

Module 10: Data-based Decision Making: Understanding, Assessing, and Using Data

GETTING READY: NOTES FOR TRAINERS

MODULE SCOPE

Purpose

To prepare Ryan White HIV/AIDS Program (RWHAP) Part A planning council/planning body (PC/PB) members to use data for decision making. The module is designed to ensure that PC/PB and committee members – especially those preparing for their first planning cycle – are familiar with the many types of data they will use to decide how RWHAP Part A funds should be allocated, and to improve services for all people living with HIV (PLWH) who depend on RWHAP services. This includes ensuring that they: 1) understand data sources and types, 2) can assess data quality and usefulness, and 3) are prepared to use these data in decision making related to all their PC/PB responsibilities: integrated/comprehensive planning, priority setting, resource allocation, development of directives, and improving service models and the system of care, so that appropriate services are available and accessible to all PLWH throughout the EMA or TGA.

Content Overview

Understanding Data Types and Sources

- Importance of Data in RWHAP Planning
- Terms and Definitions
- Data Types and Sources

Assessing Data Quality and Usefulness

- Assessing Data Quality and Usefulness
- Triangulating Data from Multiple Sources
- Data Reports and Formats

Using Data for Decision Making

- PC/PB Members as Advocates and Planners
- Using Data to Carry Out Legislative Responsibilities
- Using Data to Identify and Address Health Disparities
- Dealing with Data Gaps

Learning Objectives

Following training (which may take place over one or more sessions), participants will be able to:

Understanding Data Types and Sources

1. Define “data-based decision making”
2. Describe at least 3 reasons why it is so important that PC/PBs obtain and use data in their RWHAP planning and decision making
3. Describe the role of data in implementing 5 important PC/PB roles
4. Define and differentiate the epidemiologic terms of *incidence* and *prevalence*
5. Explain the concept and importance of *unmet need* and of *individuals with HIV who are unaware of their HIV status*
6. Describe 4 data-related concepts used in assessing service needs and gaps within the EMA or TGA
7. Identify and describe 8 types of data PC/PBs should obtain and use in decision making

Assessing Data Quality and Usefulness

8. Identify and describe 4 factors to consider in assessing the quality and usefulness of a study or data report
9. Describe the use of *triangulation* in comparing data from multiple sources and studies
10. Describe at least 5 characteristics of effective HIV data reports prepared for PC/PBs
11. Identify at least 4 ways to make data presentations understandable and useful for all PC/PB members
12. Describe at least 3 ways to make data charts understandable and useful for PC/PB members, including those who are not data experts
13. Describe sound practices for receiving and discussing data

Using Data for Decision Making

14. Describe and compare the PC/PB member roles of *advocate* and *planner*
15. Describe how the PC/PB uses data to carry out its responsibilities for priority setting, resource allocation, development of directives, and reallocations
16. Explain how PC/PBs use both *quantitative* and *qualitative* data in HIV community planning
17. Describe how the PC/PB uses data in developing and updating its Integrated HIV Prevention and Care Plan
18. Specify at least 4 types of data the PC/PB can use to identify and address health disparities
19. Identify a process the PC/PB can use to identify and deal with data gaps

USING THE MODULE

Suggested Uses

- To train new PC/PB members about the many types of data they need to understand and use in their planning and decision making so they are prepared for their first planning cycle
- To prepare *new* members of the committees responsible for data-based tasks such as needs assessment, integrated/comprehensive planning, and priority setting and resource allocation for their roles
- To train *all* PC/PB members and members of responsible committee(s) if they have not had prior data training or want to update their understanding, given the continuing expansion of data types and complexity for HIV community planning
- To familiarize the PLWH committee or caucus with types and uses of data and prepare them for active participation in review of data and discussion of its implications for service models and use of funds
- To familiarize PC/PB support staff and recipient staff with RWHAP Part A data sources, types, and uses, especially new staff without prior HIV community planning experience
- To divide into smaller segments for a series of relatively brief sessions on different subtopics during PC/PB meetings, committee meetings, or special sessions

Localizing the Module

- Add the name and/or logo of your PC/PB and a map of your EMA or TGA to the slides
- Add PowerPoint slides with data from your EMA or TGA to illustrate the various types of data—for example, your most recent HIV care continuum chart for RWHAP clients, some epidemiologic profile charts, key needs assessment findings, latest estimate of unmet need, or summary of client characteristics or service utilization from the Ryan White HIV/AIDS Program Services Report (RSR)
- Revise or replace the examples or data provided in the Activities to provide local situations or data

TIP: Consider using this module with the committees responsible for needs assessment or PSRA after members have received training related to their specific responsibilities (after Module 4, Needs Assessment or Module 5, PSRA). Providing both types of training can ensure a solid foundation of practical knowledge and skills for individuals not previously involved in community-based health planning.

EQUIPMENT AND MATERIALS CHECKLIST

- PowerPoint projector and laptop
- Easel pad, markers, and tape
- Copies of participant materials for Activities
- Copies of Quick Reference Handouts

MATERIALS FOR THIS MODULE

Understanding Data Types and Sources

- PowerPoint Slides: Understanding Data Types and Sources
- Activity 10.1: Data Terms and Concepts Quiz (with Answer Sheet)
- Activity 10.2: Quick Discussions to Apply Knowledge
- Activity 10.3: Finding Needed Data
- Quick Reference Handout 10.1: PC/PB Guide to Data Types and Sources

Assessing Data Quality and Usefulness

- PowerPoint Slides: Assessing Data Quality and Usefulness
- Activity 10.4: Quick Questions to Apply Knowledge
- Activity 10.5: Using Triangulation
- Activity 10.6: Preparing Effective Charts and Tables
- Quick Reference Handout 10.2: Triangulating Data

Using Data for Decision Making

- PowerPoint Slides: Using Data for Decision Making
- Activity 10.7: Quick Scenarios to Apply Knowledge
- Activity 10.8: Using Data for Decision Making: Scenarios
- Activity 10.9: Dealing with Data Gaps
- Quick Reference Handout 10.3: Supporting Data-based Decision Making: A Checklist for PC/PBs

BACKGROUND INFORMATION FOR TRAINERS

Focus and Importance of Module 10

This module provides knowledge and skill development needed by all PC/PB members and committee members. A fundamental expectation for PC/PBs is that their decisions will be data-based. This requires that a variety of data are regularly obtained, analyzed, reviewed, and used appropriately as decisions are made.

New PC/PB members and committee members often receive a limited introduction to HIV-related data as part of their initial orientation. Those who serve on committees responsible for needs assessment or priority setting and resource allocation (PSRA) are likely to receive some additional training or at least information about the data they obtain or review. It is sound practice for PC/PBs to include data-focused mini-training sessions whenever data are presented at both committee and full PC/PB meetings throughout the year. However, because PC/PBs and their committees now need to collect or receive, understand, and use so many different types of data, members need a more comprehensive understanding of HIV-related data and how to assess and use available data. This module provides a broad foundation of knowledge and skills-building practice that can help all members participate knowledgeably in data-based decision making. The module includes a number of discussion opportunities and activities, so that participants can apply knowledge and become comfortable in assessing, interpreting, and using data in decision making.

Key Concepts and Terms

This module introduces a number of research and data-related terms. Quick Reference Handout 10.1 provides additional information about the types of data most often used by PC/PBs in their planning. The information below provides additional detail on several important data-related topics. (Key Concepts and Terms is designed primarily for the trainer but can also be provided to participants as a handout).

Innumeracy: Illiteracy, the inability or limited ability to read and comprehend written materials, is a relatively familiar concept, though language issues are seldom adequately considered in determining literacy levels. Less attention is generally given to innumeracy—"numerical illiteracy" or a lack of familiarity with mathematical concepts and how to use numbers in calculations. Yet it is likely that the number of U.S. residents who are innumerate is considerably larger than the number who are illiterate. One study by the U.S. Department of Education's National Center for Education Statistics¹ estimated that 14% of Americans had "below basic" literacy, while 22% had "below basic" numeracy or quantitative skills. Individuals with a high level of formal education sometimes have very limited math skills. Some people joke about their lack of mathematical

capacity, while others would prefer to hide it. It is important for PC/PB members and committee members to feel comfortable assessing their own math skills and to commit to overcoming fears about using numbers and charts so they can become good data users.

Performance and outcomes measurement, including use of the HRSA Performance Measure Portfolio:

RWHAP programs are now expected to assess program quality and outcomes. The process has been supported, and to some degree standardized, through the HRSA Performance Measure Portfolio, a set of performance and outcome measures from which RWHAP recipients select measures to use in assessing service quality and outcomes. Measures generally indicate the percent of all

patients or current patients that have received a procedure, completed a process, or achieved a medical outcome during the measurement year. Measures relate to both processes (for example, the percent of patients receiving a prescription for antiretroviral therapy or the percent of new patients screened for substance use) and outcomes (for example, the percent of patients with HIV with a viral load of less than 200 copies/ml at their last HIV viral load test). The Portfolio includes and highlights a set of “core performance measures” considered most critical to the successful care and treatment of PLWH (HIV viral suppression, prescription for antiretroviral therapy, HIV medical visit frequency, gap in medical visits, and PCP prophylaxis). The performance measures now align with the steps along the HIV care continuum.

Data based on these measures is usually made available to the PC/PB by the recipient, through a number of data-gathering and reporting methods. Among them are: client data reported by subrecipients through the EMA/TGA’s client-level data system, clinical quality management (CQM) measures, quality assurance measurement by the recipient as part of the monitoring of subrecipients, HIV care continuum data aggregated by local or state surveillance staff, and sometimes special studies. PC/PBs are permitted to evaluate service effectiveness and cost-effectiveness, but mostly depend on data provided by the recipient.

Varied data sources and types: This module describes data types and sources that are typically obtained and used by PC/PBs in their planning. PC/PBs themselves plan and oversee needs assessment activities, but most other data come from or through the recipient—including service expenditure data, client characteristics and service utilization, CQM and monitoring data. A few types of data come from state surveillance staff, most notably the epidemiologic (epi) profile and other surveillance-based data, such as the estimate of unmet need and the HIV care continuum for all PLWH. The HIV care continuum for RWHAP clients is often generated by local surveillance or other data staff since much of the information

comes from the client-level data system. HIV testing data typically come from the state and/or local agency responsible for HIV prevention.

Some types of data are available in nearly all EMAs and TGAs, but the availability, completeness, quality, and frequency of many types of data vary considerably. For example, most jurisdictions now generate high quality client-level data for the RWHAP Services Report (RSR), but some still struggle. In addition, recipients may provide the PC/PB access to client- and service-based data sets that permit additional analysis or comparisons by PLWH subpopulation, or a set of tables or spreadsheets that limit analysis to basic demographics or service categories. EMAs and TGAs vary in their ability to provide unit costs for services, to analyze data for the PC/PB, and to generate user-friendly reports and charts.

Ideally, the PC/PB and recipient sit down together and agree on the types of data that each entity will provide, and their content, frequency, and format. This agreement can be included as a chart in the Memorandum of Understanding (MOU) between the PC/PB and recipient. Where an MOU does not exist or has not been recently updated, PC/PBs and recipients need to agree each year on what data will be provided, when, and in what form. Usually special data needs arise during the year, and a process is needed to negotiate how they will be assessed and met.

The ability of a recipient to meet both ongoing and special data requests from the PC/PB depends on many factors, especially resources, staff data skills, and the relationship between the recipient and PC/PB. In preparing PC/PBs to understand and appropriately use data, it is important to communicate not only the importance of various types of data, but also the need to work with PC/PB support staff and recipient staff to arrange for the best available data. PC/PBs should also recognize that data gaps are inevitable and the PC/PB will rarely have all the information desired for decision making.

Triangulation of data is an important concept that involves comparing findings from different sources and collected using different methods to gain a better understanding of an issue by looking at it from several perspectives. Triangulation is also used by the PC/PB to “cross-validate”

data—checking to see whether different data sets come up with similar findings about a particular issue. Quick Reference Handout 10.2 defines triangulation of data and describes some of the many ways triangulation contributes to sound planning and decision making.

For More Information

Additional Resources

- [Planning Council Primer](#) [2018 update]], especially Appendix I: Types of Data Reviewed by Planning Councils
- Compendium of Materials for Planning Council Support (PCS) Staff, especially:
 - [5-3. Using Data, Assessing Needs: Quick Definitions and Descriptions for Data-Related Terms and Concepts Used by Ryan White HIV/AIDS Program \(RWHAP\) Planning Bodies](#)
 - [7-4c. Using Data with the Planning Council: Training Poster](#) (Portland TGA - Multnomah County Health Department, HIV Care Services)
- [Understanding the HIV Care Continuum](#), Centers for Disease Control and Prevention, updated June 2018
- [Integrated Guidance for Developing Epidemiologic Profiles](#), HIV Prevention and Ryan White HIV/AIDS Programs Planning, developed jointly by the CDC and HRSA, 2014
- [Performance Measure Portfolio](#), a set of performance measures for use in assessing critical aspects of HIV care and treatment, including process and outcome measures. HRSA/HAB, updated November 2013
- [Is Innumeracy America’s Biggest Hidden Problem?](#) November 18, 2016, blog post by Self Lender

Related Training Guide Resources

- *Module 2: Roles and Responsibilities of RWHAP Part A Planning Councils/Bodies and Recipients*, provides a basic description of the roles and responsibilities of the PC/PB and the recipient, including shared tasks
- Modules 4, 5, 6, and 7 provide skill-focused training related to other key legislative responsibilities, all of which affect the system of care:
 - *Module 4: Needs Assessment*
 - *Module 5: Priority Setting and Resource Allocation*
 - *Module 6: Integrated/Comprehensive Planning*
 - *Module 7: Maintaining and Improving a System of Care*

For links to all the resources listed above, go to www.targetHIV.org/planning-chatt/module10

References

- 1 Kutner, M., Greenberg, E., Jin, Y., and Paulsen, C. (2006). *The Health Literacy of America’s Adults: Results From the 2003 National Assessment of Adult Literacy (NCES 2006-483)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics