

# Global Competency and Outcomes Framework for Universal Health Coverage

# **HIV Module**



# Global Competency and Outcomes Framework for Universal Health Coverage

# **HIV Module**

Global Competency and Outcomes Framework for Universal Health Coverage: HIV Module

ISBN 978-92-4-004596-5 (electronic version) ISBN 978-92-4-004597-2 (print version)

#### © World Health Organization 2022

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (http://www.wipo.int/amc/en/mediation/rules/).

**Suggested citation.** Global Competency and Outcomes Framework for Universal Health Coverage: HIV Module. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

**Sales, rights and licensing.** To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see https://www.who.int/copyright.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Design: L'IV Com Sàrl

### Contents

Acknowledgements	iv
Abbreviations	v
Executive summary	vi
1. Introduction	1
2. A competency-based approach to education rooted in population health needs	2
3. What are the HIV health services towards UHC?	4
<ul> <li>3.1 Using this module alongside the UHC Compendium and the Global Competency and Outcomes Framework for UHC to develop competency-based curricula for the provision of HIV services</li> <li>3.2 Illustrative profiles and a focus on health workers with a pre-service training pathway of 12–48 months</li> </ul>	4 5
4. Practice activities for programme design incorporating HIV services	7
Domain I: Individual Health Domain Domain II: Population Health Domain Domain III: Management and Organization Domain	7 10 10
References	19

### Acknowledgements

The development of this module as part of the Global Competency and Outcomes Framework for Universal Health Coverage (UHC) was led by Siobhan Fitzpatrick, with technical inputs from Ibadat Dhillon and Giorgio Cometto, and under the strategic oversight of James Campbell, Health Workforce Department, World Health Organization (WHO).

WHO is grateful to members of the Education Working Group, who provided technical input to the conceptualization of the Global Competency and Outcomes Framework for UHC, which this HIV Module accompanies: Ian Bates (International Pharmaceutical Federation, the Netherlands); Henry Campos (The Network: Towards Unity for Health, Brazil); Wanicha Chuenkongkaew (Mahidol University, Thailand); Address Malata (University of Malawi, Malawi); Senthil Rajasekaran (World Federation for Medical Education, Wayne State University School of Medicine, United States of America); Sean Tackett (Johns Hopkins Bayview Medical Center, United States of America); Olle ten Cate (University Medical Center Utrecht, the Netherlands); Val Wass (World Organization of Family Doctors [WONCA], United Kingdom of Great Britain and Northern Ireland); and Cynthia Whitehead (University of Toronto, Canada).

WHO thanks the following personnel who contributed to this module: Onyema Ajuebor (Health Workforce Department) and Rachel Baggaley, Nathan Ford, Cheryl Johnson, Robert Luo, Ajay Rangaraj and Marco Vitoria (Global HIV, Hepatitis and STIs Programmes).

WHO thanks the following personnel whose work to develop and populate the UHC Compendium was instrumental in the development of this module: John Fogarty (consultant); Taufique Joarder (consultant); Teri Reynolds (Clinical Services and Systems, WHO); and Karin Stenberg (Department of Health Systems Governance and Financing, WHO).

Funding

The production of this document has been made possible through funding support from the United States Agency for International Development (USAID).

### Abbreviations

ARV	antiretroviral
CBE	competency-based education
СТ	computed tomography
HCV	hepatitis C virus
HPV	human papillomavirus
IPT	isoniazid preventive therapy
ISCO	International Standard Classification of Occupations
NSP	needle and syringe programmes
OST	opiate substitution therapy
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
SDG	Sustainable Development Goal
STI	sexually transmitted infection
ТВ	tuberculosis
UHC	universal health coverage
VMMC	voluntary medical male circumcision
WHO	World Health Organization
STI TB UHC VMMC	sexually transmitted infection tuberculosis universal health coverage voluntary medical male circumcision

### Executive summary

This document provides a reference for educators and curriculum planners to identify the relevant HIV-specific education outcomes for competency-based curricula for health workers with a pre-service training pathway of 12–48 months, when used in tandem with the WHO Global Competency and Outcomes Framework for Universal Health Coverage (UHC) (1).

This module is one of the several accompanying service-specific modules of the WHO Global Competency and Outcomes Framework for UHC. It is derived from the HIV services included in the WHO UHC Compendium: Health Interventions for UHC (2) – a database of health interventions to enable service package planning.

This module introduces the principles of competency-based education (CBE) and the competency model used within the WHO Global Competency and Outcomes Framework for UHC which is oriented towards the performance of the practice activities relevant for the scope of practice and service package. It maps the HIV services from the UHC Compendium with the practice activities in the Global Competency and Outcomes Framework for UHC; in so doing, it provides a reference for the content and outcomes to be integrated into competency-based curricula.

When developing competency-based curriculum content, the following steps should be followed:

- 1. Identify the HIV package of services.
- 2. Define the HIV-related programme outcomes for the programme:
  - a. Identify the relevant tasks within scope of practice, using the illustrative occupational profiles as a reference (Table 3).
  - b. Identify any additional practice activities that are necessary for the provision of HIV services that are not mapped to the individual intervention, such as team handover, using the practice activities in the Global Competency and Outcomes Framework for UHC.
- 3. Define the competency-based performance standards for the HIV-related outcomes using the competencies in the Global Competency and Outcomes Framework for UHC.
- 4. Define the relevant curriculum content using the practice activity knowledge guides in the Global Competency and Outcomes Framework for UHC.
- 5. Orient learning activities and assessment of the achievement of HIV-related programme outcomes defined in step 2 following the principles outlined in the Global Competency and Outcomes Framework for UHC.

## 1. Introduction

The aim of UHC is for all people to have access to the full range of essential health services, from health promotion, and injury, disability and disease prevention to treatment, rehabilitation and palliative care, when and where they need them, without financial hardship (3). Almost all of the Sustainable Development Goals (SDGs) are interrelated and contribute to health directly or indirectly. Strengthening health worker education and training links directly to SDG 3 (ensure healthy lives and promote well-being for all at all ages), and builds on the agenda for SDG 4 for inclusive and quality education.

A holistic health labour market approach is essential to maximize the potential of education and to ensure the uptake of the population-based approach to defining curricula outcomes. This includes aligning health worker education and training with the needs and demands of the health system; that the health workforce is equipped through appropriate education with the competencies required to effectively meet population needs; that the health workforce with the right skills mix is equitably distributed geographically to provide the health services that meet diverse population needs; and that decent conditions<sup>1</sup> that ensure gender-transformative employment, support, supervision, training and resources optimize health worker motivation, retention, distribution and performance (4).

The competencies of health workers as outlined in the Global Competency and Outcomes Framework for UHC are particularly important in the organization and delivery of HIV services in addressing the stigma and discrimination that can be faced when accessing certain health services. It is important that health workers are trained to provide the clinical health services, and to do so in a manner that integrates the competencies for people-centredness, decision-making, communication, collaboration, evidence and personal conduct into their practice.

This document provides a reference for educators and curriculum planners to identify the relevant HIV-specific education outcomes for competency-based curricula for health workers with a pre-service training pathway of 12–48 months oriented towards the practice activities for the provision of HIV services. It should be used alongside two other WHO products:

- WHO UHC Compendium: Health Interventions for UHC (2), a database of health interventions to enable service package planning. The first step is to identify the relevant HIV services within scope of practice; and the relevant practice activities for the provision of these services.
- WHO Global Competency and Outcomes Framework for UHC (1) which identifies both the competencies and their measurable behaviours and knowledge guides for practice activities towards UHC, which should be tailored to the content identified in this HIV module.

<sup>&</sup>lt;sup>1</sup> Such an integrated package of policies include: job security, a manageable workload, supportive supervision and organizational management, continuing education and professional development opportunities, enhanced career development pathways, family and lifestyle incentives, hardship allowances, housing and education allowances and grants, adequate facilities and working tools, and measures to improve occupational health and safety, including a working environment free from any type of violence, discrimination and harassment.

### 2. A competency-based approach to education rooted in population health needs

The Lancet Commission on transforming health professionals' education (5) amongst others called for a competency-based outcomes approach to education and training that is rooted in health and health system needs. Competency-based education is an outcomes-based approach to learning that situates knowledge and skills in the context of health practice and emphasizes the mastery of learning. Competencies are the abilities of the health worker to integrate and apply the necessary knowledge, skills and attitudes towards the provision of services as required for the context, thus building on the foundational base of knowledge, skills and attitudes that form the focus of traditional curricula models.

Competency-based education has the potential to improve the health of the community only in so far as context-specific health issues are used to determine the desired education outcomes and competencies (6). Developing competency-based curricula to meet population health needs is a process that begins first by identifying what those population health needs are; then by defining the outcomes needed to meet those needs; and finally, by tailoring the curriculum to meet those outcomes.

A holistic approach to competence requires the specification of competencies and other outcomes in the context of practice activities, with the design and delivery of education programmes oriented towards practice activities to enable learners to achieve those outcomes. This shift in emphasis enables better preparedness for practice, quality of care, and enables a more resilient and adaptable health workforce. The learner-centred approach within CBE and the focus on outcomes achieved rather than the process or duration of learning, also offer the potential to promote equity and inclusion through flexible education pathways (7). A gender and equity lens in health worker education can have a long-lasting transformative effect on both employment and health outcomes.

Competency-based education requires a dual focus on the services to be provided, and the competencies of the person who provides them. Within the WHO competency model that underpins the Global Competency and Outcomes Framework for UHC, education outcomes are framed in terms of what the health worker will do (practice activities) and how they will do it (competencies):

• **Practice activities** are the responsibilities for health services that a learner will have. Practice activities describe a group of related tasks with a common purpose, such as provision of a procedure, or care coordination, with the specification of limitations and level of supervision. This holistic approach to defining outcomes moves away from a "checklist" of practice, and acknowledges the unpredictable nature of health care and the different contexts and challenges that might be encountered. Practice activities and their component tasks can be observed from start to finish. Practice activities can be used to differentiate between role responsibilities within a team, and used to define job descriptions, scopes of practice, certification or qualifications.

• **Competencies** are a person's abilities to integrate knowledge, skills and attitudes in their performance of tasks. Competencies are interrelated and interdependent. This means that they cannot be learned, observed or assessed in isolation, but only in the context of practice. Competencies are durable, trainable and measurable through behaviours. Further, these competencies enable the range of performance, and are not specific to an individual task or practice activity. As such, a given situation might require the integration of multiple competencies, and every competency has the potential to underpin the performance of any practice activities within an individual's role and responsibility. Competencies are what a person brings to their practice; they are not certifiable as a stand-alone unit of certification or regulated activity, only in the context of practice activities.

Competence is a holistic measure of performance of the practice activity(ies) to the standard defined in terms of behaviours; hence competence is the integration and application of knowledge, skills and attitudes to practice. Competency-based education is a deliberate and intentional specification of performance standards in terms of the requisite competencies and the behaviours that demonstrate them. The two types of outcomes (practice activities and competencies) of education and training programmes must be considered together when determining a person's level of proficiency, and determining progression decisions. This approach builds upon efforts among educationalists to clarify and conceptualize competencies in relation to (and thus distinct from) the performance of work.

The focus of CBE is mastery of the learning outcomes of the programmes, defined in terms of the application of knowledge, skills, attitudes and behaviours to practice. Fig. 1 illustrates how knowledge, skills and attitudes underpin both competencies (and behaviours) and practice activities (encompassing tasks).



#### Fig. 1. The relationship between competencies, practice activities, knowledge, skills and attitudes

# 3. What are the HIV health services towards UHC?

HIV prevention, treatment, care and support services form an essential part of the package of services to be provided as health systems advance towards UHC. All people, including gay men and other men who have sex with men, sex workers, transgender people, people who inject drugs, prisoners and other incarcerated people, migrants, as well as women and adolescent girls, should have access to HIV health services.

The HIV services described in this module are an extract from the WHO UHC Compendium of health interventions. The UHC Compendium is a database of health services and intersectoral interventions designed to assist countries in making progress towards UHC. The UHC Compendium and associated suite of country tools will provide rapid one-stop access to supporting evidence, associated human and material resource inputs, and feedback on cost impact as interventions are selected.

HIV services included within the UHC Compendium are described in terms of their component **actions** (components of health services as received by an individual) and **tasks** (components of each action as provided by a health worker or team of health workers). In the November 2021 version of the UHC Compendium there were 46 actions that have been identified to constitute a package of HIV services. They encompass prevention; screening and diagnosis; management of HIV; and management of the complications of HIV. Each action comprises the component tasks provided by health workers; and each task is mapped to one of the practice activities identified within the WHO Global Competency and Outcomes Framework for UHC.

Whilst this module focuses exclusively on the provision of HIV services, the package of care provided to an individual will often encompass multiple health services that meet the wider needs of that individual, for example, including mental health or management of co-occurring conditions. It is important that this module is not seen as a stand-alone set of services, but rather as a guide for identifying the relevant education outcomes to integrate HIV services into curricula, alongside content from other modules.

#### 3.1 Using this module alongside the UHC Compendium and the Global Competency and Outcomes Framework for UHC to develop competency-based curricula for the provision of HIV services

Practice activities, when specified to the tasks within role responsibility for the health services, provide the organizing framework for curricula aligned with population health needs. The practice activities that map specifically to the provision of HIV interventions are included in this service-specific module. When developing competency-based curricula, educators are advised to consider the range of practice activities that a health worker may provide across both the **Individual Health Domain** and **Population Health Domain**, as well as the practice activities within the **Management and Organization Domain**, that may not map to a specific intervention but are equally important for the role, such as documentation, care coordination or providing a clinical handover.

### 3.2 Illustrative profiles and a focus on health workers with a pre-service training pathway of 12–48 months

The Global Competency and Outcomes Framework for UHC focuses on education and training of health workers with a 12–48-month pre-service training pathway, practising within a system of supervision, support and referral. This module builds out from the Global Competency and Outcomes Framework for UHC to identify the HIV services that can be provided by these health workers with selection and specification according to roles and responsibilities.

Four occupational profiles are used to identify the broad practice activities within the Global Competency and Outcomes Framework for UHC illustrating the distribution of tasks towards the provision of HIV health services. These profiles are aligned approximately with the International Standard Classification of Occupations (ISCO) occupational profile definitions for a:

- nurse associate professional
- community health worker
- nursing professional
- paramedical practitioner.

These profiles are provided as guidance only and must be reviewed in relation to the occupational scope of practice for these roles and others for the setting and skills optimization. The mapping in Table 3 further highlights where a task towards the provision of HIV services would typically be provided by a health worker with a longer training pathway.

Illustrative profiles are provided to guide the adaptation of the practice activities, and curricular guides within the Global Competency and Outcomes Framework for UHC, for a specific context. The four illustrative profiles were developed to reflect varying levels of autonomy in clinical decision-making and varying duration of

Variable	Profile A	Profile B	Profile C	Profile D
Profile	Short pre-service education, limited clinical decision- making autonomy: e.g. nursing associate professional (ISCO-08 3221)	Short pre-service education, limited clinical decision- making autonomy: e.g. community health worker (ISCO-08 3253)	Longer pre-service education, some clinical decision-making autonomy: e.g. nursing professional (ISCO-08 2221)	Longer pre-service education, substantial clinical decision-making autonomy: e.g. paramedical practitioner (ISCO 08-2240) <sup>a</sup>
ISCO main group	Health associate professional	Health associate professional	Health professional	Health professional
Typical duration of training	12–24 months	12–24 months <sup>b</sup>	24–48 months	24–48 months
Brief overview of responsibilities	Predominant role in treatment support and health promotion and prevention May carry out basic procedures in support of management plan	Narrow scope of practice for treatment and classification of conditions Predominant role in treatment support, referral, home care and health promotion and prevention	Wide scope of practice across prevention, promotion and care; scope of practice relating to non-medical diagnosis and treatment, usually in the context of a management plan agreed with others May take leadership or management role	Wider scope of practice across prevention, promotion and care; scope of practice includes diagnosis and treatment, usually with specified limitations (provision of routine basic procedures or specific complex or surgical procedures or diagnostics) May take leadership or management role

#### Table 1. Illustrative health worker profiles for practice activities

#### Table 1. continued

Variable	Profile A	Profile B	Profile C	Profile D
Level of supervision	Works with close monitoring	and supervision	Works autonomously for th supervision or delegated re health worker in the team	e most part, with some sponsibilities from the senior
Complexity of clinical decision-making	Limited clinical decision- making	Clinical decision-making following standardized protocols and prescriptive options	Decision-making related to implementation of treatment plan	Medical diagnosis; decisions related to management, prioritization or rationalization of resources
Role in clinical decision- making	Mainly protocol based		Adapts protocols to the ind	ividual

Notes:

<sup>a</sup> Some nursing professionals acquire, through additional training and licensing, additional areas of competence that grant them greater clinical decision-making autonomy. Specialized nursing staff should be considered for the purpose of this document as part of the illustrative category in the profile D grouping.

<sup>b</sup> In contexts where community health workers receive less than 12 months' training, the role is narrower and typically limited to the standardized application of public health, diagnostic or case management protocols.

pre-service education. However, **there is considerable heterogeneity of available occupational groups across countries,** and the scope of practice may vary. As such, the UHC Compendium health worker data are intended to be used within country planning processes as a starting point for contextualization, i.e. determining how multidisciplinary teams can be efficiently organized to provide the tasks.

The detailed breakdown of tasks, and the illustrative profiles of the occupational groups who could provide them, are mapped to the practice activities. These can be used in reference to the curricula guides within the Global Competency and Outcomes Framework for UHC to identify and add specificity to the curriculum content and curriculum outcomes. For further guidance about curricula development please refer to Chapter 4 of the Global Competency and Outcomes Framework for UHC (1).

#### Table 2. Developing HIV-related curriculum content

Step	Guidance notes	Relevant resources
1. Identify the HIV package of services.		Table 3 (extract from the UHC Compendium).
<ol> <li>Define the HIV-related outcomes for the programme:         <ul> <li>Identify the relevant tasks and practice activities within scope of practice.</li> <li>Identify any additional practice activities that are necessary for the provision of HIV services that are not mapped to the individual intervention.</li> </ul> </li> </ol>	The practice activities are mapped to HIV interventions in Table 3. When developing competency-based curricula, educators are advised to consider the range of practice activities that may not map to a specific intervention but are equally important for the role, such as documentation, care coordination or providing a clinical handover.	Tasks and illustrative occupational profiles within Table 3 (extract from the UHC Compendium). Practice activities (full list, next section plus Chapter 3 of the Global Competency and Outcomes Framework for UHC).
3. Define the competency-based performance standards for the performance of the HIV-related outcomes to the requisite standard.	The behaviours that demonstrate competencies are the performance standards for the practice activities; the competencies should be developed throughout the programme.	Chapter 2: Competencies in the Global Competency and Outcomes Framework for UHC.
4. Define the relevant curriculum content.	Knowledge, skills and attitudes provide the foundations for the relevant practice activities and competency-based performance standards.	Chapter 3: Practice activity knowledge guides in the Global Competency and Outcomes Framework for UHC.
5. Develop learning activities and assessment of the achievement of learning aligned with the HIV-related outcomes defined in step 2.	The learning activities should enable the individual to develop the required knowledge, skills, attitudes and behaviours to perform the required practice activities to the requisite standard. Evidence should be collected to demonstrate the individual's learning achievement of these outcomes.	Chapter 4: Principles of curriculum redevelopment in the Global Competency and Outcomes Framework for UHC.

### 4. Practice activities for programme design incorporating HIV services

A **practice activity** represents a core function of health practice comprising groups of related tasks. These core functions are also thought of as areas of competence for individual health workers, within which there may be tasks within scope of practice and role responsibility. The Global Competency and Outcomes Framework for UHC provides knowledge guides to support the specification of curriculum content.

The practice activity mapping in Table 3 offers a direct link from the interventions selected within the UHC Compendium for a service package, to defining the competency-based curricula outcomes for health workers who provide those services.

The 35 practice activities within the Global Competency and Outcomes Framework for UHC describe education outcomes for a programme as a whole, and for the health team as a whole. This includes practice activities that are specific to HIV services that are tagged to the intervention actions, as well as those that relate to the broader role such as care coordination or providing a handover or managing resources; or they are relevant for services towards population health rather than individual encounters.

An individual patient encounter typically comprises multiple practice activities, such as taking a history, making a clinical judgement, and providing some procedures or making a referral; however, they are identified as separate practice activities to reflect the stand-alone functions that each represents, as well as the related curricular content towards that function, and the possible point of handover within a health team.

In this section, selected practice activities are highlighted which are mapped to HIV interventions. Interpreting the mapping in Table 3 should be in the context of the tasks within practice activities relevant to scope of practice and role responsibility. A second set of practice activities are labelled as "essential for the provision of HIV services". Whilst these do not map directly to the HIV interventions in Table 3, the HIV interventions cannot be provided without these practice activities. The practice activities without an additional label are still important towards the achievement of UHC, but do not require HIV-specific curriculum content.

#### Domain I: Individual Health Domain

#### Practice activities relating to the provision of health services for an individual

1. Gathering information through interviewing and assessment – mapped to HIV interventions in Table 3

Tasks within this practice activity relate to gathering and confirming information through interviewing, taking a history and performing a cognitive, emotional, mental, physical or social assessment (NB excluding diagnostic testing).

2. Formulating a judgement following a clinical encounter – essential for the provision of HIV services Tasks within this activity relate to interpreting information and clinical decision-making; this is the process of making a diagnosis or classifying a condition or action plan, for example, based on a decision-making tree.

### **3. Managing conversations with individuals and their families** – essential for the provision of HIV services

Tasks within this activity may include difficult conversations, such as discussing a diagnosis, prognosis or management plan. This is an overarching outcome relating to "managing the patient encounter" and is relevant to many other practice activities such as gathering information or developing the treatment plan; but it would duplicate the resource mapping.

#### 4. Advocacy for individual health needs – essential for the provision of HIV services

Tasks within this practice activity include supporting the individual to access health services; this may include practical aspects of help, helping the individual increase their health literacy or representing the individual in decision-making about their care.

### **5.** Providing information and support to impact individual health behaviours –mapped to HIV interventions in Table 3

Tasks towards this practice activity relate to health promotion and prevention goals of care; such as providing information about positive or harmful behaviours, distributing non-medical supplies such as bed nets, or monitoring and tracking behaviour change. Tasks within this practice activity may follow from an individual's diagnosis and managing their health risks and so they are tailored to that individual, but they exclude post-procedural care or post-procedural counselling.

#### 6. Gaining informed consent – mapped to HIV interventions in Table 3

Tasks within this practice activity comprise the component steps of sharing or clarifying information, addressing concerns, and confirming and documenting consent.

#### 7. Ordering, administering and interpreting the results of diagnostic and screening procedures – mapped to HIV interventions in Table 3

Tasks within this practice activity relate to determining the need for a test or procedure, carrying that procedure out, and interpreting the results of the test. NB This is distinct from using those results to determine the implications of the results towards developing a treatment and management plan, in Practice Activity 8.

#### 8. Developing and adjusting a management plan – essential for the provision of HIV services

Tasks within this practice activity are part of the process to interpret information about the individual and their health needs, and to determine with them the management plan. Tasks also reflect the process of implementing the management plan, including identifying resources and coordinating others' roles; as well as interpreting monitoring information and revising and adjusting a plan, including the withdrawal or end of a plan.

#### 9. Prescribing medications or therapeutics – mapped to HIV interventions in Table 3

Tasks within this practice activity reflect the decision-making process towards prescribing decisions, as well as the documentation of a prescription, and taking actions to ensure the follow-up or monitoring of the medications within a wider management plan.

#### **10. Preparing and dispensing medications or therapeutics** – mapped to HIV interventions in Table 3 Tasks within this practice activity describe any preparation or mixing of medications prior to dispensing to the individual; and the interaction of dispensing including providing information about selfadministration and side-effects.

#### 11. Administering medications or therapeutics – mapped to HIV interventions in Table 3

Tasks within this practice activity include any preparation for administration, the administration of medications/therapeutics, as well as monitoring for side-effects. NB This excludes self-administration; this describes the administration of a medication by the health workers.

#### 12. Selecting assistive products

Tasks within this practice activity include the specific assessments to select and specify an assistive product, ordering the product and writing instructions for its use.

#### 13. Providing assistive products

Tasks within this practice activity are the preparing, fitting and/or setting up of the product, as well as supporting the individual to use it. Tasks also include monitoring and follow-up, and basic maintenance and repairs or adaptations of the product.

#### 14. Providing non-pharmacological health interventions – mapped to HIV interventions in Table 3

This includes all tasks (excluding medications or therapeutics) towards a single intervention, procedure or health service: this includes preparing the individual for the procedure; performing or assisting in the provision of a procedure; monitoring the individual's response during or following the procedure including follow-up visits; and post-procedure counselling.

#### 15. Providing treatment and care support to individuals – mapped to HIV interventions in Table 3

Tasks within this practice activity are related to the individual, rather than the provision of a procedure. This might include clinical support tasks such as wound care, often in a different setting to the preceding non-pharmacological interventions, e.g. surgery; or it might be education and training the individual in self-care; or providing emotional or psychological support for coping with a diagnosis or steps in a management plan.

#### 16. Managing end-of-life and bereavement care

Tasks within this practice activity are specifically oriented towards end of life, including provision of palliative care, providing comfort and psychosocial support to the individual and their carers. It excludes signing a death certificate (part of Practice Activity 27: documentation).

#### **17. Reporting notifiable diseases, conditions or events** – essential for the provision of HIV services Tasks within this practice activity relate to reporting and surveillance of an individual's health status (disease, condition or event) in relation to reporting criteria.

**18.** Providing a clinical presentation to other health workers – mapped to HIV interventions in Table 3 Tasks within this practice activity encompass handovers and referrals for the purpose of transferring responsibility for care; it could take verbal or written form.

#### 19. Moving and transporting individuals

Tasks within this practice activity describe the moving, handling and transporting of individuals, including planning, preparation of aids, monitoring the individual during the episode and returning equipment for subsequent use.

#### 20. Coordinating transfer to another care environment

All practical tasks towards the transfer of care between environments – determining the basis for the transfer is part of Practice Activity 8: developing and adjusting a management plan. Tasks here include evaluating options, developing a transfer plan, making practical arrangements and care coordination.

#### Domain II: Population Health Domain

#### Practice activities relating to the provision of health services for communities

#### 21. Assessing community health needs

Tasks within this practice activity relate to efforts to plan for an assessment, coordinate governance, collect and interpret information, propose options to address the findings, and report on the findings.

#### 22. Planning and delivering community health programmes

Tasks within this practice activity are acting on the findings of a community health assessment, from planning a programme, preparing, implementing and evaluating the programme.

#### 23. Managing public health communication

Tasks within this practice activity relate to public (mass) communications, from determining the need for communications, selecting the appropriate method, developing communications materials and content and evaluating the communications efforts.

#### 24. Developing preparedness for health emergencies and disasters, including disease outbreaks

Tasks within this practice activity are around strengthening community preparedness in the case of an emergency or disaster, from assessing preparedness, participating in, planning or running preparedness activities, preparing resources, monitoring and evaluating preparedness, and monitoring and evaluating the risks of health emergencies and disasters according to health data.

#### 25. Responding to health emergencies and disasters, including disease outbreaks

Tasks within this practice activity describe the efforts to respond to known emergencies or disaster events, including monitoring the situation, ensuring communications, organizing supplies and resources, monitoring, evaluating and coordinating the response, and developing recovery plans. NB This relates to the response as a collective effort but excludes tasks towards individual health services which are mapped to practice activities 1–20 in the Individual Health Domain.

#### 26. Advocacy for community health needs

Tasks within this practice activity include the breadth of actions to advocate for and with a community, from developing an advocacy strategy, identifying stakeholders, mobilizing the community, taking actions and evaluating the impact.

#### Domain III: Management and Organization Domain

#### Practice activities relating to the effective use of human, physical and financial resources

#### 27. Accessing and documenting information – essential for the provision of HIV services

Tasks towards accessing, documenting and validating information, including issuing legal documentation such as prescriptions or death certifications. More broadly, this practice activity also describes tasks towards developing information management structures.

#### 28. Registering individuals for health services – essential for the provision of HIV services

Tasks within this practice activity include outreach to identify the individuals to be registered (for example, contact tracing), as well as conducting initial (non-clinical) triage, gathering information and inputting that information into a health information system.

#### 29. Delivering quality improvement activities

Tasks within this practice activity include identifying areas of improvement, planning, implementing, coordinating, overseeing and evaluating impact of quality improvement initiatives.

#### 30. Providing workplace-based learning and supervision

Tasks within this practice activity are those towards providing supervision, feedback, formal or informal workplace-based learning, and reporting on performance. NB Beyond the pre-service training pathway for health workers for 12–48 months (the lens through which this framework has been developed), this could be extended to include specialized education responsibilities including curricula design, development and implementation, assessment or standard-setting and developing curricula resources.

#### 31. Managing human resources

Tasks within this practice activity are those towards coordinating, overseeing and planning for the performance of other health workers, such as performance management, estimating workforce needs, scheduling or taking actions to ensure safety and well-being in the workplace.

#### 32. Managing financial resources

Tasks within this practice activity include managing a budget, making budget decisions, keeping financial records or processing payments or billing.

#### 33. Managing physical resources

Tasks within this practice activity relate to the use of, storing or maintaining physical resources such as equipment or workspaces. This also includes making decisions around the use of physical resources and stock control.

#### 34. Participating in evaluation and research

Tasks within this practice activity relate to sharing, collecting or recording information as it relates to research activities, as well as interpreting findings. NB Beyond the pre-service training pathway for health workers for 12–48 months (the lens through which this framework has been developed), this could be extended to include specialized research responsibilities including ethical approvals, research study design, conducting research, writing and disseminating findings.

#### 35. Developing, evaluating and implementing local policies, procedures and guidelines

Tasks within this practice activity incorporate contributions to a collective policy-making process, from contributing information, gathering data, evaluating information, drafting text or translating a policy into local procedures; as well as piloting or monitoring implementation.

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
Prevention of HIV	Counselling on safe sex, risk reduction and condoms	Conduct counselling on safe sex, risk reduction and condoms	5. Providing information and support to impact individual health behaviours	$\mathbf{r}$	$\mathbf{i}$	$\mathbf{i}$	>	
Prevention of HIV	Counselling on harm reduction services: needle and syringe programmes (NSP)	Conduct counselling on harm reduction services: needle and syringe programmes (NSP)	5. Providing information and support to impact individual health behaviours	~	~	$\mathbf{i}$	^	
Prevention of HIV	Counselling on harm reduction services: opiate substitution therapy (05T)	Conduct counselling on harm reduction services: opiate substitution therapy (OST)	5. Providing information and support to impact individual health behaviours	~	$\searrow$	$\mathbf{i}$	^.	
Prevention of HIV	Counselling on harm reduction services: overdose prevention	Conduct counselling on harm reduction services: overdose prevention	11. Administering medications or therapeutics		$\searrow$	$\mathbf{i}$	7	
Prevention of HIV	Male and female condoms	Provide male and female condoms	10. Preparing and dispensing medications or therapeutics	∕-	$\sim$	$\searrow$	<i>\</i> .	
Prevention of HIV	Counselling on partner notification, diagnosis and treatment	Conduct counselling on STI re-infection and transmission prevention	5. Providing information and support to impact individual health behaviours		~	$\mathbf{i}$	<i>\</i> -	
Prevention of HIV	Post-exposure prophylaxis (PEP) with antiretrovirals	Prescribe PEP	9. Prescribing medications or therapeutics			$\mathbf{i}$	∕.	
Prevention of HIV	Pre-exposure prophylaxis (PrEP) with antiretrovirals	Prescribe PrEP	9. Prescribing medications or therapeutics			$\geq$	7	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent			$\mathbf{i}$	^.	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Prepare the patient and organize the equipment	14. Providing non-pharmacological health interventions		$\searrow$	$\mathbf{i}$	7	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Apply local anaesthesia	11. Administering medications or therapeutics			$\checkmark$	$\searrow$	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Conduct VMMC	14. Providing non-pharmacological health interventions			$\mathbf{i}$	<i>\</i> -	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Assist with VMMC	14. Providing non-pharmacological health interventions			$\searrow$	<i>\</i> .	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Provide nursing support to conduct VMMC	15. Providing treatment and care support to individuals		~	~	<i>\</i> -	
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Provide post-procedural counselling and advice	14. Providing non-pharmacological health interventions		~	~	~	

Table 3. HIV interventions, practice activities and illustrative occupational profiles

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
Prevention of HIV	Voluntary medical male circumcision (VMMC)	Provide post-procedural nursing care	15. Providing treatment and care support to individuals		$\searrow$	$\overline{}$	~	
Prevention of HIV	Vaginal microbicide gel	Prescribe vaginal microbicide gel	9. Prescribing medications or therapeutics			$\overline{\mathbf{V}}$	$\searrow$	
Screening and diagnosis of HIV	Comprehensive history and physical examination for HIV (including identification of patients with treatment failure, perform medication review of antiretrovirals [ARVs], identify adverse drug reactions or drug interactions, among others)	Take comprehensive history and conduct physical examination for HIV (including clinical assessment for depression, among others)	<ol> <li>Gathering information through interviewing and assessment</li> </ol>			~	~	
Screening and diagnosis of HIV	Comprehensive history and physical examination for HIV (including identification of patients with treatment failure, perform medication review of antiretrovirals [ARVs], identify adverse drug reactions or drug interactions, among others)	Provide relevant clinical advice and information	<ol><li>Providing information and support to impact individual health behaviours</li></ol>			~	~	
Screening and diagnosis of HIV	Counselling on self-collection of samples for HIV laboratory testing and provision of device	Conduct counselling on self-collection of samples for HIV laboratory testing	5. Providing information and support to impact individual health behaviours	~	~	$\overline{\mathbf{v}}$	~	
Screening and diagnosis of HIV	Counselling on self-collection of samples for HIV laboratory testing and provision of device	Provide device for self-collection of samples for HIV laboratory testing	10. Preparing and dispensing medications or therapeutics	$\checkmark$	$\sim$	$\overline{}$	<i>\</i> -	
Screening and diagnosis of HIV	Basic laboratory tests	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent		~	$\overline{}$	<i>\</i>	
Screening and diagnosis of HIV	Basic laboratory tests	Collect specimen and send for examination (including specimen for screening of syphilis, gonorrhoea, hepatitis B, hepatitis C, chlamydia, coccidioidomycosis)	7. Ordering, administering and interpreting the results of diagnostic and screening procedures		~	~	~	
Screening and diagnosis of HIV	Basic laboratory tests	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures		~	$\overline{}$	~	
Screening and diagnosis of HIV	Point of care testing	Provide counselling and information and obtain consent	6. Gaining informed consent	7	~	$\checkmark$	~	
Screening and diagnosis of HIV	Point of care testing	Collect specimen and perform the test	7. Ordering, administering and interpreting the results of diagnostic and screening procedures	~	~	$\sim$	~	

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
Screening and diagnosis of HIV	Point of care testing	Explain finding to the patient and provide post- procedural counselling and advice	14. Providing non-pharmacological health interventions	∕-	~	~	~	
Management of HIV	Oral antiretrovirals (ARVs) for first-line treatment	Prescribe oral antiretrovirals (ARVs) for first-line treatment	9. Prescribing medications or therapeutics				~	
Management of HIV	Oral antiretrovirals (ARVs) for second- or third- line treatment	Prescribe oral antiretrovirals (ARVs) for second- or third-line treatment	9. Prescribing medications or therapeutics				$\overline{}$	
Management of HIV	Isoniazid preventive therapy (IPT)	Provide isoniazid preventive therapy (IPT)	10. Preparing and dispensing medications or therapeutics		$\mathbf{r}$	$\overline{}$	~	
Management of HIV	Oral antimicrobials for prevention of opportunistic infections in HIV	Prescribe oral antimicrobials for prevention of opportunistic infections in HIV	9. Prescribing medications or therapeutics				~	
Management of HIV	Age-appropriate cancer screening for people living with HIV	Explain the procedure, obtain consent for screening test	6. Gaining informed consent				~	
Management of HIV	Age-appropriate cancer screening for people living with HIV	Review/modify prescription and/or advise additional tests or procedures	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			Ņ	^	
Management of HIV	Age-appropriate cancer screening for people living with HIV	Review/modify prescription and/or advise additional tests or procedures	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			^	~	
Management of HIV	Age-appropriate cancer screening for people living with HIV	Refer the test positive patients	18. Providing a clinical presentation to other health workers					~
Management of HIV	Counselling on self-collection of samples for hepatitis C laboratory testing and provision of device	Conduct counselling on self-collection of samples for HCV laboratory testing	5. Providing information and support to impact individual health behaviours	~	~	~	~	
Management of HIV	Counselling on self-collection of samples for hepatitis C laboratory testing and provision of device	Provide device for self-collection of samples for HCV laboratory testing	10. Preparing and dispensing medications or therapeutics	~	~	~	~	
Management of HIV	Condition-specific nutrition assessment and counselling	Conduct condition-specific nutrition assessment	1. Gathering information through interviewing and assessment			~	~	
Management of HIV	Vaccination: hepatitis B	Administer hepatitis B vaccine	11. Administering medications or therapeutics	^	~	~	$\overline{}$	
Management of HIV	Vaccination: pneumococcal conjugate vaccine	Administer pneumococcal conjugate vaccine	11. Administering medications or therapeutics	^	^	^	~	

Table 3. HIV interventions, practice activities and illustrative occupational profiles

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
Management of HIV	Vaccination: HPV	Administer HPV vaccine	11. Administering medications or therapeutics	$\mathbf{r}$	~	$\sim$	$\sim$	
Management of HIV	Vaccination: influenza	Administer <i>Haemophilus influenzae</i> type b (Hib) vaccine	11. Administering medications or therapeutics	$\geq$	$\overline{}$	$\succ$	$\overline{\mathbf{v}}$	
Management of complications of HIV	Oral antimicrobials for complications of HIV	Prescribe oral antimicrobials for complications of HIV	9. Prescribing medications or therapeutics			$\searrow$	$\overline{}$	
Management of complications of HIV	Oral fibrates for complications of HIV	Prescribe oral fibrates for complications of HIV	9. Prescribing medications or therapeutics			~	~	
Management of complications of HIV	Oral HMG CoA reductase inhibitors for complications of HIV	Prescribe oral HMG CoA reductase inhibitors for complications of HIV	9. Prescribing medications or therapeutics				~	
Management of complications of HIV	Intravenous antimicrobials for complications of HIV	Administer intravenous antimicrobials for complications of HIV	11. Administering medications or therapeutics		$\geq$	~	~	
Management of complications of HIV	Intravenous corticosteroids for complications of HIV	Administer intravenous corticosteroids for complications of HIV	11. Administering medications or therapeutics		$\geq$	$\searrow$	$\overline{}$	
Management of complications of HIV	Intravenous fluids for cryptococcal meningitis	Administer intravenous fluids for cryptococcal meningitis	11. Administering medications or therapeutics		$\mathbf{i}$	~	~	
Management of complications of HIV	Intravenous fluids for cryptococcal meningitis	Monitor during administering	11. Administering medications or therapeutics			~	~	
Management of complications of HIV	Advanced laboratory tests	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent			~	~	
Management of complications of HIV	Advanced laboratory tests	Collect specimen and send for examination	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			~	~	

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
Management of complications of HIV	Advanced laboratory tests	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\geq$
Management of complications of HIV	Computed tomography (CT) scan	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent			~	$\searrow$	
Management of complications of HIV	Computed tomography (CT) scan	Assist and guide the patient	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			~	~	
Management of complications of HIV	Computed tomography (CT) scan	Operate the computer for CT scan	7. Ordering, administering and interpreting the results of diagnostic and screening procedures		$\searrow$	~	$\searrow$	
Management of complications of HIV	Computed tomography (CT) scan	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\geq$
Management of complications of HIV	X-ray	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent			~	$\sim$	
Management of complications of HIV	X-ray	Conduct X-ray	7. Ordering, administering and interpreting the results of diagnostic and screening procedures		~	~	$\mathbf{r}$	
Management of complications of HIV	X-ray	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\geq$
Management of complications of HIV	Lumbar puncture	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent				~	
Management of complications of HIV	Lumbar puncture	Prepare the patient and organize the equipment	14. Providing non-pharmacological health interventions		~	~	~	

Table 3. HIV interventions, practice activities and illustrative occupational profiles

Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile C	Profile D	48+
	Lumbar puncture	Apply local anaesthesia	11. Administering medications or therapeutics				~	
Management of complications of HIV	Lumbar puncture	Conduct lumbar puncture	7. Ordering, administering and interpreting the results of diagnostic and screening procedures				$\sim$	
Management of complications of HIV	Lumbar puncture	Assist with lumbar puncture	7. Ordering, administering and interpreting the results of diagnostic and screening procedures		~	$\geq$	$\sim$	
Management of complications of HIV	Lumbar puncture	Send specimen for laboratory test	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			$\sim$	$\sim$	
Management of complications of HIV	Bronchoscopy	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent					~
Management of complications of HIV	Bronchoscopy	Prepare the patient and organize the equipment	14. Providing non-pharmacological health interventions		$\searrow$	$\searrow$	$\sim$	
Management of complications of HIV	Bronchoscopy	Apply sedation	11. Administering medications or therapeutics			$\succ$	~	
Management of complications of HIV	Bronchoscopy	Conduct bronchoscopy	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\mathbf{k}$
Management of complications of HIV	Bronchoscopy	Assist with bronchoscopy	7. Ordering, administering and interpreting the results of diagnostic and screening procedures				$\geq$	
Management of complications of HIV	Bronchoscopy	Explain the finding to the patient and provide post-procedural counselling and advice	14. Providing non-pharmacological health interventions					$\mathbf{k}$
Management of complications of HIV	Bronchoscopy	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\mathbf{k}$

-	ς	
	ā	μ
	Ξ	
	2	
1	Ŧ	
	2	
		∍
	č	-
		-
r	Y	1
	٩	
	c	5
2	3	9

lable 3. continued								
Intervention	Action	Task	Practice activity	Profile A	Profile B	Profile A Profile B Profile C Profile D	Profile D	48+
Management of advanced HIV	Advanced laboratory tests	Review advice, provide counselling and information and obtain consent	6. Gaining informed consent			$\checkmark$	$\searrow$	
Management of advanced HIV	Advanced laboratory tests	Collect specimen and send for examination	7. Ordering, administering and interpreting the results of diagnostic and screening procedures			$\checkmark$	$\searrow$	
Management of advanced HIV	Advanced laboratory tests	Interpret and document finding	7. Ordering, administering and interpreting the results of diagnostic and screening procedures					$\overline{}$
Management of advanced HIV	Preventive oral treatment regimens for TB (see TB action for products data)	Prescribe preventive oral treatment regimens for TB	9. Prescribing medications or therapeutics				~	
Management of advanced HIV	Oral antimicrobials for prevention of opportunistic infections in HIV (fluconazole pre-emptive therapy and co-trimoxazole prophylaxis specified in products)	Prescribe oral antimicrobials for prevention of opportunistic infections in HIV	9. Prescribing medications or therapeutics			~	~	

### References

- 1. Global Competency and Outcomes Framework for Universal Health Coverage. Geneva: World Health Organization; 2022.
- 2. UHC Compendium: Health Interventions for Universal Health Coverage. Geneva: World Health Organization; 2021 (https://www.who.int/universal-health-coverage/compendium#:~:text=The%20 UHC%20Compendium%20is%20a,health%20services%20and%20health%20interventions, accessed 19 November 2021).
- 3. Universal health coverage (UHC). Geneva: World Health Organization; 2021 (https://www.who.int/ news-room/fact-sheets/detail/universal-health-coverage-(uhc), accessed 19 November 2021).
- 4. Global Strategy on Human Resources for Health: Workforce 2030. Geneva: World Health Organization; 2016.
- 5. Bhutta Z, Chen L, Cohen J, Crisp N, Evans T, Fineberg H et al. Comment. Education of health professionals for the 21st century: a global independent commission. Lancet. 2010;375:1137–8.
- Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet. 2010;376:1923–58. doi:10.1016/s0140-6736(10)61854-5.
- 7. Newman C, Ng C, Pacqué-Margolis S, Frymus D. Integration of gender-transformative interventions into health professional education reform for the 21st century: implications of an expert review. Hum Resour Health. 2016;14:14.

Health Workforce Department World Health Organization 20 Avenue Appia CH 1211 Geneva 27 Switzerland www.who.int/hrh

