CORE COMPETENCIES IN ADOLESCENT HEALTH AND DEVELOPMENT FOR PRIMARY CARE PROVIDERS

INCLUDING A TOOL TO ASSESS THE ADOLESCENT HEALTH AND DEVELOPMENT COMPONENT IN PRE-SERVICE EDUCATION OF HEALTH-CARE PROVIDERS

World Health Organization

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Glossary

Whenever possible, these definitions have been taken or adapted from other WHO publications; some are composite definitions.

Ability – The quality of being able to perform; a natural or acquired skill or talent.

Adolescent – WHO defines adolescents as people between 10 and 19 years old.

Attitude – A person's views (values and beliefs) about a thing, process or person, which influence behaviour.

Autonomous decision – In the context of adolescent health care, an autonomous decision is a decision of an adolescent regarding elements of his/her health care that is taken without third-party authorization (e.g. by parents or guardians). Unless the adolescent lacks decision-making capacity, or decision-making capacity is delegated by law to a third party,[1] the adolescent decides about all aspects of care, including refusing care. The adolescent also decides which family members and friends, if any, participate with him or her in the care process. Health-care providers have an obligation to develop adolescents' capacity for autonomous decision-making by providing adequate, appropriate and clear information to help them understand the nature and risks of, and alternatives to, medical procedures or treatments and their implications for health and other aspects of the their lives.

Autonomy – The right of the adolescent to make his or her own decisions without being dominated by the health-care provider or another adult. Autonomy is the central premise of the concept of informed consent and of the right to participate in one's own health-care processes.

Behaviour – A person's way of relating or responding to the actions of others or to an environmental stimulus.

Client – The term "client" is used throughout this document to describe adolescents who may be seeking any of a wide range of health services (e.g. prevention, clinical care). "Client" is meant to include the term "patient", which refers to adolescents who have an illness or specific health concern.

Competency – Sufficient knowledge and psychomotor, communication and decision-making skills and the attitudes to enable the performance of actions and specific tasks to a defined level of proficiency.

Competent – Having the essential knowledge, skills, attitudes and professional behaviour to successfully demonstrate performance of a specific task, action or function in the work setting.

Core competency – A competency that a sector (e.g. health, education) has agreed is essential for a person to perform requisite functions and tasks. In health education core, or essential, competencies are the aspects of a subject or discipline that are common to all students, essential to practice, and essential to master in order to graduate from an academic programme and enter into professional practice.

Curriculum – The totality of learning activities that are designed to achieve specific educational outcomes. The term "curriculum" can refer to either a written document or the entire academic programme.

Curriculum design – The organization and sequencing of course requirements and learning experiences that make up the total academic programme.

Curriculum development – A systematic, logical and dynamic process for organizing learning. It involves articulating the desired characteristics of the graduates and designing the curriculum, as well as specifying the content, teaching methods, means of assessing students' achievement and programme evaluation.

Educator – A person responsible for programme development and teaching, who conducts theoretical and/or practical learning activities in the field of adolescent health and development. A wide range of professionals might be involved in this process – lecturers, practitioners, teachers, trainers, faculty members, etc. The term "educator" is meant to include all these professions.

[1] This may include situations when, in order to protect adolescents, third-party involvement is mandated by law (e.g. abuse reporting).

Equity – The absence of avoidable or remediable differences among population groups, defined socially, economically, demographically, or geographically.

Ethics – Ethics comprises four principles:

- **respect for persons:** the duty to respect the self-determination and choices of autonomous persons, as well as to protect persons with diminished autonomy. Respect for persons includes fundamental respect for the other; it should be the basis of any interaction between a professional and a client;
- **beneficence:** the obligation to secure the well-being of persons by acting positively and maximizing the benefits that the client can attain;
- **non-malfeasance:** the obligation to minimize harm to persons and, wherever possible, to remove causes of harm altogether;
- **proportionality/justice:** the duty, when taking actions involving the risk of harm, to balance risks and benefits so that actions have the greatest chance of resulting in the least harm and the most benefit to persons directly involved.

Knowledge – An individual's understanding of a subject, including not only facts and information but also the ability to apply them for a specific purpose.

Pre-service education – Learning that takes place in preparation for taking on a future role, for example, as a doctor or nurse. This education provides a broad array of knowledge, skills and attitudes needed to fulfil that future role and from which the student can later select what is needed in a specific situation. Pre-service education most often takes place in schools and universities (e.g. medical, nursing and midwifery schools).

Primary care – Primary care refers to the level of the client's first contact with the health-care system. Primary care is often responsible for care coordination, integration and advocacy across the health-care system. Depending on the setting, primary care professionals may include family doctors, paediatricians, nurses, midwives and community health workers.

Quality of care – WHO has defined quality dimensions for adolescent health care: available, accessible, acceptable, appropriate, equitable and effective.

Quality standard – A statement of a defined level of quality in the delivery of services required to meet the needs of intended beneficiaries.

Skill – Ability learned through pre-service and continuous professional education and/or acquired through experience to perform specific actions or tasks to a specified level of measurable performance.

Introduction

Globally, evidence is growing that education in adolescent medicine improves the clinical performance of health-care practitioners (Sanci, 2000; Sawyer, 2013). A paradox persists, however: Health professionals report high interest in developing skills to work better with adolescents, and yet their education needs remain unmet (WHO, 2014a).

The WHO report Health for the world's adolescents suggests that progress towards universal health coverage for adolescents will require renewed attention to the education of health-care providers.

The report proposes the actions needed to improve the way that the workforce is educated:

- making competency-based education in adolescent health care mandatory in pre-service curricula and post-graduate education;
- designing competency-based educational programmes that emphasize the developmental and contextual aspects of adolescent health;
- instituting policies and strategies that support the supervision of primary care providers and specialists providing services to adolescents.

This document seeks to inform and assist such users as officials from ministries of health and ministries of education in charge of implementing pre-service and continuous professional education (CPE) programmes; policy-makers in charge of improving the quality of health services for adolescents; educators and curriculum coordinators developing educational curricula and designing their structure and content; educators in teaching institutions and in worksites responsible for teaching students and delivering CPE to primary care providers; health-care providers who have completed their basic training and may engage in self-learning and self-assessment; and students themselves in pre-service education.

The aim of this document is to help countries develop competency-based educational programmes in adolescent health and development in both pre-service and in-service education. In addition, it provides guidance on how to assess and improve the structure, content and quality of the adolescent health component of pre-service curricula. By fostering the capacity of health-care providers in adolescent health care and development, the document supports the implementation in countries of the Global Standards for Quality Health-Care Services for Adolescents. The ultimate goal of this competency framework is to increase the quality of health-care services provided to adolescents by improving the education of primary health-care providers.

Background

Since 1996 WHO has invested in developing resources to support the competence of health-care providers in adolescent health and development. These resources include the *Orientation programme on adolescent health for health-care providers* (WHO, 2006) and the complementary *Adolescent job aid* (WHO, 2010). Also, in 2004 WHO published *Adolescent health and development in nursing and midwifery education* (WHO, 2004). This document presented what were considered at the time the essential competencies in adolescent health and development for nurses. That competency framework had two limitations, however: It did not include competencies related to the situational clinical care of adolescents, and it focused on a narrow segment of primary care providers even though a wide range of professionals are involved in the health care of adolescents.

"Adolescent-friendly" projects and programmes with a training component have focused overwhelmingly on in-service training rather than pre-service education. Furthermore, most funding for these interventions comes from donor agencies, a fact that raises concerns about sustainability. The WHO consultation with primary care providers for the *Health for the world's adolescents* report reiterated the need to invest in more sustainable forms of capacity building in adolescent health care, such as pre-service education. Respondents very seldom reported that adolescent health was part of their pre-service education, and most of them agreed that adolescent health should be part of the pre-service curriculum.

In May 2014 WHO published the Global Standards for Quality Health-Care Services for Adolescents (WHO, 2014a). Standard 4 specifically states the required competencies:

> Health-care providers demonstrate the technical competence required to provide effective health services to adolescents.Both health-care providers and support staff respect, protect and fulfil adolescents' rights to information, privacy, confidentiality, non-discrimination, non-judgmental attitude and respect.

The technical and attitudinal competency of health-care providers is central to the implementation of all the standards. Therefore, competency-based educational programmes in adolescent health are necessary for implementation of the Global Standards for Quality Health-Care Services for Adolescents.

How this document was developed

Development of these competencies was a collaborative process involving many departments in WHO and other stakeholders. The steps in the process are outlined below and depicted in Fig. 1.

Review of key resources

WHO commissioned a review of WHO documents and key resources from professional associations and teaching institutions that informed the development of a background report for a technical meeting. The criteria established by WHO to identify the key resources were: (1) relevance of the resource to adolescent primary care providers and (2) permission from the developers of resource documents to use them to inform the WHO competency framework.

The following resources were identified and reviewed to inform the competency framework:

1. *Adolescent health and development in nursing and midwifery education.* Geneva, WHO, 2004 (http://www.who.int/maternal_child_adolescent/documents/fch_cah_04_4/en/)
2. *Adolescent job aid.* Geneva, WHO, 2010 (http://www.who.int/maternal_child_adolescent/documents/9789241599962/en/)
3. *Orientation programme on adolescent health for health-care providers.* Geneva, WHO, 2006 (http://www.who.int/maternal_child_adolescent/documents/9241591269/en/)
4. *Sexual and reproductive health: core competencies in primary care.* Geneva, WHO, 2011 (http://www.who.int/reproductivehealth/publications/health_systems/9789241501002/en/)

5. *Adolescent health: enhancing the skills of general practitioners in caring for young people from culturally diverse backgrounds, GP resource kit, 2nd ed*. Sydney, NSW Centre for the Advancement of Adolescent Health and Transcultural Mental Health Centre, 2008 (http://www.caah.chw.edu.au/resources/gpkit/Complete_GP_Resource_Kit.pdf)
6. *Advanced training curriculum in adolescent medicine* (consultation draft). Sydney, Royal Australian College for Physicians.
7. *e-learning for health care: adolescent health.* London, National Health Service (http://www.e-lfh.org.uk/programmes/adolescent-health/)
8. *Working with young people – a training resource in adolescent health.* Sydney, Royal Australian College of Physicians (http://www.racp.edu.au/page/pch-resources/)

Technical meeting and technical working group

With the involvement of other WHO departments, the Department of Child and Adolescent Health (now the Department of Maternal, Newborn, Child and Adolescent Health) organized a technical meeting in July 2010. The meeting sought agreement on the process for developing this document. WHO established a technical working group, consisting of representatives of WHO departments[1] and an external consultant, that developed a draft competency framework and a tool to assess competencies in the context of a pre-service curriculum.

Regional capacity building and field-testing

Between 2011 and 2013 WHO field-tested the document in selected institutions in China (Hong Kong SAR), Egypt, Ghana, India, Malaysia, Sri Lanka and the United Republic of Tanzania (see Annex 3). In November 2013, before the field test, WHO conducted a capacity-building workshop to train regional consultants to facilitate the field tests and subsequently to work in the regions to improve pre-service curriculum in interested countries and institutions. During the field test a total of 112 educators and students answered questionnaires on the status of the pre-service training in adolescent health.

Global survey on pre-service training in adolescent health and development

This survey was carried out in 2013 and was distributed electronically via SurveyMonkey to 127 key respondents representing academic institutions that deliver training in child and adolescent health care. There were 83 respondents from 78 educational institutions, representing 39 countries and five WHO regions. Twenty-three respondents represented nursing and midwifery institutions, and 60 represented other medical training institutions. Survey questions included the current status of training in adolescent health and respondents' opinions on priority issues and various options for integrating adolescent health into current health curriculum. This survey informed the competency domains, the guidance on implementation and the assessment tool.

Additional inputs from the global survey with primary care providers

In 2013 WHO conducted a survey in English to inform the global report *Health for the world's adolescents: a second chance in the second decade*. The survey was conducted online via SurveyMonkey and was open from 15 July to 7 October 2013. Among others, it included questions about the type of training received in adolescent health, respondents' self-perceived and required knowledge and skills and priority adolescent health issues. There were 735 respondents from 81 countries, representing all six WHO regions. Data from the survey confirmed that the competency domains and elements contained in the draft document were adequately reflected.

Meeting with regional consultants and other technical experts

WHO organized a meeting in Geneva in March 2014 to synthesize and validate the findings from the field test and to reach consensus on the proposed changes to the tool. In addition to the field-test teams, participants included representatives from development partner organizations with expertise in adolescent health and capacity building of health-care providers. After the meeting WHO revised the In line with WHO guidelines, all participants that were not part of the Secretariat completed and signed a

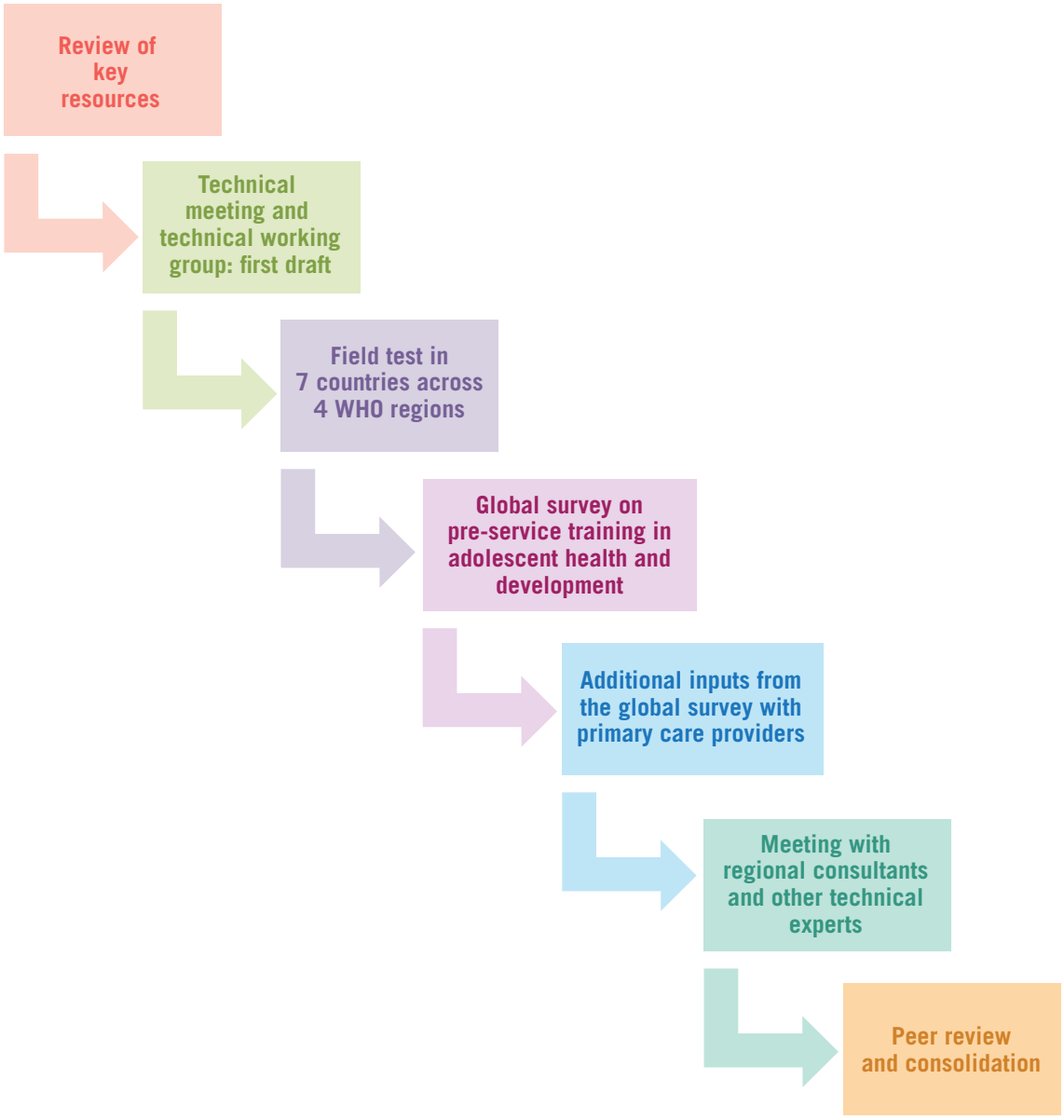
[1] Child and Adolescent Health (CAH), Human Resources for Health (HRH), Making Pregnancy Safer (MPS) and Reproductive Health and Research (RHR)

declaration of interests form; none declared a conflict of interest. After the meeting, WHO revised the document, taking into account the results of the field test and the discussions at the meeting.

Review and consolidation

WHO staff representing various regions and levels of the organization, as well as external reviewers representing other United Nations organizations, civil society, academia and national policy-makers, peer-reviewed the document in May–June 2014. (See the list of reviewers in the Acknowledgments.)

Fig. 1. The process for development of the core competencies in adolescent health and development for health-care providers in primary care settings



Competencies and domains

Competencies in adolescent health care can be categorized in three domains.

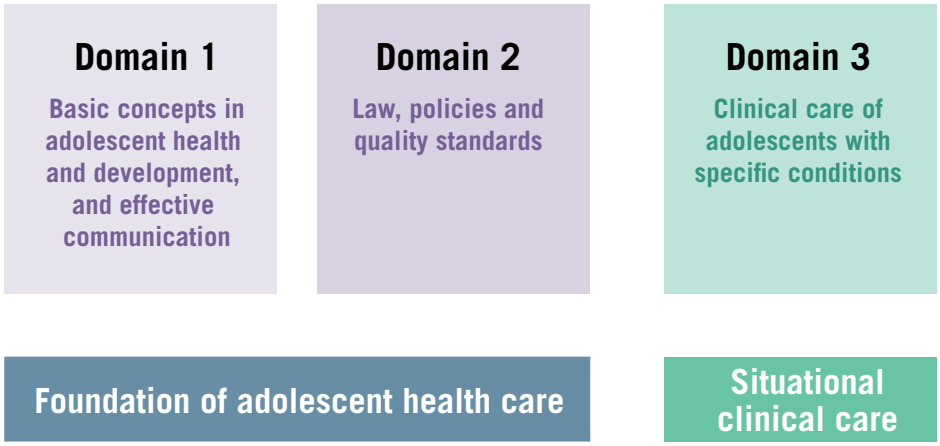
First, providers of adolescent health care require specialized skills in consultation, interpersonal communication and interdisciplinary care appropriate to the developmental phase and context of the individual. Providers who care for adolescents need competencies in confidentiality, integrated health risk assessment, motivational and cognitive approaches to counselling and care in the transition from paediatric to adult care. Moreover, the fact that adolescent capacities evolve with age and experience means that health-care providers also need competence in assessing adolescents' capacity for autonomous decision-making in order to maintain the balance between protection and autonomy. *These competencies are grouped into Domain 1: Basic concepts in adolescent health and development, and effective communication.*

Second, within clinical practice laws and policies that promote, protect and fulfil adolescents' right to health must be applied. Delivering services in line with professional and quality standards and consistent with human rights principles of equity, non-discrimination, participation and inclusion, and accountability is paramount. This set of knowledge, skills and attitudes is essential for ensuring that quality care is provided legally. *These competencies are grouped into Domain 2: Laws, policies and quality standards.*

Competencies in Domains 1 and 2 are cross-cutting and not limited to any particular clinical condition. Be it HIV, diabetes or depression, what is universally required is an understanding of adolescent development, effective communication and the provision of quality care in line with standards and human rights principles. These competencies lay the foundation for adolescent health care (Fig. 2).

Third, caring for adolescents with specific conditions requires tailoring management approaches. Management that is sensitive to adolescent development is required. For example, it is one thing in terms of competencies to discuss HIV prevention with a sexually experienced adult, but quite another to discuss the same issue with a young adolescent who is not yet sexually active or feels ashamed because social norms condemn certain behaviours or circumstances (e.g. sexual activity before marriage, not being in school, same-sex sexual orientation). Also, effective management of many conditions requires parents' and caregivers' support. For example, effective management of chronic conditions in adolescents requires helping parents to understand how their role changes during adolescence, from managing their child's health to supporting their child's growing autonomy in self-care. Similarly, preventing and managing nutrition-related disorders requires that health education on a healthy diet is addressed not only to adolescents themselves but also to their parents and caregivers. *The competencies linked to the effective management of an adolescent client in specific clinical situations are grouped in Domain 3: Clinical care of adolescents with specific conditions.* Within this domain the topics that countries choose to include in the curriculum should be based on the country's epidemiological situation and the country's priority adolescent health needs.

Fig. 2. Three domains in adolescent health care



The competencies within the three domains were selected because they are either specific to adolescents or relate to common health conditions and/or developmental issues in adolescence. Competencies that may relate to adolescent health and development but are neither specific to adolescents nor relate to common health and development conditions in adolescence have not been included. For example, competencies relating to financial management of health services, community mapping of vulnerable populations and health promotion have not been included in this document, although they and many others may be highly relevant to the health and development of adolescents. Rather, it is assumed that such competencies are covered in other educational activities. Table 1 lists the domains and competencies for adolescent health and development.

Table 1. Core competencies for adolescent health and development for health-care providers in primary care settings

Domains	Competencies
Domain 1. Basic concepts in adolescent health and development, and effective communication	Competency 1.1. Demonstrate an understanding of normal adolescent development, its impact on health and its implications for health care and health promotion
	Competency 1.2. Effectively interact with an adolescent client
Domain 2. Laws, policies and quality standards	Competency 2.1. Apply in clinical practice the laws and policies that affect adolescent health-care provision
	Competency 2.2. Deliver services for adolescents in line with quality standards
Domain 3. Clinical care of adolescents with specific conditions	Competency 3.1. Assess normal growth and pubertal development and manage disorders of growth and puberty
	Competency 3.2. Provide immunizations
	Competency 3.3. Manage common health conditions during adolescence
	Competency 3.4. Assess mental health and manage mental health problems
	Competency 3.5. Provide sexual and reproductive health care
	Competency 3.6. Provide HIV prevention, detection, management and care services
	Competency 3.7. Promote physical activity
	Competency 3.8. Assess nutritional status and manage nutrition-related disorders
	Competency 3.9. Manage chronic health conditions including disability
	Competency 3.10. Assess and manage substance use and substance use disorders
	Competency 3.11. Detect violence and provide first-line support to the victim
	Competency 3.12. Prevent and manage unintended injuries
	Competency 3.13. Detect and manage endemic diseases

Attitudes, knowledge and skills required to demonstrate core competencies

All services for adolescents and associated competencies should be driven by respect for human rights principles of equity, meaningful participation and inclusion. Therefore, a number of overarching attitudes are a fundamental component of all the competencies (see Table 2).

Table 2. Attitudes that are a fundamental component of all the competencies in adolescent health care

Treat each adolescent with full respect for her/his human rights.
Show respect for adolescent clients' choices as well as their right to consent or refuse physical examination, testing and interventions.
Approach all adolescents, including those from marginalized and vulnerable populations, in a non-judgemental and non-discriminatory manner, respecting individual dignity.
Demonstrate understanding of adolescents as agents of change and as a source of innovation.
Demonstrate understanding of the value of engaging in partnerships with adolescents, gatekeepers and community organizations to ensure quality health-care services for adolescents.
Approach adolescent health care as a process, not a one-off event, and appreciate that adolescents need time to take decisions and that ongoing support and advice might be needed.
Approach every adolescent as an individual, with differing needs and concerns, and differing levels of maturity, health literacy and understanding of their rights, as well as differing social circumstances (schooling, work, marriage, migration).
Show respect for the knowledge and learning styles of individual adolescents.
Demonstrate empathy, reassurance, non-authoritarian communication and active listening.
Offer services that are confidential and provided in privacy.
Demonstrate awareness of one's own attitudes, values and prejudices that may interfere with the ability to provide confidential, non-discriminatory, non-judgemental and respectful care to adolescents.

Adapted from WHO, 2011.

Table 3 describes the specific knowledge and skills required to demonstrate each competency.

Competency-based education differs from traditional education in that it focuses on learning objectives – what a student is expected to be able to *do* in order to *demonstrate* that he or she has the required knowledge, skills and attitudes as a result of a learning activity. There are various ways to demonstrate, for example, that one has acquired knowledge of the developmental stages of adolescents. The student can be asked to enumerate them, to describe them or to give examples of how various stages of adolescent development affect the process of care. Countries, therefore, will have to adapt the list below to choose the precise way that the competency will be demonstrated. The box below presents some examples of verbs that help demonstrate the competency; they can be used when adapt the learning objectives locally. The WHO publication *Effective teaching: a guide for educating health-care providers* (WHO, 2005) describes various methods to assess students' knowledge and skills.

Action verbs for learning objectives

Knowledge area	Skill area	Attitude area	Words to avoid
adopt	adjust	accept	appreciate
analyse	arrange	ask	believe
categorize	assemble	assist	internalize
classify	assess	attend to	know
compare	conduct	choose	realize
compile	demonstrate	comply	understand
contrast	follow	conform	
describe	identify	contribute	
devise	insert	cooperate	
differentiate	inspect	defend	
discriminate	locate	demonstrate	
discuss	manage	display	
estimate	model	follow	
evaluate	organize	help	
explain	perform	initiate	
interpret	place	join	
list	point to	listen	
name	practice	observe	
organize	prepare	participate	
predict	provide	practice	
recognize	remove	propose	
show	sort	report	
solve		share	
summarize		suggest	
tabulate		support	
		use	

Adapted from WHO, 2005.

Table 3. Core competencies and learning objectives for associated knowledge and skills

Competency	Learning objectives for knowledge and skills required to demonstrate the competency
Domain 1	**Basic concepts in adolescent health and development, and effective communication**
Competency 1.1 Demonstrate an understanding of normal adolescent development, its impact on health and its implications for health care, and health promotion	**Knowledge** • Describe the stages of adolescent development (physical, neurological, cognitive, psychosocial) and how these are influenced by various biological, social, emotional and environmental factors • Describe the cognitive, affective and behavioural development of adolescents and how these are affected by the neurocognitive maturation of the brain • Describe how the dynamic patterns of physical, neurocognitive and social development affect health attitudes and behaviours in adolescents and recognize how this knowledge can inform preventive or promotional activities • Explain the leading causes of mortality and morbidity among adolescents, the prevalence of key health-related behaviours and conditions among adolescents, and protective and risk factors using national/regional/local age and sex-disaggregated data • Explain how the structural social determinants of health and more proximal protective and risk factors affect adolescent health • Describe how environmental measures (e.g. assuring safe playgrounds and safe schools) can promote adolescent health • Name local attitudes, beliefs and practices regarding adolescents and explain how these can affect adolescents' access to and use of services **Skills (ability to)** • Assess adolescents' linear height and weight using growth reference charts and identify deviations from the standard range • Assess pubertal development using Tanner stages of puberty and identify whether it is normal, precocious or delayed • Assess the stages of adolescent development (early, middle, late) • Counsel on and promote a healthy lifestyle

Competency 1.2

Effectively interact with an adolescent client

Knowledge

- Discuss the various factors that can improve the climate of the consultation: the importance of confidentiality, privacy, confidence, neutral non-judgemental attitudes, respect, empathy
- Explain the importance of involving adolescents in the process of their own health care (e.g. take into account adolescents' preferences about management options)
- Explain the importance of approaching adolescent health care as a process, not a one-off event, and of providing ongoing support and advice as needed

Skills (ability to)

- Provide a trustful atmosphere in the consultation by informing adolescents about their rights to privacy and confidentiality (and any legal restrictions to the latter)
- Treat the adolescent client in a friendly, respectful manner that is empathic, non-judgemental and without discrimination
- Develop jointly with the adolescent a plan for communication with trusted adult(s) (e.g. parents, guardians, other family members) and their involvement in care, while respecting confidentiality and promoting the adolescent's growing capacity for autonomy
- Assess how the adolescent's and the parent's/guardian's/family member's beliefs affect the condition and its treatment
- Assess the influence of gender norms on an adolescent client's health behaviours and outcomes
- Take a patient history, exploring for possible undisclosed issues (complaints or burdens not readily disclosed as a reason for the visit)
- Perform a psychosocial assessment (e.g. using the HEADSSS framework – home, education & employment, eating, activities, drugs, sexuality, safety, suicide/depression) to detect risk and protective factors in adolescents' social, educational and home environment
- Provide context-, age- and developmentally appropriate information and counselling to adolescents, adapting communication style according to the needs of the individual; use visual aids or information technology tools as appropriate; check understanding
- Provide appropriate guidance through brief interventions (e.g. motivational interviewing) as required
- Sensitively conduct a physical examination, providing clear explanations before the examination and reassurance during the examination
- Summarize main points at the end of the consultation, integrating explanations of treatment/management procedure and decision support counselling
- Support the parents/guardians in their educational tasks (e.g. promotion of healthy lifestyle, developing adolescent autonomy in following treatment regimens, and self-management)

Domain 2 Laws, policies and quality standards

Competency 2.1

Apply in clinical practice the laws and policies that affect adolescent health-care provision

Knowledge

- Name evidence-based prevention strategies relevant to adolescent health
- Recognize the items of the International Convention on the Rights of the Child and other human rights instruments that have implications for adolescent health care
- Explain the implication for adolescent health care of the human rights-based approach to health care
- Explain the main laws and policies that affect the legal, educational and health status of adolescents in the country (e.g. those that govern informed consent to medical procedures, child protection, use of illegal substances) and their implications for clinical practice
- Recognize the main principles of biomedical ethics (e.g. the balance between protection and autonomy)

Skills (ability to)

- Advocate adolescent health services to the staff of health facilities and the community
- Manage common ethical dilemmas (e.g. manage differences between adolescents' and parents' opinions of the best interest of the adolescent with respect to the management option(s), or protecting adolescents' right to confidentiality and decision-making when the legal framework is ambiguous)
- Assess adolescents' capacity to take autonomous decisions about their health and health care

Competency 2.2

Deliver services for adolescents in line with quality standards[1]

Knowledge

- Describe the main characteristics of quality health care services for adolescents
- List locally applicable standards for quality health care for adolescents, if such standards exist, and the WHO global standards[2]
- List the clinical guidelines and protocols required for clinical practice in a given discipline
- Explain the importance of collecting facility-based age and sex-disaggregated data to improve the quality of care for adolescent clients
- Name key social support agencies in the community that serve adolescents

[1] The knowledge and skills under this competency focus on aspects of quality that are not covered in other domains or competencies. For example, effective communication and evidence-based management of clinical conditions are part of quality health-care services for adolescents, but these aspects are covered in other competencies.

[2] The WHO global standards can be found at http://apps.who.int/adolescent/second-decade/section/section_6/level6_11.php

Skills (ability to)

- Organize service delivery in line with locally applicable standards for quality health care for adolescents or, if those are absent, in line with WHO global standards
- Adapt care to the socio-economic and cultural conditions in which the adolescent lives (e.g. religion, migrant families or families with low resources) while promoting and protecting adolescents' human rights in health care
- Work effectively with schools and other community-based programmes and services caring for adolescents (e.g. involve school nurse in health promotion activities) and develop a structured approach for follow-up and referral
- Communicate with parents, guardians, family members and other community members and organizations about the value of providing respectful, confidential health services to adolescents
- Regularly assess the quality of health service provision, including assessments of adolescents' experience of care, and apply findings to improve quality of care
- Plan service provision and improve the quality of care by using national/regional/local age- and sex-disaggregated data on health outcomes, health-related behaviours, service utilization and quality of care

Domain 3 Clinical care of adolescents with specific conditions

Competency 3.1

Assess normal growth and pubertal development and manage disorders of growth and puberty

Knowledge

- Describe the sequence of normal growth and how this relates to pubertal development for boys and girls
- Describe factors that might cause disorders of growth and puberty
- Explain menstruation (timing of menarche, menstrual hygiene, dysmenorrhoea and menorrhagia)

Skills (ability to)

- Assess normal growth and pubertal development[1]
- Manage[2] pubertal delay in male adolescents
- Manage pubertal delay in female adolescents
- Manage short stature
- Manage precocious puberty
- Promote menstrual hygiene

[1] See skills for Competency 1.1.

[2] Assessment and management should be part of the competence of the primary-level health-care worker. However, the extent to which certain conditions are managed at the primary care level varies from country to country. In all cases local policies for referral should be followed.

Competency 3.2

Provide immunization

Knowledge

- Describe the national routine vaccination schedule and its implications for adolescents (booster doses and adolescent age group-specific vaccines)
- Explain what an integrated approach to vaccination means (e.g. providing vaccination as part of a package that may include health education/advice or other services)
- Describe the contribution that vaccination can make to comprehensive prevention and control strategies for specific diseases

Skills (ability to)

- Provide information and counselling to adolescents on required vaccines, their effects and related health topics
- Correctly administer and follow safe injection practices for the required vaccines according to national policies (e.g. diphtheria-tetanus, hepatitis B virus (HBV), human papillomavirus (HPV), meningitis, measles, rubella, Japanese encephalitis, influenza)

Competency 3.3

Manage common health conditions during adolescence

Knowledge

- Identify conditions common in adolescents

Skills (ability to)

- Assess and manage abdominal pain and diarrhoea
- Assess and manage anaemia, sickle cell anaemia, thalassemia
- Assess and manage fatigue
- Assess and manage headache
- Assess and manage skin conditions (e.g. acne, piercing, tattoos, skin whitening)
- Address body image concerns
- Assess vision and refer adolescents with vision problems
- Assess and manage respiratory infections
- Manage common orthopaedic problems (e.g. back pain, scoliosis)
- Promote oral health and manage dental problems

Competency 3.4

Assess mental health and manage mental health problems

Knowledge

- Describe the epidemiology of common mental health disorders of adolescence
- Describe adolescent brain development and its links with social and emotional well-being
- Describe the effect of early trauma on later attachment
- Explain the impact of sexual and physical abuse on adolescents' mental health
- List evidence-based treatments for mental health disorders
- Name local beliefs that explain symptoms of mental disorders
- Describe how adolescents may self-medicate for symptoms of mental disorders
- Explain the impact of use and misuse of digital technologies on adolescent health and development

Skills (ability to)

- Assess emotional well-being and identify symptoms of mental health disorders
- Perform risk assessment and manage self-harm and suicidal behaviour
- Assess and manage conditions specifically related to stress (secondary non-organic enuresis after a recent potentially traumatic event, post-traumatic stress disorder including acute traumatic stress symptoms)
- Assess and manage emotional disorders (depressive episode, depressive disorder, anxiety disorder)
- Assess and manage behavioural disorders (hyperkinetic disorder/attention deficit hyperactivity disorder (ADHD), disorders of conduct)
- Assess and manage body image disturbance and eating disorders
- Assess and manage developmental disorders (intellectual disability, pervasive developmental disorders including autism)
- Manage significant emotional or medically unexplained complaints (e.g. somatic symptoms (somatoform disorders))
- Assess and manage thought disorders and delusion
- Refer to higher-level care when appropriate

Competency 3.5

Provide sexual and reproductive health care

Knowledge

- Explain the development of sexuality throughout childhood and adolescence, including gender identity and sexual orientation (including lesbian, gay, bisexual and transgender)
- Discuss national, regional and local data on prevalence of sexually transmitted infections (STIs) among adolescents, and adolescents' sexual health-related behaviours, knowledge and attitudes
- Describe safe sex practices and the advantages of delaying sexual initiation, marriage and pregnancy
- Explain prevention of female genital mutilation and other harmful traditional practices
- Describe methods to prevent adolescent pregnancy (the full range of contraceptive options including emergency contraception)
- Discuss abortion (spontaneous and induced abortion, legal grounds for safe abortion for adolescents, consequences of unsafe abortion)
- Discuss specific issues for adolescent parents (e.g. balancing parenting with own education)
- Discuss specific issues for particular groups (e.g. menstrual hygiene and contraception for adolescents living with disability, how particular health conditions affect sexual health)

Skills (ability to)

- Sensitively take a sexual and reproductive health history
- Manage menstrual pain
- Manage meno/metrorrhagia and irregular menstruation
- Diagnose and treat STIs, perform follow-up and offer prevention
- Manage common foreskin problems
- Manage acute scrotal pain
- Provide counselling on sexual and reproductive health issues (e.g. sexuality, sexual identity, sexual debut and safe sex, contraception and the full range of contraception options including emergency contraception, STIs), adopting a positive approach to sex rather than a problem- and risk-oriented approach
- Provide a full range of contraceptive methods including emergency contraception
- Manage contraceptive side-effects and address adolescents' concerns about side-effects
- Provide care in pregnancy, childbirth and the postpartum period for the adolescent mother and her newborn
- Provide safe abortion counselling and care in countries where abortion is legal, and counselling for and methods of post-abortion contraception in all cases

Competency 3.6

Provide HIV prevention, detection, management and care services

Knowledge

- Explain HIV prevention and diagnosis
- Discuss voluntary medical male circumcision as a means of HIV prevention (in countries with a generalized HIV epidemic[1])
- Describe prevention of mother-to-child transmission for adolescent mothers
- Discuss the epidemiology of and special considerations for perinatally HIV-infected adolescents
- List strategies to improve adherence to antiretroviral therapy by HIV-positive adolescents and retention in care
- Explain the contraceptive options for HIV-positive adolescents

Skills (ability to)

- Conduct HIV testing and counselling of adolescents, including disclosure to adolescents of HIV status and discussing the benefits and risks of disclosure of their HIV status
- Link HIV testing and counselling with contraceptive information and services
- Empower and support adolescents to determine if, when, how and to whom to disclose their HIV status
- Manage HIV-positive adolescents at the primary care level
- Provide support to the caregivers of HIV-positive adolescents

Competency 3.7

Promote physical activity

Knowledge

- Describe WHO-recommended levels of physical activity for various age groups
- List barriers to physical activity, according to gender, culture, climate, etc.
- Describe approaches to promote physical activity

Skills (ability to)

- Provide health education to adolescents, parents and caregivers about physical activity (e.g. its importance, recommended levels)

[1] Recommended in countries with a generalized HIV epidemic and a low prevalence of male circumcision: Botswana, Central African Republic, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

Competency 3.8

Assess nutritional status and manage nutrition-related disorders

Knowledge

- Demonstrate knowledge of healthy eating and nutritional needs during adolescence
- Discuss the epidemiology of dieting behaviours in adolescence
- Discuss prevention of overweight and obesity
- Describe approaches to prevent undernutrition and micronutrient deficiencies
- List iron-rich foods that are locally available

Skills (ability to)

- Provide health education to adolescents, parents and caregivers on healthy diet
- Assess body mass index (BMI) for age
- Manage obesity in adolescents
- Manage adolescents with undernutrition and micronutrient deficiencies
- Assess nutrition of adolescents with special needs (e.g. adolescent girls and pregnant adolescents, adolescents living with HIV, adolescents living with disabilities)

Competency 3.9

Manage chronic health conditions including disability

Knowledge

- Explain the epidemiology of major chronic illness (e.g. asthma, diabetes, inflammatory bowel diseases, cystic fibrosis) during adolescence
- Describe psychosocial issues in adolescents living with chronic conditions and disabilities
- Describe how common health-related behaviours (e.g. smoking, unsafe sex) may affect the course of specific chronic conditions
- Explain the major barriers to treatment adherence in adolescence and practical approaches to improve adherence
- Recognize how emotional and mental disorders in adolescents can complicate the course of chronic health conditions
- Explain the importance of a planned transition from paediatric to adult care and the components of a transition programme

Skills (ability to)

- Promote self-management skills in adolescents with chronic conditions
- Assess an adolescent's adherence to the management plan
- Support parents to understand how their role changes during adolescence, from managing their child's health to supporting their child's growing autonomy in self-care
- Support adolescents and families to remain engaged in health care as they transfer from one health service system to another

Competency 3.10

Assess and manage substance use and substance use disorders

Knowledge

- Describe common patterns of substance use (tobacco, alcohol, other psychoactive substances) in adolescence, including experimentation
- Explain the epidemiology of substance use and dependence
- Describe evidence-based approaches to prevention of substance use and substance use disorders

Skills (ability to)

- Provide smoking cessation support and treatment, including interventions for users of smokeless tobacco
- Assess and manage alcohol use and alcohol use disorders
- Assess and manage drug use and drug use disorders

Competency 3.11

Detect violence and provide first-line support[1] to the victim

Knowledge

- Describe various forms of interpersonal violence common among adolescents (e.g. family and intimate partner violence, youth violence, dating violence, sexual assault, school violence)
- Describe the epidemiology of bullying among adolescents, including cyberbullying
- Explain local attitudes that contribute to a social climate in which certain forms of violence towards adolescent boys and girls are tolerated and legitimized (e.g. gender-based violence, victim-blaming attitude)
- List available support networks for victims of interpersonal violence

Skills (ability to)

- Detect bullying and offer first-line support to victims of bullying
- Identify family and intimate partner violence and offer first-line support to victims
- Provide counselling on dating violence, including prevention and management
- Offer clinical care to adolescent survivors of sexual assault including first-line support, emergency contraception and post-exposure prophylaxis for HIV and sexually transmitted infections as appropriate
- Treat victims of violence with respect and sensitivity and do not trivialize the incident
- Provide information and help the adolescent who has been a victim of violence to connect to relevant services and social support

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[1] A detailed description of the elements of first-line support can be found in the WHO recommendations on interventions at the primary and referral levels of care to address adolescent health priorities in the WHO report *Health for the world's adolescents,* at http://apps.who.int/adolescent/second-decade/section6/page1/universal-health-coverage.html.

Competency 3.12

Prevent and manage unintended injuries

Knowledge

- Explain the epidemiology of unintended injuries, especially road traffic accidents
- List safety measures and risk factors for unintended injuries among adolescents
- Discuss prevention of road traffic accidents (e.g. safety belts, helmets, alcohol legislation, graduated licenses)
- Explain the prevention of other unintended injuries (e.g. drowning, fires)

Skills (ability to)

- Assess and manage adolescents who present with unintentional injuries
- Assess and manage drug- and alcohol-related unintentional injuries

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Competency 3.13

Detect and manage endemic diseases

Knowledge

- Explain the epidemiology of endemic diseases and specific issues with adolescent patients

Skills (ability to)

- Assess, classify and manage febrile adolescents
- Test for and treat endemic diseases

Core competencies and global standards for quality health-care services for adolescents

As noted earlier, workforce competency is key to the implementation of the Global Standards for Quality Health-Care Services for Adolescents. Fig. 3 shows the relationship between the global standards and the core competencies.

Fig. 3. Competencies necessary to implementation of the Global Standards for Quality Health-Care Services for Adolescents

Global standard	**Competency 1.1.** Understand normal adolescent development, its impact on health and its implications for health care and health promotion	**Competency 1.2.** Effectively interact with an adolescent client	**Competency 2.1.** Apply in clinical practice the laws and policies that affect adolescent health-care provision	**Competency 2.2.** Deliver services for adolescents in line with quality standards	**Competencies 3.1.–3.13.** Clinical care of adolescents with specific conditions
Standard 1. The health facility implements systems to ensure that adolescents are knowledgeable about their own health, and they know where and when to obtain health services.		✓		✓	
Standard 2. The health facility implements systems to ensure that parents, guardians and other community members and community organizations recognize the value of providing health services to adolescents and support such provision and the utilization of services by adolescents.		✓		✓	
Standard 3. The health facility provides a package of information, counselling, diagnostic, treatment and care services that fulfils the needs of all adolescents. Services are provided in the facility and through referral linkages and outreach.[1]		✓		✓	✓

[1] Provision in the facility should be linked, as relevant, with provision in referral-level health facilities and in schools and other community settings.

Standard 4. Health-care providers demonstrate the technical competence required to provide effective health services to adolescents. Both health-care providers and support staff respect, protect and fulfil adolescents' rights to information, privacy, confidentiality, non-discrimination, non-judgemental attitude and respect.	✓	✓	✓	✓	✓
Standard 5. The health facility has convenient operating hours, provides a welcoming and clean environment and maintains privacy and confidentiality. It has the equipment, medicines, supplies and technology needed to ensure effective service provision to adolescents.				✓	
Standard 6. The health facility provides quality services to all adolescents irrespective of their ability to pay, age, sex, marital status, education level, ethnic origin, sexual orientation or other characteristics.			✓	✓	
Standard 7. The health facility collects, analyses and uses data on service utilization and quality of care, disaggregated by age and sex, to support quality improvement. Health facility staff is supported to participate in continuous quality improvement.				✓	
Standard 8. Adolescents are involved in the planning, monitoring and evaluation of health services and in decisions regarding their own care, as well as in certain appropriate aspects of service provision.		✓	✓	✓	

Implementation

The core competencies that every primary care provider should demonstrate can be taught in both pre-service and in-service education. A progression across this spectrum of education is necessary to ensure lifelong learning. Many countries, however, do not have sustainable forms of continuous professional education. Therefore, improving the structure, content and quality of the adolescent health component of pre-service curricula is very important. An initial analysis of the current content and teaching methods of these curricula should inform the improvements. To assist situation analysis, the tool in Appendix 1 is a questionnaire for assessing the adolescent health and development component of pre-service training. Box 1 provides an overview of the sections of this part of the tool.

Experience gained from introduction of the content of the Integrated Management of Childhood Illness (IMCI) into pre-service education, as well as similar experiences in the field of adolescent health, show that both the scale of improvements and their sustainability depend on a favourable political environment. All stakeholders who participated in the development of this document agreed that any assessment would be meaningless if it were not embedded in a larger process of curriculum improvement, for which commitment at a high level is needed from the outset. Thus, the first step in implementation is to generate understanding, acceptance and support of the adolescent health content in pre-service education among national authorities, the academic community, and members of professional associations and religious bodies. This can be done more easily in countries where *there is already an enabling policy environment that recognizes the special needs of adolescents and supports the provision of services to adolescents.*

Box 1. Overview of the tool to assess the adolescent health and development component in the pre-service education of health-care providers

The assessment tool consists of four sections:

1. The first section addresses the **general characteristics of the course curriculum**, such as the structure and content, the process of approval of the content, evaluation methods and other issues that may influence the development of an adolescent health component within it. Usually, the coordinator of the curriculum should complete this section.

2. The second section asks about the presence within the overall curriculum of any **courses/tracks devoted to adolescent health**. The coordinator of the curriculum should complete this part of the tool, also.

3. The third section reviews the **outcome-based competencies that constitute the foundation of adolescent health care** and whether or not the curriculum covers them. This part of the tool can be completed by the coordinator as well as by educators from nursing and midwifery departments and specialist disciplines of paediatrics, community medicine, psychiatry, gynaecology and obstetrics and general medicine, among others.

4. The fourth part lists all the **domains that can potentially be dealt with**, keeping in mind the question of whether they have an "adolescent-specific approach". Educators from all involved disciplines should review this list.

   Students, too, can complete the latter two sections.

Preparing for change

Preparing for introduction or revision of the adolescent health pre-service curriculum can be considered as a process of five steps:

1. Orient national opinion leaders and decision-makers

As a pre-condition for curriculum reform, educators, opinion leaders and decision-makers from the academic and adolescent health communities must recognize the benefits of investing in the capacity of the primary care workforce to provide better care for adolescents. National institutions, such as the ministry of health, ministry of education, ministry of youth, the national board of licensing and certification, qualifications and curriculum development agency(ies), paediatrics societies, associations of nurses and midwives and other civil society organizations should be involved in the effort to orient national leaders. This may require considerable advocacy and awareness-raising about the needs of adolescents in the country and the gaps and deficiencies in current service provision. Once national leaders have understood this, a clear plan for introducing, or improving, the adolescent health component in the curriculum will help guide the process of change. A national task force should be created to lead the process, to advise which institutions should be engaged first, and to help these organizations with staff orientation and planning and the scaling-up of the changes nationwide.

2. Plan an assessment

In countries with large numbers of teaching institutions involved in pre-service education, it might be necessary to set criteria for choosing which institutions to engage first. Priority should go to the curricula of the profession(s) that, according to the country policies or practice, should be most involved in providing primary care services to adolescents. For example, if recent reform has placed emphasis on nurses as primary care providers for adolescents, then the nursing curriculum could be addressed. If an ongoing reform aims to increase the involvement of general practitioners or family doctors in the provision of school or other adolescent health services, then the curriculum of residents in general practice or family medicine could be addressed.

The assessment should be conducted first within a selected number of interested and influential institutions that can then become "champions" in the dissemination of the process to the other educational facilities of the country.

Once the institutions are identified, representatives from the national task force and the members of the faculty, including the curriculum coordinator(s) of the institutions, should decide which teaching departments need to be involved. The list of domains and competencies in Table 1 may guide this decision.

The assessment tool (Annex 1), particularly part 4, might need adaptation to concentrate on the topics most relevant to national or regional epidemiology and local health needs. To achieve consensus, ideally this adaptation should be conducted by a multi-professional team that includes representatives from the ministry of health, the ministry of education, health faculties and primary care services.

3. Conduct the assessment

The assessment has two parts: (1) individual answers to the questionnaire by members of the faculty and by students and (2) a collective reflection on findings and recommendations. Although an external expert can facilitate the process, this is not a requirement. The experts involved in the development of the assessment tool and its initial implementation felt that the tool is sufficiently self-explanatory and that interested educators can use it without external support.

The people who will be asked to complete the questionnaire should be briefed about its purpose, its various components, how the assessment will inform the curriculum reform, and what other steps apart from the assessment are envisaged for the reform. It should be emphasized that the assessment is an opportunity to reflect on the place given to adolescent health in an institution – in particular, the adequacy of what is currently taught at the pre-service level vis-a-vis what is thought to be necessary, what is expected from students by the end of their training and how to improve their competencies in adolescent health care.

4. Develop recommendations

Following this assessment, the role of the task force is to issue recommendations regarding the content of the pre-service curriculum in adolescent health care. These recommendations will to some extent vary depending on the discipline (e.g. nurses, midwives or medical students). The recommendations should focus on the structure of the curriculum (i.e. stand-alone or embedded in other courses) and its content and also should provide guidance on the improvements required in teaching methods (e.g. how to train in communication skills using role-play and/or simulated patients).

5. Implement change

A challenge for health education institutions is to ensure a seamless developmental progression across the spectrum of education, both pre-service and in-service. Several generic issues should be addressed, whatever the content and comprehensiveness of the education programme that has been adopted.

Stand-alone or integrated?

An important decision is whether adolescent health should be taught as a stand-alone course or dealt with as part of the general flow of the curriculum (Boxes 2–4 provide examples.) In countries where adolescent medicine is already explicitly taught, both models exist; in some faculties and health education institutions a one- or two-week course covers most of the important topics listed in this document. Such an approach highlights the importance of adolescent health and signals that this topic is an important area for students to learn. This approach, however, is a "one-shot" experience for the learners, who may in the long term lose many of the competencies gained in the course.

The other model – integration into the general curriculum – generally provides more repetition and reinforcement, with different sessions dealing with different aspects of adolescent health across the pre-service curriculum. This approach makes clear that aspects specific to adolescents lie within the general curriculum and are "core business", not a special add-on. In this approach sessions on adolescents are commonly included in the curricula in paediatrics, psychiatry/mental health,

Box 2. Embedded training programmes in Switzerland and Sri-Lanka

Since 1998, at the Faculty of Medicine of Lausanne, adolescent health and medicine are taught as a mandatory discipline, whose content is spread over years 3 to 5. Adolescent medicine specialists facilitate most of the sessions, but psychiatrists, endocrinologists and gynaecologists teach some sessions. Both plenary lectures and small group sessions are provided. Communication skills are taught with the help of adolescents posing as patients. The lectures take place within several modules and address paediatrics, mental health, substance use and sexuality.

The competency-based programme includes topics such as anthropology and concepts of adolescence; a life-course approach to adolescent health; legal and ethical considerations; normal adolescent bio-psychosocial development; communication skills and strategies to manage consultations effectively with adolescents and their families; psychosocial history taking using the HEADSSS acronym; deviation from normal developmental trajectories; risk-taking and exploratory behaviour; appropriate physical examination,

including pubertal staging; participation of adolescents in the planning and delivery of their own care; and advocacy for adolescent health and well-being.

Examinations include questions on adolescent health, which promotes students' attendance at the lectures and sessions.

In Sri Lanka the curriculum in Bachelor of Medicine, Bachelor of Surgery (MBBS) of the Faculty of Medicine of the University of Kelanyia, Ragama, has an adolescent health component that is integrated into the different parts of the curriculum. Adolescent health and development is part of the clinical skills strand taught in the departments of Obstetrics and Gynaecology, Medicine and Paediatrics; part of the Behavioural Sciences and Mental Health strand taught by the departments of Psychiatry, Family Medicine, Ethics, Professionalism and Sociology; and part of the strands of basic and applied sciences and community health.

gynaecology and so on. Attitudinal elements of the competencies, which are relevant to all disciplines, could be taught in an interdisciplinary manner. Box 2 provides examples of integrated educational programmes in adolescent health and medicine in Switzerland and Sri-Lanka.

The two models can co-exist. For example, the Hong Kong Polytechnic University, China, has adopted an approach to incorporating adolescent health into their curriculum that is both stand-alone and crosscutting (see Box 3).

Mandatory or optional?

Another important question concerns optional courses: Faculties may decide that some content should be obligatory, while other, less critical elements can be offered as an option for students or health-care providers who are particularly interested in adolescent health. Box 4 provides an example of a stand-alone optional educational programme in Portugal. One should remember, however, that the framework proposed in this document outlines core competencies – that is, those considered indispensable for every health-care provider in the primary care setting to provide quality care to adolescent clients. Therefore, it is recommended that the competencies in Domains 1 and 2 be mandatory and universal, as they constitute the foundation of adolescent health care.

Box 3. A mixed stand-alone and embedded programme in Hong Kong

The Hong Kong Polytechnic University, China, has adopted an approach to incorporating adolescent health into their pre-service nursing curriculum that is both stand-alone and embedded. While the topics on adolescent health and development as well as communication skills are taught in a stand-alone fashion, the essentials of adolescent-friendly health services are taught in a cross-cutting manner, spread over subject areas such as “Fundamentals of Nursing” and “Law and Ethics of Nursing”. Common health issues are also taught in a crosscutting manner, spread over subjects such as mental health and childbearing.

The developers believe that the cross-cutting approach can have the advantage of reducing resistance to introducing new content into an already crowded curriculum.

Box 4. A stand-alone optional educational programme in Portugal

In Portugal, at the Faculty of Medicine, University of Lisbon, adolescent health has been taught as a stand-alone optional discipline since 1999. Both fourth and fifth year medical students can register for the course. So far, more than 500 students have been exposed to this one-week intensive course (total of 28 hours).

The main objective is to provide medical students with the basic knowledge and skills to take appropriate care of adolescents, whatever the medical specialty they will choose.

The teaching methods used to support this training are diverse, including web-based and interactive lectures, role play, simulated patients, case scenario discussions and clinical placement.

The competency-based programme includes the following topics: normal adolescent psychological, emotional and cognitive development; risk and exploratory behaviour; adolescent growth and development including pubertal staging; deviation from normal developmental trajectories; communication skills and strategies to effectively manage consultations with adolescents and their families; history-taking including the use of the HEADSSS acronym; sleep; nutrition and exercise; eating disorders and obesity; the developmental aspects of adolescent sexuality, contraception, sexually transmitted infections, adolescent pregnancy; epidemiology of intentional and unintentional injuries; special health-care needs, the impact of chronic conditions on the health and well-being of adolescents and their families, adherence to treatment; transition of care from the paediatric to the adult health-care system; mental health; substance use, misuse and abuse; legal and ethical issues, confidentiality and consent; participation of adolescents in their own care planning and delivery; and advocacy for adolescent health and well-being.

Early in the curriculum or later?

Another crucial issue is the general level of competency that the student should have attained by the time that he or she is exposed to the adolescent health content, especially that in Domains 1 and 2, which deal with the human environment, communication skills and ethical issues. It may prove more useful to insert sessions pertaining to the foundation competencies later in the curriculum, when students have a higher level of general knowledge. These generic competencies also should be provided once practicing primary care providers are working and are meeting real adolescent patients. Thus, even though this document focuses on pre-service education, pre-service and in-service education ideally should be considered complementary approaches, not separate.

It will be the responsibility of the task force to make recommendations regarding how to implement the change in participating institutions and how to scale up improvements in pre-service education nationwide. Several models, as outlined in Boxes 2 to 4, can co-exist in a country or region, depending on the structure of the overall curriculum and the profiles of learners and educators. Implementation of the changes should follow a snowball process: A few "champion" institutions could introduce or improve adolescent health within a particular curriculum and then report on their experience, thus building support for progressively introducing the curriculum to other health education institutions.

Training the educators

A challenge for medical educators and professional accreditation bodies is to embed evidence-based approaches to teaching and learning about adolescent health and medicine in undergraduate and post-graduate curricula and training programmes. A major issue is the capacity of the educators. It is suggested that, as part of the preliminary work of the task force, experienced educators should conduct a training-of-educators course so that the educational programmes can be successfully introduced in the "champion" schools. Indeed, capacity building will be a key prerequisite to the success of the initiative.

Another precondition for success is the identification of training materials. There are a number of documents available, produced by WHO, other United Nations agencies and nongovernmental organizations. Annex 2 provides a list of training resources that can be adapted locally. Other documents may be available locally in the local language(s) of the country/region.

Monitoring and evaluation

The ultimate indicator of the effectiveness of improvements in pre-service curricula is a high standard of care delivered to adolescents in primary care settings. However, improvements in quality of care do not depend only on the ability of students to apply knowledge, skills and attitudes in their work after graduation. Attributing improvements in quality of care to changes in the content and teaching methods of pre-service education could be methodologically difficult and would require a long time frame for measurement. It is important, therefore, to develop a monitoring and evaluation framework that makes it possible to measure short- and medium-term progress by detecting changes in the process of teaching (changes made in the way a course or academic program is taught, the methods and materials used) and in teaching outcomes (students' competence).

Institutions are encouraged to develop a competency-testing tool to monitor and evaluate aspects of the three domains and the 17 related core competencies. Using a combination of methods, such as self-reported confidence that one possesses the necessary knowledge, skills and attitudes as well as objective assessments (e.g. tests, observation), will enable institutions to assess the extent to which these educational improvements have contributed to the students' competencies in adolescent health, and how it improved teaching process.

Core competencies in adolescent health and development could be assessed at five levels:

1. **student self-assessment,** to assess their own professional growth and levels of knowledge, skills and attitudes in the core competencies;
2. **student assessment,** to examine students' core competencies in adolescent health by means of formative and summative assessment methods;
3. **educators' self-assessments,** to gauge their own performance in teaching and professional growth;
4. **training institution capacity,** to assess a faculty's capacity to teach adolescent health and whether the institution has a plan for staff development;
5. **national evaluation of the adolescent health component in pre-service education,** to assess educational quality nationwide and the performance of educators and students in meeting the standards and also to inform planning for appropriate interventions at the national level. The results of the evaluation should be used to demonstrate to teaching institutions, funding agencies and national authorities to what extend the resources invested in teaching produced the expected effect. The evaluation can be coordinated jointly by the ministry of health and the ministry of education, for example.

Key reference documents

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WHO (2014a). Health for the world's adolescents: a second chance in the second decade. Summary. Geneva: World Health Organization. (http://www.who.int/maternal_child_adolescent/topics/adolescence/second-decade/en/, accessed 10 July 2014).

WHO (2014b). Midwifery educator core competencies. Geneva: World Health Organization.

WHO (forthcoming). Global standards for quality health-care services for adolescents. Geneva: World Health Organization.

Annex 1. Tool to (self-) assess the adolescent health and development component in the pre-service education of health-care providers

Purpose

This (self-) assessment tool is intended to help professionals who design training curricula and educators and trainers to determine:

- the structure and content of current curricula on adolescent health and development, as well as the teaching, learning and assessment methods currently taught in your institution;
- how adolescent health and development could be better incorporated into curricula and educational activities in your institution and why they should be;
- to what extent your pedagogic approaches fit with core competencies in adolescent health and development ("competency-based curriculum").

The ultimate goal of this tool is to assist health education institutions to develop or advance their educational programmes in adolescent health and development. Its content is informed by the core competencies and learning objectives presented in Table 3.

The questionnaire consists of four sections, covering:

1. the general characteristics of the curriculum;
2. the availability of the courses/tracks devoted to adolescent health in the curriculum;
3. review of areas that form the foundation of adolescent health and medicine (Domains 1 and 2 of the core competencies);
4. review of various specific issues related to adolescent health (Domain 3 of the core competencies).

The four sections can be completed separately and independently or else jointly by:

- the curriculum coordinator (sections 1 and 2)
- faculty members (sections 2, 3 and 4)
- students (sections 3 and 4).

Tool to assess the adolescent health and development component in the pre-service education of health-care providers

Section 1. General information about the institution and the nature of the curriculum/course

INFORMANT

Name: _____

Position: _____

Role: _____

Name of INSTITUTION

_____

_____

_____

Name of curriculum/course	Duration of course/ educational programme _____Years /___Months

PRE-REQUISITES FOR STUDENT/PARTICIPANT ENTRY INTO COURSE OR EDUCATIONAL PROGRAMME

☐ No ☐ Yes

(please list): _____

_____

_____

_____

Currently, with regards to CONTENT AND STRUCTURE OF THE CURRICULUM in your institution:

	Yes	No	Don't know
There is a formal written process for the approval of any course curricula/educational activities and content.			
Course content is determined by a group, committee or other collective body.			
Course content is determined largely by the course coordinator.			
Course content is largely historically determined and repeated from year to year.			
The structure and content of the course curricula/educational activities are based on national standards.			
The structure and content of course curricula/educational activities take into account health priorities, based on national epidemiological data.			
There is regular review of course content, and changes are made accordingly.			
There is a regular accreditation process in place to review the curriculum.			
Teachers are regularly evaluated on their teaching performance.			
Teachers keep up to date in their discipline/teaching area.			
Students participate in the evaluation of the teachers and the improvement of the curriculum/course.			

☐ There are other mechanisms for determining the content of the curricula/educational activities (please explain)

_____

_____

_____

_____

_____

_____

_____

The next questions explore the extent to which your curriculum/course is competency-based. Please choose the appropriate answer for each row.

	Yes, mostly	Yes, some-what	No	Don't know
There is a defined list of the competencies to be acquired by the end of the course.				
The learning objectives[1] are defined and available in writing.				
The teaching methods are tailored to the learning objectives.[2]				
The teachers have been trained in the field of medical education/pedagogy.				
The teachers have received specific orientation to competency-based education.				

If your curriculum/course is not competency-based, what issues might make it difficult to introduce a competency-based approach in your institution in the future?

	Yes	No	Don't know
It will be difficult to get consensus across all departments/ educators/courses on a single consistent teaching methodology.			
We do not have the resources to train or orient all educators in a competency-based training approach.			
Educators may not be interested in adopting a new approach.			
We may not have the capacity to develop educational materials to support a competency-based approach.			

[1] Learning objectives are what a student is expected to be able to do in order to demonstrate that he or she has the required competency.

[2] As an example, if the learning objective is for students to list the immunization schedule for adolescents, an interactive presentation is an appropriate teaching method. However, if the learning objective is for students to give immunizations according to the schedule, students will need opportunities to practice giving the immunizations.

TEACHING METHODS

How often are various teaching methods currently used in your faculty/department?
Please check one appropriate box for each row.

	Very often	Often	Seldom	Never
Lectures				
Role play				
Simulated patients				
Case study				
Workplace, clinical placements				
Multimedia interactive				
Web-based activities				
Other (please specify)				

ASSESSMENT METHODS

Are your assessment methods (examinations) aligned with the learning objectives and teaching methods?

☐ Yes ☐ No

Are the following methods used to assess the students in your institution?

Please select one answer for each row.

	Yes	No	Don't know
Written examinations			
Oral examinations			
Direct observation (e.g. observation of history-taking, physical examination, counselling of patient)			
Structured practical examinations			
Assessment of patient records			
Other (please specify)			

Section 2. Information on courses or a curriculum track dedicated to adolescent health and medicine

Does your curriculum provide any structured course, module or track dedicated to adolescent health?

☐ Yes☐ No

If YES, please describe how adolescent health is currently taught in your institution:

	Yes	No	Don't know
Adolescent health and development is taught as a "stand-alone" topic.			
Adolescent health and development is embedded in other teaching. • nursing			
• midwifery			
• gynaecology			
• paediatrics			
• community medicine			
• family medicine			
• psychiatry			
• dermatology			
• other (please specify)			
There is a mixture of the above.			
There is a person or group in charge of coordinating all the courses pertaining to adolescent health and development.			
The teachers in charge meet to coordinate the content of their courses.			
The teachers in charge of adolescent health have been specifically trained in the subject.			
The teachers in charge of adolescent health have been trained in the field of medical education/pedagogy.			
The teachers in charge of adolescent health include questions pertaining to their discipline in the student assessments/ examinations.			

If your institution does NOT have any structured course, module or track dedicated to adolescent health, please describe what, in your opinion, is the level of interest in having a structured course/track on adolescent health:

	Yes	No	Don't know
There is broad interest across the institution in including adolescent health in curricula/educational activities.			
Only a few are interested in and committed to including adolescent health in curricula/educational activities.			
There is general resistance/reluctance to include adolescent health in curricula/educational activities.			
There is a recognized leader/champion(s) for adolescent health.			

If your institution does NOT have a structured course/track related to adolescent health, in the future what issues and challenges might arise when incorporating adolescent health content or improving content in curricula/ educational activities?

	Yes	No	Don't know
There is a lack of interest or understanding of the importance of adolescent health.			
There is resistance to including adolescent health in curricula/ educational activities.			
Curricula are already crowded and have no space for new or additional content.			
There is uncertainty as to which elements of adolescent health and development to include in curricula/educational activities.			
The staff needs further training to increase their own expertise in adolescent health.			
Teaching materials are lacking.			

If you do NOT have a structured course/track related to adolescent health, in the future how do you think adolescent health can best be incorporated into or improved in existing curricula/educational activities in your institution?

	Yes	No	Don't know
Adolescent health and development should be taught as a "stand-alone" topic.			
Adolescent health and development should be embedded in other teaching (such as gynaecology, dermatology, paediatrics). If you answered "yes", please list the departments that should incorporate adolescent health content into their teaching.			
• midwifery			
• gynaecology			
• paediatrics			
• community medicine			
• family medicine			
• psychiatry			
• dermatology			
• other (please specify)			
There should be a mixture of above.			
There should be a person or group in charge of coordinating all the courses pertaining to adolescent health and development.			
The teachers in charge should coordinate the content of their courses.			

Please comment on what **PROCESSES** would need to be in place for adolescent health to be incorporated into or improved in curricula/educational activities.

_____

_____

_____

_____

Section 3. Review of the foundation of adolescent health care

Below is a list of topics related to core competencies in adolescent health and development. For each topic on the list, please choose one answer that reflects the situation or your opinion

BASIC CONCEPTS IN ADOLESCENT HEALTH AND DEVELOPMENT, AND EFFECTIVE COMMUNICATION			
	Yes, this topic is taught in our curriculum	**No, this topic is not currently taught, BUT it should be**	**This topic is not taught and is not relevant**
UNDERSTANDING ADOLESCENCE			
Definitions and concepts of adolescence			
Normal growth and puberty, including impact on body image			
Cognitive development			
Psychosocial development			
Development of sexuality			
Assessment of developmental stages			
Protective and risk factors in the context of adolescent development			
Epidemiology of adolescent health outcomes and health-related behaviour			
Local attitudes, beliefs and practices regarding adolescents			
CONSULTATION SETTING AND COMMUNICATION SKILLS			
How to ensure a trustful atmosphere in the consultation (privacy, confidentiality)			
Taking a history, including psychosocial assessment			
Physical examination			
Factors influencing effective communication with adolescent clients			
Communication with parents			
Gender norms in adolescent health care			
Health education and counselling			
Motivational interviewing			

	Yes, this topic is taught in our curriculum	No, this topic is not currently taught, BUT it should be	This topic is not taught and is not relevant
LAWS AND POLICIES THAT AFFECT ADOLESCENT HEALTH-CARE PROVISION			
National laws and policies that affect adolescent health-care provision			
Human rights-based approach to health care			
Ethical issues			
Assessment of adolescent's competency in decision-making			
School health and the role of schools in health promotion			
Advocating adolescent health in the community			
QUALITY STANDARDS FOR HEALTH-CARE FACILITIES			
National, regional and local quality standards for health-care facilities			
WHO Global Standards for quality health-care services for adolescents			
Working effectively with schools and other community-based programmes and services caring for adolescents			
Using data for quality improvement			

Section 4: Review of topics linked to management of specific clinical situations in adolescents

For each topic on the list, please choose one answer that reflects the situation or your opinion.

	Yes, the topic is included, and it has a focus on needs/situation of adolescents	Yes, the topic is included, but there is no focus on adolescents	No, the topic is not included but should be, with a focus on adolescents	No, the topic is not included and is not relevant
Pubertal delay, male				
Pubertal delay, female				
Short stature				
Precocious puberty				
Vaccinations: diphtheria-tetanus; meningitis, HBV, HPV, etc.				
Abdominal pain				
Anaemia, thalassemia, sickle cell anaemia				
Fatigue				
Headache				
Skin conditions (e.g. acne, piercing, tattoos, skin whitening)				
Poor vision				
Poor hearing				
Respiratory infection, pneumonia, asthma				
Orthopaedic problems				
Endemic diseases				
Dental problems and oral health				

	Yes, the topic is included, and it has a focus on needs/situation of adolescents	Yes, the topic is included, but there is no focus on adolescents	No, the topic is not included but should be, with a focus on adolescents	No, the topic is not included and is not relevant
Gender identity and sexual orientation (including lesbian, gay, bisexual, transgender)				
Sexual attitudes and behaviours				
Sexual and reproductive health history-taking				
Normal menstruation and menstrual hygiene				
Menstrual pain				
Meno/metrorrhagia, irregular menstruation				
Diagnosis of STIs including HIV				
Prevention of STIs including HIV				
Treatment of STIs				
Treatment of HIV				
Special issues in perinatally HIV-infected adolescents				
Foreskin problems				
Acute scrotal pain				
Contraception, including emergency contraception				
Adolescent pregnancy, antenatal and postnatal care				
Adolescent parenthood				
Safe abortion				
Female genital mutilation				
Voluntary medical male circumcision[1]				
Preventive interventions for safe sex				

[1] Recommended in countries with a generalized HIV epidemic and low prevalence of male circumcision: Botswana, Central African Republic, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

	Yes, the topic is included, and it has a focus on needs/situation of adolescents	Yes, the topic is included, but there is no focus on adolescents	No, the topic is not included but should be, with a focus on adolescents	No, the topic is not included and is not relevant
Epidemiology of chronic diseases in adolescence				
Psychosocial issues and chronic conditions				
Adherence to treatment				
Transition to adult care				
Assessment of mental health problems				
Depression				
Body image disturbance and eating disorders				
Self-harming behaviour and suicide				
Anxiety disorder and phobia				
Attention deficit hyperactivity disorder				
Thought disorders and delusion				
Developmental disorders				
Use and misuse of digital technologies				
Epidemiology of substance use				
Tobacco use				
Alcohol use and alcohol use disorders				
Drug use and drug use disorders				
Medication and self-medication of mental disorders				

	Yes, the topic is included, and it has a focus on needs/situation of adolescents	Yes, the topic is included, but there is no focus on adolescents	No, the topic is not included but should be, with a focus on adolescents	No, the topic is not included and is not relevant
Nutrition and healthy eating, nutritional needs				
Overweight and obesity				
Underweight, starvation				
Undernutrition and micronutrient deficiencies				
Bullying and cyberbullying				
Family and intimate partner violence				
Youth and dating violence				
Sexual assault				
Traffic injury				
Other injuries				
Physical activity and sports				

Suggestions for additional topics

_____

_____

_____

Other comments (e.g. reasons for omission of particular topics, or other)

_____

_____

_____

Annex 2. Educational and training resources on adolescent health and development

WHO resources

Orientation programme on adolescent health for health-care providers. Geneva, WHO, 2006. This training package aims to help health-care providers to promote healthy development in adolescents and to prevent and respond to health problems challenging this population group. http://www.who.int/maternal_child_adolescent/documents/9241591269/en/

TEACH-VIP E-Learning. Geneva, WHO, 2010. This is an online training resource suitable for a wide range of audiences including public health and health-care professionals, staff of public health and related government sectors, officials from nongovernmental organizations and others interested in increasing their knowledge of injury and violence prevention. http://teach-vip.edc.org/

TEACH-VIP 2. Geneva, WHO, 2012. WHO's modular training curriculum on injury prevention and control was developed with the input of a global network of injury experts and is applicable for a wide variety of training audiences. http://www.who.int/violence_injury_prevention/capacitybuilding/teach_vip/en/

Other resources

Adolescent health programme. London, Royal College of Paediatrics and Child Health. This web-based programme helps health-care professionals get the right knowledge and skills to help their young patients lead healthier and more active lives. http://www.rcpch.ac.uk/AHP

Adolescent reproductive and sexual health education program. New York, Physicians for Reproductive Health, American Medical Association. There are 17 modules that can be downloaded on various aspects of adolescent reproductive health including essentials of contraception, male adolescent reproductive health, pregnancy options counseling with adolescents, caring for transgender adolescents and others. http://prh.org/teen-reproductive-health/arshep-explained/

EuTEACH curriculum. Lausanne, Switzerland, European training in effective adolescent care and health. There are 21 modules, which cover subject matter ranging from defining adolescence and overview of adolescent bio-psychosocial development to the design of youth-friendly health services. http://www.unil.ch/euteach/home.html

Working with young people. Sydney, Australia. Content, tools and technology for professionals supporting youth's mental health and well-being. http://au.professionals.reachout.com/Youth-mental-health/Working-with-young-people

Annex 3. Teaching departments and institutions where the tool was field-tested

1. School of Nursing, Polytechnic University, Hong Kong SAR, China
2. Alexandria University, Departments of Faculty of Medicine and Faculty of Nursing, Cairo, Egypt
3. Community Health Nurses Training School, Winneba, Ghana
4. Nursing and Midwifery Training School, Korle-Bu, Ghana
5. Lady Hardinge Medical College, University of Delhi, New Delhi, India
6. University College of Medical Science, University of Delhi, New Delhi, India
7. Ministry of Health, Kuala Lumpur, Malaysia
8. Faculty of Medicine, University of Kelanyia, Ragama, Sri Lanka
9. Faculty of Medicine, University of Peradeniya, Peradeniya, Sri Lanka
10. Medical School, St. Francis University College of Health and Allied Sciences, Ifkara, United Republic of Tanzania
11. School for Assistant Medical Officers at Tanzanian Training Centre for International Health, Ifakara, United Republic of Tanzania

For more information, please contact:

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Child and Adolescent Health
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www.who.int/maternal_child_adolescent/en

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