Virginia’s Care Marker Database: Using Multiple Data Sources for HIV Care Linkage and Re-Engagement

VIRGINIA DEPARTMENT OF HEALTH
Division of Disease Prevention

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Overview

• Improving Care Continuum Data

• Integrated HIV Care/Prevention Data System

• Data to Care Efforts/Pilot Results

• Evaluating Interventions with Care Continuum Data

• Next Steps
National HIV Care Continuum

HIV Care Continuum Shows Where Improvements are Needed

In the US, 1.2 million people are living with HIV. Of those:

- **Diagnosed**: 86%
- **Engaged in Care**: 40%
- **Prescribed ART**: 37%
- **Virally Suppressed**: 30%


Labs/care markers not reported consistently

Not all deaths reported
Definitions:

Newly diagnosed and linked to HIV care within 90 days: Diagnosed with HIV disease in calendar year (CY) 2013 or 2014 and first care marker (CD4 or viral load test, HIV medical care visit, or antiretroviral (ART) prescription) post-diagnosis was within 90 days; Evidence of a care marker in 2013/2014: Evidence of at least one care marker in CY 2013 or 2014; Retained in HIV care in 2013/2014: Having at least two or more care markers in CY 2013 or 2014 at least 3 months apart; Virally suppressed in 2013/2014: Last viral load taken in CY 2013 or 2014 was <200 copies/ml.

Data: Current as of October 2015; Accessed November 2015; Care Markers Database, HIV Surveillance, Division of Disease Prevention, Virginia Department of Health; 2014 data may be incomplete due to reporting delays.
Continuum of Care for Ryan White Clients, 2013

All RW clients living with HIV in Virginia as of 2013

RW clients diagnosed with HIV in 2013 (N=421)

- 100.0% 7,083 Diagnosed with HIV
- 97.4% 410 Diagnosed in 2013 and linked to care
- 96.4% 6,831 Care marker in 2013
- 85.2% 6,031 Retained in care in 2013
- 76.7% 5,431 Virally suppressed in 2013

All RW clients living with HIV in Virginia as of 2013

RW clients diagnosed with HIV in 2013 (N=421)
Black Box: Real Time HIV Surveillance

- Pilot project from Georgetown, funded by NIH
- Involved DC, MD, and VA Departments of Health
- Utilized privacy technology for sharing surveillance data among jurisdictions where an algorithm for matching was set up in the “black box” and returned matches of varying strengths (Exact to Very Low) to each jurisdiction
### Black Box Results

<table>
<thead>
<tr>
<th>Person matches across jurisdictions:</th>
<th>Exact</th>
<th>Very High</th>
<th>High</th>
<th>Medium High</th>
<th>Medium</th>
<th>Very Low</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-MD*</td>
<td>4,013</td>
<td>5,907</td>
<td>53</td>
<td>268</td>
<td>645</td>
<td>482</td>
<td>11,368</td>
</tr>
<tr>
<td>MD-VA*</td>
<td>856</td>
<td>2,343</td>
<td>11</td>
<td>117</td>
<td>377</td>
<td>865</td>
<td>4,569</td>
</tr>
<tr>
<td>VA-DC*</td>
<td>1,064</td>
<td>3,340</td>
<td>15</td>
<td>149</td>
<td>438</td>
<td>529</td>
<td>5,535</td>
</tr>
<tr>
<td>Total</td>
<td>5,933</td>
<td>11,590</td>
<td>79</td>
<td>534</td>
<td>1,460</td>
<td>1,876</td>
<td>21,472</td>
</tr>
</tbody>
</table>

* DC-MD, MD-VA, VA-DC indicate the jurisdictions involved.
Each of the databases to the left has monthly data extracts uploaded to the CMDB matched on client name, birth date, gender and race. eHARS serves as the base of cases for the CMDB.
HIV Care Continuum Indicators: eHARS Only vs. Care Markers Database (CMDB)

- **Retained in HIV care in 2014**
  - eHARS Only: 7,862 (32%)
  - Care Markers Database: 7,862 (40%)

- **Virally suppressed in 2014**
  - eHARS Only: 6,747 (27%)
  - Care Markers Database: 8,904 (36%)
e2Virginia

Ryan White All Parts data

HIV Prevention data (Corrections, CAPUS, Testing)

Patient Navigation Process Data

Out of Care Lists
This is a secured web connection. All data is protected by the highest level of Internet encryption (SSL).
for Test Test

Cross-Provider Services
Cross-Provider Clinical Info

Request These Permissions

You have a new data sharing request from ABCD Healthcare.

Please log in to https://demo.rde.org/e2virginia/ to grant or deny this request.

Thanks,
the e2Virginia team.
## Agency Alerts

### Summary of Current Alerts

Click on each alert for details.

<table>
<thead>
<tr>
<th>Type</th>
<th>Upcoming Alerts</th>
<th>Past-Due Alerts</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4 test not performed within past three months</td>
<td>0</td>
<td>160</td>
<td>Consider scheduling or following-up to conduct CD4 test</td>
</tr>
<tr>
<td>VL test not performed within past three months</td>
<td>0</td>
<td>164</td>
<td>Consider scheduling or following-up to conduct a VL test</td>
</tr>
<tr>
<td>No medical appointment in the past three months</td>
<td>N/A</td>
<td>168</td>
<td>Consider scheduling or following-up to ensure medical appointment</td>
</tr>
<tr>
<td>CD4 results less than 200 but status has not changed to AIDS</td>
<td>N/A</td>
<td>7</td>
<td>Review records and ensure the HIV Status is correct. It may need to be changed to AIDS.</td>
</tr>
<tr>
<td>No TB/TST conducted within 12 months of the last TB/TST</td>
<td>N/A</td>
<td>122</td>
<td>Consider scheduling or following-up to conduct TB/TST</td>
</tr>
<tr>
<td>Active clients who have not received any services in the past 6 months</td>
<td>N/A</td>
<td>178</td>
<td>Review client records and try to reconnect them to services or mark as inactive.</td>
</tr>
</tbody>
</table>

All recommendations assume that you first ensure that the data (e.g., CD4 test date and value) has been entered into eCOMPAS.

If you wish to suggest a new alert click [here](#).
Email Alerts

Hello Serge,

The following are system alert(s) to which you are subscribed:

System: eCOMPAS (https://www.e-compas.com/)
Contract: Ryan White Grantee

<table>
<thead>
<tr>
<th>Type</th>
<th>Alerts</th>
<th>Warnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4 test performed</td>
<td>125</td>
<td>36</td>
</tr>
<tr>
<td>VL test performed</td>
<td>130</td>
<td>34</td>
</tr>
<tr>
<td>Missed Medical Appointment (last medical visit)</td>
<td>168</td>
<td>N/A</td>
</tr>
<tr>
<td>CD4 results less than 200 and status not AIDS</td>
<td>8</td>
<td>N/A</td>
</tr>
<tr>
<td>TB / TST Eligible but not tested this year</td>
<td>106</td>
<td>N/A</td>
</tr>
<tr>
<td>Inactive Clients</td>
<td>115</td>
<td>N/A</td>
</tr>
</tbody>
</table>

You may manage your subscriptions to alerts and reminders by logging into eCOMPAS, clicking the My Account button, and then by clicking the “Alerts and Reminder” tab.

Thank you,
The eCOMPAS Team
Lost to Care Lists

Protocol
- Time frame
- Additional sources
- VDH processes

Distribution
- DIS
- Medical Sites
- Patient Navigators

Data Collection
- In Care
- Reasons Not in Care
- Linked
- Unable to Locate
Data to Care Pilot

Results: Pilot Overall

- In Care: 43%
- Relocated OOS: 23%
- Deceased: 5%
- Unable to Locate: 23%
- Not in Care: 6%

N=83
Next Steps/Future Directions

• Black Box data from other jurisdictions being utilized to update HIV Surveillance data, will be piloting sharing of care marker data among jurisdictions on a real-time basis using Black Box technology

• Data to Care Staff hired at VDH to review out of care lists internally (Lexis Nexis, other sources) and work with HIV prevention and HIV care contractors to determine missing/other potential data sources, including EMRs

• e2Virginia launch statewide in January 2016 to collect RSR, Prevention, HIV testing, and patient navigation data
Final Thoughts

• HIV Care Continuum is a framework and tool for examining both data and care issues

• Utilizing data for public health action requires merging of multiple sources of information across systems and funding streams

• Increased alignment of goals and objectives across agencies that fund HIV prevention, care, and surveillance activities
Thoughts/Wrap Up
Acknowledgements

Virginia Department of Health:
Kate Gilmore, Lauren Yerkes, Steve Bailey, Diana Jordan,
Elaine Martin, Jean Cadet, Sonam Patel, Amanda Saia,
Sahithi Boggavarapu

Health Resources and Services Administration:
Jessica Xavier, John Hannay

Centers for Disease Control:
Benjamin Laffoon