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Strengthening health systems to respond to the sexual and reproductive health needs and rights of adolescents: Experiences in Ethiopia, Chile, and Republic of Moldova

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ABSTRACT

Globally the sexual and reproductive health of adolescents is improving, but progress is uneven and many adolescents experience poor sexual and reproductive health outcomes. This is driven, in part, by persistent barriers to accessing and using health services. Efforts to address these barriers have often been fragmented and disconnected from the broader health system. An adolescent-responsive health system shifts the emphasis from creating adolescent-friendly services to ensuring the entire health system responds to the needs and rights of adolescents. This paper aims to fill the gap in evidence about how adolescent-responsive health systems can be implemented and their impact. We analyze the experience of three countries, Chile, Ethiopia, and Republic of Moldova, using two validated frameworks: Shiffman's political prioritization framework and the World Health Organization health systems strengthening framework. Our analysis identifies factors that enabled these countries to prioritize adolescent-responsive health systems, specific actions taken to integrate adolescent-friendly elements into each health system building block, and observed changes in contraceptive use and related adolescent health indicators. Findings demonstrate that making health systems responsive to the needs and rights of adolescents is feasible across diverse low- and middle- income contexts. Implementation requires political prioritization, often catalyzed by a high-profile event or policy process, and sustained changes across leadership and governance, health workforce, service delivery, health information, and health financing. Adolescent-responsive health systems can meaningfully expand access to person-centered care, contributing to universal health coverage and the realization of adolescents' sexual and reproductive health and rights.

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1. Introduction

Globally, there has been notable progress in the sexual and reproductive health (SRH) of adolescents (Akwara and Chandra-Mouli, 2023; Beckwith et al., 2024). Adolescent birth rates, for example, have declined from 52 births per 1000 girls in 2010 to 42.5 in 2021 (United Nations Department of Economic and Social Affairs UNDESA, 2022). This decline has been due, in part, to an increase in the proportion of adolescent girls aged 15–19 whose need for family planning was satisfied by modern methods, from 49% to 60% between 2010 and 2020 (United Nations Children's Fund, 2020). However, progress for adolescents within and across countries remains uneven. The proportion of adolescents whose need for family planning was satisfied by modern methods remains below 50% in South Asia, Sub-Saharan Africa, and the Middle East and North Africa (United Nations Children's Fund, 2020). Each year, adolescents have an estimated 21 million pregnancies, 50% of which are unintended (Sully et al., 2020) Unintended pregnancy in adolescence has far reaching consequences for adolescents' rights, health, education, social and economic well-being, and requires concerted, sustained efforts to address.

A key driver of adolescent SRH outcomes are the unique barriers they face to accessing and using high-quality healthcare services (Sully et al., 2020; Chandra-Mouli et al., 2014, 2017; Chandra-Mouli and Akwara, 2020). To address these barriers, many countries have implemented adolescent-friendly health services (World Health Organization, 2012). When implemented with fidelity to global guidelines, adolescent-friendly health services have demonstrated effectiveness in improving quality and increasing service uptake (Chandra-Mouli et al., 2016). However, implementation of adolescent-friendly services has often been piecemeal; for example, health care workers are not trained and supported as part of a system wide performance improvement approach, data gathered through adolescent-friendly services are not included in the health management information system, and services are delivered through separate spaces that may not be integrated into the health system. As a result, adolescent-friendly services have been difficult to scale and sustain and barriers to adolescent access to health services, such as quality of care, privacy, and geographic access, persist (Chandra-Mouli and Akwara, 2020; High Impact Practices in Family Planning HIP, 2021; Hainsworth et al., 2014; Simon et al., 2015). To better align with the increased emphasis on universal health coverage and to more sustainably meet the needs and rights of adolescents—who make up a quarter of the population in many countries—there is a need to shift from a piecemeal adolescent-friendly services approach to embedding adolescent health considerations in all aspects of a health system (World Health Organization, 2023, 2014; Sawyer et al., 2026).

In 2014, the World Health Organization (WHO) called this an "adolescent-responsive health systems" approach (World Health Organization, 2014). As described in the Adolescent-Responsive Contraceptive Services Family Planning High Impact Practices Enhancement, this approach intentionally transitions the emphasis from creating separate adolescent-friendly spaces and corners to ensuring that all health services are responsive to the needs and rights of adolescents by incorporating adolescent-friendly elements that have demonstrated effectiveness (High Impact Practices in Family Planning HIP, 2021). Table 1 illustrates how to incorporate evidence-based practices for adolescent health across the health system using the WHO health system building blocks framework (World Health Organization, 2007).

There is increasing interest in adopting an adolescent-responsive health systems approach but limited documented implementation learning and experience to guide and inform action (Sawyer et al., 2026). The objective of this research is to fill this gap. We identified three countries, Chile, Ethiopia, and Republic of Moldova, that have made substantial progress in moving towards an adolescent-responsive health system and achieving progress in improving adolescent SRH. We analyze their experiences to answer three questions:

Table 1
A description of an adolescent-responsive health system through application of evidence-informed practices in adolescent health service delivery to the WHO health system building blocks.

Leadership and governance	Policies, standards, guidelines, and budget allocations uphold adolescent rights to healthcare and are implemented. Functional mechanisms for adolescents to hold health systems accountable for meeting their needs, are in place.
Service delivery	Adolescents have access to an integrated package of health care, rather than only SRH. Care is delivered to adolescents at primary, secondary, and tertiary levels and through multiple different entry points at facility, school, and community level. Adolescents can access services through both the public and private sector.
Health workforce	Healthcare staff who interact with adolescents are adolescent-competent and unbiased through a combination of pre-service education, in-service training, supervision, and mentorship.
Health information	Data are collected by age and sex. Age-disaggregated is used at all levels of the health system to inform improvements to service delivery for adolescents.
Medical products and commodities	All commodities are available without restrictions by age, sex or gender identity, parity, marital status, or other characteristics.
Financing	Adolescents and services for adolescents are included in national and sub-national budgets, insurance schemes, and performance-based and demand-side financing.

1. What factors enabled these countries to prioritize embedding adolescent-friendly elements into the building blocks of their countries' health systems?
2. What actions did these countries take to embed adolescent-friendly elements in each building block of the health system?
3. What changes occurred in use of contraception or related indicators for adolescents, during and after the move towards more adolescent-responsive health systems?

2. Methods

We used the following steps to answer the three research questions above.

Step 1: Select countries for analysis. Using purposive sampling, we identified three countries for analysis. We selected these countries from among a small pool of countries that had moved from adolescent-friendly health facilities to responsive health systems based on the following criteria: a) existence of peer-reviewed or grey literature containing evidence of progress towards at least some aspects of adolescent-responsive health systems; b) has sustained elements of adolescent-responsive health systems for at least 10 years; c) has reliable data on adolescent contraception indicators over time; and d) reflected diverse socio-economic contexts and different regions of the world. To assess these criteria, we conducted a search of the literature, consulted with those working on adolescent health, and gathered intelligence at meetings and conferences. Based on these criteria, three countries were identified: Chile, Ethiopia, and Republic of Moldova.

Step 2: Analyze countries using an analytical framework drawn from Shiffman's political prioritization framework (Shiffman, 2007) and the WHO health systems framework (World Health Organization, 2007). We developed an analytical framework in table form (Table 2). The first part of the table seeks to document the factors that enabled countries to prioritize actions towards an adolescent-responsive health system. For each country, we aimed to understand and document factors within the three categories Shiffman proposes as relevant to political prioritization of key public health issues: transnational influence, domestic advocacy, and national political environment (Shiffman, 2007).

The second part of the analytical framework is grounded in the WHO health system building block framework, with two additions (World

Table 2
Adolescent-responsive health systems country analytical framework.

Factors enabling political prioritization of embedding adolescent-friendly elements in health systems
Transnational influence
How did efforts by international agencies to establish a global norm related to adolescent health impact prioritization?
How did the offer of financial and technical resources by international agencies impact prioritization?
Domestic advocacy
How did the presence of national political champions, availability and use of evidence, organization of forums to generate cause, and/or availability of clear policy alternatives to demonstrate the problem is surmountable?
National political environment
Were there political changes or prioritization of other health causes that may have affected prioritization?
Building block 1: Leadership and governance
Health policies, laws, and strategies
What health policies, laws, and strategies address adolescent health?
Restrictions and consent
Do health policies restrict or limit adolescents to access counseling and services based on age, marital status, and parity? Do they require any guardian/parent spousal consent? How is this interpreted in implementation?
Diverse adolescents
How does the policy and standards of the health system address the needs of diverse adolescents, including adolescents of different ages, genders, disability, and life stages?
Package of services
Has the Ministry of Health (MOH) outlined a package of services for adolescents at each level of care, inclusive of violence and injury prevention, nutrition, physical activity, SRH, HIV, maternal health, mental health, integrated management of communicable and non-communicable conditions, substance use, and immunization?
Adolescent health standards
Do national standards for delivery of health services for adolescents exist—either as standalone standards or integrated into other health service delivery standards?
Adolescent accountability
Is there a mechanism by which adolescents are made aware of their health rights and entitlements?
Is there a national or sub-national process by which adolescents can participate in holding the health system accountable for policy, budgeting, and quality service delivery?
Building block 2: Service delivery
Service delivery points
According to health system structure and guidance, where are adolescent health services provided? In practice, are services provided in all these places?
Privacy
How do adolescent service delivery points ensure visual and auditory privacy for adolescents?
Quality improvement
How does the health system quality improvement process include measurable aims for improving quality of health services for adolescents?
Referrals
Is there an appropriate[4] referral system in place to support movement of adolescents (and their information) to other health services within and between facilities? Is there a referral system in place to support movement of adolescents to non-health services?
Building block 3: Health workforce
Staff
Are there dedicated staff with responsibility for ensuring that the health system addresses adolescents? Are these staff consistently in place or significant vacancies?
Competencies
Are there national competencies for health workers in adolescent health aligned to the package of health services for adolescents?
Pre-service education
How are adolescent health competencies addressed in pre-service education for different cadres of health workers?
Continuous professional education
Is there a continuous professional education system for providers on adolescent health? Does the continuous professional education system include in-service training, supervision, mentorship, and/or other related learning methods (e.g., collaborative learning) in adolescent health?
Building block 4: Health information
Data collection
How does the health system collect and report sex and age-disaggregated data for key health service use indicators at community, facility, subnational, and national levels in five-year age groups (i.e., 10–14, 15–19, and 20–24)?
Administrative data use
How do health system managers at facility, subnational, national levels systematically analyze and use sex- and age-disaggregated health service data to adapt service delivery strategies and improve quality and equity?
Other data collection and use
How do health system managers use other data about adolescents (e.g., supervision and quality information, population-based surveys or health facility assessments) to inform decision-making, resource allocation, and priority setting within the health system?
Building block 5: Medical products and commodities
Commodity planning and restrictions
Were there any changes to the broader commodity supply system that strengthened the availability for commodities for adolescents and adults?
Building block 6: Financing
Cost of services
How are the cost of services for adolescents covered? Are there any informal out-of-pocket payments required of adolescents? Are free or subsidized services offered to some groups of adolescents?
Insurance
Are adolescents eligible for financial pooling arrangements, for example, a public insurance program or access to facilities that are financed by prepaid pooled funds? Which adolescents are eligible?
Demand-side financing
Do demand-side financing mechanisms, such as vouchers, explicitly include adolescent health services?
Supply-side financing
Do supply-side financing mechanisms, such as performance-based financing, explicitly include adolescent health metrics as part of the performance measures?

(*continued on next page*)

Table 2 (*continued*)

Building block 6: Financing
Adolescent health resource allocation Are there national and subnational budget allocations to adolescent health?
Building block 7: Health system partnerships
Community partnerships Does the health system have a mechanism to engage with community-based adolescent health initiatives, community development systems, and civil society organizations (including youth-led organizations)? How are these mechanisms used to build support for the provision of health information and services to adolescents and promote adolescent demand for services? **Education system partnerships** Does the health system have a mechanisms to collaborate with the education systems? How are the mechanisms used to promote comprehensive sexuality education, referrals, school-based health services, and/or health promoting schools? **Multisectoral partnerships** Does the health system have mechanisms to coordinate with other systems that benefit adolescents, such as social protection or economic development?

[4]Referral systems for adolescent should ensure anonymity. In addition, referral systems for adolescents should ensure that adolescent can access the services for which they are referred to (they aren't too far, too expensive, or restricted to adolescents) and track closed referrals.

Health Organization, 2007). First, given the importance of community level influences on adolescent health seeking behavior, we ensured inclusion of community level factors in each of the relevant building blocks as called for by Sacks et al. (2019). Second, we included a category of "health system partnerships" to reflect the importance of interaction and collaboration between the health system and other systems/sectors that are essential for adolescent health and well-being (Svanemyr et al., 2015). For each health system building block plus the "health system partnerships" category, we developed a set of questions to guide assessment of whether and how that building block was made more adolescent-responsive (Table 2). This analysis framework was adapted from a tool developed and used by USAID's MOMENTUM Country and Global Leadership (MOMENTUM) project in 2021 (MOMENTUM Country and Global Leadership, 2022). The MOMENTUM tool identified the features that would make each building block more adolescent-responsive through a comprehensive review of the published literature on adolescent-friendly services, expert opinion, expert review by the WHO and others, and testing and validation in Kenya and Sierra Leone (MOMENTUM Country and Global Leadership, 2024).

We completed the analysis table for each country (Appendix A, B, and C) sourcing information from: a) the peer reviewed publications and grey literature (Chandra-Mouli et al., 2019, 2013a; Akwara et al., 2022; Fikree and Zerihun, 2020; Kereta et al., 2021; Kempers et al., 2014; Lesco et al., 2019) and b) the expert input of the authors of this paper who were engaged in their country's progression towards adolescent-responsive health systems.

Step 3: Assess progress on key adolescent SRH indicators over time. To answer the final question, we reviewed published evidence on contraceptive uptake and related indicators in each country. We selected contraceptive uptake as a primary indicator for this analysis because it is one of few indicators that all three countries capture in an age-disaggregated manner over time. In addition, the importance of contraceptive uptake to other health outcomes, such as adolescent fertility is well documented.

We paid particular attention to mitigating bias in the case study development, using guidance from Quintão et al. to increase validity and reliability in using case studies (Quintão et al., 2020). We gathered information from multiple sources which we have cited, we constructed pathways grounded in these data, and we placed these changes within the wider context. Finally, we stated the decisions we made explicitly, so that they could be verified by other researchers.

3. Results

3.1. What factors enabled countries to prioritize embedding adolescent-friendly elements across health system building blocks?

Using the Shiffman Framework, we find that, across all three countries, a key contributing factor to the government decision to strengthen the health sector response to adolescent health was a high profile global and/or regional call for action, event, or process. Government officials in the countries responded positively and either led the translation of this commitment themselves or drew upon the expertise of partners from within and outside the countries to use this window of opportunity to transform the health system.

In Ethiopia, the International Conference on Population and Development (ICPD) Plan of Action, launched in 1994, put adolescent SRH on the global agenda for the first time and lent legitimacy to the call for champions to address adolescents meaningfully (Akwara et al., 2022). In addition, Ethiopia's commitment to reducing maternal and child mortality as part of the Millennium Development Goals catalyzed significant investment in rural healthcare infrastructure, and expanded access to contraception for all people, including adolescents.

In Chile and other countries of the Andean region in South America, the relatively slow progress in reducing adolescent fertility compared to adult fertility, catalyzed attention on the high rates of adolescent pregnancy and pregnancy-related health, social, and economic consequences, especially among poorer families and communities. This led to the establishment of the Andean Plan of Action to address adolescent pregnancy. Urged by nongovernment organizations, academics, and champions within the government, the Government of Chile responded to the regional call for action by putting in place a strong national initiative (Caffe et al., 2017).

In the Republic of Moldova, the unravelling of government systems and structures following the breakup of the Soviet Union, the social disruption and the economic difficulties led to increases in mortality and morbidity in young people, a group previously considered to be healthy. This, in turn, led to increased commitment and investment in understanding and responding to young people both by the government and international organizations. Non-government organizations (NGOs) and academics working for and with adolescents were given a place at the table when WHO-World Bank led discussions on health sector reform were initiated; they were well prepared with experience and groundwork to use this opportunity (Chandra-Mouli et al., 2013b).

3.2. What actions did these countries take to embed adolescent-friendly elements in each building block of the health system?

Our analysis finds that all three countries took steps to embed adolescent-friendly elements across *all* the health system building blocks, rather than the more common limited focus on "adolescent-friendly" service delivery alone. This multi-pronged, health system-wide approach proved critical in scaling and sustaining investment in adolescent health from 1995 to present day. Below, we present the actions taken across the three countries within each of the health system building blocks and note areas where progress has been more limited.

3.2.1. Leadership and governance

All three countries embedded adolescent SRH in national law, policies, and guidelines. Chile developed a national adolescent and youth health policy in 1999, which then informed a range of other policies, guidelines, and goals. Chile set a target to reduce adolescent pregnancy by 30% in the health systems' goals for 2000–2010, making adolescent pregnancy prevention a system-wide priority and setting the stage for the National Comprehensive Health Program for Adolescents and Youth Action Plan in 2012.

In Ethiopia, adolescents were identified as a priority population in the country's first National Reproductive Health Strategy and in the National Family Planning Guidelines published in 2006. This subsequently led to the development of a National Adolescent Sexual and Reproductive Health Strategy, and eventually to the current National Adolescents and Youth Health Strategy (2021–2025). This strategy is complemented by Adolescent and Youth Health Standards, an implementation guide, and a health workforce training manual.

In 2005, the Republic of Moldova launched the National Strategy for Reproductive Health with adolescent SRH as one of main priorities and the National Concept on Youth-Friendly Health Services, which defined youth-friendly health services for the country and informed a range of other normative documents, including national quality standards and norms on youth-friendly health services.

All three countries developed national guidelines on adolescent health and a clear package of services for adolescents at each level of care, aligned with WHO recommendations. While the specifics of consent for different services vary, all three countries affirmed the rights of young people to access most, if not all, services by removing barriers relating to age and parental consent for legal minors.

For all three countries, the leadership and governance building block continued to be strengthened over a long period of time—nearly 30 years from 1994 to present (2024). The countries' laws, policies, and guidelines evolved and improved during this period. For example, in Ethiopia and Moldova, early policies and guidelines focused almost exclusively on adolescent SRH whereas the more recent iterations of their youth health policies and guidelines have expanded beyond SRH to include mental health, nutrition, non-communicable diseases, and other adolescent health areas. Another example is that all countries began with in-service training of health workers and then extended this to pre-service training.

All three countries have established mechanisms for engaging young people in governance, but have room for strengthening the systematic ability of young people to hold health services and systems accountable at scale.

3.2.2. Service delivery

All three countries used a similar approach to service delivery for adolescents at scale. In some public health facilities, dedicated spaces for adolescent health services (called either adolescent-friendly spaces or youth-friendly services) were created. These facilities had at least one room available and were often in areas with higher client volume. In addition, recognizing that these dedicated spaces were not feasible across all health facilities and that many adolescents had challenges in reaching the designated facilities, the MOH in all three countries subsequently integrated adolescent health care into community- and health facility-based primary health care.

In Chile, "adolescent health check" visits, integrated adolescent health primary care check-up, were standardized in government guidelines, tools, and data collection and implemented across primary health care facilities. In Ethiopia, the MOH integrated adolescent primary health care into the mandate of government Health Extension Workers (HEWs), a cadre of paid community health workers deployed in rural areas across the country, and mainstreamed adolescent care into primary-level health service delivery points. In the Republic of Moldova, Youth-Friendly Health Centers (YFHCs) are subdivisions of primary health care institutions. In addition, family doctors and nurses are also required to, and trained and supported to, provide adolescent friendly care and refer adolescent clients in need of more comprehensive care to the designated YFHCs.

3.2.3. Health workforce

Ethiopia and Chile have dedicated teams focused on adolescent health within the MOH at national level and adolescent health focal points at sub-national levels. The Republic of Moldova's MOH has not had this level of staffing; the leads for maternal and child health and primary health care both include adolescents in their purview.

Ethiopia and Chile have defined national competencies for health workers on adolescent health, while the Republic of Moldova has competencies drafted and awaiting approval. Adolescent health is incorporated into pre-service education to varying degrees in the three countries. In Ethiopia, adolescent SRH is part of pre-service education for nurses and midwives, but national adolescent and youth health champions continue to advocate for the inclusion of adolescent health topics in all health professional pre-service education. In Chile and the Republic of Moldova, adolescent health is incorporated into the pre-service curricula of medical, nursing, and midwifery schools.

All three countries also train health service providers on adolescent health through standardized in-service training. However, health care provider supervision and mentorship in adolescent health remains a challenge. In the Republic of Moldova, the Neovita Resource Center serves as a center of excellence and provides supportive supervision to other youth-friendly health centers.

However, adolescent health is not routinely addressed in the standard MOH supervision or quality improvement processes in Chile, Ethiopia, and Republic of Moldova. In addition, providers in Chile, Ethiopia, and Republic of Moldova are not consistently supported to improve how they deliver services to adolescents, including as it relates to respectful care for adolescents. For example, there are limited opportunities, outside of in-service training, for providers to interact with peers and reflect on their values and attitudes towards adolescents, particularly adolescent SRH, and how that might manifest in their treatment of adolescent clients. Republic of Moldova has made strides in this direction with a collaborative learning model among providers at the youth-friendly centers, but this does not extend to all primary health care service delivery points (Lesco et al., 2019).

3.2.4. Health information

All three countries made considerable progress in collecting and using age-disaggregated data as part of strengthening the adolescent-responsiveness of their health system. Chile went from collecting some limited age-disaggregated data in their national health information system in 1994 to collecting a wide range of data disaggregated by age, sex, ethnicity, and other factors. Similarly, Ethiopia has successfully evolved its data for decision-making and quality improvement for health systems, advancing from initial efforts to a comprehensive model that now tracks and utilizes age-disaggregated data for all service delivery indicators as of 2021. The Republic of Moldova shifted from collecting some age- and sex- disaggregated health statistics to the inclusion of a separate module for youth friendly health centers in the national health information system.

In addition, the MOHs and non-governmental partners in all three countries use a variety of different information sources to inform their planning, budgeting, and delivery of services to adolescents. For example, Chile conducts a National Youth Survey every three years, which includes SRH indicators among other topics. Ethiopia uses data from the Ethiopia Demographic and Health Survey, the Performance Monitoring for Action survey, and service provision assessments. Non-governmental partners in Ethiopia also conduct extensive research on adolescents, which inform policy and planning. The government and partners in the Republic of Moldova have similarly conducted a range of different studies to inform the health system's response to adolescents. These include the WHO Health Behavior in School-Aged Children

surveys every four years since 2014, and two rounds of costing studies to inform budgeting and advocacy around adolescent inclusion in the national health insurance plan.

3.2.5. Medical products and commodities

All three countries worked to strengthen the consistent availability of a wide range of contraceptives during this period, which benefited adolescent clients. In addition, all three countries introduced the human papillomavirus (HPV) vaccine for adolescents, with targeted campaigns to reach adolescent girls. In the Republic of Moldova, efforts to strengthen the supply of commodities for adolescent health resulted in youth-friendly health centers being included in national commodity distribution plan and contributed to strengthening the overall supply chain.

3.2.6. Financing

All three countries acted at two levels—firstly in increasing governmental investment in making health systems adolescent responsive, and secondly in ensuring free access to health care services for adolescents, particularly reproductive health services, including contraceptive counseling and methods.

All three countries made national and sub-national budget allocations to adolescent health. For example, the national budget for adolescent health programs in Chile increased by 48% between 2018 and 2022. Inclusion of adolescent health in the national budget required consistent advocacy from national actors. In addition, costing studies conducted in Moldova informed the budget and enabled investments by the Government of Moldova and by external funders.

All three countries made progress in developing national health insurance plans that included adolescents. Chile has a universal health insurance system, comprising both public and private options. Most adolescents are covered under the national public health insurance. In the Republic of Moldova, the National Health Insurance Company has financed youth-friendly health services within the framework of primary health care since 2008. Ethiopia's community-based health insurance strategy allows adolescents aged 10–18 to access services covered through their parents' membership. However, parents must pay an increased contribution for youth aged 19–24, and many families are unable to pay.

3.2.7. Health system partnerships

The degree of health system partnerships to improve adolescent health and promote holistic adolescent development varied between the three countries. In Ethiopia, there was considerable national and sub-national efforts to coordinate across multiple ministries and partners to catalyze action on adolescent health and related issues, such as child marriage. In addition, the MOH and the Ministry of Education in Ethiopia initiated collaboration to advance school-based health education. In the Republic of Moldova, the MOH collaborates with the Ministry of Education to promote adolescent health education by involving adolescent health care providers in extra-curricular comprehensive sexuality education, health promoting school initiatives, and school health service provision. In addition, the Republic of Moldova's MOH collaborates with the Ministry of Labor and Social Protection to implement the National Child Protection Program and ensure access to health services for the most vulnerable adolescents in rural areas through youth-friendly mobile clinics. In Chile, collaboration with the education system has been limited by a lack of a national plan and wavering commitment to comprehensive sexuality education and other school health promotion and services.

In all three countries, health system actors at national, sub-national, and facility level collaborate with non-governmental partners, including community-based organizations, to increase adolescent health knowledge and awareness of services. Some non-governmental partners also work with communities to address social norms that shape expectations around child marriage, restrict adolescent girls' access to contraception before marriage, or stigmatize adolescent boys and girls who seek health services.

3.3. What changes occurred in access to and use of contraception and related indicators?

Across all three countries, adolescent contraception indicators improved over time as the health system grew increasingly responsive to the needs and rights of adolescents. In Chile, the adolescent fertility rate declined from 24.9 per 1000 girls age 10–19 in 2005 to 5.3 per 1000 in 2023 (Statistical Department Ministry of Health of Chile, 2023). In 2015, 53.9% of adolescents reported using a contraceptive method at first sex. This rose to 85.4% in 2020 (Statistical Department Ministry of Health of Chile, 2023).

In Ethiopia, there was a decline in the unmet need for contraception among adolescents (ages 15−19) from 37.5% in 2000 to 20.5% in 2016 (Central Statistical Authority Ethiopia and ORC Macro, 2001; Central Statistical Agency Ethiopia and ICF, 2016). Similarly, the modern contraceptive prevalence rate among married adolescents (ages 15−19) in Ethiopia increased from 3% in 2000 to 37% in 2019, and there was a reduction in the equity gap in modern contraceptive use among married adolescent girls, particularly in respect to educational levels (10%) and urban-rural (12%) characteristics (Central Statistical Authority Ethiopia and ORC Macro, 2001; Ethiopian Public Health Institute EPHI and ICF, 2021).

In the Republic of Moldova, contraceptive pill use among sexually active adolescent girls age 15 increased from 6% in 2014 to 13% in 2022 (National Bureau of Statistics Republic of Moldova, 2024). Most sexually active adolescents age 15 used condoms (74%) in 2022, as they did in 2014 (National Bureau of Statistics Republic of Moldova, 2024). The adolescent fertility rate declined from 34.2 per 1000 women 15–19 years of age in 2015 to 23 per 1000 women 15–19 years of age in 2022 (National Bureau of Statistics Republic of Moldova, 2024). Abortion rates declined from 11.7 per 1000 women 15–19 years of age to 5.9 per 1000 in the same period. The proportion of total births to adolescents decreased from 7.1% in 2015 to 5.6% in 2022 (National Bureau of Statistics Republic of Moldova, 2024).

4. Discussion

The study shows that it is feasible for low- and middle-income countries to systematically build more adolescent-responsive health systems, over time.

Using the Shiffman framework, we find three factors contributed to enabling the countries to secure political and governmental support for embedding adolescent-friendly elements into the building blocks of their respective health systems: 1) a high profile global and/or regional event or process that served to highlight the need for it, 2) the openness/willingness of political leaders and government officials to respond to this nudge with bold decisions, and 3) the readiness and capacity of government officials to work with/draw upon the expertise of partners from within and outside the countries to use this window of opportunity to transform the health system.

Using the health system build blocks framework, we find several common features of adolescent-responsive health systems. All three countries had supportive leadership and governance through enabling laws, policies, standards, and administrative mechanisms. Each country had strategies to deliver a defined package of adolescent health services at scale through multiple channels, and did not mandate separate spaces for youth-friendly service provision. All three countries allowed generalist providers to serve adolescents, had defined competency frameworks, and established pre-service and continuing education systems for providers. In addition, all three countries made efforts to ensure adolescent health services were free and adolescents were covered under national insurance programs. All three countries collected and used age-disaggregated data to inform service delivery improvements and

complemented routine data with specific studies that assessed impact and cost.

The countries also experienced similar areas where additional efforts are needed to increase the responsiveness of the health system to adolescents and fulfill adolescents' rights: adolescent engagement in accountability mechanisms, ongoing support for health workers beyond training and retraining, and systems to identify and respond to adolescents who are most impacted by inequality and discrimination.

Our study reinforces findings from similar studies. Firstly, others have used Shiffman and WHO health systems building block frameworks to analyze how adolescent health, and other health areas, such as nutrition and newborn health, have been prioritized, integrated, and scaled through health systems (Pelletier et al., 2012; Amo-Adjei et al., 2023; Belaid et al., 2020; Enweronu-Laryea et al., 2015; Chandra-Mouli et al., 2025). Amo-Adjei et al. used the Shiffman prioritization framework and identified similar facilitating factors, including local leadership, for the scale-up of a program to reach adolescent mothers in Jamaica (Amo-Adjei et al., 2023). Common themes around transnational influence, defining global events, and sustained local advocacy emerged from Chandra-Mouli et al.'s assessment of the scale-up of comprehensive sexuality education in conservative contexts (Chandra-Mouli et al., 2025). Secondly, our study aligns with recent calls to shift to an adolescent-responsive health system and a series of tools and guidance documents created by the WHO (Sawyer et al., 2026; Baird et al., 2025; World Health Organization, 2025). Our study complements these efforts by providing examples of countries that have made this shift and identifying the facilitating factors and processes, including countries that have experienced political instability and began the process while their health systems were still undergoing considerable overall strengthening.

The strengths of the study are that we used two analytic frameworks that are well known and widely applied; that the analysis we present is based on bodies of published and unpublished reports documenting the history and evolution of each of these countries' initiatives and on the inputs provided by individuals who have been intimately involved in these countries' adolescent SRH program for one or more decades; and that the countries are based in three very different social, economic, cultural, and geographic contexts.

The weaknesses of the study are that the analysis is based on secondary data with the attendant risk of selective inclusion and of bias. Further we cannot conclude that changes to adolescent health outcomes were a direct result of efforts to strengthen the health systems' response to adolescents. Our interpretation of the findings is in line with the proximate determinants of fertility framework that emphasizes that changes in fertility operate through a combination of proximate determinants—particularly sexual exposure, contraception, induced abortion, and postpartum infecundability—which are indirectly shaped by broader social and structural forces (Stover, 1998). We interpret reductions in adolescent fertility as the combined result of distal influences, such as rising educational attainment, expanded access to information, and improvements in socioeconomic conditions, and more immediate program-related factors, notably strengthened provision of contraceptive information and services.

5. Conclusion

The experiences of Chile, Ethiopia, and Republic of Moldova demonstrate how countries can prioritize adolescent health and systematically build more adolescent-responsive health systems. While the specific circumstance of each country is unique, the process of systematically embedding adolescent considerations across different building blocks of the health system is something other countries can, and should, adapt and implement in their own context in order to create more adolescent-responsive health systems and fulfill the health needs and rights of adolescents.

CRediT authorship contribution statement

Callie Simon: Writing – review & editing, Writing – original draft, Formal analysis, Data curation, Conceptualization. **Worknesh Kereta Abshiro:** Writing – review & editing, Formal analysis, Data curation. **Matilde Maddaleno Herrera:** Writing – review & editing, Formal analysis, Data curation. **Galina Lesco:** Writing – review & editing, Formal analysis, Data curation. **Lemessa Oljira:** Writing – review & editing, Formal analysis, Data curation. **Rachel Dean:** Writing – review & editing, Resources, Project administration. **Rajesh Mehta:** Writing – review & editing, Conceptualization. **Venkatraman Chandra-Mouli:** Writing – review & editing, Writing – original draft, Formal analysis, Data curation, Conceptualization.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Adolescent-responsive health systems analysis framework for Chile

Factors enabling political prioritization of embedding adolescent-friendly elements in health systems	
Transnational influence	Chile began prioritizing adolescent SRH and rights in 1995, soon after the ICPD in 1994.
Domestic advocacy	Chile established the National Adolescent and Youth Health Program in 1995, which created national champions and accountability for adolescent health. This prioritization subsequently led to its first National Adolescent and Youth Health National Policy in 1999, the setting of national commitments to reduce adolescent pregnancy in the period of 2000–2010, the development of adolescent service provision models in 2008, and the development of laws affirming adolescents' right to access a wide range of contraceptive methods.
National political environment	There was consistent support for this agenda despite political changes moving between right-wing and left-wing political parties.
Building block 1: Leadership and governance	
Health policies, laws, and strategies	Chile developed its first Adolescent and Youth Health Policy in 1999. A goal of reducing adolescent pregnancy by 30% was established and incorporated into the Health System's goals for the 2000–2010 period. A goal of reducing the adolescent fertility rate by 20% was included in the National Comprehensive Health Program for Adolescents and Youth Action Plan from 2012 to 2020.
Restrictions and consent	There are no restrictions in place, and the 2006 National Standards on Fertility Regulation affirms that neither age nor health conditions should limit contraceptive use.

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Factors enabling political prioritization of embedding adolescent-friendly elements in health systems	
Diverse adolescents	The policy and standards neither affirm nor deny the needs of diverse adolescents.
Package of services	The MOH outlined a comprehensive package of services in 2008, and expanded that into a primary health care package in 2012.
Adolescent health standards	The National Adolescent Health Program includes standards aligned with the guidance of WHO and the Pan-American Health Organization.
Adolescent accountability	A National Advisory Adolescent and Youth Council was established in 2008, with two adolescent representatives from each region of the country. Adolescents are elected and their role is to oversee public policies and government action for adolescents. They are responsible for holding the government accountable at the national level.
Building block 2: Service delivery	
Service delivery points	Chile uses a dual-pronged service delivery strategy for adolescents. The government mandates and funds adolescent-friendly spaces (Espacios Amigables in Spanish) to provide SRH, mental health, and other primary healthcare services to adolescents. Since 2008, the number of these service delivery points has increased from 54 to 375; and this increase is tied to a shift in responsibility and accountability for implementation to the municipality (rather than central level). In addition, the government supports adolescent primary health care to be delivered through all primary health care points, using the "adolescent health check" visit forms and methodology.
Privacy	The adolescent-friendly services in Chile follow the national guidelines, which require visual and auditory privacy for adolescents. Adolescent services offered through other service delivery points may not always ensure the same level of privacy.
Quality improvement	There is periodic review of the national health service data, including for adolescents. This analysis, which includes volume of visits and types of consultations, informs efforts to improve the quality of health services.
Referrals	The guidelines for the "adolescent health check-up" require referrals to health and non-health services for adolescents.
Building block 3: Health workforce	
Staff	There are staff responsible for adolescent health at the national level. At the primary healthcare level, health workers provide services to all segments of the population including adolescents. In addition, in the youth-friendly service spaces there are midwives responsible for providing care to adolescents.
Competencies	There are national competencies for health workers on adolescent health, aligned with WHO guidance.
Pre-service education	Adolescent health, including SRH, is incorporated into the pre-service education of medical doctors, nurses, and midwives. However, national champions for adolescent and youth health continue to advocate for the comprehensive integration of adolescent health into the pre-service curricula for all providers.
Continuous professional education	There is a national training curriculum for providers on adolescent health services. Once trained, providers are certified for five years. The National Health Program implemented a continuous education initiative for adolescent healthcare providers, offering seminars, workshops, and webinars. These training activities aimed to ensure that providers complete the required number of hours in specific topics related to adolescent health.
Building block 4: Health information	
Data collection	The National Health Information System has evolved from collecting some limited age-disaggregated data in 1995 to collecting a wide range of data disaggregated by age, sex, ethnicity, and other factors. The data collected and disaggregated by age includes adolescent primary care visits (the adolescent check-up) and adolescent SRH indicators, including contraception.
Administrative data use	The data collected is made available at all levels, including at the primary healthcare level, through a Monthly Statistical Summary. All levels of the health system are asked to review and act on the relevant data.
Other data collection and use	The National Institute for Youth conducts the National Youth Survey every three years. This includes SRH and other health indicators.
Building block 5: Medical products and commodities	
Commodity planning and restrictions	The MOH is responsible for the procurement and supply of contraceptives, without a distinct program specifically targeting adolescents.
Building block 6: Financing	
Cost of services	Health services and basic medications, including contraceptives, are provided free of charge to adolescents under the national insurance program.
Insurance	Chile has a universal health insurance system, comprising both private and public options. 77.3% of the population aged 0–19 is covered under public health insurance, specifically the National Health Fund (FONASA).
Demand-side financing	There are no demand side financing measures in Chile.
Supply-side financing	There are no supply side financing measures in Chile.
Adolescent health resource allocation	From 2018–2022, the National Budget for Adolescent Health Programs increased by 48%, with significant resources allocated to adolescent SRH. Between 2016 and 2018, the budget for adolescent friendly spaces increased by 24%. However, from 2018 to 2020, there was only a 4% increase.
Building block 7: Health system partnerships	
Community partnerships	Per national guidelines, the adolescent-friendly services at primary health care level also conduct health promotion in the community in coordination with local schools and community centers.
Education system partnerships	A notable gap in Chile is the absence of a national comprehensive sexuality education policy and program, which makes coordination with the education system for health promotion challenging.
Multisectoral partnerships	Coordination meetings are held with the Ministry of Social Affairs to align efforts aimed at addressing the needs of specific vulnerable adolescent populations.

Appendix B. Adolescent-responsive health systems analysis framework for Ethiopia

Factors enabling political prioritization of embedding adolescent-friendly elements in health systems	
Transnational influence	Ethiopia's commitment to adolescent health began after the 1994 ICPD declaration. However, the millennium Development Goals (MDGs), launched in 2000, were a major catalyst as the country committed to reduce maternal and child mortality. The MOH recognized that reducing mortality in rural parts of the country, where more than 80% of the population resided, required a major investment in primary healthcare. The country also recognized that adolescent pregnancy contributed to a substantial number of maternal details and so must be addressed to achieve the MDGs. The Sustainable Development Goals further cemented Ethiopia's commitment to adolescent health—with commitments to reducing adolescent fertility and strengthening access to contraception.
Domestic advocacy	National champions of the rights and health of young people were critical in elevating adolescents and youth health as a priority issue. In 2000, national champions organized the National Youth Consultation on Sexual and Reproductive Health. It was a catalytic moment that brought together a wide range of stakeholders invested in the health and well-being of adolescents.

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Factors enabling political prioritization of embedding adolescent-friendly elements in health systems	
National political environment	Prioritization of adolescent health as part of the health system was greatly enabled by the establishment of the Health Extension Program, and the development of a new cadre of community-based, primary health care providers called Health Extension Workers. Though not specific to adolescents, this major prioritization of rural health care expanded access to a range of health services, including contraception. Progress made on developing an adolescent-responsive health system has been jeopardized by conflict in recent years. Though the underlying system and commitment have been sustained, challenges such as commodity shortages, impact of violence on adolescents and youth and communities, and other impacts of crisis have created major health challenges for adolescents.
Building block 1: Leadership and governance	
Health policies, laws, and strategies	Adolescents were identified as a critical population in Ethiopia's First National Reproductive Health Strategy and its National Family Planning Guideline developed in 2006. Following this, the MOH also developed a National Adolescent Sexual and Reproductive Health Strategy. The current national Adolescent and Youth Health Strategy (2021–2025) intentionally includes SRH and other adolescent health issues.
Restrictions and consent	There is no policy limiting adolescents' access to contraception. Adolescents under the age of 15 do require parental consent for HIV testing unless they are considered emancipated minors.
Diverse adolescents	The National Adolescent and Youth Health Strategy addresses the diverse needs of different adolescents, including younger and older adolescents as well as adolescents living with disabilities. In addition, other government strategies require engagement with diverse young people, for example Youth Councils are required to include young people with disabilities.
Package of services	The MOH has outlined a comprehensive service package, and the training manual and standards/guidelines to accompany it. The national package of services is aligned with WHO guidance. However, implementation is inconsistent. Some service delivery points focus only on SRH, while others have broadened to include the full package of health services for adolescents.
Adolescent health standards	There are national adolescent health standards, aligned with the National Adolescent and Youth Health Strategy and the package of services noted above. The national standards are adapted from, and in line with, the WHO adolescent health quality standards.
Adolescent accountability	The Adolescent and Youth Health Council, organized by the Ethiopian MOH, serves as a strategic advisory body to ensure that health services are responsive to the unique needs of young people. The youth council is embedded at all levels of the health system—from the health facility to national level. The Councils promote meaningful youth engagement, multisectoral coordination, policy advocacy, service quality, and monitoring and accountability. In addition, some non-governmental partners facilitate youth-led social accountability mechanisms like the community scorecard approach at select facilities, but that level of youth engagement in accountability is not at scale.
Building block 2: Service delivery	
Service delivery points	Adolescent health services can be provided through different service delivery points, including adolescent-friendly service rooms and mainstreamed adolescent health services in all contact points of the health facility in health centers and integrated adolescent health services in health posts and through health extension workers outside of health facilities. Additional service delivery points for adolescents include some NGO service delivery providers, some youth centers, and university health clinics.
Privacy	Some adolescent health service delivery points have visual and auditory privacy, particularly adolescent-friendly services in the public sector that have received external support (such as from a donor-funded NGO). However, this is not consistent in all service delivery points, particularly at the health post/ Health Extension Worker level.
Quality improvement	The MOH has a robust quality improvement strategy and set of tools, and each facility has a quality improvement team to lead the process. However, adolescent health has not been included in the national quality improvement process. Some NGOs have facilitated the inclusion of adolescent health in quality improvement, but this has not yet been institutionalized.
Referrals	There is a system in place whereby providers have a referral slip for both health and (available) non-health referrals. However, feedback on whether adolescents completed the referral is not available.
Building block 3: Health workforce	
Staff	At national level, the MOH has a robust staff dedicated to adolescent and youth health. Every region, zone, woreda, and facility has a focal person responsible for adolescent and youth health, but they cover several other health areas as well and have limited resources to carry out their mandates.
Competencies	There are national adolescent health competencies for health workers and those are addressed in a national adolescent health training manual, originally developed in 2016 and updated in 2022.
Pre-service education	Adolescent SRH is part of pre-service education for nurses and midwives. However, national adolescent and youth health champions continue to advocate for an increased focus on adolescent and youth health in all health provider pre-service education.
Continuous professional education	There is a system for continuous professional development, providers of adolescent health services are expected to complete a certain number of hours of training to renew their work permits.
Building block 4: Health information	
Data collection	Over time, the MOH increased the collection and use of age- and sex- disaggregated health data, starting with contraceptive service data. As of 2021, all service delivery indicators are collected and analysed in five-year age brackets.
Administrative data use	Each level of the health system is expected to review service delivery data, disaggregated by age, on a quarterly basis and take actions appropriate to their level.
Other data collection and use	In addition to routine health service data, data on adolescent health is captured through the Ethiopia Demographic and Health survey, Performance Monitoring for Action survey, service provision assessments, and many other studies carried out by Ethiopian researchers and non-governmental organizations. Most national level data sources do not include very young adolescents (10−14), though at least two large-scale studies in Ethiopia do include very young adolescents.
Building block 5: Medical products and commodities	
Commodity planning and restrictions	The Government of Ethiopia strengthened its health commodity procurement and supply system during this period (1995 to present). No separate efforts were made for adolescents, though adolescents benefitted from the increased contraceptive availability at lower levels of the health system. The recent violence and humanitarian crisis in Ethiopia have challenged supply systems, once again resulting in contraceptive shortages in some places.
Building block 6: Financing	
Cost of services	The Government of Ethiopia has long provided contraceptive and other reproductive health services to adolescents for free.
Insurance	Ethiopia currently has a community-based health insurance strategy that allows adolescents aged 10–18 to access services covered through their parents' insurance membership. Youth aged 19–24 who live with their parents are also eligible to be covered, if their parents pay an increased contribution. However, many families are unable to pay more for their youth members, which results in some young people "falling through the cracks" of the system.
Demand-side financing	There are no national or at-scale demand-side financing approaches.
Supply-side financing	There are currently pilots of performance-based financing in Ethiopia. They cover 20 indicators, but no inclusion of adolescent health related indicators.

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Building block 6: Financing	
Adolescent health resource allocation	In recent years, there has been a budget line for adolescent health in national and sub-national health budgets. However, the amount remains very small in comparison with the size of the adolescent population.
Building block 7: Health system partnerships	
Community partnerships	The Ethiopian health system has prioritized community engagement and partnerships, as exemplified by the Health Extension Program. Recently, the revised MOH community engagement strategy further articulated the expectation that HEWs will engage a village health leaders team to foster community partnerships. The strategy includes youth leaders/youth groups as part of the village health leaders team and a key constituency for engagement. The implementation of this strategy has begun but has been hampered by conflict.
Education system partnerships	The Ministry of Education is a strong player in the national technical working group for adolescent and youth health. The MOH and Ministry of Education have long collaborated on school-based health services, school health promotion, and Education for Health and Wellbeing (formerly sexuality education). The Ministry of Education and the MOH, in collaboration with partners, developed a reproductive health supplementary guideline for students and teachers grade 9–12, to ensure the provision of SRH information for both teachers and students.
Multisectoral partnerships	Collaboration happens, but not consistently and in an institutionalized manner.

Appendix C. Adolescent-responsive health systems analysis framework for Moldova

Factors enabling political prioritization of embedding adolescent-friendly elements in health systems	
Transnational influence	During the period of prioritization by the Government of the Republic of Moldova (early 2000 to present), Moldova's government was influenced by international agreements, such as ICPD, and also regional and international influence from UNICEF and the WHO.
Domestic advocacy	The Republic of Moldova has a strong set of national champions for adolescent health, including local organizations whose mission has been to advance adolescent-responsive health systems over the last two decades. These champions have used data, such as the fact that the Republic of Moldova had some of the highest rates of adolescent pregnancy and other poor adolescent health outcomes in Europe, to advocate with the MOH.
National political environment	The collapse of the Soviet Union led to significant social, economic, and health system disruptions in the Republic of Moldova. Adolescent pregnancies increased and peaked in this period, which catalyzed national advocacy while the ICPD 1994 Plan of Action was creating a global call for investment in adolescent SRH.
Building block 1: Leadership and governance	
Health policies, laws, and strategies	Adolescent health and adolescent access to youth-friendly health services was presented as a priority in National Health Policy Republic of Moldova 2007–2021 and the National Strategy for Reproductive Health 2005–2015. Adolescents continue to be a priority target population for the current National Health Strategy 2030. In 2005, the National Concept on Youth-Friendly Health Services in the Republic of Moldova was launched. This national document defined youth-friendly health services and related principles. This has been followed by a range of normative documents such National Regulation of Youth-Friendly Health Centers (2007), Quality Standards for Youth-Friendly Health Services (2009), National Ordinance for Scaling-up Youth-Friendly Health Services (2011), Youth-Friendly Health Centers Norms and Regulations (2013).
Restrictions and consent	The age of consent for sex in the Republic of Moldova is 16. According to the national Health Law and Reproductive Health Law, adolescents can access health services, including SRH services, without parental consent below age 16 in cases when parents cannot be reached, and services are needed to save their life. In such cases an adolescent can consent for themselves and would need to be supported by consultative decision of a group of 3 or more (depending on severity of case) health care specialists.
Diverse adolescents	The Republic of Moldova's quality standards for adolescent health includes specific mention of the importance of reaching vulnerable groups, such as those living on the streets, those in rural areas, and those left behind by parents who have migrated out of the Republic of Moldova. In addition, in the Youth-Friendly Health Services norms and guidelines, there are specific provisions for delivering services to highly vulnerable adolescents, including street children, children/adolescents from socially vulnerable families, adolescent key populations, adolescents living with HIV, adolescents involved in migration, refugees, adolescents with special needs and vulnerabilities. The Republic of Moldova's provider training includes specific guidance on how to address the needs of diverse groups of adolescents.
Package of services	Youth-friendly health services are considered part of the primary health care system in the Republic of Moldova. The package of services aligns with the WHO.
Adolescent health standards	National quality standards for youth-friendly services were developed in 2009 and are in alignment with the WHO quality standards.
Adolescent accountability	In the Republic of Moldova, adolescents and youth are invited to participate in planning, provision, and evaluation of youth-friendly health services. There are also on-line and off-line mechanisms for client feedback at the youth-friendly health centers. At national level, there is an annual monitoring meeting with youth volunteers from all the youth-friendly health service sites. These youth review progress of youth-friendly health services across the country and provide feedback. However, there are not systematic, routine accountability mechanisms at scale outside of the youth-friendly health centers.
Building block 2: Service delivery	
Service delivery points	Adolescents, like other population segments, can access health services at all levels of health care system directly or by referral. In addition, dedicated youth-friendly multi-disciplinary units were set up as part of the primary health care system, in all districts and municipalities. These YFHCs act as a resource center at the local level where adolescents can ask for care by themselves or be referred to from other services. These centers also facilitate access to other needed services e.g., social welfare, and support in-service training for family doctors, nurses, school nurses, community resource people in adolescent health issues. In addition, YFHCs are piloting hotlines and mobile health clinics to expand access to more rural areas.
Privacy	According to Youth Friendly Health Services National Quality Standards, all levels of care are required to offer privacy to adolescent clients, and most do.
Quality improvement	In line with the Youth Friendly Health Services National Quality Standards, a set of quality indicators and monitoring tools were developed for self-evaluation of quality within the YFHCs. These can also be used by external evaluators and adolescents and youth themselves. Periodically, these indicators are analyzed during supervision meetings with staff of YFHCs and measures to build on strengths and address areas of weakness are included in annual action plans of.
Referrals	Within the health sector, the same referral mechanisms are used for adolescents as for other clients. Three other mechanisms are used for youth. (i) For youth who engage with other multisectoral services and organizations, there is a referral voucher to YFHCs. (ii) All YFHCs periodically map potential service delivery points in their catchment areas and develop a local referral framework to facilitate the process of cooperation with different services. (iii) In almost all cases, a "warm referral" approach is used i.e., specialists of the YFHCs support adolescents to establish an appointment for other needed services or even accompany/or find a support person to accompany them to other services.
Building block 3: Health workforce	
Staff	There is not a dedicated staff member within the MOH for adolescent health. The MOH leads for Maternal and Child Health and Primary Health Care both have adolescent health within their purview. One of the first YFHCs, Neovita, has been designated by the MOH as a national resource centre since 2013. In this role, NEOVITA supports

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Building block 3: Health workforce	
	coordination and monitoring of district and municipal YFHCs, promotes adolescent and youth health at the national level; develops programs and training materials for young people, parents, professionals; and ensures the implementation of training programs and activities for the staff involved in the delivery of youth-friendly services. But the organization is not allocated any supplementary budget to execute these activities, leading to motivation and effectiveness challenges.
Competencies	Provider competencies for adolescent health are available in draft form and align with WHO recommended competencies but are not yet approved.
Pre-service education	Adolescent health care training materials were incorporated into preservice curricula of the medical university and the nursing and midwifery schools.
Continuous professional education	Providers who offer adolescent health services receive regular in-service training. The Neovita Resource Center (referred to above) provides supportive supervision to the other YFHCs and to the primary care providers of adolescent health services. In addition, youth-friendly health centers use collaborative learning models to support primary health care providers, school nurses, and community resource people to improve in their capacity to serve adolescents.
Building block 4: Health information	
Data collection	A national HMIS has been developed and is being implemented and captures gender and age disaggregated data. A separate confidential component, Youth Klinic-Informational System, was developed and implemented for YFHCs. Official statistics provide accurate data on adolescent birth and abortions, mortality rates, and HIV/STIs rates. Health statistics are complemented with data from behavioral research, especially from the WHO collaborative Health Behavior of School Children Study (since 2013).
Administrative data use	These data are analyzed during the supervision meetings with staff of YFHC and measures to improve are introduced in annual action plans of YFHCs. In addition, the data is reported to the MOH and other stakeholders during the advocacy activities, reported in conferences and meetings, and used to inform different strategic documents, such as the National Health Strategy 2030.
Other data collection and use	The Republic of Moldova has collected a wide range of different types of data to support health system improvements and management decisions over the last 20 years. Special studies include epidemiologic and behavioral studies, such as knowledge, attitude, and practice surveys. In addition, the Republic of Moldova has conducted costing studies to understand the cost of implementing and scaling youth-friendly services within the government system.
Building block 5: Medical products and commodities	
Commodity planning and restrictions	During the last decade, Moldova has taken steps to introduce critical SRH commodities into the national commodity procurement and provision system and ensure that the YFHCs are connected to and benefitting from those commodities, this includes the addition of the HPV vaccine since 2017.
Building block 6: Financing	
Cost of services	All health services to adolescents are free of charge in public health facilities.
Insurance	Since 2008, the National Health Insurance Company has financed youth-friendly health services within the framework of financing primary health care institutions. This coverage has been extended further following an economic evaluation in 2011. Now, services are provided free of charge for all young people aged 10–24 years-age and for vulnerable youth till 35 years-age.
Demand-side financing	There are no demand-side financing strategies in Moldova.
Supply-side financing	There are no supply-side financing strategies in Moldova.
Adolescent health resource allocation	There is financing of the Youth-Friendly Health Centers by the National Health Insurance Company, but there are no other national or subnational budget allocations to adolescent health.
Building block 7: Health system partnerships	
Community partnerships	The National Youth-Friendly Health Services Guidelines includes outreach and engagement with community partners to promote health knowledge and access to health services among adolescents and their parents.
Education system partnerships	The MOH collaborates with the Ministry of Education by engaging health service providers, particularly from Youth Friendly Health Centers, to support school health services, health-promoting school initiatives, and extracurricular activities.
Multisectoral partnerships	MOH, and the Ministry of Labour and Social Protection jointly contribute to the National Child Protection Program to promote access to health services for the most vulnerable adolescents from the rural areas, this includes provision of youth-friendly mobile health services.

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