DISCLAIMER

Gilead Sciences played no role in the development of this manual. Additionally, the views expressed in this manual do not reflect those of the World Health Organization (WHO), whose normative guidance is cited at various points throughout the manual, unless otherwise explicitly stated through a citation.
The International Association of Providers of AIDS Care (IAPAC) established its African Regional Capacity-Building Hub with a mission to strengthen clinician capacity around HBV, HCV, and HIV clinical management. The Hub’s work is advanced in collaboration with national, regional, and international stakeholders, and through a restricted educational grant from Gilead Sciences.

The Hub is aligned to assist with ongoing efforts to expand access to HBV, HCV, and HIV screening, testing, prevention, care, and treatment on the African continent. The Hub’s 2015-2020 goals include:

- Supporting countries to integrate World Health Organization (WHO) and other relevant normative guidance, including national guidelines, in relation to their HBV, HCV, and HIV responses;
- Increasing clinician capacity to implement HBV, HCV, and HIV normative guidance, along their respective continua, in specialized and primary care settings based on needs specifically determined at clinical sites; and
- Promoting continuing education and metrics-based certification as mechanisms to trigger continuing quality improvement, provide quality assurance, and address health workforce retention concerns.

IAPAC is the Hub’s Secretariat, and its association and academic partners are the International Association for the Study of the Liver (IASL), the Makerere University College of Health Sciences (Kampala, Uganda), and the University of Cape Town’s Division of Hepatology (South Africa).
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acronyms</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Adult Learning</td>
<td>4</td>
</tr>
<tr>
<td>Training Logistics</td>
<td>7</td>
</tr>
<tr>
<td>Training Agenda</td>
<td>9</td>
</tr>
<tr>
<td>Trainer Introduction</td>
<td>10</td>
</tr>
<tr>
<td>Module 1 – Defining, Measuring, and Monitoring the HIV Care Continuum</td>
<td>11</td>
</tr>
<tr>
<td>Module 2 – Optimizing the HIV Care Continuum</td>
<td>16</td>
</tr>
<tr>
<td>Module 3 – HIV Testing and Linkage to Preventative and Therapeutic Care</td>
<td>19</td>
</tr>
<tr>
<td>Module 4 – Early ART Initiation and Selection of 1st Line ART</td>
<td>23</td>
</tr>
<tr>
<td>Module 5 – Defining HIV Treatment Failure and Selection of 2nd Line ART</td>
<td>29</td>
</tr>
<tr>
<td>Module 6 – Considerations for Engaging Key Populations in HIV Care</td>
<td>31</td>
</tr>
<tr>
<td>Module 7 – Achieving Long-Term Retention and Engagement in HIV Care</td>
<td>37</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>41</td>
</tr>
<tr>
<td>Patient Education</td>
<td>44</td>
</tr>
</tbody>
</table>
### ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>abacavir</td>
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<tr>
<td>AIDS</td>
<td>acquired immunodeficiency syndrome</td>
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<tr>
<td>ART</td>
<td>antiretroviral therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>antiretroviral</td>
</tr>
<tr>
<td>ATV/r</td>
<td>ritonavir-boosted atazanavir</td>
</tr>
<tr>
<td>AZT</td>
<td>azidothymidine</td>
</tr>
<tr>
<td>DAART</td>
<td>directly administered antiretroviral therapy</td>
</tr>
<tr>
<td>d4T</td>
<td>stavudine</td>
</tr>
<tr>
<td>DRV/r</td>
<td>ritonavir-boosted darunavir</td>
</tr>
<tr>
<td>EFV</td>
<td>efavirenz</td>
</tr>
<tr>
<td>FTC</td>
<td>emtricitabine</td>
</tr>
<tr>
<td>HAV</td>
<td>hepatitis A virus</td>
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<tr>
<td>HBV</td>
<td>hepatitis B virus</td>
</tr>
<tr>
<td>HCV</td>
<td>hepatitis C virus</td>
</tr>
<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
</tr>
<tr>
<td>HPV</td>
<td>human papillomavirus</td>
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<tr>
<td>HTC</td>
<td>HIV testing and counseling</td>
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<tr>
<td>IAPAC</td>
<td>International Association of Providers of AIDS Care</td>
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<td>IPT</td>
<td>isoniazid preventive therapy</td>
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<tr>
<td>LPV/r</td>
<td>ritonavir-boosted lopinavir</td>
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<tr>
<td>MSM</td>
<td>men who have sex with men</td>
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<tr>
<td>NRTI</td>
<td>nucleoside reverse transcriptase inhibitor</td>
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<tr>
<td>NVP</td>
<td>nevirapine</td>
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<tr>
<td>PEP</td>
<td>post-exposure prophylaxis</td>
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<tr>
<td>PI</td>
<td>protease inhibitor</td>
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<tr>
<td>PLHIV</td>
<td>people living with HIV</td>
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<tr>
<td>PMTCT</td>
<td>prevention of mother-to-child transmission</td>
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<tr>
<td>PrEP</td>
<td>pre-exposure prophylaxis</td>
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<tr>
<td>RAL</td>
<td>raltegravir</td>
</tr>
<tr>
<td>SMS</td>
<td>short message service</td>
</tr>
<tr>
<td>SQV/r</td>
<td>ritonavir-boosted saquinavir</td>
</tr>
<tr>
<td>START</td>
<td>Strategic Timing of AntiRetroviral Treatment</td>
</tr>
<tr>
<td>STI</td>
<td>sexually transmitted infection</td>
</tr>
<tr>
<td>TasP</td>
<td>treatment as prevention</td>
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<tr>
<td>TB</td>
<td>tuberculosis</td>
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<tr>
<td>TDF</td>
<td>tenofovir</td>
</tr>
<tr>
<td>VMMC</td>
<td>voluntary medical male circumcision</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>3TC</td>
<td>lamivudine</td>
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INTRODUCTION

Purpose
The purpose of this manual is to provide trainers with guidance and tips for leading a training using the IAPAC African Regional Capacity-Building Hub’s HIV Clinical Management curriculum.

Training Package
The HIV Clinical Management training package consists of:

- Train-the-Trainer Manual
- Presentation slides for each module
- Participant handouts (e.g., guidelines, case studies)

Target Audience
The target audiences for trainings using this manual and the HIV Clinical Management curriculum are physicians and nurses, as well as health educators from a variety of settings, including:

- Healthcare facilities and clinics
- Medical and nursing schools
- Community-based organizations
- Other facilities serving people living with or at risk for HIV
LEARNING CYCLE

Kolb’s experiential learning cycle has four phases: concrete experience which leads the learner to make observations and reflections based on their experiences. These observations and reflections then inform the conceptualizations and generalizations made by the learner on the subject matter. The conceptualizations and generalizations are then tested by learners using actual experimentation. New insights from experimentation form the basis of new concrete experience, thus making a full cycle.

In general teaching and learning aims at effective change in three domains:

1. Cognitive (knowledge) “Head”
2. Psychomotor (skills) “Hand”
3. Affective (attitudes) “Heart”

FIGURE 1. Kolb’s Experiential Learning Cycle

KNOWLEDGE RETENTION

In general, humans remember:

- 20% of what they hear,
- 40% of what they see, and
- 80% of what they discover by themselves.

Research shows that in general adults do not concentrate beyond 40 minutes hence the need to have a variety of experiential learning designs.

NOTES FOR TRAINERS

Keep all of this in mind as you prepare your training: adult participants need to hear, reflect, interact, and practice new knowledge and skills; long lectures are not the most helpful methods for teaching adults.

Good training helps participants discover what they already know, and validates their own experiences and knowledge, as well as provides new information. Finding ways to train participants through a combination of lectures, plenary discussions, small group work, and individual reflection maximizes learning potential for participants.

KEY STEPS IN TRAINING DESIGN

1) Context Analysis. An analysis of the organizational needs or other reasons the training is desired. Consider:

a. What are the needs of the participants that the training will address?
b. Why is the training program seen as the recommended solution to an information gap?
c. What is the history of the institution with regard to staff in-service training?
d. Who will decide when the training should happen?
2) **User Analysis.** This analysis seeks to determine:

a. For whom is the training relevant?
b. What is the participants’ level of existing knowledge on the core content?
c. How much time are the participants (or their employers) able to make available for the training?
d. What kind of expertise or competencies should the trainers possess?

3) **Content Analysis.** Analysis of material relevant to the training. We seek to answer:

a. What knowledge or information is currently used on the job?
b. What new knowledge, skills, or values are required to fill the information gap?
c. What is the general learning style of the participants?
d. What learning approaches and methodologies are suitable for the content and learning style of participants?

4) **Training Suitability Analysis.** Training is one of several solutions to service delivery gaps. Therefore we seek to answer:

a. How will the training link to broader strategies for change?
b. With whom should we share the draft curriculum for critical feedback?
c. How will effective training result in a return of value to the organization that is greater than the initial investment to produce or administer the training?
d. What materials and resource do we need to mobilize given budget provisions and limitations?

5) **Setting Objectives.** Although some trainers use teaching objectives that focus on what the trainer plans to do, it is recommended to use learning objectives in order to focus on the learner outcome.

An example of a teaching objective may be: “To update, reinforce, and provide new information regarding the clinical management of HIV/AIDS.”

To modify this into a **learning objective,** start with the phrase: “At the conclusion of this activity, participants should be able to…” and then state the measurable activities the participants will be able to do, for example “describe the use of antiretroviral therapy to reduce AIDS-related morbidity and mortality.” Use specific action verbs (behavioral terms) to state cognitive outcomes:

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>COMPREHENSION</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define</td>
<td>Explain</td>
<td>Apply</td>
</tr>
<tr>
<td>List</td>
<td>Express</td>
<td>Employ</td>
</tr>
<tr>
<td>Recognize</td>
<td>Describe</td>
<td>Demonstrate</td>
</tr>
<tr>
<td>Record</td>
<td>Discuss</td>
<td>Illustrate</td>
</tr>
<tr>
<td>Repeat</td>
<td>Identify</td>
<td>Interpret</td>
</tr>
<tr>
<td>State</td>
<td>Restate</td>
<td>Perform</td>
</tr>
<tr>
<td>Transl.</td>
<td>Translate</td>
<td>Practice</td>
</tr>
</tbody>
</table>

6) **Monitoring and Evaluation.** We seek to answer:

a. How will the training’s efficacy be evaluated during and after the training?
b. How will we monitor and evaluate the manner the trainees have adopted or applied their learning?

**NOTES FOR TRAINERS**

A few hours of thinking through all of the above listed questions will improve your ability to plan a training session that provides real benefit to individual participants, the group as a whole, and the community. Do not skip this important step!
WORKING DEFINITIONS

Training design: A complete and thorough description and “fleshing out” of the training that contains rationale, objectives, content/core topics, training methods, time, evaluation tools, facilitating roles and responsibilities, and materials and other resources needed.

Training: An educational process involving the creation and acquisition of knowledge, skills, and attitudes.

Curriculum: A general description of the training or course that contains the:

a. aim(s)/goal(s)/purpose
b. specific objectives
c. course content
d. training methods/pedagogy
e. timeframe for the training
f. criteria for training evaluation

Syllabus: Contents of a course or training arranged according to a flow.

Module: A series of related activities responding to a particular set of objectives that can be undertaken independently; this may be one component of a curriculum.

NOTES FOR TRAINERS

A few final thoughts:

• It is important to always keep in mind your final goal: What is it you want the participants to have gained by the end of the training? What change in knowledge/attitudes/behavior do you want them to exhibit?
• Knowing how much to include in a training is a matter of experience. It is often useful to know the key items that you want to present, and make sure that there is time to address those items. Additionally, it is useful to have other topics for discussion or presentation prepared that may or may not be used depending on how quickly or slowly the group moves.
• Be ready to spend more time than you planned on key topics if it is clear the group needs more time to work through ideas or needs more time to practice; it is better to do a few things well than to speed through the entire curriculum and “lose” the group. If most of the group seems to understand and is ready to move on, but a few participants still seem confused or unsure, meet with them over breaks or after the training to spend more time with them to ensure that everyone understands the key concepts and skills.
• Be flexible to modify the training based on the group’s interest and learning priorities while keeping the end goal in sight. When the training diverges from the planned approach, assess whether the diversion is helpful in reaching the overall objective of the training. If it is just an interesting conversation but does not contribute to reaching the overall objective, suggest that it be moved to a lunch discussion.
TRAINING LOGISTICS

PLANNING AHEAD

Administrative Support: The course will need to be organized (advertise, receive registrations, find and book venue, etc.) and course materials will need to be prepared. This may take up to 10 days.

Facilitator versus Co-Facilitators: One facilitator is recommended per 60 in-service training participants for a one-day course. However, if the training agenda is split over two days held consecutively, it is recommended that two facilitators conduct the course of the curriculum.

Training Venue:

☐ You will require a room to hold up to 60 participants, with participants sitting in groups (preferably in groups of 5) around tables.
☐ You will require audiovisual equipment for use of PowerPoint presentation.
☐ You may print the slides onto overhead transparencies if you do not have PowerPoint projector capabilities.
☐ Organize payment for venues (if required).
☐ Familiarize yourself with the venue facilities (air-conditioning/heating, lighting, PowerPoint projector, tea and coffee facilities, toilets, parking, etc.).

Geo-Mapping Trainings and Trainees: We seek to geo-map the geographic reach of Hub trainings. We ask trainers to provide detailed updates after each training session regarding numbers of individuals trained accompanied by relevant non-identifying demographic information, including trainees’ academic credentials, practice settings, geographic locations (city/province), overall patient caseloads, and HIV-specific caseloads. The date and location of the training session and the demographic information should be emailed to AfricanHub@iapac.org with the subject line “HIV Trainees.”

Costing: Determine whether you need to pay for venue hire, audiovisual equipment hire, catering, and printing. In some instances, such costs may be recouped by charging trainees an administrative fee.

Publicity: A draft promotional flyer has been supplied for you to modify. Sample text for email announcements will also be provided.

Registration: You will need email or postal addresses of all participants in order to send pre-reading materials. Additionally, you may collect relevant participant information such as job title, contact details, prior experience, and food preferences.

Invoicing: If participants are required to pay an administrative fee for the course, they will require an invoice to process payment.

Catering: It is recommended that morning coffee/tea, lunch, and afternoon coffee/tea are provided, in addition to water. You should check food preferences prior to placing a catering order.

Train-The-Trainer Manual: HIV Clinical Management
ONCE REGISTRATIONS HAVE BEEN RECEIVED

Confirmations:

☐ Email participants to confirm their registration has been received and that they will receive pre-reading material at least 1 week (preferably 2 weeks) prior to the course.
☐ Organize name tags.
☐ Send all participants the pre-reading material at least 1 week (preferably 2 weeks) prior to the course.
☐ Order a sufficient supply of training manuals. This can be done by emailing IAPACHub@iapac.org with the email heading “HIV Hub Supplies Request.”

Printing Course Materials: This manual includes a series of handouts, including the training agenda, case studies, and self-assessment questions.

☐ Each document should be printed and collated by placing a colored piece of paper/divider at the end of each document to distinguish between documents.
☐ Do not forget to print out the evaluation form and course certificates (provided), too.

ON THE TRAINING DAY

You will require:

☐ All module slides
☐ Name tags
☐ Training agenda
☐ Training manuals
☐ Handouts (e.g., guidelines)
☐ Evaluation forms
☐ Certificates of completion
TRAINING AGENDA

IAPAC AFRICAN REGIONAL CAPACITY-BUILDING HUB: HIV IN-SERVICE TRAINING

NOTE: Trainers may make adjustments to the training agenda, however it is recommended that all elements of the curriculum are covered by the conclusion of the in-service training.

DATE:  
FACILITY, CITY, COUNTRY:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM– 9:00 AM</td>
<td>Registration/Check-In/Breakfast</td>
</tr>
<tr>
<td>9:00 AM– 9:15 AM</td>
<td>Welcome, Introductions, and Program Overview</td>
</tr>
<tr>
<td>9:15 AM– 9:45 AM</td>
<td>Module 1: Defining, Measuring, and Monitoring the HIV Care Continuum</td>
</tr>
<tr>
<td>9:45 AM– 10:15 AM</td>
<td>Module 2: Optimizing the HIV Care Environment</td>
</tr>
<tr>
<td>10:15 AM– 10:45 AM</td>
<td>Module 3: HIV Testing and Linkage to Preventative and Therapeutic Care</td>
</tr>
<tr>
<td>10:45 AM– 11:00 AM</td>
<td>Question and Answer Session</td>
</tr>
<tr>
<td>11:00 AM– 11:30 AM</td>
<td>Break</td>
</tr>
<tr>
<td>11:30 AM– 12:30 PM</td>
<td>Learning Activity: Case Study Application</td>
</tr>
<tr>
<td>12:30 PM– 1:30 PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:30 PM– 2:00 PM</td>
<td>Module 4: Implementing Earlier ART Initiation and Selecting 1st Line ART</td>
</tr>
<tr>
<td>2:00 PM– 2:15 PM</td>
<td>Module 5: Defining HIV Treatment Failure and Selecting 2nd Line ART</td>
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<tr>
<td>2:15 PM– 2:45 PM</td>
<td>Module 6: Special Considerations for Engaging Key Populations in HIV Care</td>
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<tr>
<td>2:45 PM– 3:15 PM</td>
<td>Module 7: Achieving Long-Term Retention and Engagement in HIV Care</td>
</tr>
<tr>
<td>3:15 PM– 3:30 PM</td>
<td>Question and Answer Session</td>
</tr>
<tr>
<td>3:30 PM– 4:00 PM</td>
<td>Break</td>
</tr>
<tr>
<td>4:00 PM– 5:00 PM</td>
<td>Learning Activity: Case Study Review</td>
</tr>
<tr>
<td>5:00 PM– 5:30 PM</td>
<td>Summary and Evaluation</td>
</tr>
<tr>
<td>5:30 PM</td>
<td>Adjourn</td>
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</tbody>
</table>
INSTRUCTIONS TO FACILITATOR

1) Distribute course materials and name tags to participants.

2) Trainer introduction: Introduce yourself (and other facilitators if appropriate) and detail your background and experience. Alternatively, you may participate in the group introduction and icebreaker.

3) Participant introductions and icebreakers: There are many choices when it comes to icebreakers. You may have your own preferences.

4) Participants’ expectations: Ask the group to openly provide feedback on the four ‘G’s’:
   - Gives (what participants can give to the course)
   - Gains (what they hope to gain from the course)
   - Ghastlies (what they hope does not happen in the course (e.g., too simple, too advanced, not relevant, etc.)
   - Ground rules (what rules can the group agree upon (e.g., one person talks at a time, no single person to dominate discussion, etc.)

   You should write these down on large paper or on a whiteboard (or transparency) so you can regularly refer to them during the course and assess if the course is meeting participants’ needs.

5) Discuss course objectives and outline of the one-day training agenda.

6) Address housekeeping issues – toilets, breaks, coffee/tea/water, or any other issues.
TRAINING GUIDE

Time Required:
Approximately 30 minutes

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual

Learning Objectives:
1. Understand the use of ART for HIV treatment and prevention
2. Identify steps in the HIV care continuum
3. Define how the continuum should be measured and reported
4. Describe the relevance of UNAIDS’ 90-90-90 targets for 2020
Introduction

- Modern antiretroviral therapy (ART) has changed the course of HIV disease
- Life expectancy can be near-normal with a highly preserved quality of life
- Life expectancy in some southern African countries is increasing

“Continuum of HIV Care”

The “continuum of HIV care” refers to a comprehensive package of HIV prevention, diagnosis, treatment, and support services provided for people living with HIV (PLHIV) and their families ranging across: initial HIV diagnosis and linkage to care, management of opportunistic infections and other co-morbid conditions, initiating, maintaining, and monitoring ART, switching to second line and third line ART, and palliative care.
Continuum of HIV Care  (where it all started...)

Spectrum of engagement in HIV care, US 2011

Continuum of HIV Care  (Sub-Saharan Africa)

Abandoned HIV treatment cascade for sub-Saharan Africa, 2012

Measuring the Continuum

- Measuring the continuum is critical to evaluating the success of HIV responses at clinical, local, national, subnational, and international levels
- Use standardized method to estimate total # of PLHIV
  - For the sake of comparability, use a common method to establish the continuum’s denominator; critical for unbiased evaluation of program implementation, progress, and impact
- Estimated total # of PLHIV should be denominator for measuring HIV care continuum

WHO Guidelines for Improving the HIV Care Continuum for Adults and Adolescents, 2013
**Continuum Data Elements**

- Collect a minimum of 5 data elements:
  1. Estimated # of PLHIV in a jurisdiction
  2. # and % of PLHIV who are diagnosed HIV positive
  3. # and % of PLHIV who are diagnosed and linked to care (optional)
  4. # and % of PLHIV who are on ART
  5. # and % of PLHIV on ART who are virally suppressed

  Focusing on these 5 data elements helps to measure program improvement/success; other program metrics may also be used.

---

**Continuum Optimization**

- The methodology of determining the care continuum should be described within all reports on continuum optimization:
  - Comprehensive and transparent reporting of the measurement methodology is imperative for internal decision-making and external comparability
  - Incomplete reporting may result in suboptimal program assessment and subsequent resource allocation decisions

  Where possible, consider longitudinal cohort measurement of HIV service utilization and treatment outcomes

  Helps to identify means to maximize viral suppression through early ART access and maintaining ART adherence.

---

**Effect of Interventions on Continuum**

(Chart showing the effect of various levels of engagement in care)

- Improve % of...
UNAIDS 90-90-90 Targets

- UNAIDS estimates that:
  - 25%, or 15 million PLHIV, who are in need of ART are currently on ART
  - 12% of PLHIV on ART have achieved long-term viral suppression
- UNAIDS has set 90-90-90 targets to achieve by 2020:
  - 90% of PLHIV should know their status (testing target)
  - 90% of PLHIV who know their status should be receiving ART (treatment target)
  - 90% of PLHIV on ART should have achieved viral suppression (optimisation target)

Modeling suggests that achieving these targets will decrease AIDS incidence, AIDS-related deaths, and new HIV infections by 50% from 2010 levels by 2030.

Practical Considerations

- Recognize that ART prevents illness, death, and transmission
- Measuring the HIV care continuum using a standardized methodology is critical to assessing the quality of care at clinic-, local-, national-, subnational-, and regional levels
- Work is needed to optimize the HIV care continuum to increase testing and treatment coverage, as well as retention in care, and improve the proportion of the population successfully treated
- Global solidarity to attain the 90-90-90 targets extends to every clinic, hospital, health district, and Ministry of Health
TRAINER GUIDE

Time Required:
Approximately 30 minutes

Learning Objectives:
1. Understand how legal circumstances negatively influence the HIV care environment
2. Describe the use of stigma measures to improve engagement in HIV care
3. Summarize how task-shifting/sharing and decentralized care may improve the HIV care environment

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)
Introduction
Optimizing the HIV care environment may be the most important action to ensure that there are meaningful increases in the number of PLHIV achieving viral suppression
➢ Legal, social, environmental, and structural barriers limit access to the full range of services
➢ Repeal HIV-related restrictions on entry, stay, and residence in any country
➢ Requires multi-stakeholder engagement, diversified and inclusive strategies, as well as innovative approaches
➢ Critically important to address HIV-specific laws that criminalize the conduct of key affected populations and reduce HIV-related stigma and discrimination

Optimizing the Care Environment
➢ Eliminate stigma and discrimination based on race, ethnicity, gender, age, sexual orientation, and behavior in all settings, but particularly in healthcare settings, using standardized measures and evidence-based interventions
➢ Take proactive steps to identify and manage clinical mental health disorders, and/or mental health issues related to HIV diagnosis, disclosure of HIV status, and/or HIV treatment

Task-Shifting/Sharing
➢ Shifting and sharing HIV testing, dispensing of ART, and other appropriate tasks among professional and paraprofessional health worker cadres is recommended
➢ Use of lay health workers to provide pre-test education and testing and to enhance PMTCT engagement in HIV care
➢ Task-shifting/sharing from physicians to appropriately trained healthcare providers, including nurses and associate clinicians, for ART initiation and maintenance

World Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2013
Task shifting of antiretroviral treatment from doctors to primary-care nurses in South Africa (STRETCH): a pragmatic, parallel, cluster-randomised trial

Expansion of primary care nurses’ roles to include ART initiation and prescription can be done safely:
- can improve health outcomes and quality of care
- but might not reduce time to ART initiation or AIDS-related mortality

Community and Patient Engagement

- Engage community across continuum of care
  - Models of community-based support and ART delivery can complement public sector ART programs by enhancing antiretroviral support, improving ART access and outcomes
  - Enabling PEPFAR to take responsibility for their care (chronic disease management) can result in improved health outcomes, increased health service utilization
    - Self-management (e.g., monitoring, decision-making)
    - User-friendly care (e.g., electronic intervention)
MODULE 3
HIV TESTING AND LINKAGE TO PREVENTATIVE AND THERAPEUTIC CARE

TRAINER GUIDE

Time Required:
Approximately 30 minutes

Learning Objectives:
1. Summarize strategies for increasing access to HIV testing
2. List barriers to successful linkage to care
3. Distinguish differences in linkage to care and interventions for people who test HIV positive and HIV negative
4. Evaluate the merits of community- vs. home-based HIV testing

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)
Introduction

- Optimizing HIV testing is the critical first step in addressing the HIV care continuum.
- Healthcare systems should strive to make HIV screening widely available and accessible to all individuals regardless of gender, age, or perceived risk factors.
- HIV testing should be done in a high-quality confidential setting.
- A critical focus is post-test counseling and immediate linkage to care and access to ART.

Abbreviated HIV treatment cascade for sub-Saharan Africa, 2012

HIV Testing Continuum

- Create demand for HIV testing & treatment
- Link to HIV testing
- Deliver post-test information
- HIV testing
- Link to care & treatment
- Deliver post-test counseling
- Post-test counseling
- Link to prevention services

- Additional testing needed:
  - Test for HIV
  - Notify HIV-positive diagnosis

- Eligibility assessment:
  - Link to care & treatment
  - Link to prevention services

Increasing HIV Testing Coverage

- To increase HIV testing coverage, the following is recommended:
  - Routine offer of opt-out HIV testing
  - Community-based HIV testing
  - Confidential, voluntary HIV testing in workplace/institutional settings
  - HIV self-testing with the provision of guidance about proper method for administering test and direction on what to do once results obtained
  - Offer HIV testing to partners of newly diagnosed individuals
  - Use of epidemiological data and network analysis to identify individuals at risk of HIV infection for HIV testing
WHO HIV Testing Guidelines

- Trained key providers can independently conduct HIV testing with rapid diagnostic tests and increase access to testing through community-based approaches.
- Annual retesting of key populations and HIV-negative partners.
- Provider-initiated HIV testing should be considered for malnutrition, STIs, hepatitis, and TB services.

WHO HIV Testing Guidelines (continued)

<table>
<thead>
<tr>
<th>Who to Test</th>
<th>When to Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant women and partners</td>
<td>First antenatal care visit</td>
</tr>
<tr>
<td></td>
<td>Retesting during third trimester or peripartum</td>
</tr>
<tr>
<td></td>
<td>Other couples and partner testing</td>
</tr>
<tr>
<td>Infants and children &lt;12 months</td>
<td>4-6 weeks for all infants exposed to HIV or whose mothers have an uncertain status</td>
</tr>
<tr>
<td></td>
<td>Viral status after 18 months and/or when breastfeeding ends</td>
</tr>
<tr>
<td>Adolescents</td>
<td>Integrate into all healthcare encounters</td>
</tr>
<tr>
<td></td>
<td>Annually if sexually active with new sexual partners</td>
</tr>
</tbody>
</table>

Increasing Linkage to Care

- Linkage to care is a critical but often poorly managed step in care continuum.
- Typically, linkage may consist of verbal or written referral to a care facility by a counselor or the individual who provided the HIV test result.
- Linkage to care should enable a patient to engage in care early, benefit from a broad package of care, and facilitate immediate access to ART.
- Prompt engagement in care optimizes individual and public health outcomes.
- Key barriers to linkage to care include economic, geographic, transportation, and distance barriers, as well as stigma and discrimination.
**Recommendations**

- Immediate referral to HIV care improves linkage to ART
- For high-risk individuals who test HIV negative:
  - Offer PrEP or PEP
  - Provide free condoms
  - Educate about risk reduction strategies
  - Offer voluntary medical male circumcision (as appropriate)
- Use case managers/patient navigators

**Post-Exposure Prophylaxis**

- **Recommendations:**
  - Post-exposure prophylaxis for HIV
  - Reduced-dose and reduced-dose regimens are well tolerated in adults
  - Initial antiretroviral regimen for adults and adolescents
- **PEP** with NRTIs recommended for perinatal HIV exposure prevention
- NRTIs or PIs recommended for perinatal HIV exposure prevention
- NRTIs can be considered as alternative options

**Pre-Exposure Prophylaxis**

- **Recommendation:** Use pre-exposure prophylaxis to prevent HIV acquisition
  - Specific recommendation: PrEP
  - Strength of the recommendation: Strong
  - Quality of the evidence: High
  - PrEP can be used as an additional prevention strategy for people at increased risk of HIV infection as part of combination prevention approaches
MODULE 4
IMPLEMENTING EARLIER ART INITIATION AND SELECTION OF 1ST LINE ART

TRAINER GUIDE

Time Required:
Approximately 30 minutes

Learning Objectives:
1. Appraise the scientific support for immediate ART initiation (test and treat)
2. Describe how HIV viral load testing should be optimally used for ART monitoring
3. Define how community-based ART distribution strengthens the HIV care continuum

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)

Learning Objectives
1. Appraise the scientific support and weaknesses for immediate initiation of ART (test and treat)
2. Describe how HIV viral load testing should be optimally used for monitoring ART
3. Define how community-based ART distribution and pharmacies strengthens the HIV care continuum
Introduction

- Increasing early access to ART is associated with decreased AIDS-related mortality, mortality and transmission.
- START showed 62% reduction in:
  - risk of progression to AIDS
  - other serious illness (excluding TB or cancer) or death among people who initiated ART with CD4 >500 cells/mm³ compared with deferred ART initiation after CD4 <350 cells/mm³.

START Results

- In START, clinical events occurred in many patients with CD4 counts >500 cells/mm³.

TEMPRANO Clinical Trial (Côte d’Ivoire)

- TEMPRANO trial focused on ART adherence and patient outcomes.
TEMPRANO Clinical Trial (Côte d’Ivoire)

HPTN 052 and PARTNERS
- Final results of the HPTN 053 clinical trial found no cases of linked HIV sexual transmission from HIV-positive partner was on stable ART after 9,800 patient years of follow-up.
- Preliminary results of the PARTNERS study of 1,100 serodiscordant couples with incomplete condom use (40% MSM) found no HIV transmission within couples after 30,000 sexual encounters from a partner with an undetectable viral load.

Increasing HIV Treatment
- Offer ART after HIV diagnosis, irrespective of CD4 count.
- ART regimens with the highest levels of efficacy, lowest adverse event profile are recommended, preferably in fixed-dose, once-daily combinations.

World Guidelines forigining the HIV Care Continuum for Adults and Adolescents, 2015
Increasing HIV Treatment (continued)

- Viral load testing every 6 months preferred tool for monitoring ART response
  - If viral load is not routinely available, CD4 count and clinical monitoring should be used to diagnose ART failure
  - Plasma HIV-1 RNA level is the preferred monitoring laboratory tool and should be used after ART initiation as a means to monitor the response to ART
  - Among individuals who are on stable ART with CD4 count <350 cells/mm³ and who have been virologically suppressed for 2 years, viral load monitoring can be performed every 6-12 months

WHO 1st Line ART Recommendations (2012)

WHO ART Recommendations - 2015

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Target population</th>
<th>Specific recommendation</th>
<th>Strength of the recommendation</th>
<th>Quality of the evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adults (≥18 years)</td>
<td>ART should be initiated in all adults living with HIV at any CD4 cell count</td>
<td>Strong</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>As a priority, ART should be initiated in all adults with ≤350 cells/mm³ and in adults with ≥350 cells/mm³ who have clinical symptoms consistent with HIV/AIDS, regardless of CD4 cell count</td>
<td>Strong</td>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WHO ART Recommendations - 2015

<table>
<thead>
<tr>
<th>Pregnant and breastfeeding women</th>
<th>ART should be initiated in all pregnant and breastfeeding women living with HIV at any CD4 count and continued lifelong</th>
</tr>
</thead>
</table>
| Adolescents (10-19 years old) | ART should be initiated in all adolescents living with HIV at any CD4 count 
| As young adults, ART should be initiated in all adolescents with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count <200 cells/mm3 |

ENCORE1

- Randomized international study (N = 630 adults) randomized to receive efavirenz 400 mg or 800 mg with tenofur and emtricitabine
- No difference in viral suppression
- 400 mg group had significantly fewer adverse events and fewer patients stopping treatment for adverse events.

Adverse events - related to study drug

<table>
<thead>
<tr>
<th></th>
<th>EFV 400 mg</th>
<th>EFV 800 mg</th>
<th>Difference (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>373 (50)</td>
<td>362 (49)</td>
<td>1 (N = 630)</td>
</tr>
<tr>
<td>N (%)</td>
<td>240 (33)</td>
<td>247 (32)</td>
<td>-7 (N = 630)</td>
</tr>
<tr>
<td>N (%)</td>
<td>18 (2)</td>
<td>26 (4)</td>
<td>8 (N = 630)</td>
</tr>
</tbody>
</table>

Drug Resistance Testing

- HIV drug resistance testing is recommended at entry into care or prior to ART initiation, and when virologic failure is confirmed

- Transmitted or treatment-emergent HIV drug resistance may limit the response to ART
- Resistance testing for an individual is recommended in contexts where there is availability of second- and third-line ART

Where routine access to HIV drug resistance testing is restricted, population-based surveillance is recommended.
**Practical Considerations**

- **ART is recommended for all PLHIV**
  - Early initiation associated with decreased risk of complications (e.g., TB)
  - Patients on stable ART rarely transmit HIV
- **Viral load testing is preferred for monitoring ART**
  - Viral suppression to below level of detection is the goal of ART
  - Should be monitored at least every 6 months
- **Tenofovir + emtricitabine (or lamivudine) + efavirenz is standard WHO-recommended first-line ART**
MODULE 5
DEFINING HIV TREATMENT FAILURE AND SELECTION OF 2ND LINE ART

TRAINER GUIDE

Time Required:
Approximately 15 minutes

Learning Objectives:
1. Define “HIV treatment failure” (virologic failure)
2. Describe how ART monitoring should be optimally performed
3. Discuss the use of 2nd line ART and which regimens are recommended by WHO

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)

Learning Objectives
1. Define “HIV treatment failure” (virologic failure)
2. Describe how ART monitoring should be optimally performed
3. Discuss the use of second-line ART and which medications are recommended by WHO
Defining & Monitoring Treatment Failure

- Treatment failure is defined by a persistently detectable viral load exceeding 1,000 copies/ml (e.g., two consecutive viral load measurements within a three-month interval, with adherence support between measurements) after at least six months of using ARV drugs.

- Viral load testing every six months is recommended as the preferred tool for monitoring ART response.
  - If viral load is not routinely available, CD4 count and clinical monitoring should be used to diagnose treatment failure.

WHO 2nd Line ART Recommendations (2012)

[Image of WHO 2nd Line ART Recommendations chart]

African Regional Capacity-Building Hub | IAPAC
MODULE 6
CONSIDERATIONS FOR ENGAGING KEY POPULATIONS IN HIV CARE

**TRAINER GUIDE**

**Time Required:**
Approximately 30 minutes

**Learning Objectives:**
1. Discuss common challenges to engagement in care for key populations
2. Summarize guidance for engaging key populations across the HIV care continuum

**Description of Supporting Materials:**
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)
Common Challenges
Population-specific policies/programs needed to address:
- Pervasive stigma and discrimination
- Violence, including intimate partner violence
- Mistrust of medical providers or health systems
- Unmet needs of daily living (e.g., food and shelter)
- Lack of access to culturally appropriate services
- Un- or under-addressed co-morbidities
- Suboptimal access to evidence-based interventions

Key Populations (for purposes of this training course)
- Pregnant women
- Adolescents
- Men who have sex with men (MSM)
- Transgender individuals
- Sex workers
- Substance users
- Incarcerated populations

WHO Recommendations – Key Populations

WHO consolidated Guidelines on HIV Prevention, Diagnostics, Treatment and Care for Key Populations, 2013
WHO Recommendations – Key Populations (continued)

Prevention and Care
6. Key populations living with HIV should have the same access to antiretroviral therapy (ART) and to HIV management as other populations.
7. All pregnant women from key populations should have the same access to antenatal care and be tested for HIV, with the same access to services for prevention of mother-to-child transmission (PMTCT) and follow the same recommendations as women in other populations.

WHO HIV Testing Recommendations: Pregnant and Post-Partum Women

- Provider-initiated HIV testing should be a routine part of care for antenatal, childbirth, postpartum, and pediatric care in high-prevalence settings
- Where breastfeeding is the norm, lactating HIV-negative mothers should be tested periodically
- Couples and partners testing services are recommended in antenatal settings
Considerations for Pregnant Women

- Prioritize and increase women’s access to and retention in HIV services along the continuum of HIV care, including through gender-sensitive programming
- Integrate community-based support services for women within HIV care, including peer-based programs and family-based programs that engage partners and family members; at a minimum, offer direct referral to such services for women living with HIV
- Screen for and implement interventions to address food insecurity among women living with HIV
- Screen for physical and emotional abuse and violence (or the risk of experiencing violence) among women across the HIV care continuum

Considerations for Pregnant Women (continued)

- Conduct non-discriminatory discussions of pregnancy and parenting choices and the provision of family planning services to support the full range of sexual and reproductive rights of women living with HIV
- Implement interventions to scale-up access to and retention in HIV care and treatment for pregnant and breastfeeding women living with HIV; such interventions should also include socioeconomic support
- Scale-up pediatric HIV services for infants born to HIV-positive mothers to promote both child and maternal health
- Tailor ART prescribing practices to consider women’s use of other medications (e.g., contraceptives), as well as potential side effects in women
- Address the challenges faced by younger women living with HIV across the HIV care continuum

Treatment for Pregnant and Breastfeeding Women

- A once-daily fixed-dose combination of TDF + 3TC + EFV is recommended as 1st line ART for first trimester of pregnancy
- The recommendation applies both to lifelong treatment and to ART initiated for PMTCT and then stopped
- Infants of mothers who are receiving ART and are breastfeeding should receive six weeks of infant prophylaxis with daily NVP
- If infants are receiving replacement feeding, they should be given four to six weeks of infant prophylaxis with daily NVP (or twice-daily ACT); infant prophylaxis should begin at birth or when HIV exposure is recognized postpartum
Considerations for Adolescents

- Remove adult-assisted consent to HIV testing and counseling in minor adolescents with the capacity to consent.
- Adolescent-centered services are recommended in both clinical and community-based settings delivered by staff who understand and respect consent and confidentiality.
- Develop a healthcare transition plan between pediatric and adult care.

Key Population Considerations

**MMI**

- Develop and adopt standards for the provision of culturally competent care and the dissemination of information/educational materials in clinical programs for all MMI to address medical mistrust, promote confidentiality, and minimize stigma, with specific attention to MSM from racial or ethnic minority populations.
- Offer supporting services in community-based settings in order to reach MMI who may not access HIV testing services in clinical settings.
- Offer STI testing, including screening for syphilis, Chlamydia, and Gonorrhea in all relevant anatomic sites, screen for viral hepatitis and vaccinate susceptible MSM for (HAV and HBV), vaccinate MSM aged less than 26 for HPV, provide oral examination for HPV-associated pathology.
- Facilitate linkage to care of MSM youth at HIV testing sites through direct referral to MSM peer navigators.

**Transgender Individuals**

- Develop and adopt standards for the provision of culturally competent care and the dissemination of information/educational materials in clinical programs for transgender individuals to address medical mistrust, promote confidentiality, and correct misperceptions regarding HIV management and transgender-specific medical care.
- Consult with or refer HIV-positive transgender individuals on ART who wish to start hormone therapy to a clinician experienced in transgender medical care.
Key Population Considerations (continued)

Sex Workers

➢ Tailor HIV prevention, treatment, and care interventions for sex workers, including voluntary HIV, STI, and viral hepatitis (HBV and HCV) screening, condom promotion, and access to ART

➢ Implement programs to scale-up access and address barriers to ART which are led by and for sex workers living with HIV.

Key Population Considerations (continued)

Substance Users

➢ Scale up evidence-based treatment for substance use, in particular opioid substitution therapies

➢ Implement time-limited DAART with substance users at high risk of non-adherence

➢ Conduct comprehensive and integrated assessments for and provide treatment of co-morbid psychiatric illnesses, in particular depression, among substance users

Key Population Considerations (continued)

Incarcerated Populations

➢ Offer universal HIV testing, particularly in jurisdictions with hyper-endemic rates of incarceration, so that the offer of HIV testing in correctional healthcare settings mirrors that in community health settings

➢ Implement interventions to prevent HIV transmission among populations that move in and out of incarcerated facilities, while delivering general interventions that decrease intimate partner sexual violence, promote harm reduction, and address substance use

➢ Ensure that health-care services in jails and prisons follow international guidelines for HIV care, including for the management of HIV coinfections that occur at high frequency in incarcerated populations

➢ Promote two-way comprehensive communication between correctional and community HIV providers to ensure that there are no gaps in care, treatment, and support services as people transition to and from their communities and correctional facilities.
MODULE 7

ACHIEVING LONG-TERM RETENTION AND ENGAGEMENT IN HIV CARE

TRAINER GUIDE

Time Required:
Approximately 30 minutes

Learning Objectives:
1. Identify barriers to retention in the HIV care
2. Describe clinic-level interventions to improve engagement in care
3. Discuss strategies to mitigate loss to follow-up and facilitate re-engagement in care

Description of Supporting Materials:
PowerPoint Slides
Train-the-Trainer Manual
Case Study (refer to Learning Activities section)

Learning Objectives
1. Identify barriers to retention in the HIV care
2. Describe clinic-level interventions to improve engagement in care
3. Discuss strategies to mitigate loss to follow-up and facilitate re-engagement in HIV care

__________________________________________

__________________________________________

__________________________________________

__________________________________________
Introduction

- Barriers to HIV treatment engagement are common across countries, even when local resource bases may differ widely
- Efficiently keeping people engaged in their care is more critical than ever, as resources are ultimately limited in every setting, and growing numbers of PLHIV are in need lifelong quality care

Long-Term Retention in Care

- Retention in care is associated with improved individual health outcomes and may reduce community-level viral burden, with implications for secondary prevention
- Systematic monitoring of retention in HIV care is recommended for all patients
  - Although monitoring retention is routinely recommended, specific details, such as retention measures to be used and desired visit frequency, vary among jurisdictions and programs and should be in harmony with national and international guidelines

Adherence Monitoring

- Routine ART adherence monitoring is recommended in all patients
- Measurement methods include:
  - Tracking pharmacy/clinic visits
  - Measuring viral load as the primary adherence monitoring metric
  - Collection of self-reported adherence data
  - Collecting pharmacy refill data
- Pill count, electronic drug monitoring, or ARV drug concentrations in biological samples are NOT routinely recommended

Note: Guidance for Optimizing the HIV Care Continuum for Adults and Adolescents, 2013
Long-Term Engagement

- Information and communication technologies and staff/peer-delivered counseling are recommended
  - Mobile health technology using weekly interactive components (e.g., 2-way SMS)
  - Alarm devices as reminders for PLHIV with memory impairment

- Proactive engagement and re-engagement of patients who miss clinic appointments and/or are lost to follow-up is recommended
  - Includes intensive outreach for those not engaged in care within one month of a new HIV diagnosis

Monitoring ART Adherence

- Self-reported adherence is less strongly associated with treatment responses than are electronic drug monitor or pharmacy-based measures, but relative ease of implementation supports its use in clinical care

- Careful attention must be paid to collecting self-report data in a manner that makes reasonable demands on memory

- Questionnaires should inquire only about specific doses taken over a short time interval (e.g., in the previous week) and about global measures of adherence over a longer time interval (e.g., in the previous month)

Adherence Tools for Patients

- Adherence tools are more beneficial when combined with education & counseling
  - Individual one-on-one ART education
  - One-on-one adherence support:
    - May include telephone-based counseling and/or
    - Face-to-face counseling
  - Expanded one-on-one counseling to include
    - Discardant partners, as necessary
  - Group education and group counseling
  - Peer support

- Ntibates, dose planners, reminder alarms, and electronic drug monitors
LEARNING ACTIVITIES

LEARNING ACTIVITY MODULES 2–3

**Case Study Application.** Teams of two to four trainees are given a patient case study and asked to apply the information learned from Modules 2-3. This team activity is followed by a whole class discussion of each team’s conclusions and responses to the case study questions. This exercise requires approximately one hour to complete.

**CASE STUDY 1 (PART 1)**
Ms. AB is a 26-year-old woman in a sexual relationship with an HIV-positive partner who is not yet on ART. She has a 17-month-old child. Ms. AB and her partner use condoms most but not every time that they have sexual intercourse. She has not had an HIV test since the delivery of her baby, and she reports having had condom-less sex 4 nights ago.

Questions:
1) How do you assess Ms. AB’s HIV risk?
2) Should Ms. AB receive an HIV test? Why has she not been tested recently? Describe possible barriers to her getting tested.
3) What structural interventions could help Ms. AB or other members of her community increase their rates of HIV testing?
4) Who should perform HIV testing? In what setting(s) should testing be performed? Why?
5) Should her child receive an HIV test?

**CASE STUDY 1 (PART 2)**
Ms. AB tests HIV negative and is interested in HIV prevention.

Questions:
6) Is she a candidate for post-exposure prophylaxis (PEP)? How would you counsel Ms. AB about PEP?
7) What is the recommended protocol for PEP? How soon must PEP be started to be effective? What is the duration of PEP treatment?
8) Is she a candidate for pre-exposure prophylaxis (PrEP)? Discuss why or why not.
9) When should she receive another HIV test?

**CASE STUDY 1 (PART 3)**
Ms. AB received neither PEP nor PrEP because she stated that taking “HIV pills” is highly stigmatizing in her community, including within your clinic where patients who have been prescribed ARV drugs are treated poorly by clinic staff. She has consistently missed clinic appointments over the past 8 months.

Questions:
10) Why is stigma within healthcare settings a barrier to increased HIV testing, care, and treatment? What can be done to create a patient-friendly environment?
11) What is the recommended intervention to re-engage Ms. AB in care? Who should be involved in attempting to re-engage Ms. AB in care and ensure she makes clinic appointments?
CASE STUDY 1 (PART 4)

Ms. AB returns to the clinic almost a year since her last clinic visit. She requests an HIV test. She tests HIV positive.

Questions:

12) Why is linkage to HIV care important? Who should initiate linkage to HIV care? When should this happen?

13) What are some potential barriers to successful linkage to HIV care?

14) What structural interventions improve linkage to HIV care?

15) Using members of your team, select one person to act as Ms. AB, the others as members of your care team. Role play the counseling involved in informing Ms. AB of her HIV status and how you would link her to care. What practices are recommended? What practices are not recommended?

CASE STUDY 1 (PART 5)

Your clinic has documented low HIV testing coverage within its catchment area, however your clinic does not generate data related to linkage to HIV care (preventive and therapeutic).

Questions:

16) What is the HIV care continuum?

17) Why is monitoring HIV testing coverage important?

18) Why is generating linkage to HIV care data important?

19) For purposes of measuring the HIV care continuum, what denominator does the 2015 IAPAC guidelines recommend?
LEARNING ACTIVITY MODULES 2-7

**Case Study Review.** Teams of two to four trainees are given a patient case study and asked to apply the information learned from Modules 2-7. This team activity is followed by a whole class discussion of each team's conclusions and responses to the case study questions. This exercise requires approximately one hour to complete.

**CASE STUDY 2 (PART 1)**
Mr. CD is a 32-year-old man who was recently diagnosed HIV positive in your clinic.

Questions:

1) According to 2015 IAPAC and WHO guidelines recommendations, is Mr. CD’s CD4 count a criterion for initiating ART?
2) Describe recent randomized clinical trials showing clinical benefit for ART in asymptomatic HIV-infected adults.
3) What first-line ART should Mr. CD receive? Outline changes in first-line ART recommendations by the 2015 WHO guidelines.
4) How should drug resistance testing be used for Mr. CD?
5) What is HIV treatment failure? How is HIV treatment failure defined?

**CASE STUDY 2 (PART 2)**
Mr. CD is initiated on ART.

Questions:

6) What interventions should be used to reinforce and monitor Mr. CD’s retention in HIV care?
7) How should his HIV treatment adherence be monitored?
8) What members of the care team should play a role in monitoring Mr. CD’s HIV treatment adherence?

**CASE STUDY 2 (PART 3)**
You now learn that Mr. CD uses injection drugs. Referral to a mental health counselor confirms clinical depression.

Questions:

9) What interventions are recommended to address his substance use?

10) If available, should needle and syringe exchange and opiate substitution programs be incorporated into care?
11) What interventions are recommended to address his clinical depression? How important is it to do so in the context of HIV treatment? Quality of life?

**CASE STUDY 2 (PART 4)**
Mr. CD’s wife is 8 weeks pregnant and unfortunately also tests positive for HIV.

Questions:

12) When should she initiate ART? What ARV medications are recommended?
13) What types of interventions are recommended to enhance her engagement in HIV care?

**CASE STUDY 2 (PART 5)**
Mr. CD has a 14-year-old daughter who is sexually active.

Questions:

14) Ideally, and according to 2015 IAPAC guidelines, should Mr. CD’s daughter require parental consent to have an HIV test?
15) What types of services are recommended for adolescents who are diagnosed HIV positive?

**CASE STUDY 2 (PART 6)**
Your clinic generates HIV testing coverage, linkage to HIV care, and ART initiation data for its catchment area, however it does not generate viral suppression data.

Questions:

16) Why is monitoring viral suppression an important metric?
17) Why should your clinic consider longitudinal cohort measurement of HIV service utilization and treatment outcomes?
PATIENT EDUCATION

What is HIV?

- HIV is a disease caused by the human immunodeficiency virus.
- The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS) but not every person infected with HIV develops AIDS.
- HIV continues to be a major global public health issue:
  - According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), there were approximately 35 million people living with HIV by the end of 2013.

How is HIV spread?

- HIV is spread through contact with the blood, breast milk, semen, or vaginal fluid of an infected person.
- HIV is more easily transmitted in the presence of other sexually transmitted diseases.

Who is at risk of getting HIV?

Behaviors and conditions that put individuals at greatest risk of contracting HIV include:

- Sharing unsterilized needles for medical or dental procedures (blood transfusions, acupuncture, etc.), tattoos, or injection drug use;
- Having unprotected sexual intercourse (anal or vaginal);
- Having another sexually transmitted infection;
- Occupational blood exposure to HIV in a healthcare setting;
- Having received a blood transfusion or blood products before 1990; and
- Having a mother who has HIV.

What are the symptoms of HIV infection?

- The symptoms of HIV vary depending on the stage of the infection. Though people living with HIV tend to be most infectious in the first few months, many are unaware of their status until later stages.
- In the first few weeks following initial infection, individuals may experience no symptoms at all or an influenza-like illness that includes fever, headache, rash, or sore throat.
- As the infection progressively weakens the person’s immune system, the individual can develop other signs and symptoms such as swollen lymph nodes, weight loss, fever, diarrhea, and coughing.
- Without treatment, they could also experience severe illnesses such as tuberculosis, cancers, etc.

Is HIV a preventable disease?

Currently, there is no vaccine for HIV, but the infection is largely preventable.

Individuals can reduce their risk of HIV infection by adopting the following behaviors:

- Not sharing needles or other drug-related equipment;
- Ensuring that the equipment used for tattooing, piercing, or acupuncture is sterile (the safest way is to go to a professional);
- Wearing protective medical gloves and handling used needles with care in a healthcare facility where contact with someone else’s blood or needle is possible;
- Getting tested for other sexually transmitted infections that may increase their susceptibility to HIV infection;
- If a woman is pregnant and has concerns, talking to her doctor; and
- Not engaging in high-risk behavior.
To prevent the spread of the virus to others, people with HIV should:

- Use condoms consistently;
- Not share needles or drug-related equipment; and
- Take HIV treatment as prescribed because it reduces the risk of transmitting the virus on to others.

Medications are also able to prevent the acquisition of HIV. Post-exposure prophylaxis (PEP) involves taking antiretroviral drugs within three days of a possible exposure to HIV. People at high risk for HIV infection who have tested HIV negative may request access to pre-exposure prophylaxis (PrEP), where it is available. However, PrEP must be used in combination with consistent condom use and other harm reduction measures.

**How is HIV diagnosed?**

- The only way to determine whether you are HIV positive is to be tested for HIV through a blood test that detects the presence or absence of HIV antibodies.
- HIV treatment is most effective when HIV infection is in its early stages.

**Is there a treatment for HIV infection?**

The human body cannot get rid of HIV. So, once you have HIV, you have it for life. Although there is no cure for HIV, effective HIV treatment with antiretroviral therapy can control the virus so that people living with HIV can enjoy healthy and productive lives without opportunistic infections or other serious diseases. Antiretroviral therapy also reduces the risk of transmitting the virus on to others.

**What else can people do to live well with HIV?**

- Get vaccinated against hepatitis A and hepatitis B;
- Implement lifestyle changes, such as maintaining a healthy body weight, eating a well-balanced diet, exercising regularly, quitting smoking, and avoiding alcohol and high-risk behaviors; and
- Inform their healthcare provider of any medication taken for other conditions because some medication may interfere with HIV treatment.