Evaluation of Quality Program: Using a Logic Model

Participant training objectives:
- To understand how Logic Models can help with the evaluation of your quality program
- To know how to create a Logic Model
- To decide whether a Logic Model would help your HIV quality program to assess its effectiveness

Target audience:
QI committee members, senior HIV leaders, and other staff involved in planning and evaluating the program’s annual quality initiatives

Type of exercise:
Scenario, group exercise, 60 minutes

Key concepts:
A Logic Model is a tool that helps you outline how your quality program will work and why you think it will succeed. In creating a Logic Model, an organization:
- Identifies the resources available to the quality program
- Clarifies the activities that will happen
- Predicts the results that the program will have

The Big Picture:
Quality program evaluation occurs at the end of a program cycle, but if the quality committee takes time at the beginning of the program cycle to lay out the “how” and the “why” of the program, its evaluation can be based on everyone’s clear understanding of the expectations for that year. Logic Models therefore are helpful for planning a quality program as well as for their evaluation.
Materials

For this group learning session, you will need the following materials:

- Participant handouts:
  - Scenario
  - Learning Transfer Worksheet
  - Copy of slide presentation
- Overhead projector/LCD panel (optional)
- Wipeboard/chalkboard (optional)

To prepare for the group learning session, complete the following tasks:

Familiarize yourself with the session's structure and content:

- Read through the Group Exercise notes in their entirety, including the exercise answer key, presentation slides, and participant handouts.
- Practice the presentation outlined in the Group Exercise notes.

Photocopy the Scenario, Learning Transfer Worksheet, and slide presentation for each participant.

Prepare your presentation slides for display. Options:

- Photocopy the slides, or write the slide content, on transparencies.
- Write the slide content on flipchart paper.
- For display using an LCD panel, enter the content into a computer file.

Prepare the training room.

- Arrange the tables and chairs in a circle or square shape, if possible.
- Set up and test equipment (e.g. overhead projector), if applicable.
- Make sure you have enough chalk or wipeboard markers, if applicable.

Notes
Welcome and Introductions

To begin the group learning session, welcome participants and thank them for their participation. If necessary, ask individuals to introduce themselves to the group.

Learning Objectives

Tell participants that by the end of the session they will:

- Understand how Logic Models can help with the evaluation of your quality program
- Know how to create a Logic Model
- Decide whether a Logic Model would help their HIV quality program to assess its effectiveness

Agenda

Provide a brief description of the session’s primary components:

- Presentation of the elements of a Logic Model and its place in program evaluation
- Group exercise in developing a Logic Model
- Learning transfer worksheet to guide the creation of a Logic Model for your own organization

Quality Improvement Background

Distribute a copy of the slides to each participant for note taking and/or future reference.

Explain that a Logic Model is a way to lay out how and why you believe your program will work - what the relationship is among the resources you have to operate the program, the activities you plan to do and the changes or results you hope to achieve. To create a Logic Model, you list:

- Resources/Inputs: what you need (what you have) to carry out the activities you’ve planned
- Activities: what you do with the resources
- Outputs: what you hope the activities will produce
- Outcomes: what you expect to happen as a result of the outputs
- Impact: the fundamental change you are seeking (e.g., better health status among people with HIV or AIDS)

Then you do two more things:

- List the assumptions that are making in moving from resources to activities, activities to outputs, outputs to outcomes, and outcomes to impact.
- Identify measures you can use to assess your outputs, outcomes and impact.

Note: it may be helpful to show participants a completed logic model (page 5) and/or walk through a simple example as part of the explanation.
Logic Models are useful for program evaluation because they:

- Identify up-front the assumptions that need to be tested as the program unfolds
- Let you know early on when things aren’t going as planned
- Make clear the expected results, so we can know whether the program has been effective on its own terms
- Allow participants to tell the program’s “story” to others: the organization’s leaders, regulators, funders, consumers, etc.

Getting Started:

Divide the participants into teams of roughly equal size, 4-6 people per group. You can assign participants to teams yourself or ask them to count off by a given number and form teams with other participants who have the same number.

Scenario

Group Exercise

Distribute the scenario and logic model format sheet to each participant and provide directions for completing the exercise:

- Read the scenario individually (5 minutes)
- As a group, fill out the logic model format sheet, including assumptions and measures

Assist teams who have problems getting started or become stuck on a particular point. Alert participants when 5 minutes remain so that they are adequately prepared to report back.

Reporting Back

Call time. Ask one team to present its list for “resources.” When the team is done, ask for any other contributions from other teams. Move to the next team for “activities,” the next for “outputs,” then “outcomes,” and “impact,” asking after each team’s presentation for additional items other teams had included. At the end, have a general discussion of assumptions and measures.
Learning Transfer

Getting Started
Distribute the worksheet and give participants 5 minutes to complete it.

Debrief
If time permits, ask participants to individually share one area in which they are doing well and one area in which they could improve.

Finally, ask participants to select one area that requires improvement and to write down one or more things they could do in the next month to better define the facility’s quality improvement management plan.

Wrap-up
Ask participants to provide feedback on whether or not they have achieved the objectives introduced at the beginning of the group learning session:

- Understand how Logic Models can help with the evaluation of your quality program.
- Know how to create a Logic Model.
- Decide whether a Logic Model would help your HIV quality program to assess its effectiveness.

Schedule an informal follow-up session with any participant(s) who has not reached the objectives.
Evaluation of Quality Program: Logic Model Development

"IF...THEN..."  "BUT, HOW?"

ASSUMPTIONS

RESOURCES
What you need to carry out the activities you have planned

ACTIVITIES
What you do with the resources you have

OUTPUTS
What the activities produce (e.g., services, products)

OUTCOMES
What you expect to happen as a result of the outputs - short-term and long-term benefits or changes for program participants

IMPACT
The fundamental long-term changes you are seeking

MEASUREMENT

Source: Center for Health and Public Service Research, Robert F. Wagner Graduate School of Public Service, New York University
Evaluation of Quality Program: Using a Logic Model: Scenario

Instructions:
Complete a logic model for this organization's quality program, using the format sheet provided and the information given below.

• What resources does the Campus Care Center Have?
• What activities do they plan to do?
• What do they expect the activities to produce - their "outputs"?
• What outcomes - long or short-term benefits of the program?
• What impact do they expect?
• What assumptions are they making along the way?
• What measures can they use to assess their outputs, outcomes and impact?

The Campus Care Center, part of an academic hospital, is located on a large university campus. With over 250 HIV+ adults cared for in a new outpatient clinic, the facility has a staff of 12:

• 3 medical providers
• 2 nurses
• 2 case managers
• 1 nutritionist
• 1 peer counselor
• 3 support staff

Recently, the Campus Care Center received Ryan White Title III funding. The Medical Director subsequently scheduled a half-day meeting to develop an annual quality plan and asked a team of staff members to collect baseline data for 7 quality of care indicators, in preparation. The team reported the following results:

• GYN exam: 77%
• Viral load done within past 6 months: 91%
• PPD placed and read: 56%
• CD4 count done within past 6 months: 91%
• PCP prophylaxis for eligible patients: 95%
• HAART for eligible patients: 81%
• MAC prophylaxis for eligible patients: 100%

Based on this information and additional discussion during the meeting, the team developed the facility's annual quality plan:
Infrastructure

The overall responsibility and leadership for the HIV quality program lies with the Medical Director who authorizes the quality committee to plan, assess, measure, and implement performance improvements throughout the entire clinic.

The membership of the quality committee reflects the diversity of disciplines within the Campus Care Center associated with the processes being monitored. The members of the committee include the Medical Director (chairperson), 1 medical provider, 1 nurse, 1 case manager, 1 peer counselor, and 1 support staff member. The chairperson will report back to the overall committee responsible for hospital-wide quality activities. Membership will be approved by the Medical Director.

The Quality Committee should have at least 10 scheduled meetings per year, tentatively planned for the second Wednesday in each month from 8:30-10:30 a.m. The meeting schedule must be coordinated and approved by committee members. Additional meetings may be called, as needed.

Annual Quality Goals

The project goals listed below are based on the program statement and baseline performance data:

- To involve staff in a variety of quality improvement activities.
- To educate staff about quality improvement methodologies.
- To initiate a QI project team in order to improve the GYN rate to 90% or above.
- To initiate a QI project team in order to improve the PPD rate to 75% or above.

We will measure the following quality of care indicators on an annual basis: GYN, PPD, PCP, MAC, Viral load, CD4, and HAART.

Minutes of all quality committee meetings will be distributed to all committee members and to all necessary hospital-wide quality committees. Reports of the Campus Care Center’s quality activities will be shared with all staff within one week of presentation to the QI Committee.

Based on the belief that staff should be actively involved in the HIV quality program and its activities, all current and new staff members will receive the hospital’s quality manual of QI methodologies and review key chapters during biweekly staff meetings. In addition, staff will be provided with a 2-hour training session about quality improvement principles, and will receive the hospital’s quarterly newsletter on quality tools and techniques. All new staff members will receive quality training.

Evaluation

At the end of the year, the annual quality plan will be evaluated and all QI projects will be assessed against goals.
Evaluation of Quality Program: Logic Model Template

ASSUMPTIONS:

MEASURES:

Instructions:
Plan for creating a logic model for your organization’s quality program by answering the questions below:

Who needs to be part of designing the logic model?

__________________________________________

__________________________________________

__________________________________________

When can we meet to design the logic model?

__________________________________________

__________________________________________

__________________________________________

What will I need to have ready for this meeting?

__________________________________________

__________________________________________

__________________________________________

What obstacles may we encounter as we design our logic model?

__________________________________________

__________________________________________

__________________________________________

What can we do to anticipate and lessen these obstacles?

__________________________________________

__________________________________________

__________________________________________
# Evaluation of Quality Program: Using a Logic Model: Answer Key

## Resources
- Committee with interdisciplinary membership
- Regular meeting time
- Designated leader
- Training resources
- Baseline data

## Assumptions
- People will show up for meetings
- Training money won't be cut
- Leader will lead
- Staff will not leave the organization, so we can build on experience

## Activities
- Committee meets regularly
- GYN QI project
- PPD QI project
- Annual measurement of 7 indicators
- Reports are shared with all staff
- Publish Quality manual, Quality newsletter

## Assumptions
- The QI projects will get done, and will get done well
- Measurement will be done, with results distributed and used by all staff
- Everyone receives training and reads the background materials (manual, newsletter)

## Outputs
- GYN exam rate increases to over 90%
- PPD test rate increases to over 75%
- Fully educated staff
- Fully involved staff
- Performance report on 7 indicators
<table>
<thead>
<tr>
<th>MEASURES</th>
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<tbody>
<tr>
<td>• GYN exam rate, PPD test rate</td>
<td>• # of staff receiving quality training</td>
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<tr>
<td>• # of staff participating in QI projects</td>
<td>• # of months that performance reports are issued, on time</td>
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<tr>
<th>ASSUMPTIONS</th>
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<tr>
<td>• Getting people to exams leads to better overall GYN care and follow-up</td>
<td>• People whose PPDs are positive get appropriate follow-up treatment</td>
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<tr>
<td>• Education and participation in quality work leads to true interest and support for ongoing quality improvement efforts</td>
<td>• Distribution of performance data leads to knowledge and action</td>
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<tr>
<th>OUTCOMES</th>
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<tr>
<td>• Comprehensive GYN care</td>
<td>• Effective TB screening and prophylaxis</td>
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<td>• Engaged staff committed to quality</td>
<td>• Knowledge of organizational performance across seven indicators</td>
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<tr>
<th>MEASURES</th>
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<tr>
<td>• % of HIV+ women with GYN conditions treated at an early stage</td>
<td>• % of PPD+ patients receiving prophylaxis and completing medication course</td>
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<tr>
<td>• % of new quality improvement projects initiated by staff</td>
<td>• % of staff who, when asked, can describe the organization’s performance in quantitative terms</td>
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<tr>
<td>• Staff turnover rate</td>
<td>• Staff turnover rate</td>
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<th>ASSUMPTIONS</th>
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<tr>
<td>• Improvement in these discrete areas combines to make an impact on overall care and community outreachPerformance report on 7 indicators</td>
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<tr>
<th>IMPACT</th>
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<tr>
<td>• Better HIV Care Offered to the Community</td>
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<th>MEASURES</th>
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<td>• # of new patients</td>
<td>• % of patients who say they will recommend the center to friends, colleagues</td>
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<tr>
<td>• Numerical ratings received from regulatory and accrediting agencies</td>
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