

# Handbook for conducting an adolescent health services barriers assessment (AHSBA) with a focus on disadvantaged adolescents



**Knowing which adolescents are being left behind on the path to universal health coverage, and why**



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# Foreword

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The WHO Constitution states that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition. This right to health is at the heart of the current WHO agenda for the

realization of universal health coverage. The WHO Director-General, Dr Tedros Adhanom Ghebreyesus, in his statement for Human Rights Day 2017 said, “No one should get sick and die just because they are poor, or because they cannot access the health services they need.” When people are marginalized or face stigma or discrimination, their physical and mental health suffers. Discrimination in health care services is unacceptable and is a major barrier to development.

The principle of leaving no one behind is fundamental to achieving universal health coverage, as well as the other health-related targets in the Sustainable Development Goals. It is imperative that we all work together to fight against inequities and ensure for everyone the highest attainable standard of health. Adolescents are one sixth of the world’s population and they account for 6% of the global burden of disease and injury. The recent very rapid declines in mortality among infants and young children have not been mirrored among adolescents, who find themselves in the period when many risky behaviours start having a major impact on their future health as adults.

Investing in adolescent health is one of the ways to promote health across the life-course and to break the intergenerational transmission of health inequities.

Despite this, millions of adolescents get left behind every day in accessing health services and in achieving positive health outcomes. What we need are that resources follow the desire for equity, so that we can identify who they are and why they are being left behind and work to transform this. The Adolescent Health Services Barriers Assessment (AHSBA) tool has the ability to change the lives of the most disadvantaged adolescents all over the world.

Its use sends a powerful message from governments that they care about those adolescents struggling to access health care and that they are prepared to do what is necessary to make care inclusive of all persons, no matter their circumstances.

This resource supports the equity, gender and human rights principles found in the Global Accelerated Action for the Health of Adolescents (AA-HA!) country implementation guidance, helping to operationalize and achieve the right of adolescents to the fulfilment of the highest attainable standard of health.

**Dr Princess Nothemba Simelela**  
Assistant Director-General for Family,  
Women, Children and Adolescents

# Dedication

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This manual is dedicated to adolescents like Aisha and Samuel.

## Aisha

Aisha was born in a remote village where, like her, most girls did not attend primary school and few learned to read and write.

As was common for girls in this community, Aisha's parents arranged for her to marry a farmer when she was 14 years old. At that time Aisha moved to the household of her husband and in-laws. Aisha's new family was eager for her to have a baby as soon as possible. Aisha secretly wished she could wait a few more years before becoming pregnant, because she was still adjusting to the responsibilities of her new life. Previously, her female cousins had told her it was possible to prevent pregnancy by wearing certain beads on a string around her waist, drinking a mixture of local herbs or visiting a health centre for medicine. However, the nearest government health facility was a three-hour walk away, and even if she could have gone to it, Aisha knew she would need the permission of her husband and in-laws before the doctor would give her contraceptives. Instead, she discreetly collected the herbs and drank the solution that her cousins had recommended.

Aisha soon became pregnant despite her attempts to prevent it. Food was scarce in her new household and from early in her pregnancy, Aisha felt hungry, tired,

dizzy and weak. She was not able to attend antenatal appointments because of the distance to the health facility and the cost involved. Maternal and child health services were supposed to be provided for free in government facilities, but the nearest health centre was known to require extra payments, like tipping providers and paying for medications. The laboratory network in the area was also weak, so even if she had gone to prenatal check-ups, she would not have received some of the tests that she needed.

When Aisha was 35 weeks pregnant she went into premature labour. She started to bleed heavily. A traditional birth attendant in her village helped her, but the woman did not at first recognize that Aisha's blood loss was excessive. Five hours after Aisha started bleeding, her husband borrowed enough money from his neighbours to hire a car to take her to the government health facility.

When Aisha arrived at the health centre the staff attended her promptly, but she had lost too much blood. The health facility had a shortage of blood for transfusions, so she did not receive the amount she needed. Aisha died at age 15 of postpartum haemorrhage – excessive blood loss – a common yet treatable risk for anaemic pregnant girls and women (1, 2).

## Samuel

Samuel grew up in the countryside, sharing a two-room hut with his widowed mother and four siblings. Samuel's mother was a member of an ethnic minority and a subsistence farmer who supported the family by working a small plot of rented land. After two years of crop failures, however, the family became severely malnourished. Samuel decided to leave home at age 12 to find work in the nearest city, so he could support himself and help his mother financially.

Once he was in the city, Samuel picked up odd jobs, like cleaning market stalls and hauling supplies at construction sites. At night, he slept on the ground of the big outdoor market with other boys. His new life was hard and sometimes dangerous, but Samuel liked that he got enough food to eat every day and sometimes he was even able to send money to his mother.

When Samuel was 14, he was pulling a cart on a busy road one day when he was hit by a motorcycle. Two of his friends took him to the state hospital. Samuel, like other street children, was not covered by health insurance.

His friends pooled their money to pay for his wounds to be cleaned and wrapped, but they could not afford the prescribed antibiotic and pain medication. Samuel returned to the streets to recover. Before long, one of Samuel's wounds became infected and his friends again pooled their money to have him admitted to the hospital. Samuel's wound healed, but afterward he had a permanent limp and recurring pain from his injuries.

Samuel started glue-sniffing with other street boys because it relieved his pain and helped him forget his troubles. At a certain point, he realized he had become addicted. He went to local health services to seek help, but they spoke to him harshly, and he felt ashamed and left. Fortunately, a new service for street youth had opened in the area, and one of the street workers approached Samuel to tell him about their drug treatment programme. Samuel decided to try it. Over time, he stopped sniffing glue. When Samuel was 17, the street programme helped him to find a job that paid enough money that he could rent a room. Finally, Samuel was able to get off the streets (3, 4).

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*Aisha's and Samuel's stories are just two that reflect hundreds of thousands of adolescents who suffer serious yet preventable illness, injury or death every year. These stories show how a person's circumstances can play an important role in their exposure to risk factors, their access to services, their health outcomes and the non-health-related consequences of treatment (such as impoverishment or stigmatization). Many intersecting factors – such as poverty, adverse gender and cultural norms, discrimination based on ethnicity, transportation and cost barriers, and disability – can contribute to large groups of adolescents not having access to effective health services. By understanding which adolescents experience major barriers to effective health services, and what barriers they face, we can identify entry points and implement better interventions to ensure no adolescents are left behind.*

# Acknowledgements

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This handbook builds on other assessments of barriers to health services and work done on the integration of equity, gender and human rights into policies and programming (5–9). It is part of a wider World Health Organization (WHO) Gender, Equity and Human Rights workstream on barrier assessment methods. The workstream operationalizes the emphasis on acting on barriers to universal health coverage within WHO’s Thirteenth General Programme of Work 2019–2023 (10). This handbook also draws from WHO’s work in adolescent health. Resources that informed the handbook include the 2017 *Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation* (11); the 2012 WHO publication *Barriers and facilitating factors in access to health services in the Republic of Moldova* (5) and the 2017 WHO publication *Towards universal coverage for preventive chemotherapy for neglected tropical diseases: guidance for assessing “who is being left behind and why”* (9). The qualitative component additionally draws from similar research approaches that were used in Viet Nam by WHO and the Hanoi Medical University in 2015.

This handbook was designed and commissioned through a cross-departmental technical collaboration led by Theadora Swift Koller (Technical Officer, Equity; Family, Women’s and Children’s Health; Gender, Equity and Human Rights) and David Ross (Medical Officer, Research and Development; Maternal, Newborn, Child and Adolescent Health) of WHO headquarters, under the general direction of Veronica Magar (Team Leader, Family, Women’s and Children’s Health; Gender, Equity and Human Rights) and Rajiv Bahl (Coordinator, Research and Development; Maternal, Newborn, Child and Adolescent Health).

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The following people provided technical input; they are listed in alphabetical order, and all are WHO headquarters staff unless otherwise noted: Wole Ameyan (HIV); Lakshmi Narasimhan Balaji (United Nations Children’s Fund); Valentina Baltag (Maternal, Newborn, Child and Adolescent Health); Rebekah Thomas Bosco (Gender, Equity and Human Rights); Krishna Bose (The Challenge Initiative); Venkatraman Chandra-Mouli (Reproductive Health and Research); Veronica Magar (Gender, Equity and Human Rights); Mary Manandhar (Gender, Equity and Human Rights); Symplice Mbola Mbassi (WHO Regional Office for Africa); Rajesh Mehta (WHO Regional Office for South-East Asia); Mikael Ostergren (Maternal, Newborn, Child and Adolescent Health); Taiwo Adedamola Oyelade (WHO Regional Office for Africa); Pura Rayco-Solon (Nutrition for Health and Development); Julia Lynn Samuelson (HIV); and Anne Schlottheuber (Information, Evidence and Research). The previous contributions of Patricia Frenz to WHO work on barriers to adolescent health services, in the context of the 2016 Innov8 technical handbook (8) step 4 application in Nepal (which influenced some of the conceptual underpinnings in the AHSBA) are also noted. Special thanks to David Peters for support towards barriers assessment methods.

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# Lists of assessment templates, tables, figures and boxes

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## ASSESSMENT TEMPLATES

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**ASSESSMENT TEMPLATE B:** First summary table for a **SERIES** of key informant interviews or focus group discussion/ interview sets: Adolescent subpopulation and barrier findings by type of health service

**ASSESSMENT TEMPLATE C:** Second summary table for a **SERIES** of key informant interviews or focus group discussion/ interview sets: Barriers to access to health services by coverage dimension

**ASSESSMENT TEMPLATE D:** First literature review summary table of adolescent subpopulation and barrier findings: Source document, type of research, study population and type of health service, with examples

**ASSESSMENT TEMPLATE E:** Second literature review summary table of adolescent subpopulation and barrier findings: Coverage dimension and type of health service

**ASSESSMENT TEMPLATE F:** First data mining summary table of adolescent subpopulation and barrier findings: Data source, indicator, stratifier and type of health service

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# Abbreviations

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<b>AA-HA!</b>	<i>Global accelerated action for the health of adolescents: guidance to support country implementation</i>
<b>AHSBA</b>	adolescent health services barriers assessment
<b>AIS</b>	AIDS Indicator Survey
<b>BMI</b>	body mass index
<b>DALY</b>	disability-adjusted life year
<b>DFID</b>	Department for International Development (United Kingdom of Great Britain and Northern Ireland)
<b>DHIS</b>	District Health Information System
<b>DHS</b>	Demographic and Health Survey
<b>EQUIST</b>	EQUitable Impact Sensitive Tool
<b>FGD</b>	focus group discussion
<b>GSHS</b>	Global School-Based Student Health Survey
<b>GYTS</b>	Global Youth Tobacco Survey
<b>H6+</b>	A partnership of UNFPA, UNICEF, UN Women, WHO, UNAIDS and the World Bank Group
<b>HBSC</b>	Health Behaviour in School-Aged Children
<b>HEAT</b>	Health Equity Assessment Toolkit
<b>HMIS</b>	Health Management Information System
<b>HPV</b>	human papillomavirus
<b>IMHE</b>	Institute for Health Metrics and Evaluation
<b>Innov8</b>	An approach for reviewing national health programmes to leave no one behind
<b>IPPF</b>	International Planned Parenthood Federation
<b>IRIS</b>	Institutional Repository for Information Sharing
<b>KI</b>	key informant
<b>LGBTI</b>	lesbian, gay, bisexual, transgender or intersex
<b>LMICs</b>	low- and middle-income countries
<b>LSMS/IS</b>	Living Standards Measurement Survey/Integrated Topic Survey
<b>M&amp;E</b>	monitoring and evaluation
<b>MICS</b>	Multiple Indicator Cluster Survey
<b>n.a.</b>	not applicable
<b>RHS</b>	Reproductive Health Survey
<b>RMNCAH</b>	reproductive, maternal, newborn, child and adolescent health
<b>SDG</b>	Sustainable Development Goal



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<b>SRH</b>	sexual and reproductive health
<b>STI</b>	sexually-transmitted infection
<b>UN</b>	United Nations
<b>UNAIDS</b>	the Joint United Nations Programme on HIV/AIDS
<b>UNDP</b>	United Nations Development Programme
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	World Health Organization

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# Executive summary

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With the adoption of the Sustainable Development Goals (SDGs) in 2016, the global community recognized universal health coverage as a critical priority. In recent decades, many governments have improved the quality and the coverage of their adolescent health services, but in every country there remain adolescent subpopulations which do not have effective coverage with health services. In keeping with the goals of universal health coverage and a human rights-based approach to health, all adolescents should have a fair opportunity to attain their full health potential, and none should be disadvantaged from attaining this potential (10–12).

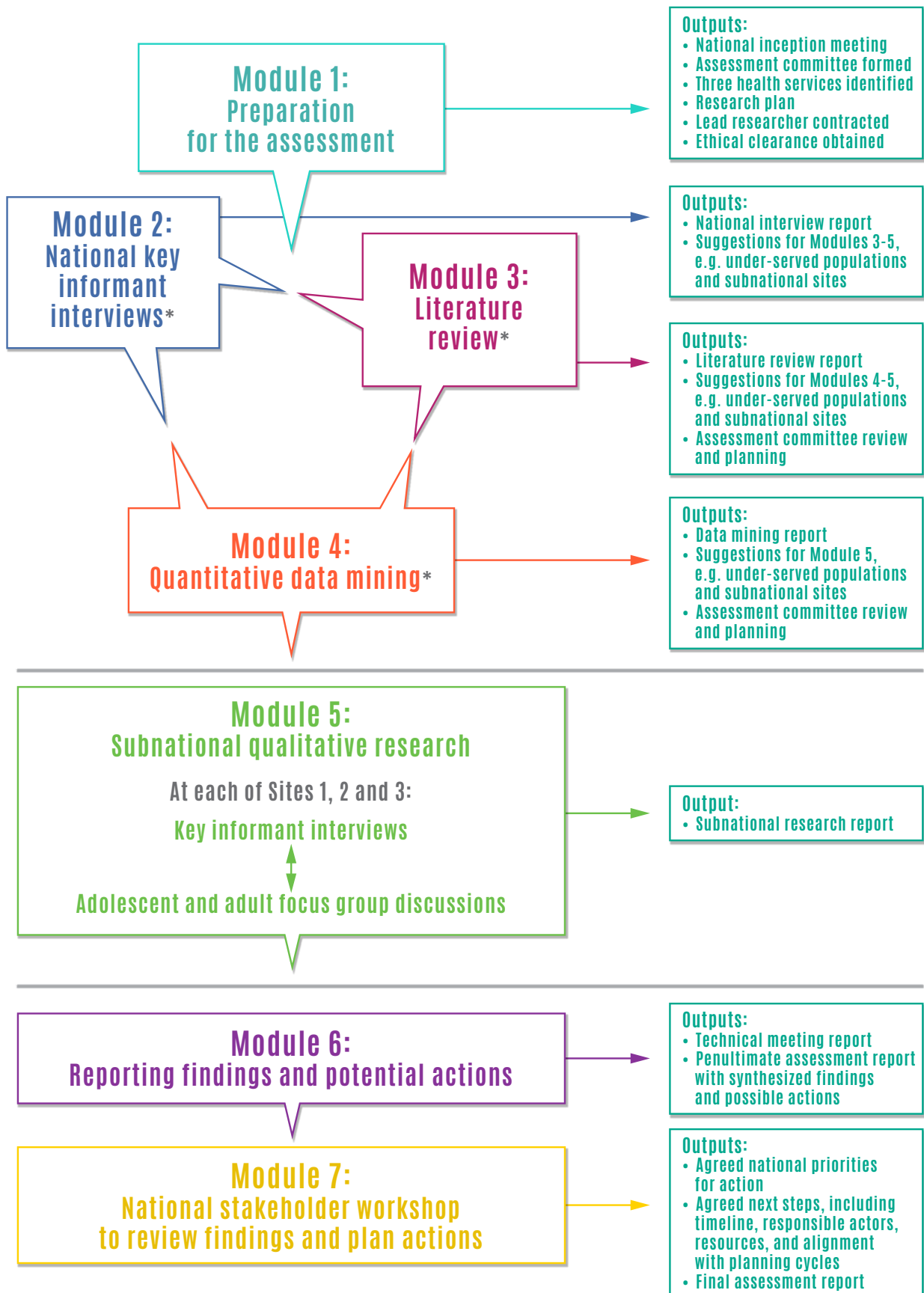
A first step towards achieving universal health coverage for adolescents is for each country to assess which adolescent subpopulations do not have effective health service coverage and what the most important barriers are that prevent them from having it. This handbook for conducting an adolescent health services barriers assessment (AHSBA) with a focus on disadvantaged adolescents outlines how governments can assess health service equity and barriers at national and subnational levels in order to identify which adolescents are being left behind, and why. The handbook's three objectives are:

1. to build in-country capacity to identify barriers which prevent disadvantaged adolescents from having effective coverage with health services;
2. to trigger remedial action to address the barriers in order to promote high levels of programme performance and more equitable health outcomes among adolescents;
3. to catalyse integration of a focus on who is being left behind and why into ongoing country-level monitoring and evaluation (M&E) of health services for adolescents.

The primary target audience for the handbook is programme managers at the national and subnational levels. The handbook is grounded in the Tanahashi framework, which describes five dimensions of effective health service coverage: availability, accessibility, acceptability, contact/use and effective coverage. The AHSBA process is broken down into seven modules (Fig. 1).

- Module 1 – Preparation for the assessment
- Module 2 – National key informant interviews
- Module 3 – Literature review
- Module 4 – Quantitative data mining
- Module 5 – Qualitative data collection
- Module 6 – Reporting of findings and potential actions
- Module 7 – National stakeholder workshop to review findings and plan actions

Appendix 1 outlines a generic plan for the assessment, including a timeline, terms of reference and budget items for each module. The AHSBA handbook is designed so that national governments and nongovernmental partners can adopt the methodology in full or in modular components, depending on their particular context and need. The assessment can be implemented as a stand-alone exercise in response to an identified adolescent health problem, as one component of a routine review of one health programme, as one component of a broader national adolescent health programme review, or as part of a multisectoral adolescent and youth services review. The AHSBA process can build upon a country's *Global accelerated action for the health of adolescents (AA-HA!)* priority-setting exercise (11), and can feed directly into a country's implementation of the *Innov8 approach for reviewing national health programmes to leave no one behind* (8).



\* Some Module 2-4 tasks may need extra time to arrange (e.g. access to specific interviewees, literature databases, or quantitative datasets). After the initial short report, such tasks can be continued and feed into the final report.

Fig. 1. Overview of the adolescent health services barriers assessment (AHSBA) process



# Introduction

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## LEAVING NO ONE BEHIND: ADOLESCENTS AND THE SUSTAINABLE DEVELOPMENT GOAL TARGET OF UNIVERSAL HEALTH COVERAGE

**Adolescent health programming:** The 1.2 billion adolescents in the world have diverse and complex health care needs. Some health services are universally important to all adolescents, because they address the physical, cognitive and psychosocial growth and development that takes place between the ages of 10 and 19 years. These include health services related to puberty, nutrition, skin, body image, the need for vaccinations (e.g. human papillomavirus (HPV) or tetanus vaccines), menstruation and hygiene (11, 13).

**All societies recognize that there is a difference between being a child and becoming an adult. How this transition from childhood to adulthood is defined and recognized differs between cultures and over time. This handbook follows the World Health Organization (WHO) definition of adolescents as people aged 10–19 years old. Across all societies and settings, adolescents share key developmental experiences. These include rapid physical growth, hormonal changes, sexual development, new and complex emotions, an increase in cognitive and intellectual capacities, moral development and evolving relationships with peers and families (14).**

In addition to adolescent-specific health services, adolescents may need services for a range of important health problems such as unintentional injury, interpersonal violence, sexual and reproductive health (SRH) concerns, communicable diseases, noncommunicable diseases and mental health issues (see Appendix 2). Access to effective health services is essential to prevent, detect and treat all of these conditions.

In recent decades, many countries have made great strides in improving adolescent health by developing adolescent-specific national health programmes and enabling laws

and environments to protect and promote the rights of adolescents (11, 15). Such efforts have led to substantial improvements in both the quality and the coverage of adolescent health services. They have also contributed to broader national attempts to achieve integrated, people-centred health services (16).

**Adolescent health service equity:** Despite substantial progress, legal and financial barriers to accessing health services tend to be greater in adolescents than in other age groups (17). Financial barriers include those related to access to money, lack of confidentiality when submitting insurance claims, and ineligibility for tax- or insurance-based funding schemes. Legal requirements for parental consent, or societal norms and traditions, also may cause adolescents to delay or avoid seeking services. Even when national legislation allows a particular health response, a provider's attitudes and beliefs about the appropriateness of an action in the context of sex, gender, age, marital status, or partner or parental consent could affect their response to an adolescent.

In every country there are *under-served adolescents* who do not have adequate coverage of effective health services in relation to their actual health needs. Some of these adolescents experience barriers also faced by the broader population, such as those related to wealth, education, gender, rural/urban residency, migrant and refugee status, employment status, and different forms of social exclusion and discrimination (e.g. based on ethnicity or sexual orientation) (18). Samuel's experience of extreme poverty in a rural setting, followed by homelessness in an urban setting, provides examples of such barriers to effective care and treatment. Other legal and health service barriers may be adolescent-specific, including those related to relative age (younger or older adolescent), school status, marital status, and status as legal minors or adults. For example, because Aisha was a young adolescent girl, her pregnancy

was high risk and she had a great need of early and adequate prenatal care. These circumstances increased the impact of the substantial barriers Aisha faced in obtaining effective health services, including adverse gender norms and distance/transportation.

Adolescence is also a period when health behaviours and social determinants, such as the ability to stay in school, can have lasting impacts on health equity across the life course. Effective coverage of health services for all adolescents can help prevent the intergenerational transmission of poverty, for example, by reducing rates of adolescent pregnancy and substance abuse.

**Global guidance on adolescent health:** The *Global Strategy for Women's, Children's and Adolescents' Health (2016–2030)* (19) and the *Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation* (11) stress that all adolescents should have a fair opportunity to attain their full health potential, and none should be disadvantaged from attaining that potential. This is in keeping with a human rights-based approach to health and its goal that all health policies, strategies and programmes progressively increase the realization of all people's right to health and other health-related rights. With the adoption of the Sustainable Development Goals (SDGs) in 2016, the global community recognized **universal health coverage** as a critical priority. Universal health coverage means that all people, including adolescents, can use the promotive, preventive, curative, rehabilitative and palliative health services they need – of sufficient quality to be effective – while also ensuring that the use of these services does not expose them to financial hardship (11). Universal health coverage is a target of SDG 3 (Good health and well-being), but it fundamentally relates to other SDGs as well, including SDG 5 (Gender equality), SDG 10 (Reduced inequalities) and SDG 16 (Peace, justice, and strong institutions).

As emphasized in WHO's Thirteenth General Programme of Work 2019–2023, a major challenge to achieving universal health coverage is persistent barriers to accessing health services; these are influenced by both supply- and demand-side factors (10). **Supply-side barriers** are those which lie within the control of the health sector (e.g. availability of staff with the necessary training and skills; accessibility of essential medicines and medical equipment). **Demand-side barriers** entail those which, even if the health sector adapts its delivery channels/approaches to the specific disadvantaged circumstances of a subpopulation, other sectors will also need to be involved to overcome the root causes (e.g. poverty, lack of education, gender norms, cultural beliefs about health, working and informal employment conditions).

A first step towards achieving universal health coverage among adolescents is for each country (and/or subnational level) to assess which adolescent subpopulations are very under-served, and what are the most important barriers they face. Such findings can be used to improve adolescent health programming, with a focus on disadvantaged adolescents. This handbook outlines how a government can assess adolescent health service equity and barriers in order to identify which adolescents are being left behind in their countries or subnational areas (e.g. municipalities, provinces, districts), and why. The adolescent health services barriers assessment (AHSBA) process outlined in this handbook has been designed to be adapted in different country and subnational contexts. Box 1 outlines the rationale for such an assessment. Appendix 3 provides a glossary of key terms used throughout the handbook.

### Box 1. Why assess health service barriers experienced by under-served adolescents?

The primary reason to assess which adolescent subpopulations within a country experience great difficulty in accessing health services, and why, is that all adolescents have fundamental rights to life, development, the highest achievable standards of health and access to health services. These rights are supported by global human rights instruments to which almost all countries are signatories, including immediately binding obligations to ensure equality, non-discrimination, remedy and redress (18, 20, 21).

By understanding which adolescents have inadequate coverage of effective health services in comparison to other adolescent subpopulations, there is potential for strategic, impactful improvement of national adolescent health programming. This can result in substantial human rights gains, as well as public health, economic, security and demographic benefits for the country in both the short- and the long-term (17, 22, 23). For example, if an assessment of barriers experienced by disadvantaged adolescents finds that the adolescents with the least access to health services are out-of-school, internal or international migrant workers, and/or those who live in remote communities, this information could help the national government tailor its services more effectively to reach those adolescent subpopulations (e.g. through mobile services).

## OVERVIEW OF THE HANDBOOK FOR CONDUCTING AN ADOLESCENT HEALTH SERVICES BARRIERS ASSESSMENT

**Target audience:** The primary target audience for the Handbook for conducting an adolescent health services barriers assessment is programme managers at the national and subnational levels. Secondary audiences are those who provide support to government authorities, including representatives of the United Nations (UN) system and other H6+ agencies, nongovernmental organizations and funding agencies, as well as researchers, educators, activists, representatives of patients' associations and the private sector, and community and religious leaders.

**Objectives:** This handbook's three objectives are:

1. to build in-country capacity to identify barriers which prevent disadvantaged adolescents from having effective coverage with health services;
2. to trigger remedial action to address the barriers in order to promote high levels of programme performance and more equitable health outcomes among adolescents;
3. to catalyse integration of a focus on who is being left behind and why into ongoing country-level M&E of health services for adolescents.

**As an age group, adolescents may be under-served relative to other age groups in a country, or relative to national standards and expectations. It is important to note such overall inequities within the AHSBA process, but the main focus of this assessment is on relative disadvantage among adolescents within the country. The focus is therefore on particularly disadvantaged adolescents, and the barriers they face in obtaining effective health services. The AHSBA handbook outlines how to identify differences in health service equity within a country's adolescent population, not differences between adolescents and other age groups.**

**Given adolescents make up a sizeable minority of the population within a country, and their health service needs are as diverse as those of the broader population, it is beyond the scope of the assessment to scrutinize all possible adolescent health services, barriers and disadvantaged adolescent subpopulations. At the onset, the government will need to decide which three health services will be the focus of the assessment. The assessment will then identify examples of particularly under-served adolescent subpopulations, and scrutinize the barriers they experience, to better inform broader national adolescent health programming.**

**Modules:** The main body of this handbook is broken down into seven modules:

- **Module 1 – Preparation for the assessment** – outlines key steps preceding the assessment, including identification of the national focal person to lead the process, a stakeholder inception meeting, formation of an assessment committee, identification and contracting of the lead researcher, ensuring the meaningful involvement of adolescents, establishing a research plan, and obtaining ethical committee clearance for the assessment.
- **Module 2 – National key informant interviews** – describes selection of national key informants and provides an interview protocol, including a generic script and debriefing and summary forms.
- **Module 3 – Literature review** – outlines a targeted literature review of health and social science journal articles, technical reports, evaluations, case-studies, presentations at technical meetings, working papers and briefings, recommendations from relevant human rights bodies, and other write-ups of qualitative research findings and quantitative survey analyses that explore health service coverage inequities and barriers.
- **Module 4 – Quantitative data mining** – provides guidance on analysis of critical indicators from existing databases in order to generate new information about adolescent health service inequities and barriers. It primarily, but not exclusively, involves analysis of national-level data, disaggregated by sex, age group, education, district, rural/urban residence and other sociodemographic factors (such as ethnicity), where available.
- **Module 5 – Qualitative data collection** – describes qualitative interviews with key informants at the district and community levels, as well as focus group discussions and interviews with under-served adolescents, their parents and other adults who work directly with them (e.g. social workers, community health workers or teachers) in three subnational areas.
- **Module 6 – Reporting of findings and potential actions** – details how to synthesize findings from Modules 2–5, conduct a small technical meeting to review findings and identify potential entry points for action, and produce a draft assessment report.
- **Module 7 – National stakeholder workshop to review findings and plan actions** – provides a generic agenda for a national stakeholder workshop to review the assessment findings, discuss their implications for policies, programming and M&E, and set priorities for action.

Formal short reports should be produced after completing each of Modules 2, 3, 4 and 5, which will then be adapted as annexes to the final report. The main body of the final report itself will be a concise synthesis of all findings and proposed actions. Fig. 1 provides an overview of the seven modules and their outputs. Appendix 1 outlines terms of reference and budget items for each of the modules.

**Meaningful adolescent participation:** Throughout the assessment, it will be important to ensure the meaningful involvement of young people and especially adolescents, for both ethical and operational reasons. The right of adolescents to participate in decision-making that affects them is enshrined in the United Nations Convention on the Rights of the Child and reinforced in General Comment No. 20 (2016) on the implementation of the rights of the child during adolescence. Adolescent participation also allows decision-makers to tap into adolescents' unique perspectives, knowledge and experiences, which contributes to a better understanding of their needs and leads to better solutions (17, 18).

Adolescent participation can take many forms, which can involve different levels of initiative and control by adolescents (11, 24). In the assessment process outlined in this handbook, *adolescent collaborators* participate in the planning, decision-making and monitoring of the assessment, while *adolescent research participants* are consulted through national and subnational qualitative discussions and interviews.

Adolescent collaborators may be recruited through multiple avenues. For example, they may be adolescent leaders within youth parliaments or councils, or volunteers or employees of nongovernmental organizations and civil society organizations that work directly with under-served youth. Depending on the context, this may include agencies that work with adolescents who are: low-income; out-of-school; rural or urban informal settlement dwellers; indigenous or ethnic minorities; migrants or refugees; disabled or living with a chronic illness; lesbian, gay, bisexual, transgender or intersex (LGBTI); street children; or otherwise disadvantaged. When seeking the involvement of adolescent collaborators, the assessment team should consider how disadvantaged adolescents may be included in a meaningful way, because their experiences and insights may be most relevant.



At least four adolescent collaborators from different disadvantaged populations should participate in both the national stakeholder inception meeting and the final national review workshop, while two should participate in the assessment committee that monitors progress, and two in the small technical meeting that will review findings and propose actions. These should not be the same four adolescents in all four activities: the two adolescent collaborators invited to the final national review workshop should be new to the assessment.

The adolescent collaborators are likely to be much younger than other participants in the meetings above, and also are likely to have less education, training and experience. Even among the four adolescent participants there might be great differences in ability. It thus will be critical for the assessment team to ensure each adolescent is well oriented on the objectives and process of a meeting in advance, and is supported as needed to engage in the meeting itself. At least one adult team member should be assigned these responsibilities before and during the meeting. It may also be appropriate for individual adolescents to be accompanied by an adult (e.g. the nongovernmental organization contact person who recruited them), to assist in translating or explaining information as needed during the meeting.

In addition, during the assessment process, adolescents from different disadvantaged subpopulations will be consulted through national key informant interviews (n=2), subnational key informant interviews (n=6), and the focus group discussion series (approximately 12 focus group discussions, with 24 follow-up individual interviews).

These are minimal expectations of adolescent participation in the AHSBA process. Countries are encouraged to expand upon these plans and engage in other participatory methodologies as well.

**AHSBA assessment teams can draw on a number of resources which provide practical guidance and case-studies of how to facilitate adolescent engagement through participatory methodologies, including:**

- **2005 YouthNet/Family Health International and Advocates for Youth – *Youth participation guide: assessment, planning, and implementation* (25);**
- **2007 ECPAT – *Ensuring meaningful child and youth participation in the fight against commercial sexual exploitation of children* (26);**
- **2010 DFID–CSO Youth Working Group – *Youth participation in development: a guide for development agencies and policy makers* (27);**
- **2014 USAID – *Youth engagement in development: effective approaches and action-oriented recommendations for the field* (28);**
- **2015 WHO and UNAIDS – *Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health care services for adolescents* (29);**
- **2016 Global Kids Online – *Method guide 8. Participatory methods: engaging children’s voices and experiences in research* (30);**
- **2017 GAGE – *Adolescent perspectives on services and programmes in conflict-affected contexts: a participatory research toolkit* (31);**
- **2017 UNICEF – *Adolescent participation in research: innovation, rationale and next steps* (32).**

**The Tanahashi conceptual framework:** Numerous frameworks can be used to analyse barriers to health services. The AHSBA handbook is primarily grounded in the Tanahashi framework, which provides a step-wise approach to assessing health service coverage (33). Fig. 2 depicts the relationship between the five Tanahashi dimensions: *availability*, *accessibility*, *acceptability*, *contact/use* and *effective* coverage. Table 1 gives examples of barriers and facilitating factors associated with each dimension. Importantly, in the Tanahashi framework the quality of health services is a cross-cutting feature that underpins all five dimensions. It is represented by subcomponents, such as: availability of necessary inputs (availability coverage); perceived responsiveness of provider and perceptions of the quality of care (acceptability coverage); and treatment adherence and working referral systems (effective coverage).

Although the Tanahashi framework provides the main conceptual basis for this handbook, other frameworks have also been drawn upon. For example, three essential components identified by Tugwell et al. (34) – diagnostic accuracy, provider compliance and patient adherence – should all be taken into consideration when assessing effective health service coverage (Table 1). In another example, WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) defined eight global standards for health services for adolescents: 1) adolescents’ health literacy; 2) community support; 3) appropriate package of services; 4) providers’ competencies; 5) facility characteristics; 6) equity and non-discrimination; 7) data and quality improvement; and 8) adolescents’ participation (29).

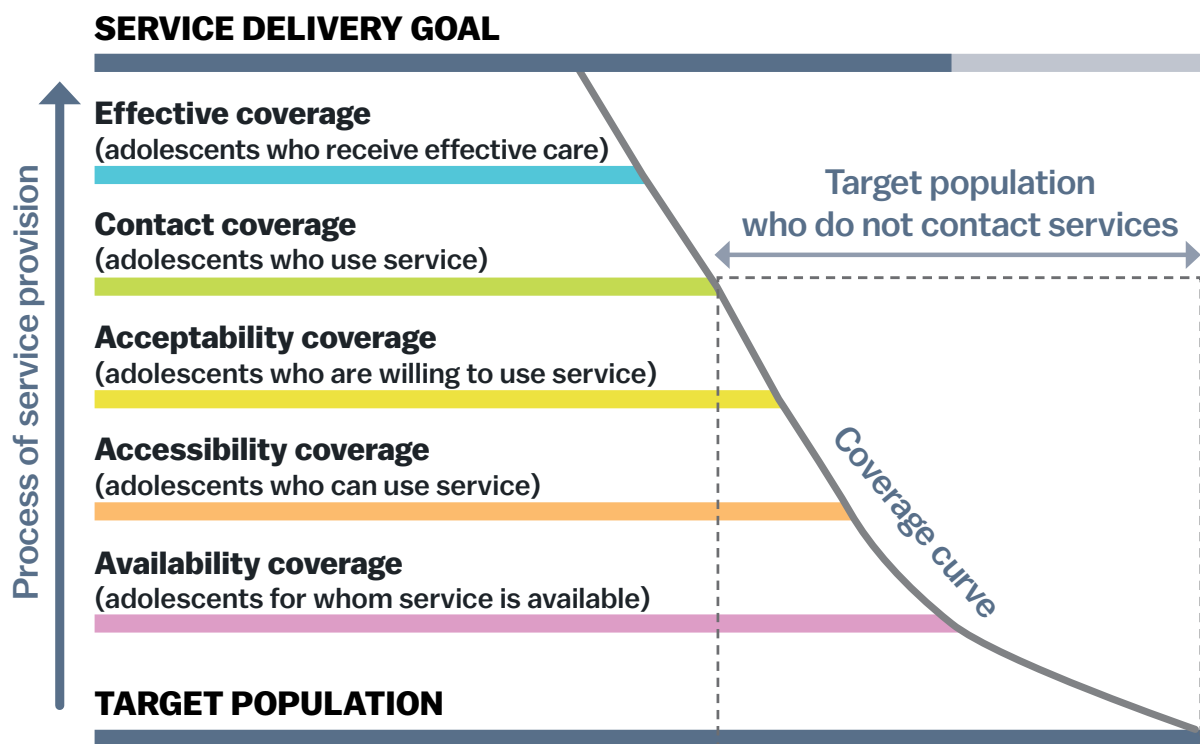


Fig. 2. Tanahashi conceptual framework illustrating how different dimensions of coverage are necessary to achieve effective service delivery (33)

*Note: this figure should be understood as a conceptual model, not as a representation of actual adolescent health service coverage.*

Table 1. Tanahashi dimensions of health service coverage and examples of adolescent barriers (13, 29, 33–35)

Health service dimension	Examples of types of barrier or facilitating factor	Examples of adolescent barriers
<b>Availability coverage</b>	<p><i>Across the levels of the health system, the availability and sufficiency of resources for delivering an effective intervention, for example:</i></p> <ul style="list-style-type: none"> <li>• number or density of health facilities (or outreach/ community-based services such as immunization, or population-based services such as food fortification)</li> <li>• availability of services for different diseases/health topics, as appropriate for population burden of disease or injury</li> <li>• availability of adequately skilled personnel</li> <li>• availability of necessary inputs (e.g. drugs, equipment, protocols, patient-safety measures, electrification, and water and sanitation in facilities)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>The country does not have health worker pre-service training in adolescent health and development, and few facilities have staff who have had in-service training in the core competencies (13)</i></li> <li>• <i>In rural or remote areas, or in humanitarian crisis settings, adolescents die from avoidable or treatable conditions (e.g. lower respiratory infections, diabetes or conditions requiring emergency surgery) because health services are not available</i></li> <li>• <i>In a low-income area with high agricultural pesticide use, paediatric cancer services are not available despite young adolescents having high rates of leukaemia</i></li> </ul>
<b>Accessibility coverage</b>	<p><i>Geographic:</i></p> <ul style="list-style-type: none"> <li>• distance, availability of transport, time for transportation <p><i>Financial:</i></p> <ul style="list-style-type: none"> <li>• direct: out-of-pocket expenditures (e.g. co-payment, medicines)</li> <li>• indirect: opportunity costs (e.g. missed schooling, lost work, child care), transport costs</li> </ul> <p><i>Organizational and informational:</i></p> <ul style="list-style-type: none"> <li>• attention to schedules/opening times</li> <li>• systems to schedule appointments</li> <li>• administrative requirements for care (e.g. registration in local area)</li> <li>• appropriate information sources on health topic, services, treatment</li> </ul> <p><i>Discrimination in access</i></p> </li></ul>	<ul style="list-style-type: none"> <li>• <i>A low-income girl with a skin infection cannot afford services, medications and transportation costs, so she does not seek treatment for her condition</i></li> <li>• <i>A boy working in the informal sector is not able to take time off to attend appointments required for voluntary medical male circumcision</i></li> <li>• <i>Adolescents who are internal migrants are impeded when seeking services because they are not registered</i></li> </ul>
<b>Acceptability coverage</b>	<ul style="list-style-type: none"> <li>• Cultural beliefs, and the extent of connectivity/ integration with indigenous/traditional health systems and providers</li> <li>• Gender-responsiveness of services (including same-sex provider where culturally appropriate)</li> <li>• Gender norms, roles and relations which inhibit access (e.g. inability to be autonomous in deciding when to seek care, or gender norms that prioritize care-taking of others or providing financially for the family over seeking treatment for oneself)</li> <li>• Age-appropriateness of services (e.g. adolescent-friendly)</li> <li>• Extent to which confidentiality is protected and stigmatization avoided</li> <li>• Perceptions of service quality</li> <li>• Perceived and actual corruption among health providers (e.g. requesting informal payments to skip waiting lines or to obtain effective treatment; sale of medicines that should be free)</li> <li>• Discriminatory attitudes by providers (e.g. based on sex, ethnicity, marital status, religion, caste or sexual orientation)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Adolescents girls do not request desired services because they fear the provider will chastise them or violate their confidentiality</i></li> <li>• <i>An adolescent boy does not seek mental health services because he perceives depression as weak, and not masculine</i></li> <li>• <i>LGBTI adolescents do not go to emergency services after being attacked because they face discrimination</i></li> <li>• <i>An unmarried adolescent boy is refused condoms because the health worker disapproves of sex outside of marriage</i></li> </ul>

Health service dimension	Examples of types of barrier or facilitating factor	Examples of adolescent barriers
<b>Contact/use coverage</b>	<p><i>Actual contact between the service provider and the user when services are available, accessible and acceptable.</i></p> <p>Barriers can relate to Global Standard no. 1, adolescent health literacy (29), i.e. adolescents not being knowledgeable about their own health, or not knowing when and where to obtain health services. For example:</p> <ul style="list-style-type: none"> <li>• lack of awareness of available health services (e.g. free sexually transmitted infection (STI) treatment, HPV vaccination or meningitis vaccination)</li> <li>• insufficient understanding of the value of seeking services (e.g. counselling for dating violence, or treatment for malaria).</li> </ul>	<ul style="list-style-type: none"> <li>• <i>An adolescent girl does not seek diagnosis and treatment for chronic diarrhoea because she believes occasional diarrhoea is a normal part of life</i></li> <li>• <i>An adolescent boy does not seek treatment for substance use problems because he does not know it is free at his local health facility</i></li> </ul>
<b>Effective coverage</b>	<ul style="list-style-type: none"> <li>• Barriers in diagnostic accuracy (e.g. linked to insufficient inputs at health centres and in the laboratory network)</li> <li>• Barriers in provider compliance (e.g. related to low levels of training, lack of supportive system requirements, absenteeism or other accountability issues, or a weak referral and back-referral system)</li> <li>• Barriers in treatment adherence (e.g. due to unclear instructions, poor patient-provider relationship, mismatch between treatment prescribed and patient compliance ability, adverse social conditions and gender roles/relations preventing follow up by the patient).</li> <li>• Impoverishing or catastrophic health expenditures as a result of using services (e.g. related to the financial barriers listed under accessibility)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>A provider does not respond appropriately to an adolescent's reported plan to harm himself</i></li> <li>• <i>A girl requesting contraception is only allowed to take oral contraceptive pills, not long-acting methods, but she is not able to comply with daily pill use because she will be observed at home</i></li> <li>• <i>An adolescent is not diagnosed with a treatable condition such as asthma, anaemia or gonorrhoea, because the facility does not have adequate diagnostic capacity</i></li> </ul>

**Social drivers of inequity:** Social influences such as culture and gender can play an important role in adolescents' coverage with health services. **Culture** is the set of distinctive spiritual, material, intellectual and emotional features of society or a social group which encompasses lifestyles, ways of living together, value systems, traditions and beliefs (36). While shared and coherent, culture is not a static set of beliefs and practices, but rather an ever-emerging array of collective values, ethics, assumptions and ideals. Cultures differ in the extent to which they attribute power, control and agency to adolescents and adults. For example, in an individualistic culture, older adolescent students may have permission to make independent decisions about their own health care, while in a collective culture this may be jointly decided by adults in an adolescent's life.

During adolescence, context – such as families, schools, communities and health facilities – can also shape the way gender is learned, enforced and reinforced. For example, understanding of gender can be influenced by religious institutions and custodians, as well as sport, music and global culture. Health care seeking may be shaped by

gendered power imbalances, such as girls being taught less information about health services than boys, or having less power and freedom of movement to access health services. The health system response may also be influenced by cultural and gendered norms of masculinity and femininity. For instance, health workers may have different assumptions about what is appropriate and allowed for adolescent girls and boys of the same age, and may treat them differently as a result.

**Gender analysis:** **Gender** refers to the socially constructed roles, behaviours, activities, attributes and opportunities that any society considers appropriate for men and women, boys and girls, and people with non-binary identities (37). **Binary** here refers to two distinct, opposite and disconnected forms of masculine and feminine, while **non-binary** refers to gender identities that are not exclusively masculine or feminine. Gender is a social and relational process rather than simply the difference between women and men; it interacts with, but is distinct from, biological sex. Gender is formed through the relationships between people and can reflect the distribution of power within those relationships. Gender

is not static but changes across time and place. When individuals or groups do not conform to established gender norms (including concepts of being masculine or feminine), roles, responsibilities or relations, they often face stigma, discriminatory practices or social exclusion – all of which can adversely affect health.

For the research methods described in Modules 2–5, a **gender analysis** should be intrinsic to identification of under-served populations and the assessment of barriers they experience. Gender analysis starts with disaggregating data by males and females, as well as by people of other genders or identities (e.g. intersex, non-binary or transgender), if such data are available, to fully consider gender diversity. A gender framework is used to organize thinking, research questions, data collection and analysis. Gender analysis includes an examination of differences between adolescent boys/men and adolescent girls/women in terms of risk and exposure, health-seeking behaviour, access and use of services, experiences in health care settings, treatment options and impact of ill-health (35, 38). Gender analysis looks at the interaction between biological and sociocultural factors, and access to and control over health resources. It asks critical questions to uncover multi-level causes of inequality shaped by gender norms, roles and relations, unequal power relations between and among groups of women and men, and the intersection of gender with other contextual factors (e.g. ethnicity, income and age). This analysis should consider the influence of gender on health across three domains, i.e. gender as a social determinant of health, gender as a driver of health behaviours, and the gendered response of health systems (39).

Critical to understanding of gender power relations is examining who has what (access to resources); who does what (the division of labour and everyday practices); how values are defined (social norms) and who decides (rules and decision-making) (40, 41). Examples of questions in each of these categories are:

- **Access to resources, information, assets and participation:** To what extent do health facilities provide services with appropriate conditions (e.g. functioning toilets, bathing areas for inpatient facilities, shelter from sun/rain in the waiting area) and with appropriate staff for all populations? Are girls, women, boys or men more or less likely to know about user fees exemptions, cash transfer entitlements and health insurance benefits?

- **Division of labour, time and everyday practices:** To what extent are maternal and child health outreach clinics organized considering adolescent girls' and women's agricultural, economic or care-taking activities in their communities? How do girls' and boys' roles and responsibilities affect use of products (e.g. bed nets, vaccinations) or adherence to long-term treatment (e.g. for tuberculosis, HIV)?
- **Social norms:** To what extent are marginalized adolescent girls or boys unlikely to seek health care because of social norms about acceptable male and female behaviours? Examples include masculine norms such as "men do not need health care", or feminine norms such as "women should not assert themselves". Do health workers respond differently to adolescent clients based on gender? Are non-binary or gender-diverse adolescents ignored or disrespected?
- **Rules and decision-making:** Do adolescent girls or women require the permission of a father, male partner or relative to be in a public space, or to access a health facility? To what extent does regulation influence the accessibility of certain commodities (e.g. condoms) to adolescent girls as compared to boys?

**Several resources have been developed to explain gender frameworks and how to use them within health systems research. These include:**

- 2011 WHO – *Gender mainstreaming for health managers: a practical approach* (35);
- 2013 mHealth Alliance – *Addressing gender and women's empowerment in mHealth for MNCH* (42);
- 2014 Health Policy Project – *Tools for assessing gender in health policies and programs* (38);
- 2016 Jhpiego – *Gender analysis toolkit for health systems* (43);
- 2018 Mandahar et al. – *Gender, health and the 2030 agenda for Sustainable Development* (39).

**The process of questioning outlined in such frameworks can help an assessment team move beyond describing the differences between males and females to examine why and how power relations cause inequities between people.**



**Consideration of intersectionality:** *Intersectionality* refers to the complex and cumulative way that the effects of different forms of discrimination (such as those based on race, sex and economic status) combine, overlap and intersect. Intersectionality-based analytic frameworks identify how interlocking systems of power impact those who are most marginalized in society (44, 45). The consideration of only one form of discrimination (e.g. unfair treatment of girls) will not fully address other forms, e.g. the marginalization of girls who are also excluded due to their ethnic or religious minority status. Importantly, the intersectional experience of these different forms of discrimination may be greater than the sum of its parts. When assessing barriers faced by the most under-served adolescent subpopulations, it is thus critical to consider how barriers may intersect and be reflected in health and health service inequities.

**Adolescents who experience the intersection of multiple forms of discrimination are also those most likely to be under-served in a society. For example, disabled adolescents in an ostracized ethnic group, or poor, homeless LGBTI adolescents, or refugee girls who are not allowed to move independently outside of their temporary homes may all face extraordinarily large barriers to accessing effective health services.**

Continuing with the example of an adolescent who is marginalized because of her ethnic or religious minority status, consider two 19-year-old married women from the same village who need health services. Both young women live with their in-laws and work in the family kitchen

using an unsafe traditional stove. Both were burned on the arm and needed treatment. In both cases, the young woman told neighbours that the burn happened by accident, when in fact secretly her husband or an in-law had burned her intentionally, in anger. One of the young women is high caste from a family of merchants. To get to her medical appointment, she walks directly through the village for 20 minutes on the main public path. A doctor meets with her promptly, cleans and wraps her wound, and takes time to discuss wound care and future prevention, including giving her referral information for a domestic violence helpline. This young woman pays for her appointment and buys the recommended medication before leaving the facility.

The second young woman in this example is low caste and from a family that works cleaning public facilities. Because of her low caste status, she is socially restricted from walking on the common village paths. To reach the health facility, she must walk for an hour on a much longer path around the perimeter of the village. This young woman arrives on time for her appointment, but must wait for higher caste, drop-in clients to be seen first. Then she is seen by a low-level health care worker, who quickly cleans and wraps her wound, gives her a prescription and sends her to the cashier. The young woman cannot afford to buy the recommended medication, so she pays for her appointment only, and leaves. In this example, the intersectionality of different forms of discrimination – gender, caste and economic – contribute to less accessible, less acceptable and less effective health service coverage for the second young woman.

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## NATIONAL ADAPTATION OF THE HANDBOOK

**Policy and programming context:** Each country's unique history and current practice of adolescent health programming should be taken fully into consideration when planning an assessment of barriers experienced by under-served adolescents. Importantly, countries are diverse in the ways that they have developed and currently manage adolescent health programming. Some governments have established an overarching national adolescent health policy and strategy that provides guidance to all health disciplines. In other countries,

adolescent health programming has evolved in more specialized ways within different types of health care, e.g. youth-friendly SRH services, or adolescent-specific mental health services to prevent and respond to suicide. In yet other countries, adolescent health and development programming is partially or fully under the mandate of other ministries (e.g. youth affairs and sports; human resources and development; or information and culture), as outlined in different policies and strategies (e.g. an adolescent development strategy).

The setting for adolescent health care also varies between countries, as some governments primarily provide services through health facilities, while others additionally provide health care through the school system or community agencies.

This handbook is designed so that national authorities and governments at various levels can adopt the methodology in full or in modular components, depending on their particular context and need. The assessment should target current needs and gaps, and not duplicate efforts.

**Even countries which have similar approaches to national adolescent health programming may differ substantially in where they are in their national policy and programme review and planning cycles, so tailoring an adolescent barriers assessment to the particular time and context is critical.**

**Adaptation within a national review:** The different ways that a national government might adapt and implement the AHSBA handbook are given below.

**1. *A stand-alone exercise in response to an identified adolescent health problem.***

For example, if the health ministry undertakes an assessment in response to new trends indicating that older adolescents in the country have a high STI incidence as well as low rates of STI testing, treatment initiation, and treatment adherence and retention; or, if the youth and sports ministry decides to conduct an assessment in response to new trends indicating high rates of overweight and obesity among adolescents.

**2. *One component of a routine review of one health programmatic area (e.g. SRH services).***

For example, if the national ministry responsible for reproductive, maternal, newborn, child and adolescent health (RMNCAH) carries out an adolescent health services barriers assessment with a focus on disadvantaged adolescents as part of its periodic RMNCAH programme review.

**3. *One component of a national adolescent health programme review.***

For example, if a government recently conducted a situation analysis that identified three adolescent health priorities X, Y and Z (e.g. drowning prevention and emergency services; self-harm prevention and treatment services; and screening and treatment of schistosomiasis and other parasitic infections) it might then conduct an assessment to identify adolescents who have the greatest difficulty accessing health services for those specific kinds of health problems, and different barriers they face.

**4. *One component of a broader national multisectoral review.***

For example, if the youth affairs ministry, which coordinates adolescent health and development programming across sectors, carries out an adolescent health services barriers assessment with a focus on disadvantaged adolescents as part of its periodic programme review.

**Focus on three health conditions/services:** Adolescents make up a sizeable minority of any country's population, often from one sixth to one third of the entire population. In addition to their particular developmental needs, the adolescent subpopulation experiences almost every disease or injury burden experienced by the broader population, and is also subject to additional diseases and risks specific to adolescents. The particular nature, scale and impact of adolescent health needs are unique in each country, so it is critical that governments assess which adolescent health concerns are highest priority in their country in order to best target and utilize their limited resources.

WHO's 2016 *Strategizing national health in the 21st century: a handbook* (46) and the 2017 Global AA-HA! guidance (11) detail how national and subnational governments can carry out an **adolescent health priority-setting exercise** when developing or reviewing adolescent health programming. As outlined in the Global AA-HA! guidance, this process includes systematic reviews, analysis of existing national and subnational disaggregated data, and focus group discussions and/or interviews with adolescents and other key stakeholders. Box 2 provides further explanation of the three Global AA-HA! priority-setting steps.

## Box 2. Priority-setting: steps recommended by the Global AA-HA! guidance

Section 4 of the Global AA-HA! guidance outlines the following three steps in a national adolescent health priority-setting exercise.

1. A **needs assessment** to identify the “gaps” between current conditions and those that should have been assured from a rights perspective, taking into consideration positive development needs and major disease and injury categories (i.e. unintentional injury, interpersonal violence, SRH concerns, communicable diseases, noncommunicable diseases or conditions, and mental health issues including drug abuse).
2. A **landscape analysis** of existing adolescent health programmes, policies, legislation, capacity and resources within the country, as well as a review of current global and local guidance on evidence-based interventions.
3. **Priority-setting** that considers the most vulnerable adolescents; the urgency, frequency, scale and consequences of particular burdens; the existence of effective, appropriate and acceptable interventions to reduce them; and the availability of resources and capacity to implement or expand priority interventions equitably.

The Global AA-HA! priority-setting exercise helps governments answer two overarching questions related to national adolescent health programming:

- what conditions have the greatest impact on adolescent health and development in our country?
- which existing and potential interventions most effectively address those conditions?

In some countries, governments will not have conducted such a priority-setting exercise prior to starting a health services barriers assessment. In such circumstances, AHSBA stakeholders can engage in a more truncated process to identify three important adolescent health services (X, Y and Z) to focus on in the assessment.

**Acting on assessment findings:** Understanding which adolescents in a country experience barriers to effective health services, and why, is not enough in and of itself. National governments must also act on such findings to dismantle barriers and promote more equitable health services for under-served adolescents. Towards this end, the national stakeholder review and planning workshop at the end of the assessment (see Fig. 1) should discuss the implications of the findings for national policies, programming and M&E, set initial national priorities for action, and specifically delineate a process with a timeline, responsible actors, resources and alignment with planning cycles for next steps to address the barriers.

**An adolescent health services barriers assessment can also be conducted in conjunction with the WHO “Innov8 approach for reviewing national health programmes to leave no one behind” (8). The Innov8 technical handbook outlines eight steps governments can follow to better address equity, gender, human rights and social determinants of health in national programme planning and review processes.**

National governments may wish to carry out an assessment of barriers experienced by under-served adolescents at least once every five years. Conducting an assessment at periodic intervals will enable countries to address how adolescent health service inequities are affected by new trends in economic development, employment, migration, urbanization, conflict, environmental degradation, technological innovations, and health and health services, including health system changes resulting from previous health service barrier assessments. Such an exercise could take place as a stand-alone exercise and/or could be integrated within a country’s ongoing health monitoring cycle of selecting relevant health indicators, collecting and analysing data, reporting results and implementing changes (47). In any case, it is important that the M&E framework for adolescent health services at subnational and national levels captures data on adolescent health service equity and barriers on an ongoing basis, to see if measures put in place to close coverage gaps are working.



## LIMITATIONS OF THE HANDBOOK

The AHSBA handbook has several limitations. It is beyond the scope of this process to assess all adolescent health services or all under-served adolescent subpopulations within a country. Instead, the assessment outlined in this handbook focuses on three types of adolescent health service and three adolescent subpopulations which have difficulty accessing them. Similarly, the assessment outlined in this handbook focuses on health outcomes and service coverage. It is beyond its scope to provide a detailed assessment of inequities in exposure to risk factors and the wider determinants of health (e.g. water and sanitation, food security). However, national governments could adapt the approach and tools of this handbook to assess additional types of adolescent health care, subpopulations or inequities in exposure to risk factors, if these are of particular interest to them.

The practical, adaptable assessment outlined in this handbook should produce verifiable findings to inform improvement of national adolescent health programme design, delivery and M&E, but it is not designed to produce gold-standard research. For example, the quality of country assessments will depend in part on the quality of existing databases and the rigor of existing studies. Where those sources are limited, the assessment also will be limited. Even such findings can be useful, however, if they help to identify the most important adolescent health service data gaps for countries, as this information can be used to improve ongoing research and M&E.

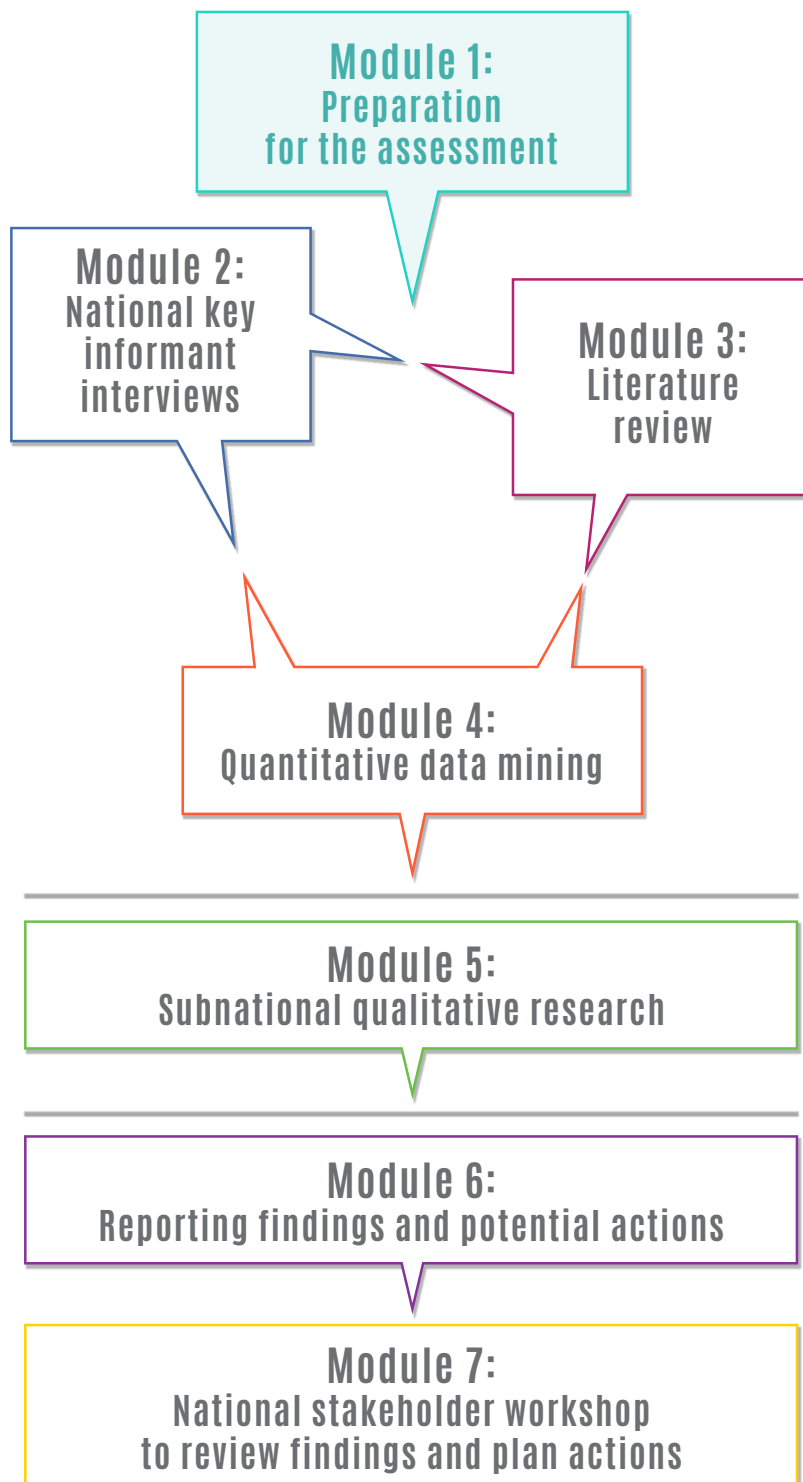


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# Module 1

## Preparation for the assessment



# Module 1

## Preparation for the assessment

### OBJECTIVES OF PREPARATION FOR THE ASSESSMENT

1. **Conduct a national stakeholder inception meeting to: decide which three adolescent health services (X, Y and Z) will be the focus of the assessment; appoint an assessment committee; and provide other technical and logistical guidance in preparation for the assessment.**
2. **Conduct assessment committee meetings and follow-up work to: develop the research plan with a budget and schedule; appoint staff or a contractual partner to lead and conduct the assessment; obtain needed ethical permissions; and provide ongoing supervision and technical and logistical support to the assessment.**

#### 1.1. NATIONAL STAKEHOLDER INCEPTION MEETING

The adolescent health services barriers assessment should be initiated and coordinated by an appropriate focal person within the national government with primary responsibility for adolescent health and development, such as the adolescent health focal person within the health ministry. This focal person should recruit stakeholders from key sectors and disciplines to participate in a national inception meeting. If a government decides to conduct the barrier assessment at a subnational or municipal level only, then a relevant high-level official with responsibilities over adolescent health and development may initiate and coordinate the assessment at that level.

**National inception meeting participants:** Approximately 20 people should participate in the meeting, including representatives of national authorities working in adolescent health services (e.g. primary health care, public health, health programming and health financing) and representatives of other relevant national authorities that may play a role in enabling adolescent access to services (e.g. youth, social protection, education,

women's development). Relevant subnational authorities should also be included and, depending on the context, participation may go beyond the public health system to include representatives of relevant private or mixed health services/systems. The meeting should also include representatives of nongovernmental organizations and civil society organizations working to improve the health and welfare of adolescents, and particularly of underserved adolescents, in the country.

As explained in the Introduction, at least four adolescent collaborators should participate in the national stakeholder inception meeting, ideally representing different genders, age groups and disadvantaged backgrounds. These participants can be recruited through different nongovernmental organizations or government agencies working directly with disadvantaged adolescents.

**Selecting three health conditions/services:** At the national inception meeting, stakeholders should decide which three adolescent health services (X, Y and Z) will be the focus of the assessment. In some countries,

selecting the three adolescent health services will be straightforward, because the national government already will have gone through a formal review process and identified its current priority adolescent health conditions (as described in the Introduction). In many countries, however, the stakeholder meeting will need to select three conditions and/or services without such guidance.

Prior to making such a decision, data on the current major causes of adolescent mortality and morbidity in the country, and related risk factors and social determinants, should be presented and discussed. Appendix 2 provides examples of the type of information that should be considered, i.e. the top causes of adolescent mortality and morbidity by sex, age group and region. It should be noted, however, that Appendix 2 provides a global summary and national governments should consider data that are specific to their country. Ideally, the inception meeting will consider primary data from national surveys and vertical programmes, but secondary estimates of national causes of mortality and morbidity may also be useful in this discussion. These include data available through international sources such as the WHO Global Health Estimates (48) and the Institute for Health Metrics and Evaluation Global Burden of Disease study (49).

**If the adolescent health services barrier assessment is not taking place within a specific section of the health system, the national stakeholder inception meeting should consider the best available data on all adolescent health conditions in the country before selecting the health services that will be the focus of the assessment. This will mean keeping an open mind about what the best available evidence suggests has the greatest impact on adolescents, even if it goes against preconceived ideas or against those that are widely reported.**

**For example, limiting the process to certain health conditions which already are the main focus of adolescent health programming (e.g. SRH, nutrition or mental health problems) may exclude other conditions that have equal or greater impact on adolescent mortality and morbidity (e.g. infectious diseases, domestic abuse or road-traffic injuries).**

**Appointing an assessment committee:** At the national inception meeting, a small assessment committee should be appointed to guide and monitor the adolescent health services barriers assessment. This committee should be multisectoral and cross-disciplinary, including representatives of key sectors and agencies working on behalf of disadvantaged adolescents, as well as two adolescent collaborators from different disadvantaged populations. Ideally this committee will include at least one statistician or other stakeholder with expertise in quantitative data analysis, one social scientist who has worked with disadvantaged adolescent populations in the country, and government and nongovernmental organization representatives involved in programme planning, M&E, and other relevant areas such as financial protection for patients.

**Technical and logistical guidance:** Participants at the national inception meeting should also be consulted about relevant contacts and resources available to carry out each of the planned modules. Most critical at this stage is identifying possible quantitative datasets for mining in Module 4, and any contact people who may facilitate access to these, as it may take time to arrange formally. In addition, meeting participants may be able to assist in obtaining ethical clearance for the assessment (Module 1), identifying national or subnational key informants to interview (Modules 2 and 5), recommending social science/health publications or facilitating access to literature search engines (Module 3), or doing logistical planning for the subnational research (Module 5).

## 1.2. ASSESSMENT COMMITTEE PREPARATION

The assessment committee will develop the research plan, appoint staff or a contractual partner to lead and conduct the assessment, and obtain any needed ethical permissions from government, partner or university bodies. Appendix 1 outlines terms of reference and budget items for each of the modules.

**Allocating staff or contracting a consultant:** Typically, the assessment committee will need to contract a lead researcher plus a small team of professionals to conduct the research within the timeline outlined in Appendix 1. For example, it may be useful for two or three senior researchers to share the tasks outlined in Modules 2–4 equally, or to divide that work up between themselves based on their different areas of expertise. Similarly, it may be most efficient for three pairs of one senior researcher and one support staff person to conduct the Module 5 qualitative research in the three subnational sites simultaneously.

Depending on their capacity and the context, the team may also need professional support for specific tasks, such as a statistician to advise and assist statistical analyses (Module 3), or social scientists to advise and assist in developing and conducting focus group discussions and interviews at the subnational level (Module 5). For the subnational research, it may also be necessary to contract local counterparts to make logistical arrangements in advance of fieldwork, or translators to assist in interviews. All of these points should be taken into consideration when creating the assessment team and planning the budget.

**Ethical clearance:** Applications to obtain required ethical clearance should be made as soon as possible, as these procedures can be time-consuming to complete. The formal assessment cannot begin until necessary permissions are obtained. While waiting, however, the assessment team can begin a preliminary literature review and inquire into the availability of national key informants and quantitative databases, so that those modules can begin immediately once permissions are obtained.

**The assessment team can set the AHSBA process in motion, but the timeline may need to be flexible as some modules will depend on the planning, cooperation and collaboration of others. Although Modules 2–4 can be completed in sequence, realistically they may overlap if there are delays due to ethical clearance procedures, or to limited availability of key informants, literature search engines or quantitative databases for mining. Indeed, while Modules 2–4 should largely be completed prior to the subnational qualitative research (Module 5), each may have outstanding tasks that can still be completed later in the assessment.**

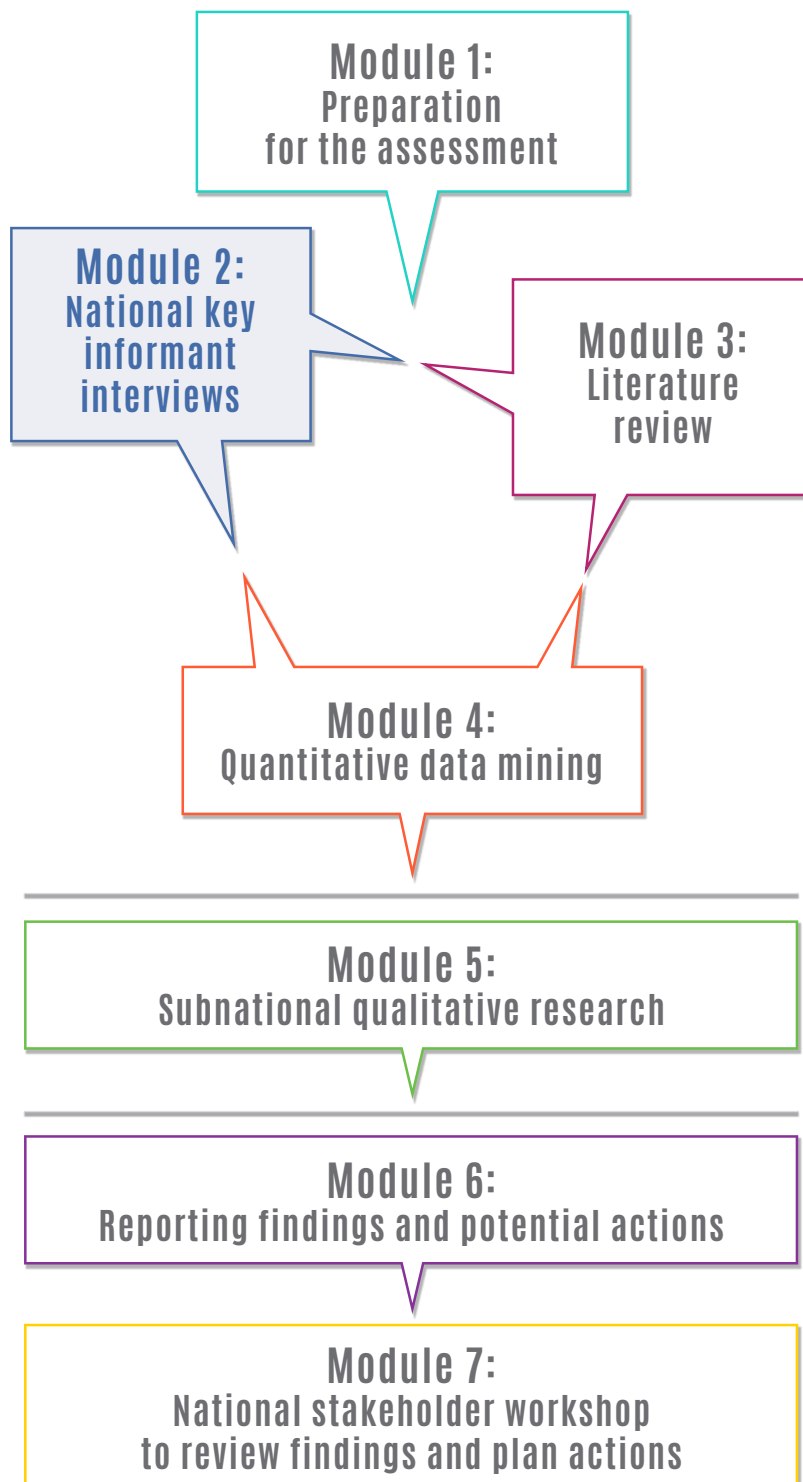
The assessment committee will meet at key junctures and communicate routinely during the assessment in order to review progress and determine next steps.

### OUTPUTS OF THE PREPARATION FOR THE ASSESSMENT

- A national stakeholder inception meeting, initiated by a relevant government focal person, at which three adolescent health services (X, Y and Z) are selected as the focus of the assessment and an assessment committee is appointed.
- A research plan with timeline, budget and assessment committee meeting schedule.
- Appointment of staff or a contractual partner to lead and conduct the assessment, with outsourcing arrangements as needed.
- Required ethical committee(s) approval of the assessment.

# Module 2

## National key informant interviews





# Module 2

## National key informant interviews

### OBJECTIVES OF THE NATIONAL KEY INFORMANT INTERVIEWS

1. Conduct interviews with national key informants on inequities in adolescent health outcomes and service coverage in the country, particularly related to priority adolescent health conditions X, Y, and Z.
2. Based on the national key informant interviews, identify which adolescent subpopulations are very under-served, and what barriers they experience in obtaining effective and sustained coverage of health services aimed at addressing health conditions X, Y, and Z.
3. Based on the national key informant interviews, identify several possible subnational sites for qualitative research with under-served adolescent subpopulations, providing justification.

### 2.1. NATIONAL KEY INFORMANT INTERVIEW PROTOCOL

A minimum of 12 one-hour key informant interviews should be conducted at the national level focused on both demand- and supply-side health service barriers experienced by very under-served adolescents. Interviews with national key informants may take time to arrange and are likely to inform all of the modules; therefore, this interview series should be initiated at the start of the assessment, if possible. The interviews can continue simultaneously with the literature review and data mining exercise as the assessment proceeds.

**National key informant selection:** The assessment team should compile and recruit a list of national key informants with expertise in relevant sectors, including at least:

- **two** representatives from national health authorities working in adolescent health services and other key areas, including those that are particularly important for health conditions X, Y and Z;
- **three** representatives of other relevant authorities (e.g. human rights, youth, social protection, education, women's development) that may play a role in enabling access to health services, including those that are particularly important for health conditions X, Y and Z;
- **five** representatives of nongovernmental organizations and civil society organizations working to promote the health, welfare and rights of under-served adolescents in the country. Depending on the context, this may include organizations that work with adolescents who are: low-income; out-of-school; rural or urban informal settlement dwellers; indigenous or ethnic minorities; migrants or refugees; disabled or living with a chronic illness; LGBTI; street children; or otherwise disadvantaged.
- **two** adolescents representing different genders, age groups and disadvantaged backgrounds. Adolescent key informants could be recruited in numerous ways, but might include adolescents who work or volunteer for a national health-related nongovernmental organization or civil society organization, or who are members of a national youth parliament. Note these should *not* be the same adolescents who participated in the national stakeholder inception meeting or the assessment committee.

**National key informant interview process:** Interviews should be tailored to the respondent's area of expertise. The interviewer or interviewing pair should request verbal permission to audio record each interview.



At the beginning of each audio recording, the interviewer should state his or her name and the date, and use a coding system to identify the person being interviewed<sup>1</sup>. If audio recording is not permitted, then the interviewing team should write down key points during the interview itself. Names and title should not be included in the final report or interim reports for privacy reasons.

The interview should begin with open-ended questions, to elicit the respondent's own perspective without suggesting answers to them. Then the questions can become more specific to ensure that each area of interest to the interviewer is addressed. If any of the planned questions repeat content that was discussed in depth earlier in the interview, then they can be skipped.

**The goal of the national key informant interviews (and later subnational qualitative research) is to learn about the respondents' experiences and world views in their own terms. Towards that end, interviewers should ask respondents open-ended questions based on broad topic guidelines and avoid suggesting answers to the respondents. This approach will allow respondents to raise unanticipated issues about barriers to health services which can then be explored in depth.**

**Questions should be worded in a simple, clear and concise way. If some terms are open to interpretation, or have no linguistic or cultural equivalent in the area (e.g. adolescent, ethnicity), they should be discussed and defined either at the beginning of the interview or at the point when they are introduced.**

Box 3 provides general questions which could be asked of key informants at the national level; however, these should be adapted to the specific country context, the health services of interest, and the key informant's area of expertise.

### Box 3. Generic guide and script for interviews with key informants

#### Introduce the research

*[The facilitator should begin by introducing him- or herself and saying:]*

— *We are trying to identify which groups of adolescents\* in this country do not have adequate access to health services, and what barriers they face. By "adolescents" we mean young people aged 10–19 years. By "adolescent group" we mean any subpopulation that might be identifiable by sex, age, education, economic status, place of residence (e.g. rural/urban), subnational area (e.g. district, state or province) or other characteristics. It may be that some under-served adolescent groups are not easily recognized, so your opinion as an expert would be especially valuable in identifying them.*

— *We would like to identify which groups of adolescents do not get needed health services, and why. We are interested in this question for general health services, but also specifically related to health services for [give names of conditions X, Y, and Z]. We hope this information will better inform national health programming, improve access for under-served adolescent populations, and ultimately improve their health.*

— *We would like to audio record this conversation so that we don't have to focus on note-taking during the discussion. Do you give permission for this to be audio recorded? And do you have any questions before we continue?*

*[Wait for permission, and answer any questions.]*

\* Some countries and languages may not have a word for "adolescent" (10–19 years old), so interviewers may wish to adapt local terms to explain this age group in more detail, and/or include a question for discussion of local cultural classifications of girls and boys within the interview.

<sup>1</sup> For information on safe data storage please refer to: UN (2012). Human Rights Indicators: A guide to measurement and implementation. New York and Geneva: UN Office of the High Commissioner for Human Rights. Available: <http://www.ohchr.org/EN/Issues/Indicators/Pages/HRIndicatorsIndex.aspx>

## Interview questions, to be adapted to the country context

**Question 1. How would you rate adolescents' access to effective health services in this country? Would you say excellent, good, fair or poor? Why? Please explain and give examples.**

**Question 2. Is this different for adolescent boys and for girls? For younger and for older adolescents? Why?**  
Please explain and give examples.

**Question 3. What do you believe are the main barriers facing adolescents in accessing health services in this country?**  
In other words, what are the main reasons adolescents may not get the health services they need?  
Please explain and give examples.

**Question 4. In this country, which group(s) of adolescents have the greatest difficulty accessing general (primary) health services?**

— You can consider groups which might be relatively easy to measure (such as poor, rural, ethnic minority or out-of-school adolescents), but also groups which are not as obvious or easy to measure (such as migrant labourers, domestic servants, the physically disabled, street children or sexually-active school pupils).

— We are particularly interested in identifying under-served groups of adolescents who might be hidden or not usually thought of, so please reflect on this fully before answering.

— Please explain your reasoning.

[In this question, it may be helpful to replace the general examples above with specific examples from other geographic regions in the same country; this may help to explain the idea to the respondent while not suggesting answers about local adolescents.]

**Question 5. What are the main barriers that deter these adolescents from accessing health services? Please answer for each of the groups mentioned in response to question number 4, and please give examples.**

[Discuss each group mentioned previously by the key informant, unless they have already described these barriers in depth.]

**Question 6. Several steps need to be achieved for an adolescent to obtain effective health services.**

For the disadvantaged adolescents you have already described, please consider each of these issues one at a time:

**Question 6.1. Are the services available?** Do the services exist? Do they have adequately skilled staff, medications and equipment? Please explain and give examples.

— Is this different for girls and boys?

— Is this different for younger (10–14 years old) and older (15–19 years old) adolescents?

**Question 6.2. Are the services accessible?** Can adolescents reach the services, in terms of transportation and opening times? Can they afford them? Please explain and give examples.

— Is this different for girls and boys?

— Is this different for younger (10–14 years old) and older (15–19 years old) adolescents?

**Question 6.3. Are the services acceptable to adolescents?** Please take into account confidentiality, stigma, discrimination and the characteristics of health care providers. Please explain and give examples.

— Is this different for girls and boys?

— Is this different for younger (10–14 years old) and older (15–19 years old) adolescents?

— Are any services not acceptable to the adolescents' "gatekeepers", for example, parents or guardians who may determine whether an adolescent accesses a service? Please explain and give examples.

**Question 6.4. Assuming services are available, accessible and acceptable to adolescents, are there any reasons why adolescents may still not use them when they need them? Do adolescents sometimes not realize they need health services? Or have incorrect beliefs about health services? Or prefer to use other services (such as traditional healers or private pharmacists)? Please explain and give examples.**

— Is this different for girls and boys?

— Is this different for younger (10–14 years old) and older (15–19 years old) adolescents?

**Question 6.5. Are the health services of sufficient quality to be effective? Are there issues that influence treatment adherence by disadvantaged adolescent subpopulations? Does the referral system work for all adolescent subpopulations? Are the systems for transitioning adolescents from paediatric to adult care appropriate and effective for all adolescent subpopulations? Please explain and give examples.**

— Is this different for girls and boys?

— Is this different for younger (10–14 years old) and older (15–19 years old) adolescents?

**Question 7. What changes to current services would address these barriers and improve access for disadvantaged adolescents? In your opinion, what single change would make the biggest difference? Please explain your reasoning.**

**Question 8. How would you adjust monitoring and evaluation of health status and health services to better assess if the needs of disadvantaged adolescents are being met?**

**Question 9. In your mind, what are currently the most important available sources of information on why some adolescents are not accessing effective health services?**

**[Repeat questions as needed to fully cover services for health conditions X, Y and Z.]**

**[When done with these questions, briefly explain the planned literature review, data mining exercise and subnational research.]**

**Question 10. Do you have any suggestions for the planned adolescent barriers assessment as we move forward? For example, databases which might be analysed and contacts who can help access them? Or the best location(s) for subnational research, and contact information for possible subnational key informants or collaborators?**

**[Finally, offer to answer any questions the KI may have for you, and thank them for their time.]**

## 2.2. NATIONAL KEY INFORMANT DATA ANALYSIS AND REPORTING

**National key informant data processing:** Immediately after each interview (or, at the latest, by the end of that day), the interview team should complete a “Debriefing form for an **INDIVIDUAL** key informant interview or focus group discussion/interview set” (Assessment Template A), drawing on the audio recording as needed to complete the form comprehensively and accurately. (*Note: Assessment Template A will also be used later in the assessment to record the results of subnational focus group discussions/ interview sets, as described in Module 5*).

Electronic audio files should be saved and titled with a standardized code that will make them easy to sort and access at a later date. For example, the file name could be composed of abbreviations of the type of interview or discussion (e.g. NKII=national key informant interview); respondent code/number by interviewer initials; and date, e.g. NKII\_01.byEK.2018.08.31).

**National key informant data analysis:** During data analysis, interviewers should complete both Assessment Template B and Assessment Template C to summarize the national key informant interview findings. The narrative summary of findings can be organized following the same structure as Assessment Template A, but should strive to summarize patterns across the series of key informant interviews. Important patterns include any barriers

or under-served adolescent subpopulations that were frequently reported and notable differences in those reports by gender, age group, geographic region or other stratifier.

In the narrative summary, numbers should be provided to indicate the frequency of respondent reports, for example: “three of the national key informants identified Q as the most under-served adolescent subpopulation, while two identified R, and one each of the remaining interviewees identified S, T, U and V”. If specific numbers are not available, then relative estimates can be used, such as, “almost all national key informants reported that P was a major barrier for disadvantaged adolescents”. More information on qualitative data summarizing and the estimation of frequencies based on Assessment Template A can be found in Module 5.

If time and resources allow, countries are encouraged to do a more rigorous analysis of the national key informant interviews, involving verbatim transcription of the audio recordings, translation (if needed), and coding and content analysis using software designed for qualitative data. Such an approach might provide more accurate and in-depth information on the barriers experienced by disadvantaged adolescents, but also would require substantially more time and resources. This option is discussed in more detail in Module 5.

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## 2.3. NATIONAL KEY INFORMANT REPORT COMPONENTS

At the completion of the national key informant interview series, interviewers should produce a brief report that includes the following components.

- **Introduction.** A few sentences explaining the AHSBA and the national key informant interviews.
- **Methods.** A brief description of methodology used to conduct interviews.
- **Findings.** A maximum 5-page narrative summary of findings based on the completed and attached assessment templates.
- **Discussion with proposal for next steps.** A brief (1–2 page) statement proposing adolescent subpopulations and geographic regions for subnational research, based on the national key informant interviews.

- **Limitations and research needs.** A brief section addressing limitations of the national key informant interviews and any further research needs highlighted by the process.
- **Assessment templates.** A total of 14 completed Assessment Templates should be referenced in the report and attached as annexes, i.e. Assessment Templates A (x 12), B (x 1) and C (x 1).

When the national key informant report is completed, it should be submitted to the assessment committee along with all of the electronic national key informant interview audio files.

## QUESTIONS AND DECISION POINTS FOR THE ASSESSMENT COMMITTEE

1. Based on the national key informant interviews, which under-served adolescent subpopulations should be consulted in the qualitative research in order to better understand the health service barriers they experience?
2. What subnational research sites would be most suitable for conducting research with these adolescent subpopulations?

## OUTPUTS OF THE NATIONAL KEY INFORMANT INTERVIEWS

- A short report, as detailed in section 2.3, including introduction, methods, findings, discussion with proposal for next steps, limitations and research needs, and completed summary tables based on Assessment Templates A (x 12), B (x 1) and C (x 1).
- Suggestions for subnational qualitative research (Module 5), i.e. under-served adolescent subpopulations and subnational research sites.



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ASSESSMENT TEMPLATE A:

Debriefing form for an INDIVIDUAL key informant interview or focus group discussion/interview set

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Date: Names of researcher(s):

---

Check one: National KI  Subnational KI  Subnational FGD/interview set

If subnational, site name:

---

KI institution and department / OR / FGD type of adolescent group and number of participants:

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Audio file name(s):

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*Under each point below: (a) Summarize key findings in narrative form; (b) For FGDs, estimate the number of participants who reported this finding; (c) Provide an exact illustrative quote from the audio recording (also note the recording time marker where quote can be found). Complete more than one form, if needed, to cover findings reported for different adolescent subpopulations or health services.*

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**1. KI ranking of adolescents' overall access to health services / OR / FGD main way(s) adolescents manage their health care needs:**

Quote: Reported by: \_\_\_\_\_ (approx. no. FGD participants)

---

**2.1. Main difference(s) in health care for adolescent girls and boys:**

Quote: Reported by: \_\_\_\_\_ (approx. no. FGD participants)

---

**2.2. Main difference(s) in health care for younger and older adolescents:**

Quote: Reported by: \_\_\_\_\_ (approx. no. FGD participants)

---

**3. Main barrier(s) for adolescents overall:**

Quote: Reported by: \_\_\_\_\_ (approx. no. FGD participants)

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**4. Which group(s) most under-served:**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**5.1. Main barrier(s) for each under-served group:**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**5.2. Main difference(s) in barriers experienced by under-served girls and boys:**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

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**5.3. Main difference(s) in barriers experienced by under-served younger and older adolescents:**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**6.1. Main availability barrier(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**6.2. Main accessibility barrier(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**6.3. Main acceptability barrier(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---



---

**6.4. Main contact/use barrier(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**6.5. Main effective coverage barrier(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**7. Recommended health service change(s):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**8. KI recommended M&E change(s) / OR / FGD other important findings (e.g. major disagreements, or key minor opinions):**

Reported by: \_\_\_\_\_ (approx. no. FGD participants)

*Quote:*

---

**9. Important source(s) information, or further suggestion(s) for the assessment:**

---

**10. Contact information of stakeholder(s) for possible KI interviews or FGD planning:**

---

KI = key informant

FGD = focus group discussion

**ASSESSMENT TEMPLATE B:**

First summary table for SERIES of key informant interviews or focus group discussion/interview sets:

Adolescent subpopulation and barrier findings, by type of health service

General, X, Y, or Z health services	FINDINGS		Main potential solution(s) suggested
	Under-served adolescent subpopulation	Main barrier(s) to health service	
General	(1)	(a) (b) (c) ...	
	(2)	...	
	(3)	...	
	...	...	
Name of health condition X	(1)	(a) (b) (c) ...	
	(2)	...	
	(3)	...	
	...	...	
Name of health condition Y	(1)	...	
	(2)	...	
	(3)	...	
	...	...	
Name of health condition Z	(1)	...	
	(2)	...	
	(3)	...	
	...	...	

KI = key informant

FGD = focus group discussion

**ASSESSMENT TEMPLATE C:**

Second summary table for a **SERIES** of key informant interviews or focus group discussion/interview sets:

**Barriers to access to health services by coverage dimension**

*If health services for conditions X, Y and Z do not overlap much, researchers may wish to complete separate versions of this table for each type of health service.*

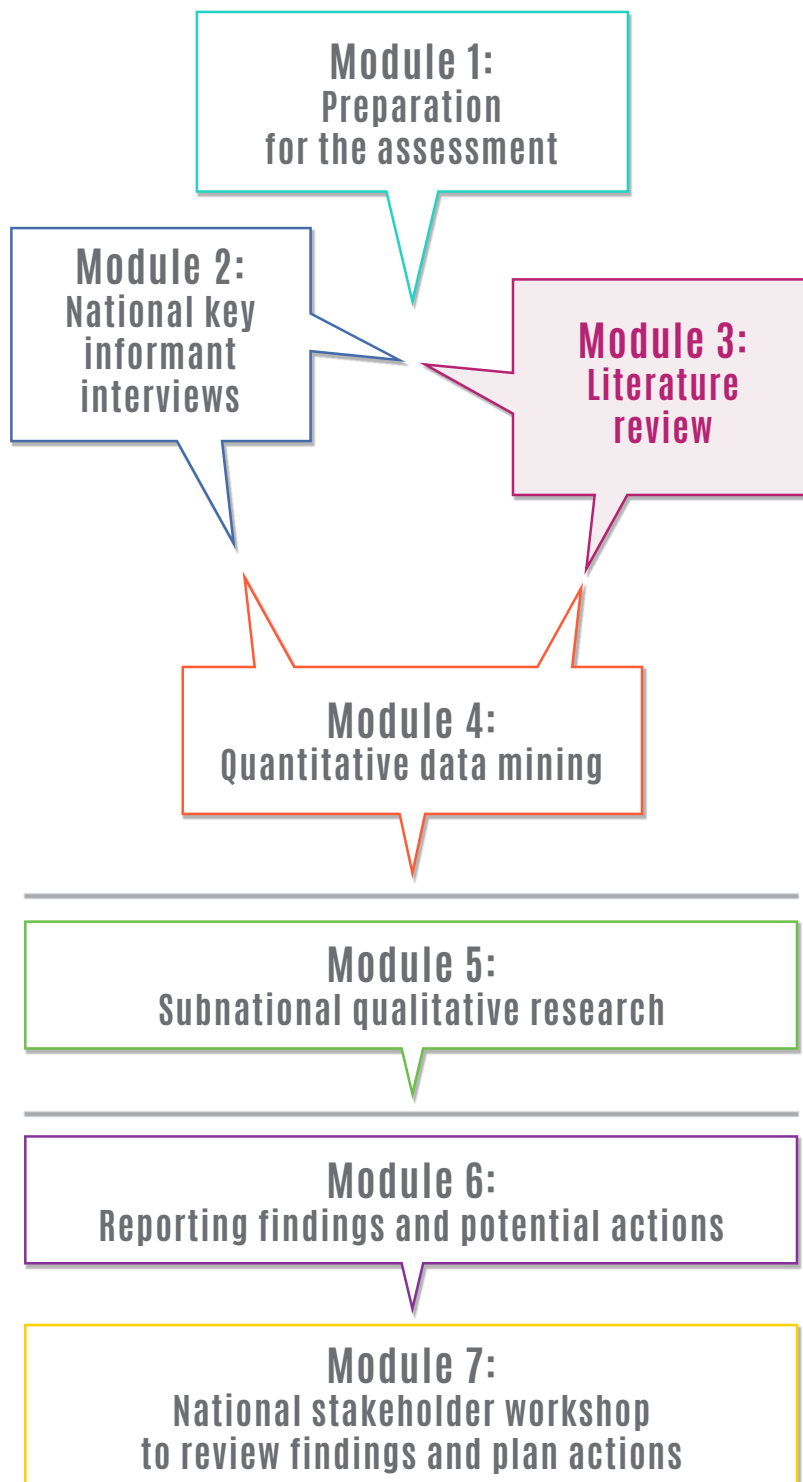
Coverage dimension	MAIN BARRIERS			
	<i>Write type of health service:</i> _____			
	<i>Check one:</i>	National KI <input type="checkbox"/>	Subnational KI <input type="checkbox"/>	FGD/interview <input type="checkbox"/>
Availability	(1) (2) (3) ...			
Accessibility	(1) (2) (3) ...			
Acceptability	(1) (2) (3) ...			
Contact/use	(1) (2) (3) ...			
Effective coverage	(1) (2) (3) ...			

KI = key informant

FGD = focus group discussion

# Module 3

## Literature review



# Module 3

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## Literature review

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### OBJECTIVES OF THE LITERATURE REVIEW

1. Review and summarize key literature on inequities in adolescent health outcomes and service coverage in the country, particularly related to priority adolescent health conditions X, Y and Z.
  2. Based on the literature review, identify which adolescent subpopulations are very under-served, and what barriers they experience in obtaining effective and sustained coverage of health services aimed at addressing health conditions X, Y and Z.
  3. Based on the literature review, identify several possible subnational sites for qualitative research with under-served adolescent subpopulations, providing justification.
- 

### 3.1. LITERATURE SEARCH

Focusing on the country of interest, the literature search will seek relevant published health and social science journal articles, technical reports, evaluations, case-studies, presentations at technical meetings, working papers, briefings, occasional surveys, and other write-ups of qualitative and quantitative analyses. Relevant documents can be identified by using the following methods.

- (a) **Keyword search of academic databases.** At a minimum, this should include PubMed (<https://www.ncbi.nlm.nih.gov/pubmed/>). It could also include other free or subscription databases, such as MEDLINE, the WHO Library Database (IRIS), the Universal Human Rights Index, the Cochrane Library, the Campbell Collaboration Online Library, Anthropology Plus and Scopus.
- (b) **Direct search of relevant websites of relevant agencies.** Examples include websites of the national government, national research institutions, UN/multilateral/bilateral agencies, national and international nongovernmental organizations, national and international human rights institutions, and other entities that work in the country.

- (c) **Consultation with stakeholders.** These might include community networks of adolescents as well as government, UN, nongovernmental organization and community-based organization representatives in relevant fields such as epidemiology, public health and social sciences. For example, ethnographers, anthropologists, social geographers and/or urban geographers should be consulted, particularly if they are proficient in local languages and have expert knowledge of ethnic groups and geographic areas within the country, as they may know of pertinent area- or programme-specific reports.
- (d) **Keyword search of general internet search engines.** Google is one example; searches through such resources might be particularly important to identify reports and other grey literature that may be missed using (a), (b) and (c).

Table 2 outlines selection criteria which can be adapted for the literature review. A more specific list of selection and exclusion criteria should be defined and documented by the reviewer at the onset of the exercise. The reviewer should search different combinations of topics in column 2

across the six rows (A–F) to find relevant literature to review. Importantly, the more criteria that are included in an electronic search, the narrower the findings will be – raising the concern that important literature could be missed. The reviewer should thus begin the search with a more limited combination of criteria (e.g. rows A–E only), exploring multiple possible combinations within those rows, and not search all criteria (rows A–F) together unless this is needed to narrow the search focus.

**First level of search:** This should be broad, considering any assessment of inequitable health status among the general population (all ages) within the last five years, particularly related to health conditions X, Y and Z. For each of these outcome-level parameters, there will be a corresponding set of health service coverage indicators that should be sought. Even if this research does not include adolescent-specific findings, it may identify some major, overarching patterns of health service inequity that affect adolescents as well as the general population (e.g. geographically remote communities with few/no health services, or poor urban neighbourhoods where health care is unaffordable and thus rarely obtained).

**Second level of search:** This should focus on adolescents to identify any relevant information that may not have been found in the first level of search. In practice, it may be more convenient to undertake these two levels of search simultaneously, i.e. searching one database for both the country’s general population and adolescent population before moving on to another database. For each criteria A–F in Table 2, synonyms should be used for repeated searching of the same concept. Examples are shown in Table 2, column 3; however, additional synonyms should also be explored, including terminology specific to the country or region.

**Third level of search:** This should only be pursued if insufficient information was found during the first two levels of search, or if the assessment committee wants

to explore a specific topic further (e.g. health service barriers experienced by indigenous or ethnic minority adolescents). These search criteria should be tailored to the specific areas of interests and available data. For example, in a very traditional and conservative setting where social norms and cultural changes are relatively slow, anthropological studies from 20–30 years earlier may still be very useful.

**The first and second levels of search may produce vast numbers of potentially relevant documents, in which case the working list of documents for review can be broken down into high priority, medium priority and low priority. For example, materials may be ranked as “high priority” based on the quality of the source materials (e.g. a large study from a major research institution) or the relevance of the content (e.g. a study that specifically examined adolescent health service barriers in the country).**

**If the search does not produce enough information to answer the research question, or gaps become apparent during the course of the review, then the search can be broadened to include relevant items from the third level of search shown in Table 2, column 4. For example, if the initial search produces little information from the last five years, then the search can be broadened to encompass all publications in the last 10 years, the last 20 years, or longer. The search could also be expanded to seek other relevant information, such as recommendations related to adolescent health which have been produced by human rights bodies including committees, independent experts, ombudspersons and national human rights institutions (e.g. thematic and country reports of the Special Procedures of the Human Rights Council).**

Table 2. Selection criteria used for three levels of literature search

1. CRITERIA	2. FIRST- AND SECOND-LEVEL SEARCHES <i>Search combinations of the six criteria A–F together to identify relevant literature. Begin the search with a limited combination of criteria (e.g. rows A–E); only search all criteria (rows A–F) together if needed to narrow the search.</i>	3. EXAMPLES OF KEYWORDS TO USE IN SEARCHES	4. OPTIONAL THIRD-LEVEL SEARCH <i>The search can be expanded to include any of the third level of criteria if the first- and second-level searches produce insufficient information.</i>
<b>A. Population</b>	<b>FIRST LEVEL:</b> General population OR <b>SECOND LEVEL:</b> Adolescents (any in range 10–19 years), ideally disaggregated by sex and age (e.g. 10–14 years, 15–19 years)	<ul style="list-style-type: none"> <li>• Adolescent</li> <li>• Youth</li> <li>• Child/children</li> <li>• Young (adult/person/people) and other locally contextualized classifications</li> <li>• Teen/teenager</li> </ul>	
<b>B. Geographic area*</b>	Specific country OR subnational area OR subpopulation of interest	<ul style="list-style-type: none"> <li>• Name of country</li> <li>• Name of subnational area</li> </ul>	<i>Broader region</i>
<b>C. Time period</b>	Published/issued recently (e.g. last 5 years)	Expand search range to last 6–10 or 20 years, depending on the field and availability of information	<i>Longer time period (e.g. more than 20 years)</i>
<b>D. Health outcomes</b>	Health outcomes or problems that affect adolescents, related to: <ul style="list-style-type: none"> <li>• adolescent health condition X</li> <li>• adolescent health condition Y</li> <li>• adolescent health condition Z</li> </ul>	Name and common (international or local) synonyms for: <ul style="list-style-type: none"> <li>• adolescent health condition X</li> <li>• adolescent health condition Y</li> <li>• adolescent health condition Z</li> </ul>	<i>Broader groupings of conditions which encompass health conditions X, Y or Z</i>
<b>E. Health service coverage and barriers</b>	Coverage and/or barriers, as relate to: <ul style="list-style-type: none"> <li>• General health service for adolescents</li> </ul> OR Health services: <ul style="list-style-type: none"> <li>• adolescent health condition X</li> <li>OR</li> <li>• adolescent health condition Y</li> <li>OR</li> <li>• adolescent health condition Z</li> </ul>	<ul style="list-style-type: none"> <li>• Health service: <ul style="list-style-type: none"> <li>- general/primary</li> <li>- for adolescent health condition X</li> <li>- for adolescent health condition Y</li> <li>- for adolescent health condition Z</li> </ul> </li> <li>• Health facility</li> <li>• Health promotion/prevention/testing/diagnosis/treatment/rehabilitation</li> <li>• Health service coverage (available, access/accessible, acceptable, contact, use, effective, quality)</li> <li>• Barriers</li> </ul>	<i>Additional types of health care for which data are:</i> <ul style="list-style-type: none"> <li>• relevant and relatively available (e.g. often the case for SRH services)</li> </ul> OR <ul style="list-style-type: none"> <li>• of particular interest to the country</li> </ul>

\* Some anthropological or ethnographic studies may be focused on an ethnic group rather than a geographic area; where this is likely, the search can be modified accordingly.



1. CRITERIA	2. FIRST- AND SECOND-LEVEL SEARCHES <i>Search combinations of the six criteria A–F together to identify relevant literature. Begin the search with a limited combination of criteria (e.g. rows A–E); only search all criteria (rows A–F) together if needed to narrow the search.</i>	3. EXAMPLES OF KEYWORDS TO USE IN SEARCHES	4. OPTIONAL THIRD-LEVEL SEARCH <i>The search can be expanded to include any of the third level of criteria if the first- and second-level searches produce insufficient information.</i>
<b>F. Equity</b>	Content addressing social marginalization, vulnerability, disadvantage, exclusion, inequitable access, discrimination, or related key terms	<ul style="list-style-type: none"> <li>• Vulnerable</li> <li>• Disadvantaged</li> <li>• Marginalized</li> <li>• Under-served</li> <li>• Social exclusion</li> <li>• Discrimination, stigma</li> <li>• Adverse gender norms</li> <li>• At risk</li> <li>• Intersectional</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Specific vulnerable groups in the country (e.g. adolescents who are: low-income; out-of-school; rural or urban informal settlement dwellers; indigenous or ethnic minorities; migrants or refugees; disabled or living with a chronic illness; LGBTI; street children; or otherwise disadvantaged)</i> OR</li> <li>• <i>Specific equity stratifiers e.g. wealth quintile, poverty</i> OR</li> <li>• <i>Specific gender norms, roles and relations which influence inequities in effective coverage;</i> OR</li> <li>• <i>Specific risk factors and social determinants associated with adolescent health conditions X, Y and Z</i></li> </ul>

## 3.2. DOCUMENT REVIEW

Like the literature search, the literature review has the potential to be a long and complex process, so it will be important to assess the highest priority materials first. Once that is completed, the reviewer can evaluate progress before deciding whether to continue with the next, lower priority levels of document review.

**A saturation approach should be employed during the document review, meaning that if the reviewer has repeatedly collected the same information on one adolescent subpopulation, condition or type of barrier, he or she can focus the remaining time and limited resources on examining others.**

Selected literature should be reviewed and summarized, as shown in Assessment Template D. For some information (e.g. health outcomes and subpopulations affected), it may be possible to summarize relevant content based on reading the abstract or executive summary, supplemented by appropriate word searches within the document. In addition, the table of contents can be reviewed to narrow the focus to relevant sections, which then can be read in full.

In other cases, however, it may be necessary to read entire documents to summarize pertinent information related to adolescent health service inequity and to identify barriers. Many articles address health needs, health status, treatment preferences, and knowledge, attitude and behaviours of general adolescent populations, but do not directly focus on inequities *within* a country's adolescent population. When documents only indirectly address adolescent health service inequity, the review will require more subtle interpretation of the content. A close reading may also be necessary for the interpretation and categorization needed to group findings by Tanahashi dimension.

When assessing literature to identify which adolescent subpopulations have the least access to effective health services in a country, differences will often reflect common equity stratifiers in large-scale, quantitative surveys such as sex, age, education, economic status, place of residence (e.g. rural/urban) and subnational area (e.g. district, state or province) (e.g. (50, 51)). However, it is important for the literature review and the assessment overall to be approached in an exploratory and open-minded way, so that less known and less easily recognized groups of under-served adolescents may also be identified.

For example, in some countries large numbers of adolescent girls are domestic workers who have little education, income, independence or access to health services. However, the dispersed, isolated and low status nature of this disadvantaged subpopulation may make it essentially “invisible” to standard survey techniques. As another example, in a country that has recently experienced a large influx of young migrants and refugees, multiple issues (e.g. mobility, language barriers, not having regularized status) could cause this adolescent population to be both under-served and missed in quantitative research. In the literature review, anthropological studies and other forms of qualitative subnational research will be especially important to identify such difficult-to-measure, under-served adolescent subpopulations, and to understand the context of their daily lives and the barriers they experience.

For each document reviewed, a record should be made of the citation information, type of research, type of adolescent study population, and findings on under-served adolescents and health service barriers. Documents can be organized alphabetically by author. A simplified example is shown in Assessment Template D.

## ASSESSMENT TEMPLATE D.

### First literature review summary table of adolescent subpopulation and barrier findings: Source document, type of research, study population and type of health service, with examples

Examples are for a country that has identified its adolescent health conditions (X, Y and Z) as: X – Treatment for injecting drug use; Y – Prevention of pregnancy; Z – Prevention and treatment for suicide/self-harm. In practice, findings may be more easily organized and accessed if the reviewer produces four separate tables for general, X, Y and Z health services.

Source citation information	Type of research	Adolescent or related study population	General, X, Y or Z health services	FINDINGS	
				Under-served adolescent subpopulation(s)	Brief description of main health service barrier(s)
1. [Author, title, year etc.]	School survey (national)	School children (10–17 years)	General	(a) Low-income adolescents	(a) Low-income adolescents cannot make co-payments
				(b) Rural adolescents	(b) Few health services in rural areas
				(c) Disabled adolescents	(c) Adolescents with mobility impairments cannot get transport to services, and lack rehabilitative and assistance devices e.g. wheelchairs
2. [Author, title, year etc.]	Anthropological research (major city)	Young injecting drug users (15–24 years)	X. Injecting drug-use treatment	(a) Injecting drug-using legal minors (15–17 years)	(a) No residential treatment for <18 year olds (legal children)
				(b) Injecting drug-using adolescents (15–19 years)	(b) Fear of prosecution so do not seek services
3. [Author, title, year etc.]	Health facility survey (nationally representative)	Patient exit interviews (15–24 years)	Y. Pregnancy prevention	Girls/boys who are unmarried and/or students	Providers refused to give contraceptives because of gender norms or marriage/school status
4. [Author, title, year etc.]	In-depth interviews (district level)	Adolescents (10–19 years)	Z. Suicide/self-harm prevention and treatment	Indigenous adolescents	Services are not delivered in culturally appropriate ways
...					

### 3.3. LITERATURE REVIEW DATA ANALYSIS

Once the literature review data have been summarized in tabular form, as shown in Assessment Template D, this summary table should be studied to identify patterns related to the availability, accessibility, acceptability, contact/use and effectiveness of adolescent health service coverage. During this analysis it may be necessary to return to the original literature to check or expand upon the data summarized in Assessment Template D, to ensure those data accurately and fully summarize the literature review findings on health service coverage.

These findings can be organized by Tanahashi coverage dimension in Assessment Template E, with further categorization by under-served adolescent population, type of barrier and type of health service/condition.

Once Assessment Template E is fully populated, both summary tables (Assessment Templates D and E) should be reviewed to identify key themes to be described in the narrative findings section of the literature review report, as detailed below.

---

### 3.4. LITERATURE REVIEW REPORT COMPONENTS

Finally, a brief literature review report should be written about which adolescent subpopulations in the country are very under-served and the barriers they experience. The literature review report should include the following components.

- **Introduction.** A few sentences explaining the AHSBA and the literature review, as well as a brief overview of adolescent health conditions X, Y and Z in the country.
- **Methods.** Concise description of methodology, including lists or tables of search terms, databases or search engines searched, institutional websites searched, and other sources of documents; as well as a summary of the number and type of documents reviewed.
- **Findings.** A maximum 7-page narrative summary of findings based on the completed and attached assessment templates. For each adolescent health service (general, X, Y or Z), this should describe findings on the main under-served adolescent subpopulation(s), the five Tanahashi coverage dimensions and barriers to services, with due attention to differences between girls and boys, age groups, and equity stratifiers.
- **Discussion with proposal for next steps.** One page proposing (based on the literature review) the adolescent subpopulations and barriers to health services which should be given close attention in Modules 4–5, and in future national programming and M&E. This should include a brief description of the approximate size, geographic distribution and identifying characteristics of the under-served adolescent subpopulation(s), and the nature, scale and intensity of the main barriers they experience.
- **Limitations and research needs.** This brief section should summarize gaps in the existing literature, e.g. limited information was found on financial protection and adolescents, or on gender norms and relationships.
- **Assessment templates.** The completed Assessment Templates D and E should be referenced in the report and attached as annexes.

ASSESSMENT TEMPLATE E.

Second literature review summary table of adolescent subpopulation and barrier findings: Coverage dimension and type of health service

Health service coverage dimension	Under-served adolescent subpopulation	Type of barrier	Type of health service (check if applicable)			
			General	Name of health condition X	Name of health condition Y	Name of health condition Z
Availability	(1)	(1)				
	(2)	(2)				
	(3)	(3)				
	...	...				
Accessibility	(1)	(1)				
	(2)	(2)				
	(3)	(3)				
	...	...				
Acceptability	(1)	(1)				
	(2)	(2)				
	(3)	(3)				
	...	...				
Contact/use	(1)	(1)				
	(2)	(2)				
	(3)	(3)				
	...	...				
Effective coverage	(1)	(1)				
	(2)	(2)				
	(3)	(3)				
	...	...				

### 3.5. ASSESSMENT COMMITTEE MEETING

At this stage, the assessment committee should meet to:

- (a) review the findings from the literature review report;
- (b) assist the data mining team to identify and gain access to databases for Module 4;
- (c) begin logistical arrangements for the data mining exercise and (if any subnational sites have already been identified) for the qualitative research to be conducted in Module 5, including recruiting a local consultant at each of the subnational sites for advance planning approximately two weeks before the fieldwork.

#### QUESTIONS AND DECISION POINTS FOR THE ASSESSMENT COMMITTEE

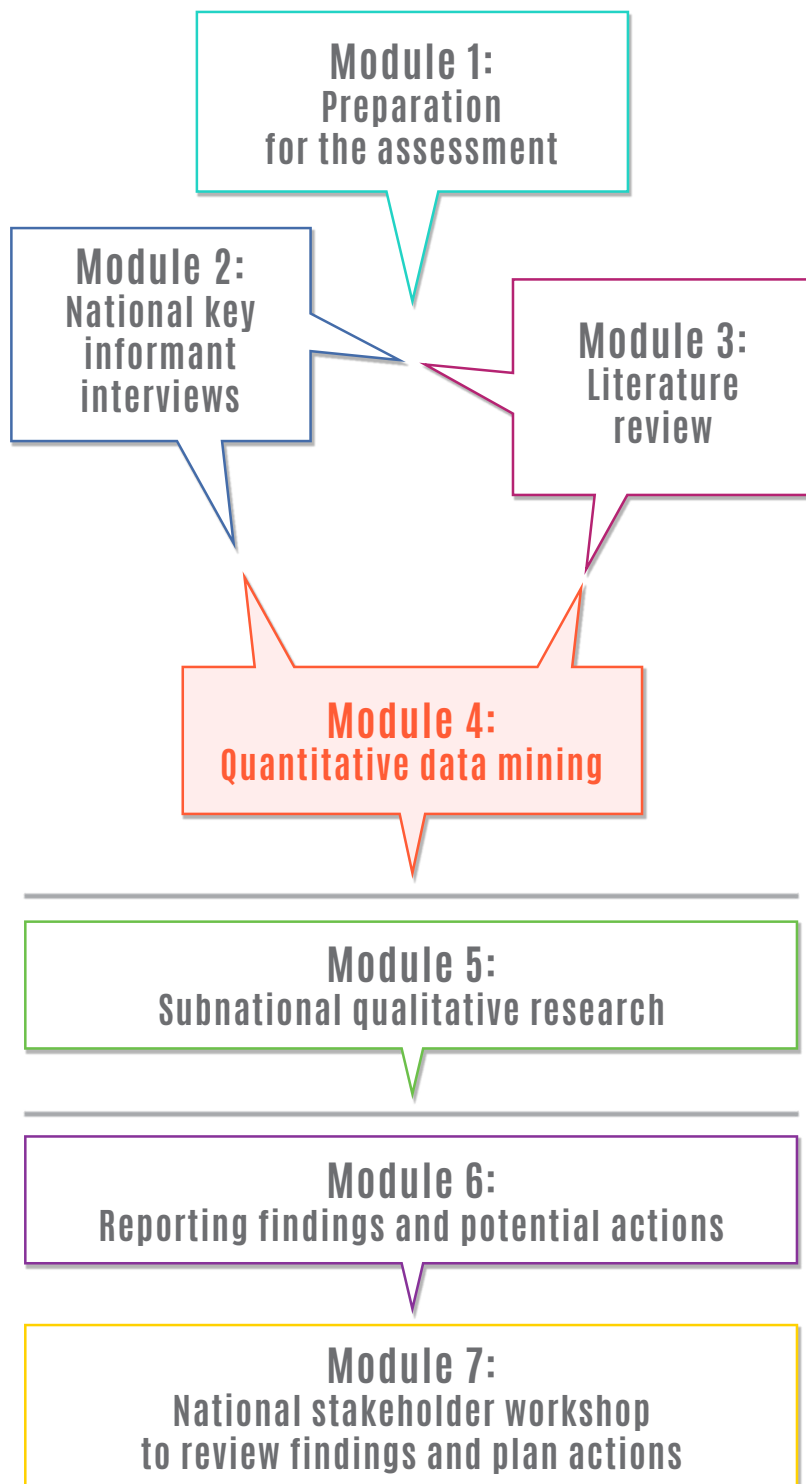
1. Did the literature review adequately answer the assessment questions, i.e. which are the under-served adolescent populations in the country, and what barriers do they face?
2. Based on the literature review, which under-served adolescent subpopulations, and which subnational sites, might be most suitable for qualitative research?
3. What logistical arrangements need to be made at this stage to facilitate the quantitative data mining and subnational research?

#### OUTPUTS OF THE LITERATURE REVIEW

- A literature review short report with the following sections: introduction, methods, findings, discussion with proposal for next steps, limitations and research needs, and completed summary tables based on Assessment Templates D and E.
- Suggestions for Module 4 quantitative data mining (e.g. gaps in available data) and suggestions for Module 5 subnational qualitative research (i.e. under-served adolescent populations and site selection).

# Module 4

## Quantitative data mining





# Module 4

## Quantitative data mining

### OBJECTIVES OF THE QUANTITATIVE DATA MINING

1. Access and directly analyse datasets to produce new information on inequities in adolescent health burdens, risk factors and related service coverage in the country, particularly for health conditions X, Y and Z.
2. Based on the data mining exercise, identify which adolescent subpopulations are under-served, and what barriers they experience in obtaining effective services, particularly for health conditions X, Y and Z.
3. Based on the data mining exercise, identify possible subnational sites for qualitative research with under-served adolescent subpopulations, providing justification.

### 4.1. OVERVIEW OF THE QUANTITATIVE DATA MINING

This module describes how to analyse existing datasets to identify very under-served adolescent subpopulation(s) in a country, and the health service barriers they experience. The module is broken down into three steps: identifying possible data sources, identifying indicators and equity stratifiers, and analysis and reporting.

**Quantitative data mining consists of new analysis of existing datasets to reveal findings that have not previously been reported. It does not involve summarizing findings from published or unpublished literature (e.g. Demographic and Health Survey (DHS) reports). Compilation of previously reported data should take place during the literature review, as outlined in Module 3.**

**Analysis of health indicators by equity stratifiers:** The quantitative data mining will involve analysis of national-level health and health service indicators disaggregated by key equity stratifiers, such as sex, age, education, economic status, place of residence (e.g. rural/urban) and subnational area (e.g. district, state, or province). Sex and age disaggregation (at least two 5-year age groups of 10–14 and 15–19 years) are critical in this process, because

developmental changes during adolescence are rapid and differ substantially between the two sexes. Analysis by subnational area is also important as it enables mapping of geographic areas that are performing particularly poorly in relation to the key indicators. Where possible, the data mining exercise should assess indicators within each dimension of the Tanahashi framework (i.e. availability, accessibility, acceptability, contact/use and effective health service coverage) disaggregated by these equity stratifiers.

**Appendices 5 and 6 list examples of existing adolescent health-related indicators, possible equity stratifiers and their data sources under the broad categories of health, risk factors and health service availability, accessibility, acceptability, contact/use and effective coverage. These tables aim to provide useful examples, but they are not exhaustive and should not be considered comprehensive. Additional information about adolescent health indicators can be found in WHO's 2018 global reference list of 100 core health indicators (plus health-related SDGs) (52) and section 6 of the Global AA-HA! guidance (11).**

The complex technical nature of this module means that it should ideally be carried out by a statistician, or a team that includes a statistician in a guiding and monitoring capacity. This data mining team will need to evaluate progress throughout the exercise, and adapt and revise the plan as needed to complete the exercise as effectively as possible. It may be useful, for example, for the data mining to be done in two stages over the entire period of the assessment. The first stage of analysis can focus on a few easily available datasets and feed directly into the data mining report and subnational site selection. The second stage could involve analysis of other datasets which required more time to access. This second stage would be completed in time to inform the overall assessment report.

**Logistical and technical challenges:** This module identifies some of the most common national and international datasets and databases that may be available for mining and, within those sources, common indicators that may be available for stratified analysis. Critically, however, outlining what may be theoretically possible in a data mining exercise is very different from what may be feasible on the ground. The data mining team may face many logistical hurdles, including those listed below.

- **Accessing datasets.** Obtaining necessary permissions and technical assistance may be time-consuming, so this should be started as early in the assessment as possible (see more on this below).
- **Sampling frameworks.** The population sampled within a survey may not be representative of all adolescents and specifically may omit those who are most disadvantaged. For example, school-based surveys collect data from students only, and so are unlikely to provide information about health service barriers experienced by out-of-school adolescents.
- **Finding relevant indicators and stratifiers.** The selection of indicators and quality of data within available datasets may be limited. For example, they may address adolescent health risks and conditions, but not specifically health service coverage or barriers. In such cases, the team can still mine available databases for useful background or contextual information, such as demographic information and descriptions of service delivery trends.

- **Stratifying adolescent data.** In recent years, great progress has been made in the collection and disaggregation of national data specific to adolescents (e.g. data for age groups 10–19, 10–14 and 15–19 years). In many instances, however, adolescent-specific data do not yet exist, so it may be necessary to analyse data for broader age groups (e.g. 10–24 years) or overlapping age groups (e.g. 15–24 years). Likewise, datasets may lack other equity stratifiers (e.g. income, education, geography, sex and ethnicity).

**The process of identifying and obtaining access to databases should be started as soon as possible in the assessment, because these steps can be time-consuming. For example, experts should be consulted about relevant datasets during the national stakeholder inception meeting and national key informant interviews. At that time, they should also be asked for practical information and assistance, such as contact information for and introductions to database managers.**

**The assessment team should contact database managers early in the assessment to request collaboration, as this may require formal institutional agreements and permissions to be granted. Typically, the database manager will also need to arrange for someone to assist the assessment team in accessing and analysing the database; for example, a project statistician who is familiar with the database codes and software, and who may be able to create new categories within the data as needed (e.g. 10–14 and 15–19-year-old age groups).**

## 4.2. DATA SOURCES

Data source mapping is the cataloguing and describing of existing data sources to determine which can be analysed to identify under-served adolescent subpopulations within a country and the barriers they experience (47, 53). This process assesses (a) whether data sources are available, and (b) whether those that are available contain data on both health indicators and equity stratifiers, or can be linked to separate data sources on health indicators and equity stratifiers. Without these conditions, it is not possible to generate disaggregated health estimates and measure/monitor health inequalities within a country's adolescent population.

The type and availability of data sources will differ from country to country. Appendices 5 and 6 list some of the most common national and international data sources; these and other sources are described in Table 3. In general, data sources used for health inequality monitoring are institution-based (e.g. Table 3, row 1)

or population-based (e.g. Table 3, rows 2–4). For many low- or middle-income countries, household or school-based health surveys are, by default, the main data source, because institutional records, censuses, and civil registration and vital statistics may be incomplete or irregular (17, 47). These types of survey typically collect data pertaining to a large number of health indicators and many equity stratifiers at the individual level. However, it may not be possible to analyse such data by the desired equity stratifier or at the desired level (e.g. double disaggregation by age and economic status), particularly if the sample size is too small.

In addition to these primary sources, several free online databases (Table 3, row 5) have been created through major international collaborations to enable users to conduct secondary analyses of national-level estimates of mortality, morbidity and equity stratifiers.

**Table 3. Data sources that may have information on under-served adolescent subpopulations and health service barriers they experience (46)**

Data source	Description
<b>1. Health Management Information System(s)</b>	For health service coverage analyses, the national ministry of health should be an important source of routine facility and administrative data. These data may be compiled from the district up to the national level in the District Health Information System (DHIS) 2 software programme, which currently is used by 47 countries as a national Health Management Information System (HMIS). In addition, some countries with federal governments may have separate, state-level HMIS datasets which may be accessed for data from particular states of interest. Depending on the organization of the national HMIS, it may be possible – or necessary – to analyse coverage of specific types of health service only (e.g. reproductive health services; mental health services).
<b>2. Census of population and housing</b>	This is the primary information source for determining the size of a country's adolescent population, its geographic distribution and its social, demographic and economic characteristics. Censuses may provide a denominator for the computation of vital statistics and many health outcome indicators, as well as risk factors, social determinants of health and health service use. In addition, although censuses do not typically collect information about health indicators, it might be possible to link census data using unique personal identifiers (e.g. social security number or postal code) with other data sources that contain information about health indicators.
<b>3. Civil registration and vital statistics</b>	Civil registration and vital statistics systems can usually provide data on fertility, mortality and causes of death disaggregated by age and sex, but not by other stratifiers such as economic status or education, unless civil registration and vital statistics data can be linked with other data sources containing this information (e.g. census data). Civil registration and vital statistics datasets are often incomplete, particularly for the populations that are most vulnerable and under-served.

Data source	Description
<p><b>4. Nationally representative surveys</b></p>	<p>Many countries have a multi-year programme of national health surveys for monitoring progress on key aspects of population health, service coverage, health-related behaviours and risk factors, and out-of-pocket spending on health. These may be specific to the country or conducted at intervals in many countries globally. Examples of surveys with key sponsors include:</p> <ul style="list-style-type: none"> <li>• United Nations Children’s Fund (UNICEF) Multiple Indicator Cluster Survey (MICS) (over 100 countries);</li> <li>• United States Agency for International Development (USAID) Demographic and Health Survey (DHS) (87 low- or middle-income countries);</li> <li>• WHO Global School-Based Student Health Survey (GSHS) (97 countries, mostly low- or middle-income countries);</li> <li>• WHO Health Behaviour in School-Aged Children (HBSC) Survey (48 European countries and the United States of America);</li> <li>• World Bank Core Welfare Indicator Questionnaire;</li> <li>• World Bank Living Standards Measurement Survey/Integrated Topic Surveys (LSMS/IS) (38 countries).</li> </ul> <p>Some nationally representative surveys focus on specific health conditions that the country has identified as a priority for adolescents, such as:</p> <ul style="list-style-type: none"> <li>• USAID AIDS Indicator Survey (AIS) (7 countries);</li> <li>• WHO Global Youth Tobacco Survey (GYTS) (120 countries);</li> <li>• USAID Malaria Indicator Survey (16 countries).</li> </ul>
<p><b>5. Health and equity estimates by international agencies</b></p>	<p>These estimates are usually available through free online databases and software produced by major international collaborations. Typically, they are based on secondary analyses of national-level estimates of mortality, morbidity, health outcomes and health services, disaggregated by relevant equity stratifiers (e.g. from DHS and MICS). Important examples include:</p> <ul style="list-style-type: none"> <li>• the WHO Global Health Observatory, including the Global Health Estimates (48) of adolescent health, and the Health Equity Monitor database and its Health Equity Assessment Toolkit (HEAT and HEAT Plus) (54);</li> <li>• UNICEF EQUIST (EQUitable Impact Sensitive Tool) (55);</li> <li>• the Metrics for Management EquityTool (56);</li> <li>• the Population Council GIRL Center Adolescent Data Hub (57);</li> <li>• the United Nations Development Programme (UNDP) Human Development Index and Gender Development Index databases (58), disaggregated at a subnational level;</li> <li>• the Institute for Health Metrics and Evaluation Global Burden of Disease data (49);</li> <li>• the Inter-agency and Expert Group on Gender Statistics database of minimum set of gender indicators (59).</li> </ul> <p>See Appendix 4 for more information on some of these resources.</p>
<p><b>6. Public health/disease surveillance</b></p>	<p>Public health/disease surveillance systems detect, report and respond to notifiable communicable diseases and other health events. Data may be linked to routine facility and community information systems.</p>
<p><b>7. Subnational data sources</b></p>	<p>For some conditions (e.g. noncommunicable diseases, or neglected tropical diseases), there may be very little age-disaggregated data available at the national level. In such cases, smaller, subnational studies may provide useful insights into barriers in general and specifically those experienced by under-served adolescent subpopulations. This may be valuable even if the data cannot be considered representative at the national level.</p>
<p><b>8. Independent research datasets</b></p>	<p>Other relevant published and unpublished datasets particular to a country or subnational area may be very useful, including data collected in the course of academic research, nongovernmental organizations’ programme M&amp;E, and special surveys by international agencies. For example, data from survey interviews with health service providers and health service users aged 15–24 years were collected in 23 countries as part of the 2017 United Nations Population Fund (UNFPA) and International Planned Parenthood Federation (IPPF) <i>Assessment of adolescent and youth-friendly health service delivery in the East and Southern Africa region</i> (60).</p>

### 4.3. INDICATORS AND EQUITY STRATIFIERS

When considering whether to analyse an available dataset, the data mining team should study its indicator list to identify indicators and possible stratifiers which may provide information on under-served adolescent populations and the barriers they experience. These may include indicators related to:

- adolescent health in general or specific to health conditions X, Y and Z;
- exposure to risk factors in general or specific to health conditions X, Y and Z, and vulnerability to those risk factors;
- health service coverage dimensions, i.e. availability, accessibility, acceptability, contact/use and effective coverage, and related barriers;
- the eight global standards for quality health-care services for adolescents, i.e. adolescents' health literacy, community support, an appropriate package of services, providers' competencies, facility characteristics, equity and non-discrimination, data and quality improvement; and adolescents' participation (29).

The indicators in the datasets should also be reviewed with consideration of how the data may be disaggregated by relevant equity stratifiers (e.g. sex, adolescent age group, education level, economic status, urban/rural residency and subnational area). Other stratifiers can be added to this basic list if they are available and may provide further insight about under-served adolescents, e.g. stratifiers related to ethnicity, religion or current school status. Appendices 5 and 6 list commonly used indicators and stratifiers by data source.

When data are limited, the data mining team may need to adapt and work with the closest approximations of desired indicators or stratifiers. Examples are given below.

- **Adolescent-specific data.** When a dataset does not have adolescent-specific data, it may still be useful to assess health service equity for the closest age groups (e.g. 15–24 years old), or even the entire population. Such an exercise might indicate where overarching inequities are greatest in the country (e.g. low-income residents of particular districts), which can inform the qualitative data collection in Module 5.
- **Health service coverage and quality.** Some countries may not have a database of indicators that specifically assess the global standards for quality health-care services for adolescents (29, 60, 61). In that case, data on health service coverage and quality for broader populations may be available and may provide indicative data for adolescents.
- **Type of health services.** In some settings, it may be possible to assess equity and barriers for adolescent subpopulations related to many different types of health service, while in others (especially in low- or middle-income countries) the main adolescent-specific data might focus on SRH services. In that case, it may be useful for data mining to also focus on SRH services, even if they are not the main focus of the assessment.
- **Geographic location.** Geographic disaggregation can be especially useful when a dataset does not include any other stratifier to assess adolescent health service inequities.

## 4.4. QUANTITATIVE DATA ANALYSIS

Quantitative data analysis should take place under the guidance of the assessment team statistician, with findings summarized in Assessment Templates F and G. At its most basic level, measuring adolescent health inequality involves calculating disaggregated estimates, i.e. mean values of indicators across subpopulations stratified by age, sex, education, economic status, place of residence and subnational area (47).

For estimates obtained from samples of the population (e.g. household surveys), standard errors and confidence intervals can be used to check whether indicators are systematically different between adolescent subgroups.

Building on disaggregated data, summary measures of inequality can be calculated that present the degree of inequality in one single number. The 2013 WHO *Handbook on health inequality monitoring: with a special focus on low- and middle-income countries* (47) and the 2017 *Health Equity Assessment Toolkit Plus: upload database edition: technical notes* (62) describe simple and complex measures of inequality which can be used during such analyses. Simple measures – such as *difference* and *ratio* – are best suited for comparisons between two subgroups. *Difference* is an example of an absolute inequality measure, which indicates the magnitude of inequality, while *ratio* is an example of a relative measure, which shows proportional inequality among subgroups. Simple measures are generally easy to understand, but cannot simultaneously compare more than two subgroups; nor do they account for the population size of each subgroup. Complex measures make use of data from all subgroups and may consider the population size of each subgroup too. Examples are given below.

- Two measures used to illustrate health inequality in ordered subgroups (i.e. subgroups with an inherent positioning that can be ranked, e.g. economic status ranked from poorest to wealthiest quintile):
  - *slope index of inequality* shows absolute inequality and specifically the difference between the most advantaged and most disadvantaged subgroups, taking into account all subgroups and the population share of each subgroup;
  - *concentration index* is a measure of relative inequality, expressing the disproportionate distribution of a health indicator among subgroups.
- Two measures used to illustrate health inequality in non-ordered subgroups (i.e. subgroups that cannot be logically ranked, e.g. subnational regions):
  - *mean difference from mean* measures the extent to which the mean values of a health indicator in subgroups deviate from the overall mean or a select reference value, expressing absolute inequality;
  - *Theil index* allows for measurement of relative inequality.

**Some software applications make statistical analyses, such as those described above, straightforward. The WHO Health Equity Monitor database and its accompanying Health Equity Assessment Toolkit (HEAT) software provide one example. The HEAT Built-In Database Edition comes pre-installed with the WHO Health Equity Monitor database, while the HEAT Plus Upload Database Edition allows users to upload and work with their own national database. See Appendix 4 for more information.**



## ASSESSMENT TEMPLATE F.

**First data mining summary table of adolescent subpopulation and barrier findings: Data source, indicator, stratifier and type of health service** *In practice, findings may be more easily organized and accessed if column 4 is removed and the assessment team produces three separate tables for health services X, Y and Z.*

Data source	Indicator	Stratifier(s)	General, X, Y or Z health services	FINDINGS			
				Disaggregated data	Summary measure(s) of inequality	Under-served adolescent subpopulation	Possible health service barrier(s)*
1.	(1)						
	(2)						
	(3)						
	...						
2.	(1)						
	(2)						
	(3)						
	...						
...							

\* Possible health service barriers should only be entered here if they are suggested *within the same dataset* for the identified under-served population. Ideally, hypotheses about barriers and causality in the dataset will be assessed using multiple regression analysis, with statistical significance noted. However, it may not be feasible to determine causality, e.g. if poor adolescents are identified as under-served, it may not be clear if this is caused by significantly fewer financial resources, significantly lower education, or other factors. If this is not possible, patterns within the dataset suggesting barriers can be cautiously noted for further exploration in the assessment. For example, if analysis of a dataset reveals rural adolescents are under-served and also live four times farther from health facilities than urban adolescents, then distance to facilities can be noted as a possible barrier for further exploration.



ASSESSMENT TEMPLATE G:

Second data mining summary table of adolescent subpopulation and barrier findings: Coverage dimension and type of health service

Health service coverage dimension	FINDINGS		Type of health service (check if applicable)			
	Under-served adolescent population	Possible health service barrier(s)*	General	Name of health condition X	Name of health condition Y	Name of health condition Z
Availability	(1)					
	(2)					
	(3)					
	...					
Accessibility	(1)					
	(2)					
	(3)					
	...					
Acceptability	(1)					
	(2)					
	(3)					
	...					
Contact/use	(1)					
	(2)					
	(3)					
	...					
Effective coverage	(1)					
	(2)					
	(3)					
	...					

\* Possible health service barriers should only be entered here if they are suggested *within the same dataset* for the identified under-served population. Ideally, hypotheses about barriers and causality in the dataset will be assessed using multiple regression analysis, with statistical significance noted. However, if this is not possible then patterns suggesting possible barriers can still be cautiously noted for further exploration.

## 4.5. DATA MINING CASE-STUDY: SEXUAL AND REPRODUCTIVE HEALTH SERVICES

In this section, a case-study is described to illustrate how the data mining process might look for an ASHBA of SRH services. In this hypothetical scenario, the government conducts an adolescent barriers assessment as part of a national adolescent SRH programme review, and decides to focus the assessment on family planning, HIV prevention and post-abortion care services.

First, the assessment team reviews Appendix 5 and determines that four of the surveys (MICS, DHS, LSMS/IS and the AIS) have been conducted in recent years in the country and data have been collected for most of the indicators shown in Table 4, as well as other indicators which are relevant to the three health services of interest. All of these databases have the potential to be stratified by sex, age, economic status, place of residency and subnational region, and other indicators might potentially be used as equity stratifiers, as shown in column three of Table 4.

As part of Module 3 (Literature review), the assessment team already summarized relevant findings from the MICS, DHS, LSMS/IS and AIS that were published in survey reports. However, almost none of the published report findings were disaggregated specifically for adolescent population (10–19 years), let alone for adolescent subpopulations (e.g. 10–14 years, 15–19 years).

The next step in this hypothetical case-study is that the assessment team approaches the database managers for the most recent round of MICS, DHS, LSMS/IS and AIS in their country and requests their assistance in disaggregating the data further, as part of the data mining exercise. Each database manager agrees to assist, but is limited by what can be provided based on the specific data that were collected in that country, and how the data have been organized and can be accessed in their database. In the end, some of the indicators and equity stratifiers in Table 4 are analysed, as follows:

- MICS indicators are analysed for 15–19 year olds (and 15–17/18–19 year olds) for all five standard equity stratifiers, and several additional ones, e.g. SRH knowledge and behaviour for 15–17 year olds stratified by orphanhood status;
- DHS indicators are analysed for 15–19 year olds for all five equity stratifiers and several additional ones, e.g. problems accessing health care through health insurance coverage;
- LSMS/IS indicators are analysed for 10–19 year olds (and 10–14/15–19 year olds) for all five equity stratifiers and several specific ones, e.g. experience of delay seeking health care by ethnicity;
- AIS indicators are analysed for 15–19 year olds (and 15–17/18–19 year olds) for all five equity stratifiers and several additional ones, e.g. comprehensive knowledge of AIDS by marital status.

In addition to these common databases, the assessment team requests assistance in mining some country-specific databases as outlined in Appendix 6. These represent quite different sources, e.g. the national health programme monitoring database, a one-time health facility survey and an ongoing academic randomized controlled trial of adolescent SRH intervention. They produce new information, for example:

- the national programme monitoring database is analysed for 15–19 year olds (and 15–17/18–19 year olds) by subnational region, e.g. obstetric complications due to abortion;
- the health facility surveys is analysed for 15–19 year olds by rural/urban status, e.g. percentage of health care providers who report providing pre-/post-abortion counselling;
- the academic database is analysed for year of adolescent age (e.g. 13, 14, 15, 16, 17, 18, 19 years) for all available equity stratifiers, e.g. type of contraceptive use.

In concluding this hypothetical case-study, the findings from all of these analyses would be summarized in completed Assessment Templates F and G within the data mining report.

Table 4. Examples of data sources, indicators and stratifiers for an adolescent health services barriers assessment focused on family planning, HIV prevention and post-abortion care services

Data source and key sponsor	Examples of health and health service indicators, by available age range ( <i>years</i> )	Examples of other possible equity stratifiers, by available age range ( <i>years</i> )
UNICEF MICS	<p><b>15–24:</b></p> <ul style="list-style-type: none"> <li>• SRH knowledge and behaviour (female)</li> </ul> <p><b>15–49:</b></p> <ul style="list-style-type: none"> <li>• Reproductive health service (female)</li> </ul>	<p><b>0–17:</b></p> <ul style="list-style-type: none"> <li>• Parent died</li> </ul> <p><b>5–17:</b></p> <ul style="list-style-type: none"> <li>• Health insurance coverage</li> </ul> <p><b>10–14:</b></p> <ul style="list-style-type: none"> <li>• Orphan school attendance</li> </ul> <p><b>15–24:</b></p> <ul style="list-style-type: none"> <li>• Literacy rate (female)</li> </ul>
USAID DHS	<p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Problems accessing health care (e.g. permission, money, distance) (female)</li> <li>• Participation in decision-making about own health care (female, married)</li> <li>• Male circumcision (male)</li> </ul> <p><b>15–24:</b></p> <ul style="list-style-type: none"> <li>• At least one birth before age 20 (female)</li> </ul> <p><b>15–24 (retrospective under-16, 17–19):</b></p> <ul style="list-style-type: none"> <li>• Age at most recent birth</li> </ul>	<p><b>5–14, 15–24:</b></p> <ul style="list-style-type: none"> <li>• Annual per capita expenditure outpatient or inpatient care</li> </ul> <p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Health insurance coverage</li> <li>• Experience of mass media or literacy rate</li> </ul>
World Bank LSMS/IS	<p><b>All ages:</b></p> <ul style="list-style-type: none"> <li>• Dissatisfaction with inpatient or outpatient care in last 4 weeks and reasons (e.g. due to poor quality care, no drugs available, unfriendly treatment, long waiting hours, expense).</li> <li>• Experience of delay seeking health care, and reasons (e.g. expense, self-treatment, distrust)</li> <li>• Experience of health care refusal, and reasons (e.g. expense, not eligible)</li> </ul>	<p><b>All ages:</b></p> <ul style="list-style-type: none"> <li>• Ethnicity</li> <li>• Religion</li> <li>• Chronic illness/disability (e.g. infectious diseases, mental health issues)</li> <li>• Difficulty finding money to pay for household health care</li> </ul> <p><b>10–14, 15–19:</b></p> <ul style="list-style-type: none"> <li>• School attendance</li> </ul> <p><b>15–24:</b></p> <ul style="list-style-type: none"> <li>• Literacy rate</li> <li>• Unemployment rate</li> </ul>
USAID AIS	<p><b>16–17, 18–19:</b></p> <ul style="list-style-type: none"> <li>• HIV prevalence</li> </ul> <p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Knowledge of HIV prevention</li> <li>• Comprehensive knowledge of AIDS</li> <li>• Prior HIV testing coverage</li> <li>• Pregnant women counselled and tested for HIV (female)</li> <li>• Male circumcision, and who performed it (male)</li> </ul>	<p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Marital status</li> <li>• Employment status</li> </ul>

## 4.6. DATA MINING CASE-STUDY: GENERAL HEALTH SERVICES

In this section, a case-study is described to illustrate how the data mining process might look for an ASHBA of general health services. In this hypothetical scenario, the government conducts the adolescent barriers assessment as part of a national adolescent health programme review, and decides to focus the assessment on adolescent health services for substance use, self-harm and injury.

First, the assessment team reviews Appendix 5 and determines that three of the surveys (GSHS, LSMS/IS

and the GYTS) have been conducted in recent years in the country and have data on indicators shown in Table 5, as well as other indicators which are relevant to the three health services of interest. The World Bank LSMS/IS has the potential to be stratified by the five common equity stratifiers (i.e. sex, age, economic status, place of residency and subnational region), while both the GSHS and the GYTS have the potential to be stratified by some of them. For all surveys, other indicators might also potentially be used as equity stratifiers, as shown in column three of Table 5.

**Table 5. Examples of data sources, indicators and stratifiers for an adolescent health services barriers assessment focused on services for substance use, self-harm and injury**

Data source and key sponsor	Examples of health and health service indicators, by available age range (years)	Examples of other possible equity stratifiers, by available age range (years)
WHO GSHS	<p><b>11 or younger, 12, 13, 14, 15, 16 or older:</b></p> <ul style="list-style-type: none"> <li>• Problems associated with alcohol use</li> <li>• Current drug use</li> <li>• Suicide ideation and attempts</li> <li>• Physical activity</li> <li>• Parental regulation and monitoring</li> <li>• Attempted cessation of cigarette smoking</li> <li>• Frequency of serious injury</li> </ul>	<p><b>11 or younger, 12, 13, 14, 15, 16 or older:</b></p> <ul style="list-style-type: none"> <li>• School attendance</li> <li>• Travel to school</li> </ul>
World Bank LSMS/IS	<p><b>All ages:</b></p> <ul style="list-style-type: none"> <li>• Chronic illness/disability (e.g. mental health issues)</li> <li>• Taking medication for chronic illness/disability</li> <li>• Sudden illness (e.g. broken bone)</li> <li>• Dissatisfaction with inpatient or outpatient care in last 4 weeks and reasons (e.g. due to poor quality care, no drugs available, unfriendly treatment, long waiting hours, expense).</li> <li>• Experience of delay seeking health care, and reasons (e.g. expense, self-treatment, distrust)</li> <li>• Experience of health care refusal, and reasons (e.g. expense, not eligible)</li> </ul>	<p><b>All ages:</b></p> <ul style="list-style-type: none"> <li>• Ethnicity</li> <li>• Religion</li> <li>• Chronic illness/disability (e.g. mental health issues)</li> <li>• Difficulty finding money to pay for household health care</li> </ul> <p><b>10–14, 15–19:</b></p> <ul style="list-style-type: none"> <li>• School attendance</li> </ul> <p><b>15–24:</b></p> <ul style="list-style-type: none"> <li>• Literacy rate</li> <li>• Unemployment rate</li> </ul>
WHO GYTS	<p><b>13–15:</b></p> <ul style="list-style-type: none"> <li>• Prevalence of tobacco use</li> <li>• Desire to quit smoking</li> <li>• Ever received help or advice to stop smoking</li> </ul>	

As part of Module 3 (Literature review), the assessment team has already summarized relevant findings from the GSHS, LSMS/IS and the GYTS as published in survey reports. However, almost none of the published report findings were disaggregated by adolescent age groups or for all possible equity stratifiers.

The next step in this hypothetical case-study is that the assessment team approaches the database managers for the recent rounds of GSHS, LSMS/IS and GYTS in their country and requests their assistance in disaggregating the data further, as part of the data mining exercise. Each database manager agrees to assist, but is limited by what can be provided based on the specific data that were collected in that country, and how the data have been organized and can be accessed in their database. In the end, some of the indicators and equity stratifiers in Table 5 are analysed, as follows:

- GSHS indicators are analysed by all possible adolescent age ranges and stratified by sex and education, as well as by several additional equity stratifiers, e.g. frequency of serious injury by distance travelled to school (as possibly relates to road injury);
- LSMS/IS indicators are analysed for 10–19 year olds (and 10–14/15–19 year olds) for all five equity stratifiers and several additional ones, e.g. chronic illness/disability (e.g. mental health issues) by difficulty finding money to pay for household health care;

- GYTS indicators are analysed for 13–15 year olds by available standard equity stratifiers (i.e. sex, education, place of residency and subnational region), and several additional ones, e.g. ever received help or advice to stop smoking by subnational region.

In addition to these common databases, the assessment team also requests assistance in mining some country-specific databases as outlined in Appendix 6. This produced new information, for example:

- the civil registration and vital statistics database is analysed for 10–19 year olds (and 10–14/15–19 year olds), e.g. suicide mortality rate by subnational region;
- a household survey is analysed for 10–19 year olds (and 10–14/15–19 year olds), e.g. prevalence of daily smoking by rural/urban status;
- the national health system monitoring database is analysed for percentage of health facilities with health workers trained to provide mental health services to adolescents;
- a health facility survey is analysed for percentage of health facilities with systems in place for adolescent psychosocial referral.

In concluding this hypothetical case-study, the findings from all of these analyses would be summarized in completed Assessment Templates F and G within the data mining report.

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## 4.7. DATA MINING REPORT COMPONENTS

A brief data mining report should be produced to describe findings on very under-served adolescent subpopulation(s) in the country, and what barriers they face. The quantitative data mining report should include the following components.

- **Introduction.** A few sentences explaining the AHSBA and the quantitative data mining component.
- **Methods.** A brief narrative description of methodology, referencing the completed assessment templates for specific databases searched and indicators and equity stratifiers analysed.
- **Findings.** A maximum 7-page narrative summary of the data mining findings based on the completed and

attached assessment templates. For each adolescent health condition X, Y and Z, this should describe the main adolescent health service inequities and barriers, with due attention to differences between girls and boys, age groups and equity stratifiers. This should include 1–2 pages of geographic mapping (for adolescent health conditions X, Y and Z) to help inform the selection of sites for subnational qualitative research (Module 5).

- **Discussion with proposal for next steps.** One page proposing (based on the data mining) the adolescent subpopulations and barriers to health services which should be given close attention in Modules 5–6, and in future national programming and M&E. Briefly describe the approximate size, geographic distribution

and identifying characteristics of the under-served adolescent subpopulation(s), and the nature, scale and intensity of the main barriers they experience. This should include any specific suggestions for subnational research, e.g. location of sites, key informants to interview and focus group composition.

- **Limitations and research needs.** A brief section addressing limitations of the data mining exercise, e.g. if available data on adolescents were limited to school children, health facility patients, or the ethnic majority,

then out-of-school adolescents, those who do not access health facilities, or ethnic minorities may have been missed. This section can also identify some ways in which the data sources could be strengthened to overcome these information gaps.

- **Assessment templates.** The completed Assessment Templates F and G should be referenced in the report and attached as annexes.

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## 4.8. ASSESSMENT COMMITTEE MEETING

At this stage, the assessment committee should meet to:

- (a) review the findings from the quantitative data mining report, as well as the literature review and national key informant interview findings;
- (b) select three sites for subnational qualitative research based on the country's adolescent health conditions X, Y and Z, the accumulated evidence on which

adolescent subpopulation(s) have the least access to related health services, and where those adolescent subpopulation(s) are concentrated in the country;

- (c) assist the qualitative research team to identify potential key informants for interview at the subnational level.

See section 5.1 for more guidance on points (b) and (c) above.

### QUESTIONS AND DECISION POINTS FOR THE ASSESSMENT COMMITTEE

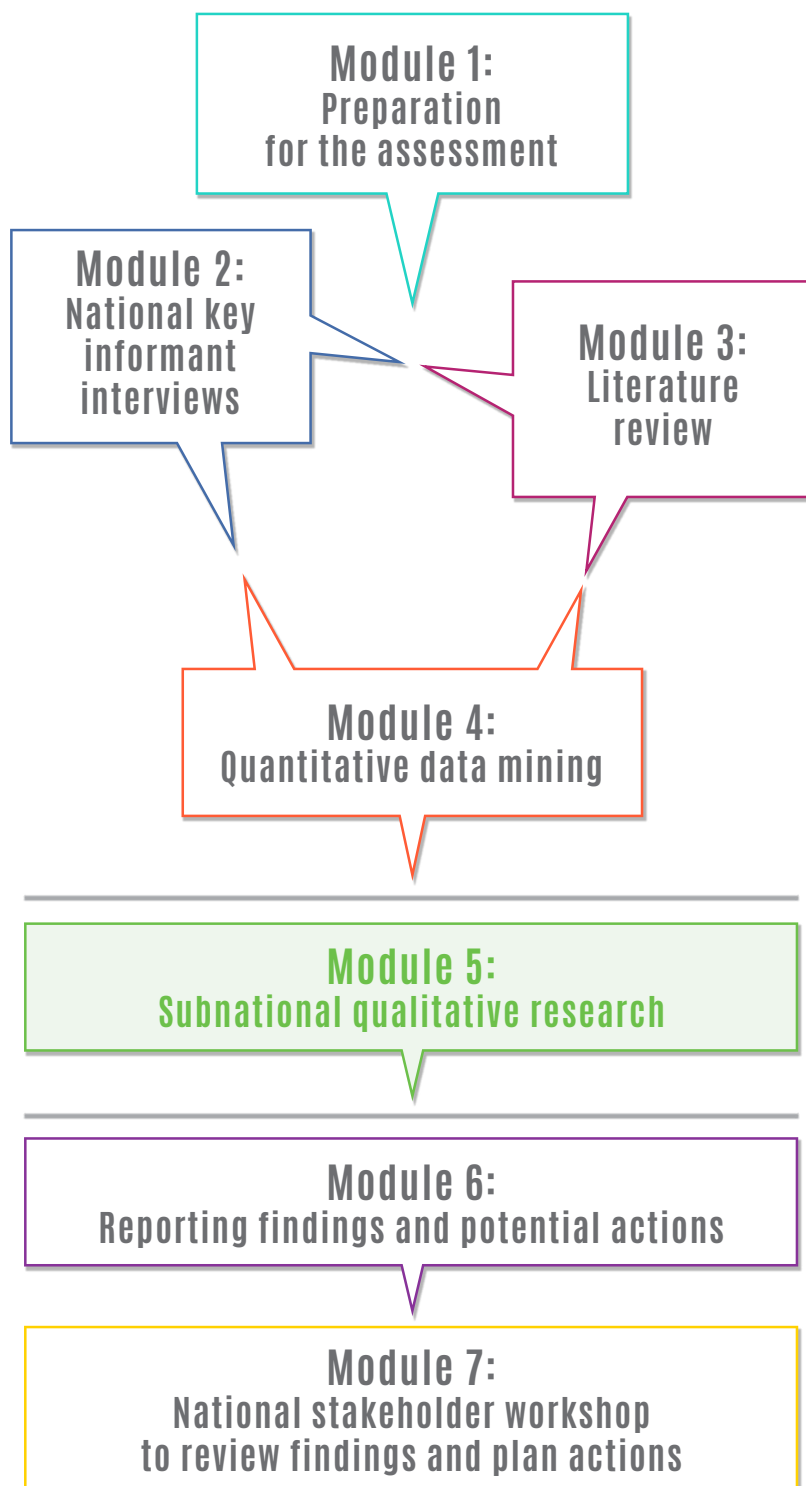
1. Did the data mining exercise adequately answer the assessment questions, i.e. which are the under-served adolescent populations in the country, and what barriers do they face?
2. Based on the data mining exercise, which under-served adolescent subpopulations and which subnational sites might be most suitable for qualitative research?
3. What logistical arrangements need to be made at this stage to proceed with the subnational research?

### OUTPUTS OF QUANTITATIVE DATA MINING

- A quantitative data mining short report with the following sections: introduction, methods, findings (including mapping), discussion with proposal for next steps, limitations and research needs, and completed summary tables based on Assessment Templates F and G.
- Suggestions for qualitative research (Module 5): under-served adolescent subpopulations and subnational research sites.

# Module 5

## Subnational qualitative research



# Module 5

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## Subnational qualitative research

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### OBJECTIVES OF THE SUBNATIONAL QUALITATIVE RESEARCH

1. Conduct interviews and/or focus group discussions with subnational key informants, under-served adolescents, and adults who live and work directly with under-served adolescents to gain new information about the barriers adolescents experience in obtaining effective health services, particularly related to health conditions X, Y and Z.
  2. Based on the subnational qualitative research, describe the barriers under-served adolescents experience in obtaining effective services, particularly related to health conditions X, Y and Z.
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### 5.1. OVERVIEW OF THE SUBNATIONAL RESEARCH

The subnational qualitative research described in this module should ideally be carried out by one or more social scientists who are trained in qualitative research and preferably are experienced in participatory approaches. Other specialists may also be needed, depending on the context; for example, translators for working with ethnic minority, migrant or refugee subpopulations.

The methods should include at least six key informant interviews at each of the three subnational assessment sites. In addition, at least five focus group discussions and 10 follow-up in-depth interviews should be conducted at each of the subnational assessment sites. The overview of subnational qualitative research methods and the approximate time required for each is shown in Table 6.



**Table 6. Overview of subnational qualitative data collection methods, with approximate time, number and templates for each**

Type method	No. of interviews/discussions	Approx. time for each (hours)	Subtotal approx. time (hours)	ASSESSMENT TEMPLATE* (no.)						
				Template A	Template B			Template C		
Subnational KI interviews – site #1	6	1	6	6						
Subnational KI interviews – site #2	6	1	6	6	1			1		
Subnational KI interviews – site #3	6	1	6	6						
FGDs – site #1	5	2	10	5						
Follow-up interviews – site #1	10	0.5	5							
FGDs – site #2	5	2	10	5	1	1	1	1	1	1
Follow-up interviews – site #2	10	0.5	5		'X'	'Y'	'Z'	'X'	'Y'	'Z'
FGDs – site #3	5	2	10	5						
Follow-up interviews – site #3	10	0.5	5							
<b>TOTAL</b>	<b>63</b>	n.a.	<b>63</b>	<b>33</b>	<b>4</b>			<b>4</b>		
				<b>41</b>						

\* X, Y and Z refer to the three health services that are the focus of the assessment.

KI = key informant

FGD = focus group discussion

n.a. = not applicable

The figures given in Table 6 are minimum estimates, as the assessment committee and the qualitative research team should finalize the target number of interviews and group discussions at the onset of the exercise, based on factors such as available funding and the subpopulations and health conditions of interest. For example, if the country's adolescent health conditions X, Y and Z are in quite different fields (e.g. interpersonal violence, sexual health and (non-SRH) communicable diseases), and they affect distinct adolescent subpopulations (e.g. male gang members, older adolescent girls and remote adolescents), then the assessment committee may wish to expand the number and type of interviews and focus group discussions to address the health conditions and subpopulations fully.

If participants agree, all qualitative interviews and focus group discussions should be audio recorded for referencing during data analysis and write-up. To process the data quickly, this module outlines a streamlined debriefing process involving completion of summary forms soon after each interview or group discussion,

similar to that discussed in Module 2. At the end of the module, these completed forms will be compiled and analysed together to make key qualitative findings quickly available in report form. Rigorous qualitative data analysis often involves further steps of full transcription, translation and coding of audio recorded data, but such a process can be very time-consuming and resource-intensive. Countries are encouraged to take such an approach where this is feasible for them; this option is discussed more in section 5.7.

The qualitative research protocol and conduct should follow the *International ethical guidelines for health-related research involving humans*, and particularly its section on research involving children and adolescents (63). This includes obtaining informed consent from adult participants and guardians of legal minors, as well as obtaining assent from legal minors (see section 5.4 for more information). It also includes ensuring the confidentiality of participants' identities at all stages of the research.

## 5.2. PLANNING FOR SUBNATIONAL RESEARCH

**Subnational site selection:** Once Modules 2–4 have been completed, the assessment committee should review all the findings to identify three subnational areas (e.g. region, state or district) for focus group discussions and individual interviews at the community level. These sites should be selected based on the country’s adolescent health conditions X, Y and Z, the accumulated evidence on which adolescent subpopulations have the least access to related health services, the size of the adolescent subpopulations, the scale of the barriers they experience, and where those adolescent subpopulations are concentrated in the country. If enough information is available at this stage, site selection can go beyond broad subnational areas (e.g. major regions) to the specific localities within them where there is high representation of under-served adolescents.

**The selection of the subnational sites should reflect the socioeconomic, geographic, rural/urban and cultural diversity within a country or state. Emphasis should be given to areas where the national key informant interviews, literature review and data mining exercise indicate there are substantial unmet health needs among adolescents, and where general multidimensional poverty, social exclusion and discrimination are great.**

Care should be taken not to select sites for subnational research because they are convenient for the assessment team, e.g. geographically close or relatively easy to reach via main forms of transport. The same biases can lead to certain regions of a country receiving much more effective health services and being better monitored and researched than other regions. Many of the suitable subnational assessment sites are likely to be remote or rural and difficult to access, with relatively few schools or health services. However, urban or semi-urban areas may also be relevant if adolescents who live in urban slums are identified as a particularly under-served group.

**Logistical arrangements:** Once the three subnational sites have been selected, the assessment committee should immediately begin planning for the subnational qualitative research. For each site, it will be useful to recruit a local counterpart (e.g. a local nongovernmental organization working on adolescent health) to help with logistical arrangements in the weeks before the main fieldwork begins. The local counterpart can, in conjunction with local authorities, sensitize community leaders, distribute formal letters of introduction, identify possible communities where under-served adolescents may be found, and even recruit under-served adolescents in advance to ensure the data collection phase is as efficient as possible.

While making these arrangements, the assessment committee should also plan for the assessment team to return to the subnational sites at the end of the assessment to present findings to subnational stakeholders, including local authorities and community members. Findings should be shared with local stakeholders so they can learn and benefit from the assessment as well.

### 5.3. SUBNATIONAL KEY INFORMANT INTERVIEWS

In each subnational assessment site, the qualitative research team should conduct 1–2 hour key informant interviews with (at a minimum):

- **one** relevant government representative (e.g. health, education, youth or social work sectors) at district or community levels;
- **two** representatives of nongovernmental organizations and civil society organizations who work with disadvantaged youth and/or in adolescent health;
- **two** frontline health and social service providers or civil society organization representatives who specialize in adolescent health conditions X, Y and Z, and/or work with the identified under-served adolescent subpopulations, and who are likely to have insight into why some adolescents are not receiving effective coverage;
- **one** adolescent from the identified under-served subpopulation. For example, this could be an adolescent who is a trained peer educator within the school system or health system, or who volunteers or is employed by a local nongovernmental organization or civil society organization. Note this should *not* be one of the adolescents who participates in focus group discussions.

When selecting these subnational key informants, the assessment team should consider gender parity within and across the subnational sites. For example, both male and female adolescents should be interviewed, unless the adolescent health services studied are specific to one gender only.

The general questions, approach and record-keeping for national key informant interviews detailed in Module 2 can be adapted for the subnational key informant interviews. An additional objective is to solicit the assistance of local stakeholders who are familiar with the under-served adolescent communities, and who may be willing to help recruit under-served adolescents and relevant adult community members for focus group discussions and interviews.

Immediately after each subnational key informant interview (or, at the latest, by the end of that day), interviewers should complete a debriefing form (Assessment Template A). In total, 18 such subnational key informant forms should be completed (Table 6). When all subnational key informant interviews have been completed, their overall findings should be summarized in two summary tables (Assessment Templates B and C).

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### 5.4. FOCUS GROUP DISCUSSION PREPARATION

In each of the subnational areas where the key informant interviews are conducted, qualitative data collection with community members should include:

- at least five 2-hour focus group discussions with 10 participants each; these should mostly be focus group discussions with under-served adolescents, and a smaller set of focus group discussions with adults who live or work with them, such as parents, social workers, community health workers or teachers;
- at least 10 follow-up, individual interviews (15–30 minutes) with select focus group participants (about two from each group).

**Focus group composition:** Individual focus groups should be fairly homogenous, meaning they should be composed of participants who are similar to one another, because

participants in a relatively homogenous group are more likely to be comfortable speaking openly. Under-served adolescent group discussions should *not* be composed of diverse adolescents (e.g. male and female; in-school and out-of-school; more educated and less educated; married and not married; older and younger), as participants of a higher social status may be more confident and articulate, and thus dominate the discussions. This is of particularly great concern in this assessment as the goal is to better understand the experiences of under-served adolescents who may be more disadvantaged, at-risk and stigmatized than other adolescents, and who may be inhibited from speaking in mixed groups (e.g. pregnant, unmarried girls or street children).

Box 4 provides an example of how focus group characteristics might be selected in a hypothetical country context.

#### Box 4. Example of the composition of a focus group discussion series for three different adolescent subpopulations

To illustrate how the composition of a focus group discussion series can be carefully designed, considering the criteria above, it is useful to take an example of a hypothetical country where the assessment committee decides to focus on three distinct adolescent groups and health conditions:

- subnational site #1 – urban male gang members (interpersonal violence);
- subnational site #2 – older adolescent girls in a specific rural ethnic group (sexual health);
- subnational site #3 – adolescents in a remote area with a high adolescent malaria mortality rate (malaria).

In the country, health insurance is available; however, its coverage is limited. Health services exist in all three of the subnational sites, but they are largely limited to mobile clinics in site 3. All three of the identified subpopulations are predominantly composed of families and individuals who live below the poverty level, according to government standards.

In each subnational site, interviewers hold three or four focus group discussions with adolescents from the identified subpopulations. Each focus group has 10 participants, at least some of whom do not have health insurance in order to examine that potential barrier. In addition, in each group, interviewers try to ensure at least some participants have used a health service in the past year, so that the quality of services can also be assessed. Adolescent discussion groups are fairly homogenous in terms of sex, approximate age, school status and marital status, to try to create groups in which all participants feel comfortable speaking openly and honestly.

Other characteristics of the focus group discussion series are shown in Table 7.

Table 7. Examples of a focus group discussion series involving male gang members, older adolescent girls in a specific ethnic group, and remote adolescents with high malaria mortality rates

Focus group discussion no.	Type of participant	Approximate age (years)	Characteristics
<i>Subnational site #1 – violence prevention/treatment services for male gang members</i>			
1	Male adolescents	10–14	In/around gangs
2		15–19	In gang(s)
3		15–19	In gang(s)
4	Parents/guardians	n.a.	n.a.
5	Community-based organization representatives, health workers and others working with adolescent gang members	n.a.	n.a.
<i>Subnational site #2 – sexual health services for older girls in a specific ethnic group</i>			
6	Female adolescents	10–14	In-school and out-of-school
7		15–19	Unmarried, in-school
8		15–19	Unmarried, out-of-school
9		15–19	Married, out-of-school
10	Parents, community-based organization representatives, health workers and others working with this subpopulation	n.a.	n.a.
<i>Subnational site #3 – malaria prevention/treatment services for remote adolescents</i>			
11	Male adolescents	10–14	
12		15–19	
13	Female adolescents	10–14	
14		15–19	
15	Parents/guardians, community-based organization representatives, health workers, and others working with adolescents in areas with high malaria prevalence	n.a.	n.a.

n.a. = not applicable

### Focus group discussion participant recruitment:

When recruiting focus group participants, the qualitative researchers should enlist the assistance of local professionals (e.g. nongovernmental organization representatives, or anthropologists) who work with under-served adolescent populations. These local counterparts should also be helpful in securing necessary permissions and consent for participation from parents, guardians, social workers, community health workers, teachers or other adults who live and work closely with under-served adolescents.

Focus group participants should be selected based on profiles or characteristics of very under-served adolescents as identified in the earlier modules. Importantly, under-served adolescents may be difficult to identify, approach and recruit for focus group discussions for multiple reasons. They may be isolated, mobile or dispersed, such as street children or domestic workers. They may have sensitive behaviours or identities, such as LGBTI, sex workers or children of sex workers. They may have limited availability, such as day labourers, off-shore islanders or nomadic youth. They may speak different languages, for example indigenous, minority ethnic, refugee or immigrant adolescents. In addition, adolescents who have the least access to effective health services are also more likely than other adolescents to be outside of existing health, education and social systems. Therefore, qualitative researchers should not rely on such systems alone when trying to recruit adolescents for focus group discussions, and in some instances existing systems should not be relied on at all.

For example, if researchers wish to recruit adolescents living with HIV for focus group discussions on health service coverage, they should try to include HIV-positive adolescents who have never attended HIV treatment and care services and/or those who have dropped out of services. Several strategies could be employed to identify and recruit such adolescents, including requesting the assistance of civil society organizations working with marginalized adolescents (e.g. intravenous drug users, LGBTI youth, homeless young people); consulting HIV counselling and testing facilities to identify adolescents who tested HIV-positive, but did not follow up on referral to treatment and care facilities; snowball sampling or

participatory methods starting with adolescents who are enrolled in HIV care and treatment facilities, with a goal to identify and contact HIV-positive adolescents in their social networks who are not in treatment and care.

**During the recruitment process, qualitative researchers may find themselves in settings where disadvantaged adolescents spend a lot of time on a daily basis (e.g. work sites of day labourers, street hangouts). Researchers should make use of such time to observe their surroundings and adolescents' everyday interactions in order to note information that may be relevant to the assessment (e.g. informal work activities, pill-purchasing practices). Depending on the context, the adolescent subpopulation and the health conditions of interest, more formal participant observational research might be useful and also could be planned within the subnational qualitative component of the assessment.**

### Informed consent and assent, and parental permission:

Before conducting and audio recording focus group discussions or interviews with community members, it is important to review and follow international and national guidelines for obtaining *informed consent* from adult participants, *permission* from parents or legally authorized representatives of legal minor participants and *assent* from legal minors (63, 64). Informed consent is an essential, ethical practice in conducting research. It entails providing potential participants with information, assessing their comprehension of the information provided, and ensuring the consent is voluntary and not coerced by circumstances or persons involved the research. Adults generally are considered capable of providing informed consent. Adolescents who are legal minors have varying capacities to give informed consent (see Box 5), so in most circumstances researchers obtain both a legal minor's assent (i.e. affirmative agreement to participate in research) and permission from a parent or another legally authorized adult for the child's participation in the research. Box 5 provides more background on internationally recommended standards for assent, informed consent and adolescents' evolving capacities.

### **Box 5. Assent, informed consent and adolescents' evolving capacities (64)**

Between the ages of 10 and 19 years, adolescents have rapidly evolving cognitive, social and emotional capacities. Their potential for autonomous decision-making, sound judgement and participation in promoting their own welfare – including providing truly informed consent – increases with age and maturity. When working with adolescents, governments and researchers thus must manage a delicate balance of safeguarding adolescents to prevent possible harm, while respecting their personhood and increasing autonomy.

In addition, during adolescence young people experience a change in status from being children or legal minors (e.g. 10–17 years) to becoming legal adults (e.g. 18–19 years). The qualitative research team will need to review the country's legal requirements in advance of the research to ensure compliance with any relevant legislation. It would also be useful to review customary laws and related practices that govern the lives of adolescents, particularly if these operate parallel to – and possibly even in contradiction of – statutory laws. These might relate to classification of life stages, rites of passage and adult gatekeepers, for example.

When working with adolescents who are legal minors, parents' or guardians' permission may be required; once permission is obtained, however, it is still important to obtain assent from the adolescent him- or herself.

There are instances when obtaining parental permission may be problematic, such as when:

- a conflict exists between the best interests of the adolescent and the interests of the parent (e.g. for research on adolescent sexual abuse, where a parent or other guardian may be the abuser);
- a conflict exists between the knowledge/wishes of the adolescent and the wishes of the parent or guardian, with girls often being more restricted than boys;
- an adolescent is capable of making independent decisions about medical or mental health care and/or is legally empowered to make such decisions;
- the adolescent is legally emancipated because of age or status (married or serving in the military), or is functionally emancipated (living independently);
- parents are functionally incapacitated (e.g. because of mental illness), unavailable or otherwise unable to provide informed permission;
- the adolescent is estranged from their parents;
- the adolescent is capable of providing informed consent for the research, based on the principle of evolving capacity.

Any of these circumstances may be a rationale for waiving parental permission, in accordance with national guidelines and the United Nations Convention on the Rights of the Child.

**When seeking consent and otherwise working with disadvantaged populations, the qualitative research team should use simple, clear wording in whatever language is most familiar to the respondents. In multilingual contexts, this may include having instrument wording carefully translated and back-translated in advance of focus group discussions or interviews to ensure accuracy and consistency.**

**Qualitative research teams can also consider how visual materials (e.g. photographs, videos, drawings or maps) might be used in interviews and focus group discussions, as these methods have been found to be useful in adolescent health research (e.g. (32, 65, 66)). Some of the participatory resources listed in the Introduction provide detailed guidance about how such methods can be adapted (e.g. (30, 31)).**



## 5.5. FOCUS GROUP DISCUSSION AND FOLLOW-UP INTERVIEW PROTOCOL

**Focus group discussion setting and approach:** Several factors contribute to a well-conducted focus group discussion, including the suitability of the setting, the appropriateness of the facilitators, their skill in facilitation and the design of the questions. These are discussed in more detail below.

- **Suitable setting.** Facilitators should try to ensure that the setting is comfortable and private so that participants are more likely to speak freely. For example, if authority figures such as parents or teachers have helped arrange an adolescent focus group discussion, facilitators should explain to them in advance that they cannot be present during the discussion itself, because it might inhibit the open exchange of ideas. The facilitators should also arrange the seating to reduce power or status differentials. For instance, if initially the participants' desks are arranged in rows facing the facilitator, then the desks should be rearranged into a circle so that the facilitator and all participants can easily see and speak to everyone in the group.
- **Appropriate facilitators.** Ideally, focus group discussions should be led by facilitators of the same sex, language and ethnic background as participants in order to promote rapport and understanding. Focus group discussions can be conducted by only one facilitator, but it is best to have a second support person for note-taking, if possible. Note-taking is especially important if participants do not agree for the discussion to be audio recorded.
- **Skilful facilitation.** In a group interview, an interviewer asks respondents specific questions and they reply directly to him or her. Focus group discussions work differently in that the facilitator asks a series of open-ended questions of a group – trying to avoid suggesting any answers within the questions – and after each question encourages participants to discuss it among themselves. The goal of this approach is to help participants relax and speak more honestly and openly about a topic than they might in a formal interview.
- **Protecting confidentiality.** Before each focus group discussion or follow-up interview, the interviewer should state on the audio recording his or her name, the date, the subnational area and the type of group being interviewed. The interviewer should *not* say the full name of participants on the recording. Participants should be asked to only use first names if they introduce themselves or refer to one another during the discussion, to ensure the confidentiality of the audio recorded data.

During the focus group discussion, the facilitator has the important role of gently encouraging all participants to contribute, mediating any disagreements that emerge, and re-directing the conversation when it goes off topic. The facilitator might also ask probing questions to elicit more information on the topic if a participant only briefly mentions something that is relevant, or if there is a need to clarify meaning. For example, if a participant mentions that – at a certain age – local adolescents are not allowed to access health services independently, the facilitator may ask if that differs for sex or education level, and if there are any circumstances when adolescents of that age are allowed more agency and decision-making power.

It is also crucial for the facilitator to routinely ask each group whether, in their opinion, the experiences being described are common or unusual. Patterns should be jotted down in note form or summarized out loud for the audio recording, for example, the facilitator can say, “So, four out of 10 participants say this kind of barrier occurs a lot”, or “Let me recap: two people say this experience has happened to them, and another five say it happened to one of their friends”.

**Focus group discussion questions:** Questions should be worded in a simple, clear and concise way. If some terms are open to interpretation or have no linguistic or cultural equivalent (e.g. adolescent, ethnicity), then they can be defined at the beginning of the discussion, or upon introduction. Use of unfamiliar language can cause confusion and inaccurate reporting, and also undermine trust in the process. Where possible, social scientists who have done qualitative research with the assessment subpopulations should be involved in developing the focus group discussion protocol and questions using local terms. When developing questions, it may also be possible to draw on existing lexicons of local terms which have already developed by anthropologists, nongovernmental organizations or UN agencies. Once a focus group discussion has begun, however, the content and sequence of questions will partially depend on the flow of the discussion. For example, if a barrier is thoroughly addressed in response to the first question of a focus group discussion, then questions that were planned to address that barrier later can be skipped.

An overview of how an AHSBA focus group discussion should proceed is given below.

- Questions initially ask about participants' opinions of peer experiences, rather than their own personal experiences, because third-person questions are easier for adolescents to answer in a group setting, especially when the topic is sensitive (e.g. SRH).
- The first questions begin broadly, so as not to suggest possible answers. The qualitative research team should focus on facilitating discussion among the participants, and avoiding direct back-and-forth between them and the facilitator. However, researchers can interject follow-up questions for clarification or expansion of pertinent issues. For example, if adolescents report that their peers mainly go to traditional healers or street kiosks for health care, the facilitator can ask why they seek care at those services rather than health facilities.
- Once this general health care background is established, the facilitator can ask more direct questions about barriers adolescents experience in getting needed health care. At this point, facilitators can take time to ask about each of the five Tanahashi dimensions in turn; however, they should use simple, familiar wording to make these dimensions understandable to the participants.
- Follow-up questions during this section of the discussion should try to elicit information on how common the adolescent participants believe the barriers to be, while taking note of opposing opinions.
- The facilitator can conclude the focus group discussion by asking participants which adolescent subpopulations are extremely under-served, and if they have suggestions for reducing barriers to health services.

Box 6 provides a series of generic questions which could be used in a focus group discussion with under-served adolescents. These can be adapted and tailored to the specific context, adolescent subpopulation and health service of interest.

## Box 6. Generic guide and script for focus group discussions with adolescents

### Introduction (10 minutes)

[The facilitator should begin by introducing him- or herself and saying:]

— *We are meeting to discuss adolescent experiences of trying to obtain good health services [in general, or specific to health conditions X, Y and Z]. By adolescent, we mean anyone aged 10–19 years old.*

— *In this discussion, we ask that everyone will respect each other's privacy and not share what is said here outside of the group later. What we discuss here will remain confidential.*

— *We would like to audio record the discussion and take notes to help us remember the details later, but no one's name will be connected to what they say.*

— *The discussion will probably take about 2 hours, and then we might ask to speak with a few of you individually afterwards, just for a short time. During the discussion, we will provide you with some refreshments.*

[The facilitator should make sure participants consent before proceeding with audio recording. The facilitator should then introduce the other researcher who is present, and invite members of the focus group to introduce themselves using their first names only, and briefly saying if they are in school or working, and if they live with friends, parents or a spouse.]

### Discussion

*We would like to learn more about what young people like yourselves do when they have health care needs. When we say "health care needs", we mean things like treatment for an illness or an injury, or medicine to prevent disease or pregnancy.*



**Question 1. What do most people your age do if they have health care needs? (10 minutes)**

**Question 2. Is this different for adolescent boys and girls? For younger and for older adolescents? Please explain and provide examples. (10 minutes)**

*We would like to understand more about any barriers young people experience when they are trying to get good health care. I am now going to ask some questions about different kinds of barriers.*

*If you or your peers have experienced any of these barriers, please explain and provide examples.*

**Questions 3/4/5. What are the main barriers you and your peers face in getting good health care? In other words, what are the main reasons young people like you may not get the health services they need? (10 minutes)**

[The facilitator should now ask questions 6.1–6.5, below. Possible follow-up questions are provided below each question, but these should only be asked if the information is not provided spontaneously during the discussion.]

**Question 6.1. (Availability): Are there any government health services available to you and your peers? Please explain and provide examples. (12 minutes)**

- Do the government health services have enough staff, medications and equipment?
- Are there other [nongovernment] health services available in this area, such as private clinics or traditional healers?

**Question 6.2. (Accessibility) Are you and your peers able to reach and pay for government health services when you need them? Please explain and provide examples. (12 minutes)**

- Do young people encounter any problems with distance or transportation?
- Are there problems with costs or opening hours?
- If people can't get government health services when they need them, what do they do instead?

**Question 6.3. (Acceptability) Do you or your peers like or dislike the government health services? Please explain and provide examples. (12 minutes)**

- Are the health workers respectful?
- Do they protect your privacy?
- Do they discriminate against adolescents in general, or any particular groups of adolescents?
- Do they treat girls and boys differently?
- Do they treat younger and older adolescents differently?
- Do you and your peers ever prefer other health services [e.g. private clinics or traditional healers] over government health services?
- Do parents/guardians ever prefer that you or your peers go to different services than the government health services? If yes, who decides?

**Question 6.4. (Contact/use): Are there any other reasons why you or your peers might not attend government health services when you need health care? Please explain and provide examples. (12 minutes)**

- Do you think sometimes young people might not recognize when they need health care?
- Do young people ever have false beliefs about health services?

**Question 6.5. (Effective coverage): Do you think the treatments young people receive through government health services are good? Please explain and provide examples. (12 minutes)**

- Do you or your peers ever have difficulty following the treatment prescribed by health workers (e.g. type and dose of medication, follow-up appointments)?

[One important task during the discussion of these questions is to understand which reported barriers seem to be common, and which groups of adolescents are most affected. Thus, when a participant has described a new barrier, the facilitator can follow up by asking the whole group for clarification. Optional follow-up questions include:]

- *Is this a common problem for young people like yourselves? Please explain.*
- *Does it happen to most youth, or only about half, or only a small number?*
- *Please explain if this affects some adolescent groups more than others.*
- *Please explain if it is different for boys and girls.*
- *Please explain if it is different for younger and older adolescents.*

**Question 7. Please take a moment now to think about the different adolescent groups we have talked about, and the different barriers that prevent them from getting good health care. What do you think could be changed to help them get better health services? In your opinion, what single change would make the biggest difference? Please explain. (15 minutes)**

### **Closing (5 minutes)**

[The facilitator should end the discussion by saying:]

— *Thank you very much for participating in this discussion.*

— *Do any of you have any questions for us before we end? [Answer any questions.]*

— *At this time, we would like to interview two or three people individually for 15–30 minutes. This is a normal part of the assessment, and people are selected based on instructions we have already been given.*

— *Can you all please wait a few minutes while I consult my colleague? Then we will let you know who we would like to interview, and the other participants can leave.*

— *Thank you all again!*

**Conducting follow-up interviews:** The follow-up interviews should be brief and unstructured, and should take place immediately after the focus group discussion to maximize efficiency. Participants should be selected for these one-on-one interviews if they brought up salient information about barriers to health services that warrant further exploration and clarification.

To select participants for follow-up interviews, the focus group participants should be asked to wait a few minutes after the discussion. The qualitative researchers should briefly and discreetly consult each other to agree on which respondents to interview. The senior researcher should make the decision if there is disagreement. Then other

participants should be thanked before they leave, with the explanation that they are not being asked for follow-up interviews because of limited time and pre-existing selection criteria. Prior to each follow-up interview, the interviewer should again request verbal permission from the adolescent to audio record it.

The generic script in Box 6 can be adapted for focus group discussions with parents, social workers, community health workers, teachers or other adults who are close to under-served adolescents. These focus group discussions should concentrate on the participants' opinions about health service barriers experienced by under-served adolescents.

## 5.6. FOCUS GROUP DISCUSSION AND FOLLOW-UP INTERVIEW DATA PROCESSING

Immediately after each focus group discussion and its follow-up interviews (or, at the latest, by the end of that day), the qualitative team should complete a debriefing form (Assessment Template A). Only one form should be completed for each set of one focus group discussion and its two or three follow-up interviews. The interviewers should draw on the audio recordings as needed to complete each form comprehensively and accurately. In total, 15 such focus group discussion/interview forms should be completed (Table 6).

All focus group discussion and follow-up interview audio-files should be organized and named with a standardized code that will make them easy to sort and access at a later date. For example, the file names could be composed of abbreviations of:

- type of interview or discussion (e.g. SKII=subnational key informant interview; FGD=focus group discussion; CMI=community member interview);

- respondent type/number of respondent by interviewer initials (e.g. ADOL=adolescent; PAR=parent/guardian; COM=other community member);
- date and location.

This would result in searchable and sortable electronic file names like “SKII.02byJK.2018.09.23.RegionQ”, “FGD.ADOLbyJK.2018.12.28.RegionR” and “CMI.PARbyJK.2018.07.13.RegionS”.

When the focus group discussion series is finished, interviewers should complete both Assessment Template B and Assessment Template C for each of health services X, Y and Z (Table 6). These should summarize the findings of focus group discussions and follow-up interviews.

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## 5.7. SUBNATIONAL QUALITATIVE DATA ANALYSIS

In the subnational qualitative research report, the findings from focus group discussion/interview sets and key informant interviews can be organized in the same way as Assessment Template A, but it will be critical to move beyond describing findings to also estimating the frequency of participant responses. The narrative summary of findings should summarize key patterns, including any barriers which were frequently reported for under-served adolescent groups, and notable differences in those reports by source (i.e. key informant/focus group discussion), gender, age group, or other equity stratifiers or group characteristics.

To analyse these patterns, it will be necessary to repeatedly and systematically review the content of the 33 debriefing forms (18 subnational key informant, 15 focus group discussion/interview sets). Take, for example, a country where the AHSBA subnational research has focused on very poor adolescent subpopulations and their coverage with prevention and treatment services for diarrhoeal diseases (a rural site), meningitis (a semi-urban site) and lower respiratory infections (an urban site). Findings for each of these health services could be

analysed together and separately. For instance, overarching availability, accessibility, acceptability, contact/use and effective coverage findings for very poor adolescents could be summarized based on a separate review of sections 6.1–6.5 of all 33 completed debriefing forms. Similarly, drawing on each site’s 11 completed debriefing forms, patterns could be summarized specific to health condition/service (diarrhoeal diseases, meningitis, lower respiratory infections) or type of residency (rural, semi-urban, urban).

This is just one example, as the completed debriefing forms and their subsections could be sorted and compared in many different ways to highlight key patterns in the findings. In another example, to explore similarities and differences in adolescent and adult recommendations to improve health services, the debriefing forms could be organized and reviewed considering all adolescent findings (i.e. two national and six subnational key informant interviews, and approximately 12 focus group discussion/interview sets) separately from all adult findings (10 national and 12 subnational key informant interviews, and approximately three focus group discussion/interview sets).

**In the qualitative research, key patterns should be described in detail and include estimates of the frequency of participant reports. Numbers should be provided where they are available; however, if numbers are not available, relative estimates can be used such as:**

- “all” (100%);
- “the vast majority” (approximately 90% or more);
- “a large majority” (approximately 70% or more);
- “most” (more than 50%, especially over 60%);
- “about half” (approximately 40–60%);
- “a minority” (less than 50%, especially under 40%);
- “many” (a large number);
- “several” (more than two, but not many);
- “few” (a small number).

**Generic sentences can be developed and adapted when writing the report narrative, e.g. “In [insert number] focus group discussions, the most frequently reported accessibility barriers were K, L and M. In [insert number] follow-up individual interviews, the only additional accessibility barrier that was frequently reported was N”. Clusters of such generic statements should then be followed by a relevant quote from the interviews (e.g. ((67, 68))).**

The following sentences are examples of how the frequency of participant reports can be summarized in narrative form.

- *“In four out of five focus group discussions with youth who abuse substances, the greatest barriers to accessing drug detoxification services were reported to be too few places available at the facility and/or fear of being arrested. These barriers were also mentioned in the fifth focus group discussion, but that group reported that the greatest barriers to accessing such services were low motivation to stop using drugs, and/or a belief that it is too difficult to stop. Similarly, the greatest barriers to drug detoxification services reported by the subnational key informants were too few facilities (eight informants) and criminalization of drug use (three informants).”*
- *“Most participants in all six focus group discussions reported that the nearest health services were very good and affordable, but they faced accessibility barriers of long*

*distances and the need to pay for transportation to get there. Only two respondents, who were motorbike taxi drivers, said they did not experience such barriers. While distance was also reported as a major barrier by most subnational key informants, almost all said that a severe shortage of skilled health workers was a major barrier as well.”*

- *“In the focus group discussions with unmarried out-of-school adolescents, most reported they were sexually active and were concerned about pregnancy and STIs. However, only a few had ever gone to a health facility to request contraceptives or condoms. Most of the boys did not know condoms were available free at health facilities, and most of the girls said they feared being chastised by health workers. In two of the follow-up interviews, individual girls reported attending health facilities to get implant contraceptives with the help of older sisters/cousins, while one boy said he always used condoms he bought at a chemist shop after he contracted an STI.”*
- *“In all of the four focus group discussions and eight interviews with male adolescent labourers working in mines in the southern zone, most respondents reported having had injuries or illnesses which needed treatment, but few had ever gone to a health service. The most frequently reported barriers were prohibitive cost and belief that the quality of services were low (i.e. untrained staff, little equipment or medications). In contrast, in the three focus group discussions and seven interviews with female adolescent domestic workers in the northern zone, the most frequently reported barriers were prohibitive cost, difficulty getting time off work and/or not having permission from employers to seek care.”*
- *“In the eastern region, where there continues to be violent conflict between the two major ethnic groups, almost all parents reported that the main barriers to health care for their adolescent children relate to the immediate conflict (e.g. avoidance of roads for fear of attack, or army blockage of secure roads). In contrast, in the western region where the conflict has ended, most parents said their adolescent children could reach the nearest health facilities, but they frequently were not able to get needed services because shortages of staff, equipment and supplies persist.”*

In the subnational qualitative research report, each of these overview statements could be followed by a relevant, illuminating quote from an interview or focus group discussion.

Finally, when summarizing these data, the 33 completed debriefing forms should be cross-checked against the audio recordings to make sure that all key issues are captured correctly in the summary and that good quotes are documented well. It is recommended that this cross-checking be done by a second researcher (i.e. not the same person as who led the focus group discussions and completed the debriefing forms) to ensure the reliability of the findings and possibly catch new patterns that were missed during the first analysis.

**The audio recording, debriefing and fact-checking process described in Module 5 should make key qualitative findings quickly available. If time and resources allow, systematic transcription, translation (if needed), and coding and content analysis using a qualitative data analysis software programme (e.g. NVivo) should produce more accurate, nuanced and in-depth evidence. Such tasks are relatively time-consuming and costly, however, so governments would need to plan accordingly. For example, transcription of an audio recording usually takes four to eight times longer than an actual interview or discussion. Thus, to fully transcribe the 75 hours of interviews and discussions outlined in Modules 2 and 5 (see Table 6), one transcriber would need to work full-time for 3 months. Professional translation and qualitative data coding requires a higher skill level and can be even more time-consuming and costly.**

## 5.8. SUBNATIONAL QUALITATIVE REPORT COMPONENTS

At completion of the subnational research, the qualitative research team should produce a report on the main barriers that the under-served adolescent subpopulation(s) experience in obtaining effective health care, analysed in terms of the five Tanahashi coverage dimensions. The report should include the following components.

- **Introduction.** A few sentences explaining the AHSBA and the subnational qualitative research component.
- **Methods.** A brief description of the subnational research sites, with lists or tables showing the number and types of subnational key informants, the number of focus group discussions and follow-up interviews, and the composition of focus groups and follow-up interviews (i.e. number and type of participants).
- **Findings.** A maximum 15-page narrative summary of findings based on the completed and attached assessment templates. This section should describe barriers to health services experienced by the adolescent subpopulation(s) broken down by the five Tanahashi dimensions of availability, accessibility, acceptability,

contact/use and effective coverage. Quotes from qualitative research participants should be included to explain or illustrate key findings in participants' own words.

- **Discussion with proposal for next steps.** One page focusing on possible implications of the qualitative research health service barrier findings for national policies and programming, for consideration in Modules 6 and 7.
- **Limitations and research needs.** A brief section addressing limitations of the qualitative research exercise and any qualitative research needs highlighted by it.
- **Assessment templates.** A total of 41 completed Assessment Templates should be referenced in the report and attached as annexes, i.e. Assessment Templates A (x 33), B (x 4), and C (x 4) (Table 6).

At this stage, copies of all of the electronic focus group discussion and follow-up interview audio files should be submitted to the assessment committee.



## QUESTIONS AND DECISION POINTS FOR THE ASSESSMENT COMMITTEE

1. Based on Modules 2–5, which are the main under-served adolescent subpopulations in the country, and what are the main barriers they face?
2. Based on Modules 2–5, what policy and programme actions can be proposed to reduce or eliminate those barriers?

Detailed guidance on how to use AHSBA findings to answer these questions is found in Module 6.

## OUTPUT OF QUALITATIVE DATA COLLECTION

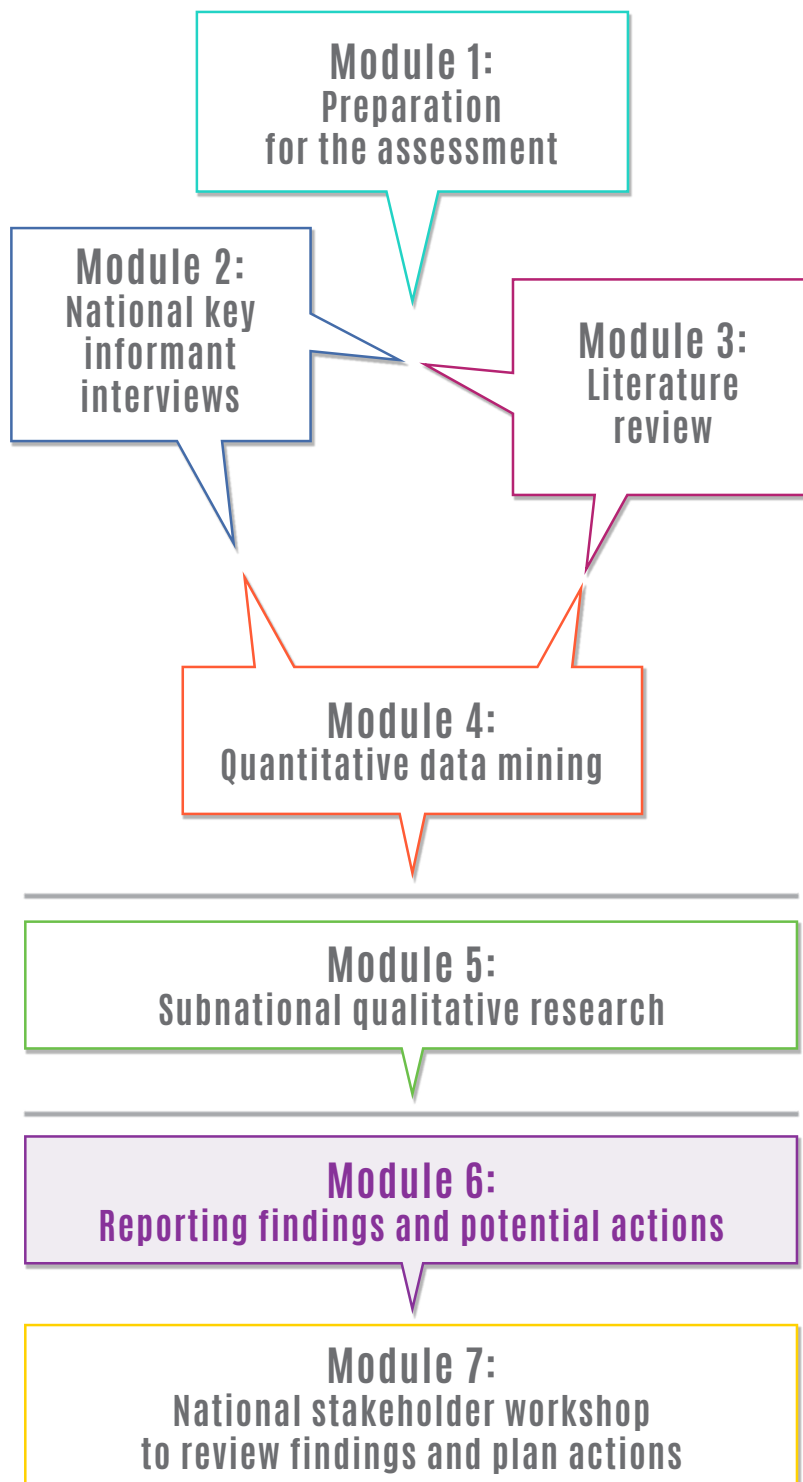
- A subnational qualitative research short report including introduction, methods, findings, discussion with proposal for next steps, limitations and research needs, and completed summary tables based on Assessment Templates A, B and C.



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# Module 6

## Reporting of findings and potential actions



# Module 6

## Reporting of findings and potential actions

### OBJECTIVES OF THE REPORTING OF FINDINGS AND POTENTIAL ACTIONS

1. Synthesize findings from Modules 2–5 focused on barriers under-served adolescents experience in obtaining effective health services, particularly related to adolescent health conditions X, Y and Z.
2. Conduct a small meeting of technical experts to review findings and identify possible actions to improve country policies and programming and to increase effective health service coverage for under-served adolescents, particularly related to health conditions X, Y and Z.
3. Produce a penultimate draft of the assessment report.

In this module, the assessment team will produce a 25-page assessment report that includes a summary of findings organized by the Tanahashi dimensions of health service coverage, as well as potential entry points for action in the current national context. The first step is producing a 15-page synthesis of findings from Modules 2–5 under the five Tanahashi coverage dimensions. The second step will be reviewing and discussing those findings in a small, technical meeting to identify potential

entry points for action. The third step will be producing a penultimate full draft report based on the synthesized findings and technical input, for review at the national review workshop described in Module 7.

At the beginning of this module, all necessary logistical preparations should begin for both the small technical meeting and the national review workshop, so that they can take place in a timely way.

### 6.1. SYNTHESIZING FINDINGS AND DRAFTING THE PRELIMINARY REPORT

In the assessment report, Module 2–5 findings should be triangulated and summarized in a way that highlights key results across most or all methods, and also notable differences between the findings. One practical way to do this is for the assessment team to excerpt and review the findings section of each short report (as organized by availability, accessibility, acceptability, coverage/use and effective coverage), and condense each of those sections down to brief, key findings. The brief sections from each report can then be integrated within a “master” findings

section that is also organized by availability, accessibility, acceptability, coverage/use and effective coverage subsections.

Critically, these different short report sections should not simply be copy and pasted together, but instead should be *synthesized* to highlight key patterns and estimates of the frequency or scale of findings. As in the short reports, numbers should be provided where available to describe qualitative findings or patterns across methods, but if numbers are not available then relative estimates can be used.



**At this stage of the assessment, the subnational qualitative research may be fresh and prominent in the assessment team's minds. Researchers should be careful, however, not to rely disproportionately on that component of the assessment, as each AHSBA method has strengths and weaknesses.**

**Qualitative research can potentially provide in-depth, complex and truthful information about respondents' experiences and perspectives. Nonetheless, because the qualitative sample size is small, those findings cannot be assumed to be "representative" or typical of adolescents in general, or even representative of the subpopulation of disadvantaged adolescents being assessed.**

**In contrast, while quantitative findings may be more superficial than qualitative findings, they have more potential to be representative of broader populations. In addition, the literature review and data mining exercises will have summarized findings from many rigorous, long-term studies and thus offer a valuable complement to the relatively brief subnational qualitative research.**

This process of synthesizing and triangulating findings should include gender analysis and should draw out intersectional issues, both generally and under each of the coverage dimensions. In addition to the gender and intersectionality analysis tools referenced earlier (35, 38, 40–43), other international guidance documents can be drawn upon in this overarching analysis phase. For example, UNICEF's EQUIST was developed as a strategic planning, modelling and monitoring tool and will be expanded in 2018–2019 to integrate a specific module on adolescent health, including guidance on step-by-step analysis of barriers and bottlenecks and identification of suitable strategies to overcome them (55).

A final, critical step in drafting the findings section of the main report will be to systematically reference the short reports to provide readers with further information and detail. For example, to provide additional evidence for a key pattern, a sentence could end with "see Annex 4 (Quantitative data mining report) section 2.4 and Annex 5 (Subnational qualitative research report) section 3.1 for examples".

## 6.2. SMALL TECHNICAL MEETING TO IDENTIFY POTENTIAL ACTIONS

The purpose of the small technical meeting is to review AHSBA findings and explore specific, practical ways to overcome identified barriers within the current national context. The meeting should consider:

- the assessment findings on major barriers;
- how such barriers have been targeted in policy and programmes in the country historically (e.g. what has worked, what has not worked, and current policy and programming gaps related to resources, capacity, as so on);
- current international recommendations related to the barriers, particularly best practice interventions and programming related to adolescent health, gender, health equity and other relevant areas;
- which evidence-based interventions and programmes are appropriate and feasible in the current country context (other important criteria, such as scalability and sustainability, should also be considered).

### **Global guidance on evidence-based programming:**

Before the technical meeting, the assessment team should devote 1–2 days to exploring global guidance documents on evidence-based interventions and programming in relevant fields. This will not be an exhaustive review, but rather should help the assessment team to understand what is currently considered to be best practice internationally in relation to overcoming the identified barriers, and to summarize and share what they have learned for discussion during the small technical group meeting.

When considering possible entry points and actions at the national level, there are several global guidance documents which may be helpful. Steps 6–8 of WHO's Innov8 technical handbook detail how countries can address inequities through intersectoral action, social participation, programme re-design and improved M&E (8).

This includes a real-world example of the redesign of Nepal's adolescent SRH programme, including proposals for: modification of programme content; integration with social programmes and other sectors; structural and organizational changes; management and financial improvements; human resource adjustments; standard-setting, regulation, or legislation advancements; social participation mechanisms; and changes to the ongoing planning, review and M&E cycles.

Additional guidance on best practice interventions and national strategic planning, operational planning, budgeting, legislation, M&E, and intersectoral action can be found in the Global AA-HA! and the Strategizing national health in the 21st century guidance documents (11, 46), among a range of other sources. For example, Appendix 7 of this handbook summarizes section 3 of the Global AA-HA! guidance, namely, the most important evidence-based interventions for (a) positive adolescent health and development; (b) six broad adolescent health areas (unintentional injury; violence; SRH including HIV; communicable diseases; noncommunicable diseases, nutrition and physical activity; and mental health, substance use and self-harm); and (c) interventions with particularly high priority for adolescents in humanitarian and fragile settings (11).

**Technical meeting participants:** Selection of participants for the small technical meeting should be based on their relevant expertise or other key role that they can contribute to the meeting. The technical meeting should comprise approximately 15 participants from diverse and complementary entities/organizations that are relevant to finding innovative solutions to the main barriers identified through the assessment. They may include representatives of government at national and subnational levels, civil society and nongovernmental organizations working with disadvantaged populations, or religious organizations, UN agencies and other multilateral system partners. At least two participants should be adolescent collaborators who come from the disadvantaged subpopulations that were the focus of the assessment.

**The expertise of technical meeting participants should relate to adolescent health, the disadvantaged subpopulations of interest, and the particular health conditions/services that were the focus of the assessment, as well as other relevant sectors which are commonly involved in adolescent health, e.g. youth, education, social protection. However, the assessment team should also strive to include sectors which may be highly relevant even if they are not routinely included in such discussions, e.g. financial protection, or M&E.**

#### **Technical meeting objectives, process, and outputs:**

The 1–2 day technical meeting should be facilitated at the national level. Primary objectives of the meeting are to review assessment findings and identify possible national-level solutions to the barriers experienced by disadvantaged adolescents.

Table 8 provides a generic agenda for the technical meeting. The main points of discussion should be documented closely during the meeting. Outputs should include detailed description of potential solutions and practical next steps for further exploring the appropriateness and feasibility of these solutions. At the meeting, participants should be asked to volunteer (e.g. as leader or advocate) to assess the feasibility and carry out the groundwork involved in possible solutions.

**Engagement at the subnational level:** If possible, subnational representatives who participate in the technical meeting should be supported to provide feedback at the subnational level, including possibly convening a small, local meeting of key stakeholders to explore potential solutions at each of the subnational assessment sites. This is particularly important in settings where subnational governments will have a key role in oversight and implementation of any proposed solutions. Also, given local actors have knowledge of context-specific entry points and opportunities, they may propose useful, innovative solutions that complement those suggested at the national level. In some settings, it may be most effective to initiate such subnational meetings before the national meeting in order to facilitate a ground-up approach.

Table 8. Generic agenda for a small technical meeting to review assessment findings and identify possible action areas

AGENDA ITEM	ACTIVITY
Welcome	Registration, introductions, opening remarks
Meeting objectives	<p>Present the workshop objectives:</p> <ul style="list-style-type: none"> <li>(a) review assessment findings on major barriers;</li> <li>(b) review how such barriers have been targeted in policy and programmes in the country historically and currently;</li> <li>(c) review current international recommendations related to the barriers, particularly evidence-based interventions and programming;</li> <li>(d) identify national and subnational action areas to be explored and next steps towards finding solutions to the barriers.</li> </ul>
Brief presentation on national adolescent health	<p>Brief presentation on:</p> <ul style="list-style-type: none"> <li>(a) adolescence as a unique period of development;</li> <li>(b) sociodemographic description of the country's adolescent population;</li> <li>(c) brief overview of major adolescent health and development issues, globally and nationally.</li> </ul>
Presentation and discussion of AHSBA findings	<ul style="list-style-type: none"> <li>(a) Brief presentation on AHSBA background and methods.</li> <li>(b) In-depth presentation of the assessment's barrier findings on under-served populations, health services of interest, Tanahashi coverage dimensions, and barriers.</li> <li>(c) Plenary questions and discussion of the AHSBA background, methods and findings.</li> </ul>
Presentation and discussion of current efforts to address health service coverage in the country	<p>Presentation and plenary discussion of current efforts to address coverage gaps for the country's general population and specifically for under-served adolescents, particularly related to the barriers identified in the assessment.</p>
Presentation and discussion of current international best practice interventions and programming	<p>Presentation and plenary discussion of evidence-based recommendations/global guidance on ways to improve availability, accessibility, acceptability, contact/use and effective coverage for under-served adolescents, particularly related to the major barriers identified in the assessment.</p>
Working group discussion of possible action areas	<ul style="list-style-type: none"> <li>(a) Participants divide into small working groups (4–5 people), each of which focuses on a health service/population of interest and has an identified facilitator and note-taker.</li> <li>(b) Groups are tasked with identifying possible action areas to be explored and next steps towards finding solutions to the identified barriers. Consideration should be given to the evidence base, feasibility and appropriateness of possible actions, as well as other important issues such as scalability and sustainability.</li> <li>(c) Depending on the context, it may be useful for each participant to contribute to each small group discussion. In that case, a “World Café” approach can be used (69) in which the location and facilitator of specific discussion topics stays constant, but every 20–30 minutes participants move on and contribute to a new discussion.</li> </ul>
Feedback from working groups on action areas	<p>Plenary presentations of working group recommendations and proposed action areas.</p>
Agreement on potential action areas and next steps	<p>Facilitated plenary discussion should focus on:</p> <ul style="list-style-type: none"> <li>(a) discussion and agreement on possible action areas to be explored, at both national and subnational levels;</li> <li>(b) next steps towards finding appropriate, practical solutions to the identified barriers, at both national and subnational levels;</li> <li>(c) request for volunteer leaders or advocates to assess the feasibility and carry out the groundwork involved in exploring possible solutions;</li> <li>(d) preparation for the national stakeholder review and planning meeting.</li> </ul>
Close	<ul style="list-style-type: none"> <li>(a) Agreement on a milestone date for follow-up.</li> <li>(b) Closing address by authorities and partners.</li> </ul>

### 6.3. ASSESSMENT REPORT COMPONENTS

The assessment report can follow the general structure used in scientific reporting, including brief Executive summary, Introduction and Methods sections, followed by somewhat lengthier descriptions of Findings and Potential Actions to address barriers to health service for

under-served adolescents in the country. The content that should be included in each report section is summarized in Table 9. This format can be modified depending on the specific country context and assessment process.

Table 9. Structure and content of the assessment report

REPORT SECTION	No. pages	CONTENT
<b>Front matter</b>	–	Title page, institutional and/or individual authors, Table of contents, Acknowledgements, Glossary, List of abbreviations, etc.
<b>Executive summary</b>	2	A concise overview of the assessment process and findings, including: <ul style="list-style-type: none"> <li>• which under-served adolescent subpopulations were the focus;</li> <li>• what major barriers they face;</li> <li>• recommendations to reduce barriers in programming and improve M&amp;E.</li> </ul>
<b>1. Introduction or Background</b>	2	1.1. Brief background on the assessment, its rationale and specific objectives and how it relates to the SDGs, universal health coverage and international guidelines on adolescent health, including the Global AA-HA! guidance. 1.2. Brief description of the country and particularly the national policy and programming context of the assessment. 1.3. Explanation of the focus of the assessment: <ul style="list-style-type: none"> <li>• name specific disadvantaged adolescent subpopulations;</li> <li>• name adolescent health conditions/services X, Y and Z.</li> </ul>
<b>2. Methods</b>	2	Brief description of the assessment methods, including an overview of their scope and depth (e.g. number of national key informant interviewees; locations of subnational research; ethical clearance granted). <i>Specific reference to the Module 2–5 short reports contained in Annexes 2–5 should be made for detailed description of methods, e.g.:</i> <ul style="list-style-type: none"> <li>• <i>the agencies/entities represented in national key informant interviews (Module 2);</i></li> <li>• <i>the types of search terms used and number of documents reviewed (Module 3);</i></li> <li>• <i>the different databases searched (Module 4);</i></li> <li>• <i>how under-served subpopulations and subnational locations were identified, the agencies/entities represented in subnational key informant interviews, and how participants were recruited for focus group discussions and interviews (Module 5).</i></li> </ul> <i>Specific reference should also be made to Annex sections on the limitations of each research methodology and overarching ethical issues such as identity protection, informed consent, and data coding and storage.</i>

REPORT SECTION	No. pages	CONTENT
<b>3. Findings</b>	15	<p><b><i>Based on AHSBA handbook section 6.1 (Synthesizing findings and drafting the preliminary report):</i></b></p> <p>This section of the report should include a concise description of the following:</p> <p>3.1. The under-served adolescent subpopulations identified and focused on within the assessment, including their approximate population size, geographic distribution and identifying characteristics.</p> <p>3.2. For distinct adolescent subpopulations and/or health services (3.2.1, 3.2.2, etc.)*, the main barrier findings organized under five subsections on availability, accessibility, acceptability, contact/use and effective coverage. In addition to narrative explanation, overarching assessment findings can be summarized in tabular form, e.g. completing an adapted Assessment Template B for each of the five Tanahashi dimensions (excluding the column on potential solutions, as potential actions will be addressed in the next section). This section should include gender analysis and consideration of intersectionality.</p> <p>3.3. Key findings mapped against the existing action areas of the national adolescent health action plan, or the action plans for health conditions X, Y and Z, with a subsection on wider health system performance issues related to inequity.</p> <p>3.4. Brief, notable differences between findings of the national key informant interviews, the literature review, the data mining exercise and the subnational research.</p> <p><i>Specific reference should be made to Annex 1 for key findings for subnational areas, and also to Annexes 2–5 for more detailed description of findings from the national key informant interviews, literature review, data mining and subnational research (i.e. the Module 2–5 short reports).</i></p>
<b>4. Potential actions</b>	3	<p><b><i>Based on AHSBA handbook section 6.2 (Small technical meeting to identify potential actions):</i></b></p> <p>A summary of the possible entry points to address barriers at the national level, noting specific opportunities and potential actions to inform ongoing national programming review and policy, strategy, action plan, and M&amp;E plan development.</p> <p>Identification of areas requiring further assessment or research may also be noted.</p> <p><i>Specific reference should be made to Annex 1 for proposed actions for subnational areas.</i></p>
<b>5. References</b>	1	A list of cited literature following international standards for bibliographic referencing.
<b>6. Annexes</b>	110	<p><i>Annex 1: Key findings and proposed actions for subnational assessment area(s) [5 pages]</i></p> <p><i>Annex 2: Module 2 short report on the national key informant interviews [~11 pages]</i></p> <p><i>Annex 3: Module 3 short report on the literature review [~25 pages]</i></p> <p><i>Annex 4: Module 4 short report on the quantitative data mining [~25 pages]</i></p> <p><i>Annex 5: Module 5 short report on the subnational qualitative research [~44 pages]</i></p> <p><b><i>All short reports should include completed Assessment Templates B–G (summary tables), but should NOT include completed Assessment Templates A (debriefing forms).</i></b></p>
<b>TOTAL</b>	<b>135*</b>	

\*If the assessment examined distinct adolescent subpopulations and/or different types of health services (e.g. if services for adolescent health conditions X, Y and Z did not overlap much), then the Findings section might need to be expanded accordingly.

Once the full assessment report has been drafted, it should be submitted to the assessment committee. At this time, the assessment committee should review the draft report and provide feedback for the writers to further refine it. The next, penultimate draft report should be shared with relevant stakeholders for comment and review at a national stakeholders' workshop to review findings and plan actions (Module 7).



## OUTPUTS OF REPORTING OF FINDINGS AND POTENTIAL ACTIONS

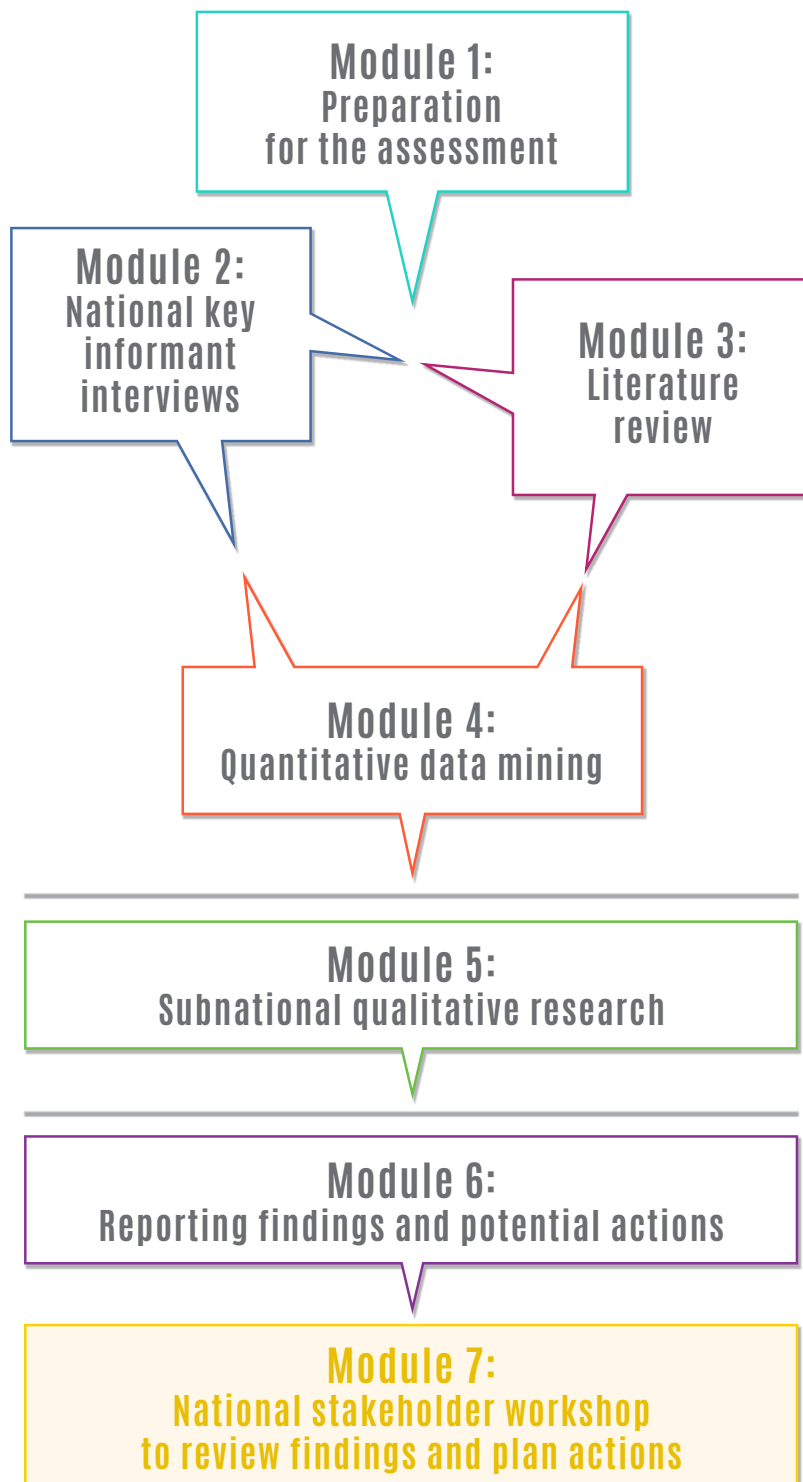
- A brief technical meeting report with detailed description of potential solutions to address barriers and practical next steps for further exploring the appropriateness and feasibility of these solutions.
- A 25-page draft assessment report, including brief executive summary, introduction and methods sections, and lengthier descriptions of findings and potential actions to address barriers to health services for under-served adolescent populations in the country. The four AHSBA short reports should be attached as annexes, with systematic referencing within the main report to key annex content for further information.



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# Module 7

## National stakeholder workshop to review findings and plan actions



# Module 7

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## National stakeholder workshop to review findings and plan actions

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### OBJECTIVES OF THE NATIONAL STAKEHOLDER WORKSHOP

1. Review the findings of the adolescent health services barriers assessment.
  2. Discuss the implications of findings for policies, programming, and M&E.
  3. Set initial national priorities for action.
  4. Establish and delineate a process (with timeline, responsible actors, resources and alignment with planning cycles) for next steps to address the barriers experienced by under-served adolescents.
- 

At least two weeks prior to the national review and planning workshop, the penultimate draft of the assessment report should be distributed to all invited representatives of government ministries and other agencies/entities, with a request that participants thoroughly review the draft report in advance of the workshop and come prepared to discuss it.

### 7.1. NATIONAL REVIEW WORKSHOP PARTICIPANTS

A group of 20–25 senior, intersectoral stakeholders should participate in the national review and planning workshop. It is critical that senior-level government staff (e.g. ministers and directors) in relevant fields participate in this meeting in order to ensure that jointly agreed recommendations are translated into policies and programmes, both within and across ministries. A strategic participant list should be developed to ensure these criteria are met, followed by advocacy at the highest levels to ensure senior government participation.

In addition to representatives of areas directly relevant to the assessment (e.g. adolescent health, specific health conditions/services, specific disadvantaged populations), the assessment committee should consider inviting senior government representatives from fields that may be very relevant to achieving potential actions, even if they are not typically included in adolescent health meetings, such as financial protection, social protection, criminal justice,

the legislature, transport, telecommunications, and/or M&E. See section 5 of the Global AA-HA! guidance for further, practical considerations for planning and managing intersectoral adolescent health collaboration at the national level (11).

Also important to the national stakeholder workshop will be the participation of senior representatives of nongovernmental organizations, civil society organizations and donors working on improving the health and welfare of adolescents – particularly under-served adolescents – in the country. In addition, participation of adolescent collaborators will be key. As well as the two adolescents who participated in the assessment committee, at least two other adolescents who represent under-served subpopulations should be engaged in the national stakeholder workshop and the collaborative work that follows, so that their unique perspectives, knowledge and experience can contribute to better national decision-making.



Ideally these two adolescent collaborators will not yet have been involved in the assessment process (i.e. neither as meeting participants, key informants, nor focus group participants).

Box 7 provides a hypothetical example of participants in a national review and planning workshop in a country where the government has focused its assessment on adolescent mental health services in the aftermath of a humanitarian crisis.

### Box 7. Example of a participant list for a national stakeholder review and planning workshop

In this hypothetical example, the national government has focused its adolescent barriers assessment on substance use, depression and anxiety disorders in the aftermath of a humanitarian crisis. The national stakeholder meeting could be composed of the following participants:

- **12 representatives of senior government:** at least four from the national ministry of health (e.g. adolescent health, mental health, substance use, hospital services); at least five from other national ministries (e.g. humanitarian response, social work, education, women, youth, police, legislature, financial protection); and three from subnational regions where the humanitarian crisis was concentrated;
- **six representatives of nongovernmental, civil society or faith-based organizations:** from services and advocacy agencies focused on mental health, adolescent health, humanitarian crises, and gender, equity and rights;
- **three representatives of development partners:** for example WHO, UNICEF, United Nations Office of the High Commissioner for Refugees, United Nations Office on Drugs and Crime;
- **two senior representatives of academic, research or professional institutions:** specializing in mental health, adolescent health, humanitarian crises, and gender, equity and human rights;
- **four adolescent leaders:** e.g. two 10–14 year olds and two 15–19 year olds from relevant national or subnational youth organizations.

## 7.2. NATIONAL REVIEW WORKSHOP AGENDA AND AHSBA REPORT FINALIZATION

Table 10 provides a generic agenda for a 2–3 day national stakeholder workshop to review assessment findings and plan actions. It also contains an optional segment on developing a process of integrating equity, gender and human rights considerations into national M&E of adolescent health services.

After the national workshop, the lead researcher and/or assessment committee should finalize the assessment report based on edits agreed at the workshop.

**Each country has a unique history of adolescent health policies, programming, and M&E. Even countries with similar approaches are likely to be at different stages within their national review and planning cycles at any point in time. Therefore, the agenda in Table 10 should be carefully adapted and tailored to the specific national context. For example, depending on the context, it may be more practical and efficient to have a large, 1-day stakeholder workshop followed by 1–2 days of smaller, working workshops for the stakeholders who are responsible for acting on the assessment findings and implementing proposed actions.**

Table 10. Generic agenda for a national stakeholder workshop to review findings and plan actions

Agenda item	Activity
<i>Introduction</i>	
<b>Welcome and participant introductions</b>	Welcome from the health ministry, other key ministries/sectors and key partners, followed by brief participant introductions.
<b>Workshop objectives</b>	<ul style="list-style-type: none"> <li>(a) Review the workshop objectives, the process for agreeing on actions and the expected outputs/outcomes.</li> <li>(b) Reinforce that the workshop will focus on developing consensus and shared ownership of the key areas of action and next steps moving forward.</li> </ul>
<b>1. Review of findings from the national adolescent health service barriers assessment</b>	
<b>1.1. Presentation of key findings from the assessment of barriers experienced by under-served adolescents</b>	<ul style="list-style-type: none"> <li>(a) Brief presentation of key points from the Introduction and Methods sections of the penultimate draft report.</li> <li>(b) More in-depth presentation of the report's Findings and Potential Actions sections.</li> </ul>
<b>1.2. Discussion of the assessment findings</b>	<p>Plenary discussion should focus on:</p> <ul style="list-style-type: none"> <li>(a) answering questions about the assessment;</li> <li>(b) possible gaps in the assessment findings, e.g. key under-served adolescent subpopulations that may have been missed;</li> <li>(c) limitations of the review methodology and important gaps in knowledge;</li> <li>(d) establishing consensus on key findings on under-served populations and the barriers they experience, and any changes to the Findings section of the final assessment report.</li> </ul>
<b>2. Development of a national action plan to address barriers experienced by under-served adolescents</b>	
<b>2.1. Interactive exercise on patient pathways</b>	<ul style="list-style-type: none"> <li>(a) Divide into small groups of 6–8 people to read and discuss pre-prepared “patient pathways” posted on a wall. Patient pathways should provide a detailed story reflecting the main barriers experienced by disadvantaged adolescents as found in the assessment. The stories of Aisha and Samuel in this handbook’s Dedication are generic examples of patient pathways which might be appropriate for adaptation in some settings.</li> <li>(b) Groups should discuss each step in a given pathway and identify key barriers that disadvantaged adolescents might experience at that step. These should be noted on cards and posted under the relevant step on the wall display.</li> <li>(c) Groups should also identify core quality issues and underlying system strengthening needs which affect these barriers.</li> <li>(d) Small groups should present their patient pathway reflections back to the plenary for discussion of policy and programme implications.</li> </ul>
<b>2.2. Presentation(s) on current efforts to address health service coverage gaps</b>	Presentation(s) should include current efforts to address coverage gaps for the country’s general population and specifically for under-served adolescents. For example, health financing policies to promote financial protection and ensure clients are not exposed to financial hardship through direct payments; or an increase in number and type of health service platforms (e.g. public and private facilities, schools, mobile clinics, pharmacies, youth centres, e-health and outreach) available to under-served adolescents.
<b>2.3. Presentation on global guidance on evidence-based intervention</b>	Review of best practice recommendations/global guidance on ways to improve availability, accessibility, acceptability, contact/use and effective coverage for under-served adolescents, particularly related to the health conditions targeted and major barriers identified in the assessment. Ideally this will include examples of what other countries have done to successfully address coverage gaps for under-served adolescents.

Agenda item	Activity
<b>2.4. Presentation on potential actions produced by the small technical meeting</b>	Review and discuss the potential actions outlined by the small technical meeting, and consider how to adopt them or other actions to improve country policies and programming.
<b>2.5. Agreement on areas for action to address barriers experienced by under-served adolescents</b>	Plenary discussion should agree on key areas for action to reduce health service barriers experienced by under-served adolescents at national level, and also (if desired) at subnational level.
<b>2.6. Working groups on policy and programme action plans</b>	<p>The plenary should create 2–3 working groups to develop feasible action plans/ recommendations for addressing the agreed areas for action in policies and programming, indicating key actors responsible and a time frame.</p> <p>To ensure the proposed action plans are feasible, working groups should consider and try to achieve an appropriate balance of the following:</p> <ul style="list-style-type: none"> <li>(a) remedial and preventive action;</li> <li>(b) short-, medium- and longer term action;</li> <li>(c) action by the health sector alone, and intersectoral or whole-of-society action;</li> <li>(d) national and possibly subnational action;</li> <li>(e) actions that call for new resources (e.g. people and funds) and those which can build on existing efforts, including re-orienting approaches;</li> <li>(f) scalable and sustainable action.</li> </ul>
<b>2.7. Feedback from working groups on policy and programme action plans</b>	Presentation of working group recommendations and proposed action plans.
<b>2.8. Agreement on next steps for policy and programme action plans</b>	<p>Facilitated plenary discussion should focus on:</p> <ul style="list-style-type: none"> <li>(a) next steps for taking agreed recommendations forward as an action plan, with an agreed time frame;</li> <li>(b) creating a national implementation working group to support the implementation and follow-up.</li> </ul>
<b>3. <i>Development of a process for integrating equity, gender and rights considerations into national M&amp;E of adolescent health services</i></b>	
<b>3.1. Presentation(s) on current M&amp;E of adolescent health service quality and coverage, and the programme review process</b>	<p>Presentation(s) should address:</p> <ul style="list-style-type: none"> <li>(a) the current plan and practice of routine adolescent health M&amp;E at national and subnational levels;</li> <li>(b) the programme review process and areas for improvement, e.g. gaps in how national and subnational data are collected, including whether sex- and age-disaggregation is adequate (e.g. 10–19, 10–14 and 15–19-year age groups);</li> <li>(c) availability of other relevant data disaggregated by social and economic factors at the national and subnational levels;</li> <li>(d) possible ways that existing algorithms/processes could better integrate equity, gender and rights considerations into routine M&amp;E of national and subnational adolescent health programming.</li> </ul>

Agenda item	Activity
<b>3.2. Working groups on M&amp;E action plans</b>	<p>The plenary should create 2–3 working groups to discuss gaps in data/knowledge and consider processes for collection and collation of data at national, subnational and local government authority levels.</p> <p>Working groups should consider adolescent health programming M&amp;E gaps, such as incomplete recording of age- and sex-disaggregated data, need for capacity-building or need for increased data review.</p> <p>Working groups should try to identify:</p> <ul style="list-style-type: none"> <li>(a) national and subnational level actions, e.g. whether existing algorithms/processes can be adapted to better integrate equity, gender and rights considerations into routine M&amp;E of national and subnational adolescent health programming;</li> <li>(b) actions that build on existing M&amp;E efforts;</li> <li>(c) what is needed, and what is already in place, to support change for a more enhanced focus on equity, gender and rights;</li> <li>(d) 2–3 actions that can be adopted and implemented in the next 18 months, and a specific time frame.</li> </ul>
<b>3.3. Feedback from working groups on M&amp;E action plans</b>	<p>Presentation of working group recommendations and proposed M&amp;E action plans.</p>
<b>3.4. Agreement on next steps for M&amp;E action plans</b>	<ul style="list-style-type: none"> <li>(a) Plenary discussion and agreement on national priorities for adolescent health programming M&amp;E action plans and next steps for taking actions forward, including how the national implementation working group will support the process.</li> <li>(b) A facilitator should summarize the agreed M&amp;E actions and next steps, including timeline, responsible actors, resources and alignment with planning cycles, and should seek consensus on these next steps.</li> </ul>
<b>Close</b>	<ul style="list-style-type: none"> <li>(a) Agreement on a milestone date for follow-up.</li> <li>(b) Closing address by authorities and partners.</li> </ul>

## OUTPUTS OF THE NATIONAL STAKEHOLDER WORKSHOP

- Agreed national priorities for action.
- A delineated process (with timeline, responsible actors, resources, and alignment with planning cycles) for next steps to address the barriers experienced by under-served adolescents.
- The final national adolescent health service barriers assessment report, which will incorporate all edits agreed at the national workshop.

# Conclusion

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Many countries have established national adolescent health programmes and continue to strengthen and expand these programmes to better meet the diverse needs of their adolescent populations. A key component of this process is understanding and responding to adolescent subpopulations which experience major barriers to effective health services. This handbook has outlined how national governments can implement an adolescent health services barriers assessment with a focus on particularly disadvantaged adolescents, whether it takes place as a stand-alone exercise, is part of a specialized sectoral or broader national programme review, or is integrated within health service monitoring cycles.

Critically, while it is important to understand which adolescents in a country experience health service barriers, and why, this is not enough in and of itself. National governments must also act on such findings to dismantle

barriers and promote more equitable health services for under-served adolescents. Towards that end, the findings from a national adolescent health services barriers assessment can feed directly into the national strategic planning, operational planning, budgeting, legislation, M&E, and intersectoral action outlined in the Global AA-HA! guidance and the WHO handbook *Strategizing national health in the 21st century* (11, 46), as well as by WHO's Innov8 approach for reviewing national health programmes to leave no one behind (8). For example, by drawing on AHSBA findings and following the eight Innov8 steps, national governments can better address equity, gender, human rights and social determinants of health in their national adolescent health programme planning and review processes. Such gains can benefit a country's adolescents today and in their future adult lives, while also contributing to public health, economic and demographic gains for the country as a whole.



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# Appendix 1

## Generic plan for a national adolescent health services barriers assessment

*This generic plan should be adapted to the particular country context. For example, activities may be linked to or integrated with ongoing national activities such as an adolescent health policy/programme review, or an adolescent health situation analysis. It may be possible to merge some activities (e.g. meetings, travel), in which case the costs budgeted below may be reduced or eliminated.*

MODULE DESCRIPTION	BUDGET ITEM FOR COSTING*
<b>MODULE 1. PREPARATION FOR THE ASSESSMENT**</b>	
<p><i>National stakeholders inception meeting:</i></p> <ul style="list-style-type: none"> <li>(a) identifies three adolescent health conditions/services (X, Y, and Z) for focus of assessment; selection based on e.g. recent adolescent health situation analysis or Global AA-HA! priority-setting exercise;</li> <li>(b) appoints a small assessment committee to guide and monitor progress of the “national adolescent health services barriers assessment”.</li> </ul>	<ul style="list-style-type: none"> <li>• Hosting fees for event e.g. hotel and food</li> <li>• Travel costs and per diems as needed, for up to 20 participants</li> <li>• If hiring a consultant to facilitate: 5 days at their day rate (2 days preparation; 2 days meeting; 1 day report finalization)</li> </ul>
<p><i>Assessment committee preparation:</i></p> <ul style="list-style-type: none"> <li>(a) developing the assessment plan;</li> <li>(b) obtaining needed ethics committee permissions from the relevant government, partners and university bodies; ensuring the assessment is compliant with national and international requirements and cultural, community and administrative systems;</li> <li>(c) selecting the staff or consultant(s) who will lead the assessment modules;</li> <li>(d) identifying and ensuring technical experts are recruited for specific modules, if needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional Review Board fees as per national requirements</li> <li>• Assessment committee allowances as warranted</li> <li>• Lunch and tea break costs if committee meets in offices</li> <li>• Daytime conference package, including meeting room fee if meeting is off-site</li> <li>• If hiring consultant(s) to lead assessment and they participate in preparations: 3 days at their day rate</li> <li>• If hiring technical expert(s) to help develop plan and instruments (e.g. statistician, social scientist, translator): specific days at their day rates</li> </ul>

MODULE DESCRIPTION	BUDGET ITEM FOR COSTING*
<b>MODULE 2. NATIONAL KEY INFORMANT INTERVIEWS</b>	
<p><b>National key informant interviews:</b></p> <p>At the national level, a qualitative researcher conducts interviews with: representatives from health authorities working in adolescent health services and other key areas; other relevant national authorities (e.g. youth, education, women) that may play a role in enabling access to services; nongovernmental organization and civil society organization representatives who work on improving the health and welfare of under-served adolescents in the country; and adolescents from relevant groups.</p> <p><i>Assessment team completes approximately 12 Assessment Template A forms for national key informants.</i></p>	<p>If hiring a consultant: 4 days at their day rate</p>
<p><b>National key informant interview report writing:</b></p> <p><i>Assessment team produces a formal, short narrative report, including attaching completed Assessment Template A forms (x 12) and Assessment Templates B and C for national key informants. Interview audio e-files are copied, organized, and submitted with report.</i></p>	<p>If hiring a consultant: 2 days at their day rate</p>
<b>MODULE 3. LITERATURE REVIEW</b>	
<p><b>Literature review:</b></p> <p>The reviewer undertakes a targeted review of health and social science journal articles, technical reports, evaluations, case-studies, presentations at technical meetings, working papers and briefings, and other write-ups of qualitative research findings and quantitative survey analyses that explore health service coverage and barriers for very under-served adolescents within the country.</p>	<p>If hiring a consultant: 10 days at their day rate</p>
<p><b>Literature review report writing:</b></p> <p><i>Assessment team produces a formal, short narrative report, including completed Assessment Templates D and E.</i></p>	<p>If hiring a consultant: 2 days at their day rate</p>
<p><b>Assessment committee post-literature review:</b></p> <p>(a) reviews the findings from the literature review report;</p> <p>(b) assists data mining team to identify and gain access to databases for Module 4;</p> <p>(c) begins logistical arrangements for subnational research to be conducted in Module 5.</p>	<p><i>If includes meeting:</i></p> <ul style="list-style-type: none"> <li>• If literature review consultant participates: 1 day at their day rate</li> <li>• Assessment committee allowances as warranted</li> <li>• Lunch and tea break costs if committee meets in offices</li> <li>• Daytime conference package, including meeting room fee if meeting is off-site</li> </ul> <p>[Budget items for Module 5 preparations are detailed in Module 4.]</p>



MODULE DESCRIPTION	BUDGET ITEM FOR COSTING*
<b>MODULE 4. QUANTITATIVE DATA MINING</b>	
<p><b>Data mining:</b> The data mining team analyses existing databases in order to generate new information about adolescent health service equity and barriers. This primarily involves analysis of national-level data, disaggregated by sex, age group, education, district, rural/urban residence and other sociodemographic factors to determine which adolescents have the greatest difficulty in obtaining effective health services, and why.</p>	<ul style="list-style-type: none"> <li>• If hiring a consultant: 10 days at their day rate</li> <li>• If hiring a statistical consultant for additional guidance and support: 2 days at their day rate</li> </ul>
<p><b>Data mining report writing:</b> <i>Assessment team produces a formal, short narrative report, including completed Assessment Templates F and G.</i></p>	<ul style="list-style-type: none"> <li>• If hiring a consultant: 2 days at their day rate</li> <li>• If hiring a statistical consultant for additional guidance and support: 1 day at their day rate</li> </ul>
<p><b>Assessment committee post-data mining and national key informant interviews:</b></p> <p>(a) reviews the findings from Modules 2–4;</p> <p>(b) selects three sites for subnational qualitative research based on the country’s adolescent health conditions X, Y and Z, the accumulated evidence of which adolescent subpopulation(s) have the least access to related health services, and where those adolescent subpopulation(s) are concentrated in the country;</p> <p>(c) assists the qualitative research team to identify potential key informants for interview at the subnational level.</p>	<ul style="list-style-type: none"> <li>• If hiring consultant(s): 3 days fieldwork preparation, instrument development and team training, at their day rate</li> <li>• If hiring local counterparts in subnational sites 1–3: 1 day per site at their day rate to make logistical arrangements and schedule meetings</li> </ul> <p><i>If includes assessment committee meeting:</i></p> <ul style="list-style-type: none"> <li>• If consultant(s) participate: 1 day at their day rate</li> <li>• Assessment committee allowances as warranted</li> <li>• Lunch and tea break costs if committee meets in offices</li> <li>• Daytime conference package, including meeting room fee if meeting is off-site</li> </ul>
<b>MODULE 5. SUBNATIONAL QUALITATIVE RESEARCH</b>	
<p><b>Interviews with subnational key informants:</b> At district and community levels, a qualitative researcher conducts interviews with: relevant government representatives (e.g. health, education, youth or social work sectors); representatives of nongovernmental organizations and civil society organizations who work with disadvantaged youth and/or adolescent health; frontline health and social service providers who work with the identified under-served adolescent subpopulations, and/or who specialize in adolescent health conditions X, Y and Z; and adolescents from relevant groups. <i>Assessment team completes Assessment Template A forms (x 18) for subnational key informants, as well as Assessment Templates B and C for subnational key informants.</i></p>	<ul style="list-style-type: none"> <li>• If hiring a consultant: 7 days at their day rate, plus any travel costs and per diems</li> <li>• Any extra travel costs needed to do subnational interviews</li> <li>• If hiring translators or local counterparts to assist in fieldwork: specific days at their day rates</li> </ul>
<p><b>Focus group discussions with adolescents, parents, and other adults who work with under-served adolescents:</b> At the community level, the qualitative research team conducts focus group discussions with under-served adolescents, and with adults who live or work with them (e.g. parents, social workers, community health workers, teachers), as well as follow-up, individual interviews with select focus group participants. <i>Assessment team completes Assessment Template A forms (x 15) for focus group discussion/interview sets, as well as Assessment Template B (x 3) and Assessment Template C (x 3) for focus group discussion/interview sets.</i></p>	<ul style="list-style-type: none"> <li>• If hiring consultant(s): 15 days at their day rates, plus any travel costs and per diems</li> <li>• If hiring translators or local counterparts to assist in fieldwork: specific days at their day rates</li> <li>• Costs to arrange focus group discussions (e.g. travel to sites, costs for local hosts, and costs for food and drinks for focus group participants)</li> </ul>

MODULE DESCRIPTION	BUDGET ITEM FOR COSTING*
<p><b>Subnational research report writing:</b>  <i>Assessment team produces a formal, short narrative report, attaching completed Assessment Templates A (x 18), B and C for subnational key informants, and completed Assessment Templates A (x 15), B (x 3) and C (x 3) for focus group discussion/interview sets. Interview and discussion audio e-files are copied, organized, and submitted with report.</i></p>	<p>If hiring a consultant: 3 days at their day rate</p>
<b>MODULE 6. REPORTING OF FINDINGS AND POTENTIAL ACTIONS</b>	
<p><b>Assessment report writing:</b>  The assessment committee should produce a report that:</p> <p>(a) synthesizes findings from Modules 2–5 focused on barriers to universal health coverage for adolescent subpopulations in the country, including analysis of issues related to health system performance and wider social determinants of health that influence the availability, accessibility, acceptability, contact/use and effective coverage of adolescent health services, their implications, and identification of entry points and guidance on options for future policies and action;</p> <p>(b) proposes actions to improve country programming to increase access to health services for under-served adolescent subpopulations.</p>	<ul style="list-style-type: none"> <li>• If hiring a consultant: 5 days at their day rate</li> <li>• Assessment committee per diems as warranted</li> <li>• Lunch and tea break costs if committee meets in offices</li> <li>• Daytime conference package, including meeting room fee if meeting is off-site</li> </ul>
<p><b>Small technical expert meeting to review findings and propose actions:</b>  The small technical meeting should:</p> <p>(a) review findings on health service barriers experienced by very under-served adolescent subpopulations;</p> <p>(b) identify possible actions to address those barriers at national and subnational levels, taking into consideration international best practice recommendations and the particular country context.</p>	<ul style="list-style-type: none"> <li>• Hosting fees for event e.g. hotel and food</li> <li>• Travel costs and per diems if needed for 15 participants</li> <li>• If hiring a consultant to facilitate workshop and finalize report: 4 days at their day rate (1 day preparation, 2 days for meeting and 1 day for report revisions)</li> </ul>
<b>MODULE 7. NATIONAL STAKEHOLDER WORKSHOP TO REVIEW FINDINGS AND PLAN ACTIONS</b>	
<p>The national stakeholder workshop should:</p> <p>(a) review findings of the assessment of health service barriers experienced by very under-served adolescents;</p> <p>(b) consider and decide on actions to improve country programming.</p>	<ul style="list-style-type: none"> <li>• Hosting fees for event e.g. hotel and food</li> <li>• Travel costs and per diems as needed for 25 participants</li> <li>• If hiring a consultant to facilitate workshop: 3 days at their day rate (1 day preparation, 2 days for workshop)</li> </ul>
<p><b>Finalization of assessment report:</b>  Finalization of the national adolescent health services barriers assessment report, based on edits agreed at the national workshop.</p>	<ul style="list-style-type: none"> <li>• If hiring a consultant to finalize report: 3 days at their day rate</li> </ul>

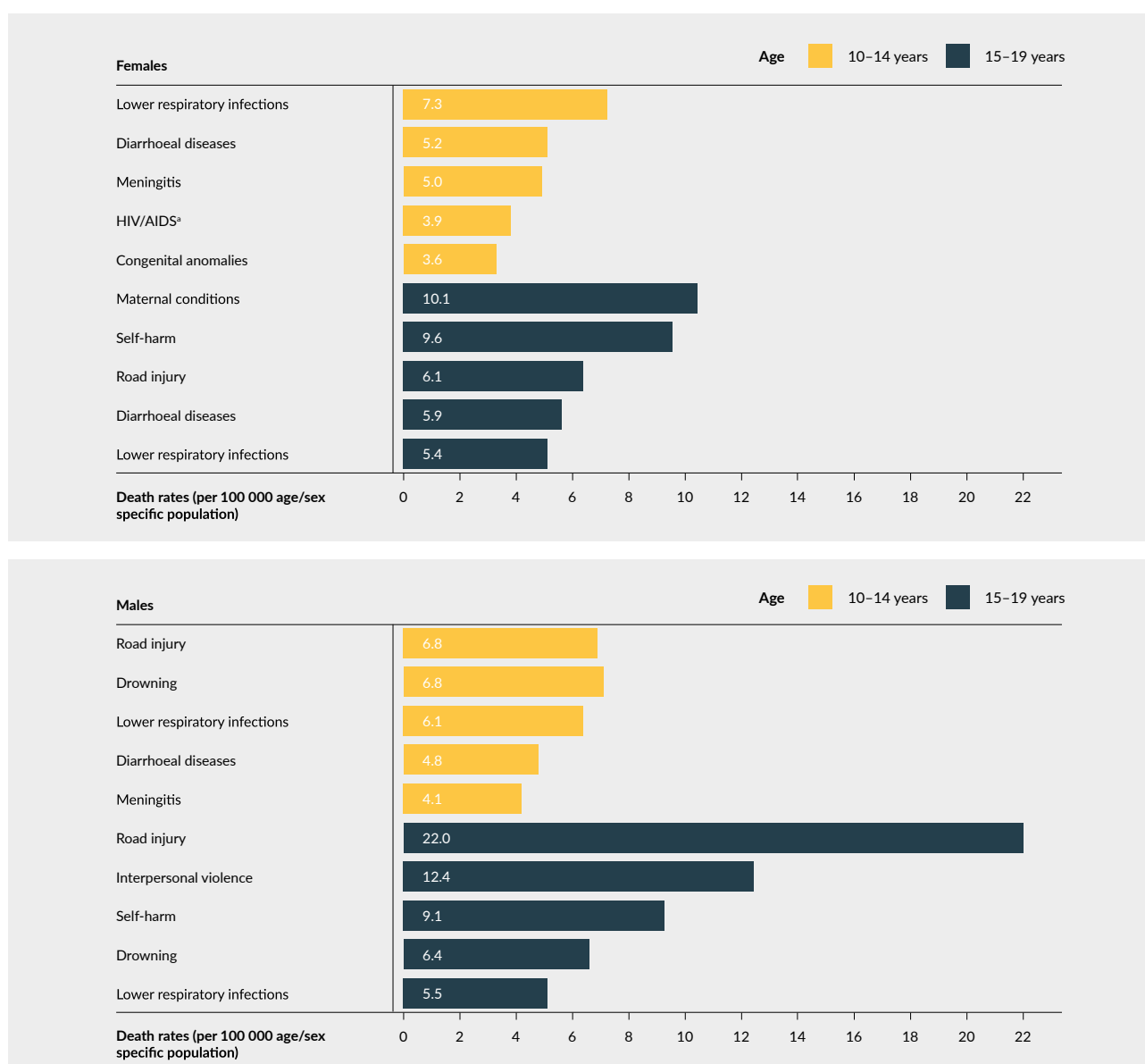
\* The estimate of days is a minimum that represents meeting and fieldwork only. The overall assessment period will be longer due to delays between steps (e.g. to obtain ethical clearance, or to accommodate key informants' schedules).

\*\* Module 1 may take substantially longer if preliminary research is needed to decide on adolescent health conditions X, Y and Z (e.g. a situation analysis or a Global AA-HA! priority-setting exercise).

# Appendix 2

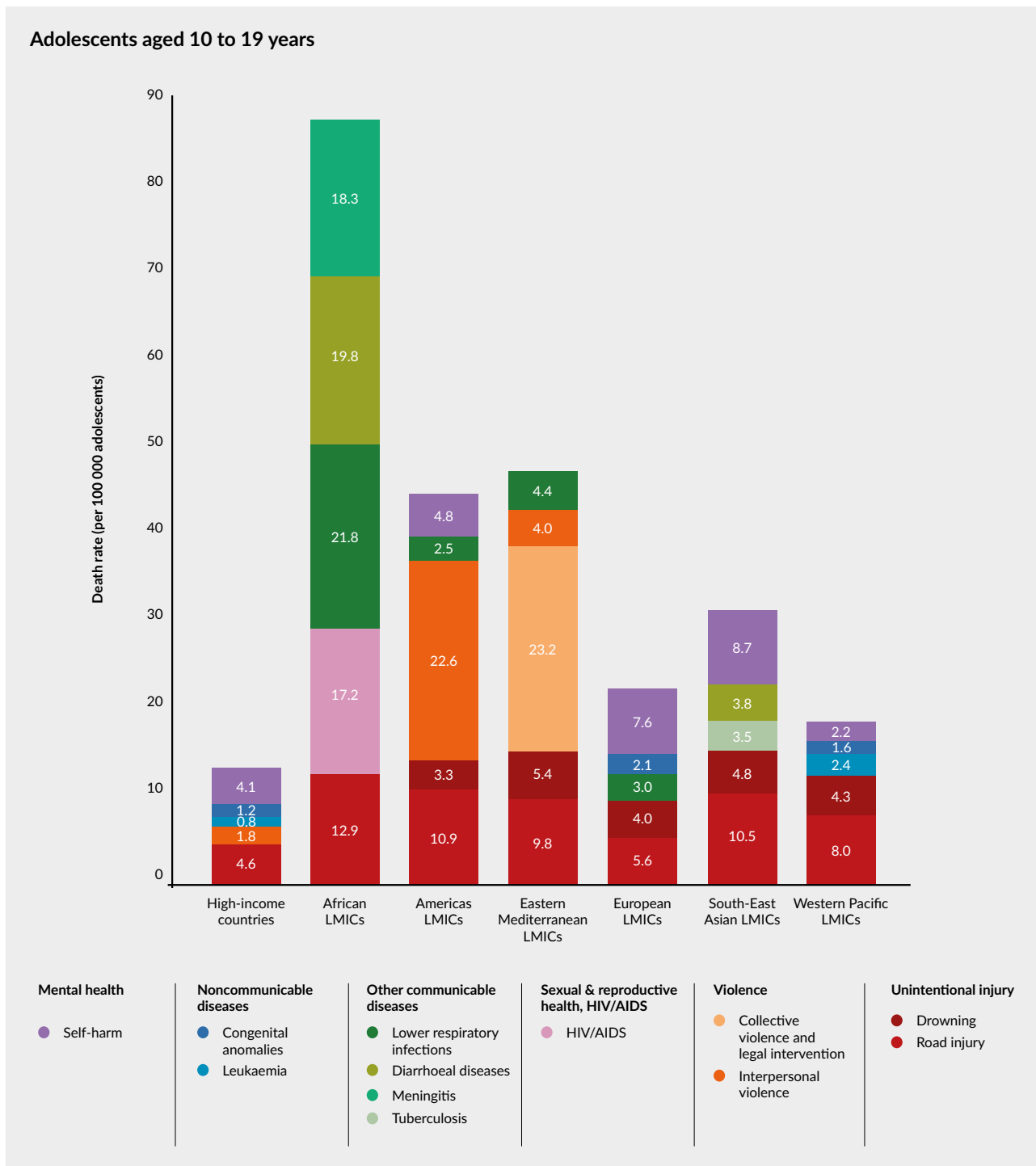
## Top causes of adolescent morbidity and mortality

Figs. A2.1–2.4 summarize the top five causes of mortality and morbidity among adolescents globally in 2015, by sex, age group and modified WHO region. Each of these and their risk factors are described in more detail in section 2 of the Global AA-HA! guidance and its annexes (11, 70).



\*2015 estimates rank AIDS lower than previous estimates because of a reassessment by UNAIDS of inputs into the Spectrum model used to produce the estimates. Re-analysis of 2012 estimates suggested that the high ranking of AIDS as second cause of adolescent deaths globally was overestimated. Nevertheless, AIDS remains one of the leading causes of adolescent death, particularly in African LMICs. Source: Global Health Estimates 2015: deaths by cause, age, sex, by country and by region, 2000–2015 Geneva: World Health Organization; 2016 ([http://www.who.int/healthinfo/global\\_burden\\_disease/estimates/en/index1.html](http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html)). Prevention Gap Report. Geneva: UNAIDS; 2016 ([http://www.unaids.org/sites/default/files/media\\_asset/2016-prevention-gap-report\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/2016-prevention-gap-report_en.pdf)).

Fig. A2.1. Estimated top causes of adolescent death, by sex and age group, 2015



LMICs = low- and middle-income countries

Fig. A2.2. Estimated top causes of adolescent death, by modified WHO region, 2015

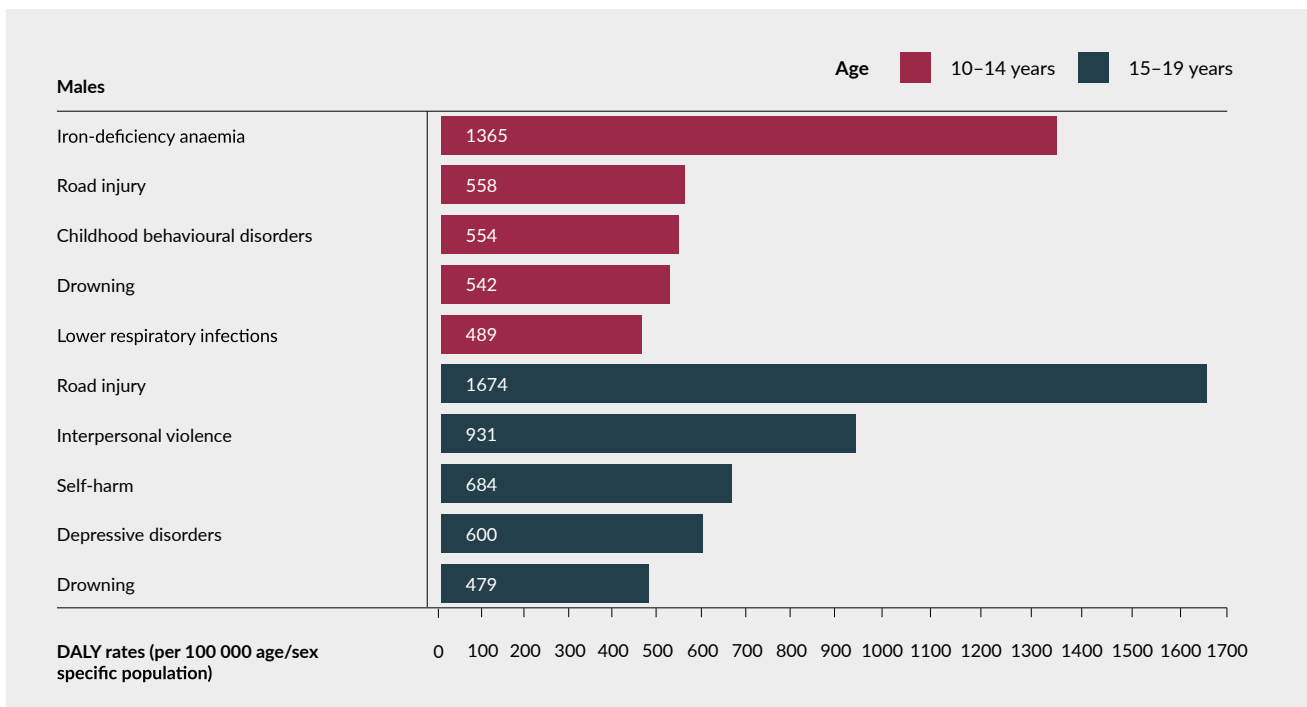
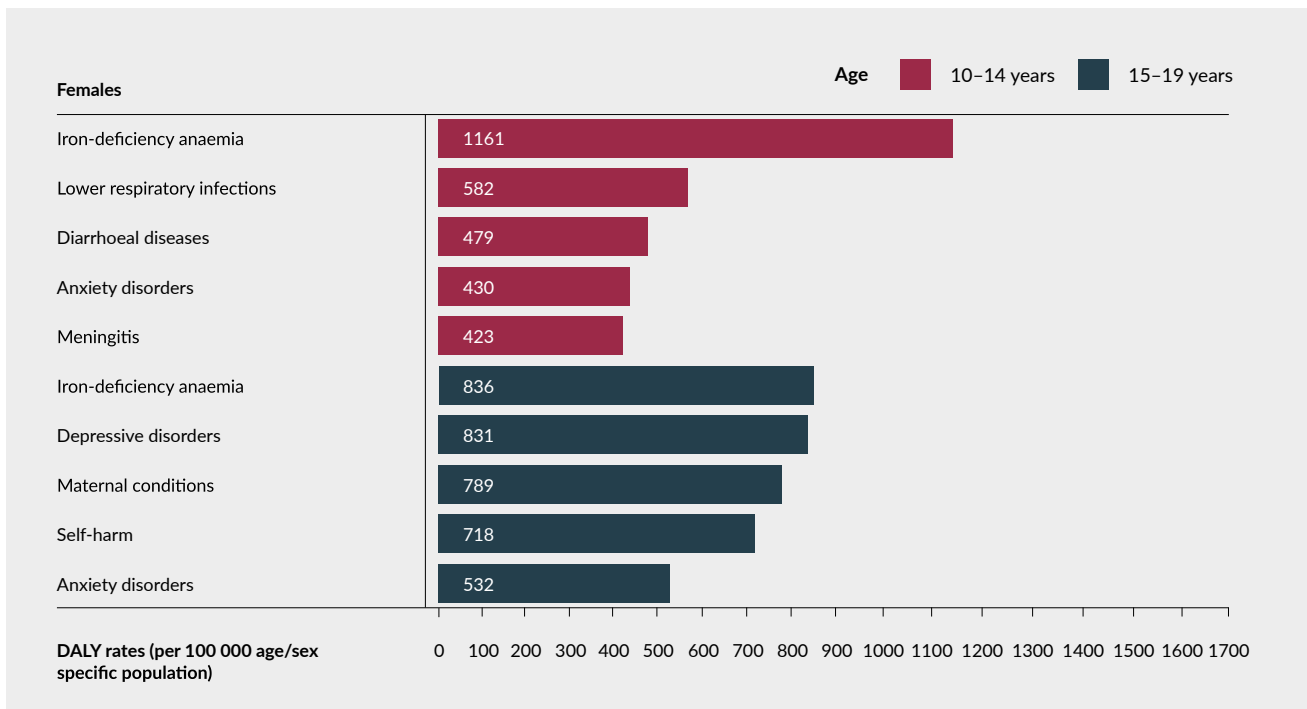
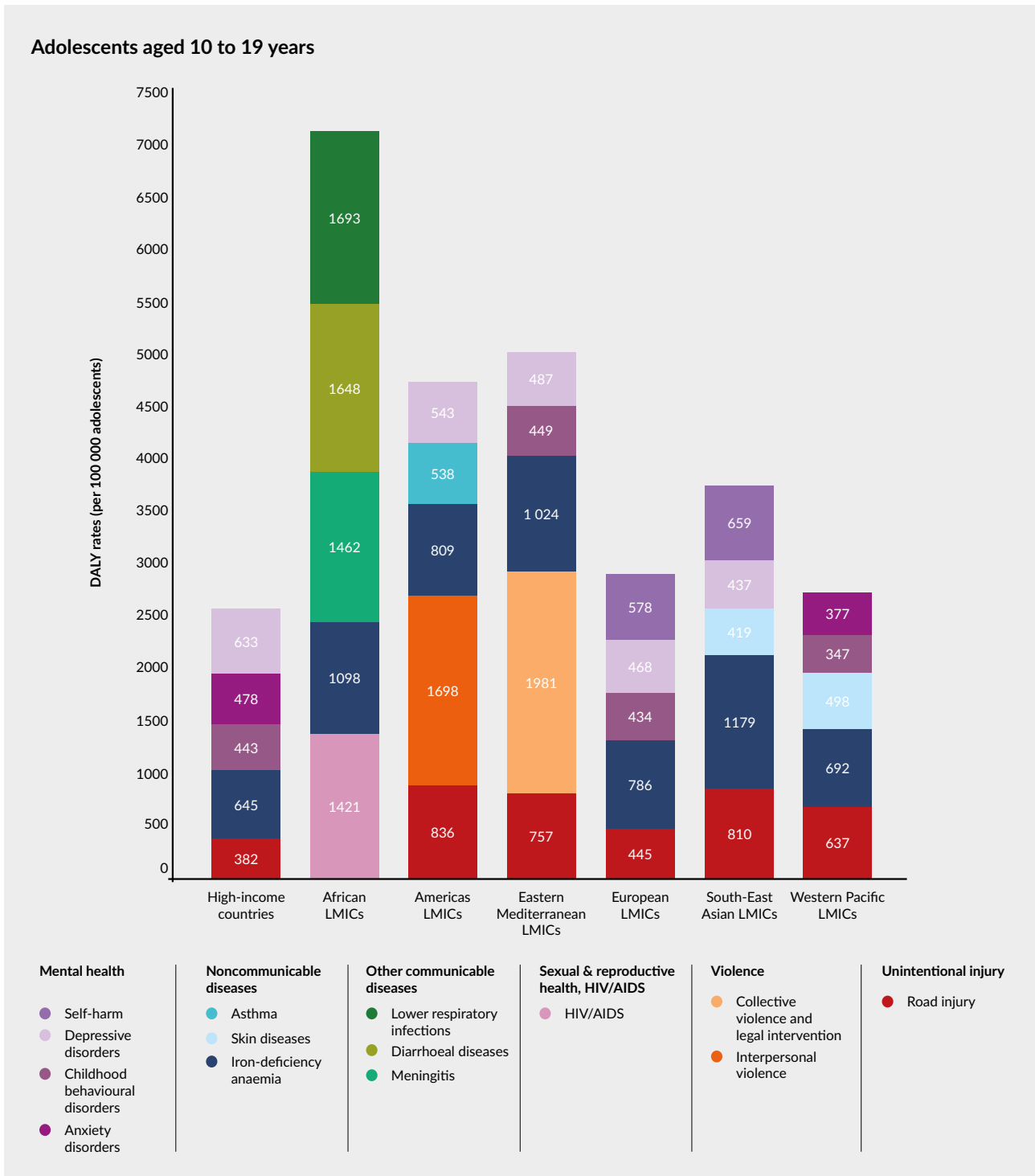


Fig. A2.3. Estimated top causes of adolescent disability-adjusted life years (DALYs) lost, by sex and age group, 2015

*DALYs lost are a summary measure combining mortality and morbidity.*



LMICs = low- and middle-income countries

Fig. A2.4. Estimated top causes of adolescent disability-adjusted life years (DALYs) lost, by modified WHO Region, 2015

# Appendix 3

## Glossary

**Adolescent** is a person aged 10–19 years.

**Adolescent-friendly health services** are those that are comprehensive and accessible, acceptable and appropriate for adolescents. These should promote health literacy and provide an appropriate package of services and integrated management of common concerns, including developmental conditions; menstrual conditions; pregnancy-related conditions; genital conditions; questions related to HIV; abdominal pain; suspected anaemia; tiredness; headache; skin problems; body image concerns; vision problems; and concerns about assault or abuse (29, 71).

**Adolescent rights** include recognition and respect for the dignity and agency of adolescents; their empowerment, citizenship and active participation in their own lives; the promotion of optimum health, well-being and development; and a commitment to the promotion, protection and fulfilment of their human rights without discrimination (18, 20).

**Barriers** are those factors which obstruct individuals from accessing effective health services. These barriers may be economic (e.g. as a consequence of insufficient public financing and out-of-pocket expenditures, including those for unofficial or informal costs such as transport), geographic (e.g. where services are not available for the subpopulation, or not within reach), clinical or epidemiological (e.g. the specific services do not meet the health needs of the subpopulation), cultural (e.g. gender norms, roles and relations inhibit effective coverage of the services; or the workforce does not address the need for contextualized and intercultural approaches, and may be unacceptable to the local community), or of other types (10, 72). Barriers often intersect and compound one another, and are a driving force behind health inequities. The causes of barriers are found both within and beyond the health sector.

**Burden of disease or injury** is the impact of a health problem in a population, as measured by rates of mortality, morbidity or disability, or some combination of these.

**Culture** is the set of distinctive spiritual, material, intellectual and emotional features of society or a social group which encompasses lifestyles, ways of living together, value systems, and traditions and beliefs (36). While shared and coherent, culture is not a static set of beliefs and practices, but rather an ever-emerging array of collective values, ethics, assumptions and ideals.

**Demand-side barriers** are those which, even if the health sector adapts its delivery channels/approaches to the specific disadvantaged circumstances of the subpopulation, other sectors will need to be involved to overcome the root causes, e.g. gender norms, cultural beliefs about health, and working and informal employment conditions.

**Effective health service coverage** is the proportion of the population who need health services and who obtain them in a timely manner and at a level of quality necessary to have the desired effect and potential health gains (11). Effective health service coverage depends on health service availability, accessibility, acceptability, and contact/use first being achieved, and then the quality of services themselves also being sufficient (33).

**Equity** is the absence of avoidable, unfair or remediable differences within a population, whether defined socially, economically, demographically or geographically, or by other means of stratification (73). **Health equity** implies that everyone has a fair opportunity to attain their full health potential and no one is disadvantaged from achieving this potential (74). While health inequity is a normative concept, and thus cannot be precisely measured or monitored, **health inequality** – observable differences between subgroups within a population – can be measured and monitored, and serves as an indirect means of evaluating health inequity (47).



**Financial protection** in relation to universal health coverage is achieved when direct payments to obtain health services do not expose individuals or their families to financial hardship and do not threaten living standards. Key to financial protection is ensuring prepayment and pooling resources for health, rather than relying on individuals or their families to pay for health services out-of-pocket at the time of use, which can cause households to incur catastrophic and impoverishing expenditures. Robust governance and accountability mechanisms are also critical.

**Gender** is the socially constructed roles, behaviours, activities, attributes and opportunities that any society considers appropriate for men and women, boys and girls and people with non-binary identities. Gender interacts with, but is distinct from, biological sex. *Binary* refers to two distinct, opposite and disconnected forms of masculine and feminine, while *non-binary* refers to gender identities that are not exclusively masculine or feminine. Gender is also formed through the relationships between people and can reflect the distribution of power within those relationships. Gender is not static but changes across time and place. When individuals or groups do not conform to established gender norms, roles, responsibilities or relations (including concepts of being masculine or feminine), they often face stigma, discriminatory practices or social exclusion – all of which can adversely affect health.

**Gender analysis** identifies, assesses and informs actions to address inequality that come from: 1) different gender norms, roles and relations; 2) unequal power relations between and among groups of men and women; and 3) the interaction of contextual factors with gender, such as sexual orientation, ethnicity, education or employment status. It includes an examination of differences between adolescent boys/men and adolescent girls/women in risk and exposure, health-seeking behaviour, access and use of services, experiences in health care settings, treatment options and impact of ill-health (35, 38, 73). It also looks at the interaction between biological and sociocultural factors, and access to and control over resources in relation to health, and identifies appropriate responses to different needs.

**Gender diversity** encompasses both binary and non-binary gender identities, including those whose gender identity does not match the sex they were assigned at birth and those who identify with third and other alternative genders, or a combination of genders (75).

**Gender equality** refers to equal chances or opportunities for groups of women and men to access and control social, economic and political resources, including protection under the law (such as health services, education and voting rights) (73). Gender equality means that access to rights or opportunities is not affected by gender. Efforts to promote and ensure gender equality address structural or systemic inequalities rooted in assumptions and behaviour about gender that disadvantage certain people. Gender inequality can be a major barrier preventing adolescents from obtaining effective health services. For example, in some settings adolescent girls who are married may not access needed health services because they have little autonomy or freedom of movement relative to their husbands.

**Health equity, health inequality and health inequity** – See “Equity” definition above.

A **human rights-based approach** to health focuses attention and provides strategies and solutions to redress inequalities, discriminatory practices (both real and perceived) and unjust power relations, which are often at the heart of inequitable health outcomes (76). The goal of a human rights-based approach to health is that all health policies, strategies and programmes be designed with the objective of *progressively improving* all people’s realization of their right to health and other health-related human rights. In working towards the goal of human rights and particularly the right to health, a rights-based approach upholds human rights standards and guiding principles, including but not limited to non-discrimination and equality, participation, inclusion and accountability (77, 78).

**Integrated, people-centred health services:** *Integrated health services* are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course. *People-centred care* consciously adopts individuals’, carers’, families’ and communities’ perspectives as participants in, and beneficiaries of, trusted health systems that are organized around the comprehensive needs of people rather than individual diseases, and respects social preferences. People-centred care also requires that patients have the education and support they need to make decisions and participate in

their own care, and that carers are able to attain maximal function within a supportive working environment. People-centred care is broader than patient- and person-centred care, encompassing not only clinical encounters, but also including attention to the health of people in their communities and their crucial role in shaping health policy and health services (16).

**Intersectionality:** Intersectionality-based analytic frameworks attempt to identify how interlocking systems of power impact those who are most marginalized in society (44, 45). Intersectionality considers that various social categories, such as gender, class, race, ethnicity, sexuality, age and ability, are socially constructed, dynamic and interwoven together. Such contextual factors do not exist separately from one another and human experiences cannot be accurately understood by prioritizing any one single factor or constellation of factors.

**Lesbian, gay, bisexual, transgender or intersex (LGBTI):**

**Lesbian** women and **gay** men are attracted to individuals of the same sex and/or gender identity as themselves.

**Bisexual** people may be attracted to individuals of the same or different sex and/or gender identity. **Transgender** is an umbrella term used to describe people with a wide range of identities –including transsexual people, people who identify as third gender, and others whose appearance and characteristics are perceived as gender atypical and whose sense of their own gender is different than the sex that they were assigned at birth. **Intersex** people are born with physical or biological sex characteristics (including sexual anatomy, reproductive organs and/or chromosomal patterns) that do not fit the traditional definitions of male or female (79).

**Positive development** means healthy transitions and growth in adolescence, including healthy physical, sexual, cognitive and psychosocial development.

**Risk factor** is an attribute, characteristic or exposure that increases the likelihood of an individual suffering a negative health outcome immediately or in the future. Some conditions can be both a risk factor and a burden of disease. For example, iron-deficiency anaemia is a risk factor for death or disability from postpartum haemorrhage, but also causes lassitude and weakness (80).

**Sexual orientation** refers to a person's physical, romantic and/or emotional attraction towards other people. Sexual orientation is distinct from gender identity. Sexual orientation is comprised of three elements: sexual attraction, sexual behaviour and sexual identity. Sexual orientation is most often defined in terms of heterosexuality, to identify those who are attracted to individuals of a different sex than themselves, and homosexuality, to identify those who are attracted to individuals of the same sex as themselves (79).

**Social determinants of health** are the conditions in which people are born, grow, live, work and age which affect their health risks and outcomes. This includes the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices (81, 82). For example, adverse commercial determinants of health include strategies and approaches used by the private sector to promote products and choices that are detrimental to health (83, 84). **Supply-side** determinants of health are those characteristics of a health system that are beyond the control of potential health service users, such as health facilities, drugs, equipment, finances, human resources, and organization of the provider network and referral system. **Demand-side** determinants are individual, household or community characteristics that influence the demand for health services.

**Stratifier** is a factor that can be used to separate data into subgroups; an “equity stratifier” is a way to assess dimensions of inequality. An acronym that encapsulates common equity stratifiers is “PROGRESS”: Place of residence (rural, urban, etc.); Race or ethnicity; Occupation; Gender; Religion; Education; Socioeconomic status; and Social capital or resources.

**Subpopulation** is a subset of a large population that can be defined according to one or more common characteristics. For example, a subpopulation can be defined only by sex, i.e. “females” or “males”, or by income level, education level or residence. To truly understand the dynamics of inequities, it is important to consider the intersections of characteristics that make some subpopulations more disadvantaged than others.

**Supply-side barriers** are those which lie within the control of the health sector, e.g. availability of adequately trained staff; accessibility of essential medicines and medical equipment.

**Under-served** means not having adequate coverage of effective health services in relation to actual health needs.

**Universal health coverage** means that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need – of sufficient quality to be effective – while also ensuring that the use of these services does not expose them to financial hardship (11).

# Appendix 4

## Online quantitative databases for potential mining

Several free online databases have been created through major international collaborations to enable users to conduct secondary analyses with national-level estimates of mortality, morbidity and equity stratifiers. These include: (a) the Health Equity Assessment Toolkit (HEAT) and the Health Equity Monitor database, (b) the EQUitable Impact Sensitive Tool (EQUIST), (c) the EquityTool, and (d) the GIRL Center Adolescent Data Hub, each of which is described in more detail below.

### (a) WHO Health Equity Monitor database and its accompanying HEAT software

The Health Equity Assessment Toolkit (54) is available in 2 editions:

- **HEAT, Built-In Database Edition, version 2.1 (2018 update)** which comes pre-installed with the Health Equity Monitor database (2018 update);
- **HEAT Plus, Upload Database Edition**, which allows users to upload and work with their own database.

The Health Equity Monitor database currently includes data for more than 30 reproductive, maternal, newborn and child health indicators, disaggregated by six dimensions of inequality (economic status, education, place of residence and subnational region, as well as age and sex where applicable) from more than 330 Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and Reproductive Health Surveys (RHS) conducted in 111 countries between 1991 and 2015. HEAT calculates 15 summary measures of inequality (Fig. A4.1). These include absolute measures (i.e. absolute concentration index, between-group variance, difference, mean difference from best performing subgroup, mean difference from mean, population attributable risk, and slope index of inequality) and relative measures (i.e. index of disparity, weighted

index of disparity, mean log deviation, population attributable fraction, ratio, relative concentration index, relative index of inequality, and Theil index) (85).

Using HEAT, Built-In Database Edition, Version 2.1, currently it is only possible to analyse inequality within a national adolescent population for one indicator (fertility rate for 15–19-year-old girls). For many countries, this indicator can be stratified by subnational region, economic status, place of residence and education, as shown in the Tanzanian examples in Fig. A4.2 and A4.3. However, HEAT Plus enables countries to upload their own databases. Therefore, it may be feasible to use HEAT Plus to assess health outcomes and service delivery inequalities within the adolescent population using a country's own database.

### (b) UNICEF EQUIST

EQUIST (55) was developed by UNICEF as a strategic planning, modelling and monitoring tool that combines the Marginal Budgeting for Bottlenecks tool with the Lives Saved Tool to conduct online identification of priorities, carry out barrier analysis and identify health system strategies to overcome barriers, and thus improve coverage for sustainable outcomes. The EQUIST tool has data from MICS and DHS surveys already prepopulated in the database and allows users and identified data managers to integrate information and data from additional surveys in over 70 countries.

At present, EQUIST can be used to analyse child and maternal mortality as well as stunting among children aged under 5 years. UNICEF and partners are developing the tool to integrate adolescent health and its indicators; the EQUIST modules on adolescent health are expected to be rolled out in 2018–2019.

**(c) Metrics for Management EquityTool**

For large household surveys such as MICS and DHS, it is possible to analyse data by wealth quintiles using simplified questions in the EquityTool (56). Specifically, the EquityTool allows those conducting secondary analysis of previously conducted surveys to compare the wealth of respondents to the national or urban population in over 30 countries. This can provide general population equity information that may be valuable to the adolescent health service barriers assessment.

**(d) GIRL Center Adolescent Data Hub (57)**

compiles data on adolescents living in low- and middle-income countries. Users can search datasets by country, region and topic, as well as study design (experimental vs observational), type of data (cross-sectional or longitudinal), sex (female or male) and age range (10–14, 15–19 or 20–24 years). Basic information about each of the studies is presented, along with a link to request dataset access. While some of the datasets can be requested through the Dataverse page of the GIRL Center, most are housed and accessed through the investigators' or organizations' study websites.

Description of options selected for visual	Snapshot	Interpretation
<ul style="list-style-type: none"> <li>• Explore Inequality</li> <li>• Disaggregated data</li> <li>• Horizontal line graph</li> </ul>		<p>The horizontal line graph shows subgroup estimates (on the x-axis) for each survey year (on the y-axis).</p> <p>Coloured shapes indicate population subgroups – each health indicator for each survey year is represented on the graph by multiple coloured shapes (one for each subgroup representing a dimension of inequality).</p> <p>Black horizontal lines indicate the difference between minimum and maximum subgroup estimates.</p>
<ul style="list-style-type: none"> <li>• Explore Inequality</li> <li>• Disaggregated data</li> <li>• Bar graph</li> </ul>		<p>The bar graph shows subgroup estimates (on the y-axis) for each survey year (on the x-axis).</p> <p>Coloured bars indicate population subgroups – each health indicator for each survey year is represented on the graph by multiple coloured bars (one for each subgroup representing a dimension of inequality).</p> <p>Numbers above bars indicate the respective subgroup estimates. Instead of numbers, 95% confidence intervals can be displayed in the form of vertical lines (or whiskers).</p> <p>When confidence intervals are not selected for display, value labels appear on top of each bar.</p>
<ul style="list-style-type: none"> <li>• Explore Inequality</li> <li>• Summary measures</li> <li>• Bar graph</li> </ul>		<p>The bar graph shows summary measure estimates (on the y-axis) for each survey year (on the x-axis).</p> <p>Numbers above bars indicate the respective summary measure estimates. Instead of numbers, 95% confidence intervals (analytic or bootstrap) can be displayed in the form of vertical lines (or whiskers).</p> <p>When confidence intervals are not selected for display, value labels appear on top of each bar.</p>
<ul style="list-style-type: none"> <li>• Explore Inequality</li> <li>• Summary measures</li> <li>• Line graph</li> </ul>		<p>The line graph shows summary measure estimates (on the y-axis) for each survey year (on the x-axis).</p> <p>95% confidence intervals (analytic or bootstrap) can be displayed in the form of vertical lines (or whiskers).</p>

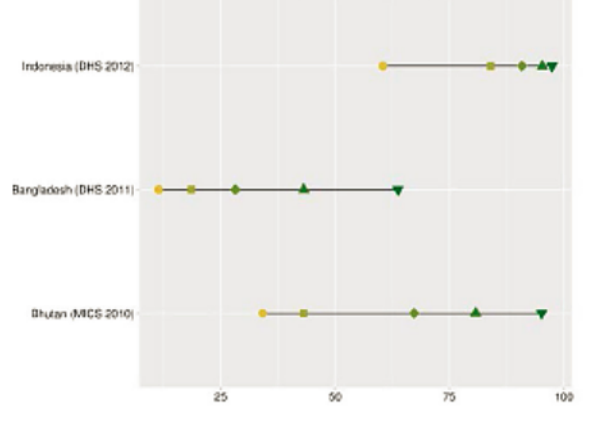
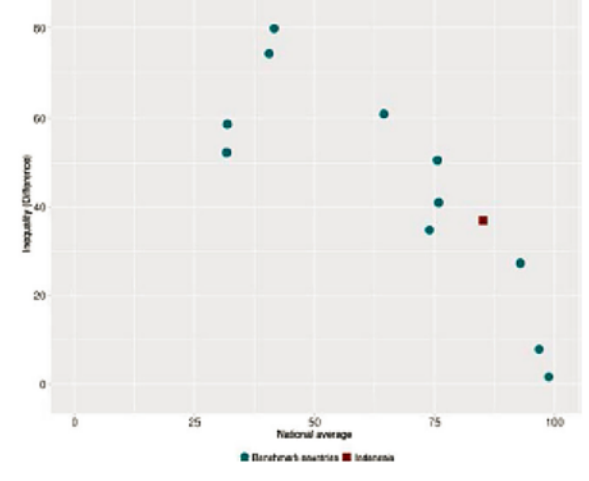
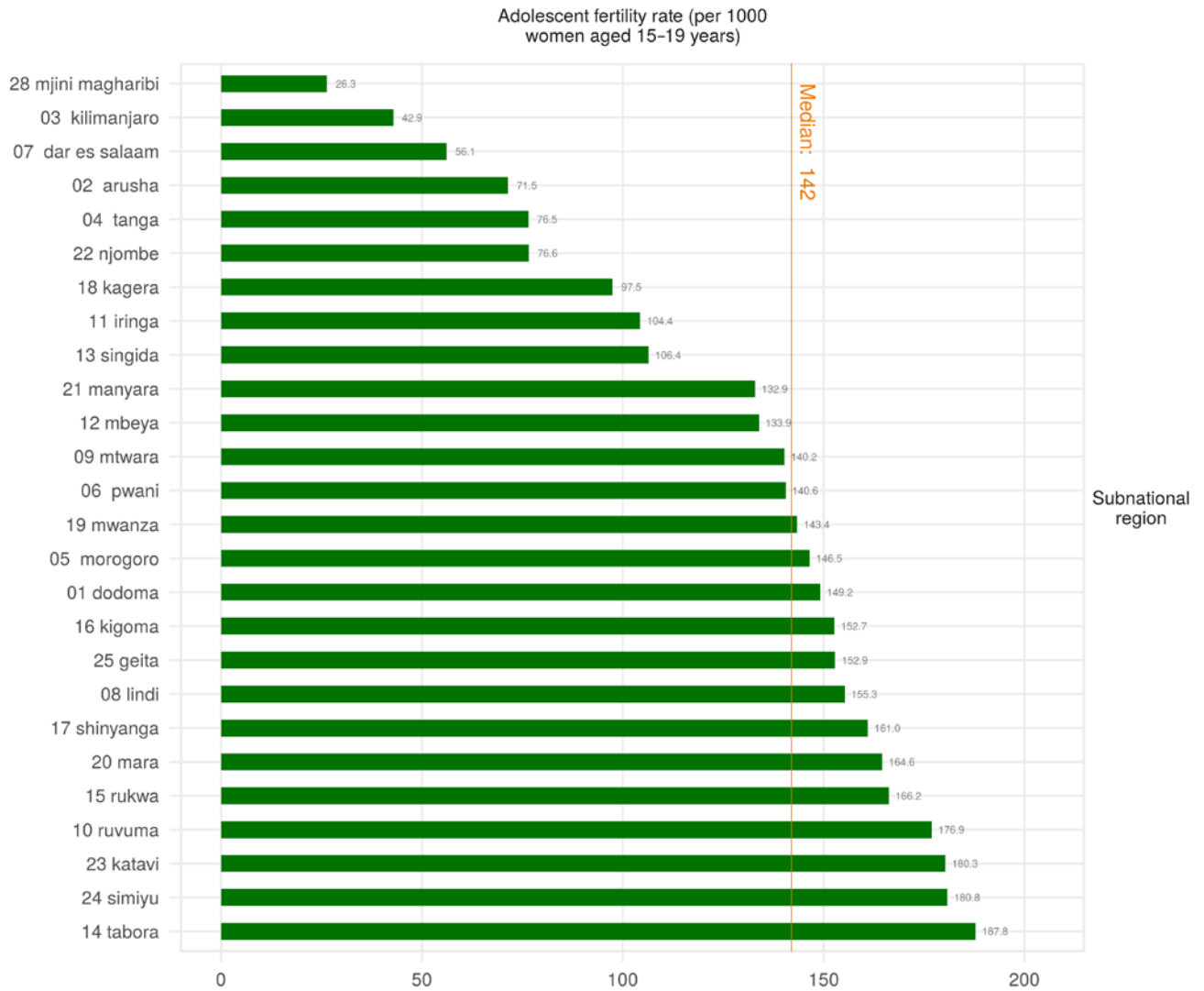
Description of options selected for visual	Snapshot	Interpretation
<ul style="list-style-type: none"> <li>• Compare Inequality</li> <li>• Disaggregated data</li> <li>• Horizontal line graph</li> </ul>		<p>The line graph presents health data for population subgroups in a selected country of interest (displayed at the top of the graph) and selected benchmark countries.</p> <p>Coloured shapes indicate population subgroups within countries – each study country is represented on the graph by multiple coloured shapes (one for each subgroup). Black horizontal lines indicate the difference between minimum and maximum subgroup estimates.</p>
<ul style="list-style-type: none"> <li>• Compare Inequality</li> <li>• Summary measures</li> <li>• Scatterplot</li> </ul>		<p>The scatterplot presents the national average (on the x-axis) and the level of within-country inequality as measured by the selected summary measure, (on the y-axis) for the selected health indicator and dimension of inequality for selected countries.</p> <p>Coloured shapes indicate countries – each country is represented on the graph by one shape. Benchmark countries are shown in blue, while the country of interest is highlighted in red. Countries may also be represented by coloured ISO3 codes.</p>

Fig. A4.1. Examples of analyses and graphs that can be produced using HEAT software and the WHO Health Equity Monitor database (85)



## United Republic of Tanzania (DHS, 2015)

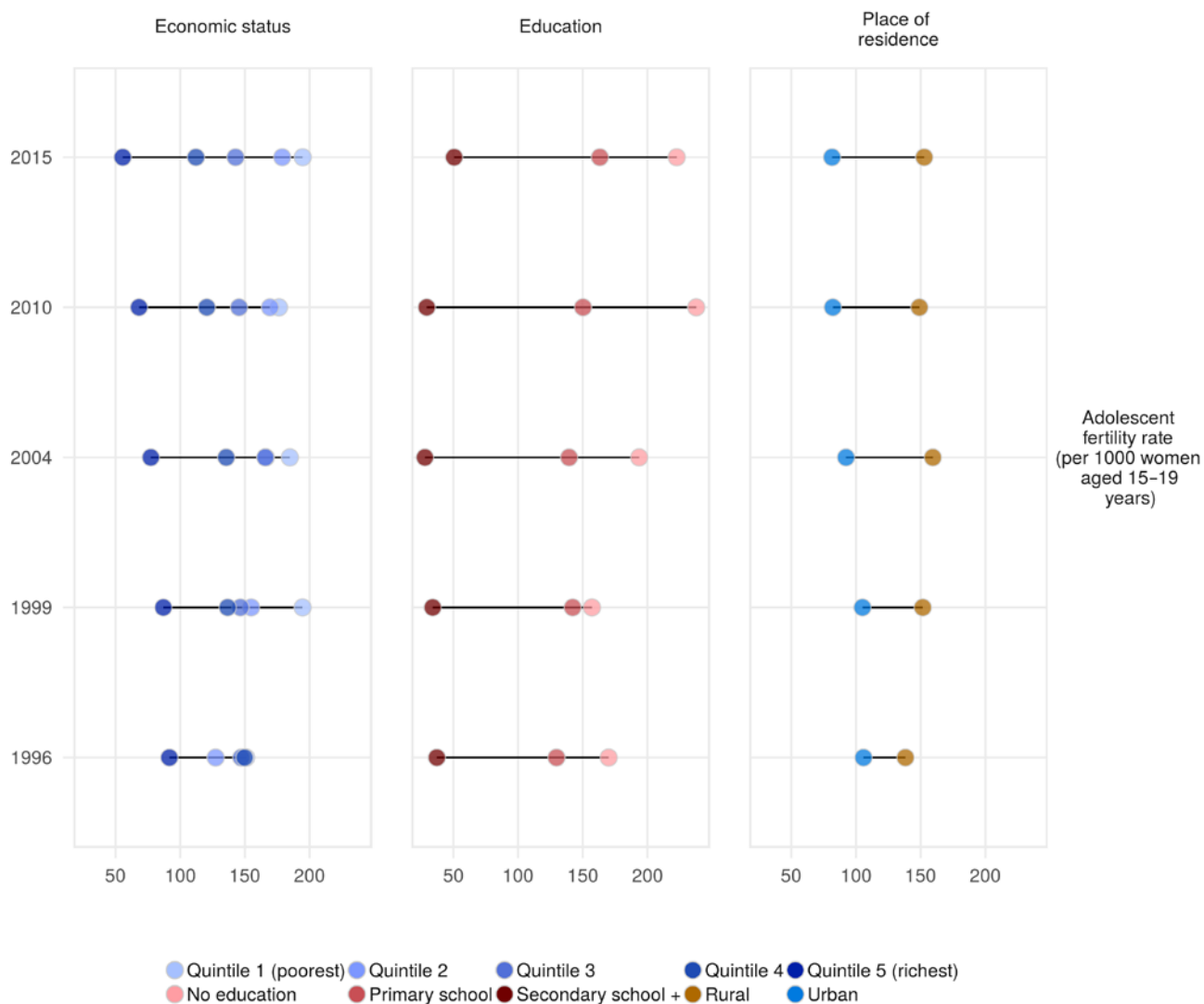


Health Equity Assessment Toolkit (HEAT): Software for exploring and comparing health inequalities in countries. Built-in database edition. Version 3.0. Geneva, World Health Organization, 2018.

The disaggregated data used in this version were drawn from the WHO Health Equity Monitor database (2018 update) which may have been revised or updated since that time. The most recent version of that database is available on the WHO website (<http://apps.who.int/gho/data/node.main.HE-1540?lang=en>).

Fig. A4.2. Example of in-country analysis of adolescent (15–19 years) fertility rates, by subnational region, using the online HEAT Built-In Database (86)

### United Republic of Tanzania (DHS, 1996, 1999, 2004, 2010, 2015)



Health Equity Assessment Toolkit (HEAT): Software for exploring and comparing health inequalities in countries. Built-in database edition. Version 3.0. Geneva, World Health Organization, 2018.

The disaggregated data used in this version were drawn from the WHO Health Equity Monitor database (2018 update) which may have been revised or updated since that time. The most recent version of that database is available on the WHO website (<http://apps.who.int/gho/data/node.main.HE-1540?lang=en>).

Fig. A4.3. Example of in-country analysis of adolescent (15-19 years) fertility rates, by economic status, place of residence and education, using the online HEAT Built-In Database (86)

# Appendix 5

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## Examples of health and health service indicators and equity stratifiers, by data source and age range

*This appendix outlines the data that individual household or school-based surveys are currently designed to collect. However:*

- *individual countries may only collect some of these data;*
- *some health indicators (e.g. disability) could be analysed either **by** an equity stratifier or **as** an equity stratifier;*
- *if adolescent data can be disaggregated by age groups (e.g. 10–17 and 18–19 years; or 10–14 and 15–19 years), then age can also be used as an equity stratifier to determine if one adolescent age group is particularly under-served;*
- *the particular survey design and protocol will determine whether it is feasible to disaggregate indicators using data collected on adolescent age group(s), sex, education level, economic status, place of residence, subnational area, or other potential equity stratifiers.*

Data source and key sponsor	Examples of health and health service indicators, by available age range (years)	POSSIBLE EQUITY STRATIFIER					Examples of other possible equity stratifiers (e.g. ethnicity, religion, current school status, disability), by available age range (years)
		Sex	Economic	Education	Residence	Subnational	
<b>GENERAL HEALTH</b>							
<b>UNICEF MICS</b> <a href="http://mics.unicef.org/surveys">http://mics.unicef.org/surveys</a>	<b>0–14:</b> <ul style="list-style-type: none"> <li>Prevalence of female genital mutilation (female)</li> </ul> <b>15–24:</b> <ul style="list-style-type: none"> <li>SRH knowledge and behaviour (female)</li> </ul> <b>15–49:</b> <ul style="list-style-type: none"> <li>Reproductive health service (female)</li> </ul>	√	√	√	√	√	<b>0–17:</b> <ul style="list-style-type: none"> <li>Parent died</li> </ul> <b>5–17:</b> <ul style="list-style-type: none"> <li>Health insurance coverage</li> </ul> <b>10–14:</b> <ul style="list-style-type: none"> <li>Orphan school attendance</li> </ul> <b>15–24:</b> <ul style="list-style-type: none"> <li>Literacy rate (female)</li> </ul>
<b>USAID DHS</b> <a href="https://dhsprogram.com/data/available-datasets.cfm">https://dhsprogram.com/data/available-datasets.cfm</a>	<b>10–14, 15–19:</b> <ul style="list-style-type: none"> <li>Prevalence and type of female genital mutilation (female)</li> </ul> <b>15–19:</b> <ul style="list-style-type: none"> <li>Took iron tablets or syrup to prevent anaemia during last pregnancy (female)</li> <li>Problems accessing health care (e.g. permission, money, distance) (female)</li> <li>Participation in decision-making about own health care (female, married)</li> <li>Experience of physical or sexual violence (female, ever/never married)</li> <li>Male circumcision (male)</li> </ul> <b>15–24:</b> <ul style="list-style-type: none"> <li>At least one birth before age 20 (female)</li> </ul> <b>15–24 (retrospective under-16, 17–19) (female):</b> <ul style="list-style-type: none"> <li>Age at most recent birth</li> <li>Antenatal care</li> <li>4 or more antenatal care visits; iron supplementation</li> <li>Birth in facility</li> <li>Birth by skilled attendant</li> <li>Low birth weight</li> <li>Postnatal care</li> </ul> <b>15–49 years:</b> <ul style="list-style-type: none"> <li>Prevalence of anaemia</li> </ul>	√	√	√	√	√	<b>5–14, 15–24:</b> <ul style="list-style-type: none"> <li>Annual per capita expenditure outpatient or inpatient care</li> </ul> <b>15–19:</b> <ul style="list-style-type: none"> <li>Health insurance coverage</li> <li>Experience of mass media, or literacy rate</li> </ul>
<b>WHO GSHS</b> <a href="http://www.who.int/ncds/surveillance/gshs/contact/en/">http://www.who.int/ncds/surveillance/gshs/contact/en/</a>	<b>11 or younger, 12, 13, 14, 15, 16 or older:</b> <ul style="list-style-type: none"> <li>Problems associated with alcohol use</li> <li>Current drug use</li> <li>Suicide ideation and attempts</li> <li>Physical activity</li> <li>Parental regulation and monitoring</li> <li>Attempted cessation of cigarette smoking</li> <li>Frequency of serious injury</li> </ul>	√	---	√	---	---	<b>11 or younger, 12, 13, 14, 15, 16 or older:</b> <ul style="list-style-type: none"> <li>School attendance</li> <li>Travel to school</li> </ul>

Data source and key sponsor	Examples of health and health service indicators, by available age range (years)	POSSIBLE EQUITY STRATIFIER					Examples of other possible equity stratifiers (e.g. ethnicity, religion, current school status, disability), by available age range (years)
		Sex	Economic	Education	Residence	Subnational	
<b>GENERAL HEALTH</b>							
<b>WHO HBSC</b> <a href="https://www.uib.no/en/hbscdata">https://www.uib.no/en/hbscdata</a>	<b>11, 13 and 15:</b> <ul style="list-style-type: none"> <li>Fair or poor self-rated health</li> <li>Multiple health complaints per week</li> <li>1 or more medically attended injury in last year</li> <li>First cigarette/drunkenness/cannabis use at 13 or younger</li> <li>Weekly smoking/alcohol consumption</li> <li>Fighting 3 or more times in last year</li> </ul>	√	√	---	---	---	<b>11, 13 and 15:</b> <ul style="list-style-type: none"> <li>Migration (where adolescent and parents were born)</li> <li>Family affluence (reflects market forces, economic trends, technological advances, and cultural, social and geographical norms) (87)</li> </ul>
<b>World Bank LSMS/IS</b> <a href="http://web.worldbank.org/archive/website00002/WEB/SELECT-2.HTM">http://web.worldbank.org/archive/website00002/WEB/SELECT-2.HTM</a>	<b>All ages:</b> <ul style="list-style-type: none"> <li>Chronic illness/disability (e.g. infectious diseases, mental health issues)</li> <li>Taking medication for chronic illness/disability</li> <li>Sudden illness (e.g. diarrhoea, broken bone)</li> <li>Dissatisfaction with inpatient or outpatient care in last 4 weeks and reasons (e.g. due to poor quality care, no drugs available, unfriendly treatment, long waiting hours, expense).</li> <li>Experience of delay seeking health care, and reasons (e.g. expense, self-treatment, distrust)</li> <li>Experience of health care refusal, and reasons (e.g. expense, not eligible)</li> </ul>	√	√	√	√	√	<b>All ages:</b> <ul style="list-style-type: none"> <li>Ethnicity</li> <li>Religion</li> <li>Chronic illness/disability (e.g. infectious diseases, mental health issues)</li> <li>Difficulty finding money to pay for household health care</li> </ul> <b>10–14, 15–19:</b> <ul style="list-style-type: none"> <li>School attendance</li> </ul> <b>15–24:</b> <ul style="list-style-type: none"> <li>Literacy rate</li> <li>Unemployment rate</li> </ul>
<b>World Bank Core Welfare Indicator Questionnaire</b> <a href="http://ghdx.healthdata.org/series/core-welfare-indicators-questionnaire-survey-cwiq">http://ghdx.healthdata.org/series/core-welfare-indicators-questionnaire-survey-cwiq</a>	<b>12–19:</b> <ul style="list-style-type: none"> <li>Live birth in last 12 months (female)</li> <li>Prenatal care during pregnancy (female)</li> </ul> <b>All ages:</b> <ul style="list-style-type: none"> <li>Injury or sickness in last 4 weeks, and type</li> <li>Consulted health care provider or traditional healer in last 4 weeks, and type</li> <li>How medical consultation paid</li> <li>Problems with health service</li> </ul>	√	√	√	√	√	<b>All ages:</b> <ul style="list-style-type: none"> <li>Employment status</li> <li>Hours worked in all jobs and activities in last week</li> <li>Displaced household (e.g. due to war)</li> <li>Stability of household income</li> </ul>

Data source and key sponsor	Examples of health and health service indicators, by available age range (years)	POSSIBLE EQUITY STRATIFIER					Examples of other possible equity stratifiers (e.g. ethnicity, religion, current school status, disability), by available age range (years)
		Sex	Economic	Education	Residence	Subnational	
<b>SPECIFIC CONDITION</b>							
<b>AIDS Indicator Survey</b> <a href="https://hivdata.dhsprogram.com/">https://hivdata.dhsprogram.com/</a>	<p><b>16–17, 18–19:</b> HIV prevalence</p> <p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Knowledge on HIV prevention</li> <li>• Comprehensive knowledge on AIDS</li> <li>• Prior HIV-testing coverage</li> <li>• Pregnant women counselled and tested for HIV (female)</li> <li>• Who assisted in recent delivery (different levels health personnel, traditional birth attendant, relative/friend) (female)</li> <li>• Spoke to someone about cervical cancer during health facility visit (female)</li> <li>• Male circumcision, and who performed it (male)</li> </ul>	√	√	√	√	√	<p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Marital status</li> <li>• Employment status</li> </ul>
<b>Global Youth Tobacco Survey</b> <a href="https://healthdata.gov/dataset/global-tobacco-surveillance-system-gtss-global-youth-tobacco-survey-gyts">https://healthdata.gov/dataset/global-tobacco-surveillance-system-gtss-global-youth-tobacco-survey-gyts</a>	<p><b>13–15:</b></p> <ul style="list-style-type: none"> <li>• Prevalence of tobacco use</li> <li>• Desire to quit smoking</li> <li>• Ever received help or advice to stop smoking</li> </ul>	√	---	√	√	√	
<b>Malaria Indicator Survey</b> <a href="http://www.malariasurveys.org/index.cfm">http://www.malariasurveys.org/index.cfm</a>	<p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Knowledge on malaria symptoms</li> <li>• Prophylactic use of antimalarial drug if live birth in 2 years preceding survey (female)</li> </ul>	√	√	√	√	√	<p><b>15–19:</b></p> <ul style="list-style-type: none"> <li>• Drinking-water sources</li> <li>• Sanitation</li> </ul>

# Appendix 6

## Examples of indicators of health, risk factors and Tanahashi coverage dimension, by data source, dataset and age range

*This appendix details the data that individual surveys are currently designed to collect. However, individual countries may only collect some of these data.*

No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
1.	Total population ( <i>12</i> )	10–19	UN Population Division	UN Population Division
<b>Health</b>				
2.	Girls/women birth rate ( <i>11, 12, 17, 52</i> )	10–14, 15–19	UN Population Division; UN Population Fund; 2018 WHO indicators; Millennium Development Goal Global Database	MICS, DHS, RHS and other national surveys; civil registration systems and censuses
3.	Girls/women fertility rate ( <i>50, 88</i> )	Under-15, 15–19	USAID	DHS
4.	Percentage of girls and women with obstetric complications due to abortion ( <i>11</i> )	15–19	National health system programme monitoring; health facility surveys	Not routine
5.	New HIV infections ( <i>60</i> )	15–24	UNAIDS	UNAIDS
6.	Prevalence and type of female genital cutting ( <i>89</i> )	0–14 (MICS) 10–14, 15–19 (DHS)	UNICEF, USAID	MICS, DHS
7.	DALY rates of diseases of poverty ( <i>49, 89</i> )	10–24	Institute for Health Metrics and Evaluation (IMHE)	Global Burden of Disease Study
8.	DALY rates of injury and violence ( <i>49, 89</i> )	10–24	IMHE	Global Burden of Disease Study
9.	DALY rates of noncommunicable diseases or conditions, including mental disorders ( <i>49, 89</i> )	10–24	IMHE	Global Burden of Disease Study



No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
10.	Current level of family food consumption more than adequate, just adequate, less than adequate (90)	10–19	World Bank	LSMS/IS
11.	Subjective description of weight, e.g. “How would you describe your weight?” (very underweight, slightly underweight, about right, slight overweight, very overweight) (91)	11 or younger, 12, 13, 14, 15, 16 or older	WHO	GSHS
12.	Obesity or overweight (based on self-reported weight and BMI calculations) (51, 92)	11, 13, 15	WHO	HBSC
13.	Mortality rate (12, 52)	10–19	WHO, Global Mortality Database	WHO, Global Mortality Database
14.	Suicide mortality rate (11, 46)	<i>Unknown</i>	Civil registration and vital statistics system	Civil registration and vital statistics system
15.	[ <i>Indicators for the 3 health conditions X, Y and Z, if those indicators can be disaggregated for adolescents</i> ]	<i>Unknown</i>	Multiple sources	Multiple sources
<b>Risk factors</b>				
16.	Percentage who had sex before age 15 (60)	15–19	USAID	DHS
17.	Percentage of girls and women who have experienced sexual violence (60)	15–19	USAID	DHS
18.	Percentage of girls and women who have experienced physical violence (60)	15–19	USAID	DHS
19.	Percentage who used condom at last high-risk sex (60)	15–24	UNAIDS	UNAIDS
20.	Knowledge about HIV (60)	15–24	UNAIDS	UNAIDS
21.	Prevalence of overweight and prevalence of obesity* (46, 52)	10–17, 18–19	Household surveys	Household surveys
22.	Prevalence of being insufficiently physically active** (46, 52)	10–17, 18–19	Household surveys	Household surveys
23.	Prevalence of anaemia (46, 49, 89)	10–24, 15–49	IMHE, USAID	Global Burden of Disease Study; DHS
24.	Prevalence of daily smoking (46, 49, 89)	10–24	IMHE, household surveys	Global Burden of Disease Study; household surveys
25.	Prevalence of binge drinking (more than 60 grams) on a single occasion in the last 30 days (49, 89)	15–19	IMHE	Global Burden of Disease Study
26.	[ <i>Indicators for risk factors for the health conditions X, Y and Z, if those indicators can be disaggregated for adolescents</i> ]	<i>Unknown</i>	Multiple sources	Multiple sources

No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
<b>Health service: availability coverage</b>				
27.	Number of health workers per 10 000 population ( <i>11, 93</i> )	n.a.	Administrative records	Administrative records
28.	Percentage of health facilities providing adolescent health services/with adolescent-friendly accreditation ( <i>11</i> )	n.a.	National health system programme monitoring; health facility surveys	Not routine
29.	Percentage of health workers with specific training and/or accreditation in provision of health services to adolescents (including provision of contraceptive services) ( <i>11, 29, 60</i> )	n.a.	National health system programme monitoring; health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
30.	Number and percentage of health facilities providing mental health services to adolescents ( <i>11</i> )	n.a.	National health system programme monitoring; health facility surveys	Not routine
31.	Number and percentage of health workers with specific training in provision of mental health services to adolescents ( <i>11</i> )	n.a.	National health system programme monitoring; health facility surveys	Not routine
32.	Percentage of health facilities with specific medicines and commodities available, e.g. vaccines, condoms and other contraceptives, amoxicillin ( <i>29, 60</i> )	n.a.	Administrative records; health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Some routine
33.	Percentage of health facilities with specific supplies and equipment available, e.g. pregnancy tests, HIV test kits, disposable needles and syringes ( <i>29, 60</i> )	n.a.	Administrative records; health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Some routine
34.	Percentage of rape survivors who sought care within 72 hours who received HIV postexposure prophylaxis ( <i>11</i> )	<i>Unknown</i>	Routine facility reports Administrative data	Routine national and subnational
<b>Health service: accessibility coverage</b>				
35.	Health insurance coverage ( <i>94</i> )	5–17, 5–19	UNICEF, USAID	MICS, DHS
36.	Problems accessing health care (female) ( <i>94</i> )	15–19	USAID	DHS
37.	Participation in decision-making about own health care (female, married) ( <i>94</i> )	15–19	USAID	DHS
38.	Annual per capita expenditure on outpatient and inpatient care ( <i>94</i> )	5–14, 15–24	USAID	DHS
39.	Difficulty finding money to pay for household health care ( <i>95</i> )	10–19	World Bank	LSMS/IS
40.	Experience of delay seeking health care, and reasons (e.g. expense, self-treatment, distrust) ( <i>95</i> )	10–19	World Bank	LSMS/IS
41.	Experience of health care refusal, and reasons (e.g. expense, not eligible) ( <i>95</i> )	10–19	World Bank	LSMS/IS
42.	Percentage of population with access to affordable essential medicines on a sustainable basis ( <i>93</i> )	<i>Unknown</i>	Multiple sources	Multiple sources

No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
43.	Percentage of health facilities with operating hours convenient to young people, e.g. after school hours and on weekends (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
44.	Percentage of clients who need less than 30 minutes, 31–60 minutes or over an hour to travel to health facility (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
45.	Percentage of clients who take time off work, school or chores to attend health facility (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
<b>Health service: acceptability coverage</b>				
46.	Number of visits in past 4 weeks, and amount paid for: public ambulatory outpatient services; hospital outpatient services; private doctor; private nurse/paramedic/midwife; alternative medicine practitioner; over-the-counter medication (95)	10–19	World Bank	LSMS/IS
47.	Who assisted with recent delivery (different levels health personnel, traditional birth attendant, relative/friend) (female) (96)	n.a.	USAID	AIS
48.	Who performed male circumcision (traditional practitioner, family/friend, professional) (male) (96)	n.a.	USAID	AIS
49.	Percentage of health facilities with up-to-date educational materials specifically developed for adolescents and young people on specific health topics (SRH, nutrition, etc.) (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
50.	Percentage of health facilities with other visible information channels (e.g. peer education, video, hotline) (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
51.	Percentage of clients who report the health facility hours were convenient and/or the wait time reasonable (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
52.	Percentage of clients who report the health facility waiting room was comfortable, the facility was clean, and/or the toilet was functional (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
53.	Percentage of clients who report feeling comfortable and at ease at the health facility (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
54.	Percentage of clients who report having been given an opportunity to feedback on health services (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
55.	Percentage of health facilities that involve young people (aged 15–24 years) in various aspects of service delivery and management, e.g. advisory committee, M&E, health education (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine

No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
<b><i>Health service: contact/use coverage</i></b>				
56.	Rate of use of health services (89)	10–19	National health system programme monitoring; health facility surveys	Not routine
57.	Percentage coverage of HPV vaccination in girls and women (11)	15–24	National health system programme monitoring; health facility surveys	Not routine
58.	Took iron tablets as prophylaxis for anaemia during last pregnancy (94)	15–19	USAID	DHS
59.	Antenatal care for girls and women (4 or more visits) (12)	15–17, 18–19	UNICEF, USAID	MICS, DHS, RHS and other national surveys
60.	Skilled birth attendant at delivery for girls and women (12)	15–17, 18–19	UNICEF, USAID	MICS, DHS, RHS and other national surveys
61.	Percentage with severe mental disorders who utilized a specified package of mental health services in the last 12 months (11, 52)	10–14, 15–19	National health system programme monitoring; health facility surveys	Not routine
<b><i>Health service: effective coverage</i></b>				
62.	Percentage of health facilities with policies and procedures in place for a full adolescent health service package as recommended by the national guidelines, e.g. planned transition from paediatric to adult care (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
63.	Percentage of health facilities with systems in place for specific types of referral for young clients, e.g. rehabilitative, psychosocial, legal (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
64.	Percentage of health facilities that provided visual and auditory privacy to young clients (15–24 years), e.g. communication with reception staff not overheard, client records stored securely, soundproof consultation rooms away from public view (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
65.	Percentage of health facilities providing specific types of services, e.g. medical male circumcision, STI test and treatment, treatment of injuries from accidents and violence, nutritional needs, drug and alcohol abuse counselling (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
66.	Percentage of health facilities providing abortion-related services (60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine

No.	Examples of indicators ( <i>citation source</i> )	Available age range (years)	Data source or key sponsor	Dataset
67.	Percentage of health care providers who report specific types of services provided to young clients (15–19 years), e.g. family planning counselling, pre-/post-abortion counselling, screening for sexual and gender-based violence, mental health counselling, anti-retroviral therapy initiation, induced surgical abortion (11, 29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
68.	Percentage of health care providers who report they will not provide young clients (15–24 years) with certain services because of client marital status and/or need for spouse/partner consent (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
69.	Percentage of health care providers who report having policies on non-discrimination and/or child protection in the facility (29, 60)	n.a.	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
70.	Girls' and women's demand for modern family planning method satisfied (12, 52)	15–17, 18–19	UNICEF, USAID	MICS, DHS, RHS and other national surveys
71.	Percentage of confirmed malaria cases treated (52)	n.a.	National health system programme monitoring; health facility surveys	Not routine
72.	Percentage of clients who report receiving information on health topics (e.g. SRH, nutrition, drug use, referrals) during current or previous facility visit (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
73.	Percentage of clients who report that the health service provider they have just seen was able to respond to all their concerns satisfactorily (11, 29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine
74.	Percentage of clients who report a breach of privacy during consultation, e.g. someone entering room (29, 60)	15–24	Health facility surveys, e.g. UNFPA and IPPF 2017 in 23 African countries	Not routine

\* *Younger adolescents (10–17 years old)*: Prevalence of overweight: percentage with sex-specific body mass index (BMI)-for-age above +1 standard deviation from the WHO 2007 growth reference median (97). Prevalence of obesity: percent with sex-specific BMI-for-age above +2 standard deviation from the WHO 2007 growth reference median (97).

*Older adolescents (18–19 year olds)*: Percentage who are overweight (defined as having a BMI  $\geq 25$  kg/m<sup>2</sup>) and obese (defined as having a BMI  $\geq 30$  kg/m<sup>2</sup>).

\*\* *Younger adolescents (10–17 years old)*: Prevalence of being insufficiently physically active defined as less than 60 minutes of moderate to vigorous intensity activity daily.

*Older adolescents (18–19 year olds)*: Prevalence of being insufficiently physically active defined as not meeting any of the following criteria: 150 minutes of moderate-intensity physical activity per week; 75 minutes of vigorous-intensity physical activity per week; an equivalent combination of moderate- and vigorous-intensity physical activity accumulating at least 600 metabolic equivalent minutes per week.

# Appendix 7

## Overview of evidence-based adolescent health interventions

This appendix summarizes evidence-based adolescent health interventions from the *Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation*. Each of these interventions is described in more detail in section 3 of the Global AA-HA! guidance (11) and its annexes (70), where additional references are also provided for further information.

Positive development	Unintentional injury	Violence	Sexual and reproduction health, including HIV
<ul style="list-style-type: none"> <li>• Adolescent-friendly health services</li> <li>• Health-promoting schools</li> <li>• Hygiene and nutrition interventions</li> <li>• Child online protection</li> <li>• e-health and m-health interventions for health education and the involvement of adolescents in their own care</li> <li>• Parenting interventions</li> <li>• Adolescent participation and interventions to promote competence, confidence, connection, character and caring</li> </ul>	<ul style="list-style-type: none"> <li>• Laws on drinking age, blood alcohol concentration, seat-belt and helmet wearing, graduated driver licencing</li> <li>• Traffic calming and safety measures</li> <li>• Pre-hospital and hospital care</li> <li>• Community campaigns and individual interventions to promote behavioural change related to safe driving and good laws to encourage behavioural change</li> <li>• Population, community-based and individual level drowning prevention measures</li> <li>• Assessment and management of adolescents who present with unintentional injury, including alcohol-related injury</li> <li>• Infrastructure design and improvement</li> <li>• Vehicle safety standards</li> </ul>	<p>INSPIRE strategies to prevent and respond to all forms of violence against children and adolescents:</p> <ul style="list-style-type: none"> <li>• Implementation and enforcement of laws: banning violent punishment, criminalizing sexual abuse and exploitation of children, preventing alcohol misuse, limiting youth access to firearms and other weapons</li> <li>• Norms and values: changing adherence to restrictive and harmful gender and social norms, community mobilization programmes, bystander interventions</li> <li>• Safe environments: addressing “hotspots”, interrupting the spread of violence, improving the built environment</li> <li>• Parent and caregiver support through home visits, community approaches and comprehensive programmes</li> <li>• Income and economic strengthening: cash transfers, group saving and loans, microfinance</li> <li>• Response and support services: screening and interventions, counselling and therapeutic approaches, programmes for juvenile offenders, foster care interventions</li> <li>• Education and life skills: increasing school enrolment, safe and enabling school environment, life and social skills training</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive sexuality education</li> <li>• Information, counselling and services for comprehensive sexual and reproductive health, including contraception</li> <li>• Prevention of and response to harmful practices, such as female genital mutilation and early and forced marriage</li> <li>• Pre-pregnancy, pregnancy, birth, post-pregnancy, abortion (where legal) and postabortion care, as relevant to adolescents</li> <li>• Prevention, detection and treatment of sexually transmitted and reproductive tract infections, including HIV and syphilis</li> <li>• Voluntary medical male circumcision (VMMC) in countries with generalized HIV epidemics</li> <li>• Comprehensive care of children (including adolescents) living with, or exposed to, HIV</li> </ul>

Communicable diseases	Noncommunicable diseases, nutrition and physical activity	Mental health, substance use and self-harm	Conditions with particularly high priority in humanitarian and fragile settings
<ul style="list-style-type: none"> <li>• Prevention, detection and treatment of communicable diseases, including tuberculosis</li> <li>• Routine vaccinations, e.g. human papillomavirus, hepatitis B, diphtheria-tetanus, rubella, measles</li> <li>• Prevention and management of childhood illnesses, including malaria, pneumonia, meningitis and diarrhoea</li> <li>• Case management of meningitis</li> </ul>	<ul style="list-style-type: none"> <li>• Structural, environmental, organizational, community, interpersonal and individual level interventions to promote healthy behaviour (e.g. nutrition; physical activity; no tobacco, alcohol or drugs)</li> <li>• Prevention, detection and treatment of noncommunicable diseases</li> <li>• Prevention, detection and management of anaemia, especially for adolescent girls; iron supplementation where appropriate</li> <li>• Treatment and rehabilitation of children with congenital abnormalities and disabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Care for children with developmental delays</li> <li>• Responsive caregiving and stimulation</li> <li>• Psychosocial support and related services for adolescent mental health and well-being</li> <li>• Parent skills training, as appropriate, for managing behavioural disorders in adolescents</li> <li>• Structural, environmental, organizational, community, interpersonal and individual level interventions to prevent substance abuse</li> <li>• Detection and management of hazardous and harmful substance use</li> <li>• Structural, environmental, organizational, community, interpersonal and individual level interventions to prevent adolescent suicide</li> <li>• Management of self-harm and suicide risks</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of conditions and ensuring adequate nutrition for adolescent population groups according to age, gender, weight, physical activity levels and other key factors</li> <li>• Core health services to support adolescents with disabilities in an emergency</li> <li>• Medical screening of former child soldiers, and clinical management and community-based psychosocial support for survivors of sexual and/or gender-based violence</li> <li>• A minimal initial sexual and reproductive health service package</li> <li>• Safe access to and use and maintenance of toilets; materials and facilities for menstrual hygiene management and other intervention to improve water, sanitation and hygiene</li> <li>• Promotion of mental health through normal recreational activities for adolescents, re-start of formal or informal education, and involvement in concrete, purposeful common interest activities</li> <li>• Psychological first aid and first-line management of adolescent mental, neurological and substance-use conditions</li> </ul>



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