Module 14 Monitoring, Evaluation, and Quality Improvement



Total Module Time: 135 minutes (2 hours, 15 minutes)

Learning Objectives

After completing this module, participants will be able to:

- Discuss the importance of routinely monitoring adolescent HIV care and treatment activities
- Discuss how information from monitoring and evaluation (M&E) can be used to support program improvement
- Describe the purpose of quality improvement (QI)
- Define and describe supportive supervision

Methodologies



- Interactive trainer presentation
- Large group discussion
- Small group work

Materials Needed



- Slide set for Module 14
- Flip chart and markers
- Tape or Bostik (adhesive putty)
- A couple of pocket calculators for Exercise 1. (Participants may also use the calculators on their phones or laptop computers, so the trainer may not need to supply more than 1 or 2 pocket calculators.)
- Photocopies (1 for each participant) of all forms and registers used to collect data and monitor adolescent HIV care and treatment services. It may also be helpful to have samples of forms and registers that have been completed (with all identifying information removed to preserve client confidentiality), as well as written instructions on how to complete the registers and forms.
- Participants should have their Participant Manuals. The Participant Manual contains background technical content and information for the exercises.

Resources



- HEALTHQUAL International. Available at: http://healthqual.org/ UNAIDS. (2000). *National AIDS programmes: A guide to monitoring and evaluation*. Available at: http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub05/jc427-mon_evfull_en.pdf
- WHO. (2004). National AIDS programmes: A guide to monitoring and evaluating HIV/AIDS care and support. Available at: http://www.unaids.org/en/media/unaids/contentassets/dataimport/publi cations/irc-pub06/jc1013-caresupport_en.pdf
- U.S. State Department. The United States President's Emergency Plan for AIDS Relief: Data Quality Tools. Available at: http://www.pepfar.gov/implementer resources/data quality/index.htm
- United Nations General Assembly Special Session on HIV/AIDS. (2005).
 Monitoring the declaration of commitment on HIV/AIDS: Guidelines on construction of core indicators. Available at:
 http://www.unaidsrstesa.org/sites/default/files/monitoringandevaluation/UNAIDS_MonitoringDecl_CoreIndicators_05.pdf

Advance Preparation



- Read through the entire module and ensure that all trainers are prepared and comfortable with the content and methodologies.
- Know the definitions of adult, pediatric, and adolescent age categories, according to national guidelines.
- Exercise 1 requires advance preparation.
- Gather all forms and registers used with adolescent clients to obtain program data and photocopy them so there are enough for each participant. If possible, also bring samples of completed forms and registers to serve as examples for participants.

Session 14.1: Monitoring, Evaluation, and Data Collection

Activity/Method	Time	
Interactive trainer presentation and large group discussion	40 minutes	
Exercise 1: Using Data for Decision-Making: Small group work and	50 minutes	
large group discussion		
Questions and answers	5 minutes	
Total Session Time	95 minutes	

Session 14.2: Quality Improvement and Supportive Supervision

Activity/Method	Time
Interactive trainer presentation and large group discussion	25 minutes
Questions and answers	5 minutes
Review of key points	10 minutes
Total Session Time	40 minutes

Session 14.1 Monitoring, Evaluation, and Data Collection



Total Session Time: 95 minutes (1 hour, 35 minutes)



Trainer Instructions

Slides 1-4

Step 1: Begin by reviewing the Module 14 learning objectives and the session

objectives, listed below.

Step 2: Ask participants if there are any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

- Discuss the importance of routinely monitoring adolescent HIV care and treatment activities
- Discuss how information from monitoring and evaluation (M&E) can be used to support program improvement



Trainer Instructions

Slides 5-11

Step 3:

To encourage participants to think about the role of monitoring and evaluation in health services, start by asking the following questions:

- Why do you think it is important to keep records and to monitor our work with adolescents?
- Do you know how the data you record is used at the facility level? At the district and national levels?
- Have you ever received feedback on the data you submit?

Fill in the discussion as needed using the content below and in the slides. Make the point that, often, health workers spend a lot of time filling in registers and preparing monthly or quarterly statistics and reports without a clear understanding of how this information will be used. They also may receive little feedback on the monthly forms and reports they submit.

Explain that it is important for health workers to know that their facility reports are aggregated up to the district and national levels, and that they also form part of international progress reports, such as UNICEF, UNAIDS, and WHO's annual *Towards Universal Access* report.

Step 4: Ask participants the following questions:

- What is the age breakdown of data at your facility (e.g. often, it is <15 years and >15 years for HIV care and treatment programs)?
- What does it mean to disaggregate data, specifically thinking about HIV services?
- How could further disaggregating our clinic data help us? What age groups would you use?

Make the point that, often, routine reporting breaks data into 2 age categories: under age 15 and over age 15. However, disaggregating data (or separating the data) into more age groups can be helpful for programs. If possible, data should be collected and analyzed by the following age groups: ages 10-15 (early adolescence); ages 16-19 (late adolescence); ages 20-25 (early adulthood).



Make These Points

- Monitoring and evaluation (M&E) is the standardized process by which data related to
 the delivery of HIV services are collected and evaluated. These data can be used to
 monitor progress in the implementation of adolescent care and treatment services at
 the facility level, and can also be evaluated at the district and national levels.
- Monitoring is the routine process of data collection and measurement of progress toward program objectives.
- If possible, program data should be collected and analyzed using the following age groups: ages 10-15 (early adolescence); ages 16-19 (late adolescence); and ages 20-25 (early adulthood). This gives us more detailed information about the services being provided to young people

Monitoring

Monitoring is the routine process of data collection and measurement of progress toward program objectives. Monitoring involves COUNTING what we are doing. It also involves routinely checking the quality of services. Monitoring is a process that helps to identify problems early so that they can be corrected quickly. This requires that data be collected, compiled, and analyzed on a routine basis.

Health workers play a vital role in the monitoring process by regularly collecting (i.e. recording), compiling, and reporting data to determine, for example, the number of adolescents enrolled in HIV care, the number receiving ART, the number retained in care over time, and the types of clinical and support services offered to adolescents.

Monitoring and evaluation of adolescent HIV care and treatment programs can help to:

- Assess whether a program is meeting its targets
- Identify and improve problem areas in the implementation of adolescent HIV care and treatment services

Routine monitoring and evaluation are necessary to gather information on care and treatment **program outcomes**, such as:

- Is the program retaining adolescent clients in care?
- Are all eligible adolescents receiving ART?
- Are routine lab tests and clinical follow-up visits being conducted on schedule?

Program outcomes are usually the cumulative tally of individual outcomes and can give insight into the strengths and the areas needing improvement within an individual facility or across an entire district.

Often, when reporting outcomes, programs separate data into only two age groups: under 15 years and over 15 years. However, **disaggregating data (or further separating the data)** into more age groups allows for more meaningful interpretation of program outcomes.

It is recommended that data be collected and analyzed using these age categories:

- Ages 10-15 years (early adolescence)
- Ages 16-19 years (late adolescence)
- Ages 20-25 years (early adulthood)



Trainer Instructions

Slides 12-16

Step 5:

Lead a discussion on indicators and targets for adolescent HIV care and treatment programs. Ask participants to brainstorm the following:

- What are "indicators?" Can you give an example of an adolescent care and treatment indicator?
- What are "targets?" Can you give an example of an adolescent care and treatment target?

Allow a few minutes for brainstorming and then define the term "indicators," giving examples of indicators used to monitor adolescent care and treatment services (see Table 14.1). Next, define the term "targets" and review the examples of the 3 priority adolescent care and treatment targets listed in Table 14.2.



Make These Points

- Indicators provide information about key service interventions. Indicators can be
 calculated at the facility, district, or national level, depending on need and how these
 data will be used. It is important to monitor and evaluate changes in indicators over
 time.
- Targets are specific goals established before a new program or service is implemented or at other specific times (for example, setting annual targets for the number of adolescents enrolled and retained in care).

Indicators

Indicators are summary measures used to help indicate the status of a program's activities.

- Indicators measure things such as the number of adolescent clients tested and informed of their HIV-status, the number enrolled in HIV care, and, of those, the number initiating ART. See Table 14.1 for more examples of indicators.
- Pediatric and adult HIV care and treatment indicators are established at the national level according to the needs, resources, and standards of the specific program. Indicators are often defined in the national strategic plan for HIV.
- National level indicators generally cover service delivery to PLHIV, quality of care, and management-related information.
- Although indicators are identified at the national level, they can be calculated at the facility, district, or national level depending on need and how these data will be used.
- Some facilities have their own indicators in addition to the nationally-established indicators. Facility-level indicators can help to identify progress, problems, challenges, and solutions in the delivery of adolescent HIV care and treatment services at specific facilities. For example, facility level indicators could show how many adolescents are missing appointments and, of those, how many are followed up and returned to care.
- Indicators may need to be revised periodically (for example, in response to changes in national guidelines for the program or services being monitored).
- Indicators reflect a certain timeframe for example, over the course of a month, a quarter, or a year.
- It is important to measure changes in indicators over time. For example, if the number of HIV-infected adolescent enrolled in care is 20 in 2000, 40 in 2002, and 30 in 2004, we would want to explore reasons why the number of enrolled adolescents decreased from 2002 to 2004. One possible explanation could be that the program did not have enough physical space or provider time to continue expanding services to more than 40 adolescents per year, the maximum obtained in 2002.

Table 14.1: Examples of adolescent HIV care and treatment indicators

- Number HIV-infected adolescents (aged 10–19) enrolled in care
- Number of adolescents who initiated ART
- Number of adolescents currently receiving ART
- Number of adolescents who had a change of therapy
- Number of adolescents for whom ART was discontinued
- Number of adolescents lost to follow-up
- Number of adolescents transferred to other facilities
- Number of adolescents who have died
- Number of adolescents who have become pregnant

In addition to absolute numbers, it is good to calculate **proportions** (e.g. the proportion of adolescents who have discontinued care, the proportion who have transferred out, the proportion who have died, etc.) as this gives more useful and comparative information than raw numbers alone. However, since measuring proportions is often difficult to do, programs may wish to select a small number of priority proportions to measure. Some examples are given below and in *Appendix 14A: ICAP's Adolescent Standards of Care*.

Targets

Targets are specific goals established before a new program or service is implemented and on a regular basis thereafter. For example, a target may be "To ensure that 95% of eligible adolescent clients initiate ART." See Table 14.2 for examples of priority targets for adolescent HIV care and treatment programs.

Table 14.2: Priority targets for adolescent care and treatment programs

Table 14.2: Priority targets for adolescent care and treatment programs				
Priority Indicator	1: 95% of adolescent patients in HIV care and treatment receive Cotrimoxazole (CTX) prophylaxis			
Measured by: Proportion of adolescent patients in HIV care and treatment receiving cotrimoxazole (CTX) during the quarter				
Numerator:	Number of adolescent patients in HIV care and treatment receiving cotrimoxazole (CTX) prophylaxis during the quarter			
Denominator:	Number of adolescent patients receiving HIV care during the quarter			
Priority Indicator 2: 90% of adolescent patients enrolled remain in care for at least 6 months				
Measured by: Proportion of adolescent patients enrolled in care who remained in care for 6 months				
Numerator:	Number of adolescent patients still in care at 6 months after enrollment			

Number of adolescent patients enrolled in care in a given 3 month period

Denominator:

(e.g. April-June)

(e.g. Oct-Dec)

<u>Priority Indicator 3:</u> 95% of all adolescent patients in HIV care and treatment receive TB screening

Measured by: Proportion of adolescent patients in HIV care and treatment receiving TB screening at enrollment by symptom check list during the quarter

Numerator: Number of adolescent HIV patients screened for TB at enrollment into

HIV care during the quarter

Denominator: Number of new adolescent HIV patients enrolled in HIV care during the

quarter



Trainer Instructions

Slides 17-21

Step 6:

Next, ask participants to brainstorm about the following:

• What is "evaluation?" What questions might an evaluation answer?

Discuss evaluation as a way of assessing the change in indicator measurements and stress the importance of measuring indicators over time. Present key points about evaluation from the content below and the slides.



Make These Points

- Evaluation is the process of tracking changes in indicators that reflect service delivery and determining whether pre-established targets have been reached.
- Monitoring and evaluation are continuous processes, not one-time events.

Evaluation

While monitoring helps look at progress in indicators and helps us know if we are reaching our targets, evaluation examines the process in greater depth and helps us understand what the indicators are really telling us. Evaluations help take a closer look at the outcomes of interest and can help answer questions about what outcomes mean and what differences the program is making.

- Evaluations are typically conducted at specific time periods (for example, at the end of the year), whereas monitoring happens on a daily, monthly, and quarterly basis.
- At its simplest, an evaluation of routinely collected data from the adolescent HIV care and treatment program will demonstrate to what extent planned activities are actually realized by comparing targets with indicator measurements. So, for example, an evaluation might help to answer the following questions:
 - What percent of the target for ART initiation was reached by the program last year? (In other words, did we initiate as many people on ART as we had planned or expected to enroll?)

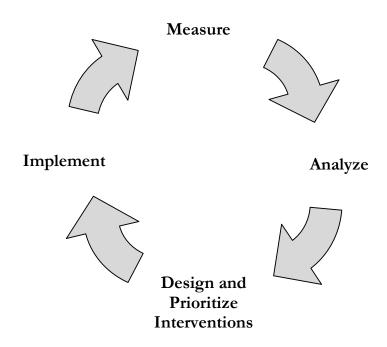
Evaluations can also involve research methods to systematically investigate a program's effectiveness. In this case, evaluation may involve special studies and specific research design, and may require a control or comparison group. One might use evaluation to answer the following program questions:

- Are adolescents enrolled in a peer support group more likely to return for scheduled appointments compared to adolescents who do not participate in peer support groups?
- Are adolescents enrolled in the program experiencing a better quality of life? (Use patient surveys to collect these data)
- Has the program reduced the number of adolescents hospitalized for HIV-related illnesses? (Compare hospitalization rates before and after the adolescent program started, using chart review)

Evaluations should be conducted regularly to look at changes that occur as the adolescent HIV program is implemented and maintained. For example, has the percentage of adolescents who receive TB screening improved since the start of the program? What about the percentage of adolescents who are retained in care for at least 6 months? If so, can these changes be attributed to our program? This will enable program staff to identify areas of program strength and weakness, and to respond to weaknesses by investigating and correcting problems.

The monitoring and evaluation process is a continuous one, as shown in Figure 14.1, below.

Figure 14.1: Monitoring and evaluation as a continuous process



Adapted from: ICAP. (2007). Clinical systems mentorship: The ICAP guide to site support. Available at: http://www.columbia-icap.org/resources/supporttools/files/SSG.Draft%201.1.pdf



Trainer Instructions

Slides 22-25

Step 7:

Discuss reporting, focusing on the use of monitoring data to complete monthly reports and how summary data can be used to evaluate services. Ask participants the following questions:

- At your clinic, how are the monthly summary forms and reports completed? To whom are they submitted?
- These reports are analyzed at the district is there someone at your clinic who analyzes them as well?
- What is done with the information in these monthly reports? Is it ever used to improve/modify services?

Recording key points on flip chart and fill in as needed using the content below and the slides.



Make These Points

- Monitoring and evaluation (M&E) is an ongoing, continuous process that informs the
 planning and implementation of changes aimed at improving the delivery of adolescent
 HIV care and treatment services.
- Indicators are calculated using routinely collected "data elements," which are recorded in registers and summarized on monthly summary forms.
- Key staff should review their facility's monthly report to ensure that activities will meet targets and goals. Program successes and weaknesses, along with a monthly data summary, should be reviewed at multidisciplinary team meetings in order to initiate discussion on how weaknesses will be addressed.

Reporting

There are numerous steps in the reporting process and each step is important:

- 1. Individual client data are recorded in facility-held patient charts, patient-held records, and/or nationally standardized **registers**.
- 2. Data in these registers are tallied and the totals are recorded on nationally standardized monthly summary forms. These totals summarize a facility's progress on key indicators (such as those listed in Table 14.1).
- 3. These monthly summary forms are submitted to the district level.
- 4. Districts collate the monthly summary forms (in other words, they put together the forms from all of the district clinics) and submit the collated data to the national level.

The data summarized on each monthly summary form should also be compiled into a **monthly report** so staff can review how the program is doing. The monthly report for the facility might include that which was reported to the district as well as additional data, such as data collected on retention or quality indicators (see Session 14.2).

All staff must be aware of the importance of completing registers in an accurate way. Monthly summary forms and reports will only be accurate if registers are completed correctly and consistently. This is discussed further in the next session.

Program Modification

At every level of the system — facility, district, and national — monthly summary forms should lead to discussion on how the program can be modified or improved to better meet targets. (This activity is referred to as "design and prioritize interventions" in Figure 14.1)

For example, if the most recent monthly report indicated that 10 out of 50 (20%) newly
enrolled HIV-infected adolescents with CD4 cell counts less than 350 were initiated on ART
this month, but that the target was to initiate at least 80% of those who were eligible on
ART, we would want to identify ways that the program could be modified or improved in
order to reach the target.

Such program improvements will require discussion of the following:

- What is the problem?: What are the barriers to rapid ART initiation for adolescents? Can ART adherence training be streamlined? If many of our adolescent clients are orphans, is there a problem identifying treatment buddies or caregivers who are responsible for supporting ART adherence? Are there delays in getting CD4 test results from the laboratory prior to initiating ART?
- How will we address the problem?: Once the key problems have been identified, how will these problems be addressed?
- What is our plan?: Once the key solutions and specific actions have been identified, who will address the issue, by when, and using what funding (if funding is needed)?
- How will we know if the plan is working?: How will we know if the new initiative is working? Will we look at this year's first few monthly reports (or quarterly summary report, if available)? If so, what improvement do we expect to see? Will we consider the program modifications successful if our ART initiation increases to 40%? 65%? 80%?

This process is discussed in more detail in the "Quality Improvement" section in Session 14.2.



Trainer Instructions

Slides 26-31

Step 8:

Discuss the characteristics of effective M&E systems from the content below and in the slides, highlighting the importance of confidentiality and accuracy. Note that the more complete and accurate the information collected with the data collection tools (forms and registers) is, the more useful the results of monitoring will be.

Step 9:

Provide an overview of the national HIV care and treatment record keeping and reporting systems and then summarize the standardized national forms used to provide data on HIV care and treatment for adolescents.

Provide copies of commonly used registers and forms to each participant. It may also be helpful to have samples of forms and registers that have been completed, as well as written instructions on how to complete them. Remind participants that they will have a chance to practice filling in these forms and registers as a part of the practicum session.



Make These Points

- Standard national forms and registers are used to collect key data on adolescent HIV
 care and treatment services. These national tools are periodically revised and updated
 based on changes in national HIV guidelines, so it is important to check that your facility
 is using the most updated versions.
- It is very important that facilities follow a consistent procedure for counting enrollment and retention of adolescent clients as they are "transferred out" of pediatric registers and "transferred in" to adult registers.
- Patient confidentiality must always be maintained. All records, including registers, must be kept in a secure location and no identifying data should leave the site.
- Ensuring that data are collected and recorded accurately, completely, and reliably on standardized forms and according to established procedures is the responsibility of the staff members who conduct these duties.

Adolescent HIV Care and Treatment Data Collection and Forms

Standard data collection and accurate recording of activities and outcomes are essential. Data collection for adolescent HIV care and treatment is usually done through the existing national M&E system, using existing national HIV care and treatment forms and registers. There is not usually a separate system with adolescent-specific forms.

- In most cases, adolescent data will be captured in the national forms for pediatric HIV, meaning that the same system and tools can be used to describe, monitor, and evaluate both the pediatric HIV program and the adolescent program.
- This is why it is particularly important that data are appropriately disaggregated by age, as described previously.
- However, if an adolescent client is provided with care in an adult HIV clinic (either because
 he or she has been transitioned to the adult HIV clinic or because pediatric services are
 unavailable), then facilities should use the national forms for adult HIV care and treatment to
 report activities related to the ALHIV.

Characteristics of effective M&E systems

Effective monitoring and evaluation systems require record keeping that is:

- Accurate in other words, correct and true. So, if a client's CD4 count is 401, make sure that "401" is entered correctly in the appropriate cell, along with his or her identifying code or name.
- **Reliable** completed the same way every time (for example, recording the adolescent's age in years and months at every visit)
- **Standardized** recorded using the same tools (for example, using the same registers, abbreviations, formulas, and definitions) in every clinic across the district or country
- Recorded following established guidelines

Be mindful of adolescents who have transitioned to adult care:

- In facilities with established adolescent programs, adolescents may need to be "transferred out" of pediatric registers and monthly summary forms as they age and "transferred in" to adult HIV program reporting forms and registers.
- There should be national guidelines for this procedure, but if they cannot be identified, facilities should have their own consistent procedure for counting enrollment and retention of adolescents who have begun to meet the definition of "adult" HIV patients.
- Care taken with these data issues will be rewarded with more accurate data on retention of adolescents in the program.

Remember these important points:

- Systems for documenting care and treatment activities must maintain client confidentiality. All records, including registers, must be kept in a secure location and no identifying data should leave the site.
- It is the responsibility of all staff members who complete registers or summary forms to ensure that data are accurate and complete and that data collection protocols are followed. Attention to accuracy will help to ensure that monthly, quarterly, and annual reports accurately reflect services and activities conducted at the clinic.

The following is a list of some of the key registers and forms facilities use to monitor activities in their adolescent programs (note that this list assumes adolescents are being captured on pediatric registers and forms; adapt as needed if adolescents will only be seen in adult clinics):

- Ward or clinic register
- General HIV counseling and testing register
- Patient care card
- HIV care summary sheet
- Pediatric clinical follow-up form
- Pediatric ART eligibility form
- Pediatric adherence form
- Pharmacy logbook/register
- Patient status form
- TB diagnostic worksheet and TB screening tool
- Pediatric patient locator form



Trainer Instructions

Slides 32-33

Step 10:

Lead a discussion on the importance of appointment and tracking systems as a part of comprehensive care for ALHIV. Ask participants the following questions and fill in as needed using the content below and in the slides:

- What appointment and tracking systems exist in your facility?
- Why are appointment and tracking systems important for adolescent care and treatment?
- How might you improve these systems in the future?



Make These Points

 Follow-up systems for patient tracking are recommended to support adherence to care and medicines.

Tracking Missed Appointments

Health facilities should use an **appointment book** to keep track of upcoming and missed appointments. A follow-up system should also be developed to contact those who have missed appointments (and their caregivers) to try to bring them back into care.

A follow-up system requires:

- A working appointment system whereby health workers can readily track missed appointments and contact clients (and caregivers) who have missed an appointment in order to bring them back to the clinic.
- In urban areas, contact may involve the use of cell phones (making phone calls or sending SMS messages). In rural areas, contact may involve the efforts of community workers, NGOs, Peer Educators, family members, or friend networks.
- Contacting clients and families when appointments have been missed, either by phone or home visit, requires the consent of the adolescent client and/or the caregiver. Therefore, a system should be in place to obtain contact information at enrollment, to update this information at each subsequent visit, and to routinely request consent to follow up missed appointments.



Trainer Instructions

Slides 34-38

Step 11:

Facilitate Exercise 1 to give participants a chance to review and discuss a data sample that could have come from an adolescent HIV care and treatment program.

Exercise 1: Using Data for Decision-Making: Small group work and large group discussion						
Purpose	To review adolescent HIV care and treatment data and to analyze the					
	data for use in program decision-making					
Duration	50 minutes					
Advance	Review and analyze the sample adolescent HIV care and treatment					
Preparation	quarterly report (Table 14.3) and review all calculations to ensure you understand them.					
	 Note that the "% of Target" column does not appear in the 					
	Participant Manual. Participants should calculate these percentages when working in small groups.					
	Bring in calculators so that the small groups can calculate					
	percentages for the sample data set. Participants may also use the					
	calculators on their cell phones or laptops.					

Introduction This exercise is a chance for us to review and analyze some sample adolescent care and treatment data. Regular analysis of program data provides the information we need to identify gaps and weaknesses in services. It also indicates where effort is needed to make improvements. **Activities Small Group Work** 1. Break participants into small groups. 2. Part 1 of small group work: Give the groups about 20 minutes to review the data in Table 14.3 (below). Ask the groups to calculate the "% of Target" in the last column, based on the data provided. Then ask them to discuss the following questions: A. For which indicators is Clinic Make Believe doing well and meeting its targets? How do you know? B. For which indicators is Clinic Make Believe NOT meeting its targets? How do you know? C. If the number of adolescents enrolled in care in Q4 (the 4th quarter) of 2009 was 450 and the number of adolescents receiving ART was 290, would you say the clinic is doing better or worse enrolling clients in ART in 2010? D. Which areas should the staff of Clinic Make Believe focus on improving? 3. Part 2 of small group work: Ask the groups to take another 10 minutes to identify one of the areas that needs improvement at Clinic Make Believe and to discuss: A. What is the problem? B. How should we (assuming we are the managers at Clinic Make Believe) address the problem? The trainer should circulate among the small groups during the discussion to respond to questions and to correct any misconceptions. **Small Group Presentations and Large Group Discussion** 4. Reconvene the large group. Ask the first small group to report on Part 1 of the small group work. Ask other groups to comment on whether or not they agree and why. 5. Ask another group to report on Part 2 of the small group work. Encourage discussion as answers to the 2 questions may vary. 6. Ask if any small group chose a different indicator (than the one already reported on) for Part 2 of the small group work. If so, ask that group to report as well. Encourage discussion about their answers to the 2 questions. 7. (optional) Ask the adolescent co-trainer to comment on the ways facilities can involve ALHIV in the review and analysis of routinely collected data, with the aim of identifying gaps and improving services. A close review of the data in routine (monthly, quarterly, or annual) Debriefing summary reports can provide much information about the strengths and weaknesses of a program.

- In reviewing summary reports, it is important to compare the current period's data with data from the previous period (or against targets).
 Otherwise, you won't know if the data represent an improvement or a decline in services.
- When comparing raw data against targets, calculate percentages (use the current period figures as the numerator and the target as the denominator) to get a better sense of progress or to compare with earlier periods (months, quarters, or years).

Table 14.3: Sample data for Exercise 1

Quarterly adolescent HIV care and treatment summary rep	ort for Clinic	Make Believe	
Number of adolescents enrolled in care	2010, Q4	Target*	% of Target
Females, aged 10–14	100		
• Males, aged 10–14	95		
• Females, aged 15–19	150		
• Males, aged 15–19	165		
Total	510	550	93%
Number of adolescents receiving ART	2010, Q4	Target*	% of Target
• Females, aged 10–14	75		
Males, aged 10–14	70		
• Females, aged 15–19	102		
• Males, aged 15–19	120		
• Total	367	350	105%
Number of new adolescent clients	2010, Q4	Target*	% of Target
• Females, aged 10–14	1		
• Males, aged 10–14	2		
• Females, aged 15–19	22		
• Males, aged 15–19	12		
• Total	37	40	93%
Number of adolescent clients who missed appointments	2010, Q4	Target*	% of Target
• Females, aged 10–14 (75 had appointments this quarter)	20 (27%)		
Males, aged 10–14 (70 had appointments this quarter)	23 (33%)		
• Females, aged 15–19 (95 had appointments this quarter)	37 (39%)		
 Males, aged 15–19 (105 had appointments this quarter) 	42 (40%)		
 Total (345 had appointments this quarter) 	122	10% of those	35% vs. 10%, they
	(35%)	in care, max.	are doing poorly
Number of adolescent clients attending support group meetings	2010, Q4	Target*	% of Target
• Females, aged 10–14	55		
• Males, aged 10–14	45		
• Females, aged 15–19	120		
• Males, aged 15–19	130		
• Total	350	50% of those in care	69% vs. 50%, they are doing well
Number of support group meetings held at the clinic	2010, Q4	Target*	% of Target
• For 10–14 year olds	6		
• For 15–19 year olds	10		
For caregivers	3		
• Total	19	9	211%
Number of active Adolescent Peer Educators at the clinic	2010, Q4	Target*	% of Target
Number of active Adolescent Peer Educators at the clinic	15	6	250%
* If a cell is blank, it means that sub-targets have not been stated	l .		

Exercise 1: Using Data for Decision-Making: Small group work and large group discussion Part 1 of small group work

A. For which indicators is Clinic Make Believe doing well and meeting its targets? How do you know?

Clinic Make Believe is doing very well in the following areas:

- Number of adolescents receiving ART
- Number of adolescent clients attending support group meetings
- Number of support group meetings held at the clinic
- Number of active Adolescent Peer Educators at the clinic

B. For which indicators is Clinic Make Believe NOT meeting its targets? How do you know?

Clinic Make Believe is not meeting its targets for those indicators that are circled in the column on the right:

- Number of adolescents enrolled in care
- Number of new adolescent clients
- Number of adolescent clients who missed appointments

C. If the number of adolescents enrolled in care in Q4 (the 4th quarter) of 2009 was 450 and the number of adolescents receiving ART was 290, would you say that the clinic is doing better or worse enrolling clients in ART in 2010?

In Q4 of 2010, Clinic Make Believe had 367 of 510 clients enrolled in ART (about 71%). In Q4 of 2009, the clinic had 290 of 450 clients enrolled in ART (about 64%). In 2010, the clinic had a higher percentage of its clients on ART, so we can say that it did better in 2010 enrolling clients in ART than it did in 2009. Note that numbers had to be translated into percentages before they could be compared.

D. Which areas should Clinic Make Believe staff focus on improving?

Staff should focus on all three of the above areas, but the indicator where the most work is needed is: number of adolescent clients who missed appointments.

Part 2 of small group work (assuming that small groups want to focus on "number of adolescent clients who missed appointments" — please note that some of the groups may have chosen to work on either of the other two indicators for which Clinic Make Believe did poorly):

A. What is the problem?

Participants should discuss, but there could be any number of things going on: maybe the clinic doesn't have an appointment system or, even if they do, maybe the clinic doesn't have a client tracking system. If the clinic has a client tracking system, maybe the data from it are not analyzed or followed up. Does the clinic need to hire someone to track clients who miss appointments? Someone who could make phone calls, send SMS messages, and make home visits?

Or maybe the problem has more to do with accessibility (maybe the clinic is far from town and there no mass transportation), staff attitude, lack of youth-friendly services, or maybe services are offered at times when young people are not available.

Maybe you need a bit more information to find out exactly who is missing their appointments, for example:

- Is the missed appointment rate any different by age or gender? (Answer: Males have a slightly higher missed appointment rate as do older age groups).
- Is the missed appointment rate lower for those on ART? This information would be
 interesting to know, but data are not available in this summary report to calculate it.
 For the next quarter, consider collecting information on the ART status of those who
 have missed their appointments.
- B. How should we (assuming we are the managers at Clinic Make Believe) address the problem?

It depends on the problem. Participants should discuss.



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Step 12:

Allow 5 minutes for questions and answers on this session.

Session 14.2 Quality Improvement and Supportive Supervision



Total Session Time: 40 minutes



Trainer Instructions

Slides 40-41

Step 1: Begin by reviewing the session objectives listed below.

Step 2: Ask participants if there are any questions before moving on.

Session Objectives

After completing this session, participants will be able to:

- Describe the purpose of quality improvement (QI)
- Define and describe supportive supervision



Trainer Instructions

Slides 42-48

Step 3:

Ask participants to discuss these questions:

- What does "quality" mean to you when thinking about adolescent HIV care and treatment services?
- How do you think facility managers would define quality? What about adolescent clients?
- How do you think monitoring and evaluation and QI are related? (Possible response: monitoring data indicates where there are weakness and gaps in service; quality improvement initiatives should then be used to address these weaknesses).

Make the point that everyone has a different perspective on what quality means. When developing plans to measure and improve the quality of our services, we need to consider all of these perspectives, as well as national guidelines and indicators.

Step 4:

Define Quality Improvement (QI). Emphasize the different but related goals of QI versus M&E. Explain that both are integral to supporting effective, high-quality adolescent HIV care and treatment programs.

Step 5:

Using the content below, provide an overview of some of the methods that can be used to asses quality and give examples of what QI activities might evaluate (for example, the youth-friendliness of services or compliance with national guidelines and standard operating procedures). Refer participants to Appendix 14A: Adolescent Standards of Care (SOCs) and explain that these SOCs can be used to routinely monitor key indicators related to the quality adolescent services.

Give participants time to discuss and to give their inputs on the methods used to assess quality, including adolescent SOCs.



(optional) Ask the adolescent co-trainer to give his or her thoughts on the ways adolescents can be involved in QI activities.

Step 6:

Ask participants to discuss possible solutions/interventions to the following problems that might be identified through QI activities:

- Older adolescents often miss their clinic appointments.
- There has been an increase in the number of adolescent clients presenting with STIs.
- Many younger adolescent clients have not been fully disclosed to and therefore do not understand why they need to take medicines every day.
- Regular attendance of the support group is low and adolescent clients think it is a "waste of time."



Make These Points

- Quality Improvement is the means by which activities are routinely evaluated to check whether services offered by the multidisciplinary team are following established guidelines and standard operating procedures.
- The purpose of QI is to identify problems (in service delivery, in data, or in both) so they can be corrected, thereby improving services for adolescent clients and their families.
- QI should be a routine, ongoing part of the normal functioning of health facilities.
- A variety of methods can be used to conduct QI, including:
 - Periodic reviews of records and charts
 - Defining standards of care (SOCs) and assessing progress toward meeting these standards on a quarterly basis (see Appendix 14A)
 - Direct observation of health workers' (and Peer Educators') activities
 - Assessments of the youth-friendliness of services, for example, by using the tool in Appendix 2B
 - Individual interviews or focus groups with adolescent clients and caregivers
 - Involvement of ALHIV, such as Adolescent Peer Educators, in routine QI activities
- It is important to set up an established time for multidisciplinary teams and managers to discuss QI findings and issues, and to plan the way forward (for example, through quarterly meetings).

Quality Improvement (QI)

Quality Improvement is the means by which activities are routinely evaluated to check whether services offered by the multidisciplinary team are following established guidelines and standard operating procedures (SOPs). QI may also be referred to as quality assurance (QA). The purpose of QI is to identify problems so they can be corrected, thereby improving services for adolescent clients and their caregivers.

QI is different from monitoring and evaluation. Monitoring can tell us how many clients attended the clinic or how many received ART last month. QI, on the other hand, can tell us whether those clients were happy/satisfied with the services they received and whether they were provided with sufficient education and appropriate adherence counseling.

QI should be a routine, ongoing part of the normal functioning of health facilities. It should incorporate procedures in which all staff at all levels — not just supervisors — are involved.

Methods to Assess Quality

It is often necessary to use a variety of methods to assess program quality. Standard monitoring tools, such as patient forms and registers, capture only a fraction of the services provided to adolescents and they provide no information on the quality of those services.

For example: If only forms, client records, and registers were used to assess quality, there would be no information on the youth-friendliness of clinical services; on the quality of psychosocial support, adherence, and other counseling sessions; or on the quality of referrals made to community-based support services.

QI activities might examine and evaluate:

- The quality and youth-friendliness of services (see Module 2)
- Compliance with national guidelines, standard operating procedures, and protocols for HIV care and treatment
- The adequacy of space and the attention to privacy and confidentiality
- Linkages to ongoing support and community-based services

QI activities may vary to some extent from one facility to another, based on the type of facility and the facility's experience with adolescent HIV care and treatment services.

QI activities might include:

- Periodic reviews of records followed by staff feedback — reviewers should check for the accuracy, completeness, and consistency of the entries in various forms, registers, and patient files used in the clinic.
- Defining and regularly measuring adolescent SOCs (see box to the right)
 - to the right)

• Direct observation of clinical procedures and counseling sessions

- Periodic assessments of the youth-friendliness of services, including the level of youth participation (the checklist presented in *Appendix 2B* may be used)
- Interviews with staff either directly or indirectly involved in the adolescent care and treatment program, in order to obtain feedback on specific indicators. Case conferences may be used as a forum to highlight current challenges, systems that are working, and systems that need improvement, and to propose solutions.

Adolescent Standards of Care (SOCs)

ICAP has developed **Standards of Care**

for different HIV program areas. These

key standards over time, in order to

improve quality. See Appendix 14A.

SOCs are tools to help programs measure

- Individual interviews or focus groups with adolescent clients who receive care and treatment services at the clinic. For example, do adolescent clients feel that adequate information and support were provided during counseling sessions? Did they feel welcomed at the clinic? Were they treated non-judgmentally by health workers? Was it clear what would be expected of them, for example, how and when they should follow up? Were their other health and psychosocial needs assessed and addressed (for example, sexual and reproductive health services)? Was their privacy and confidentiality respected?
- Individual interviews or focus groups with caregivers of adolescent clients who attend the clinic. For example, do caregivers feel that they were provided with adequate information on supporting the adolescent at home?
- Exit interviews or surveys completed anonymously by clients. A sample client satisfaction survey for youth is included as *Appendix 2C*. Client satisfaction surveys, which are typically given to clients as they complete their clinical visit, are a mechanism for clients to give their opinions about the services they received without fear that their honest feedback might affect their care. Client satisfaction surveys are typically administered either to all clients or to a random selection of clients for 1 to 2 weeks, 3 or 4 times a year.
- Evaluation of physical space, client flow, and time concerns through observation and staff and client interviews.
- Meeting with representatives of services where adolescent clients and caregivers are referred. Ask them about client needs, gaps in services, and feedback they may have received from adolescents regarding the facility's services.

How often should QI be conducted?

During initial implementation, daily or weekly QI activities allow for immediate follow-up aimed at correcting problems that have been identified. As services become established, reviews should become a formal part of overall adolescent HIV care and treatment program monitoring activities at designated intervals (monthly progressing to quarterly reviews). For example, ICAP recommends measuring SOCs on a quarterly basis (see *Appendix 14A*). Although supervisors have the ultimate responsibility for QI, QI-related activities should be shared among all members of the team.

It is important to establish a time for multidisciplinary team members and managers to discuss QI findings and issues, and to jointly come up with ideas and solutions for quality improvement. This may be accomplished as part of routine, monthly multidisciplinary team meetings or through quarterly meetings dedicated to QI review.



Trainer Instructions

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Step 7:

Introduce the concept of supportive supervision. Ask participants:

- Have you received or provided "supportive supervision" in your work?
 Please explain.
- What are the qualities associated with "supportive supervision?" For example, if you were expanding adolescent HIV care and treatment services within your facility, what could your supervisor do to help and support you to set up these services?

Write responses on flip chart.



(optional) Ask the adolescent co-trainer to comment on the types of supportive supervision he or she thinks Adolescent Peer Educators need.

Step 8:

Give an overview of supportive supervision, including its aims, using the content below and the slides. Be sure to review and discuss Figure 14.2 as a large group.



Make These Points

- An important component of responding effectively to QI findings is to provide supportive supervision. Supportive supervision is an approach to QI that requires collaboration between supervisor and staff. The supervisor must work with staff to:
 - Establish goals
 - Monitor performance
 - Identify and correct problems
- The goals of supportive supervision are to:
 - Obtain valuable information on program functioning and quality
 - Improve health worker (or Peer Educator) performance by providing one-to-one support to address an identified deficiency and to build health workers' skills
 - Acknowledge good practices by providing positive feedback and noting health workers' (and Peer Educators') contributions to the success of the program
 - Involve supervisors, health workers, and volunteers (such as Peer Educators) to improve service provision
 - Facilitate on-site, participatory problem-solving
 - Involve youth in giving feedback and improving service provision
 - Assure that the program is successful in meeting the needs of ALHIV and their caregivers and families
 - Motivate staff and volunteers

Supportive Supervision

QI activities are not complete without assessing the results of each QI review and planning a

response. Often, weaknesses discovered through QI activities require supervisors to work directly with staff (including Adolescent Peer Educators) to address underlying problems. It is important that supervisors explain to their staff that QI activities are not simply the responsibility of supervisors, but rather that all service-improvement activities conducted by any staff member are a part of the continuous QI process.

The Focus of QI

QI is most effective when the focus is on providing guidance and mentorship, as well as using group problem solving techniques, to help health workers correct problems and overcome barriers to quality service provision.

An important component of responding effectively to QI findings is providing **supportive supervision**.

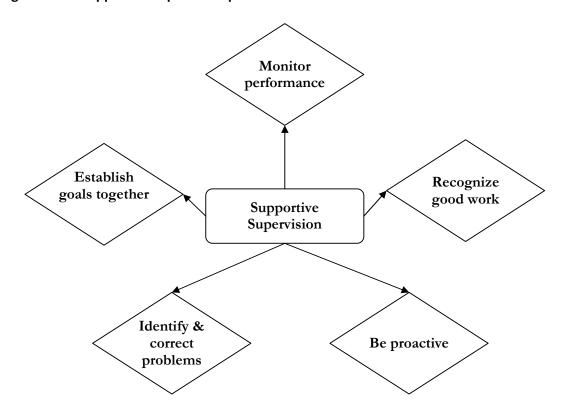
- Supportive supervision is an approach in which supervisors work with staff to establish
 goals, monitor performance, identify and correct problems, and proactively improve the
 quality of adolescent HIV care and treatment services through training, one-to-one support,
 mentoring, and coaching.
- Supportive supervision methodologies can also be extended to other contexts beyond QI, for example as a component of training.

Supportive supervision aims to:

- Obtain valuable information on program functioning and quality
- Improve health worker performance by providing one-to-one support to address an identified deficiency and to build health workers' skills
- Acknowledge good practices by providing positive feedback and noting health workers' (and Peer Educators') contributions to the success of the program
- Involve supervisors, health workers, and volunteers (such as Adolescent Peer Educators) to improve service provision this is not the sole responsibility of the supervisor. It is also important to encourage health workers and Peer Educators to support each other through peer mentoring.
- Facilitate on-site, participatory problem-solving. Health workers should be encouraged to become comfortable participating actively in addressing weaknesses along with their supervisor.
- Involve youth in giving feedback and improving service provision
- Assure that the program is successful in meeting the needs of ALHIV and their caregivers and families
- Motivate staff and volunteers

Once a deficiency in service provision is identified, supportive supervision must be established as quickly as possible to prevent poor practices from becoming routine. Figure 14.2 illustrates the concept of supportive supervision.

Figure 14.2: Supportive supervision process





Trainer Instructions

Slide 55

Step 9: Allo

Allow 5 minutes for questions and answers on this session.



Trainer Instructions

Slides 56-58

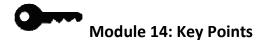
Step 10:

Ask participants what they think the key points of the module are. What information will they take away from this module?

Remind participants that they will have a chance to practice data collection more during the clinical practicum, and that they will have a chance to plan more about QI and supportive supervision during the action planning session in Module 16.

Step 11: Summarize the key points of the module using participant feedback and the content below.

Step 12: Ask if there are any questions or clarifications.



- Monitoring and evaluation (M&E) is the standardized process by which data related to the delivery of services are collected and evaluated.
- M&E is a continuous process that informs the planning and implementation of adolescent HIV care and treatment services.
- Indicators are calculated using routinely collected data. They can be calculated at the facility, district, or national level.
- Targets are specific goals established before a new program or service is implemented or at other specific times.
- Standard national forms and registers are used to collect key data on adolescent HIV care and treatment services.
- If possible, program data should be collected, disaggregated (or separated), and analyzed by the following groups: ages 10-15; ages 16-19; and ages 20-25.
- Key staff should review their facility's monthly forms/reports to ensure that activities will
 meet targets and goals. Program successes and weaknesses, along with a monthly data
 summary, should be reviewed at multidisciplinary team meetings in order to initiate
 discussion on how weaknesses will be addressed.
- Patient confidentiality must be always be maintained.
- Quality Improvement (QI) is the means by which activities are routinely evaluated to check whether services offered are following established guidelines and SOPs.
- QI should be a routine, ongoing part of the normal functioning of health facilities. A variety of methods may be used to conduct QI.
- An important component of responding effectively to QI findings is to provide supportive supervision.
- Supportive supervision requires collaboration between the supervisor and staff to establish goals, monitor performance, and identify and correct problems.

Appendix 14A: Adolescent Standards of Care

ICAP Standards of Care (SOCs)		Quarterly	Numerator	Possible	Evaluation of Program Quality			
	for Pediatrics (Adolescents) ¹	Measure of SOC	Denominator	Source of information	Result of Quarterly measure of SOC Possible Actions			
1.	All HIV-infected adolescents should receive CD4 testing at enrollment in HIV care.	% of HIV-infected adolescents with CD4 test result within 1 month of enrollment	# of adolescents enrolled in the past 6 months with CD4 recorded within 1 month of enrollment	l Adolescent	<75%	75-94%	<u>≥</u> 95%	
					# of adolescents enrolled in the past 6 months	charts	Evaluate this month	Prioritize and evaluate next quarter
2.	All HIV-infected adolescents should be screened for TB at enrollment.	% of adolescents screened for TB at enrollment	# of adolescents enrolled in the past 6 months and screened for TB at the enrollment visit	Adolescent	Adolescent charts Eval	<75%	75-94%	<u>≥</u> 95%
				# of adolescents enrolled in the past 6 months		Evaluate this month	Prioritize and evaluate next quarter	On target
3.	All eligible adolescents should initiate ART within 1 month of determination of eligibility.	% of eligible adolescents on ART within 1 month of ART eligibility	# of adolescents on ART within 1 month of determination of eligibility	ART register; Adolescent charts		<70%	70-90%	<u>≥</u> 90%
			# of HIV-infected adolescents eligible for ART		Evaluate this month	Prioritize and evaluate next quarter	On target	

 $^{^{\}rm 1}$ An adolescent refers to a child aged between 10 and 19 years.

ICAP Standards of Care (SOCs) for Pediatrics (Adolescents) ²		Quarterly Measure of SOC	Numerator	Possible	Evaluation of Program Quality			
			Denominator	Source of information	Result of Quarterly measure of SOC			
				momuni	F	Possible Actions		
4.	All HIV-infected adolescents should be educated on secondary prevention every 6 months.	% of HIV-infected adolescents with documented education on secondary prevention	# of HIV-infected adolescents seen in the past 6 months who have documented education on secondary prevention	Adolescent charts	<75%	75-94%	<u>≥</u> 95%	
			# of HIV-infected adolescents seen during the past 6 months		Evaluate this month	Prioritize and evaluate next quarter	On target	
5.	All HIV-infected adolescents should be screened for substance abuse ³ every 6 months.	% of HIV-infected adolescents with documented screening for substance abuse	# of HIV-infected adolescents seen in the past 6 months who were screened for substance abuse		<75%	75-94%	<u>≥</u> 95%	
				stance abuse ³ every 6 documented screening for substance abuse	# of HIV-infected adolescents seen during the past 6 months	Adolescent charts	Evaluate this month	Prioritize and evaluate next quarter
6.	All HIV-infected adolescents should be screened for depression every 6 months.	% of HIV-infected adolescents with documented screening for depression	# of HIV-infected adolescents seen in the past 6 months who were screened for depression	Adolescent charts	<75%	75-94%	<u>≥</u> 95%	
			# of HIV-infected adolescents seen during the past 6 months		Evaluate this month	Prioritize and evaluate next quarter	On target	

 $^{^{\}rm 2}$ An adolescent refers to a child aged between 10 and 19 years. $^{\rm 3} Alcohol,$ tobacco, and illicit drugs