JAMA*, 280(6), 547-549.

Staszewski, S., Haberl, A., Gute, P., et al. (1998). Nevirapine/didanosine/lamivudine once daily in HIV-1-infected intravenous drug users. *Antiviral Therapy*, 3(Suppl 4), 55-56.

Stein, J.A., Gelberg L. (1997). Comparability and representativeness of clinical homeless, community homeless, and domiciled clinic samples: Physical and mental health, substance use, and health services utilization. *Health Psychology*, 16(2), 155-162.

Stevens RC, Rapaport S, Maroldo-Connelly L, Patterson JB, Bertz R. (2003). Lack of methadone dose alterations or withdrawal symptoms during therapy with lopinavir/ritonavir. J Acquir Immune Defic Syndr.Aug 15;33(5):650-1.

Stone, V.E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases*, 33(6), 865-872.

Sullivan L. Drug interaction guide: Opioids and HIV antiretroviral agents. Draft. July 22, 2004. Supported by NY/NJ AETC, HRSA.

Urbina A, Jones K. (2004). Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic. Clin Infect Dis. Mar 15;38(6):890-4.

Walsh, J.C., Hertogs, K., Gazzard, B. (2000). Viral drug resistance, adherence and pharmacokinetic indices in HIV-1 infected patients on successful and failing protease inhibitor (PI) based highly active antiretroviral therapy (HAART) [Abstract 699]. Presented at the 40th Interscience Conference of Antimicrobial Agents and Chemotherapy, Toronto, Canada, September 17-20, 2000, 294.

Whalen, C., Horsburgh, C.R., Hom, D., et al. (1995). Accelerated course of human immunodeficiency virus infection after tuberculosis. *American Journal of Respiratory Critical Care Medicine*, 151(1), 129-135.

Williams, A., Friedland, G. (1997). Adherence, compliance, and HAART. *AIDS Clinical Care*, 9(7), 51-54, 58.

Reading List

University of California San Francisco. (2002). *Addressing the challenges of adherence. Navigating emerging challenges to long-term HIV therapy*. World Heath CME, New York, New York.

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Project Inform. (October 2002). Adherence: Keeping up with your meds. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/adherence.pdf.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/doctorpatient.pdf

References

Altice, F.L., Friedland, G.H., Cooney, E.L. (1999). Nevirapine induced opiate withdrawal among injection drug users with HIV infection receiving methadone. *AIDS*, 13(8), 957-962.

Antoniou, T., Tseng, A.L. (2002). Interactions between recreational drugs and antiretroviral agents. *Annals of Pharmacotherapy*, 36(10), 1598-1613.

Arnsten, J.H., Demas, P.A., Farzadegan, H., et al. (2001). Antiretroviral therapy adherence and viral suppression in HIV-infected drug users: Comparison of self-report and electronic monitoring. *Clinical Infectious Diseases*, 33(8), 1417-1423.

Arnsten, J.H., Demas, P.A., Grant, R.W., et al. (2002). Impact of active drug use on antiretroviral therapy adherence and viral suppression in HIV-infected drug users. *Journal of General Internal Medicine*, 17(5), 377-381.

Bagasra, O., Pomerantz, R.J. (1993). Human immunodeficiency virus type 1 replication in peripheral blood mononuclear cells in the presence of cocaine. *Journal of Infectious Diseases*, 168(5), 1157-1164.

Bamberger, J., Bangsberg, D., Chamber, D., et al. (June 2000). Adherence to HIV therapies: Critical issues. *Science to Community, Clinical #1.* University of California-San Francisco, San Francisco, California.

Broers, B., Morabia, A., Hirschel, B. (1994). A cohort study of drug users' compliance with zidovudine treatment. *Archives of Internal Medicine*, 154(10), 1121-1127.

Beauverie, P., Taburet, A. M., Dessalles, M. C., et al. (1998). Therapeutic drug monitoring of methadone in HIV-infected patients receiving protease inhibitors. *AIDS*, 12(18), 2510-2511.

Bruno, R., Sacchi, P., Puoti, M., et al. (2002). HCV chronic hepatitis in patients with HIV: Clinical management issues. *American Journal of Gastroenterology*, 97(7), 1598-1606.

Carmona, A., Knobel, H., Guelar, A., et al. (2000). Factors influencing survival in HIV-infected patients treated with HAART [Abstract TuOrB417]. Presented at 13th International AIDS Conference, Durban, South Africa, July 9-14, 2000.

Cedars-Sinai Medical Center. (2001). *Adherence Now: Best Practices and Practical Tools. Proceedings of a roundtable symposium in November 2001.* World Heath CME, New York, New York.

Centers for Disease Control and Prevention. (2002). Guidelines for using antiretroviral agents among HIV-infected adults and adolescents: Recommendations of the Panel on Clinical Practices for Treatment of HIV. *MMWR*, 51(RR-7), 1-55. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5107a1.htm)

Centers for Disease Control and Prevention. (1998). Prevention and treatment of tuberculosis among patients infected with human immunodeficiency virus: Principles of therapy and revised recommendations. *MMWR*, 47(RR-20), 1-58. (http://www.cdc.gov/mmwr/preview/mmwrhtml/00055357.htm)

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

Clarke S., Mulcahy F., Bergin C., et al. (2002). Absence of opioid withdrawal symptoms in patients receiving methadone and the protease inhibitor lopinavir-ritonavir. *Clinical Infectious Diseases*, 34(8), 1143-1145.

Clarke, S., Mulcahy, F., Tija, J., et al. (2001).The pharmacokinetics of methadone in HIV-positive patients receiving the non-nucleoside reverse transcriptase inhibitor efavirenz. *British Journal of Clinical Pharmacology*, 51(3), 213-217.

Eldin, B.R., Seal, K., Lorvick, J., et al. (2001). Is it justifiable to withhold treatment for hepatitis C from illicit injection drug users? *New England Journal of Medicine*, 345(3), 211-214.

Elliot, A. Depression and HIV. (1997). Retrieved December 2002 at the Project Inform website at http://www.projectinform.org.

Ferrando, S.J. (2001). Substance abuse and HIV infection. *Psychiatric Annals*, 31(1), 57-62.

Fried, M.W., Shiffman, M.L., Reddy, K.R., et al. (2002). Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *New Journal of Medicine*, 347(13), 975-982.

Gordillo V., del Amo, J., Soriano, V., et al. (1999). Sociodemographic and psychological variables influencing adherence to antiretroviral therapy. *AIDS*, 13(13), 1763-1769.

Golin, C.E., Liu, H., Hays, R.D., et al. (2002). A prospective study of predictors of adherence to combination antiretroviral medication. *Journal of General Internal Medicine*, 17(11), 756-765.

Gourevitch, M.N., Friedland, G.H. (2000). Interactions between methadone and medications used to treat HIV infection: A review. *Mount Sinai Journal of Medicine*, 67(5-6), 429-436.

Henry, J.A., Hill, I.R. (1998). Fatal interaction between ritonavir and MDMA. *Lancet*, 352(9142), 1751-1752.

Harrington, R.D., Woodward, J.A., Hooton, T.M., et al. (1999). Life-threatening interactions between HIV-1 protease inhibitors and the illicit drugs MDMA and γ -hydroxybutyrate. *Archives of Internal Medicine*, 159(18), 2221-2224.

Horn, G. (1998). Party favors – Do yourself one: Get the dope on the protease effect. *POZ*, 36. Available on the *POZ* web site at http://www.poz.com/archive/june1998/partner/warning.html)

Horn, T. (2001). HIV drug resistance and drug resistance testing: Just the FAQ's. *CRIA Update*, 10(4).

Landau, A., Batisse, D., Piketty, C., et al. (2001). Long-term efficacy of combination therapy with interferon-alpha 2b and ribavirin for severe chronic hepatitis C in HIV-infected patients. *AIDS*, 15(16), 2149-2155.

Lauer, G.M., Walker, B.D. (2001). Hepatitis C virus infection. *New England Journal of Medicine*, 345(1), 41-51.

McCance-Katz, E.F., Rainey, P.M., Jatlow, P., et al. (1998). Methadone effects on zidovudine disposition (AIDS Clinical Trials Group 262). *Journal of Acquired Immune Deficiency Syndrome Human Retrovirology*, 18(5), 435-443.

Murphy, E.L., Collier, A.C., Kalish, L.A., et al. (2001). Highly active antiretroviral therapy decreases mortality and morbidity in patients with advanced HIV disease. *Annals of Internal Medicine*, 135(1), 17-26.

Nasti, G., DiGennaro, G., Tavio, M., et al. (2001). Chronic hepatitis C in HIV infection: Feasibility and sustained efficacy of therapy with interferon alfa-2b and ribavirin. *AIDS*, 15(14), 1783-1787.

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Paterson, D.L., Swindells, S., Mohr, J., et al. (2000). Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of Internal Medicine*, 133(1), 21-30.

Peterson, P.K., Gekker, G., Chao, C.C., et al. (1991). Cocaine potentiates HIV-1 replication in human peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 146(1), 81-84.

Peterson, P.K., Gekker, G., Chun, C.C., et al. (1992). Cocaine amplifies HIV-1 replication in cytomegalovirus-stimulated peripheral blood mononuclear cell cocultures. *Journal of Immunology*, 149(2), 676-680.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 at the Project Inform website http://www.projectinform.org/pdf/doctorpatient.pdf.

Rainey, P.M., Friedland, G., McCance-Katz, E.F., et al. (2000). Interaction of methadone with didanosine and stavudine. *Journal of AIDS*, 24(3), 241-248.

Reiter, G.S., Stewart, K.E., Wojtusik, L., Hewitt, R., Segal-Maurer, S., Johnson, M., et al. (2000). Elements of success in HIV clinical care: Multiple interventions that promote adherence. *Topics in HIV Medicine*. 8(5), 21-30.

Richman, D. D., Bozette, S., Morton, S., Chien, S., Wrin, T., Dawson, K., Hellmann, N. "The Prevalence of Antiretrviral Drug Resistance in the U.S." (Abstract LB-17), 41st Intersceince Conference on Antimicrobial Agents and Chemotherapy, 2001.

Roth, M.D., Tashkin, D.P., Choi, R., et al. (2002). Cocaine enhances human immunodeficiency virus replication in a model of severe combined immunodeficient mice implanted with human peripheral blood leukocytes. *Journal of Infectious Diseases*, 185(5), 701-705.

Samet, J.H., Libman, H., Steger, K.A., et al. (1992). Compliance with zidovudine therapy in patients infected with human immunodeficiency virus, type 1: A cross-sectional study in a municipal hospital clinic. *American Journal of Medicine*, 92(5), 495-502.

Selwyn, P.A., Hartel, D., Lewis, V.A., et al. (1989). A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. *New England Journal of Medicine*, 320(9), 545-550.

Selwyn, P.A., Feingold, A.R., Hartel, D., et al. (1988). Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. *AIDS*, 2(4), 267-272.

Shapiro, M.F., Morton, S.C., McCaffrey, D.F., et al. (1999). Variations in the care of HIV-infected adults in the United States: Results from the HIV Cost and Services Utilization Study. *JAMA*, 281(24), 2305-2315.

Sherer, R. (1998). Adherence and antiretroviral therapy in injection drug users. *JAMA*, 280(6), 567-568.

Soto, B., Sanchez-Quijano, A., Rodrigo, L., et al. (1997). Human immunodeficiency virus infection modifies the natural history of chronic parenterally-acquired hepatitis C with an unusually rapid progression to cirrhosis. *Journal of Hepatology*, 26(1), 1-5.

Strathdee, S.A., Palepu, A., Cornelisse, P.G., et al. (1998). Barriers to use of free antiretroviral therapy in injection drug users. *JAMA*, 280(6), 547-549.

Staszewski, S., Haberl, A., Gute, P., et al. (1998). Nevirapine/didanosine/lamivudine once daily in HIV-1-infected intravenous drug users. *Antiviral Therapy*, 3(Suppl 4), 55-56.

Stein, J.A., Gelberg L. (1997). Comparability and representativeness of clinical homeless, community homeless, and domiciled clinic samples: Physical and mental health, substance use, and health services utilization. *Health Psychology*, 16(2), 155-162.

Stone, V.E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases*, 33(6), 865-872.

Walsh, J.C., Hertogs, K., Gazzard, B. (2000). Viral drug resistance, adherence and pharmacokinetic indices in HIV-1 infected patients on successful and failing protease inhibitor (PI) based highly active antiretroviral therapy (HAART) [Abstract 699]. Presented at the 40th Interscience Conference of Antimicrobial Agents and Chemotherapy, Toronto, Canada, September 17-20, 2000, 294.

Whalen, C., Horsburgh, C.R., Hom, D., et al. (1995). Accelerated course of human immunodeficiency virus infection after tuberculosis. *American Journal of Respiratory Critical Care Medicine*, 151(1), 129-135.

Williams, A., Friedland, G. (1997). Adherence, compliance, and HAART. *AIDS Clinical Care*, 9(7), 51-54, 58.

Lecture List

University of California San Francisco. (2002). *Addressing the challenges of adherence. Navigating emerging challenges to long-term HIV therapy.* World Heath CME, New York, New York.

Chesney, M.A. Factors affecting adherence to antiretroviral therapy. (2000). *Clinical Infectious Diseases*, 30(Suppl 2), 171-176.

Chesney, M. (January 1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS* 12(1), 10-13. (http://www.sfaf.org/treatment/beta/b39/b39adhere.html)

O'Connor, P.G., Selwyn, P.A., Schottenfeld, R.S. (1994). Medical progress: Medical care for injection-drug users with human immunodeficiency virus infection. *New England Journal of Medicine.* 331(7), 450-459.

Project Inform. (October 2002). Adherence: Keeping up with your meds. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/adherence.pdf.

Project Inform. (May 1996). Building a cooperative doctor/patient relationship. Retrieved December 2002 from the Project Inform website at http://www.projectinform.org/pdf/doctorpatient.pdf

Module V: Interdisciplinary Care – Building Relationships Among Providers and Agencies

Table of Contents

Introduction

Background and Purpose

Client-centered care challenges providers, agencies and systems of care to collaborate in a productive manner to meet the goals of the client. The purpose of this interdisciplinary module is to provide participants with strategies for fostering more collaborative relationships among the various providers involved in the care of HIV-infected substance users. This module describes and explores different techniques for improving the coordination of care between agencies. It also helps to clarify the roles and expertise levels of medical providers, substance abuse treatment providers, mental health professionals, case managers, and outreach workers.

A variety of participants may benefit from the trainings described in this module, including medical providers, substance abuse treatment providers, mental health providers, case managers, outreach workers, administrators, and people in recovery. The activities and presentations have been structured to accommodate persons with educational levels ranging from high school to advanced graduate degrees. For the small group exercises described in the module activities, it is important that the groups contain a balanced number of persons representing each discipline. This balance will help reinforce the theme that the interdisciplinary model of care requires representation from multiple disciplines. Instructors should invite additional team members, as needed, to ensure that workshop groups are balanced, with practitioners from each discipline.

The instructors who use this module should have professional experience in HIV or substance use and knowledge of human relations and group dynamics. They should also have expertise in working as part of an interdisciplinary team. A basic understanding of group dynamics within a workshop setting is also necessary to manage individual and group responses to challenging materials.

Parts of this module are adapted from the book *Wisconsin Partnership Program/Quality Research*, by B. Bowers, published in 1999 by the University of Wisconsin-Madison School of Nursing, Providing Consumer Centered Care in Integrated Programs, Madison, Wisconsin.

Resource Materials

- Handout V-1, “Assessment of Professional Identification”, (Page 8)
- Handout V-2, “HIV and Substance Use Case Study” (Page 15)
- Handout V-3, “Individual Assessment Worksheet” (Page 24)
- Handout V-4, “Group Assessment Worksheet” (Page 28)
- Handout V-5, “Case Study: Brooklyn Hospital Center Path Program” (Page 39)
- Handout V-6, “Case Study: AIDS Services Center” (Page 41)
- Handout V-7, “Case Study: Special Health Resources of East Texas” (Page 42)
- Handout V-8, “Case Study: Project Bridge” (Page 44)
- Handout V-9, “Community Linkages Assessment Guide” (Page 46)
- Handout V-10, “Agency Linkages Evaluation Tool” (Page 48)
- Handout V-11, “Sample Confidentiality Agreement” (Page 50)
- Slides V-1 to V-24
- Four flipcharts
- Colored markers
- Self-stick note pads
- Slide projection equipment

Objectives

By the end of this module, participants will:

- Be able to state at least three ways in which their work is representative of a particular discipline
- Be able to describe at least three functions of the role of medical, substance abuse, mental health, and social service providers, and outreach workers and health educators
- Be able to explain how different providers define, provide and evaluate client care
- Be able to describe at least three strategies to overcome communication barriers among the members of an interdisciplinary care team
- Be able to describe at least two strategies to create agency linkages within their communities

Training Tips:

When participants enter the room, find out who they are and seat them in working groups of six to ten people each. The groups should be comprised of various disciplines. Ask each working group to sit at a different table. This will save time later when the groups work on the case study and the team communication exercise.

Training of Trainers Teach Back Opportunities:

Throughout this module in the Instructor Notes for most activities are boxes like this in which you will find suggestions for how to structure a teach back in a Training of Trainers setting. These teach backs are NOT factored into the time allotted for the sessions. While teach backs will put only one or two participants on the "hot seat" at any time, they should also provide opportunities for you to ask other members of the group how they would have handled a situation differently.

Session 1: Icebreaker/Introductions

Activity: Participant Introductions

Purpose

- To come to an understanding of goals and expectations with participants
- To obtain information about the diversity of participants and their experience in working with HIV-infected substance users
- To demonstrate that each participant can fit into many roles in treating HIV-infected substance users and that each person brings a spectrum of experiences to his or her work
- To help participants get to know each other and become comfortable in the group

Time: 45 minutes

Materials

- Flipchart and colored markers
- Enough pens and pencils for each participant
- Self-stick note pads with notes of two different colors
- Long sheet of newsprint paper hung on wall with a timeline dating from 1960

Instructor Notes

1. In preparation for this activity, prepare and post a long sheet of newsprint paper containing a timeline date from 1960 to the present.

2. Trainers should introduce themselves to the group.

3. Ask participants what they want to get out of the workshop, and write their responses on a sheet of flipchart paper. Let participants know if something they expect to be covered will not be available or discussed during the workshop. (This list can also be generated during Session 3, "Key Components of Interdisciplinary Care.")

4. Ask participants to write down either "HIV" or "Substance Use" (SU) (whichever they prefer) on a self-stick note; everyone should use the same color note for this. Then ask the participants to place their notes on the timeline according to when they began working in that field.

5. Ask each participant to write down "HIV/SU" on another self-stick note; again, everyone should use the other color note for this. Ask the participants to place their second notes on the timeline according to when they began working in both disciplines or first had exposure to the issues involved in both.

6. Point out that the timeline demonstrates the wide range of experience that people in the room have in HIV, substance use, and the overlap between the two.

7. Now ask each person in the room to introduce himself or herself to the group. This brief introduction should include answers to the following questions:
   - What is your professional role now?
   - How did you get started in HIV and substance use work?
   - What is your experience working with interdisciplinary teams?

8. Summarize this activity by again recognizing the experience that each person brings to the group. Note that the participants' broad spectrum of experience will help inform the discussions of interdisciplinary care throughout the day.

Training Tip:

For Option 4 (in which the timeline is displayed and added to in each of 4 separate training days) it might make more sense for participants to write their names directly on the timeline – in red for HIV, blue for SU and purple for HIV/SU.

Session 1A: Icebreaker/Introductions (Short Version)

Purpose

- To help participants to get to know each other and become comfortable in the group.
- To explore thoughts, feelings, and impressions about the word "trust".
- To incorporate actions and behaviors that promote trust and that are agreed upon by the group into the rest of the training.

Time: 20 minutes

Materials

- Blackboard or a pad of newsprint
- Chalk or a marker
- Masking tape

Instructor Notes

1. Request the participants to think about what the word "trust" means to them.

2. After several minutes, ask the participants to brainstorm actions or personal characteristics that they feel build or promote trust. For example: maintaining confidentialities, being dependable, having a caring manner, being understanding, etc.

3. List these actions and characteristics on a blackboard or newsprint.

4. Ask the participants to brainstorm *specific* actions and characteristics that can help them build trust in one another during this particular training session.

5. List these on the blackboard or newsprint and ask the participants to incorporate some of the actions or behaviors into the remainder of the training session.

6. Ask each person in the room to introduce himself or herself to the group giving their name and current professional role, e.g. social worker, nurse, physician.

7. Summarize this activity by concluding with a brief discussion of the trust required between members of the interdisciplinary team.

Session 2: Professional Identification

Activity: Assessment of Professional Identification

Purpose: To explore and distinguish the perspectives and stereotypes that participants have about different professions and providers

Time: 10 minutes

Materials: Handout V-1, "Assessment of Professional Identification"

Instructor Notes

1. Background: Each of us has particular ideas about why people choose the types of work they do. Although these ideas may have some basis in truth, they can also be exaggerated or based on stereotypes. Whatever their origins, our impressions and perspectives about providers in our own practice and in other fields can affect our daily interactions with each other. This exercise is designed to allow participants to explore and distinguish their perspectives and stereotypes about different professions and providers.

2. Ask the participants to fill out Handout V-1, "Assessment of Professional Identification."

3. After they have filled out the assessment, ask them to fold it up and put it away for now. Issues related to professional identification will be revisited later in the module.

Handout V-1

Assessment of Professional Identification

For each of the professions listed below, please list some of the things that you think might motivate a person to become a member of that profession. Think about and note the different skills you think people in these professions need in order to be successful in their work. Please be as specific and detailed as you can be about each profession. Use the back of this sheet if you need more room. Your responses on this sheet are meant for you alone and will not be shared with the group.

Physician

Nurse Practitioner

Physician's Assistant

Registered Nurse

Mental Health Professional

Substance Abuse Treatment Provider

Outreach Worker

Health Educator

Adapted from the *Interdisciplinary Collaborative Teams in Primary Care Handbook*, published in 1997 by the Pew Health Professions Commission.

Session 3: Key Components of Interdisciplinary Care

Presentation: Defining Interdisciplinary Care

Purpose

- To understand that there is no single definition of interdisciplinary care
- To recognize the key components of the interdisciplinary care team

Time: 20 minutes

Materials

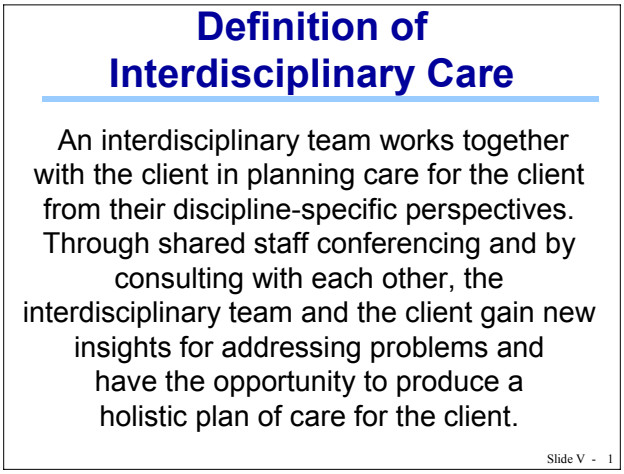
- Flipchart and colored markers
- Slide V-1, "Definition of Interdisciplinary Care"
- Slide V-2, "Key Components of the Interdisciplinary Care Team"
- Slide V-3, "Key Components of the Interdisciplinary Care Team (continued)"

Instructor Notes

1. If you did not do so as part of the Session 1 or 1A, "Icebreaker/Introductions," ask the participants what they want to get out of the workshop, and write their responses on a sheet of flipchart paper. Let participants know if something they expect will not be available or discussed during the workshop.

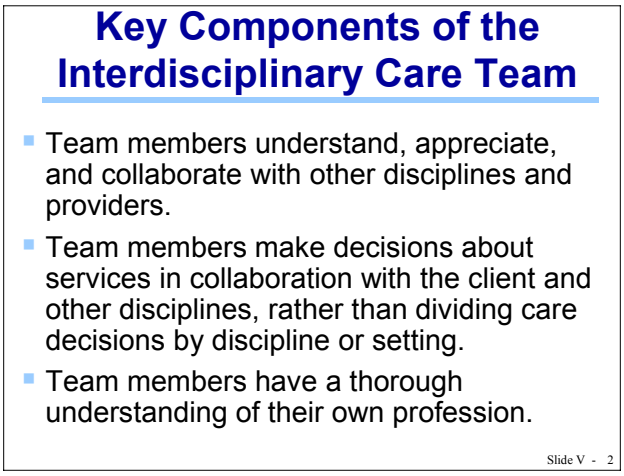
2. Ask the participants to define "Interdisciplinary Care." Summarize the key themes of their responses on a sheet of flipchart paper.

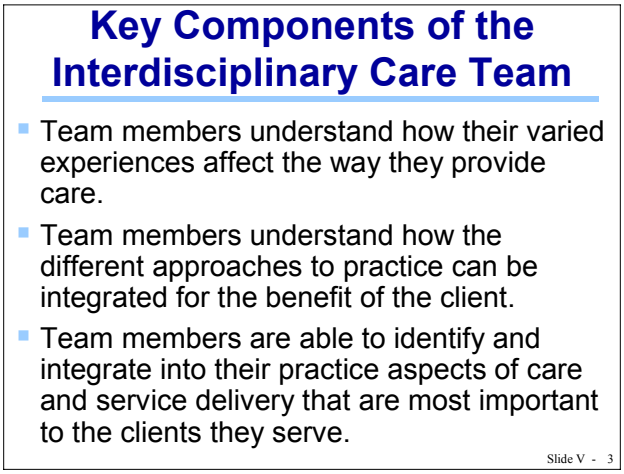
3. Present the definition of interdisciplinary care given in Slide V-1, and reflect with the group on its main points, focusing on the following:
   - Knowledge of the expertise and role of other team members and how these interrelate
   - Trust between team members
   - Recognition of and respect for the specialized skills and contributions of each team member



4. Emphasize that HIV and substance use services are often provided to the client in separate settings by separate agencies, and that these settings and agencies are often not linked. If the various providers who serve HIV-infected substance users don't work together, they neither share critical information about the client nor achieve improved outcomes.

5. Acknowledge that everyone brings a different perspective of interdisciplinary care into the room. Use Slides V-2 and V-3 to highlight the key components of the interdisciplinary care team.





6. Ask the participants whether they have any questions, and summarize the key points of the activity.

Session 4: Discipline Awareness and Understanding

Activity: Team Member Professional Identification

Purpose

- To encourage participants to think of themselves as members of a particular discipline and understand the discipline-specific orientation that guides their work
- To increase participants' awareness of the common values, attitudes, logic, and priorities of providers in their discipline, as well as individual differences in experience and perspective
- To see how these values, attitudes, logic, priorities, and approaches to practice play out in a case study involving an HIV-infected substance user

Time: 45 minutes

Materials

- Breakout tables large enough to accommodate six to ten people each
- Flipchart and colored marker
- Handout V-2, "HIV and Substance Use Case Study" (urban and rural versions)
- Handout V-3, "Individual Assessment Worksheet"

Instructor Notes

1. Background: As noted above, an important goal of this exercise is to encourage participants to think of themselves as members of a particular discipline and to understand the discipline-specific orientation that guides their work. This exercise will also help increase the participants' awareness of the common values, attitudes, logic, and priorities of providers in their discipline, as well as individual differences among providers in their discipline. These differences may include identity, personal experiences, professional perspective, and credentials.

   This exercise will also encourage participants to recognize and be confident about their competence in their work.

   Throughout this activity, it will be important to keep the participants focused on their own discipline and role, rather than on other disciplines. It is very likely that some participants will shift their focus to other disciplines. If this occurs, you should direct them back to examining the values and logic of their own practice. Participants who are unable to stay on task may be experiencing a high level of tension with their team or may lack a clear understanding of their own discipline or role.

2. If you haven't already, divide the participants into working groups of six to ten people each. The groups should be comprised of various disciplines. Ask each working group to sit at a different table.

3. Pass out a copy of the case study and the "Individual Assessment Worksheet" to each participant. Note that there are two settings (urban and rural) and two lengths (full and condensed) of case studies included in this module.. Please use the case study that is most appropriate for your region, audience, and time limitations.

4. Review with participants the worksheet instructions as well as the objectives listed at the beginning of this activity.

5. Ask the participants to read the case study and complete the worksheet. Allow 20 minutes if using the longer case study, 15-20 minutes if using the shorter version.

6. Ask each participant to look at Item 1 on the worksheet, in which they identified and prioritized the client's needs. Have them discuss their answers to this question with other participants of their small group and circle the areas where their answers varied from others. Ask the group to consider and discuss the questions below. Ask one member of the group to serve as a recorder to capture the key themes from their discussion. Allow 10 minutes.

   - How did you make a decision about what the client needed?
   - What assumptions guided your assessment of the client's needs? These may include assumptions about the population, the urgency of the situation, and the things that you feel are most troubling to the client. Your assessment may also reflect your past experiences, your work philosophy, and your ideas about providing care to clients. Try to consider all of the things you are bringing to the situation that are not coming from the client.
   - How did you prioritize the needs in Item 1 on the worksheet? What was the logic behind your thinking? What made you think that some needs were more important than others?

7. Ask the recorder from each working group to summarize their group's discussion to the larger group. If there were differences in the thinking among the participants, identify these for the group and examine them. If the people in the working groups all thought alike, what common logic guided them? Allow 15 minutes for steps 7-9.

   At this point, introduce the idea of "advocacy" if the participants have not already mentioned it. Consider what can happen when a single person or more than one person of the same discipline identify as the client's *only* advocate. This can set up a conflict between disciplines. Emphasize to the group that every provider is an advocate for his or her client.

8. Continue a guided group discussion with entire group, using the following questions:
   - How did you select the criteria for evaluation (Item 6 on worksheet)? What do these sets of criteria tell you? What don't they tell you? Do the criteria you selected correspond to the responsibilities you assigned in Item 5 on the worksheet?
   - Think about your personal history and your professional experiences. How might these have influenced your approach to this case study?

9. Summarize the highlights of this activity.

Training Tip:

Change the case study you use to make it culturally and regionally appropriate as well as to fit time restraints. The condensed version has already been stripped down to the essentials.

Training of Trainers Teach Back Opportunity:

Objective: Facilitating a Group Discussion When a Difficult Person is Present

After completing steps 1-9, stop the group and explain that you are going to ask 2 of them to teach back to the group as "Teach Back Co-Facilitators." Have them repeat steps 7-9. Slip a 3x5 card to another group member, asking him/her to take the part of case manager who believes that case managers are the only "true advocates" of a client, putting off group members from other disciplines. The Teach Back Co-Facilitators should turn this conflict into a learning opportunity.

Handout V-2

HIV and Substance Use Case Study

Introduction

The following case study is a teaching tool to describe and promote the use of an interdisciplinary model of care in addiction treatment settings. Tom Gates is a patient who is HIV-infected and has a substance use disorder. Tom's story includes a variety of typical, but challenging, situations seen among HIV-infected substance users who receive care in addiction treatment programs. Although circumstances and available resources vary from program to program, this case presents many of the challenges facing providers in this practice setting. In working with this case study, the primary objective is to encourage you to work with other group members as a team. In this way, you will learn to apply an interdisciplinary approach to care that can address the myriad and complex issues common to HIV-infected substance users.

In the context of this case, the term "health care" includes a broad range of health care needs, including nursing, medical care, mental health and substance abuse treatment, as well as social services and other nonmedical needs. The term "interdisciplinary team" is used to describe the group of providers from many disciplines who are providing services to the client. It is important to recognize that all of these providers may not necessarily work for the same organization or at the same site.

We have presented two different versions of this case study to highlight the different types of issues that might be encountered in urban and rural locations. The first version takes place in a major city with significant medical and substance abuse treatment resources, while the second version takes place in a rural location with fewer resources in the immediate vicinity.

Case History (Urban Version)

Tom Gates, a 56-year-old male, has been a patient at TriCity Community Health Center for the past three months. Tom originally came to TriCity with the complaint of mouth sores and diarrhea. He was seen by the physician, Deborah Kavanagh, and treated for oral thrush and hypertension. After appropriate testing, he was diagnosed as coinfected with HIV and the hepatitis C virus (HCV). His CD4 count is 350, with a viral load of 635,000. Deborah would like to start Tom on antiretroviral medications but is reluctant, because she is concerned about his substance use.

Tom admits to drinking a pint of liquor daily and smoking crack "with buddies on the weekends." Tom states he started drinking heavily when he was 18 years old. At the time, he was in the Navy and stationed in Southeast Asia. Tom states that he has used heroin in the past and has injected it along with cocaine. He says he has "laid off that stuff" over the last few years.

Tom does not have health insurance and is paying a sliding scale fee at TriCity Community Health Center. Deborah gives Tom sample medications for the oral thrush and hypertension and asks him to return in two weeks for follow-up. Deborah also refers Tom to Jan Harris, a licensed social worker, for a psychosocial assessment and to determine what benefits he may be eligible

for to cover the costs of medications. Jan meets with Tom briefly that day, talks with him about how he feels about being infected with HIV and HCV, and begins establishing a relationship with him. Tom has a quiet demeanor and has very few questions regarding his new diagnosis. He agrees to meet with Jan again, and they set up an appointment a week later to conduct a psychosocial assessment.

Tom misses his follow-up appointments with both Jan and Deborah and arrives at TriCity a month later out of medications and smelling of alcohol. He avoids eye contact with Laura Curran, the triage nurse, and his clothes are dirty and his hair disheveled. When he speaks with Laura, Tom becomes teary-eyed, saying he doesn't want to die. She takes his blood pressure and finds that it is high, with a reading of 186/100. Deborah examines Tom that morning and discusses his treatment options with him again. Tom agrees to go into substance abuse treatment, and Deborah refers him directly to Jan, the social worker, to set up arrangements for admission to a program.

Jan explains to Tom that TriCity has a collaborative agreement with Second Genesis, an out-patient substance abuse treatment program located six blocks from the health center. Jan calls Second Genesis and gets an intake appointment for Tom that afternoon. She faxes a summary of his health history and current medications to Second Genesis. Tom arrives for his appointment at Second Genesis two hours later. He is met by Louise Brown, a licensed social worker and certified addiction counselor, who conducts the intake assessment. She then refers Tom to Sandy Hale, a psychologist, for further mental health assessment.

Sandy diagnoses Tom with depression, post-traumatic stress disorder (PTSD), cocaine abuse, and alcohol dependence. She confers with Jeffrey Frank, the consulting psychiatrist for Second Genesis, and starts Tom on the antidepressant bupropion (trade name Wellbutrin). Sandy and Jeffrey observe Tom for any signs of alcohol withdrawal. They also teach him what signs and symptoms to watch for and ask him to contact them if symptoms develop.

From the intake assessment, the staff at Second Genesis learns that Tom was a machinist working in a tool and dye shop after he was dishonorably discharged from the Navy due to substance abuse. He has had various laborer jobs over the past 30 years, with periods of unemployment. For the past two years, Tom has been working as a janitor at a local steel factory. He lives alone in a one-room apartment downtown and takes the bus to work. Tom is divorced and has two grown children who live out of state. His ex-wife remarried two years after their divorce 23 years ago. Tom says that she and her new husband didn't "want me around my kids... I saw them once in a while when they were young," but he has "lost track of them" over the years. Tom's parents are both dead. He relates that he has a younger brother in town whom he talks to occasionally, but "we don't get along that well." Tom reports that he was incarcerated five years ago for "hitting a guy over the head with a bottle" in a street fight. He has a scar over his right temple and says he has had seizures in the past.

Tom relates that he has been in treatment before – several times in outpatient treatment and through detox "a couple of times." He states that he was once in an inpatient treatment program for three weeks, "but that was a few years back." He denies using heroin or injecting drugs for the past three years. He drinks a pint of liquor a day and has for a "long time."

Sandy Hale and Louise Brown consult on a plan of care, and Louise then reviews it with Tom. Tom agrees to start individual counseling with Sandy once a week, attend the TriCity's Addiction Groups for one hour each day, and go to at least three AA meetings per week. Louise Brown also meets with Tom on a weekly basis to see how he is doing and to manage his plan of care at the substance abuse treatment program.

Over the next five weeks, Tom follows his treatment plan at Second Genesis and participates in the groups. He also returns to TriCity Community Health Center and is started on antiretroviral medications by his physician Deborah Kavanagh. Although Tom has some side effects – nausea and diarrhea – he takes his medications as directed. Deborah is concerned about Tom's nutritional status, since he is about 20 pounds below normal body weight and his blood pressure remains uncontrolled. Tom is referred to a gastroenterologist for a consult regarding his HCV infection and poor nutritional status. A liver biopsy is ordered and scheduled for two weeks later.

Tom continues to meet periodically with Jan the social worker and obtains a pharmacy entitlement that pays for his prescriptions. She also helps him access nutritional supplements. Jan completes the psychosocial assessment with Tom and learns that he is the oldest of four children. Although his brother and his family live in town, his two sisters moved to the East Coast 20 years ago. He admits that his relationships with his siblings are "not very good." He also split up with a woman friend six months ago. Tom states that she "left me for someone else" and confides that he misses her. Tom started using heroin and speedballing cocaine in his late twenties after returning from Vietnam. He has had several periods of homelessness over the last 30 years and has moved in and out of town.

During his sixth week at Second Genesis, Tom has a urine test that is positive for alcohol. Louise discusses with him what triggered his use of alcohol. Tom states that an old girlfriend of his came to his apartment last night and they had a "few drinks together." He relates that she is going to be staying with him for a while, because she lost her job and can't pay the rent for her apartment. Louise strongly recommends to Tom that he make his sobriety the priority in his life. She tells him that if he has another positive urine test, he will be asked to leave the program. Five days later, a random urine sample from Tom returns positive for alcohol, and he is discharged from Second Genesis.

A week later, Tom presents to TriCity for both his medical appointment with Deborah, and his case management appointment with Jan. In meeting with Jan, Tom tells her what has happened at Second Genesis. He admits to Jan that he is drinking daily but states that he is not doing any crack. He has continued taking his medications, and he says that his girlfriend is "helping me to remember to take them." Tom says he told his girlfriend he is HIV-infected and that she doesn't have "it." Jan discusses with Tom the risk reduction behaviors he needs to take when having sexual relations with his girlfriend.

Jan congratulates Tom on maintaining sobriety from crack cocaine for a whole month. She discusses with Tom what he did during his one month of sobriety that helped him stay sober. Jan also reviews the medical treatment plan with Tom and asks him what part of the plan he thinks

he can do at this time. Tom states that he can take his HIV medications but does voice concerns about side effects. He says he can stay off cocaine, and will try not to drink.

Jan discusses the situation with Deborah, and they decide to ask Second Genesis to take Tom back into their program. Jan calls Louise, the substance abuse provider, and relates her conversation with Tom concerning his desire to re-enter their program. Louise and Sandy Hale, the psychologist, remind Jan that clients at Second Genesis have to make a commitment to abstinence and maintain negative urines to stay in the program. They give Tom an appointment for the next morning, and he is readmitted into Second Genesis. Two weeks later, he is discharged again after a positive urine test. Jan tries to get Second Genesis to take Tom back into the program again, but they refuse. There are no other addiction treatment programs in the community. Over the next month, Tom continues to be engaged with TriCity, although he misses some appointments and shows up as a walk-in. He continues to drink, denies using cocaine, and is taking his antiretroviral medications.

Case History (Rural Version)

Tom Gates, a 56-year-old male, has been a patient at Rural Community Health Center for the past three months. Tom originally came to Rural with the complaint of mouth sores and diarrhea. He was seen by the physician, Deborah Kavanagh, and treated for oral thrush and hypertension. After appropriate testing, he was diagnosed as coinfected with HIV and hepatitis C virus (HCV). His CD4 count is 350 with a viral load of 635,000. Deborah would like to start Tom on antiretroviral medications but is reluctant, because she is concerned about his substance use.

Tom admits to drinking a pint of liquor daily and smoking crack "with buddies on the weekends." Tom states he started drinking heavily when he was 18 years old. At the time, he was in the Navy and stationed in Southeast Asia. He states that he has used heroin in the past and has injected it along with cocaine. He also claims he has "laid off of that stuff" over the last few years.

Tom does not have health insurance and is paying a sliding scale fee at Rural Community Health Center. Deborah gives Tom sample medications for the oral thrush and hypertension and asks him to return in two weeks for follow up. Deborah also refers Tom to Jan Harris, a licensed social worker, for a psychosocial assessment and to determine what benefits he may be eligible for to cover the costs of medications. Jan meets with Tom briefly that day, talks with him about how he feels about being infected with HIV and HCV, and begins establishing a relationship with him. Tom has a quiet demeanor and has very few questions regarding his new diagnosis. He agrees to meet with Jan again, and they set up an appointment for a week later to conduct a psychosocial assessment.

Tom misses his follow-up appointments with both Jan and Deborah and arrives at the health center a month later out of medications and smelling of alcohol. He avoids eye contact with Laura Curran, the medical assistant, and his clothes are dirty and his hair disheveled. On talking with Laura, Tom becomes teary-eyed, saying he doesn't want to die. She takes his blood pressure and finds that it is high, with a reading of 186/100. Deborah examines Tom that morning and discusses his treatment options with him again. Tom agrees to go into substance abuse treatment,

and Deborah refers him directly to Jan, the social worker, to set up arrangements for entry into a program.

Jan explains to Tom that Rural has a collaborative agreement with Second Genesis, an outpatient substance abuse treatment program located 30 miles away in the next town. Jan calls Second Genesis and gets an intake appointment for Tom the next day. She faxes a summary of his health history and current medications to Second Genesis. Tom arrives for his appointment the next morning. He is met by Louise Brown, a licensed social worker and certified addiction counselor, who conducts the intake assessment. She then refers Tom to Sandy Hale, a psychologist, for further mental health assessment.

Sandy diagnoses Tom with depression, post-traumatic stress disorder (PTSD), cocaine abuse, and alcohol dependence. She confers with Jeffrey Frank, the consulting psychiatrist for Second Genesis, and starts Tom on the antidepressant bupropion (trade name Wellbutrin). Sandy and Jeffrey observe Tom for alcohol withdrawal. They also teach him what signs and symptoms to watch for and ask him to contact them if symptoms become apparent.

From the intake assessment, the staff at Second Genesis learns that Tom was a machinist working in a tool and dye shop after he was dishonorably discharged from the Navy due to substance abuse. He has had various laborer jobs over the past 30 years, with periods of unemployment. For the past two years, Tom has been working as a janitor at a local meat factory. He lives alone in a trailer that he rents about two miles outside of town. He has an "old car that I keep together" and uses it to get around. Tom is divorced and has two grown children that live out of state. His ex-wife remarried two years after their divorce 23 years ago. Tom says that she and her new husband didn't "want me around my kids… I saw them once in a while when they were young," but he has "lost track of them" over the years. Tom's parents are both dead. He relates that he has a younger brother who lives in the next town whom he talks to occasionally, but "we don't get along that well." Tom reports that he was incarcerated five years ago for "hitting a guy over the head with a bottle" in a bar fight. He has a scar over his right temple and says he has had seizures in the past.

Tom relates that he has been in treatment before – several times in outpatient treatment and through detox "a couple of times." He states that he was once in an inpatient treatment program for three weeks, "but that was a few years back." He denies using heroin or injecting drugs for the past three years. He drinks a pint of liquor a day and has for a "long time."

Sandy Hale and Louise Brown consult on a plan of care, and Louise reviews it with Tom. Tom agrees to start individual counseling with Sandy once a week, attend Rural's Addiction Groups for one hour each day, and go to at least three AA meetings per week. Louise Brown also meets with Tom on a weekly basis to see how he is doing and to manage his overall plan of care.

Over the next five weeks, Tom follows his treatment plan at Second Genesis and participates in the groups. He returns to Rural Community Health Center and is started on antiretroviral medications by his physician Deborah Kavanagh. Although Tom has some side effects – nausea and diarrhea – he takes his medications as directed. Deborah is concerned about his nutritional status, since he is about 20 pounds below normal body weight and his blood pressure remains

uncontrolled. Tom is referred to a gastroenterologist at the medical center located 40 miles away. He keeps the appointment for a consult regarding his HCV infection and poor nutritional status. A liver biopsy is ordered and scheduled for two weeks later.

Tom continues to meet periodically with Jan the social worker and obtains a pharmacy entitlement that pays for his prescriptions. She also helps him access nutritional supplements. Jan completes the psychosocial assessment with Tom and learns that he is the oldest of four children. Although his brother and his family live in the next town, his two sisters moved to the East Coast 20 years ago. He admits that his relationships with his siblings are "not very good." He also split up with a woman friend six months ago. He states that she "left me for someone else" and confides that he misses her. Tom started using heroin and speedballing cocaine in his late twenties after returning from Vietnam. He has had several periods of homelessness over the last 30 years and has moved in and out of town.

During his sixth week at Second Genesis, Tom has a urine test that is positive for alcohol. Louise discusses with him what triggered his use of alcohol. Tom states that an old girlfriend of his came to his apartment last night and they had a "few drinks together." He relates that she is going to be staying with him for a while, because she lost her job and can't pay the rent for her apartment. Louise strongly recommends to Tom that he make his sobriety the priority in his life. She tells him that if he has another positive urine test, he will be asked to leave the program. Five days later, a random urine sample from Tom returns positive for alcohol, and he is discharged from Second Genesis.

A week later, Tom presents to Rural for both his medical appointment with Deborah, and his case management appointment with Jan. In meeting with Jan, Tom tells her what has happened at Second Genesis. He admits to Jan that he is drinking daily but states that he is not doing any crack. He has continued taking his medications, and he says that his girlfriend is "helping me remember to take them." Tom says he told his girlfriend he is HIV-infected and that she doesn't have "it." Jan discusses with Tom the risk reduction behaviors he needs to take when having sexual relations with his girlfriend.

Jan congratulates Tom on maintaining sobriety for crack cocaine for a whole month. She discusses with Tom what he did during his one month of sobriety that helped him stay sober. Jan also reviews the medical treatment plan with Tom and asks him what part of the plan he thinks he can do at this time. Tom states that he can take his HIV medications but does voice concerns about side effects. He says he can stay off cocaine, and will try not to drink.

Jan discusses the situation with Deborah, and they decide to request that Second Genesis take Tom back into their program. Jan calls Louise, the substance abuse provider, and relates her conversation with Tom concerning his desire to re-enter their program. Louise and Sandy Hale, the psychologist, remind Jan that clients at Second Genesis have to make a commitment to abstinence and maintain negative urines to stay in the program. They give Tom an appointment for the next morning, and he is readmitted into Second Genesis. Two weeks later he is discharged again for a positive urine test. Jan tries to get Second Genesis to take Tom back into the program again, but they refuse. There are no other addiction treatment programs within 100 miles of Rural Community Health Center. Over the next month, Tom continues to be engaged

with Rural although he misses some appointments and shows up as a walk-in. He continues to drink, denies using cocaine, and is taking his antiretroviral medications.

Case History (Urban Version Condensed)

Tom Gates, a 56-year-old male, has been a patient at TriCity Community Health Center for three months and is newly diagnosed with HIV with CD4 350 and viral load 635,000. Deborah Kavanagh, M.D. wants to start Tom on antiretroviral medications but is reluctant due to his substance use. Tom admits to drinking a pint of liquor daily and smoking crack "with buddies on the weekends." Tom states that he has used heroin in the past and has injected it along with cocaine. With no health insurance, Tom is getting sample medications for oral thrush and hypertension. Deborah requests Tom to return in two weeks for follow up and refers him to Jan Harris, social worker, for case management services. Jan meets with Tom briefly that day and begins establishing a relationship with him. Tom has a quiet demeanor and asks few questions regarding his new diagnosis. He agrees to meet with Jan again a week later for a full assessment.

Tom misses his follow-up appointments with both Jan and Deborah and arrives at TriCity a month later out of medications and smelling of alcohol. When he speaks with Laura, the triage nurse, Tom becomes teary-eyed, saying he doesn't want to die. His blood pressure is 186/100. Deborah examines Tom, discusses his treatment options, and Tom agrees to go into substance abuse treatment. Deborah refers him to Jan to set up arrangements for admission to a program.

TriCity has a collaborative agreement with Second Genesis; an outpatient substance abuse treatment program located within six blocks from the agency. Jan calls Second Genesis, gets an intake appointment and two hours later, Tom arrives for his appointment. Louise Brown, addiction counselor, conducts the intake assessment and refers him to Sandy Hale, a psychologist, for further mental health assessment. Sandy diagnoses Tom with depression, post-traumatic stress disorder (PTSD), cocaine abuse, and alcohol dependence. Jeffrey Frank, the consulting psychiatrist, starts Tom on the antidepressant bupropion (Wellbutrin).

The Second Genesis staff learns that Tom was dishonorably discharged from the Navy due to substance abuse. He is a janitor in a local factory and lives alone in a one-room apartment downtown. He is divorced, has two grown children who he has lost contact with and a brother in town but "we don't get along that well." His parents are deceased. He was incarcerated five years ago after a "street fight" and reports he has had seizures in the past.

Sandy and Louise consult on a plan of care and Tom agrees to start individual counseling with Sandy weekly, attend Second Genesis Addiction Groups every day and at least three AA meetings weekly. For the next five weeks, Tom follows his treatment plan. He returns to TriCity and Deborah starts him on antiretroviral medications. Although he voices concerns about the side effects, he takes them as directed. Tom continues to meet periodically with Jan and he obtains a pharmacy entitlement that pays for his prescriptions. Tom confides to Jan that he split up with a woman friend six months ago and that he misses her.

During his sixth week at Second Genesis, Tom has a positive urine test for alcohol. Louise discusses with him what triggered his use of alcohol and Tom admits that he had a "few drinks"

with an old girlfriend and that she is going to be staying with him. Louise strongly recommends that he make his sobriety the priority in his life. Five days later, a random urine sample from Tom returns positive for alcohol, and he is discharged from Second Genesis.

A week later, Tom presents to TriCity for both his medical appointment with Deborah, and his case management appointment with Jan. Tom tells Jan what happened at Second Genesis and admits to Jan that he is drinking daily but states that he is not doing any crack. He has continued taking his medications, and he says that his girlfriend is "helping me to remember to take them." Tom says he told his girlfriend he is HIV-infected and that she doesn't have "it." Jan discusses with Tom the risk reduction behaviors he needs to take when having sexual relations.

Jan congratulates Tom on maintaining sobriety for crack cocaine and she discusses with him what he did during his one month of sobriety that helped him stay sober. Jan also reviews the medical treatment plan with Tom and asks him what part of the plan he thinks he can do at this time. Tom states that he can take his HIV medications, stay off cocaine, and will try not to drink. Jan calls Louise at Second Genesis requesting that Tom be readmitted to the program. Louise reminds Jan that clients have to make a commitment to abstinence and agrees to take him back into the program. Two weeks later he is discharged again after a positive urine test. Jan tries to get Second Genesis to take Tom back, but they refuse and there are no other addiction treatment programs in the community. Over the next month, Tom continues to be engaged with TriCity, although he misses some appointments and shows up as a walk-in. He continues to drink, denies using cocaine, and is taking his antiretroviral medications.

Case History (Rural Version Condensed)

Tom Gates, a 56-year-old male, has been a patient at Rural Community Health Center for three months and is newly diagnosed with HIV with CD4 350 and viral load 635,000. Deborah Kavanagh, M.D. wants to start Tom on antiretroviral medications but is reluctant due to his substance use. Tom admits to drinking a pint of liquor daily and smoking crack "with buddies on the weekends." Tom states that he has used heroin in the past and has injected it along with cocaine. With no health insurance, Tom is getting sample medications for oral thrush and hypertension. Deborah requests Tom to return in two weeks for follow up and refers him to Jan Harris, social worker for case management services. Jan meets with Tom briefly that day and begins establishing a relationship with him. Tom has a quiet demeanor and asks few questions regarding his new diagnosis. He agrees to meet with Jan again a week later for a full assessment.

Tom misses his follow-up appointments with both Jan and Deborah and arrives at Rural a month later out of medications and smelling of alcohol. When he speaks with Laura, the triage nurse, Tom becomes teary-eyed, saying he doesn't want to die. His blood pressure is 186/100. Deborah examines Tom, discusses his treatment options, and Tom agrees to go into substance abuse treatment. Deborah refers him to Jan to set up arrangements for admission to a program.

Rural has a collaborative agreement with Second Genesis; an outpatient substance abuse treatment program located 30 miles away in the next town. Jan calls Second Genesis and gets an intake appointment for the next day. Tom arrives for his appointment the next morning. Louise Brown, addiction counselor, conducts the intake assessment and refers him to Sandy Hale, a

psychologist, for further mental health assessment. Sandy diagnoses Tom with depression, post-traumatic stress disorder (PTSD), cocaine abuse, and alcohol dependence. Jeffrey Frank, the consulting psychiatrist, starts Tom on the antidepressant bupropion (Wellbutrin).

The Second Genesis staff learns that Tom was dishonorably discharged from the Navy due to substance abuse. He has been working as a janitor at a local meat factory. He lives alone in a trailer that he rents about two miles outside of town. He has an "old car that I keep together". He is divorced, has two grown children who he has lost contact with and a brother in the next town but "we don't get along that well." His parents are deceased. He was incarcerated five years ago after a "street fight" and reports he has had seizures in the past.

Sandy and Louise consult on a plan of care and Tom agrees to start individual counseling with Sandy weekly, attend Rural Addiction Groups every day and at least three AA meetings weekly. For the next five weeks, Tom follows his treatment plan. He returns to Rural and Deborah starts him on antiretroviral medications. Although he voices concerns about the side effects, he takes them as directed. Tom continues to meet periodically with Jan and he obtains a pharmacy entitlement that pays for his prescriptions. Tom confides to Jan that he split up with a woman friend six months ago and that he misses her.

During his sixth week at Second Genesis, Tom has a positive urine test for alcohol. Louise discusses with him what triggered his use of alcohol and Tom admits that he had a "few drinks" with an old girlfriend and that she is going to be staying with him. Louise strongly recommends that he make his sobriety the priority in his life. Five days later, a random urine sample from Tom returns positive for alcohol, and he is discharged from Second Genesis.

A week later, Tom presents to Rural for both his medical appointment with Deborah, and his case management appointment with Jan. Tom tells Jan what happened at Second Genesis and admits to Jan that he is drinking daily but states that he is not doing any crack. He has continued taking his medications, and he says that his girlfriend is "helping me to remember to take them." Tom says he told his girlfriend he is HIV-infected and that she doesn't have "it." Jan discusses with Tom the risk reduction behaviors he needs to take when having sexual relations.

Jan congratulates Tom on maintaining sobriety for crack cocaine and she discusses with him what he did during his one month of sobriety that helped him stay sober. Jan also reviews the medical treatment plan with Tom and asks him what part of the plan he thinks he can do at this time. Tom states that he can take his HIV medications, stay off cocaine, and will try not to drink. Jan calls Louise at Second Genesis requesting that Tom be readmitted to the program. Louise reminds Jan that clients have to make a commitment to abstinence and agrees to take him back into the program. Two weeks later he is discharged again after a positive urine test. Jan tries to get Second Genesis to take Tom back, but they refuse and there are no other addiction treatment programs in the community. Over the next month, Tom continues to be engaged with Rural, although he misses some appointments and shows up as a walk-in. He continues to drink, denies using cocaine, and is taking his antiretroviral medications.

Handout V-3

Individual Assessment Worksheet

After you have read the case study narrative, please answer the questions below. During the group discussion about this exercise, please circle the areas where your answers vary from those of participants in the group who represent other disciplines.

1. Think about the client's most pressing concerns. Develop a problems or issues list, prioritizing the strategies, interventions, and services that the client needs. Please list the top three priorities below in the order of urgency or importance:

   - First priority issue:_____
   - Second priority issue:_____
   - Third priority issue:_____

2. Can you think of any things you don't know, but would need to know, about this client?

3. Why do you need to know these things?

4. Answer the following questions about the client's goals:
   - How do you determine the goals for this client?
   - Based on what you know, what are the goals for this client?
   - For each of the priority items listed in Item 1 above, what is the client's role or responsibility?

Adapted from the *Wisconsin Partnership Program/Quality Research*, by B. Bowers, published in 1999 by the University of Wisconsin-Madison School of Nursing, Providing Consumer Centered Care in Integrated Programs, Madison, Wisconsin

Activity: Cross-Discipline Awareness

Purpose: To increase participants' knowledge, understanding, appreciation, and respect for other disciplines and for their colleagues in those disciplines

Time: 40 minutes if done in conjunction with "Team Member Professional Identification" Activity (45 minutes if done alone and participants need to read the case study)

Materials

- Flipchart and colored marker
- Handout V-4, "Group Assessment Worksheet"

Instructor Notes

1. Background: The earlier exercises were designed to help each participant review the values and perspectives of their particular discipline and gain a deeper understanding of how personal and professional experiences influence their approach to care. Building on this foundation, the current activity shifts the participants' focus of attention to the roles, values, and perspectives of other disciplines.

   It is important to note that this activity is concerned with the *integration* of the work of different disciplines rather than on a mutual understanding *between* the disciplines. This activity will succeed only if the participants have a mutual respect for and appreciation of the roles played by all disciplines represented in the interdisciplinary team. The exercises in this activity are designed to promote and enhance this mutual respect and appreciation.

2. Ask each workshop participant to choose one of the roles below to assume for the activity. They should choose a role other than their current professional role.
   - Registered nurse
   - Physician, nurse practitioner, or physician assistant
   - Social worker
   - Mental health counselor
   - Substance abuse treatment provider
   - Health educator
   - Outreach worker

3. Ask the "interdisciplinary team" at each table to complete the "Group Assessment Worksheet" together, each member voicing the perspectives of the discipline or role he or she has chosen. Allow 20 minutes for this part of the activity.

4. Ask a representative from each table to share with the large group what their table identified on the worksheet. They should summarize the different perspectives, observations and conflicts that arose. Highlight the key points, noting them on a sheet of flipchart paper, and discuss them with the group. Allow 20 minutes for this part of the activity.

Training Tip:

If the participants seem to have a high level of conflict or a low level of trust among them in this large group discussion, then the large group should be divided into smaller working groups comprised of individuals from the same discipline for the completion of this activity.

Training of Trainers Teach Back Opportunity:

Objective: Resolving a Personal Conflict that Emerges between Participants:

After completing steps 1-4, stop the group and explain that you are going to ask two of them to teach back to the group as Teach Back Co-Facilitators. Have them repeat steps 2-3. Slip 3x5 cards to two group members sitting at the same table. One card calls for the first group member to play the role of a physician who does not appreciate the hard work that goes into outreach, specifically the work done by the outreach worker at the table; the other 3x5 card calls for the second group member to be an outreach worker who feels unvalued by the physician at the table. Both are from the same clinic. This will create a personal conflict among group members that the Teach Back Co-Facilitators must overcome.

Handout V-4

Group Assessment Worksheet

Review the "HIV and Substance Use Case Study" (Handout V-2), assuming the perspective of someone in a role or discipline different from your own. Each group should be comprised of members assuming a variety of different roles. You may choose from any of the following roles or disciplines:

- Registered nurse
- Physician, nurse practitioner, or physician assistant
- Social worker
- Mental health counselor
- Substance abuse treatment provider
- Health educator
- Outreach worker

Then, as an "interdisciplinary team," answer the questions below together.

1. Think about the client's most pressing concerns. Develop a problems or issues list, prioritizing the strategies, interventions, and services that the client needs. Please list the top three priorities below in the order of urgency or importance:

   - First priority issue:_____
   - Second priority issue:_____
   - Third priority issue:_____

2. What other information would you need to know about this client from the perspective of a person in the discipline or role you've chosen?

3. Why would you need to know these things?

4. Discuss the logic behind your identification of particular issues above as priority areas.

Adapted from the *Wisconsin Partnership Program/Quality Research*, by B. Bowers, published in 1999 by the University of Wisconsin-Madison School of Nursing, Providing Consumer Centered Care in Integrated Programs, Madison, Wisconsin.

Session 5: Team Communication

Activity: Communication Strategies for the Interdisciplinary Team

Purpose

- To identify the barriers to communication among the interdisciplinary team members
- To share strategies that can break down the barriers and foster communication

Time: 35 minutes

Materials

- Flipcharts, colored markers, and tape
- Breakout tables for working groups of six to ten people

Instructor Notes

1. If you haven't already, divide the participants into working groups of six to ten people. Make sure that the participants in each working group come from a range of different disciplines.

2. Ask each working group to brainstorm for 15 minutes. Have them designate a person to record on a flipchart the barriers to communication among interdisciplinary team members. Allow 15 minutes for steps 2-3.

3. Ask the working groups to think specifically about the barriers that are encountered when members of the interdisciplinary team work in different agencies.

4. Ask a spokesperson from one working group to share the list of barriers that his or her group identified. Then ask participants from the other working groups to expand that list by adding any other barriers they identified. Allow 20 minutes for steps 4-8

5. Post this expanded list of barriers on the wall where all participants can easily see it.

6. For the remainder of the 20 minutes, conduct a guided discussion with the entire group of participants. Ask participants to share the strategies they have devised or used in their interdisciplinary work to overcome barriers to communication both within their agency and in working with other agencies.

7. Record these strategies on one or more sheets of flipchart paper, and then post the list on the wall where it can be easily seen. If possible, create a new handout containing the participants' list of strategies. Distribute copies of this new handout to all participants after they've completed the activities in this module.

8. Ask the participants if they have any questions. Answer these questions, and then summarize the key points of the session.

Training of Trainers Teach Back Opportunity:

Objective: Managing Time, Facilitating a Discussion, and Talking about Barriers without Placing Blame

After the first spokesperson has presented to the entire group (step 4), stop the group and explain that you are going to ask two participants to teach back to the group as Teach Back Co-Facilitators. They should continue where you leave off, adding to the expanding list of barriers and facilitating the discussion on strategies used in interdisciplinary work. You should step in at the end of step 6, wrapping up the guided discussion and touching upon any points missed by the Teach Back Co-Facilitators.

Note that unlike the previous teach back opportunities, this one does not complete the entire session first; instead the teach back is incorporated into the session during its first run, so there is no repetition.

Session 6: Models of Care

Presentation: Innovative Models of Interdisciplinary Care

Purpose

- To demonstrate how linkages can be created among the providers and service agencies throughout a community to better serve HIV-infected clients
- To highlight the key features of innovative, successful models of interdisciplinary care implemented at various sites across the country

Time: 45 minutes

Note: The slides and descriptions used in this session are meant as examples. You should substitute or add slides and descriptions about local models that will be familiar and more meaningful to your audience.

Materials

- Slide V-4, "Innovative Models for Interdisciplinary Care and Community Linkages"
- Slide V-5, "The Need for Interdisciplinary Care"
- Slide V-6, "Brooklyn Hospital Center Path Program"
- Slide V-7, "Path Program: Program Design"
- Slide V-8, "Path Program: Innovative Features"
- Slide V-9, "AIDS Services Center"
- Slide V-10, "AIDS Services Center: Program Design"
- Slide V-11, "AIDS Services Center: Innovative Features"
- Slide V-12, "Special Health Resources of East Texas"
- Slide V-13, "Special Health Resources of East Texas: Program Design"
- Slide V-14, "Special Health Resources of East Texas: Innovative Features"
- Slide V-15, "Project Bridge"
- Slide V-16, "Project Bridge: Program Design"
- Slide V-17, "Project Bridge: Innovative Features"
- Slide V-18, "Common Themes and Success Factors of Interdisciplinary Care"
- Slide V-19, "Common Themes"
- Slide V-20, "Common Themes (continued)"
- Slide V-21, "Common Themes (continued)"
- Handout V-5, "Case Study: Brooklyn Hospital Center Path Program"
- Handout V-6, "Case Study: AIDS Services Center"
- Handout V-7, "Case Study: Special Health Resources of East Texas"
- Handout V-8, "Case Study: Project Bridge"
- Handout V-9, "Community Linkages Assessment Guide"

- Handout V-10, “Agency Linkages Evaluation Tool”
- Handout V-11, “Sample Confidentiality Agreement”

Instructor Notes

1. Introduce the presentation topic, and explain that participants will hear a presentation about the design and key features of innovative interdisciplinary care programs involving HIV and substance use providers.

2. Spend 20 minutes presenting Slides V – 4 through V– 21, which describe the innovative models of interdisciplinary care and their common success factors. Distribute the case studies, Handouts V-5 through V-8, to supplement the presentation.

Brooklyn Hospital Center Path Program

New York, NY

Slide V - 6

Program Design

- Hospital-based infectious disease clinic expands traditional HIV medical care delivery model to provide full spectrum of services
- On-Site Services – HIV medical care, mental health treatment, case management, peer ed, nutrition, support services
- Linkages with external providers for additional services – outpatient SA counseling, methadone maintenance, detox, mental health counseling
- Each patient assigned to a medical panel, case manager, and social worker

Slide V - 7

Innovative Features

- Case conferencing key feature of model
  - Interdisciplinary team members meet 3-4 times per month to discuss patient cases
- Strong collaboration between medical care providers and detoxification program
- Peer educators are critical to the success of the program
- Community-based organizations from African immigrant and Haitian communities provide case management on site
- Service agencies that link to Path are invited to be part of a Community Advisory Board and play an active role in shaping program operations.

Slide V - 8

AIDS Services Center

Anniston, AL

Slide V - 9

Program Design

- Rural, non-profit HIV clinic – 85% of clients are current or former substance users
- On-Site Services – primary medical care, mental health counseling, community outreach, case management, substance abuse assessment and treatment, nutrition counseling

Slide V - 10

Innovative Features

- Accommodates walk-in appointments for same-day medical care, mental health, and substance abuse services
- Mobile van for home visits to provide medical care, mental health counseling, outreach, and client follow-up
- Resource-scarce area – set up 5 satellite clinics with a full complement of services
- Strong collaboration between medical director and substance abuse treatment coordinator

Slide V - 11

Special Health Resources of East Texas

Longview, TX

Slide V - 12

Program Features

- Community-based agency with three major divisions:
  - Substance Abuse Services Division – provides detox, case management, substance abuse counseling, and support services
  - HIV Division – provides full spectrum of medical care, dental care, mental health counseling, and support services in four different clinics
  - Wellspring Recovery Center – 18 bed inpatient substance abuse treatment program exclusively for HIV-infected substance users

Slide V - 13

Innovative Features

- Early intervention program provides intensive case management to HIV-infected substance users
- Wellspring staff is trained to treat clients with HIV, substance abuse, and mental health disorders through a harm reduction approach
- Case conferencing takes place informally everyday and formally once weekly to discuss patient cases
- Careful discharge planning involves case management and support services

Slide V - 14

Project Bridge

Providence, RI

Slide V - 15

Program Design

- Outreach and intensive case management program for HIV-infected ex-offenders; affiliated with ID clinic of hospital
- Provides 18-24 months of services post-release, goal is to integrate clients into community in that time
- Model consists of two intensive case management teams, each with a LICSW, case manager, and outreach worker, with infectious disease physicians, psychiatrists, and nurses available for consultation
- Physicians who provide HIV medical services in prisons refer their clients to Project Bridge and continue to provide medical care to same individuals after prison release

Slide V - 16

Innovative Features

- Project Bridge does not provide medical services or substance abuse treatment directly, but case managers accompany clients to all medical and non-medical appointments
- Intake process identifies needs of client, such as methadone treatment, residential treatment, and ADAP, to ensure continuity of HIV medications
- Weekly meetings between medical providers and case managers at Project Bridge ensure integration between medical and non-medical care

Slide V - 17

Common Themes and Success Factors of Interdisciplinary Care

Slide V - 18

Common Themes

- Program Structure
  - One agency or multiple, linked agencies providing full spectrum of services to clients
  - Linkages and communication among both internal and external providers
  - Short waiting times for appointments
  - Intensive case management
  - Mobile services
  - Staff accompany clients to appointments
  - Discharge planning with patient involvement
  - Management support

Slide V - 19

Common Themes

- Confidentiality
  - Highly sensitive issue for clients
  - Communicate confidentiality protocols to clients to ensure their protection
  - Utilize standard memoranda of understanding and confidentiality agreements with partner agencies
  - Find strong methods for locating clients that do not break confidentiality

Slide V - 20

3. After you've completed the presentation, spend 20 minutes on a group discussion about interdisciplinary care models. Encourage participants to ask questions about the models presented and to describe any other models that they are familiar with from their work.

4. Summarize the main points of the presentation and subsequent discussion. Be sure to mention that interdisciplinary care can be achieved through many different kinds of models, but that all of these models share common themes and success factors.

5. Set aside five minutes at the end of this activity to mention three additional tools that may be used to facilitate and support an interdisciplinary process. These tools are listed below:
   - Handout V-9, "Community Linkages Assessment Guide"
   - Handout V-10, "Agency Linkages Evaluation Tool"
   - Handout V-11, "Sample Confidentiality Agreement"

   Briefly describe each tool, and encourage participants to use them in their interdisciplinary work.

Training of Trainers Teach Back Opportunity:

Objective: Learning How to Present PowerPoint Materials and Engage the Audience

After completing steps 1-5, stop the group and explain that you will ask several of them to teach these slides back. Have the first volunteer do step 1 and present slides V-4 and V-5. A separate volunteer can present each model. Separate Teach Back Co-Facilitators can do steps 3-5.

Handout V – 5

Case Study: Brooklyn Hospital Center, Path Program New York, NY

The PATH (Program for AIDS Treatment and Health) program is a multidisciplinary HIV primary care and case management program at two different campuses of Brooklyn Hospital in New York City. The hospital is designated as an AIDS Center by the New York Department of Health. This designation has allowed the hospital to establish the PATH program, a multi-disciplinary, full-service model of care for individuals living with HIV and AIDS. There are HIV clinics on both hospital campuses.

During 2001, the hospital served over 700 people living with HIV. Approximately 25-50% of these individuals are substance users. Over 70% of patients are Black and 26% are Hispanic; there are much smaller populations of White and Asian/Pacific Islander patients. PATH also serves growing Haitian and African immigrant populations.

A key aspect of the PATH program is the extensive multidisciplinary team. PATH has expanded the traditional HIV medical care delivery model to include physicians, residents, nurse practitioners, physician assistants, nurses, social workers, case managers, an adherence counselor, a nutritionist, a psychiatrist, an outreach worker, an HIV counselor, and peer educators. Each patient is assigned to a medical panel, a case manager and a social worker, with the other services available as needed.

Many substance abuse services are available on site; for those that are not a variety of service integration and linkage strategies are used. For example, to supplement the HIV medical care and mental health treatment available on site, one of the campuses houses a medical detoxification program directly adjacent to the HIV clinic. Outpatient substance abuse counseling, methadone maintenance and additional mental health therapies are available through external providers; PATH case managers provide the linkage to and coordination of services. According to the medical director, this full complement of services has made a significant difference in the program's ability to engage substance users in effective treatment.

Another unique aspect of the PATH model is the movement of multidisciplinary provider teams between the two hospital campuses for separate HIV clinic sessions. Patients at both sites have full access to medical and mental health care, case management, peer education, nutrition, and other support services. While the core of the team is conducting clinic work at one site, a social worker, case manager, and front desk staff remain at the other site to address psychosocial and administrative issues that arise out of, and between, clinic sessions.

Case conferencing is also a key part of the PATH model. The multidisciplinary team members meet formally as a group three times each month; once for a patient flow meeting, once for a journal club and once for a case management meeting. In formal case conferences, the staff discusses the patients who present the greatest challenges for any one of the providers. In addition to the formal meetings, informal conferencing occurs during and after each clinic session, when the multidisciplinary needs of each patient are discussed.

Another innovative aspect of the PATH program model is the partnership between the PATH program and the detoxification program. Although the detoxification unit serves a diverse population, including individuals who are not HIV positive, and its length of stay is only five days, PATH program staff work with the detoxification staff to ensure that all HIV-infected clients receive the spectrum of HIV-related services. These include ongoing medical monitoring and maintenance of HIV medication protocols if the client is known to be HIV positive, HIV education and risk reduction, and the opportunity to access HIV counseling and testing services. The detoxification unit also allows people to remain on methadone, anti-anxiety, and psychotropic medications if clients have prescriptions for these medications. Staff at the detoxification program work closely with the PATH staff, especially the psychiatrist, to determine doses and usages of these drugs.

Peer educators from PATH visit the detoxification unit weekly to talk with detoxification clients and share their own experiences as former substance users. They encourage people to get tested, or if already positive, to reveal their status and enter care. Above all, they let people know they are available to talk and listen. Every Thursday, the HIV counselor goes to the detoxification unit to provide counseling and testing to anyone who wants to participate. They encourage individuals to return for counseling and testing after their discharge from the detoxification unit, and have been successful in some cases.

Referral relationships are also critical to the interdisciplinary model and the success of the program. Since the PATH program only has two case managers and one case manager technician for over 700 patients, they work very closely with community-based agencies to support their patients. The PATH program has formal linkages with twenty agencies for supported housing and community-based case management. Case managers from three of the community-based organizations attend clinic sessions at Brooklyn Hospital Center to provide case management services for patients. Some of these agencies have staff who provide specialized assistance to monolingual patients and work hand-in-hand with clinic staff.

The agencies with formal linkages with the PATH program are invited to be part of the hospital's Community Advisory Board and play an active role in shaping PATH program operations. In addition to formal linkages, informal relationships are also important, particularly for mental health and substance abuse treatment. Because the closely affiliated detoxification program only accepts individuals with insurance, the PATH program works with other detoxification and substance abuse treatment programs that accept the uninsured. There are numerous referral agencies for ongoing mental health treatment. For each patient, all of these external services are identified and coordinated through the initial case management assessments and at six-month intervals thereafter.

Handout V – 6

Case Study: AIDS Services Center, Inc. Anniston, AL

AIDS Services Center, Inc. (ASC) is a free-standing, private non-profit clinic located in rural Anniston, Alabama. The ASC service area covers fourteen counties with five satellite offices. Northeastern Alabama is a rural area where the main employment is textile factories and chicken farming, including large chicken processing plants.

ASC was founded as a support group in 1987. Their target population is people living with HIV/AIDS and affected others. Last year, they served 247 people with HIV/AIDS, of whom 80-85% are substance users or have a history of substance abuse. Of the persons served, approximately 53% are White, 42% are African American, 4% are Hispanic, and 1% are Asian or Pacific Islander.

AIDS Services Center provides on-site primary medical care, mental health and support services, community outreach, case management, substance abuse assessment and treatment. ASC accommodates walk-in appointments for same-day medical care, mental health or substance abuse services. They use a mobile van for home visits of medical care or mental health services and conduct community outreach for client follow-up or to locate clients who are lost to care. In addition, ASC provides outreach and health education at a juvenile detention center, a women's domestic violence shelter, and various civic, church and self-help groups. ASC also has a Palliative Care Program through a HRSA SPNS grant for clients who are ill and in need of homecare services or who are at the end-stage of AIDS. An intensive substance abuse treatment outpatient program was launched by the ASC substance abuse coordinator in August of 2000, adapting a National Institute of Drugs and Alcohol protocol.

Important linkages between HIV treatment and substance use services happen within ASC. The medical director and the substance abuse treatment coordinator work very closely to identify and support individuals who are having difficulty with substance abuse. The medical director makes numerous referrals to the substance abuse treatment coordinator. In addition, when clients first come to ASC they see a case manager who conducts a psychosocial assessment. In addition to all of the medical services provided during the initial appointment, clients also see the mental health counselor for a mental health history. The physician, nurse practitioner, nurse, and mental health counselors can make a referral to the substance abuse treatment counselor or the nutritionist if needed.

An all-staff case conference is held weekly, and since ASC uses a team approach, many informal conferences are held as needed. Since the satellite offices are located one to two hours away, staff members use the driving/riding time to review and discuss cases and any emergent problems.

Handout V – 7

Case Study: Special Health Resources of East Texas Longview, TX

Special Health Resources of East Texas, Inc. is a non-profit agency based in Longview, Texas. The agency is comprised of three main divisions. *The Substance Abuse Services Division* serves the 11 counties of East Texas. The *HIV Division* provides HIV services in 23 counties. These two divisions emerged from predecessor community agencies to form Special Health Resources in 1994. The third division is *Wellspring Recovery Center,* an 18-bed inpatient substance abuse treatment program for people with HIV. Wellspring is the only inpatient facility in Texas exclusively treating HIV positive substance abusers. The HIV division and Wellspring are entirely dedicated to working with those with HIV. Although the Substance Abuse Division serves a broader population, they work very closely with the other two divisions to provide specialized services to people living with HIV. All Special Health Resources services are available to HIV positive individuals in the 23 counties without regard to income. In addition, Wellspring services are available to any HIV positive substance user in the state. There is a strong interdisciplinary as well as cross-division focus and collaboration.

Special Health Resources serves approximately 900 HIV positive individuals on an annual basis and estimates that 20-25% are substance users. In the year 2000, 41% clients were Caucasian, 53% were African American, and 6% were Hispanic. Women represented 34% of the total population served. Among substance users, the primary drugs of choice were: 69% cocaine, 16% alcohol, 6% cannabis, and 78% poly-drug use. Approximately 59% of clients have a history of IV drug use.

The HIV Services Program provides medical care, dental care, medication, insurance assistance, massage therapy, professional individual and group counseling, housing and utility assistance, food vouchers, transportation assistance and case management services. These services, including dental care, are available at four separate clinics. Approximately 80% of clients have concurrent mental health issues, and most are medically compromised and in need of dental, nutritional and prescription medication services. Approximately half of clients tested positive for Hepatitis A, B or C, and a small number suffer from significant complications due to Hepatitis C.

Staffing of the *HIV Services Program* includes a physician, nurses, a certified acupuncturist, detoxification (acudetox) technicians, case managers, social workers, licensed chemical dependency counselors, and licensed professional counselors. To provide completely holistic care, the agency also has subcontracts with massage therapists, mental health providers, a psychologist, and alternative therapists. Because the service area is so vast, the agency maintains contracts with other agencies to ensure collaboration. They have an extensive informal network ranging from the Louisiana state line to Dallas, and from the Oklahoma border to the Arkansas border to cover their entire service area. Within this division, the HIV Early Intervention Program (HEI) provides intensive case management to HIV positive substance abusers. Specialized case managers work closely with clients to assess their healthcare needs and provide an informed and concerted effort to address the barriers of care for this population. Case managers conduct support groups and field trips. They see clients in the clinic facilities, but they

also travel to their homes and often provide transportation to care. Clients are seen as often as necessary to maximize recovery and adherence to care.

Case conferencing takes place on an informal basis every day, and formally once a week. Difficult situations are discussed, new information is shared, medical updates are given, policies and procedures are reviewed and changes are made, as necessary. These meetings often include staff from other programs in the agency. A representative from the medical clinic, the substance abuse program and all the case managers attend all case conferences.

The Substance Abuse Services Division provides outpatient substance abuse services and works closely with the other programs. One area of special focus is trauma counseling for people living with HIV.

Wellspring Recovery Center is a 60-day residential program for people with HIV and substance abuse issues. Wellspring staff is trained to treat clients who are triple-diagnosed with HIV, substance abuse and mental health problems. The center provides a well-rounded array of traditional and nontraditional health care. The Wellspring staff consists of one part-time physician who shares time with the *HIV Services Program,* nurses, a licensed professional counselor, a licensed chemical dependency counselor, substance abuse clinicians, a case manager, and cooks. *Wellspring* provides medical and psychological evaluations, medical care and substance abuse treatment, social stabilization, crisis intervention, and case management. Nurse monitoring of clients is provided 24 hours per day. The program offers an array of therapeutic options including traditional individual and group counseling, support groups, life skills groups, and skills necessary to manage addiction while following a prescribed medical regime. Additionally, some less traditional treatments are incorporated into their programs. Group and individual sessions of Acudetox (auricular acupuncture) and neuro-feedback are offered daily to clients. Other therapies include yoga, massage therapy and other bodywork techniques known to enhance the immune system and general health, wilderness experiences, equestrian therapy (horseback riding once a week), and additional outings which promote socialization and cooperation.

Throughout stays at the facility, there is careful discharge planning. The HEI team provides intensive case management and support services upon discharge. Follow-up assessments are done by Wellspring staff at 30 day, 60 day, and one year intervals following completion of the program. Many clients have formed such a strong sense of community while at Wellspring they choose to remain in East Texas and under the care of the *Substance Abuse Division* outpatient services.

In addition, all Special Health Resources outpatient case managers are trained to follow up on clients lost to care. At the time of intake, clients are asked to provide the name and phone number of someone who might know where they are if the agency cannot locate them. In addition, all case managers carry pagers and cell phones and can be reached at any time through a 1-800 number to facilitate communication with their clients and between providers.

Handout V – 8

Case Study: Project Bridge
Providence, RI

Project Bridge is an outreach and intensive case management program for HIV-positive ex-offenders operated by The Miriam Hospital in Providence, Rhode Island. Project Bridge provides clients with 18 months of services post-release, and has served approximately 130 HIV positive individuals over the past five years.

Similar to the prison population, the Project Bridge client population is 75% male and 25% female. Fifty-two percent of their clients are Black, 35% are White and 13% percent are Hispanic. These percentages are not reflective of the state population, but are indicative of the high incidence of HIV in populations of color. Almost all of Project Bridge clients have a substance abuse history, with 74% having used injection drugs and 73% of the injection drug users sharing syringes and equipment. Clients have long histories of incarceration, with an average four previous prison terms.

Project Bridge's service model consists of two intensive case management teams, each of which includes a licensed social worker and a paraprofessional case management assistant. The social workers coordinate the clinical aspects of care while the paraprofessionals coordinate support services and conduct community outreach to keep people engaged in care. Several infectious disease physicians, a psychiatrist, a clinical social worker, nurses and a psychologist from Miriam Hospital also work closely with the program clients and the Project Bridge intensive case management team. Project Bridge has a major focus on interdisciplinary care and referrals and service linkages.

The physicians who provide HIV medical services in prison refer their patients to Project Bridge. As the client prepares for prison release, the physician or correctional facilities nurse gives the client a brief introduction to the program and asks if he or she is interested in participating. Interested individuals then meet with a social worker several times for intake prior to prison release. At this time, these prospective clients provide the case manager with the names, addresses and telephone numbers of at least two individuals who will always know how to locate them once they are released from prison. During the intake process, the future needs of the clients are considered, such as housing, methadone treatment, a bed in a residential facility, and ADAP to ensure continuity of HIV-related medications. The case manager works to get many of these services in place prior to prison release. Case managers also ensure that a post-discharge medical appointment and Project Bridge appointment are scheduled. The first Project Bridge appointment is typically scheduled within 24 hours of prison release.

Although Project Bridge does not provide medical services or substance abuse treatment directly, case managers accompany clients to all medical appointments. The case management assistants accompany clients to all non-medical appointments, such as appointments to apply for housing or social security benefits. This accompaniment ensures that clients make and keep their appointments, and are able to keep in touch with a member of the team about the implications of these visits and next steps.

The case management team assists clients who express readiness to arrange for substance abuse treatment. In addition, both the case managers and the medical staff have formal training and practical experience in recognizing signs of substance abuse. Medical providers have a congenial relationship with clients and are non-judgmental, which facilitates discussions about substance use between providers and clients.

All employees of an outpatient clinic, Project Bridge staff, nurses and doctors are all part of the same structure, significantly facilitating medical care and cooperation. To ensure integration between medical and non-medical care, case managers attend a weekly meeting with medical staff that focuses on patient care. In addition to team meetings and meetings with the medical staff, there are quarterly case conferences for each client. At the quarterly case conferences, the key people providing services to a particular client from all involved agencies exchange information regarding the client's treatment, progress and goals. Clients attend these conferences and provide input.

At Project Bridge, the goal is to integrate clients into the community in 18 months. Before discharge from the program, Project Bridge staff contact other HIV case management providers in the community to arrange for client transfer.

Handout V-9

Community Linkages Assessment Guide

1. What does HIV and substance use look like in your community or county? What is the extent of the problem and whom does it primarily affect?

2. Who knows most about the HIV and substance use cases in your community? In what ways are you linked to them?

3. What are the needs of the HIV-infected substance users in your community?

4. Which providers in your community take care of HIV-infected substance users? Does your community have any government-funded health services? In what ways are you linked to these services?

5. Are there any other health and human services agencies in your area that attract or serve similar populations? In what ways are you linked to those agencies?

6. How do privacy and confidentiality concerns play out in your community? Do these concerns create barriers to service?

7. How does stigma play out in your community? How should you address it?

8. How do people access public assistance and drug assistance programs in your area? In what ways are you linked to these programs?

9. Is public transportation or transportation assistance available in your community? How do you coordinate these services?

10. What are the ways and in what settings do people in your community communicate? In what ways are you linked to these communication systems?

11. What kinds of public awareness efforts are happening in your community? In what ways are you linked to these efforts?

12. Who does the HIV and substance use education in your community, and where does this education take place? In what ways are you linked to these educational forums?

Handout V-10

Agency Linkages Evaluation Tool

Partner agency: _____ Today's date: _____

Person interviewed and job title: _____

1. How much do you know about services at (name of agency)?
   - ❑ Nothing
   - ❑ Very little
   - ❑ A little
   - ❑ Moderate amount
   - ❑ A lot

2. How satisfied are you with the services provided and the quality of your interaction with the staff at (name of agency)?
   - ❑ Not at all
   - ❑ A little
   - ❑ Moderately
   - ❑ Very
   - ❑ No relationship by choice

3. How often do you have contact with the staff at (name of agency)?
   - ❑ No contact
   - ❑ Several times a week
   - ❑ A few times a year
   - ❑ About once a month
   - ❑ About once a week
   - ❑ About once a day

4. About what percent of your clients *were referred from* (name of agency) last year?
   - ❑ 0%
   - ❑ 1-25%
   - ❑ 26-50%
   - ❑ 51-75%
   - ❑ 76-100%

5. About what percent of your agency's clients *were referred to* (name of agency) last year?
   - ❑ 0%
   - ❑ 1-25%
   - ❑ 26-50%
   - ❑ 51-75%
   - ❑ 76-100%

6. Please answer **Yes (Y)**, **No (N)** or **Don't Know (DK)** to the following statements:

The staff at (name of agency) is competent.	**Y**	**N**	**DK**
Clients value the services at (name of agency).	**Y**	**N**	**DK**
The staff at (name of agency) is sympathetic to our services.	**Y**	**N**	**DK**
I have a good working relationship with the staff at (name of agency).	**Y**	**N**	**DK**
I rarely have differences or disputes with the staff at (name of agency).	**Y**	**N**	**DK**
Clients like dealing with the staff at (name of agency).	**Y**	**N**	**DK**
The staff at (name of agency) is friendly.	**Y**	**N**	**DK**
The staff at (name of agency) is open to my suggestions about working with particular clients.	**Y**	**N**	**DK**

Thank you for your cooperation!

For Office Use Only:

Type of Agency: _____

Range of Services (please circle all that apply):

Medical care	Substance abuse treatment
Mental health services	Case management services
HIV prevention/education	HIV counseling and testing

Agency ZIP Code: _____

Public or Private?: _____

Handout V-11

Sample Confidentiality Agreement

Qualified Service Organization Agreement: Promoting Care Coordination Between HIV and Substance Abuse Treatment Facilities

[Enter the name of health care facility providing HIV care – "HIV Care Provider"] and [enter the name of the alcohol or other drug treatment facility – "Substance Abuse Treatment Facility"] hereby enter into a *qualified service organization agreement,* whereby the HIV Care Provider agrees to coordinate the treatment and/or related services being provided to patients through this program with those services provided by the Substance Abuse Treatment Facility.

Furthermore, the HIV Care Provider and Substance Abuse Treatment Facility:

(1) acknowledge that in receiving, storing, processing, or otherwise dealing with any information from this program about the patients in this program, it is fully bound by the provisions of the Federal regulations governing Confidentiality of Alcohol and Drug Abuse Patient Records, 42 C.F.R. Part 2; and

(2) undertake to resist in judicial proceedings any effort to obtain access to information pertaining to patients otherwise than as expressly provided for in the Federal confidentiality regulations, 42 C.F.R. Part 2.

Executed this ____ day of _____, 200___.

Program Director
Name of HIV Care Provider
Address

Program Director
Name of Substance Abuse Facility
Address

Adapted from the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, TIPS, 2002.

Session 7: Take Home Messages

Activity: Revisiting Assumptions and Success Factors

Purpose: To summarize the key highlights of the day

Time: 15 minutes

Materials

- Flipchart and colored marker
- Slide V-22, "General Success Factors for Teams"
- Slide V-23, "General Success Factors for Teams (continued)"
- Slide V-24, "Team Building Works"

Instructor Notes

1. If applicable, ask participants to pull out the "Assessment of Professional Identification" form that they completed in Session 2 and to review what they had written.

2. Guide the group through the following questions:
   - What new things did you learn today about the roles of other providers in your group?
   - What assumptions about the other providers in your group were reinforced today?

3. Review with the list of goals and expectations generated during either the introduction or the "Defining Interdisciplinary Care" activity. Discuss whether their expectations were met.

4. Show participants Slides V-22 through V-24, "General Success Factors for Teams." Highlight key points, and answer any questions.

Training of Trainers Teach Back Opportunity

Objective: Learning how to Wrap Up Key Messages

After completing steps 1-3, stop the group and explain that you are going to ask a few of them to teach back to the group. Ask two Teach Back Co-Facilitators to teach back step 1. A third Teach Back Facilitator can teach back step 2, and a fourth can teach back step 3.

General Success Factors for Teams

- Knowledge of expertise and role of other team members and how these interrelate
- Focus on needs of clients
- Recognition of and respect for specialized skills and contributions of each team member
- Shared charts and information regarding clients
- Trust is valued

Slide V - 22

General Success Factors for Teams

- Open communication and resolution of disagreements in a civilized manner (no hidden agendas)
- Work atmosphere is relaxed and supportive
- Collaboration and cooperation are cornerstones of success
- Commitment to common goals and to team members
- Coordination of services

Slide V - 23

Team Building Works

"Team building works. It helps team members to build upon their strengths and take better advantage of opportunities. It encourages members to strengthen their weaknesses and manage their problems together. In doing so it promotes better understanding between individuals – a critical factor in the success of any team!"

(Phillips, 1989, 1-2)

Slide V - 24

Session 7A: Definition of Interdisciplinary Care and Take Home Messages

Note: Session 7A should replace Session 7 if the facilitator has cut Session 3, "Key Components of Interdisciplinary Care" from the training. Session 7A should be used in replication Options 1, 3, and 4.

Activity: Revisiting Assumptions and Success Factors

Purpose:

- To provide a definition of interdisciplinary care
- To summarize the key highlights of the day

Time: 15 minutes

Materials

- Flipchart and colored marker
- Slide V-1, "Definition of Interdisciplinary Care"
- Slide V-22, "General Success Factors for Teams"
- Slide V-23, "General Success Factors for Teams (continued)"
- Slide V-24, "Team Building Works"

Instructor Notes

1. Present the definition of interdisciplinary care given in slide V-1.

2. If applicable, ask participants to pull out the "Assessment of Professional Identification" form that they completed in Session 2 and to review what they had written.

3. Guide the group through the following questions:
   - What new things did you learn today about the roles of other providers in your group?
   - What assumptions about the other providers in your group were reinforced today?

4. Review with the group the list of goals and expectations generated in the introduction. Discuss whether their expectations were met.

5. Show participants Slides V-22 through V-24, "General Success Factors for Teams." Highlight key points, and answer any questions.

Definition of Interdisciplinary Care

An interdisciplinary team works together with the client in planning care for the client from their discipline-specific perspectives. Through shared staff conferencing and by consulting with each other, the interdisciplinary team and the client gain new insights for addressing problems and have the opportunity to produce a holistic plan of care for the client.

Slide V - 1

General Success Factors for Teams

- Knowledge of expertise and role of other team members and how these interrelate
- Focus on needs of clients
- Recognition of and respect for specialized skills and contributions of each team member
- Shared charts and information regarding clients
- Trust is valued

Slide V - 22

General Success Factors for Teams

- Open communication and resolution of disagreements in a civilized manner (no hidden agendas)
- Work atmosphere is relaxed and supportive
- Collaboration and cooperation are cornerstones of success
- Commitment to common goals and to team members
- Coordination of services

Slide V - 23

Team Building Works

"Team building works. It helps team members to build upon their strengths and take better advantage of opportunities. It encourages members to strengthen their weaknesses and manage their problems together. In doing so it promotes better understanding between individuals – a critical factor in the success of any team!"

(Phillips, 1989, 1-2)

Slide V - 24

Options for Replication Trainings

Option 1 (90 minutes)

A. Session 1A (35 minutes)
   - Solicit and discuss goals and expectations

B. Session 4, Activity 2: "Cross-Discipline Awareness" (45 minutes)
   - Use shorter version of case study

C. Session 7A, "Definition of Interdisciplinary Care and Take Home Messages" (10 minutes)

Option 2 (120 minutes)

A. Session 1A (35 minutes)
B. Session 2, "Professional Identification" (10 minutes)
C. Session 3, "Key Components of Interdisciplinary Care" (20 minutes)
D. Session 4, Activity 2: "Cross-Discipline Awareness" (45 minutes)
   - Use shorter version of case study

E. Session 7, "Take Home Messages" (10 minutes)

Option 3 (180 minutes, includes break)

A. Session 1A (35 minutes)
   - Solicit and discuss goals and expectations

B. Session 4, Activity 1, "Team Member Professional Identification" (45 minutes)
   - Use either version of case study

C. Break (15 minutes)

D. Session 4, Activity 2: "Cross-Discipline Awareness" (40 minutes)
   - Use same version of case study as in "Team Member Professional Identification"

E. Session 5, "Team Communication" (35 minutes)
F. Session 7A, "Definition of Interdisciplinary Care and Take Home Messages" (10 minutes)

Option 4 (240 minutes in four 60 minute trainings)

Part 1

A. Session 1, "Icebreaker/Introductions" (45 minutes)
   - Solicit and discuss goals and expectations
B. Session 2, "Profession Identification" (10 minutes)
C. What's Next? (5 minutes)
   - Facilitators provide a hand-out with the dates of Parts 1-4 and what will be covered

Part 2

D. Session 1, "Icebreaker/Introductions" (10 minutes)
   - Facilitators seat participants at interdisciplinary tables as they enter
E. Session 4, Activity 1, "Team Member Professional Identification" (50 minutes)
   - Use longer version of case study

Part 3

F. Session 1, "Icebreaker/Introductions" (10 minutes)
   - Facilitators seat participants at interdisciplinary tables as they enter
G. Session 4, Activity 2, "Cross-Discipline Awareness" (45 minutes)
   - Use longer version of case study, same as in "Team Member Professional Identification"
H. What's Next? (5 minutes)

Part 4

I. Session 1, "Icebreaker/Introductions" (10 minutes)
   - Facilitators seat participants at interdisciplinary tables as they enter
J. Session 5, "Team Communication" (35 minutes)
K. Session 7A, "Definition of Interdisciplinary Care and Take Home Messages" (15 minutes)

Note: Option 4 assumes the same audience from one training to the next. Session 1, "Icebreaker/Introductions" is repeated in Trainings 2-4 to allow participants who missed the first training to add their names to the HIV/SU timeline (which should be posted at each training session).

Option 5 (285 minutes, includes break)

A. Session 1, "Icebreaker/Introductions (45 minutes)
A. Session 2, "Professional Identification" (10 minutes)
B. Session 3, "Key Components of Interdisciplinary Care" (20 minutes)
C. Session 4, Activity 1, "Team Member Professional Identification" (45 minutes)
   - Use longer version of the case study
D. Break (30 minutes)
E. Session 4, Activity 2, "Cross-Discipline Awareness" (40 minutes)
F. Session 5, "Team Communication" (35 minutes)
G. Session 6, "Models of Care" (45 minutes)
H. Session 7, "Take-Home Messages" (15 minutes)

HIV and Substance Abuse Resources

(arranged alphabetically by type of resource)

Articles:

Antoniou, T., Tseng, A. L. (2002). Interactions between recreational drugs and antiretroviral agents. *The Annals of Pharmacotherapy, 36(10),* 1598-613.

Arnsten, J. H., Demas, P. A., Grant, R. W., Gourevitch, M. N., Farzadegan, H., Howard, A. A., Schoenbaum, E. E. (2002) Impact of active drug use on antiretroviral therapy adherence and viral suppression in HIV-infected drug users. *Journal of General Internal Medicine, 17(5),* 377-381.

Centers for Disease Control and Prevention. (2002). Guidelines for using antiretroviral agents among HIV-infected adults and adolescents: recommendations of the Panel on Clinical Practices for Treatment of HIV. *MMWR, 51 (No. RR-7),* 1-55.
Available online: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5107a1.htm

Chesney, M. (2000). Factors affecting adherence to antiretroviral therapy. *Clinical Infectious* Diseases, 30(S2), S171-6.

Chesney, M. (1999). The challenge of adherence. *Bulletin of Experimental Treatments for AIDS.* January.
Available online: <http://www.sfaf.org/treatment/beta/b39/

Gourevitch, M. N., Friedland, G. H. (2000). Interactions between methadone and medications used to treat HIV infection: A review. *Mount Sinai Journal of Medicine*, .67(5-6), 429-36.

Hsu, J. H. (2002). Substance Abuse and HIV. *The Hopkins HIV Report, July,* 8-12.

Lauer, G. M., Walker, B. D. (2001). Hepatitis C virus infection. *New England Journal of Medicine, 345(1),* 41-51.

McAllister, J. (2000). Antiretroviral drug therapy for HIV-infection: Developing an adherence framework.
Available online:
<http://www.clininfo.health.nsw.gov.au/hospolic/stvincents/2000/drug_therapy.html

National Alliance of State and Territorial AIDS Directors. (1999). *Working together: State agency activity to coordinate HIV, Mental Health and Substance Abuse Prevention and Treatment Services.* November, NASTAD, Washington, DC.

O'Connor, P. G., Samet, J. H. (1996). The substance-using Human Immunodeficiency Virus patient: Approaches to outpatient management. *American Journal of Medicine, 101(4),* 435-444.

O'Connor, P. G., Selwyn, P. A., Schottenfeld, R. S. (1994). Medical care for injection-drug users with Human Immunodeficiency Virus infection. *The New England Journal of Medicine, 331(7),* 450-459.

Reiter, G. S., Stewart, K. E., Wojtusik, L., Hewitt, R., Segal-Maurer, S., Johnson, M., Fisher, A., Zackin, R., Masters, H., Bangsberg, D. R. (2000). Elements of success in HIV clinical care: Multiple interventions that promote adherence. *Topics in HIV Medicine,* 8(5). Available online: <http://www.ubevents.org/elements/publication.php

Stone, V. E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases.* 33, 865-72.

Stone, V. E., Clarke, J., Lovell, J., Steger, K. A., Hirschhorn, L. R., Boswell, S., Monroe, A., Stein, M. D., Tyree, T. J., Hayer, K. H. (1998). HIV/AIDS patients' perspectives on adhering to regimens containing protease inhibitors. *Journal of General Internal Medicine, 13*, 586-93.

Williams, A., Friedland, G. (1997). Adherence, compliance, and HAART. *AIDS Clinical Care,*. 9(7).

Newsletters:

The ADAP Report

Obtain from: coy.stout@parexel.com or *The ADAP Report*, PAREXEL MMS, 5870 TrinityParkway, Suite 600, Centereville, VA 20120, 703-310-2045

Description: This newsletter is an information resource for ADAP Administrators and contains articles about policy, program administration, clinical care and other HIV/AIDS issues.

Bulletin of Experimental Treatments for AIDS (BETA)

Obtain from: www.sfaf.org/beta, beta@sfaf.org, 415-487-8060

Description: *BETA, the Bulletin of Experimental Treatments for AIDS*, includes in-depth articles on treatments for HIV infection and AIDS-related illnesses for HIV-positive individuals and their caregivers. It is published quarterly (in winter, spring, summer, and autumn) by the Treatment Education and Support Unit of the San Francisco AIDS Foundation. Contributing writers to *BETA* include well known AIDS researchers and clinicians as well as AIDS community advocates and activists. Each issue of *BETA* includes News Briefs, Research Notes, a Women and HIV/AIDS department, a listing of open clinical trials and an extensive glossary of terms.

HIV Impact

Obtain from: info@omhrc.gov or OMHRC, PO Box 37337, Washington, DC 20013

Description: *HIV Impact* is a free newsletter of the Office of Minority Health, Office of Public Health and Science, Us Department of Health and Human Services. The newsletter provides information on a variety of HIV/AIDS issues as well as resources and upcoming conference information.

HIV Quality Care News

Obtain from: http://www.idsociety.org/HIV/NEWS_Index.htm

Description: *HIV Quality Care News* is a bimonthly publication of the HIV Medicine Association. The HIV Medicine Association is an organization of medical professionals who practice HIV medicine. We represent the interests of our patients by promoting quality in HIV care and by advocating for policies that ensure a comprehensive and humane response to the AIDS pandemic informed by science and social justice.

The Hopkins HIV Report

Obtain from: http://www.hopkins-AIDS.edu

Description: *The Hopkins HIV Report* is a free publication that is issued 6 times per year by the Johns Hopkins University AIDS service, Division of Infectious Diseases. The newsletter covers a variety of topics including treatment issues, epidemiology, and other HIV/AIDS related issues.

The PRN Notebook

Obtain from: the Physicians' Research Network: www.prn.org

Description: *The PRN* Notebook contains summaries of the presentations given at their meetings, as well as featured reports on major clinical and scientific meetings in the USA and, when possible, internationally.

Websites:

The Addiction Technology Transfer Center Network: http://www.ceattc.org

Description: The network is funded by a cooperative agreement from the Center of Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA). This website is designed to be an important source of addiction-related information for the public and the community of addiction professionals.

AIDS Action Committee: www.aac.org

Description: AIDS Action's mission is three-fold:

- to provide support services for people living with AIDS and HIV
- to educate the public and health professionals about HIV transmission, treatment and prevention
- to advocate for fair and effective AIDS policy at the city, state and federal levels

Their website provides a variety of HIV related resources in both English and Spanish.

AIDSinfo: http://www.aidsinfo.nih.gov/

Description: AIDSinfo is a U.S. Department of Health and Human Services (DHHS) project providing information on HIV/AIDS clinical trials and treatment. It is the result of merging two previous DHHS projects: The AIDS Clinical Trials Information Service (ACTIS) and the HIV/AIDS Treatment Information Service (ATIS). Important resources such as fact sheets, brochures, and guidelines can be found on a number of topics such as prevention, treatment, vaccines, and clinical trials.

The Body: www.thebody.com

Description: This website contains HIV/AIDS information in more than 550 topic areas including AIDS basics, prevention, quality of life, treatment, and policy.

The Center for AIDS Prevention Studies: www.caps.ucsf.edu

Description: The Center for AIDS Prevention Studies was established in 1986 to:

- Conduct local, national, and international interdisciplinary research on methods to prevent HIV infection and its consequences.
- Stimulate collaboration among academic researchers, public health professionals, and community-based organizations.
- Train new scientists to conduct AIDS prevention research.
- Disseminate knowledge, skills, and effective research and prevention models.
- Contribute to policy development related to the HIV epidemic at local, state, national, and international levels.
- Analyze and resolve ethical issues related to HIV research, prevention, and care.
- Collaborate with scientists from developing countries to conduct AIDS prevention research.

Centers for Disease Control and Prevention (CDC): www.cdc.gov

Description: The CDC is recognized as the lead federal agency for protecting the health and safety of people - at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. The CDC website provides up to date information and links on a number of HIV related topics, including statistics, guidelines, and funding.

Danya Institute: http:// www.danyainstitute.org

Description: The Danya Institute provides analysis and information to the public to enhance the workforce development of healthcare professionals on issues related to drug and alcohol use and addiction.

The Drug and Alcohol Treatment Association (DATA) of Rhode Island: www.dataofri.org

Description: A non-profit membership organization representing the majority of public and private alcohol and drug abuse treatment and prevention programs throughout the state. The DATA training program provides a range of training experiences including an evidence-based treatment approach for substance abuse and mental health clients with significant anger management problems, an advanced training course for clinical supervisors, an ethics course for managers, and certificate training in Crisis Prevention Institute (CPI) crisis management techniques. In-Rhodes, a resource library maintained by DATA, is available for dependency professionals or consumers seeking additional information. In-Rhodes' services are designed to facilitate the sharing of resources and information about education and prevention, published materials and research findings, as well as news about related trends.

Drug Policy Alliance: www.lindesmith.org

Description: The alliance provides information on harm reduction and drug policy.

The Forum for Collaborative HIV Research: www.hivforum.org

Description: The Forum for Collaborative HIV Research is an independent public-private partnership whose mission is to facilitate discussion on emerging issues in HIV clinical research and the transfer of research results into care.

Harm Reduction Therapy Center (HRTC): www.harmreductiontherapy.org

Description: The **HRTC** website provides information on is providing alternative treatment to people with drug and alcohol problems. The treatment, **Harm Reduction Psychotherapy** is based on the belief that substance abuse develops in each individual from a unique interaction of biological, psychological, and social factors.

Health and Disability Working Group (HDWG): www.hdwg.org

Description: HDWG is a research, technical assistance and training center of the Boston University School of Public Health. Previously known as the Medicaid Working Group, their goal is to improve the delivery of medical, behavioral, and support services to people with a broad range of disabilities and chronic illnesses. The HDWG promotes the exchange of information and ideas between policy makers, providers, and consumers to support the delivery of the best possible services in the most effective manner. They also assist providers and policy-makers in identifying needs and implementing practices or programs that address these needs. HDWG research activities include policy and primary research as well as program evaluation with a primary focus on low income and disenfranchised populations.

HIV/AIDS Bureau (HAB) of the Health Resources and Services Administration (HRSA): http://hab.hrsa.gov/

Description: The HAB of HRSA distributes the Ryan White Care Act funding to address the unmet health needs of persons living with HIV disease by funding primary health care and support services.

HIV InSite: Gateway to AIDS Knowledge: http://hivinsite.ucsf.edu

Description: Based at UCSF, this site is a virtual one-stop shop for reliable, peer-reviewed AIDS information and contains research written, edited and maintained by frontline AIDS researchers from a health sciences institution. Topics cover a wide breadth of in-depth information--from treatment, clinical drug trials, epidemiology and basic research to social and policy issues, prevention programs, population subgroups, and ethics.

National AIDS Fund Website: www.aidsfund.org

Description: The National AIDS Fund provides grants to support community-based HIV prevention programs

National Alliance of State and Territorial AIDS Directors Online Publications: www.nastad.org

Description: The following are useful publications by this organization:

- NASTAD Monograph: Linking HIV/AIDS Services with Substance Abuse and Mental Health Programs, January 2000.
- NASTAD Report: Working Together: State Agency Activity to Coordinate HIV, Mental Health, and Substance Abuse Prevention Services – Results from a National Survey Among State and Territorial AIDS Directors, November, 1999

National Institute for Drug Abuse (NIDA): http://www.drugabuse.gov/

Description: NIDA's informative website includes up to date information on commonly used substances, the links between drug use and HIV, and funding opportunities.

New Mexico AIDS InfoNet: http://www.aidsinfonet.org/

Description: The New Mexico AIDS InfoNet is a project of the New Mexico AIDS Education and Training Center in the Infectious Diseases Division of the University of New Mexico School of Medicine. The InfoNet was originally designed to make information on HIV/AIDS services and treatments easily accessible in both English and Spanish for residents of New Mexico. Fact sheets are available in a wide variety of subjects in a non-technical language and are updated frequently. In addition the InfoNet also maintains a list of over 500 HIV/AIDS websites that maybe helpful resources. Please note: the information provided on this site is designed to support, not replace, the relationship that exists between a patient/site visitor and his/her existing health care providers.

Project Inform: www.projectinform.org

Description: Project Inform is a national nonprofit, community based organization working to end the AIDS epidemic. Its mission is to:

- ***Provide*** vital information on the diagnosis and treatment of HIV disease to HIV-infected individuals, their caregivers, and their healthcare and service providers.
- ***Advocate*** for enlightened regulatory, research, and funding policies, affecting the development of, access to, and delivery of effective treatments, as well as to fund innovative research opportunities.
- ***Inspire*** people to make informed choices amid uncertainty, and to choose hope over despair.

Project Inform makes information on HIV disease and the treatments used to manage it available to all who need it, free of charge. All publications are available on the website (www.projectinform.org) or by calling the toll-free National HIV/AIDS Treatment Hotline at 1-800-822-7422.

Tufts Health Care Institute: www.thci.org

Description: Tufts Health Care Institute is a not-for-profit educational organization established as a collaborative venture of Tufts University School of Medicine (TUSM) and Tufts Health Plan (THP). The Institute develops and coordinates a variety of educational programs on care management topics for practicing and prospective health care professionals to help these individuals to practice effectively and comfortably in a high quality, cost-effective health care system. The Institute offers a curriculum framework and instructional materials that can help in training health care professionals to practice comfortably and effectively.

Seattle & King County Public-Health website:
http://www.metrokc.gov/HEALTH/apu/index.htm

Description: This website services the Seattle and King County areas and has a wealth of information on HIV and substance use including harm reduction and HIV outreach tips in English and Spanish.

Videos:

The Addiction Stigma Reduction Toolkit: Implementation Guide and Video. Highlights from the Stigma Reduction Forum held September 28, 2000.

Obtain from: The video is available through the www.ceattc.org or www.danyainstitute.org for $29 each.

Description: The purpose of the forum was to promote information sharing and to initiate strategies for reducing the stigma that affects patients, those in recovery and their families, and professionals in the field. The companion piece, *A Guide to Reducing Addiction-Related Stigma*, provides useful information about a variety of approaches to prevent addiction-related stigma. These range from simple approaches, such as using stigma-free language and writing letters to the editor, to comprehensive prevention activities, such as developing a community action-group and implementing a community-based media advocacy campaign. 30 minutes.

Creando Nuestro Futuro: Apego A Los Medicamentos Del VIH/SIDA. (1999).

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: Produced as a Spanish-language version of Taking Control (see below) this patient-oriented program takes a documentary approach, exploring adherence through the lives of four Latinos from Southern California. Filmed on location in Los Angeles, and hosted by Dr. Octavio Vallejo of UCLA, Creando Nuestro Futuro includes a diverse array of experiences: from Silvia, whose 12-year-old daughter was infected through mother's milk, to Jose, whose doctors told his family several years ago that he would live a few more days at most. Providing a distinctly Latino perspective on the hope and the challenge presented by current HIV regimens, this video is a culturally appropriate source of education and support for Spanish-speaking clients who are "creating a future." Approximately 30 minutes.

Double Jeopardy: Management of the HIV/Hepatitis C Co-Infected Patient. (2002).

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: This program follows a co-infected patient from diagnosis through referral to a GI specialist. Dr. Stephen Tabet and Dr. Margaret Shuhart of the University of Washington provide expert guidance on the management of co-infected patients, including counseling, treatment candidacy, an overview of current therapies, monitoring, and followup. 23 minutes.

Caring Inside the Wall: HIV Treatment in the Correctional Setting. (2001).

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: Structured around four cases studies, this video explores issues including intake of inmates claiming to be on HIV medications; factors to consider in beginning HAART therapy; adherence and pill lines versus keep-on-person medication regiments; transition issues; and Hepatitis C co-infection. Featuring interviews with leading national experts on HIV and corrections, the film includes segments shot in Washington's McNeil Island Correctional Center. 27 minutes.

High Impact: ***Substance Abuse and HIV Care***

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: Shot on location at Highland General Hospital in Oakland, California, and the University of Washington's Center for Health Education and Research in Seattle, HIGH IMPACT explores the challenges of delivering HIV care to patients with histories of substance abuse. Join HIV specialists David Spach, MD, Deborah Royal, RN, ANP, and psychiatrist Victoria Harris, MD, along with a focus group of clients, in a fast-paced program with five sections: Stabilizing and Reducing Harm; Beginning Antiretroviral Therapy; Drug Interactions; Pain Management; Supporting Adherence.

HIV/AIDS Medical Update 2001. (July 2001)

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: Produced annually, this lecture-style presentation by Dr. David Spach is targeted to clinicians treating HIV, and provides a technical discussion of: the role of CTL in disease progression; new FDA-approved HIV Medications; new ARV guidelines; and new HCW postexposure prophylaxis guidelines. 29 minutes.

Pill Burden: HIV Medications and the Role of the Pharmacist.

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: *Pill Burden*, a 23-minute training video for pharmacists, provides a comprehensive overview of the role of the pharmacist on the HIV-care team, and introduces basic concepts in HIV medication and treatment. Featuring two HIV specialists, Stephen Tabet, MD and Jane Woodward, PharmD, the video also presents the perspectives of two HIV-positive clients: Anna, who is beginning an HIV regimen, and Todd, whose first regimen is failing, and who is prescribed a more potent "salvage regimen."

Primary HIV Infection: Recognition and Diagnosis. (February 2001).

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each

Description: Topics covered in this 25-minute, lecture-style video include Identifying Primary HIV Infection, Diagnostic Tests for HIV, Pre-and Post-Test Counseling, and a summary of the importance of identifying HIV early. Vignettes with patients illustrate approaches providers can use when doing risk assessments and pre- and post-test counseling.

Taking A Sexual History. Produced by Stephen Brady, PhD of the Solomon Carter Fuller Mental Health Center in Boston, MA.

Obtain from: Available at www.neaetc.org for $49.95.

Description: This 30-minute video presents unrehearsed vignettes showing a variety of clinicians (including physicians, psychiatrists, nurse practitioners, and a psychologist) interviewing actual patients about their sexual and drug-using histories. While invaluable as a means of evaluating HIV risk, the approaches demonstrated will also enable clinicians to assess risks for other sexually transmitted diseases. The video is geared to professionals in primary healthcare and mental health settings, though the techniques it models will be helpful in any delivery context.

Taking Control: Adherence and HIV/AIDS Medication. (1998).

Obtain from: http://depts.washington.edu/nwaetc/ for $50 each.

Description: In this documentary-style program a diverse group of eight HIV+ clients present their experience with the new HIV medications, sharing both frustrations and hope. In addition, interviews with a doctor on the cutting edge of AIDS care, a case manager, and a pharmacist, provide clear factual information about adherence, resistance, the issues associated with non-adherence, and strategies for increasing adherence to HIV/AIDS regimens. Taking Control is a 34-minute tape for Providers presenting in-depth information, including slides and graphs outlining research on adherence.

Treating Me: A Video About Women Living With HIV/AIDS

Obtain from: www.neaetc.org for $20.00 each.

Description: A 35 minute video for physicians, nurses and other health professionals, family, and friends who care about and provide care for women. Told from the point of view of women who are infected with HIV, it examines the quality and nature of patient-provider relationships and demonstrates the positive and negative effects these relationships can have on women's health, well-being and care. Invisible biases are brought to light in an interactive workshop where women with HIV tell their stories through actors and then, as part of a panel before an audience, discuss the vignettes. Produced as a documentary in response to the growing number of women with HIV, this video serves as an excellent advocacy tool for people seeking to have a lasting impact on the awareness and sensitivity of current and future health care providers.

Other Educational Materials:

Addressing the challenges of adherence. Navigating emerging challenges to long-term HIV therapy. Supported through an unrestricted educational grant from Glaxo SmithKline. February 2002.

Obtain from: World Health CME, 41 Madison Avenue, New York, NY 10010; 212-679-6200 for free copies.

Description: This educational packet (also available in CD-ROM) presents highlights of a roundtable discussion held in San Francisco during the summer of 2001, when a group of leading treaters, educators, and researches reviewed 2 decades of progress in AIDS science and the treatment of HIV disease. Their experience and discussions about the state of the art are summarized here.

Adherence Now: Best Practices and Practical Tools. Proceedings of a roundtable symposium. Sponsored by Cedars-Sinai Medical Center and supported through and independent educational grant from GlaxoSmithKline. November 2001.

Obtain from: World Health CME, 41 Madison Avenue, New York, NY 10010; 212-679-6200 for free copies.

Description: This is an educational packet intended for physicians, nurses, nurse practitioners, physician assistants, and counselors involved in HIV care. Objectives include:

- Describing the impact of adherence on the outcome of HIV/AIDS treatments
- Comparing characteristics of patients with excellent vs. suboptimal adherence
- Listing some of the most formidable challenges to antiretroviral adherence
- Discussing and applying best practices for improving adherence
- Utilizing the enclosed tools for promoting adherence.

AIDS Outreach in the Community: Health Education & HIV Prevention for the Substance Abuser. Published by the Texas HIV Connection. Austin, TX

Obtain from: Texas HIV Connection 3410 Far West Blvd. Suite 250, Austin TX 78731.

Description: This manual provides information and activities for training workshops on outreach interventions around HIV prevention and substance use issues.

Comparing Philosophies, Approaches, and Characteristics—Harm Reduction Model vs. Medical Model. Prepared by Daliah Heller (CitiWide Harm Reduction), Kate McCoy, and Chinazo Cunningham (Montefiore Medical Center).

Obtain from : Kate McCoy, kmccoy@montefiore.org

Description: This chart gives an overview of the differences between the harm reduction model and the medical model on the topics of structural philosophy, theoretical framework and patient provider role.

Facts and Myths about HARM REDUCTION in Substance Abuse Treatment. Published by the Statewide Partnership for HIV Education in Recovery Environments (SPHERE).

Obtain from: sphere@attbi.com, 800-530-2770 x 224 for $1.50 each

Description: Brochure presenting the facts and myths of harm reduction.

A Guide to the Clinical Care of Women with HIV. Published by HRSA

Obtain from: http://hab.hrsa.gov/womencare.htm or 1-888-ASK-HRSA for free copies.

Description: This living document offers a comprehensive guide to the care of women living with HIV/AIDS.

Health Emergency 2003: The spread of drug-related AIDS and Hepatitis C among African Americans and Latinos. Written by Dawn Day, Director of the Dogwood Center, Princeton, NJ.

Obtain from: the Harm Reduction Coalition, 22 West 27th Street, 5th Floor, New York, NY, 10001, 212-213-6376.
www.harmreduction.org/issues/health/health_emerg_2003.pdf

Description: This report details the impact of the injection-related AIDS epidemic on African Americans and Latinos. The report takes a harm reduction focus and discusses evidence in favor of needle exchange programs.

HIV. (2002) Written by Howard Libman, MD, and Harvey J. Makadon, MD and published by the American College of Physicians (ACP).

Obtain from: http://www.acponline.org/catalog/books/hiv.htm for $35 ($25 for ACP members)

Description: This book offers up-to-date practical advice on the management of HIV disease. *HIV* is divided into ten chapters with tables, charts, and photographs to make information easily accessible to busy clinicians. The text addresses major clinical issues such as antiretroviral therapy, prevention of opportunistic infections, diagnostic approaches to common clinical syndromes, and management of opportunistic infections and cancers. Illustrative clinical vignettes and an appendix containing a useful drug glossary supplement the text. Written by a team of authors with established clinical, teaching, and research expertise in this field, *HIV* meets the needs of practicing physicians by providing essential information for the primary care of HIV-infected patients.

HIVGuide 2002 (HIV Primary Care Guidelines). Written by Dr. Howard Libman.

Obtain from: http://www.skyscape.com/EStore/ProductDetail.aspx?ProductID=451 for $25.

Description: This guide provides practical up-to-date recommendations on the outpatient management of HIV disease. It covers topics of importance to clinical staff involved in the primary care of HIV-infected patients. These include HIV antibody testing, initial evaluation, antiretroviral therapy, opportunistic infection prophylaxis, immunizations and other health care maintenance issues, stratified management, and sexually transmitted diseases. HIVGuide 2002 also has a useful drug glossary and list of key references and Web sites.

HIV Infection: 2002 Sourcebook for the Health Care Clinician. (August 2002) Developed by the Mountain-Plains AIDS Education & Training Center.

Obtain from: **www.uchsc.edu/sm/AIDS**, 303-315-2516

Description: This sourcebook provides information about HIV infection and AIDS for clinicians who work in today's heath care system. Its target audience is clinicians, including physicians, physician assistants, nurses, nurse practitioners, nurse midwives, pharmacists, dentists, dental hygienists, social workers, mental health counselors, case managers, and others. It contains an outline of basic patient care in HIV infection, and a list of easily accessible resources.

Outreach to People Experiencing Homelessness: A Curriculum for Training Health Care For the Homeless Outreach Workers. (2002) Developed by the National Health Care for the Homeless Council.

Obtain from: The curriculum can be viewed at www.nhchc.org and is $50.

Description: The curriculum provides a comprehensive overview of the principles, knowledge, and issues relevant to conducting outreach.

A Pharmacist's Guide to Antiretroviral Medications for HIV-infected Adults and Adolescents. (November 2001) Developed by the Mountain-Plains AIDS Education & Training Center, University of Colorado Health Sciences Center.

Obtain from: www.uchsc.edu/sm/aids, 202-315-2516.

Description: Provides information on all the currently approved antiretroviral medications. Includes dosage forms, usual dosages, special dosing considerations, common and adverse side effects. The guide also includes a special section describing the pharmacist's role in the care of people with HIV.

Positively Aware: 2002 HIV Drug Guide—available in English and Spanish. Published by the Test Positive Aware Network.

Obtain from: http://www.tpan.com/publications/drug_guide/drug_guide_2002.html. The guide can be viewed online for free and is 25 cents per hardcopy, plus s & h.

Description: This easy to read guide contains descriptions of commonly used HIV drugs. Each drug is presented with an illustration and a description of dosage, brand name, common name, class, cost, patient assistance number, potential side effects, potential drug interactions, and tips on taking the drug. Manufacturer, doctor, and consumer reviews are also included.

Trainer's Guide: For the Community-based Outreach Model To Prevent HIV and Hepatitis Among Drug Users. Published by CHHATT (Center for HIV, Hepatitis, and Addiction Training and Technology. CSAT Center for Substance Abuse Treatment SAMHSA.

Obtain from: The curriculum can be purchased through Danya International www.ceattc.org for $99

Description: This guide is designed to provide trainers of outreach workers and other healthcare professionals with the tools required to provide a 4-hour multimedia training session on the community-based outreach model for preventing HIV and the hepatitis C virus (HCV) among out-of-treatment drug users. These tools include presentation script, computer disks with the presentation text to permit tailoring of the script, professionally prepared PowerPoint slides, a set of pocket-size, laminated cue cards, and a somewhat larger tabletop flip-chart version of the cue cards.

Volume I: HIV Infection & the Primary Care Physician - 80 slides with instruction guide. Written and compiled Howard Libman, M.D. and Jon Fuller, M.D.

Obtain from: www.neaetc.org for $60.00

Description: This annotated slide-lecture series, consists of four modules covering Virology and Natural History of HIV, Opportunistic Infections, Neurologic Disease, Slim Disease, Opportunistic Tumors and other HIV manifestations. The slides and texts are highly effective tools for individualized learning or didactic presentations.

Welcome to the Harm Reduction Café Menu of Options. Published by the Statewide Partnership for HIV Education in Recovery Environments (SPHERE).

Obtain from: SPHERE@attbi.com, 800-530-2770 x224 at a cost of $3.50 each.

Description: Creative educational tool listing harm reduction options in the form of a "menu".

Appendix A: Trainers' Tips

Training adults is an adventure and journey for both student and trainer. To maximize the benefits of the journey, to make it useful and effective, a trainer needs to consider: 1) the principles of adult learning, 2) the learning styles of adults, and 3) the logistics of developing and implementing a training program. In this appendix, we provide several key tips for trainers to lead successful trainings. Several checklists and aids are provided to use or adapt for local trainings.

I. Principles of Adult Learning

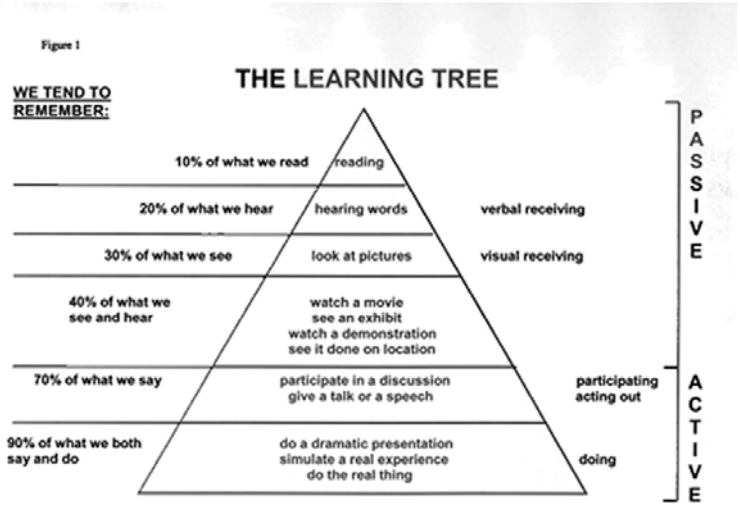
This section provides information on the principles of adult learning and how trainers can transform these principles into action when they facilitate trainings.

Researchers have said that people will remember:

20% of what they hear
30% of what they see
50% of what they see and hear
70% of what they see, hear and say
90% of what they see, hear, say, and do

Trainings try to achieve a successful balance between what people see, hear and do to maximize the learning that can happen. The modules in this curriculum try to achieve this balance by using visual aids (overhead slides and handouts that people can "see"), information in presentations (facts and ideas that people can "hear"), opportunities for discussion and sharing ideas (that people can "say"), and opportunities to demonstrate new skills (on worksheets and in small group discussions that people can "do"). One way of describing this process is *a learning tree***.** (Figure 1)

Figure 1



Reproduced from Childbirth Education: Practice, Research and Theory, Nichols and Humenick

A very well known American educator, Malcolm Knowles, presented ten principles for adult learning. For those who conduct and plan training, these principles offer a checklist for trainers in both the design and implementation of their trainings. The ten principles are:

1. Adults need to be self-directed learners.

2. Learning is a lifelong process.

3. For learning to take place, the learner must be actively involved in the experience.

4. Adults learn by doing.

5. Situations, problems, exercises and examples must be relevant, realistic, and immediately applicable.

6. Adults relate current learning to what they already know. Thus, trainers benefit from knowing the background of their participants.

7. There are several learning domains. A variety of learning activities stimulates learning and appeals to the range of learning styles.

8. Learning flourishes in an environment that is:
   - Informal
   - Nonjudgmental
   - Collaborative
   - Based upon mutual trust
   - Open and authentic
   - Humane
   - Supportive

9. Learners benefit from an opportunity to identify their own learning needs.

10. The trainer is a facilitator of learning and a catalyst for change. The responsibility for learning and making change resides with the learner**.**

Many trainers use the principles of adult learning to guide their training practices. This chart is derived from the experiences of many professional trainers who have applied the principles of adult learning to their specific training practices.

Principles of Adult Learning	Application in Training
Adults expect to learn information that is relevant to them.	Focus on real problems. It is important to create objectives.
Adults expect to learn information that has immediate application to their lives. They need to "see the reason" for learning something.	Stress how the learning can be applied, or how the information will be useful to people in their work.
Adults are goal-oriented in their learning	Obtain information on the learners' goals, and show participants how the training will meet those goals.
Adults want their learning to be problem-oriented.	• Take time to achieve consensus on the problem that will be addressed. • Design problem-solving activities and provide opportunities for practicing "solutions." • Anticipate problems in applying new ideas, and offer strategies to overcome problems. • Trainers can give overviews and summaries.
Adults have enormous experience and a wealth of information from work and private lives that should be drawn into discussion. They often start out knowing more than they think they do.	• Relate the materials to the past experiences of the learner. • Focus on the strengths that learners bring, not only their gaps in knowledge. • Listen to and respect the opinions of learners. • Encourage learners to be resources to each other and to you. • Connect the learning to the existing knowledge and experience base in the room. • Value experience in learning.
Adults have established values, beliefs, and opinions.	• Demonstrate respect for differing beliefs, religions, value systems, and life styles. • Acknowledge that people are entitled to their values and opinions, but everyone may not share these ideas. • Allow debate and challenge of ideas.
Adults have pride.	• Support the learners as individuals. • Create an environment where people will not feel put down or ridiculed. Allow people to admit confusion, ignorance, fears, biases, and different opinions. • Acknowledge and thank learners for their responses and questions. Treat all questions and comments with respect.
Adults learn best when they are actively engaged, when they learn by doing.	• Provide opportunities for small group discussion, hands-on practice, or analyzing a case study.

Principles of Adult Learning	Application in Training
Adults want more than information. They want practical answers to their questions and problems. They need to integrate new ideas with what they already know.	• Help learners recall what they already know that relates to the new information. • Ask what they know about the topic and what they would like to know • Suggest follow-up ideas and next steps • Trainings should include: • time to learn new material • time to apply new skills
Adults learn well from each other	• Set up the class so that participants can face each other • Provide opportunities for participants to work together in small and large group discussions • 3. Allow debate, challenge and discussion of ideas
Adults learn best in an informal and comfortable environment.	• Include breaks • Allow for spontaneous discussions • Provide food or drink
Adults want to learn.	• Assume participants want to be there • Find out the participants' motivation • Identify training goals that may coincide with their motivation
Respect the learner.	• Avoid jargon and don't "talk down" to learners • Provide opportunities for learners to teach each other through discussion and small group work • Acknowledge the wealth of experiences participants bring with them • Validate the value of their experience • Listen • Learn from people in the room
Adults are self-directed learners.	• Remain flexible and adjust your presentation to their needs • Ask what people already know/want to know about the topic • Remember the facilitation role of guiding participants

Trainers can incorporate these principles and goals in other ways as well:

Remember to ….	**How:**
Find out the specific learning needs and interests of individual participants. Your teaching can then be tailored accordingly.	Conduct brief needs assessments prior to the training session or immediately at the beginning of the training session
Respect differing points of view	Design programs that allow viewpoints to be shared
Respect the experience of the learners	• Avoid asking adults to try a new skill in front of a large group • Acknowledge the wealth of experience in the room, and encourage participation. Design questions that tap this resource. • Involve and engage participants to share examples from their own experience if appropriate.
Appeal to a range of learning styles	Make sure your training includes listening, seeing new material, and doing something with the new material. By including all three, we appeal to different learners and increase everyone's capacity to learn.
Build in repetition	Plan to repeat certain key concepts. Adult learners need to hear something six or seven times to have it sink in
Create a comfortable space	• Avoid long lectures with no breaks • Try to create a space with few distractions, where dialogue and privacy are allowed. • Try to build an environment of mutual trust between all learners, including the trainer
Allow participants to "diagnose" or identify the problem	• Have participants use questionnaires, surveys, and assessments before and after the training • Share results with them
Offer participants an opportunity to evaluate their own learning	Provide a variety of activities that offer opportunities for participants to assess their learning and capacity.

II. Learning Styles of Adults

People come to trainings with a variety of learning styles. Trainers need to offer learning opportunities that appeal to a variety of these styles, so that no participant is left behind.

Some researchers have suggested different ways to view learning and the situations in which certain people learn the best. Other researchers suggest that all people learn in multiple ways and have the capacity to learn in each of the following ways. What kind of learner are you?

Feelers
Feelers are people-oriented. They enjoy learning that explores people's attitudes and emotions. They like open, unstructured learning environments. They enjoy working in groups and activities where they can share their opinions and experiences.

Observers
Observers prefer to watch and listen. They enjoy learning experiences that allow them to consider ideas and opinions. They thrive in experiences that promote learning from discovery.

Thinkers
Thinkers rely heavily on logic, thought and reason. They enjoy sharing ideas and activities that require analysis and evaluation. They may prefer to work independently. Role-plays are not preferred.

Doers
Doers like to be involved in the learning process directly. They enjoy practice opportunities, are focused on the relevance of their learning, and want information in concise formats.

Some learners need visual aids in addition to information. Others need tools to assist them in applying the information. Still others require multiple opportunities to practice new skills or apply information as a way to build confidence with the information or skill. Trainers need to remain flexible and have multiple techniques available to them to ensure that learners are having a comfortable experience that appeals, in some way, to their own style of learning. A successful training incorporates activities that address all of these learning styles.

III. Developing and Implementing a Training

Training requires a certain amount of "advance work" that the trainer must complete in order to build a safe and comfortable environment for learning, and ensure the training goes smoothly. These tasks are the responsibilities of the trainer or sponsor of the training.

Needs Assessment as the Basis for Setting the Training Goals and Objectives
The key to a successful training is ensuring that the goals and objectives meet the needs of participants. A first step toward understanding the needs of participants is to conduct a brief needs assessment at least one-two weeks prior to the actual training. For example, trainers can ask three or four questions that help identify some of the key content areas as well as the participants' styles of learning. If you were conducting a training on how to do HIV counseling then you might ask:

- How long have you been working in the HIV field?
- What do you feel is critical to you becoming a successful HIV counselor?
- What are your expectations for the HIV training?

These questions could be done by telephone or through email if time and resources permit. If time is limited, a brief needs assessment can also be conducted at the beginning of the training. Another option is to conduct an icebreaker exercise that provides the trainer with some sense of the participants' level of knowledge and experience.

Setting Goals
Goals are established to clarify what participants can expect to get out of the training session. Goals are broad, participant-oriented, and are not necessarily measurable. For example:
The goal of this training program is to help participants improve their HIV counseling skills.

Goals should be shared and reviewed with participants at the beginning of the training session. Trainers can present pre-established training goals, while also asking participants what they want to achieve during the training. Often the two can be combined. By asking participants for their goals, the trainer has a chance to present a realistic portrait of what will be achieved, and to clarify misunderstandings about the purpose of the training.

Creating Objectives
Objectives describe how the goals will be achieved. They are usually specific, relevant, measurable, and attainable for participants. Objectives explain what participants will be able to do by the end of the training session. For example, the objectives for an HIV counseling and testing training might include the following.
By the end of the session participants will be able to:

- Describe a key skill for HIV counseling and testing.
- Describe how a counselor uses this skill in HIV counseling and testing.
- Practice counseling and testing using this key skill.

Trainers should share the objectives with participants and post them during the session, so participants can see where they are going during the training session. Trainers may want to check in with participants periodically and see if participants had other expectations for the objectives.

Designing a Training Program
Once the training goals and objectives are established, the next step is to outline the content of the training. Think about what activities and information need to be included in the session to achieve the objectives. The content needs to accommodate both the time allotted to the training and the number of participants. For large groups (greater than 20 persons), think about breaking people down to work in small groups or doing a mix of small group work and presentations so that all participants are active in the learning process. For smaller audiences, think about exercises that will foster maximum interaction between participants. Remember to develop a variety of training activities to ensure the capacity to remain flexible.

Complete a Task List for One-Two Days Before a Training
Once the training goals, objectives, and content are established, it is time to focus on other logistics that are important for a successful training. Developing a checklist can help complete tasks and ensure a successful experience for both the trainer and participants.

Before the training, make sure…	**Done/Not Done**
To check the training space ahead of time to make sure supplies are full, bathrooms are in order, etc. Make sure there is enough space and appropriate materials and equipment. Examples: • Overhead projector and screen (or blank wall) • Adequate outlets • TV/VCR/LCD • Easel and flipchart • Markers	
Preparations for equipment failure and other potential disasters are in place. Have back up materials in different formats (for example: have flipchart *and* overhead available).	
To prepare handouts, overheads, and/or flipcharts, and arrange them so you can use them easily during the training.	
To prepare a few back-up activities in case the training ends early or an activity isn't working with the group. Assemble materials for these back-up activities.	
To make handouts and visual aids available for the group. You can prepare folders or have participants collate materials at the beginning of the training. A packet gives participants a place to save handouts, business cards and other materials. Include your contact information. Make sure paper and pens or pencils are available so people can take notes.	
To arrange to have snacks available. Food is always good, but try to keep it nutritious.	
To set up the workshop room so it is appropriate for the size of the group and the types of activities you will be doing. Tables are needed for writing exercises, open space is necessary to do activities, and chairs in a circle or semi-circle are more conducive to discussion than rows. Decide what will work best and set up the room accordingly. (Options may include: rows, U-shape, circle, square or rectangle)	
To post a large sheet of newsprint near the front of the room and write "Parking Lot" at the top. Use this sheet to write down questions or topics people bring up that need to be addressed at a later point in the workshop, or that need follow-up after the training. This will be your reminder list.	

Before the training, make sure…	Done/Not Done
To prepare sign-in sheets and have name tags ready for participants.	
To review the workshop agenda and information beforehand. The participants will know if you are unprepared, and they will lose faith in your credibility as a group leader.	
You are prepared to begin and end on time. Being prompt demonstrates respect for the participants.	
To develop your own objectives for the training. Also prepare a written evaluation that measures if you have achieved those objectives and provides an opportunity for participants to share other observations with you. Make sure you have enough copies for participants and have allotted time during the training for them to complete it. Keep the evaluation relevant to participant's lives and provide an opportunity for participants to reflect on what they can use from the training. Make the evaluation anonymous or name optional because this will allow privacy for respondents and ensure honest responses. Have a designated place where people can leave their evaluations before they leave the training.	

At the beginning of the training, the first step is to establish a learning climate….

- Start with a welcome and greeting. Remind everyone to fill in the sign-in sheet.

- Provide an opportunity for learners to introduce themselves to one another, with an "icebreaker exercise" so that both the participants and the trainer can begin to see the wealth of experience in the room. It also allows learners to hear the sound of their own voice in the first 30 minutes of an event, and helps them be more comfortable in speaking again in front of the group.

- Provide an opportunity for participants to share what they know/want to know about the topic.

- Relate training goals and objectives to participant needs.

- Establish guidelines for discussion with participants that the group can agree to follow during your time together. These guidelines can include no interrupting, saving questions or asking them as people have them, demonstrating respect, and the ability to pass on certain activities if an individual feels uncomfortable. Remember that guidelines need to reflect respect.

In delivering the training,

- Stay in touch with participants. Use vocabulary that is simple and can be understood by everyone. Don't try to impress people with knowledge, but share it with them. Define everything and explain why and why not.

- Develop and know your style. Use humor in small doses and share anecdotes when they are appropriate.

- Communicate to the learners that you know what you are doing, believe in what you are doing, and enjoy doing it.

- Have confidence in yourself. If you don't know something, say so and offer to follow up after the session.

- Practice your delivery: keep a neutral tone and moderate your voice and speed. Use notes if needed but be patient and never sound annoyed.

In managing the training,

- Remember you are in charge: keep the group moving forward and treat participants as professionals.

- Try to remember people's names and use names when you ask or respond to a question.

- Interact with participants and encourage involvement. Repeat questions so you can understand what is being asked and so all the group can hear. Probe for issues if something is not clear.

- React to participants. Use participant questions as cues to what they need. Be ready to adjust your presentation to give them what they need. Ask participants for their ideas.

- Try to have resources available for participants who want to continue to learn or access information on the topic. Websites are easy to use and many people have access to the internet. In advance of the training, prepare a list of websites and written resources with information on your topic to share with participants. Information referrals can increase the potential of training and make a continuing contribution to the lives of the participants.

- Learn to handle difficult situations:
    - There will be situations where "talkers" in the group do not listen to others or have their own agenda. Acknowledge their ideas and if they are not relevant to the discussion at hand, reply "that is a good point, but we are focusing on this issue now and perhaps we can address that issue during break or at the end of the session."
    - There may be questions that challenge the trainer in emotional ways. Try to be prepared and think through what these questions might be and what might be some responses that help to keep the training on track.
    - There may be individuals who do not want to be there. Provide something for the participants such as pads and pens for drawing that can keep these people busy without disrupting the group. If a person is disruptive, give them the choice to leave because no one is forcing a participant to learn.
    - If you have a group with widely varied skill levels it can be difficult to design a training that will meet all participant needs. Through interaction and encouraging dialogue among participants everyone can learn from each other. Start the training by acknowledging the ranges of skills and knowledge but establishing ground rules that make clear that all ideas and questions are respected.
    - There are times when you may need to step out of the curriculum. An exercise may go wrong or a topic may spur an emotional debate. Try to be able to read your audience and adjust the training to fit the needs of participants.

At the end of the training program,

- *Evaluate!* Read and collate the evaluation responses. Use them as an opportunity to critically reflect on the training. Focus on ways to improve the training and learning experience for participants. as well as the next steps for participants as a result of the training.

- Provide an opportunity for participants to connect with one another. Do you need to send the sign in sheet to all participants? Were there other material needs that surfaced during the training that you provide to the participants following the training session?

- What did you learn?

As a final note, thank everyone for participating in the training and wish them luck in their professional work!

References

- Berger, Paula. "25 Tips for Trainers" Solutions 2000. http://www.solutionsevents.com/extras/25tips/pdf

- Global Learning Partners: "Learning to Listen Learning to Teach: Trainers Curriculum" Jubilee Popular Education Program 1996. Raleigh, NC.

- Knowles, MS., Holton, E. F. , and Swanson, R. A. (1998). The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development (5th Edition). Houston: Gulf Publishing Company.

- Kraybill, K. (2002) "Outreach to People Experiencing Homelessness: A Curriculum for Training Health Care for the Homeless Outreach Workers**."** National Health Care for the Homeless Council.

- Springer, E. (2001) "Training of Trainers": A Two day program for Southeast AIDS Training & Education Center. Emory School of Medicine Atlanta, Georgia.

A Kaleidoscope of Care: Responding to the Challenges of HIV and Substance Use
Replication Trainings

Replication Site and Date(s)	Replication Model	
	Training Content/Trainer(s)	Description of Invitees/Audience
New England AETC **March 18, 2003**	**State of the Art Overview**: Katherine Cook, Therapist **Interdisciplinary Care**: Katherine Cook & Karina Danvers, Director of CT AETC **Harm Reduction**: John Cromwell, Prevention Counselor & Carol Wilson, Substance Use Counselor **Engagement and Retention in Care**: Brianne Fitzgerald, RN & Donna Beers, RN	New England Social Workers, Nurses, Corrections Personnel, Psychologists, Faith-based & Youth Organizations, Hospital and Health Center Staff
Mountain Plains AETC **University of New Mexico** **July 23, 2003**	**HIV 101**: Elaine Thomas, MD **Harm Reduction**: Maureen Rule, MA **Engagement and Retention in Care**:Michael Graham **Panel Discussion**:Elaine Thomas, MD/IDF; Mary Schumacher, Unit Director, Metro Central Intake; Tom Dominquez, PhD, NMAS Psychologist; Michael Graham, MA/NMAS; & Maureen Rule, MA/Health Care for the Homeless	New Mexico and Santa Fe Medical & Drug Treatment Providers, Social Workers, and Case Managers.
Pacific AETC - UC Davis **July 16 - 18, 2003**	**Interdisciplinary Care & Harm Reduction:** Neil Flynn, MD, Lynell Clancy, Rachel Anderson, Ray Martinez, Claudia McKinney, Hurley Merical	Del Norte Clinics: Yuba City MDs, DDSs, Peds, Nurses and Administrative Staff Sierra Foothills AIDS Foundation: Reno AETC & HOPES Clininc Providers Sacramento Planning Council
Texas/Oklahoma AETC **June 13, 2003 - Longview**	**Harm Reduction:** Kathy Hickerson, M.A. **Adherence and Health Promotion:** Anita Scribner, MD	**Longview**: Substance Abuse Workers, Nurses, Case Managers and Others involved in Substance Abuse and HIV Care. **Houston**: Addiction Counselors, Nurses, Case Managers and Social Workers. **Dallas**: Metro Area Community-Service Providers: Case Managers, Social Workers and Nurses.
Florida/Carribean AETC **University of Puerto Rico** **June 11 & 12, 2003**	**State of the Art HIV & Substance Use Overview:** Hermes Garcia, MD & Luis Segundo, MD **Interdisciplinary Care:** Luis Segundo, MD & Silvia Rosado, RN **Harm Reduction:** Omar Rerez, PhD & Lydia Santiago, PhD **Engagement and Retention in Care:** Jose Torres, BA & Maria de los A Quintana, PhD. **Adherence and Health Promotion:** Hermes Garcia, MD & Zoe Cuadrado, MPHE **Overview - Appreciating the Links between Substance Use and HIV:** Luis Segundo,MD	Island-wide HIV Medical and Agency for Mental Health and Anti-Addiction Services Administration Community
Mountain Plains AETC **Wyoming** **June 24 & 25, 2003**	**The Substance Abuse Connection:** Bert Toews, MD **HIV and Hepatitis Update:** Martin Ellbogen, MD **Harm Reduction:** Marla Corwin, LCSW, CAC III, & Rob Johnston **Engagement and Retention in Care:** Michael Graham & Anna Kinder	Substance Abuse Treatment Providers, Drug Court Personnel, State Substance Abuse Division and Ryan White Case Managers.
New York/New Jersey AETC **University of Medicine & Dentistry of New Jersey** **June 27, 2003**	**Plenary Overview of HIV and Substance Abuse:** Tanya Zangaglia, MD **Engagement and Retention in Care:** David Rubenstein, MD **Adherence and Health Promotion:** Debbie Winters, HIV Program Manager, Director of Clinical Studies	Northern and Central State HIV Medical and Substance Abuse Providers: Mds, Nurses, Social Workers, Case Managers and Counselors.