Implementing Tobacco Cessation Strategies for PLWH

Linda Drach & Jonathan Livingston: Oregon Health Authority

Amber Casey & Stephen Hile: NYC DOHMH

Madelyne Ann Bean & Lauren E. Richey: Medical University of South Carolina

Outline

Objective and speaker introductions

Breakout Groups and Discussion

Oregon Health Authority

- ADAP Promotional Campaign for Tobacco Cessation

DOHMH

- Addressing Tobacco Use in Non-clinical Programs

MUSC Ryan White Clinic

- Focus on Medication Use and Delivery in Clinical Programs

Discussion and Brainstorming Implementation Strategies

Objectives

Examine data related to prevalence and health outcomes of tobacco use among PLWH

Implement evidence-based tools for tobacco cessation, including medication use, counseling services, and promotional materials

Motivate readiness for tobacco cessation strategies – both for clients and organizations

Linda Drach, MPH

Research/Evaluation Manager

Oregon Health Authority

linda.drach@state.or.us

Jonathan Livingston

ADAP Program Coordinator

Oregon Health Authority

jonathan.m.livingston@state.or.us

Amber Casey, MPH

Deputy Director, Care and Treatment Program

NYC DOHMH

acasey@health.nyc.gov

Stephen Hile, LMSW

Evaluation Specialist, Care and Treatment Program

NYC DOHMH

shile1@health.nyc.gov

Madelyne Ann Bean, PharmD

Clinical Pharmacist

Medical University of South Carolina Ryan White Program

cearley@musc.edu

Lauren E. Richey, MD, MPH

ID Physician; Lead Investigator MUSC Ryan White Part D

Medical University of South Carolina Ryan White Program

richeyle@musc.edu

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Break Out Groups and Discussion

Form 3-4 Person Small Groups

What is the current status of your smoking cessation program?

How is counseling/medication therapy offered by your program?

Are there established ways for patients to receive therapy?

Any promotion of either opt-in or opt-out services for smokers?

What barriers exist in your program that prevent smoking cessation therapy access?

Do your staff and providers emphasize the importance of smoking cessation?

What did you find?

Show of hands: Do you have an established program for offering smoking cessation?

Show of hands: Does your program have established mechanisms for therapy or medications for patients interested in smoking cessation?

Any common themes you found for your group?

Any common barriers to therapy you found for your group?

Can a Promotional Campaign Help ADAP Clients with Tobacco Cessation?

Oregon Public Health Division

Linda Drach, MPH

Jonathan Livingston,

Background

- Tobacco cessation rates are high among PLWH: **42%** of Oregon ADAP clients use tobacco compared to **18%** of Oregon adults overall.
- Most Oregon ADAP clients say they want to quit.
- They've had FREE cessation resources since 2008.
- Prevalence rates were the same in 2006, 2009, and 2013

Access May Not Be Enough

Increased Recruitment Can Close the Gap

Oregon's Promotional Campaign

This is what clients get from Big Tobacco

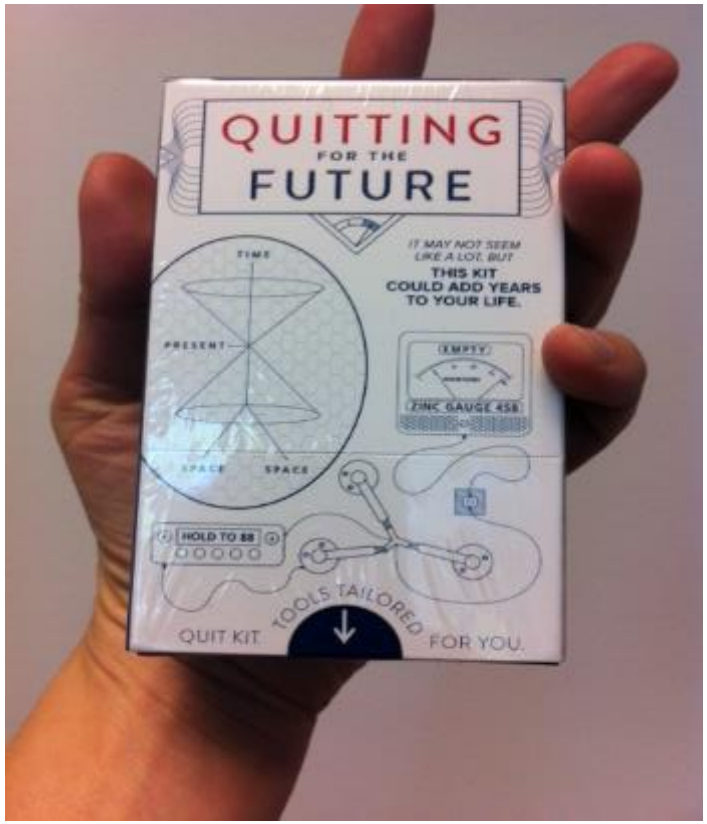
How It Worked: The Basics

We added 3 simple questions to the Client Eligibility Review (CER) form, which is submitted twice/year:

- Do you currently use tobacco (Yes/No)
- Would you like to quit? (Yes/No)
- Are you seriously thinking about quitting in the next 30 days? (Yes/No)

Clients with high readiness for tobacco cessation received promotional materials in the mail, and were contacted by phone for baseline interview.

Baseline Numbers



Between 5/1/15 and 10/31/15:

- **251 clients received mailed Tobacco Quit Kits**
- **196 of those clients (78%) participated in baseline interviews.**

Baseline Results

Baseline Progress:

- **8% of clients (n=16) had already quit tobacco**
- **52% of clients who were still smoking reported taking an action to quit tobacco.**

Information & Referral Services:

- **The interviewer provided information about cessation benefits available through Oregon ADAP to 80% of clients, and made direct fax referrals to the Oregon Tobacco Quit Line for 12 clients (6%).**

6 Month Follow-Up Results

- Surveys with the first 50 clients we could reach.
- 33 (66%) said they had a quit attempt in the past 6 months.
- 24% (n=8) were still tobacco-free

More 6 Month Results

Use of tobacco cessation products & services was high:

- **46% had used NRT**
- **26% had used pharmacotherapy**
- **22% had used the Quit Line**

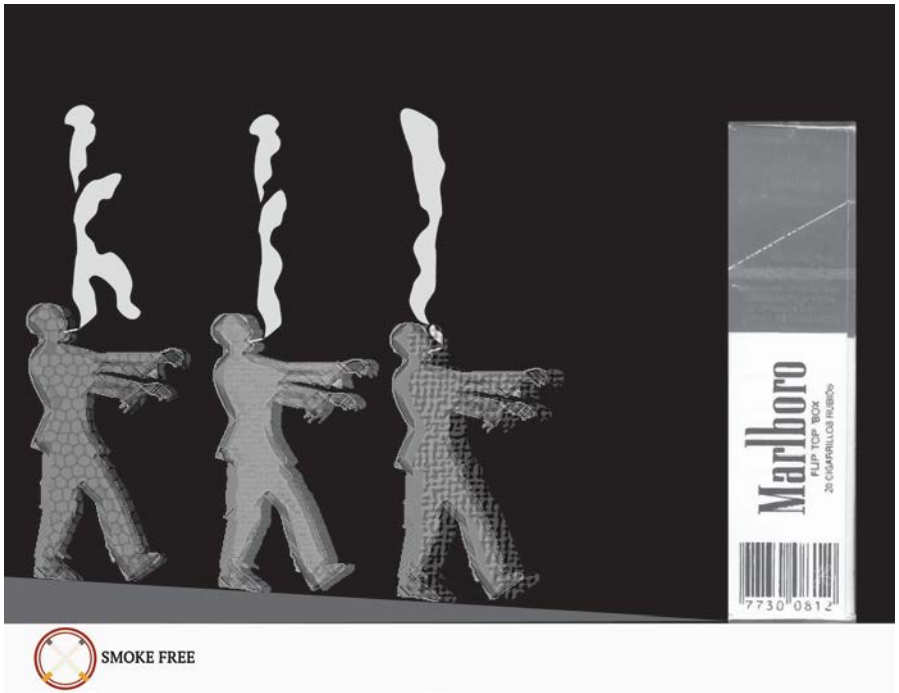
- **Among clients who were still smoking, 79% reported decreased tobacco use.**

- **A majority of ADAP clients interviewed said they thought contact from staff about cessation was helpful.**

This was part of a comprehensive approach

Next Steps for Oregon ADAP

- Continued outreach to clients; provide I&R
- Maintain streamlined access to cessation services
- Monitor prevalence rates through MMP, other surveys
- Keep looking for fresh ways to deliver the message



Addressing Tobacco Use in Non-clinical Programs

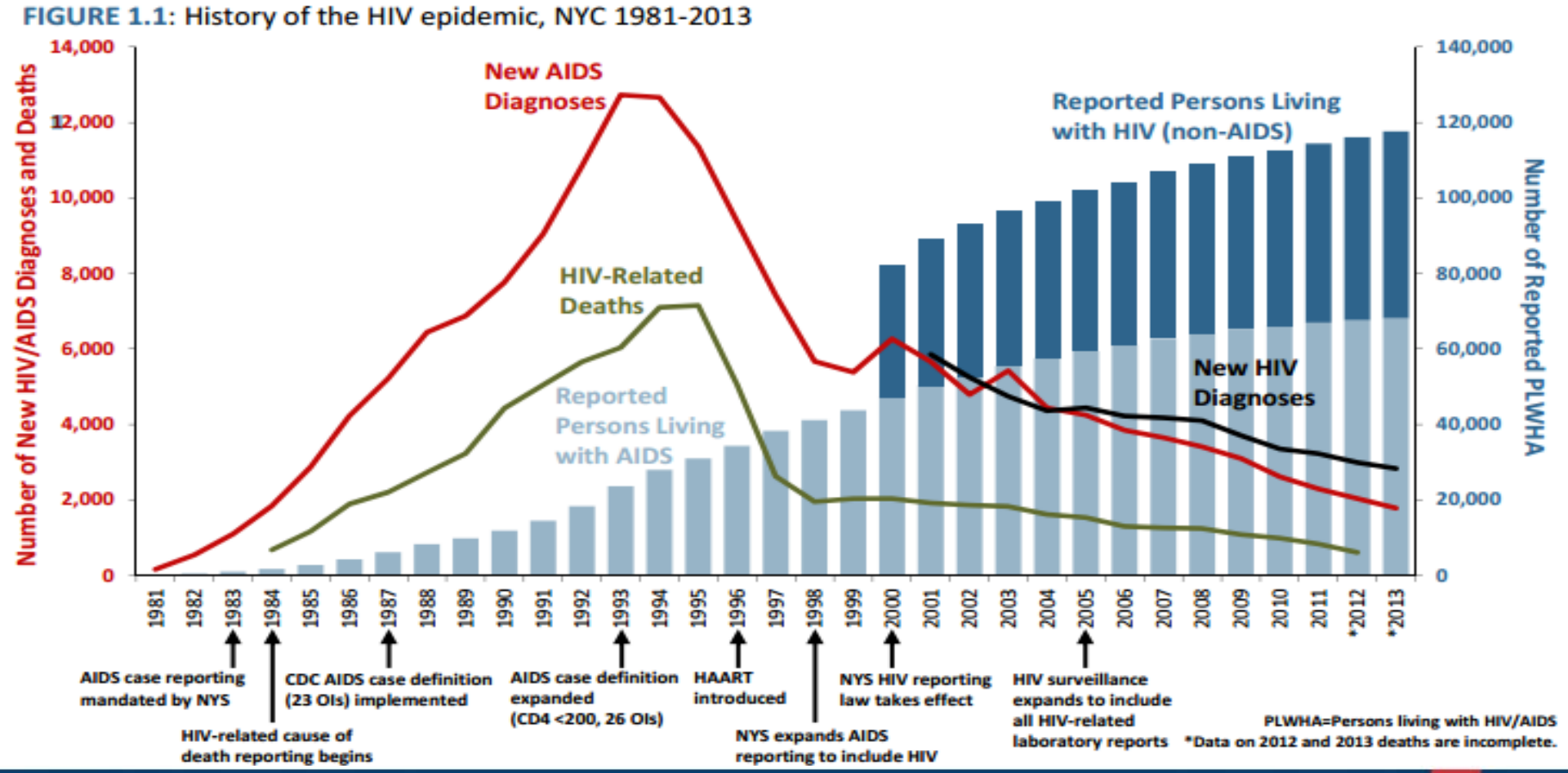
DOHMH

Amber Casey, MPH

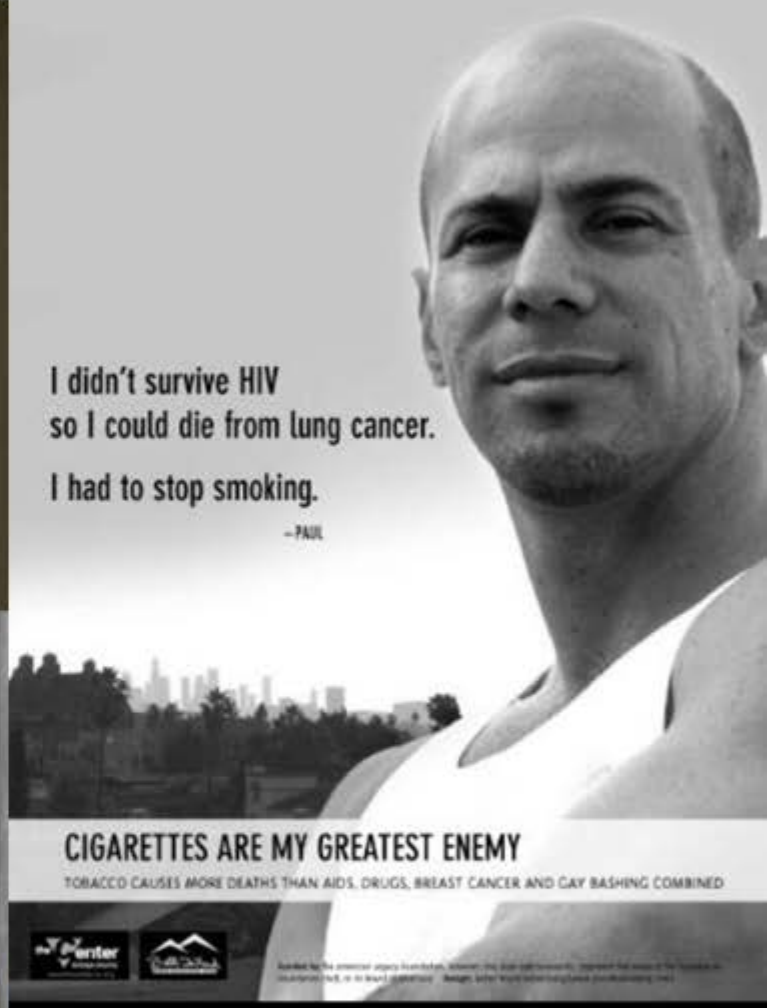
Stephen Hile, LMSW

Living Longer with HIV

HISTORY OF THE EPIDEMIC




A TIP FROM A
FORMER
SMOKER
HIV alone didn't cause the clogged artery in my neck. Smoking with HIV did.
Brian, age 45, California


I didn't survive HIV
so I could die from lung cancer.
I had to stop smoking.
– PAUL
CIGARETTES ARE MY GREATEST ENEMY
TOBACCO CAUSES MORE DEATHS THAN AIDS, DRUGS, BREAST CANCER AND GAY BASHING COMBINED
For free help to quit smoking, call:
1-800-QUIT-NOW


SMOKING
AND
HIV
CONVERSATIONS WITH AIDS.gov
WITH DRS. RONALD VALDISERRI
AND JONATHAN MERMIN

Tobacco Smoking among PLWHA

1. **PLWHA are two to three times more likely to smoke than the general population**
   - (Gonzalez et al, 2011; Gritz et al, 2004; Kwong & Bouchard-Miller, 2010; Mdodo, 2015; Reynolds, 2009; USDHHS, 2014)

2. **The majority of HIV positive tobacco users report currently contemplating quitting**
   - (Mamary et al, 2002; Shirley et al, 2013; Burkhalter et al 2005)

3. **Unique barriers to cessation for PLWHA**
   - (Rahmanian et al., 2011)

4. **Physicians may be less likely to address tobacco smoking among HIV+ patients**
   - (Crothers et al., 2007; Tesoriero et al., 2010)

Tobacco Smoking among PLWHA

1. **Smoking associated unsuppressed viral load**
   - (Feldman et al., 2006; Hile et al., 2016; Miguez-Burbano et al., 2003; Wojna et al., 2007)

2. **Smoking associated with increases in CD4 Cell counts**
   - (Feldman et al., 2006; Hile et al., 2016; Royce & Winkelstein, 1990; Wojna et al., 2007)

3. **Smoking associated with increased mortality and a higher-risk of negative health outcomes**
   - (Duong, et al, 2001; Helleberg et al., 2012;2014; Nakagawa et al., 2012; Marshall;, 2009; Petrosillo & Cicalini, 2013)

Tobacco Smoking among PLWHA in the New York EMA

1. **Approximately 50 to 60% of PLWHA in NYC smoke compared to 13.9% of all New Yorkers**
   - (Messeri & Vardy, 2013; Tesoriero et al, 2008; NYC DOHMH/CHS, 2015)

2. **Between 2010 and 2014, approximately 40% of HIV+ RWPA clients who recently completed a substance use assessment reported recent smoking.**
   - (Hile et al., 2016)

3. **In Ryan White Grant Year 2015 (3.1.15 – 2.29.16):**
   a) 60% of harm reduction clients, and
   b) 42% of mental health clients reported recent tobacco smoking

Tobacco Smoking and Mental Health and Substance Use Related Outcomes

1. **Smoking associated increased substance use**
   - (Arnsten, Demas, Grant., 2002; Burkhalter et al., 2007; Duval, Caron, Garelik., 2008; Hile et al., 2016; Humfleet et al., 2009; Pacek et al., 2014.)

2. **Smoking accepted or encouraged as a harm reduction strategy**
   - (Phillips, Brandon., 2004; Prochaska, 2010; Stubbs, Haw, Garner., 2004)

3. **Smoking may negate or run contrary to goals of mental health and substance treatment programs**
   - (Prochaska, 2010)

In Summary

Despite the success in curbing mortality due to the advent of ARVs, tobacco smoking places PLWH at risk for several additional serious comorbidities and premature death.

Current evidence indicates a need and willingness from PLWH to reduce or eliminate tobacco use.

Our aim is to empower those PLWH to address their tobacco use and improve their physical, mental and behavioral outcomes.

Care & Treatment Program (CTP)

One of the priorities of the CTP is to reduce tobacco use among our clients by:

1. **Data collection:** improve tobacco use measures
2. **Integrate:** services and referrals that address tobacco use and cessation into existing service delivery, as appropriate
3. **Navigation:** through training, encourage service providers to identify, refer, and leverage tobacco use services
4. **Culture:** promoting increased institutional awareness and understanding of the risks of tobacco use among PLWH

1. Improved Data Collection

- **In our substance use assessment, clarified tobacco use measures**
  - **Recent edits to "How Often" field**
  - **Recent edits to "How Taken" field**

- **How we collect this now:**

V. Use of Prescriptions, Injectables and Other Substances ALL — *Client Interview*

Substance	Used in the past 3 months?	How often do you use?	How have you taken this? (Check all that apply)
Haven't used any	❑*	** If client hasn't used any substance **IN PAST 3 MONTHS**, skip to outlined box (P.5) asking **Are you currently in an alcohol or substance abuse treatment program** and continue from there.*	
Tobacco	❑ Yes ❑ No ❑ Declined	___ cigarettes smoked weekly (for other forms of tobacco, # times used weekly) *or* ❑ < weekly ❑ Declined *(reminder: 1 pack = 20 cigarettes)*	❑ Orally (chewing tobacco) ❑ Smoked ❑ Inhaled/snorted (snuff) ❑ Declined (no answer)

2. Integrating Services

The following is allowable in our service system to address tobacco use:

Harm Reduction & Mental Health Programs

- **May discuss tobacco use in an counselling session (individual, family or group) provided that:**
  - **Tobacco use is document in our reporting system**
  - **Reduce/eliminate tobacco use is noted in their care plan**

2. Integrating Services (continued)

Transitional Care Coordination

- **Tobacco use is a topic for Health Promotion**

Care Coordination

- **Tobacco use is a topic for Health Promotion**

Service categories can also refer to Tobacco Use and Smoking Cessation programs

3. Navigation of Available Resources

- There are several resources available to access educational materials and NRT.
- Providers need to understand the system (State and local-level resources) to leverage resources to support their clients
- The challenge is navigating clients through the process. As outlined, we offer education and support to navigate other payers. Including:

1. **Medicaid:** Stop Smoking medications are covered (fully or copay) by your Medicaid Managed Care Health Plan but you will need to call to find out which ones are covered.
2. **Private Insurance**

4. Culture Change

- **Addressing tobacco use requires collaborating with non-traditional partners in order to leverage appropriate resources**

- **A large priority for our work is instilling a culture change, particularly among behavioral health service providers, to recognize the impact of tobacco use among our population**
  - **For example: despite addressing substance use or psychosocial, mental health barriers, a client struggling with tobacco use may succumb to tobacco-related comorbidities. Emphasizing the need to focus on addressing this concern.**

Launching Soon

Cessation Therapy: Medication Use and Delivery in Clinical Programs

Medical University of South Carolina Ryan White Clinic

Madelyne Ann Bean, PharmD

Lauren E. Richey, MD, MPH

Background

- Smoking rates are 2-3 times higher for PLWH
- PLHW lose more years of life to smoking than HIV
  - Smoking estimated responsible for 60% of death
- Cardiovascular morbidity and mortality increased
- PLWH who smoke higher risk for COPD
- Increased risk of malignancy
- Increases in bacterial infections
- Poorer immune responses to antiretroviral therapy
- Important modifiable risk factor for disease and mortality

Rahmanian et al. Proceed Am Thoracic Soc 2011;8:313-9.
Niaura et al. Clin Infect Dis 2000;31:808-812.
Helleberg et al. Clin Infect Dis 2013;56:727-34.

Background

- MUSC Division of ID is located in Charleston, SC
  - 13 ID physicians, social workers, clinical pharmacist, nursing and ancillary staff
- Population of 1200 PLWH from lower coastal region of SC
- Funded with HRSA Ryan White Grant, parts B and D
- SC AIDS Drug Assistance Program covers cessation aids
  - All medications are delivered by mail order
  - NRT
  - Bupropion
  - Varenicline
- Clinic survey in 2010
  - 40% reported smoking
  - 83% reported prior attempt to quit
  - 47% expressed interest in quitting

Bean et al. S Med J 2016;109:305-8.

Case studies

Case 1

- Mr. Doe is a 45 yo caucasian male with PMH of HIV (CD4 566 and undetectable HIV RNA) on Atripla. No other PMH, presenting for HIV follow-up.
- After visit, he was proactively approached about smoking cessation. He reported smoking 1 PPD (30 pack year history) to the nurse.
- Barriers to quitting include friends who smoke, partner smokes, and long duration of smoking/high nicotine dependence.
- He was not ready to make a quit attempt that day but could recognize importance of quitting.

Case 1

- Algorithm resulted with NRT (either patch or lozenge) and patient preferred lozenge. Patient on SC ADAP, so NRT was available the next day.

- In follow-up: At the next follow-up, the patient reported interest in quitting. Feels that the NRT helped him consider and increased his readiness to quit.
- He reported not liking the lozenge, but requested Chantix. Patient was able to get medication the next day.

- Currently taking Chantix, not yet fully abstinent from smoking.

Case 2

- Mr. Doe is a 55 yo African-american male with PMH of HIV (CD4 609 with undetectable HIV RNA) on Triumeq. He also has PMH of pulmonary hypertension, respiratory failure, recurrent pneumonia, and history of AKI (now resolved).
- He presented for HIV follow-up. After visit, he was proactively approached about smoking cessation. He reported smoking 1/2 PPD (20 pack year history) to the nurse.
- Barriers to quitting include friends and family who smoke and long duration of smoking/high nicotine dependence and reported a number of smoking triggers.
- Although he had not approached the provider about smoking cessation, he was ready to make a quit attempt after counseling.

Case 2

- Algorithm resulted with Chantix, which he was interested in using.

- However, once sent to pharmacy, his insurance denied coverage. PA was submitted, and denied. Quit attempt/medication initiation delayed by 10 days while awaiting this process. By the end, patient switched to bupropion and successfully started.

- In follow-up: Patient is 8 weeks in to therapy and down almost by ½ - now smoking 6 cigarettes per day. Will continue to counsel and help patient reduce use while on therapy. Offered to add NRT, but patient deferred.

Evidence-Based Smoking Cessation Strategies

Evidence Supported Strategies

- **Medications**
  - NRT
  - Bupropion
  - Varenicline
  - Combination therapy
- **Despite effectiveness of therapy, uptake is low**

- **“Why” you might ask??**

Evidence Supported Strategies

- **Barriers to assessing/treating tobacco dependence**
  - Limited time during clinical encounter
  - Little confidence in ability to assess and treat
  - Difficult to identify “right” patient
- **Initiation of smoking cessation service**
  - Clinical practice relies on smoker requesting treatment
  - May also depend on the provider to initiate conversation
  - Less than 10% of smokers are ready to quit in immediate future
  - Thus, reactive approach misses many opportunities

Fu, et al. JAMA Internal Medicine 2014;174:671-7
Jardin, et al. Nicotine and Tobacco Res 2014;16:992-9.
Shuter, et al. Am J Health Behavior 2012;36:75-85.
Nahvi, et al. AIDS Educ Prev 2009;21:14-27.

Evidence Supported Strategies

- **Proactive approach has shown good success**
  - In studies for PLWH
  - Even when targeting unmotivated smokers
- **Proactive components tested**
  - Identifying smokers through registries/clinical trials
  - Mailed outreach of cessation aids
  - Telephone counseling

Fu, et al. JAMA Internal Medicine 2014;174:671-7
Jardin, et al. Nicotine and Tobacco Res 2014;16:992-9.
Carpenter, et al. Archives Intern Med 2011;171:1901-7.
Vidrine, et al. AIDS 2006;20:253-60.
Vidrine, et al. Nicotine and Tobacco Res 2012;14:106-110.
Cropsey, et al. Addictive Behaviors 2013;38:2541-6.
Cropsey, et al. JAIDS 2015;69:291-8.

Evidence Supported Strategies

- Solution…Algorithm based approach!

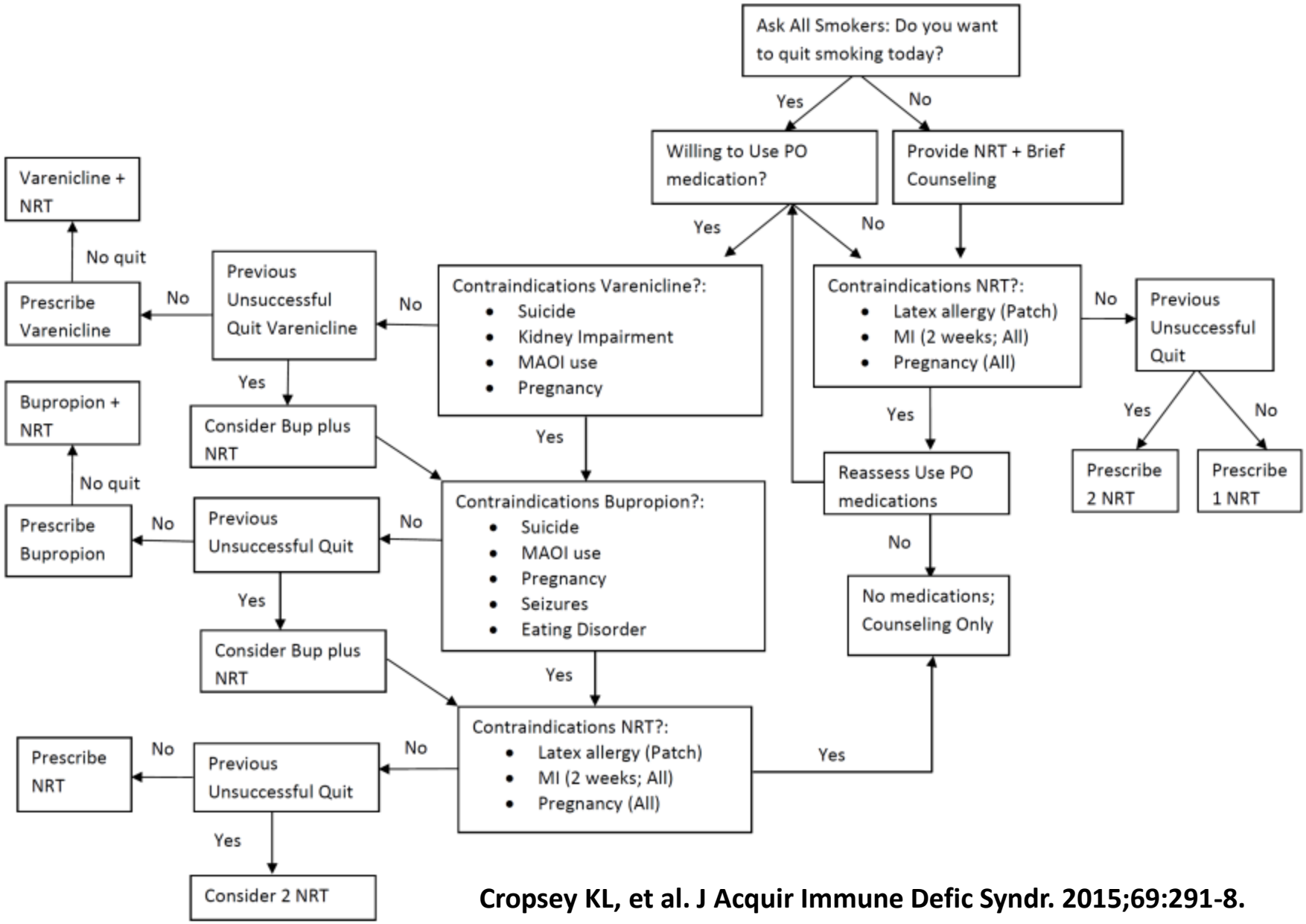
- Provides guidance with treatment decisions
- Allows process to approach all individuals in standard way
- Prioritizes patient medical factors for consideration with pharmacotherapy
- Evidence for algorithm approach is relatively limited for smoking cessation

Bader, et al. Tobacco Control 2009;18:34-42.
Hughes, et al. J Substance Abuse Treatment 2008;34:426-32.
Hughes, et al. J Substance Abuse Treatment 2013;45:215-21.
Jones, et al. J Nurse Practitioners 2014;10:120-7.

Smoking Cessation Algorithm

Published and Developed by Karen Cropsey and Colleagues at UAB

Cropsey KL, et al. J Acquir Immune Defic Syndr. 2015;69:291-8.



Cropsey KL, et al. J Acquir Immune Defic Syndr. 2015;69:291-8.

Methods

- 100 participants
  - English-speaking adults smoking at least 5 cig/day
  - Excluded pregnant, nursing, or patients not able to consent
- Randomized to receive either:
  - Algorithm-derived treatment (AT)
    - Proactive approach with assessment and medication provision
  - Treatment as usual (TAU)
    - Smoking assistance from medical provider when ready to quit
- All received 1 standard 20 min smoking cessation counseling
  - Discussed behavioral strategies for cutting down or reducing smoking
- All medications provided; choice according to algorithm

Cropsey KL, et al. J Acquir Immune Defic Syndr. 2015;69:291-8.

Procedures and Tests

- Cigarette use and dependence
  - Fagerstrom Test of Cigarette Dependence (FTCD)
  - Minnesota Nicotine Withdrawal Scale (MNWS)
- Goal for smoking and motivation
  - Thoughts About Abstinence (TAA) questionnaire
  - Self-reported survey
- Depressive or Panic symptoms
  - Patient Health Questionnaire-Depression (PHQ-9D)
  - Patient Health Questionnaire-Anxiety (PHQ-A)
- Tobacco, alcohol, and other drug use
  - Alcohol, Smoking, and Substance Involvement Screening Test (WHO ASSIST)
  - 3-item Alcohol Use Disorders Identification Test (AUDIT-C)
- Biomarkers: nadir CD4 count, HIV VL, chronic medical conditions

Cropsey KL, et al. J Acquir Immune Defic Syndr. 2015;69:291-8.

Results

- **Medication Use**
  - NRT: patch 38%, lozenge 4%, combination 12%
  - Varenicline: 36%
  - Bupropion: 10%
  - Medication use: AT participants 81% vs TAU 23%
- **Adherence**
  - 52% had not made a quit attempt
    - Offered NRT lozenges as they were still smoking
    - NRT 89%; bupropion 40%; varenicline 39%
  - 57.1% participants took medication as prescribed
- **Quit attempts**
  - 24-h quit attempt: 50% AT vs 38% TAU

Cropsey KL, et al. J Acquir Immune Defic Syndr. 2015;69:291-8.

What have we learned?

- **Approaching all patients will improve quit rates**
  - Accounts for stage of readiness of the patient
  - Shows that we think quitting is important
- **Tool improves rates of medication offering**
  - Does not rely on provider comfort with therapies
  - Regardless of busy clinic schedule/limited time with patient

What do we still need to know?

- **Medications were provided by the study**
  - In hand as they leave clinic
  - Only applicable for medication use for on-site pharmacy
- **Doesn't assess barriers to access**
  - Insurance requirements and delays with prior-authorizations
  - Insurance formulary restrictions and lack of coverage
  - ADAP formularies differ among states, SC includes all pharmacotherapy
  - Medicare doesn't cover NRT
  - Co-pays may still be unaffordable for patients
- **Still need a "real-world" application of the algorithm**
  - Algorithm suggests most effective regimens preferentially
  - Algorithm unable to account for non-medical factors

Enter our study…

Pilot Study to Test Feasibility of Delivery and Implementation of an Algorithm for Smoking Cessation Treatment for PLWH in the MUSC HIV Clinic

Madelyne Bean, PharmD

Lauren E. Richey, MD MPH

Matthew Carpenter, PhD

Louise Haynes, MSW

Methods

- **Primary goal: Assess utility of algorithm in real world setting**
  - **Assess factor of insurance and funding is a barrier**
- **60 participants**
  - **English-speaking adults smoking at least 5 cig/day**
  - **Excluded pregnant, nursing, or unable to consent**
- **All participants received algorithm-derived treatment**
  - **Proactive approach with assessment and medication provision**
- **All received standard smoking cessation counseling by pharmacist according to clinic standard**
  - **Discussed behavioral strategies for cutting down or reducing smoking**
- **All medications prescribed; coverage according to funding**

Procedures and Tests

- Cigarette use and dependence
  - Fagerstrom Test of Nicotine Dependence (FTND)
- Goal for smoking and motivation
  - Cessation Fatigue Scale (CFS)
  - Smoking history form
- Depressive symptoms
  - Center for Epidemiologic Studies Depression Scale (CES-D)
- Tobacco, alcohol, and other drug use
  - Drug Abuse Screening Test (DAST-10)
  - Smoking Abstinence Questionnaire (SAQ)
- Biomarkers: CD4 count, HIV VL, chronic medical conditions

Results

- **Data collection is ongoing…**
- **All 60 participants have been recruited, in follow-up stage**

Demonstrate Algorithm use and Discuss Application

Role-Play – Directions

- **Use copy of provided algorithm**

- **Separate into groups of 2 and each role play once as the patient and once as the provider**

Follow-up – Small Groups

- What barriers would you perceive to utilizing this tool?
- What barriers to medication use/provision can you see for your program?
- Would this tool improve medication offering/comfort level of providers for assessing/addressing tobacco use?

Discussion and Brainstorming Implementation Strategies

Implementing Tobacco Cessation Strategies for PLWH

Linda Drach: linda.drach@state.or.us
Jonathan Livingston: jonathan.m.livingston@state.or.us
Amber Casey: acasey@health.nyc.gov
Stephen Hile: shile1@health.nyc.gov
Madelyne Ann Bean: cearley@musc.edu
Lauren E. Richey: richeyle@musc.edu