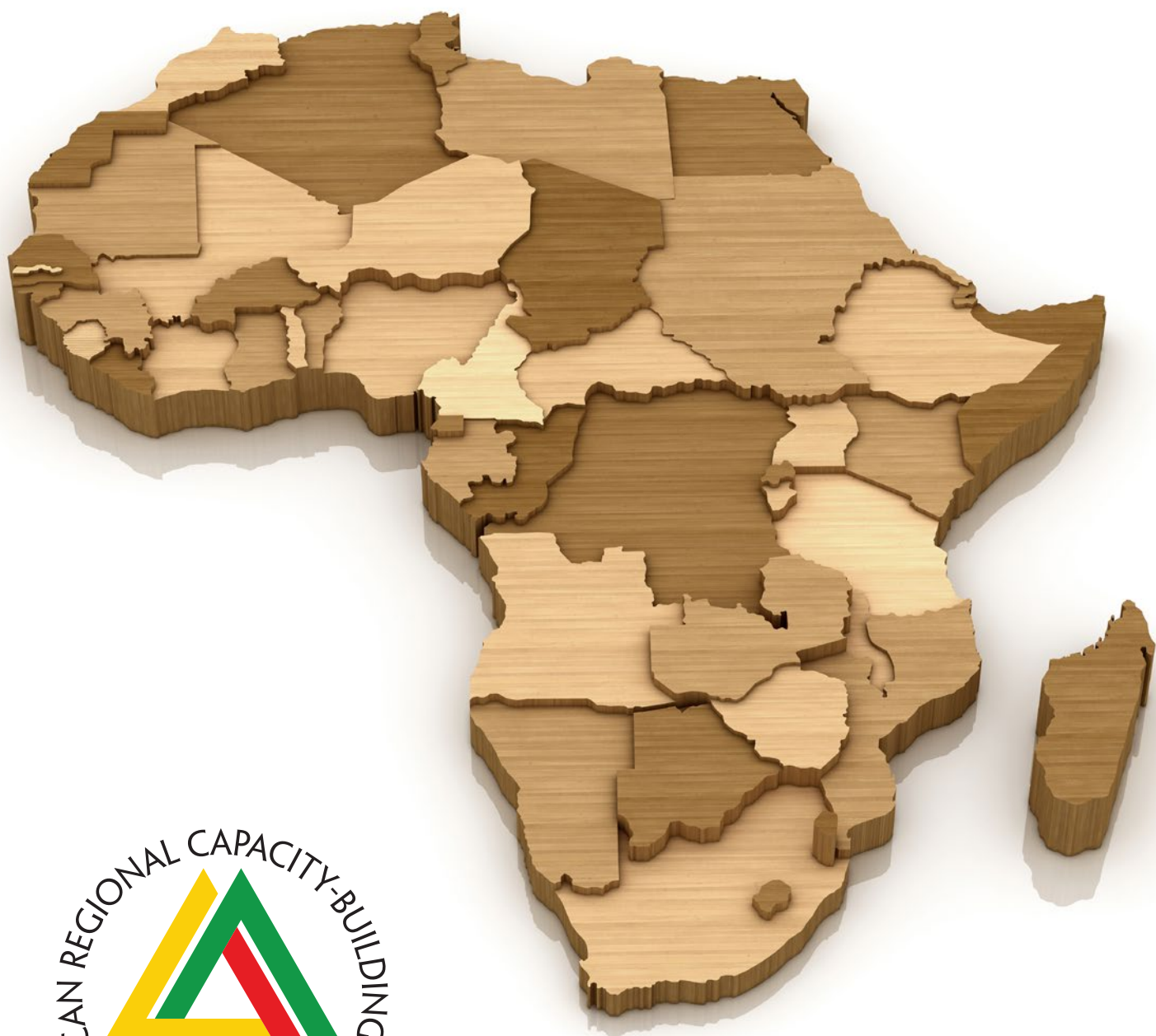


TRAIN-THE-TRAINER MANUAL

HIV CLINICAL MANAGEMENT



Supported through a restricted educational grant from Gilead Sciences.



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 copyright for the materials contained in this manual lies with the International Association of Providers of AIDS Care (IAPAC). The course materials may be reproduced and used to conduct in-service training courses for the health workforce on the African continent. The materials should not be used for any commercial or profit-making activity unless specific permission is granted by the copyright owners.

© International Association of Providers of AIDS Care, 2015

PREFACE

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

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

ACRONYMS

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

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

ADULT LEARNING

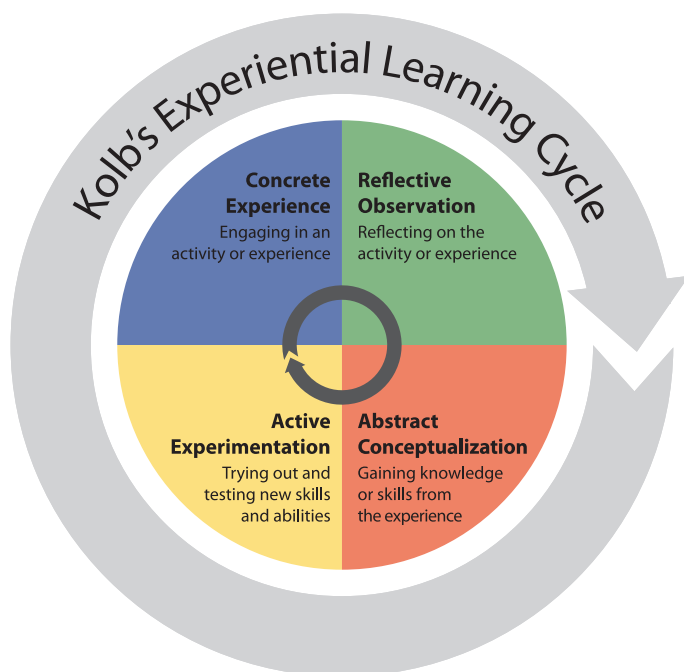
LEARNING CYCLE

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



© 2014 SkillsYouNeed.com Kolb D.A. (1984) "Experiential Learning experience as a source of learning and development," New Jersey: Prentice Hall.

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:

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

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

- What knowledge or information is currently used on the job?
- What new knowledge, skills, or values are required to fill the information gap?
- What is the general learning style of the participants?
- 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:

- How will the training link to broader strategies for change?
- With whom should we share the draft curriculum for critical feedback?
- 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?
- 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:

KNOWLEDGE	COMPREHENSION	APPLICATION
Define	Explain	Apply
List	Express	Employ
Recognize	Describe	Demonstrate
Record	Discuss	Illustrate
Repeat	Identify	Interpret
State	Restate	Perform
	Translate	Practice
		Use

6) Monitoring and Evaluation. We seek to answer:

- How will the training's efficacy be evaluated during and after the training?
- 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.

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:

8:00 AM– Registration/Check-In/Breakfast
9:00 AM

9:00 AM– **Welcome, Introductions,
and Program Overview**
9:15 AM

9:15 AM– **Module 1: Defining, Measuring, and
Monitoring the HIV Care Continuum**
9:45 AM

9:45 AM– **Module 2: Optimizing the HIV Care
Environment**
10:15 AM

10:15 AM– **Module 3: HIV Testing and Linkage to
Preventative and Therapeutic Care**
10:45 AM

10:45 AM– **Question and Answer Session**
11:00 AM

11:00 AM– Break
11:30 AM

11:30 AM– **Learning Activity: Case Study Application**
12:30 PM

12:30 PM– Lunch
1:30 PM

1:30 PM– **Module 4: Implementing Earlier ART
Initiation and Selecting 1st Line ART**
2:00 PM

2:00 PM– **Module 5: Defining HIV Treatment
Failure and Selecting 2nd Line ART**
2:15 PM

2:15 PM– **Module 6: Special Considerations for
Engaging Key Populations in HIV Care**
2:45 PM

2:45 PM– **Module 7: Achieving Long-Term Reten-
tion and Engagement in HIV Care**
3:15 PM

3:15 PM– **Question and Answer Session**
3:30 PM

3:30 PM– Break
4:00 PM

4:00 PM– **Learning Activity: Case Study Review**
5:00 PM

5:00 PM– **Summary and Evaluation**
5:30 PM

5:30 PM Adjourn

TRAINER INTRODUCTION

Time Required:

Approximately 15 minutes

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.

MODULE 1

DEFINING, MEASURING, AND MONITORING THE HIV CARE CONTINUUM

TRAINER GUIDE

Time Required:

Approximately 30 minutes

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

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 the 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.¹ Life expectancy in some southern African countries is increasing²

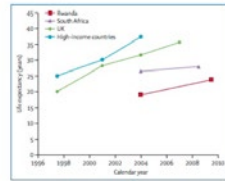
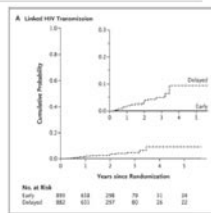


Figure: Trends in life expectancy for individuals initiating antiretroviral therapy at age 55 years
Life expectancy increases from Russia, South Africa, the UK, and high-income countries in North America and Europe are plotted at the midpoint of the calendar periods for which they are reported.

¹The Antiretroviral Therapy Cohort Collaboration, *Lancet* 2006; ²Narselmann, et al., *Lancet Glob Health* 2015

Introduction (continued)

- ART is highly effective in preventing sexual, parenteral, and vertical transmission of HIV^{2,3,4}
- HIV treatment as prevention (TasP) strategy can prevent AIDS progression, premature death, and HIV transmission^{5,6,7}



2. Cohen MS, et al. *N Engl J Med*. 2011 Aug 11; 365(6):493-505.
3. Wood L, et al. *BMJ*. 2009 Oct 30; 339(7731):1175-82.
4. De Cock RM, et al. *JAMA*. 2000 Mar 15; 283(12):1571-82.
5. Montaner JS, et al. *Lancet*. 2006 Aug 5; 368(9551):531-6.
6. Grulich RM, et al. *The Lancet*. 2009; 373(9657):AB57.
7. Montaner JS, et al. *PLoS One*. 2014; 9(2):e87922.

Cohen, *N Engl J Med*, 2011²

“Continuum of HIV Care”

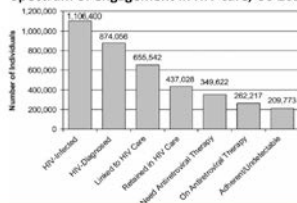
The “continuum of HIV care” refers to a **comprehensive package of HIV prevention, diagnostic, treatment, and support services** provided for people living with HIV (PLHIV) and their families ranging across: initial **HIV diagnosis and linkage to care**; management of opportunistic infections and other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



WHO Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection, 2013

Continuum of HIV Care (where it all started...)

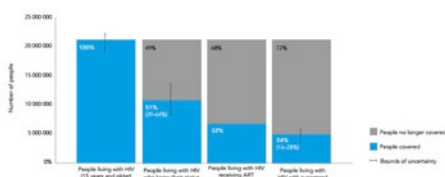
Spectrum of engagement in HIV care, US 2011



Gardner E et al. Clin Infect Dis. 2013

Continuum of HIV Care (Sub-Saharan Africa)

Abbreviated HIV treatment cascade for sub-Saharan Africa, 2012



UNAIDS, Global Report 2013

Measuring the Continuum

- Measuring the continuum is critical to evaluating the success of HIV responses at clinic-, 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

IPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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 with measuring program improvement/success; other program metrics may also be used

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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 comparison
- Incomplete reporting may result in suboptimal program assessment and suboptimal resource allocation decisions

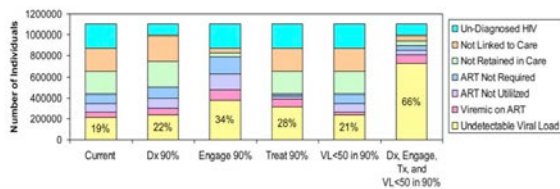
➤ Where possible, consider longitudinal cohort measurement of HIV service utilization and treatment outcomes

- Helps to identify means to maximize viral suppression through early ART access and minimizing ART discontinuation

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Effect of Interventions on Continuum

Simulations of the effect of assessing different levels of engagement in care



Gardner E et al. Clin Infect Dis. 2011

UNAIDS 90-90-90 Targets



➤ UNAIDS estimates that:

- ~55%, or 15 million PLHIV, who are in need of ART are currently on ART
- <25% 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 (**optimization target**)

Modeling suggests that achieving these targets will decrease AIDS incidence, AIDS-related deaths, and new HIV infections by 90% from 2010 levels by 2030

UNAIDS, 90-90-90, 2014

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

MODULE 2

OPTIMIZING THE HIV CARE ENVIRONMENT

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)

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





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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



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 PLHIV engagement in HIV care
- Task-shifting/-sharing from physicians to appropriately trained healthcare providers, including nurses and associate clinicians, for ART initiation and maintenance

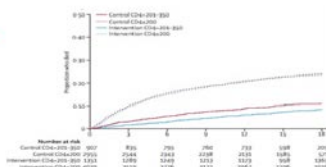
IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Task shifting of antiretroviral treatment from doctors to primary-care nurses in South Africa (STRETCH): a pragmatic, parallel, cluster-randomised trial

Lara Fairall, Mox O'Beck, Carol Lombard, Vanessa Timmerman, Kerry Lister, Merrick Zwarenstein, Andrew Boule, Danielle Georgitis, Christopher J Colvin, Simon Lewis, Gill Faria, Ruth Cornick, Beverly Dwyer, Muelo Tshabalala, Edwin Kozak, Clotilde van Vuuren, Donald Stigma, Ronald Chigwenya, Eva Bateman

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



Fairall et al. Lancet. 2012

Community and Patient Engagement

- Engage community across continuum of care
 - Models of community-based support and ART delivery to complement public sector ART programs by enhancing psychosocial support, improving ART access and outcomes
- Enabling PLHIV to take responsibility for their care (chronic disease management) can result in improved health outcomes, increased health services utilization
 - Self-management (e.g., monitoring, decision-making)
 - User-driven care (e.g., electronic intervention)



IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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)

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



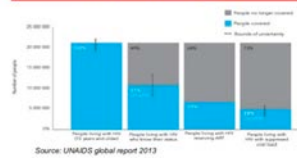
Introduction

➤ 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



UNAIDS Global Report, 2013

HIV Testing Continuum



WHO Consolidated Guidelines on HIV Testing Services, 2015

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 analyses to identify individuals at risk of HIV infection for HIV testing

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

WHO HIV Testing Guidelines

- Trained lay 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, STI, hepatitis, and TB services



WHO Consolidated Guidelines on HIV Testing Services, 2015



WHO HIV Testing Guidelines (continued)

Who to Test	When to Test
Pregnant women and partners	<ul style="list-style-type: none"> • First antenatal care visit • Retesting during third trimester or peripartum • Offer couples and partner testing
Infants and children <18 months old	<ul style="list-style-type: none"> • 4-6 weeks for all infants exposed to HIV or whose mothers have an uncertain status • Final status after 18 months and/or when breastfeeding ends
Adolescents	<ul style="list-style-type: none"> • Integrate into all healthcare encounters • Annually if sexually active; with new sexual partners

WHO Consolidated Guidelines on HIV Testing Services, 2015



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**

IASAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015





Recommendations

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



Post-Exposure Prophylaxis

Recommendation
Post-exposure prophylaxis for HIV
Number of antiretroviral drugs
An HIV post-exposure prophylaxis regimen with two antiretroviral drugs is effective, but three drugs are preferred.
Preferred antiretroviral regimen for adults and adolescents ^a
TDF + 3TC (or FTC) is recommended as the preferred backbone regimen for HIV post-exposure prophylaxis among adults and adolescents.
LPV/r or ATV/r is recommended as the preferred third drug for HIV post-exposure prophylaxis among adults and adolescents.
Where available, RAL, DRV/r or EFV can be considered as alternative options.

WHO Guidelines on Post-Exposure Prophylaxis for HIV, 2014



Pre-Exposure Prophylaxis

Recommendation 2: Oral pre-exposure prophylaxis to prevent HIV acquisition			
Target population	Specific recommendation	Strength of the recommendation	Quality of the evidence
HIV-negative individuals at substantial risk of HIV infection ^a	Oral PrEP (containing TDF) should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches	Strong	High

WHO Guideline on When to Start Antiretroviral Therapy and on Pre-Exposure Prophylaxis for HIV, 2015

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)

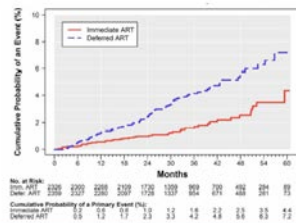
Learning Objectives

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

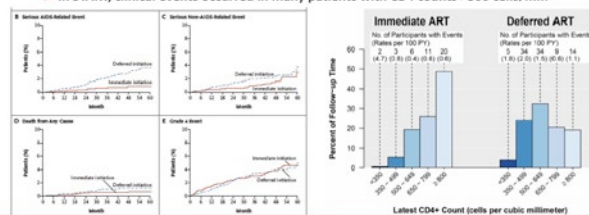
- Increasing early access to ART is associated with decreased AIDS-related morbidity, mortality and transmission
- START showed >50% reduction in:
 - risk of progression to AIDS
 - other serious illness (including TB or cancer) or death among people who initiated ART with CD4 >500 cells/mm³ compared with deferred ART initiation after CD4 <350 cells/mm³



Lundgren J et al. N Engl J Med. 2015.

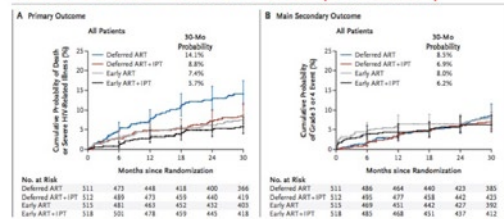
START Results

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



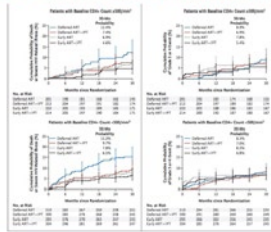
Lundgren J et al. N Engl J Med. 2015.

TEMPRANO Clinical Trial (Côte d'Ivoire)



TEMPRANO ARS 12136 Study Group. New Engl J Med. 2015

TEMPRANO Clinical Trial (Côte d'Ivoire)



TEMPRANO ARV 12136 Study Group. *New Engl J Med*. 2015

HPTN 052 and PARTNERS



- Final results of the HPTN 052 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 up¹
- 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 load²

¹Cohen, MS, et al., *IAS2015*; ²Rogger A, et al., *CROI 2015*

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**

IAPAC Guidelines for Optimizing 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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

WHO 1st Line ART Recommendations (2013)



First-line ART for adults (including pregnant and breastfeeding women and people with TB and HBV coinfection)

Preferred regimens	TDF + 3TC (or FTC) + EFV
Alternative regimens	AZT + 3TC + EFV (or NVP) TDF + 3TC (or FTC) + NVP
Special circumstances ^a	Regimens containing ABC, d4T ^b and boosted PIs

^a For adolescents, see section 7.2.4 on first-line ART for children three years and older which includes adolescents infected with HIV (10 years and older).

^b Using d4T as an option in first-line treatment should be discontinued and restricted to special cases in which other ARV drugs cannot be used. The duration of therapy with this drug should be limited to the shortest time possible and include close monitoring.

^c Special circumstances may include situations where preferred or alternative regimens may not be available or suitable because of significant toxicities, anticipated drug-drug interactions, drug procurement and supply management issues, or for other reasons.

WHO Consolidated Treatment Guidelines, 2013

WHO ART Recommendations - 2015



Recommendation 1: When to start ART among people living with HIV

Target population	Specific recommendation	Strength of the recommendation	Quality of the evidence
Adults ^a (>19 years)	ART should be initiated in all adults living with HIV at any CD4 cell count	Strong	Moderate
	As a priority, ART should be initiated in all adults with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count ≤ 350 cells/mm ³	Strong	Moderate

WHO Guideline on When to Start Antiretroviral Therapy and on Pre-Exposure Prophylaxis for HIV, 2015

WHO ART Recommendations - 2015



Pregnant and breastfeeding women	ART should be initiated in all pregnant and breastfeeding women living with HIV at any CD4 cell count and continued lifelong	Strong	Moderate
Adolescents (10–19 years old)	ART should be initiated in all adolescents living with HIV at any CD4 cell count	Conditional	Low
	As a priority, 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 ≤ 350 cells/mm ³	Strong	Moderate

WHO Guideline on When to Start Antiretroviral Therapy and on Pre-Exposure Prophylaxis for HIV, 2015

ENCORE1



- Randomized international study (N = 630 adults) randomized to receive efavirenz 400 mg vs 600 mg with tenofovir 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

	EFV400 N=321	EFV600 N=309	Difference (95%CI)	P
Number (%) patients reporting AE	286 (89.1)	273 (88.4)		
Number (%) patients with study drug related AE	118 (36.8)	146 (47.2)	-10.5% (-18.2, -2.8)	0.008*
Number (%) patients stopping drug due to related AE	6 (1.9)	18 (5.8)	-3.96 (-6.96, -0.95)	0.010*

ENCORE1 Study Group. Lancet. 2014

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

UNAIDS Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



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 failure²

WHO Consolidated Treatment Guidelines, 2013; WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, 2014



WHO 2nd Line ART Recommendations (2013)

Target population	Preferred second-line regimen*
Adults and adolescents (≥15 years)	If AZT or AZT was used in first-line ART: TDF + 3TC (or FTC) + ATV/r or LPV/r If TDF was used in first-line ART: AZT + 3TC + ATV/r or LPV/r
Pregnant women	Same regimens recommended for adults and adolescents
HIV and TB coinfection	If rifabutin is available: Standard PI-containing regimens as recommended for adults and adolescents If rifabutin is not available: Same NRTI backbone as recommended for adults and adolescents plus double-dose LPV/r (that is, LPV/r 800 mg/1200 mg twice daily) or standard LPV dose with an adjusted dose of RTV (that is, LPV/r 400 mg/600 mg twice daily)
HIV and HCV coinfection	AZT + TDF + 3TC (or FTC) + ATV/r or LPV/r

*AZT and ddI can be used as NRTI backbone options but add complexity and cost without clinical advantages. ddI can be used as an alternative PI and SQV/r in special situations, but neither is currently available as a fixed-dose combination. For a 3TC + RTV fixed-dose combination, see the development.

WHO Consolidated Treatment Guidelines, 2013

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)

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



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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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



HEALTH SECTOR INTERVENTIONS

HIV PREVENTION

- 1 The correct and consistent use of condoms with condom-compatible lubricants is recommended for all key populations to prevent sexual transmission of HIV and sexually transmitted infections (STIs).
- 2 Among men who have sex with men, pre-exposure prophylaxis (PrEP) is recommended as an additional HIV prevention choice within a comprehensive HIV prevention package.
NEW RECOMMENDATION
- 3 Where serodiscordant couples can be identified and where additional HIV prevention choices for them are needed, daily oral PrEP (specifically tenofovir or the combination of tenofovir and emtricitabine) may be considered as a possible additional intervention for the uninfected partner.
- 4 Post-exposure prophylaxis (PEP) should be available to all eligible people from key populations on a voluntary basis after possible exposure to HIV.
- 5 Voluntary medical male circumcision (VMMC) is recommended as an additional, important strategy for the prevention of heterosexually acquired HIV infection in men, particularly in settings with hyperendemic and generalized HIV epidemics and low prevalence of male circumcision.

WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, 2014

WHO Recommendations – Key Populations (continued)



HARM REDUCTION FOR PEOPLE WHO USE DRUGS

- | | |
|---|--|
| 6 | All people from key populations who inject drugs should have access to sterile injecting equipment through needle and syringe programmes . |
| 7 | All people from key populations who are dependent on opioids should be offered and have access to opioid substitution therapy . |
| 8 | All people from key populations with harmful alcohol or other substance use should have access to evidence-based interventions , including brief psychosocial interventions involving assessment, specific feedback and advice. |
| 9 | People likely to witness an opioid overdose should have access to naloxone and be instructed in its use for emergency management of suspected opioid overdose. NEW RECOMMENDATION |

HIV TESTING AND COUNSELLING (HTC)

- | | |
|----|--|
| 10 | Voluntary HTC should be routinely offered to all key populations both in the community and in clinical settings. Community-based HIV testing and counselling for key populations , linked to prevention, care and treatment services, is recommended, in addition to provider-initiated testing and counselling. |
|----|--|

WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, 2014

WHO Recommendations – Key Populations (continued)



HIV TREATMENT AND CARE

- | | |
|----|--|
| 11 | Key populations living with HIV should have the same access to antiretroviral therapy (ART) and to ART management as other populations. |
| 12 | All pregnant women from key populations should have the same access to services for prevention of mother-to-child transmission (PMTCT) and follow the same recommendations as women in other populations. |

WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, 2014

WHO HIV Testing Recommendations: Pregnant and Post-Partum Women



- Provider-initiated HIV testing should be a routine part of care in 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



WHO Consolidated Guidelines on HIV Testing Services, 2015

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Considerations for Pregnant Women (continued)



- Conduct non-stigmatizing 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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Treatment for Pregnant and Breastfeeding Women



- **A once-daily fixed-dose combination of TDF + 3TC (or FTC) + 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 AZT); infant prophylaxis should begin at birth or when HIV exposure is recognized postpartum

WHO Consolidated Treatment Guidelines, 2013

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Key Population Considerations



MSM

- **Develop and adopt standards for the provision of culturally competent care and the dissemination of information/educational materials in clinical programs for all MSM 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 MSM who may not access HIV testing services in clinical settings
- Offer STI testing, including screening for syphilis, Chlamydia, and Gonorrhea in all relevant anatomical sites; screen for viral hepatitis and vaccinate susceptible MSM for (HAV and HBV); vaccinate MSM aged less than 26 for HPV; provide anal examination for HPV-associated pathology
- Facilitate the linkage to care of MSM youth at HIV testing sites through direct referral to MSM peer navigators

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

Key Population Considerations (continued)



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 treatment 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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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 into, dwell in, or leave correctional facilities, while delivering general interventions that decrease intimate partner/sexual violence, promote harm reduction, and address substance use
- Ensure that health services in jails and prisons follow international guidelines for HIV care, including for the management of HIV comorbidities 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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015

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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



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**

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



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

IAPAC Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents, 2015



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)

Guidelines for Improving Entry Into and Retention in Care and ART Adherence for Persons with HIV, 2012



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 home visits
- Expand one-on-one counseling to include discordant partners, as necessary
- Group education and group counseling
- Peer support

➤ Pillboxes, dose planners, reminder alarm devices, and electronic drug monitors

Guidelines for Improving Entry Into and Retention in Care and ART Adherence for Persons with HIV, 2012

Improving Retention in Care

WHO-recommended interventions:

- Reduce waiting time
- Link, integrate, coordinate care
- Family-focused care
- Implement patient monitoring across HIV care continuum

Factors related to the health system	Possible interventions
High direct and indirect costs of receiving care	<ul style="list-style-type: none"> • ART and related diagnostics and services free of charge at the point of care • Decentralize ART where feasible • Scheduled facility visits • Reduce waiting time at the facility level <ul style="list-style-type: none"> • Appointment system • Separate clinical consultation visits from appointments for picking up medicines • Link, integrate and coordinate care • Family-focused care (engaging services around the needs of the family where appropriate)
Stock-outs of ART drugs	<ul style="list-style-type: none"> • Optimize pharmaceutical supply management systems to forecast, procure and deliver ART drugs. Use fixed dose combinations to simplify forecasting and supply management systems.
Lack of a system for monitoring retention in care	<ul style="list-style-type: none"> • Implement systems for patient monitoring across the continuum of care, including cohort analysis and patient tracking systems.

WHO Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection, 2013

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 health-care 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.

NOTES



WWW.IAPAC.ORG