Using data for program planning, resource allocation and policy: Opportunities for collaboration, technical assistance and capacity building

Henry F. Raymond, MPH, DrPH
Associate Professor, Epidemiology, School of Public Health, Rutgers University
Components of 3rd Generation HIV Surveillance

**Societal conditions**
- Home
- Risk
- STIs
- HIV infection
- Acute, incident
- ART initiation
- Prevalent
- OIs, AIDS
- Death
- Societal impact

**Population based surveys with HIV testing and risk behavior: DHS+, AIS**

**Population based surveys with risk behavior: DHS, MICS**

**BSS in MARPs, STIs**
- Integrated Bio-Behavioral Surveys MSM, IDU, FSW
- IBBS other

**PLACE, RAP, RARE, qualitative research**
- Molecular Epi
- STI clinic sentinel surveillance, other facility-based
- Antenatal clinic sentinel surveillance
- Acute and incident infection (BED) KP surveys, STI clinics
- Incidence surveillance (BED) in ANC and DHS+

**Case reporting: HIV, AIDS, OIs, STD, case registries HIV/AIDS/related conditions**

**Enhance care and treatment surveillance, ART use, drug resistance, morbidity, mortality**

**Greater use of existing data, research, M&E, program, data synthesis, dissemination**
That doesn’t even include routine program data!
Drowning in data & information!

• Just too much of it

• Information goes up and never comes down

• Due to competing priorities basic reporting is often the only analysis performed.

• Data from different sources is often never seen side-by-side
Tracking trends, burdens, determinants and response in the HIV epidemic requires...

• HIV prevalence
• HIV incidence
• Population sizes
• Epidemic response data
• Stratified by sub-populations, geographies, behaviors, interventions
Existing data sources are often not fully exploited.

• Data collection and basic reporting fill up a lot of time.
• Novel methods require resources to implement.
• Disconnect between those asking key questions and those that can answer them.
Existing data sources are not always complete or reliable.

- HIV cases in the registry underestimate the total number as only diagnosed infections are reported.
- HIV prevalence is not a reliable measure of the direction of the epidemic due to ART.
- National level surveys that get at population sizes of MSM or PWID, for example are not specific enough for local planning.
Overarching methodologies

• Further analyses
• Synthesis
• Triangulation
Further analyses

• In short, using to its fullest the data that have already been collected.
• Novel approaches to: incidence estimation, population size estimation
• Correlations to demographics, behaviors, geography to fine tune focus and content of interventions.
Synthesis

• Triangulation “lite”
• Very focused on a specific question
• Very focused data mining
• Quick turnaround
• Less stakeholder process
Planning Triangulation

Gather data from *multiple* sources

Look for trends *across* data sets & hypothesize

Examine *each* data set

Conducting Triangulation

Communicating Triangulation

Triangulation Process
## Triangulation Process: 12 steps

<table>
<thead>
<tr>
<th>Which part of the process?</th>
<th>What steps are involved?</th>
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<tbody>
<tr>
<td>Planning for Triangulation</td>
<td>• Identify key questions&lt;br&gt;• Ensure question is answerable/ actionable</td>
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<tr>
<td></td>
<td>• Identify sources&amp; gather data&lt;br&gt;• Refine research question</td>
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<tr>
<td>Conducting Triangulation</td>
<td>• Gather data&lt;br&gt;• Make observations&lt;br&gt;• Note trend &amp; hypothesize</td>
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<td>• Check hypotheses&lt;br&gt; • <em>IF NECESSARY</em> Identify &amp; gather add'l data&lt;br&gt; • Draw conclusions</td>
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<tr>
<td>Communicating Triangulation</td>
<td>• Hypotheses, limitations &amp; recommendations&lt;br&gt;• Outline next steps</td>
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Process includes government, community, academic stakeholders at every step.
Examples of questions

• How many persons are at risk / in need of services?
• Is the type and level of intervention in a given place and population adequate?
• In what sub-populations and / or geographies is HIV incidence highest?
• How many undiagnosed infections are there?
• What are the trends in HIV risk related behaviors such as multiple partners, condomless sex, needle sharing, substance use by key populations, sub-population and geography?
• How many diagnosed infections are not on ART?