Using Data to Improve HIV Care and Treatment
Data Quality and Data Dashboards

2017 U.S. Conference on AIDS
HRSA Pathway
Saturday, September 9, 2017
9:00 – 11:00 AM
Session Objectives

• To discuss the importance of using data for improving retention in care and HIV-related health outcomes for people living with HIV (PLWH)

• To describe successful strategies to improve data quality and examples/best practices of how to use high quality data to enhance the care and health outcomes for PLWH

• To hear from RWHAP recipients, through an interactive session, about how they use their data, challenges to using data, and technical assistance needs around data utilization
Today’s Session

• Using National-Level RWHAP Data to Inform Program Decision-Making and Priorities
  • HRSA HIV/AIDS Bureau – Stacy Cohen

• Data Disconnect
  • Elmhurst Hospital Center, Ryan White HIV/AIDS Program (Part C) – Carlos Salama, MD

• Data to Care
  • McAuley Clinic, Mercy Health Saint Mary’s, Ryan White HIV/AIDS Program (Part C) – C. Ryan Tomlin, Pharm.D., BCPS, AAHIVP

• Using Data to Inform Decisions and Drive Performance
  • Nashville/Davidson County TGA, Ryan White HIV/AIDS Program (Part A) – Pam Sylakowski

• Interactive feedback session: How do you use your data?
  • All participants
Using National-Level Ryan White HIV/AIDS Program Data to Inform Program Decision-Making and Priorities

Stacy Cohen
Branch Chief, Evaluation, Analysis, and Dissemination Branch
Division of Policy and Data
HIV/AIDS Bureau
Health Resources and Services Administration
Outline

• Overview
  • HRSA HIV/AIDS Bureau
  • Ryan White HIV/AIDS Program (RWHAP)

• Demonstrating Effectiveness of Program Investments

• National-level data
  • RWHAP client demographic data
  • RWHAP viral suppression

• Using data to address gaps and disparities
  • Implementing Solutions
  • Identifying New Approaches to Improve Health Outcomes
Overview

The Ryan White HIV/AIDS Program
Vision
Optimal HIV/AIDS care and treatment for all.

Mission
Provide leadership and resources to assure access to and retention in high quality, integrated care, and treatment services for vulnerable people living with HIV/AIDS and their families.
Overview: Ryan White HIV/AIDS Program

- Provides comprehensive system of HIV primary medical care, medications, and essential support services for low-income people living with HIV
  - More than half of people living with diagnosed HIV in the United States – over 500,000 people – receive care and support services through the Ryan White HIV/AIDS Program

- Funds grants to states, cities/counties, and local community based organizations
  - $2.32 Billion annual investment (fiscal year 2016)
  - Recipients determine service delivery and funding priorities based on their local needs and planning process

- Payor of last resort statutory provision: RWHAP funds may not be used for services if another state or federal payor is available
Overview: Ryan White HIV/AIDS Program

• Parts A (cities), B (states), C (clinics and community based organizations), and D (community based organizations for women, infants, children, and youth) services to people living with HIV:
  – Medical care, medications, and laboratory services
  – Clinical quality management and improvement
  – Support services including case management, medical transportation, and other services

• Part F Services include:
  – Clinician training, dental services, and dental provider training
  – Development of innovative models of care to improve health outcomes and reduce HIV transmission among hard to reach populations
Demonstrating Effectiveness of Program Investments

• Parts A, B, C, & D represent the majority of RWHAP resources
  – Program data needed to measure program effectiveness

• Ryan White Services Report (RSR):
  – Annual data on clients served by RWHAP Parts A-D
  – Services funded and provided
  – Client characteristics and health outcomes (i.e., viral suppression)

• RSR data link improved health outcomes to RWHAP services
  – Viral suppression is a primary outcome that demonstrates RWHAP effectiveness
  – Also identifies health disparities and areas for improvement
National-Level Ryan White HIV/AIDS Program Data

RWHAP client demographic and viral suppression data
Clients Served by the Ryan White HIV/AIDS Program by Gender, 2015—United States and 3 Territories


a Guam, Puerto Rico, and the U.S. Virgin Islands.
Clients Served by the Ryan White HIV/AIDS Program by Age Group, 2010 and 2015—United States and 3 Territories


*Guam, Puerto Rico, and the U.S. Virgin Islands.*
Clients Served by the Ryan White HIV/AIDS Program by Gender and Age Group, 2015—United States and 3 Territories

Guam, Puerto Rico, and the U.S. Virgin Islands. To ensure confidentiality, data have been suppressed.

Clients Served by the Ryan White HIV/AIDS Program and U.S. Population, by Race/Ethnicity, 2015—United States and 3 Territories

- RWHAP Clients N=528,847
  - American Indian/Alaskan Native: <1%
  - Hispanic/Latino: 2%
  - White: 27%
  - Black/African American: 47%
  - Native Hawaiian/Pacific Islander: <1%
  - Asian: <1%

- U.S. Population N=312,418,820
  - Hispanic/Latino: 12%
  - White: 62%
  - Black/African American: 18%
  - Multiple Races: 1%
  - Asian: 2%

Hispanics/Latinos can be of any race.

* Guam, Puerto Rico, and the U.S. Virgin Islands.
* Does not include U.S. territories

Clients Served by the Ryan White HIV/AIDS Program by Gender and Race/Ethnicity, 2015—United States and 3 Territories

Hispanics/Latinos can be of any race.

2 Guam, Puerto Rico, and the U.S. Virgin Islands.
Clients Served by the Ryan White HIV/AIDS Program by Gender and Transmission Risk Category, 2015—United States and 3 Territories

- **Male**
  - N = 344,210
  - Male-to-male sexual contact: 24.9%
  - Injection drug use: 6.8%
  - Heterosexual contact: 1.4%
  - Perinatal infection: 0.7%
  - Other: 3.0%

- **Female**
  - N = 130,248
  - Heterosexual contact: 9.2%
  - Male-to-male sexual contact and injection drug use: 1.3%
  - Other: 4.4%
  - Perinatal infection: 24.9%
  - Sexual contact: 85.0%

- **Transgender**
  - N = 5,205
  - Sexual contact: 92.6%
  - Other: 4.8%
  - Male-to-male sexual contact and injection drug use: 1.9%
  - Sexual contact and injection drug use: 0.3%


- Guam, Puerto Rico, and the U.S. Virgin Islands.
- Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.
- Includes hemophilia and blood transfusion.
- Includes any reported sexual transmission category.
Clients Served by the Ryan White HIV/AIDS Program by Gender and Housing Status, 2015—United States and 3 Territories

- **Male**
  - N=363,085
  - 10.2% Stable
  - 5.3% Temporary
  - 84.5% Unstable

- **Female**
  - N=139,801
  - 8.5% Stable
  - 4.0% Temporary
  - 87.5% Unstable

- **Transgender**
  - N=5,670
  - 14.5% Stable
  - 11.6% Temporary
  - 74.0% Unstable


---

*a Guam, Puerto Rico, and the U.S. Virgin Islands.
Clients Served by the Ryan White HIV/AIDS Program by Health Care Coverage, 2015—United States and 3 Territories

<table>
<thead>
<tr>
<th>Health care coverage type</th>
<th>Clients served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>32.8%</td>
</tr>
<tr>
<td>Medicare</td>
<td>10.4%</td>
</tr>
<tr>
<td>Multiple coverages</td>
<td>10.4%</td>
</tr>
<tr>
<td>Private employer</td>
<td>8.4%</td>
</tr>
<tr>
<td>Medicare and Medicaid</td>
<td>7.7%</td>
</tr>
<tr>
<td>Private individual</td>
<td>7.2%</td>
</tr>
<tr>
<td>Other plan</td>
<td>2.2%</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>0.3%</td>
</tr>
<tr>
<td>Indian Health Service</td>
<td>0.0%</td>
</tr>
<tr>
<td>No coverage</td>
<td>20.7%</td>
</tr>
</tbody>
</table>

*N=517,368


Guam, Puerto Rico, and the U.S. Virgin Islands.
Clients Served by the Ryan White HIV/AIDS Program by Poverty Level, 2015—United States and 3 Territories

N=510,218

- ≤100% FPL: 65.4%
- 101–138% FPL: 11.9%
- 139–250% FPL: 15.0%
- 251–400% FPL: 5.7%
- >400% FPL: 2.0%

FPL, federal poverty level.

a Guam, Puerto Rico, and the U.S. Virgin Islands.

Clients Served by the Ryan White HIV/AIDS Program Living ≤100% of the Federal Poverty Level, by Gender, 2015—United States and 3 Territories

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>510,218</td>
<td>65.4%</td>
</tr>
<tr>
<td>Male</td>
<td>363,673</td>
<td>61.6%</td>
</tr>
<tr>
<td>Female</td>
<td>130,884</td>
<td>74.7%</td>
</tr>
<tr>
<td>Transgender</td>
<td>5,707</td>
<td>79.8%</td>
</tr>
</tbody>
</table>

a Guam, Puerto Rico, and the U.S. Virgin Islands.


Viral suppression: ≥1 OAMC visit during the calendar year and ≥1 viral load reported, with the last viral load result <200 copies/mL. Due to low numbers, data for Guam are not presented.

Viral Suppression among Key Populations Served by the Ryan White HIV/AIDS Program, 2010–2015 —United States and 3 Territories

Hispanics/Latinos can be of any race. Viral suppression: ≥1 OAMC visit during the calendar year and ≥1 viral load reported, with the last viral load result <200 copies/mL.

a Guam, Puerto Rico, and the U.S. Virgin Islands.

Using data to address gaps and disparities

Implementing Solutions
Identifying New Approaches to Improve Health Outcomes
Implementing Solutions: Improving Health Outcomes Among Black MSM

Center for Engaging Black MSM Across the Care Continuum

His Health (www.HisHealth.org) and Well Versed (www.WellVersed.org) websites launched Fall 2016

Viral Suppression among Men who have Sex with Men (MSM) Served by the Ryan White HIV/AIDS Program, 2015—United States and 3 Territories

N represents the total number of clients in the specific subpopulation.
Viral suppression: ≥1 outpatient/ambulatory medical care visit during the calendar year and ≥1 viral load reported, with the last viral load result <200 copies/mL.

Implementing Solutions: Focusing on Housing and Employment

- HIV Care & Housing – Using Data Integration to improve Health Outcomes along HIV Care Continuum

- Improving HIV Health Outcomes through the Coordination of Supportive Employment and Housing Services

Viral Suppression among Clients Served by the Ryan White HIV/AIDS Program, by Housing Status, 2010–2015—United States and 3 Territories

Viral suppression: ≥1 outpatient/ambulatory medical care visit during the calendar year and ≥1 viral load reported, with the last viral load result <200 copies/mL.

* Guam, Puerto Rico, and the U.S. Virgin Islands.

Identifying New Approaches to Improve Health Outcomes

• Building Futures for Youth Living with HIV (evaluation study)
  – Use data to assess the current state of youth living with HIV aged 13-24 receiving RWHAP-funded care.
  – Identify best practices to improve care and treatment for youth living with HIV
    • Overcome barriers to care, fill gaps in care, optimize health outcomes
  – Develop and provide technical assistance for youth-serving RWHAP providers
Identifying New Approaches to Improve Health Outcomes

• Implementation Center for HIV Clinical Quality Improvement
  – Provide training and technical assistance to recipients aimed at improving patient health outcomes

• Assessing client factors with detectable viral load (evaluation study)
  – Identify differences between PLWH who are virally suppressed and those who are not
  – Identify new strategies to achieve improved viral suppression
Identifying New Approaches to Improve Health Outcomes

- **Dissemination of Evidence-Informed Interventions to Improve Health Outcomes Along the HIV Care Continuum**
  - Four evidence-informed care and treatment interventions for linkage and retention
  - Based on evidence informed interventions: Jail, Outreach, Buprenorphine, and Re-Engagement and Retention initiatives

- **Using Evidence Informed Interventions to Improve Health Outcomes among People Living with HIV**
  - Improving HIV health outcomes for transgender women and black men who have sex with men
  - Integrating behavioral health with primary medical care for people living with HIV
  - Identifying and addressing trauma among people living with HIV
Summary

• The Ryan White HIV/AIDS Program (RWHAP) provides HIV care, treatment, and support service to over 500,000 people living with diagnosed HIV in the U.S.

• People living with HIV (PLWH) receiving RWHAP services have better viral suppression outcomes than the national average
  – Lowers HIV transmission
  – Improves the lifespan of the PLWH

• RWHAP utilizes data to develop innovative HIV care and treatment service delivery approaches in the U.S.
Thank you!

Stacy Cohen
Email: sgagne@hrsa.gov
Web: www.hab.hrsa.gov
Twitter: twitter.com/HRSAgov
Facebook: facebook.com/HHS.HRSA
Data Disconnect

Carlos Salama, M.D.
Ryan White HIV/AIDS Program Parts C, D
Elmhurst Hospital Center
Elmhurst (Borough of Queens), N.Y.
Our Problem

- Disconnect between:
  - Data collected for grants
  - Ability to use this data to enhance care for our patients

- Extensive resources needed to collect data and send to city, state, and federal authorities
  - Each grant / agency has different reporting mechanisms, making it difficult and time consuming to synthesize data for decision making

- Format of the data
  - Not optimal to help guide our program in decision making for future goals
Our Experience

- AIRS and E-share: two programs that are used to report Ryan White HIV/AIDS Program (RWHAP) data
  - RWHAP Parts C/D are reported on AIRS
  - RWHAP Part A is reported to Public Health Solutions on E-share

- Other grants (MCM, PEP, HDR) are also reported on E-share

- Separate reporting to the NY AIDS Institute (HIVQual) requires uploading to their website.
Our Experience

- Three separate databases that we must use to report similar data to different agencies

- No communication with our previous EHR (quadramed) or current EHR (EPIC)

- Database manager must find data on EPIC and manually enter into the programs in order to report

- Significantly reduced ability of data manager to run reports and supply the data needed to help us improve patient care
Our Strategy

Direct monthly reports from EPIC (EHR)

- Reports provide physician-oriented data, including:
  - Demographics, risk factors, therapy, viral suppression, etc.
  - % virologic suppression; broken down by provider and other parameters
  - List of patients that are not suppressed to monitor provider success
  - Date of last appointment – sorting to over 6 months and then reaching out to those patients using a multidisciplinary approach of providers, nurses, adherence counselors, social workers and care-coordination navigators.

- These data do not directly communicate with e-share or AIRS
Focus on two patient groups (over 8 months):

- **Patients that are not virologically suppressed**
  - Every two months we run a report on VL suppression
  - Report is sorted by name and number of all patients with VL >200 copies
  - These charts are reviewed and patients are called in as needed to address elevated VL

- **Patients not seen / without VL in over 8 months**
  - Pre-emptively identify patients before they are lost to follow up (defined at our clinic as not seen in >1 year)
125 patients identified (out of 1305 patients, 9.6%)
- Put into place a multidisciplinary team (MD, RN, SW, MCM, Adherence/PharmD) to aggressively pursue patients and get back into care

19 patients (15%) were not able to be found
- Ultimately lost to follow up at 12 months

106 patients (85%) were contacted
- 3 patients were deceased
- 7 patients had moved out of state or country
- 10 patients were transferred to other institutions in NYC
- 86 patients (81%) were successfully seen and re-integrated in our clinic
  - 88% of these patients were still virologically suppressed at time of return to clinic
Our Lessons Learned

- Direct EHR data reports can have an immediate effect on patient retention
  - Systematic ability to track patients to ensure they are making appointments
  - Ability to target specific patients to pursue for follow-up

- Multi-disciplinary team needed to make use of these data
To ensure data hospitals are required to report is useful for improving patient care, different data systems must communicate

- Software should be able to communicate with the large EMR programs, such as EPIC, Allscripts, etc.

More data support is needed

- Many HIV programs are public hospitals with limited resources, making the hiring of many tech savvy computer specialists to upkeep reporting capabilities difficult

Grantors at the city, state, and federal level should work to standardize data reporting

- Public hospitals receive funding from multiple entities which support operations of their clinics
- For the data reported to each of these entities to be useful, standardization is needed
Our Need

- Data reported should be readily available to programs

- Programs could then rapidly disseminate information to providers and administrators to guide decision making

- Providers should be able to independently look up data that is currently inaccessible to them

- NYC provides clinics with HIV suppression dashboard that helps us compare ourselves to other programs
Our Need – A dashboard sounds good!

A data dashboard from HRSA would be useful if it could answer the following questions:

- How are we doing as a clinic? As a provider?
- What is our/my suppression rates? How do we/I compare to other institutions with similar demographics?
- Are there specific groups that are struggling? Risk factor group, racial group, etc.
- What are my patients’ vaccination rates?
Thank you!

Carlos Salama, M.D.

salamac@nychhc.org
718-334-2283
Mercy Health Saint Mary’s Data To Care

C. Ryan Tomlin, Pharm.D., BCPS, AAHIVP
Ryan White HIV/AIDS Program Parts B, C, D
Grand Rapids, Michigan
Where Our Data Originates

Outpatient Clinic EHR

Inpatient Hospital EHR

Insurance / PBM Data

Pharmacy Refill Information

Michigan Care Improvement Registry

Careware

EHR – Electronic Health Record
PBM – Pharmacy Benefits Manager
How We Use Our Data

Careware

- Implement Quality Improvement Projects
- Identify Disparities
- Routine Patient Care
Example 1: HPV Immunizations

- Clinic medical assistants collect immunization history from MCIR
- Reports generated from Careware of all patients eligible for HPV vaccination
- Report provided to all clinic nurses
- Nurses order and schedule vaccination series at patients’ next clinic visit

MCIR – Michigan Care Improvement Registry
HPV – Human Papilloma Virus
Results: HPV Immunizations

• Challenges
  – Getting staff members access to the state database
  – Getting the initial immunization orders from the patients' provider

• Successes
  – Baseline: Jan 2017 – 28% completed series
  – Current: Aug 2017 – 49% completed series
    • 75% on schedule to complete by the end of the year
Example 2: Pharmacy Refill Histories

- Once weekly reports generated from our retail pharmacies of all patients on ART and >5 days overdue for a refill
- Reports cross referenced with patients who have detectable viral loads in Careware
- Follow-up calls made by nurses and case managers to check-in or reengage patients in care
Challenges: Pharmacy Refill Histories

• Reports less accurate in patients who recently changed antiretroviral medications

• Not every patient uses our health system’s retail pharmacies
  – Some refill info gained from PBM claims data
  – Manual calls made to pharmacies as needed for patients with detectable viral loads

• Some gaps in refills are for legitimate reasons (example: short inpatient stay)
Successes: Pharmacy Refill Histories

• Viral Load Suppression Rates

<table>
<thead>
<tr>
<th></th>
<th>Numerator</th>
<th>Denominator</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2015</td>
<td>856</td>
<td>968</td>
<td>88.43%</td>
</tr>
<tr>
<td>Dec 2016</td>
<td>917</td>
<td>1014</td>
<td>90.43%</td>
</tr>
<tr>
<td>July 2017</td>
<td>954</td>
<td>1033</td>
<td>92.35%</td>
</tr>
</tbody>
</table>

• Adherence phone calls have developed into other clinic processes
  – Pharmacist-led adherence visits
  – Clinic wide case conferences
Thank you!

C. Ryan Tomlin, Pharm.D., BCPS, AAHIVP
Charles.Tomlin@mercyhealth.com
Using Data to Inform Decisions & Drive Performance

Pam Sylakowski
Director
Nashville TGA
Ryan White HIV/AIDS Program
Part A
• What gets measured, gets managed.  
  
  *Peter Drucker*

• Errors in using inadequate data are much less than using no data at all.

  *Charles Babbage*

• The goal is to turn data into information, and information into insight.

  *Carly Fiorina*

• If you can’t explain it simply, you don’t understand it well enough.

  *Albert Einstein*
While nonprofits engage heavily in collecting data, there's room for improvement when it comes to using it to make decisions about programs, services, operations.

- 90% of nonprofits surveyed collect data (✓)
- 87% think data is at least somewhat important to their organization (✓)
- 50% aren't sure how it can support their work
- 31% don't know what to do with the data they gather
- 6% are confident that their data is being used effectively
- 5% always use data to drive decision-making

Source: How Non-Profits Can Use Data to Inform Decisions and Drive Performance, First Republic Bank, 12/9/16
https://www.firstrepublic.com/~media/frb/documents/pdfs/content/how-nonprofits-can-use-data-to-inform-decisions.ashx
SUCCESES

• As a local health department having **direct** access to eHARS
  - Timely
  - Timely
  - Report Continuum of Care/Cascade measures (CDC as well as HRSA)
  - Quality check on viral load lab data between CAREWare & eHARS

• **Collaboration with TN Medicaid**
  - Indirect access to information we do not have (e.g., other health conditions persons with HIV disease have, information on retention to care and ART Rx for Medicaid enrollees)
  - State health department working with Medicaid to import viral load data into Medicaid data base
  - Episodes to Care Project – influence beyond Ryan White program, including private insurance

• Implemented **“data monitoring”** process to improve data quality
  - Developed a monitoring tool with key data quality items (how client names are entered, service naming, timeliness of entry)
  - Creates a formal conversation for importance of data quality & helps identify provider needs related to data collection (large & small providers)
[1. Perinatal] A. Episode Summary

1 Overview
Total episodes: 262
Total episodes included: 233
Total episodes excluded: 29

2 Cost of care (avg. adj. episode cost) comparison

<table>
<thead>
<tr>
<th>Cost Range</th>
<th>Commendable</th>
<th>Acceptable</th>
<th>Not acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $5,000</td>
<td>$4,298</td>
<td>$5,000</td>
<td>$5,444</td>
</tr>
<tr>
<td>$5,000 to $7,443</td>
<td>$5,444</td>
<td>$5,000</td>
<td>$4,298</td>
</tr>
<tr>
<td>More than $7,443</td>
<td>$4,298</td>
<td>$5,000</td>
<td></td>
</tr>
</tbody>
</table>

Your avg. cost: $4,298
Providers' base avg. cost: $5,444

3 Episode cost summary

Your average episode cost is commendable

<table>
<thead>
<tr>
<th>Parameters</th>
<th>You</th>
<th>Provider base average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost across episodes</td>
<td>$1,221,749</td>
<td>$1,445,654</td>
</tr>
<tr>
<td>Total # of included episodes</td>
<td>233</td>
<td>235</td>
</tr>
<tr>
<td>Avg. episode cost (non adj.)</td>
<td>$5,244</td>
<td>$6,152</td>
</tr>
<tr>
<td>Risk adjustment factor (avg.)</td>
<td>1.22</td>
<td>1.13</td>
</tr>
<tr>
<td>Avg. episode cost (risk adj.)</td>
<td>$4,298</td>
<td>$5,444</td>
</tr>
</tbody>
</table>

* Risk adjustment factor calculated for each provider's patient base

Your episode cost distribution (risk adj.)

<table>
<thead>
<tr>
<th>Avg. adj. episode cost ($1,000)</th>
<th>Below $4,000</th>
<th>$4,000-$4,499</th>
<th>$4,500-$4,999</th>
<th>$5,000-$5,499</th>
<th>$5,500-$5,999</th>
<th>$6,000-$6,499</th>
<th>Above $6,500</th>
</tr>
</thead>
<tbody>
<tr>
<td># of episodes</td>
<td>28</td>
<td>37</td>
<td>43</td>
<td>22</td>
<td>21</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Distribution of provider average episode cost (risk adj.)

<table>
<thead>
<tr>
<th>Avg. adj. episode cost ($1,000)</th>
<th>Commendable</th>
<th>Acceptable</th>
<th>Not acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>You</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 Episode quality and utilization summary

You achieved selected quality metrics

<table>
<thead>
<tr>
<th>Quality metrics</th>
<th>You</th>
<th>Gain share standard</th>
<th>Med standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HIV screening</td>
<td>97%</td>
<td>85%</td>
<td>✔</td>
</tr>
<tr>
<td>2. Group B Strep screening</td>
<td>90%</td>
<td>85%</td>
<td>✔</td>
</tr>
<tr>
<td>3. C-section rate</td>
<td>20%</td>
<td>41%</td>
<td>✔</td>
</tr>
<tr>
<td>4. Gestational DM screening</td>
<td>50%</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>5. Bacteriuria screening</td>
<td>90%</td>
<td>62%</td>
<td></td>
</tr>
<tr>
<td>6. Hepatitis B screening</td>
<td>58%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>7. Tdap vaccination rate</td>
<td>90%</td>
<td>62%</td>
<td></td>
</tr>
</tbody>
</table>

Top 5 Prescribed Drugs, by spend

1. Prenatal Plus Tablet        | $2,485
2. Ibuprofen Tablet            | $1,250
3. Hydrocodone-Acetaminophen Tablet | $1,099
4. Ferring Sulfae Tablet       | $4,093
5. Zofran Tablet               | $997

Preliminary draft of the provider report template for State of TN (for discussion only) | All content/numbers included in this report are purely illustrative
## [1. Perinatal] B. Episode quality and utilization details

### 5 Quality and utilization (metrics) comparison with provider base

You achieved selected quality metrics linked to gain sharing

<table>
<thead>
<tr>
<th>Quality metrics linked to gain sharing</th>
<th>Percentile (Quartile) of Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 (first)</td>
</tr>
<tr>
<td>HIV screening rate</td>
<td></td>
</tr>
<tr>
<td>Provider-base screening rate</td>
<td>50%</td>
</tr>
<tr>
<td>Percent of patients for whom HIV screening was conducted</td>
<td></td>
</tr>
<tr>
<td>Group B strep screening rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom Group B strep screening was conducted</td>
<td>60%</td>
</tr>
<tr>
<td>C-section rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom C-Section was conducted</td>
<td>41%</td>
</tr>
</tbody>
</table>

### Quality metrics not linked to gain sharing

<table>
<thead>
<tr>
<th>Quality metrics not linked to gain sharing</th>
<th>Percentile (Quartile) of Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 (first)</td>
</tr>
<tr>
<td>Gestational diabetes screening rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom Gestational diabetes screening was conducted</td>
<td>42%</td>
</tr>
<tr>
<td>Asymptomatic bacteriuria screening rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom Asymptomatic bacteriuria screening was conducted</td>
<td>43%</td>
</tr>
<tr>
<td>Hepatitis B screening rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom Hepatitis B screening was conducted</td>
<td>41%</td>
</tr>
<tr>
<td>Tdap vaccination rate</td>
<td></td>
</tr>
<tr>
<td>Percent of patients for whom Tdap vaccination was given</td>
<td>41%</td>
</tr>
</tbody>
</table>

Preliminary draft of the provider report template for State of TN (for discussion only) | All content/numbers included in this report are purely illustrative
# DATA QUALITY MONITORING TOOL

## A. DATA SECURITY

**1. Client Demographics.** Describe the source used to collect client's legal name, residence, date of birth, HIV status. Also describe how the agency decides to enter the client's name (should be legal name from a document like a license).

Check a sample of names to see if practice followed.

**Responses**

Describe:

- Review for Accuracy:

**2. Updating Demographic Information.** Describe how and how often the agency updates demographic information for clients, specifically address, income, household size, insurance status, housing status. Note if done thru hard copy or electronically.

**Responses**

Describe:

- Review for Accuracy:

**3. Capacity to Deliver by Services.** Describe how the agency's electronic reporting system is able to distinguish which Part A services a client has received. Provide the agency naming process as applicable (e.g. CPT code, MCM Peer).

Check a sample of records to assure that the units match TGA definition.

**Responses**

Describe:

- Review for Accuracy:

## B. DATA CAPACITY/Accuracy

**4. Capacity to Capture Units of Service.** Describe how is the agency able to report units of service in the electronic database for Part A funded services.

Check a sample of records to assure that the units match TGA definition.

**Responses**

Describe:

- Review for Accuracy:

**5. Missing Data.** Describe how the agency is able to accurately identify required RSR data that is missing in the electronic database?

**Responses**

Describe:

**6. Inactive Clients.** Please describe how the agency is able to accurately identify clients that are no longer receiving care. How do you determine when a client becomes inactive (e.g., death, not in care for 3 months) and how do you note this in the data? Note if done thru hard copy or electronically.

**Responses**

Describe:

**7. Training.** Describe the training provided to new staff on the data system and requirements. Describe how changes to procedures are shared with staff.

**Responses**

Describe:

**8. Procedures.** Describe the procedures used by the agency to check for data accuracy, missing data, training, etc.

**Responses**

Describe:

## C. DATA TIMELINESS

**1. How does the agency ensure that data is entered in the electronic database at least within a month of the service date.**

**Responses**

Describe:

## D. INTERNAL MONITORING

**1. Procedures.** Describe the procedures used by the agency to check for data accuracy, missing data, training, etc.

**Responses**

Describe:

## E. INVOICING ACCURACY

**RECOMMENDATIONS FOR IMPROVEMENT**
CHALLENGES

• Create reports that are simple, usable & meaningful for the Recipient staff, Planning Council, providers, stakeholders, public
  o Use for decision making & to drive action

• Obtain more client level social indicator data (e.g., employment)
  o Use to end the epidemic

• Strengthen QI activities
  o Use to respond to changing needs & issues and drive improvement

• Improve mechanisms for setting new local targets, with a focus on DOCUMENTING DISPARITIES and measuring change over time.
  o Use to monitor and drive improvement
RYAN WHITE HIV/AIDS PROGRAM
BY THE NUMBERS: 2015

Served 533,036 people

Reached more than 50% of people living with diagnosed HIV in the United States.

83.4% of clients achieved viral suppression*

73% of clients were racial/ethnic minorities**

47.1% of clients identified as Black/African American

22.7% of clients identified as Hispanic/Latino

The client population is aging.

2010 2011 2012 2013 2014 2015
69.5% 72.6% 75.0% 81.4% 83.4%

Percent of clients aged 50+

2010 2015
31.6% 42.5%

65.4% of clients were living at or below 100% of the Federal Poverty Level

*Viral suppression is based on data for people living with HIV who had at least one outpatient ambulatory medical care visit and at least one viral load test during the measurement year and whose most recent viral load test result was less than 200 copies/mL.

**Clients self-identified as less than 2% each American Indian/Native Alaskan Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple races.

Data sourced from 2015 Ryan White HIV/AIDS Program Annual Client Level Data Report.
Overview of HIV Disease & Substance Abuse

According to the Centers for Disease Control and Prevention (CDC), people with substance use disorders are at greater risk of contracting or transmitting an HIV infection because the misuse of drugs and/or alcohol can impair judgment and contribute to poor decision-making, e.g., sex without condoms or unprotected sex with multiple partners. The co-occurrence of mental health and substance abuse increases a person's risk for HIV nearly 32 times more than those without (Hoff et al., 1997).

For persons who are HIV+, NIDA reports that drug abuse and addiction can worsen the progression of HIV and its consequences. Medical complications are also a serious concern when treating an HIV+ patient who has a substance use disorder such as risk of severe bacterial infections including tuberculosis and hepatitis C.

Substance Abuse & The HIV Treatment Cascade

How well do persons with a substance abuse disorder enter and engage with the HIV system of care?

HIV TESTING: A 2011 SAMHSA report noted that less than 30% of substance abuse treatment facilities reported testing for HIV.

ENGAGEMENT/RETENTION IN CARE/VIRAL SUPPRESSION: A 2013 published in Clinical Infectious Disease, reported that persons with a substance abuse disorder have poorer outcomes related to engagement and retention in HIV care and poorer outcomes related to viral suppression. [http://cid.oxfordjournals.org/content/57/3/3309.full.pdf+html]

Data on Subst. Abuse

NATIONAL: According to the National Survey on Drug Use and Health (NSDUH) Report on HIV/AIDS and Substance Use, 25% of people ages 12 and older who had been told by a doctor they had HIV/AIDS engaged in binge drinking in the past month, and nearly 38% used illegal drugs in the past month and one in six people with HIV/AIDS have used an illegal drug intravenously in their lifetime. A 2000 study found 25% of those living with HIV reported alcohol or drug use at a level warranting treatment.

LOCAL: In the 2014 Nashville Needs Assessment, 21% of the population report needing help to deal with their alcohol or drug use; this is in line with the national estimate.

Resources


http://www.cdc.gov/pwad/substrance-treatment.html

http://www.samhsa.gov/hiv-aids-viral-hepatitis
<table>
<thead>
<tr>
<th>CONTINUUM OF CARE Performance Measure</th>
<th>2015/2016 result</th>
<th>2016/2017 Denomin</th>
<th>% to Increase Goal</th>
<th>NEW GOAL 2016/2017</th>
<th>2016/2017 result</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 month visit</td>
<td>50.61%</td>
<td>3,073</td>
<td>1% 2% 4% 5% 10% 15% 20%</td>
<td>52.61%</td>
<td>50.43%</td>
</tr>
<tr>
<td>viral suppression</td>
<td>83.84%</td>
<td>3,570</td>
<td>32 63 127 159 317 476 634</td>
<td>85.84%</td>
<td>92.34%</td>
</tr>
<tr>
<td>Rx ART</td>
<td>83.84%</td>
<td>3,570</td>
<td>38 77 154 192 384 576 768</td>
<td>87.23%</td>
<td>87.23%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 month visit</td>
<td>73.15%</td>
<td>3,170</td>
<td>32 63 127 159 317 476 634</td>
<td>75.15%</td>
<td>88.01%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTINUUM OF CARE Performance Measure</td>
<td>2016/2017 result</td>
<td>2016/2017 Denomin</td>
<td>% to Increase Goal</td>
<td>NEW GOAL 2017/2018</td>
<td>2017/2018 result</td>
</tr>
<tr>
<td>24 month visit</td>
<td>50.43%</td>
<td>3,159</td>
<td>1% 2% 4% 5% 10% 15% 20%</td>
<td>52.43%</td>
<td>52.43%</td>
</tr>
<tr>
<td>viral suppression</td>
<td>85.23%</td>
<td>3,877</td>
<td>38 77 154 192 384 576 768</td>
<td>87.23%</td>
<td>87.23%</td>
</tr>
<tr>
<td>Rx ART</td>
<td>92.34%</td>
<td>3,840</td>
<td>33 66 131 164 328 492 656</td>
<td>88.01%</td>
<td>88.01%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 month visit</td>
<td>88.01%</td>
<td>3,279</td>
<td>32 66 131 164 328 492 656</td>
<td>88.01%</td>
<td>88.01%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 month visit</td>
<td>0</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>viral suppression</td>
<td>0</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rx ART</td>
<td>0</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 month visit</td>
<td>0</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Numbers have an important story to tell. They rely on you to give them a clear and convincing voice.

Stephen Few

Things get done only if the data we gather can inform and inspire those in a position to make [a] difference.

Mike Schmoker

Patients are empowered by having access to their own health information, and then by owning their own data.

Elizabeth Holmes
Interactive Session: How do you use your data?

HIV/AIDS Bureau
Health Resources and Services Administration
Concept

To provide HAB Project Officers and Grant Recipients with a user-friendly interactive data tool

What can data dashboards help recipients and POs to do?

• Data quality
  • Review data quality
  • Identify and address issues with data quality

• Using data to improve care and treatment services
  • Identify gaps in care in the jurisdiction
  • Identify disparities
  • Data-driven decision-making for policies and programs
Dashboard Example 1
Dashboard Example 2

Building in Bridgetown
Residential Construction Permits Issued from 1996-2016 in Portland, OR

726 Permits Issued

Permits per year are recovering from 2008

Most new permits are for single family homes

Distribution of Properties over $1M
Median: $4,103,708

Distribution of properties under $1M
Median: $168,484

High value permits are for large apt buildings

Alternative Dwelling Units (ADUs) are on the rise

Source: http://gis.pdx.opendata.arcgis.com/datasets/residential-building

HRSA
White & Global HIV/AIDS Programs
Feedback Session: Key Questions

• How do you use data in your work? What data elements are most useful?

• What do you feel you need to make data more accessible and easier to use in your setting?

• How, if at all, does the format affect the level of comfort you have with using the data?

• In what ways would you like to be able to manipulate data to better meet your needs?

• What kinds of support can be provided to you in terms of data utilization?