DEVELOPING QUALITY INDICATORS FOR HIV PREVENTION PROGRAMS

Baylor Evaluation Center
Jessica A. Davila, PhD
Thomas P. Giordano, MD, MPH
LeChauncy Woodard, MD, MPH
Monisha Arya, MD, MPH
Lena T. Williams, MPH
Elizabeth Soriano, MA

December 4, 2008
Overview

- Overview of quality measures
- What are quality indicators?
- Current HDHHS required indicators
- Overview of other prevention indicators
- How to develop new program specific indicators
- Update on local quality improvement committee
- Announcements
Institute of Medicine’s Definition of Quality

“The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

Crossing the Quality Chasm, Institute of Medicine, 2001
Framework for Measuring Quality of Health Care

- Quality is multi-dimensional
  - Safe, effective, efficient, timely, patient-centered, equitable

- Measuring framework for quality

Institute of Medicine

Structure | Process | Outcomes

A. Donabedian, 1966
Requirements for Quality Measures

- Valid
- Reliable
- Verifiable
- Available
- Remediable
Quality Indicators

- Indicators are explicitly defined and measurable items referring to structures, processes, or outcomes of care.
- Quality of care can be measured using either processes of care or outcomes of care.
- Process measures are often a more efficient measure of quality of care and are amenable to direct change.

http://www.rand.org/pubs/research_briefs/RB4545-1/index1.html
Quality indicators help us monitor the effectiveness and progress of our HIV prevention programs.

Indicators can show us where we are doing well with HIV prevention and where we need to improve.
Think of quality indicators as a QUICK REFERENCE GUIDE for us to see how we are doing with HIV prevention in our organizations.
Indicators should:

1. Be relevant to monitoring the local epidemic
2. Be useful to the organization, as well as local and state health departments in determining overall prevention effects
3. Suggest areas needing further evaluation
4. Be easy to access from existing data sources or
5. Be based on attainable data

CDC HIV Prevention Indicators Required by HDHHS

Nine indicators must be collected by all HDHHS Contractors!
HDHHS Required Outreach Indicator

The mean number of outreach encounters required to get one person to access any of the following services:

- HIV counseling,
- testing and referral services,
- sexually transmitted disease screening or testing services,
- individual-level intervention services,
- group-level intervention services, or
- comprehensive risk counseling services.
<table>
<thead>
<tr>
<th>#</th>
<th>Sex/Gender</th>
<th>Race/Ethnicity</th>
<th>Risk Behavior</th>
<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>2</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>3</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>4</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>5</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>6</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>7</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>8</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>9</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>10</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>11</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>12</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>13</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>14</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
<tr>
<td>15</td>
<td>M F MtF FmF</td>
<td>W B H O</td>
<td>M I MI H</td>
<td>&lt;25 25-34 35-44 45+</td>
</tr>
</tbody>
</table>

Sex: M=Male; F=Female; MtF=Male to Female Transgender; FmF=Female to Male Transgender. Race/Ethnicity: W=White; B=Black; H=Hispanic; O=Other. Risk Behavior: M=MSM; MI=MSM/IDU; I=IDU; H=Hetero. Leave blank if unknown/indeterminate.
Collecting Outreach Indicators

- Difficult to collect!
- Challenge: Ideally, must track how many total encounters one person has before they access services
Discussion

1) How are encounters currently tracked by your organization?
2) What obstacles to collecting this information has your organization encountered?
3) Does your organization have a goal/target for this indicator?
4) Does your organization use this indicator for program purposes?
HDHHS Required Individual/Group Level Intervention Indicators

- Proportion of the intended number of the target population to be reached with the individual/group level intervention who were actually enrolled in the intervention

- Proportion of persons that completed the intended number of individual/group level intervention sessions among those enrolled
### 2008 HIV/STD PREVENTION HE/RR DATA COLLECTION FORM

**AGENCY:** -Select One-

**SERVICE CATEGORY:** 1 – Health Education/Risk Reduction (HE/RR)

**INTERVENTION NAME:** -Select One-

**If non-DEBI, place intervention name here:**

**BRG TARGETED:**

1st -Select One- 2nd -Select One- 3rd -Select One-

**SUB-POPULATION TARGETED:** -Select One-

**UNIT OF SERVICE:** -Select One-

**FUNDING SOURCE:** -Select One-

**ASSIGNED STAFF:**

**UNIT OF SERVICE:**

**LENGTH OF SESSION(S):**

**NUMBER OF SESSIONS:**

**DATE OF INITIAL SESSION:**

**DATE OF FINAL SESSION:**

**PLACE AN “X” HERE IF THE INTERVENTION CYCLE IS COMPLETE:** →

**LOCATION OF ACTIVITY:**

**ZIP CODE OF ACTIVITY:**

### CLIENT DEMOGRAPHICS*

<table>
<thead>
<tr>
<th></th>
<th>Client Code</th>
<th>Risk Behavior</th>
<th>Sex/Gender</th>
<th>Race</th>
<th>Ethnicity</th>
<th>Age</th>
<th>HIV Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Client Demographic Variable Codes*

- **Risk Behavior:**
  - M – MSM
  - MI – MSM/IDU
  - J – IDU
  - MF – MSF
  - FM – FSM
  - FF – FSF
  - U – Unknown

- **Sex/Gender:**
  - M – Male
  - F – Female
  - MTF – Male to Female Transgender
  - FTM – Female to Male Transgender

- **Race:**
  - W – Anglo/White
  - B – African American/Black
  - AS – Asian
  - NA – Native American
  - PI – Pacific Islander
  - M – Multi-racial
  - U – Undetermined

- **Ethnicity:**
  - H – Hispanic
  - NH – Non-Hispanic

- **Age:** Age in Years

- **HIV Status:**
  - N – Known Negative
  - PP – Preliminary Positive
  - P – Known Positive
  - U – Unknown

Revised 02/27/2008
Discussion

1) What is the process for collecting your organization’s participation information?

2) What obstacles has your program encountered while collecting this information?

3) How does your program determine the “intended number of the target population to be reached”?

4) Does your program use these indicators to focus recruitment efforts?
**Important Counseling, Testing, and Referral Indicators for CBOs**

- Percent of newly identified, confirmed HIV-positive test results among all tests reported by CDC-funded HIV counseling, testing and referral sites (HIV positivity rate)
  - Requirement: >1% positivity rate

- Percent of newly identified, confirmed HIV-positive test results returned to clients
Discussion

1) How does your organization track all tests and results, including those done during outreach activities?

2) What obstacles has your organization encountered collecting testing information?

3) Is there a standardized process for following up on HIV+ test results?
Percent of contacts with unknown or negative serostatus who receive an HIV test after PCRS notification.

Percent of contacts with a newly identified, confirmed HIV-positive test among those tested.

Percent of all contacts with a known, confirmed HIV-positive test among all contacts.
An Overview of Other Quality Indicators Your Program May Want To Consider……
CDC HIV Prevention Indicators:
A closer look by subepidemic

High-risk heterosexuals/MSM

- HIV incidence
- HIV prevalence
- Gonorrhea/chlamydia/syphilis incidence
- Number of sexual partners
- Belief in efficacy of condoms
- Condom use during most recent sex

Adapted from: Rugg DL et al.
Injection Drug Users

- HIV incidence
- HIV prevalence
- Syringe distribution per 1000
- Legal status of needle exchange
- Prescription requirements for purchase of needles/syringes

Quality Indicators for HIV Testing Programs

- # of people requesting a test (denominator = # of people coming to the health center)
  - could break this down into males, females, subepidemics
- # of people returning for f/u testing (denominator = # of people who had test)
- # of people utilizing partner notification system (denominator = # of people who test positive)
- # of people *in* care within 3 months of a positive test (denominator = # of people who test positive)
- Counselor treated you with respect
- Counselor answered all of your questions
- Perceived barriers to the HIV testing program
How to Develop New Quality Indicators For Your Program
Principles of Quality Indicator Development

Issues to consider when developing indicators:

• **What aspect of care will be assessed?**
  - Structure (staff, equipment, etc.)
  - Process (prescription of medications, ordering lab tests)
  - Outcomes (mortality, morbidity, satisfaction)

• **What are the perspectives of varying stakeholders?**
  - Patients
  - Providers
  - Managers

• **What evidence exists to support the indicator?**
  - Can be derived by systematic or non-systematic methods
Quality Indicator Development

All measures should be tested for:

- **Acceptability**
  - Are findings acceptable to those being assessed and the assessors?

- **Feasibility**
  - Is accurate data readily available?

- **Reliability**
  - Is the measurement with the indicator reproducible?

- **Sensitivity to change**
  - Does the measure detect changes in quality of care?

- **Validity**
  - Does the measure possess content validity?
Examples of Setting
Your Own Quality
Indicators
Developing Your Own HIV Prevention Quality Indicators

Set a PREVENTION GOAL → determine INDICATORS

**GOAL: Increase condom use during sex**

**INDICATORS:**
- belief in efficacy of condoms
  - condom use during last sex
  - condom availability to clients

**GOAL: Increase number of people coming to center for HIV testing**

**INDICATORS:**
- # of people being tested this month
  - # of people stating they were referred from another center client
  - # of clients stating they referred a friend
Discussion

Do any organizations currently collect and monitor other indicators beyond those required HDHHS?
Local Quality Improvement Committee

- Each contractor will be asked to nominate one staff member to participate in the local Quality Improvement Committee.
- Goal of committee is to implement cohesive quality improvement efforts across HDHHS HIV prevention services.
- Group will discuss barriers and facilitators to quality measurement and improvement.
- Please provide contact information of committee participant to Ms. Lena Williams following today’s seminar.
- Committee will meet quarterly beginning in January, 2009.
Announcements

- Individualized evaluation and quality management assistance available!
- CDC HIV Prevention Meeting abstracts due December 10!
- Next seminar – March/April 2009