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HIV TREATMENT, CARE, AND SUPPORT FOR ADOLESCENTS LIVING WITH HIV IN EASTERN AND SOUTHERN AFRICA

A review of interventions for scale

Acknowledgements:

This review brings together information and data from programmes implemented for adolescents living with HIV in the Eastern and Southern Africa region. The analysis includes contributions from academic and grey published literature as well as in-person and virtual interviews with 87 key stakeholders including government representatives, implementing organisations, service providers and adolescents and young people living with HIV. Under the leadership of Anurita Bains and Laurie Gulaid and with technical support from colleagues in the country offices, the analysis was compiled by Alice Armstrong and edited by Judith Sherman. Special thanks to all for their time, insights, and technical contributions.

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HIV treatment, care, and support for adolescents living with HIV in Eastern and Southern Africa: A review of interventions for scale

2021

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Contents

Acronyms

AFHS	adolescent-friendly health services
AGYW	adolescent girls and young women
ALHIV	adolescents living with HIV
ART	antiretroviral therapy
CATS	community adolescent treatment supporters
CHW	community health worker
CoE	centre of excellence
DSDM	differentiated service delivery models
EAC	enhanced adherence counselling
EGPAF	Elizabeth Glaser Paediatric AIDS Foundation
ESA	Eastern and Southern Africa
LTFU	loss to follow-up
MoH	Ministry of Health
NGO	non-governmental organization
PATA	Paediatric-Adolescent Treatment Africa
PMTCT	prevention of mother-to-child transmission (of HIV)
READY+	Resilient and Empowered Adolescents and Young People
SoC	standard of care
SRH	sexual and reproductive health
THPS	Tanzania Health Promotion Support
UNICEF	United Nations Children's Fund
VL	viral load
VLS	viral load suppression
WHO	World Health Organization
WRHI	Wits Reproductive Health Institute
YCC	Youth Care Club
YPLHIV	young people living with HIV

Executive Summary

Adolescents living in Eastern and Southern Africa (ESA) are key to achieving the global goal of ending the AIDS epidemic by 2030. Alongside the increasing size of the adolescent population, there is increased prioritization of the particular needs of adolescents. Greater political leadership has led to more robust strategic information, effective planning, and national policy development and implementation. Funding initiatives have ensured that investments reflect emerging priorities related to adolescents, particularly adolescent girls and young women.

While intensified focus on adolescents has resulted in improved services and outcomes, the pace of progress remains slow, especially when compared with the growing needs of adolescents living with HIV (ALHIV). It is time to deliver programmes at scale to address the needs of ALHIV, provide dedicated care and support services, and accelerate the research on work that is producing results or showing significant promise in order to scale the right interventions. ESA is home to 1.74 million adolescents living with HIV (ALHIV), representing 60 per cent of this population globally. In 12 ESA countries, AIDS is the leading cause of adolescent mortality.

Adolescents living in Eastern and Southern Africa are key to achieving the global goal of ending the AIDS epidemic by 2030

This document examines and consolidates the current experiences of ALHIV programming in ESA with the aim of supporting further implementation and scale-up of evidence-driven models. Scale-up is defined as both expanding programmes that work and institutionalizing them into national strategies and budgets. Findings and key considerations draw upon a comprehensive literature review of implemented interventions, key informant interviews, consultations with ALHIV, and country visits.

Findings

Multiple approaches improve ALHIV health and well-being and demonstrate potential for scale-up.

1

Peer-based group interventions connect ALHIV with each other, providing forums for coping with shared challenges. Participation has had a positive impact on retention in care, adherence and viral load suppression, particularly when combined with provision of antiretroviral therapy and clinical services. However, uptake among ALHIV is generally low, and the proportion of health facilities offering peer-based groups is not at a sufficient level to meet the needs of the majority of ALHIV.

2

Adolescent-friendly health services are specifically designed to meet adolescents' needs. Services for ALHIV are increasingly being delivered that increase accessibility, improve quality, and facilitate the transition from paediatric to adult treatment. Although data is emerging, available evidence suggests that quality, friendly services for ALHIV increase clinic attendance and contribute to viral load suppression.

3

Community-based interventions serve to locate and link ALHIV to services and support closer to where they live. Interventions include community-based adolescent treatment supporters, community adherence clubs, camps, school-based initiatives, and mHealth. In addition to improving coverage, when delivered consistently over time, community-based interventions demonstrate improved retention, adherence, viral load suppression, quality of life and mortality.

4

ALHIV engagement and advocacy have demonstrated their influence on national policies and strategies, resource mobilisation, and increased opportunities for social change. Although the direct impact on health outcomes is limited, country-level networks of ALHIV facilitate the participation of ALHIV in the decisions that affect their lives, including adopting healthy behaviors and holding government accountable for delivering quality services.

5

Social protection and economic strengthening are critical for ALHIV who face multiple deprivations, such as poverty, poor access to education, unemployment, food insecurity, violence and orphanhood. All of these challenges impede adolescent development, especially the cognitive, socio-emotional, and behavioural capacities that support health and well-being. While further evidence is still needed, social cash grants, vocational training, and livelihoods support show promising results in increasing adherence and improving viral load outcomes, especially when combined with psychosocial support for both ALHIV and caregivers.

Key considerations for scale-up

The findings from this review serve as a call to action to respond to the growing yet still unmet needs of ALHIV. The following key considerations are offered to guide governments and funding and implementing partners in scaling up service delivery to ALHIV.

Support national programming and resource allocation.

National governments and funding and implementing partners need to strategize how to scale up services for ALHIV that are embedded in existing government systems and community structures. Partners should shift from implementing small-scale projects to supporting governments to incorporate roadmaps for ALHIV programming into national HIV strategic plans and funding mechanisms and building capacity to implement programmes at scale. Partners should facilitate integrated, coordinated approaches to providing technical assistance, particularly in developing standardized national guidelines and operational tools.

Strengthen adolescent-centred services for ALHIV.

New and existing interventions should consider the diversity of ALHIV, providing multiple approaches to receiving care and support. These differentiated models of service delivery are increasingly based in the community, recognizing that scale will only be reached with decentralization. Community health workers and peer providers can help ALHIV manage their care and treatment and link them to other services while school-based initiatives have the potential to reduce stigma and increase adherence.

Increasingly, mHealth is being used to reach more adolescents, facilitate and complement clinic visits, disseminate advocacy messages, and provide information, support and connection for ALHIV. As mHealth grows, programmes have signalled the need for mHealth policies that will ensure that social media sites provide correct information, virtual spaces are safe, confidentiality is protected, and informed consent can be obtained when necessary.

Support the growing role of young people in scale up.

Including ALHIV networks in national strategic planning and decision making amplifies adolescents' voices and provides opportunities to ensure services are relevant and responsive to their needs. To thrive, these networks require on-going organizational development support. ALHIV also have an important role to play in both decentralizing and scaling up services. This growing cadre of community-based peer providers require standardized training and mechanisms for recruitment, remuneration, supervision, mentorship and support.

Understand what works for scale-up.

"Learning by doing" recognizes that scale up is not a one-time event, but an iterative process that requires on-going intervention research. Expanded evidence on key clinical and psychosocial outcomes will help inform scale up and contribute to sustainability. This includes identifying the minimum package of services required to have a positive effect on clinical and psychosocial outcomes, and understanding feasibility, cost considerations, how to assure quality, and what combination of layered interventions will have the most optimal impact. Scale up requires producing disaggregated data to identify who is being reached and who is left behind, as well as implementing programmes in different contexts and documenting the outcomes.

Integrate HIV into broader adolescent health programming and strengthen linkages to multisectoral services.

Multi-sectoral approaches are critical for getting to scale faster. ALHIV have multiple, complex needs, and should have access to a range of health services, such as nutrition, sexual and reproductive health, and mental health, as well as improved linkages and referrals to protection, education, livelihoods and other social services that contribute to their overall well-being.

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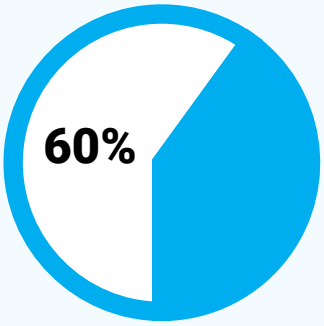
1 Introduction

In the past several years there has been a growing sense of urgency to address the health of the world's 1.2 billion adolescents. Global knowledge on adolescent health and development has improved greatly, and significant progress made in developing adolescent services that consider adolescents' unique developmental characteristics and complex needs[1]. Yet, adolescents with HIV (ALHIV) are being left behind across the adolescent health response. They are less likely to access and be retained in HIV services, or to adhere to antiretroviral therapy (ART)[2 3 4 5]. They are more likely to experience multiple—and multifaceted—challenges associated with physical, psychosocial, and cognitive development, in addition to a contextual environment that is often stigmatizing. Their mental, sexual, and reproductive health (SRH) needs are not being met as a result of insufficient and inaccessible information and services[6 7].

Eastern and Southern Africa (ESA) is home to an estimated 1.74 million adolescents[i] living with HIV, representing 60% of the global total[8]. Adolescent girls are especially vulnerable and disproportionately affected by the epidemic, which is driven by physical, cultural, political, and structural barriers to HIV prevention. In 2020, adolescent girls and young women (AGYW) represented 26% of all new HIV infections in the ESA region[9]. In 12 ESA countries, AIDS is the leading cause of adolescent mortality[10].

Eastern and Southern Africa is home to an estimated 1.74 million adolescents living with HIV, representing 60% of the global total.



In 12 ESA countries, AIDS is the leading cause of adolescent mortality

Adolescents living with HIV are key to achieving the fast-track goal of ending the AIDS epidemic by 2030. The increase in the adolescent population in sub-Saharan Africa, part of the demographic trend known as the 'youth bulge'[11], is adding pressure on already constrained health services. This is particularly worrying in the ESA region where the number of adolescents is predicted to increase by 23% over the next decade[12]. With a high number of new HIV infections and the ongoing service needs of adolescents on ART, more ALHIV in the region will require access to adolescent-responsive HIV care and support services[13].

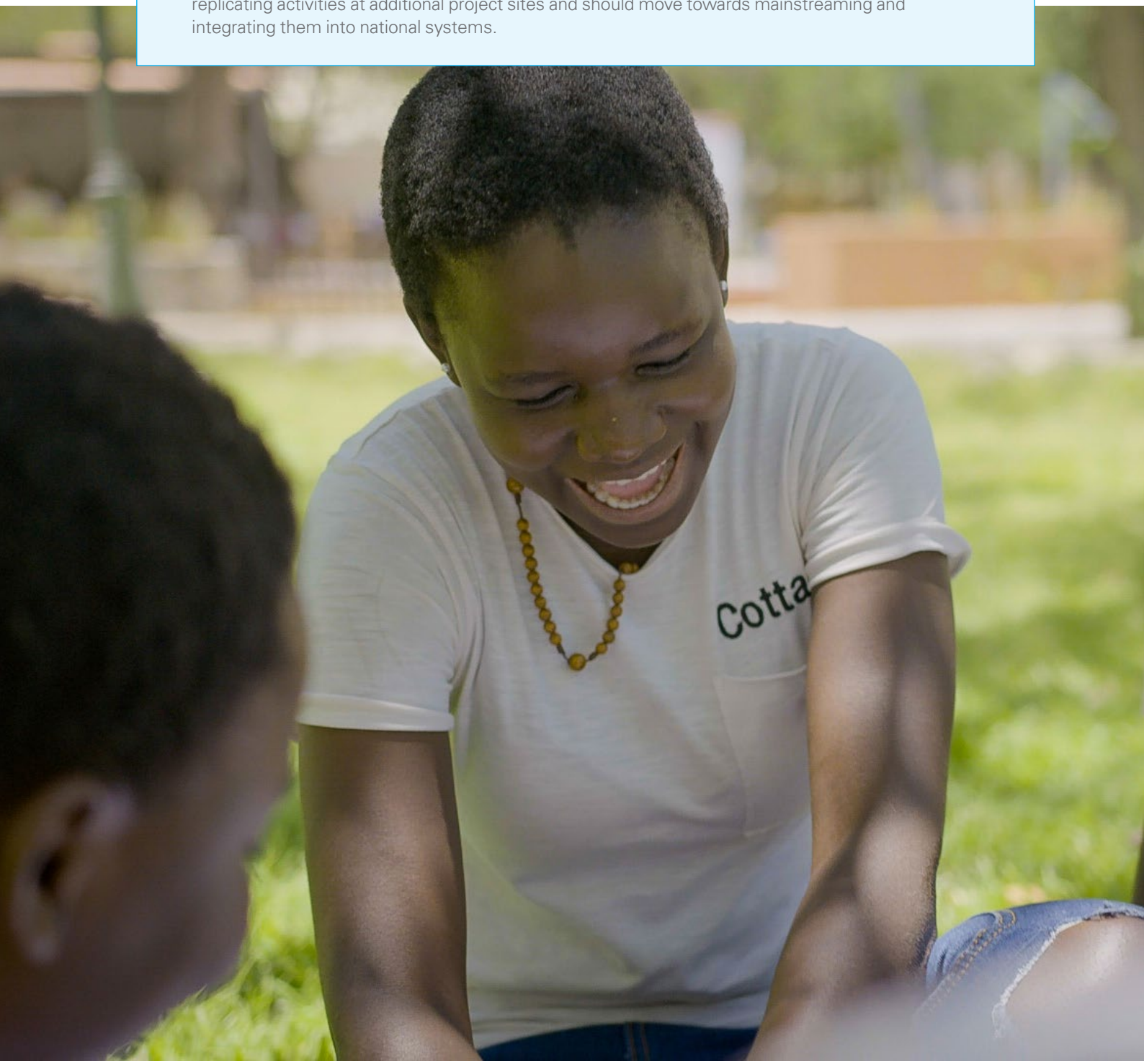
Since the 2015 launch of All In to End Adolescent HIV, a UN initiative, many ESA countries have undertaken national assessments of efforts to reduce the number of new infections and AIDS-related deaths among adolescents[14]. The mobilisation of political leadership and the identification of strategic and programmatic gaps in adolescent health and HIV responses have resulted in significant contributions to strategic information, national and district work planning, and the development and implementation of national policies[15].

Despite increased attention to adolescent services, interventions are too often restricted to pilots, small-scale, or centralised services, limiting their potential impact. To meet this challenge, we need to learn from recent progress on adolescent HIV programming to gain a better understanding of the optimal package of care and service delivery approaches for ALHIV. We then need to use this knowledge to invest in scaling up work that has shown results or significant promise, extending the benefits of successful interventions to many more ALHIV.

i UN age definitions: child (0–18 years); adolescent (10–19 years); young person (10–24 years); youth (15–24 years)

What do we mean by 'scaling up'?

Scaling up means taking successful interventions, projects, programmes, or policies, and adapting, expanding, and sustaining them in different contexts over time to achieve greater results. Planning and preparing for scale up should be part of the earliest stages of programme design and should be regularly considered throughout programme implementation. Scale up goes beyond merely replicating activities at additional project sites and should move towards mainstreaming and integrating them into national systems.



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2 Interventions and key outcomes

This document examines and consolidates data and experiences from ALHIV programming in ESA to support further implementation and scale-up of evidence-driven models. It aims to:

- Describe current ALHIV programmes, including results achieved, success factors, gaps, and challenges.
- Identify key interventions and approaches that contribute to a package of HIV services for adolescents.
- Suggest key considerations to guide implementation at scale.

Findings on outcomes **(see Box 1)** were drawn from a comprehensive literature review of documents published from 2008 through 2018 and key informant interviews across 12 countries with 87 people representing a range of stakeholders. In-country visits to Tanzania and Kenya included consultations with ALHIV and in-depth observation of ALHIV programme activities.

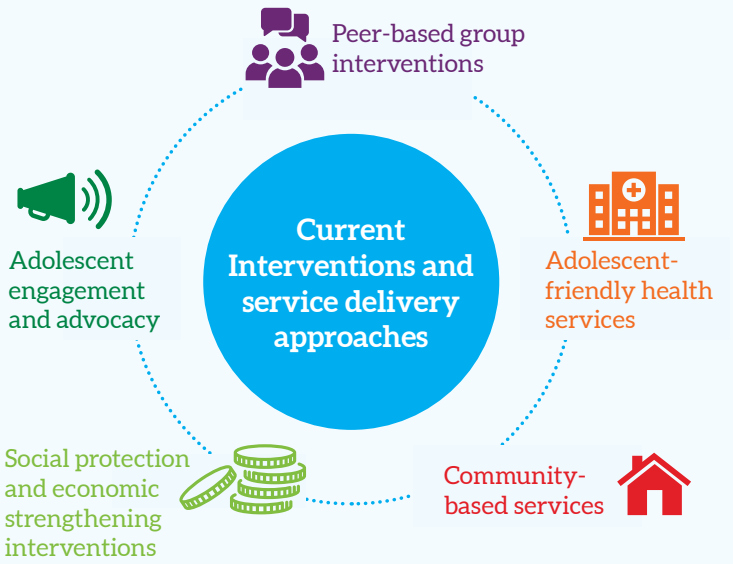
The review was limited by the lack of available evidence and outcome data, especially with regard to scaling up initiatives. Even where evidence was available, it was often applicable to small scale projects and/or not linked to outcomes. Although the review was conducted prior to the COVID-19 pandemic, it includes approaches that were adapted during the pandemic, strengthening both HIV services and COVID-19 prevention. These will be featured in a forthcoming UNICEF compendium.

The most commonly implemented ALHIV programme was peer-based support, followed by adolescent-friendly health services, community-based interventions, social protection and economic strengthening, and youth-led advocacy and engagement.

BOX 1

Key outcomes of interest

- Coverage and uptake
- Retention
- Viral load and adherence
- ALHIV wellbeing i.e. knowledge, sexual health, mental health
- Health systems



2.1 Peer-based group interventions

Key points:

Peer-based groups are comprised of similarly-aged adolescents who provide psychosocial support, information, and connection with peers facing similar challenges, such as adherence to treatment, coping with stigma, and disclosing HIV status to others.

Participating in peer-based groups has a positive impact on adherence, retention in care and viral suppression, especially when group meetings are combined with clinical services and provision of ART.

Peer-based groups are not reaching the majority of ALHIV and uptake among ALHIV who attend services that host peer-based groups is generally low.

There is an urgent need to understand the barriers to participation in peer-based groups and to identify scale-up strategies to deliver this vital support for ALHIV in accessible, acceptable, and sustainable ways.

The influence and importance of peers during adolescence is well documented; neurocognitive studies have found that peers have an impact on adolescent risk-taking behaviour and decision making[16]. The experience of a chronic illness, including isolation and rejection resulting from perceived or actual stigma, creates a powerful role for interventions that connect ALHIV to peers in similar situations. Peer-based group interventions aim to provide the psychosocial support that ALHIV need to help cope with many of the challenges they face in achieving optimal treatment and well-being outcomes.

Intervention overview

Peer-based groups provide a safe and welcoming space where ALHIV can connect with peers, learn about being an adolescent and living with HIV, develop skills, share experiences, and have fun. Although different terms are used (club, support group), the objectives of peer-based groups remain the same: to ensure that ALHIV feel supported by people who understand them and to encourage uptake of services and adherence to treatment. The overall approach to delivering peer-based group interventions is fairly consistent; most often monthly meetings are held at a health facility, although there are examples of meetings held in community spaces.

ALHIV treatment adherence improves with support from peers

Peer-based groups are generally facilitated by ALHIV, usually accompanied by health care workers from the associated facility, although some peer-support groups are facilitated by adult health-care or lay providers.

Participation of adolescent members generally requires caregiver consent and awareness of their HIV status, although certain groups are set up specifically to address and support disclosure, including separate groups for caregivers.

Group meetings typically use a range of interactive educational activities and discussions to promote learning and skills development **(see Box 2)**. A number of groups have formed smaller groups, organized by age and gender, to deliver age-appropriate content and approaches, such as providing information on SRH.

BOX 2

Common topics covered in peer-based groups

- HIV treatment literacy
- Resilience, emotions, and mental health
- Disclosing HIV status to others
- Stigma and discrimination
- Sexual and reproductive health and rights
- Life skills
- Livelihood training
- Alcohol and drug use
- Violence awareness and prevention
- Nutrition and physical exercise

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Multiple manuals, tools, and training curricula have been produced to guide implementation of peer-based group interventions, facilitate standardization, and promote quality. Implementing partners have provided technical assistance and financial support to establish and roll out peer groups. The majority of groups rely on funding from partners to cover transport costs and refreshments for group members, although in order to become more self-reliant, some groups have started income-generation activities, such as selling refreshments at facilities.

Initially established in tertiary hospitals or centres of excellence (CoE), with the decentralisation of ART considerable effort has been made to support peer group interventions in health facilities at all levels. Most groups attempt to hold their meetings concurrently with clinical appointment times and/or outside of school hours, including on the weekend. An emerging model, generated by the new focus on differentiated service delivery, combines peer-led psychosocial support with clinical care and dispensing of ARVs. Currently, all clinical aspects, including ARV dispensing, are conducted by health workers.

Programmatic evidence

Although the number of peer support programmes in ESA has grown over the past several years, the proportion of health facilities offering peer-based groups is not sufficient to reach all ALHIV and uptake among ALHIV is generally low. Nonetheless, groups that combine peer-led psychosocial support with ART and clinical services have shown promising levels of reach, retention, adherence, and viral load suppression. Loss to follow-up (LTFU) tends to occur just after enrolment in ART, before ALHIV have a chance to fully engage in support services, and is higher among older adolescents, reiterating findings from previous cohort analyses[17 18]. Other important outcomes for ALHIV well-being include improved knowledge, skills, behaviours, and mental health.

COVERAGE AND UPTAKE

- Government-led Teen Clubs in Namibia are operating in 29% (n=98) of health facilities in 12 of the 14 regions with 3291 members. Across these programmes, it is estimated that only 30% of ALHIV in Namibia regularly attend Teen Club[19].
- In Malawi, Baylor College of Medicine is supporting Teen Clubs across 43 facilities, serving 3251 teens. In a cohort analysis of 22 sites, the uptake of Teen Club was 22% among all ALHIV clients, with higher uptake among younger adolescents and no significant difference in uptake by sex[20].
- Tanzania Health Promotion Support (THPS) is supporting adolescent clubs in 31 government health facilities across 3 regions; 56% of all ALHIV attending these facilities are club members[21]. The Elizabeth Glaser Paediatric AIDS Foundation (EGPAF) is assisting Tanzanian health facilities to provide peer-led support clubs together with ART and clinical services; an analysis of 175 sites offering adolescent clubs showed ALHIV uptake at 76%[22].

RETENTION, ADHERENCE AND VIRAL LOAD SUPPRESSION (VLS)[ii]

- A review in Lesotho showed higher retention rates (78%) among adolescents in districts with peer-based groups compared to retention rates (54%) in districts without groups. The review also indicated slightly improved viral load testing and suppression rates. Facilities in implementation districts reported that 40% of adolescents had documented viral loads, of whom 83% were virally suppressed, compared to 30% and 75%, respectively, for adolescents in districts without interventions[23].
- A cohort study of 160 facilities in four ESA countries found that facilities offering adolescent support groups and SRH services experienced significantly lower attrition among ALHIV after ART initiation. As expected, older adolescents were more likely to be LTFU than younger age groups[24].

ii VLS is defined as <1000 copies of HIV/ml of blood

- In one region in Namibia, when comparing clinic attendance prior to joining Teen Clubs to current attendance, 73% of members maintained 'good' attendance and 12% improved their previous attendance record. The 14% of members whose attendance did not improve were more likely to be new members. The analysis also found that 73% of members had an undetectable viral load (<40copies/ml) and 16% were virally suppressed[25].

- A nested case-control study of a Teen Club in a tertiary hospital in Malawi indicated that ALHIV with Teen Club exposure were more likely to be retained in care and treatment. Regardless of teen club exposure, as with other studies, older ALHIV (15–19 years) were more likely to be LTFU than younger ALHIV (10–14 years)[26].

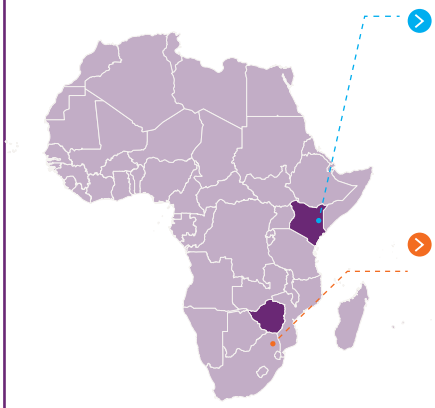
- Youth Care Clubs (YCCs) in South Africa provide integrated psychosocial support and clinical care, including ART delivery. Supported by Wits Reproductive Health Institute (WRHI), 31 YCCs are operating in 18 government clinics across two sub-districts. Retention in YCCs was observed to be marginally higher at 85%, compared to 84% in standard of care (SOC). However, 97% of YCCs' patients were virally suppressed after 12 months compared to 86% of patients in SOC[27]. In YCCs supported by Médecins Sans Frontières in one province, ALHIV attending YCCs had higher rates of retention in care compared to non-club members, at both 6 months (92.5% vs. 81.5%) and 12 months (85.3% vs. 76%)[28].

- ALHIV retention rates were higher at EGPAF-supported facilities in Tanzania that offered clubs with clinical care and ART compared to those where clubs were not integrated into other HIV services (88% versus 82%). Adolescents attending the clubs for more than one year had significantly reduced LTFU (10%), while the LTFU rate among new clients in the first year of ART remained high at 17% for both types of clubs[29]. Adolescent clubs supported by THPS showed remarkable improvements in viral suppression from 40% to 72% in an 8-month period.[30]

- Teen clubs at three Baylor CoE facilities in Eswatini contributed to a steady increase in undetectable viral loads (<20 copies/ml) over a two-year period, from 86.5% to 89.5%[31].

PREGNANT AND BREASTFEEDING ALHIV

In several ESA countries, up to one of every three pregnant women with HIV is aged 15-24. Pregnant and breastfeeding ALHIV are shown to have poorer health outcomes, including lower service uptake, higher LTFU and higher mother-to-child transmission rates, when compared with adult mothers with HIV. In response to this growing evidence, countries have begun to deliver tailored packages with a strong peer-based group component.



A peer-led project, supported by EGPAF in one county across 32 sites in **Kenya**, indicated a marked improvement in uptake of viral load testing among pregnant and breastfeeding ALHIV, from 83% at six months post-ART initiation to 96%, and in VLS from 78% to 96% at six months on treatment.[32]

In facilities in 7 districts in **Zimbabwe**, young mothers who were supported by Zvandiri's young mentor mothers had a VLS rate of 93% (compared to 47.9% at population level). All infants were tested for HIV and 100% were HIV negative.

For more information on current activities in ESA, see:
https://www.unicef.org/esa/reports/addressing-needs-adolescent-young-mothers-affected-by-hiv

Other outcomes for ALHIV

- The Baylor Eswatini Teen Club evaluation showed increased knowledge about HIV and AIDS, with 97% of Teen Club members indicating they would not stop taking their ARVs when they feel completely well, and 92.5% reporting that they were aware that ART must be taken for life[33].
- A qualitative review of an educational support group for adolescents, Integrated Access to Care and Treatment, in four primary health care facilities in South Africa, reported increased knowledge and confirmed the educational value for those attending support group sessions[34].
- Qualitative consultations carried out as part of the review in Namibia highlighted many perceived benefits by members, including a sense of belonging, gaining knowledge, greater resilience, feeling empowered, feeling healthy and strong, and the development of leadership skills[35].
- A counsellor-led, 8-session, cognitive behavioural therapy peer-based group intervention held at a tertiary hospital in Uganda showed ALHIV attending the group sessions had significantly less anxiety than those in the control group[36].
- The Hlanganani Program in South Africa provided a 3-session cognitive behavioural support group for newly diagnosed (last 12 months) HIV-positive young people (16–24 years). Participants reported safer sex practices, with condom use at last sexual encounter rising from 71% to 83%[37].

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2.2 Adolescent-friendly health services

Key points:

Successful adolescent- friendly health services (AFHS) for ALHIV address health workers' skills and attitudes, promote confidentiality, provide services at times and venues that are convenient to adolescents, and follow up clients who miss appointments.

Emerging data indicates AFHS for ALHIV contributes to increased uptake and improved retention, adherence and viral load suppression.

The rapid developmental and social changes that occur during adolescence exacerbate the barriers to health care, potentially having a profound effect on the way that adolescents engage with those services[38]. Breaking down barriers and finding effective ways to deliver services that are responsive to the needs of adolescents is a key challenge for health services. For ALHIV, who require regular—often monthly—appointments, support for their continuing engagement in care is crucial for their long-term health and well-being[39].

The WHO 2016 consolidated guidelines on ARV treatment recommends that *'adolescent-friendly health services should be implemented in HIV services to ensure engagement and improved outcomes'*[40]. Adolescent-friendly health services are characterised as services that are equitable, accessible, acceptable, appropriate, and effective **(see Box 3)**[41] and align with the global standards for quality health care services for adolescents.

BOX 3

Characteristics of adolescent-friendly health services

- **Equitable.** All adolescents are able to obtain the health services they need.
- **Accessible.** Adolescents are able to easily obtain the services that are available.
- **Acceptable.** Health services are provided in ways that meet the expectations of adolescent clients, including sensitive and non-judgmental health providers.
- **Appropriate.** The right, age-sensitive health services that adolescents need are provided.
- **Effective.** The right health services are provided in the best way and make a positive contribution to the health of adolescents.

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Adolescent-friendly health services

Intervention overview

To ensure ALHIV are getting the right services, countries have developed, or are in the process of developing defined packages of services for ALHIV, often extending into other areas, such as SRH services. Moreover, important knowledge is being shared during interactive health education sessions, waiting times, or through peer-based group meetings. The inclusion of case management further supports ALHIV, particularly those who may be more vulnerable, to receive the care they need. For example, some facilities, typically larger high-volume sites, are offering enhanced adherence counselling (EAC) and close monitoring for adolescents who are experiencing viral failure.

Facilities are also endeavoring to mitigate access challenges, such as establishing designated days and times, waiting lines, or fast-track queue systems for adolescents only and offering services during out-of-school hours, including weekends. Importantly, LTFU procedures and tracking mechanisms to identify adolescents who miss scheduled appointments are also being implemented.

Another key aspect of improving AFHS involves increasing providers' capacity, knowledge and skills to deliver care to adolescents. Training and mentorship on adolescent health and HIV care are provided through one-off courses or more structured pre-service and in-service programmes. Increasingly, such capacity building efforts are led by national programmes with the support of implementation and technical partners.

Gradually, more facilities are engaging peer providers to offer facility-based peer support. Support services include navigation, one-to-one counselling, and psychosocial support. Transition processes are also being introduced, primarily in larger tertiary services where adolescents need to move from paediatric to adult HIV care. These processes include separate training sessions on topics to encourage autonomy and taking responsibility for one's HIV and health care. While not common, some clinics are assessing the appropriateness of their services by obtaining feedback from adolescents through various forums, including social media platforms.

Programmatic evidence

Although a number of countries are implementing ALHIV service delivery packages, evidence on reach, coverage and impact is limited. Still, most programmes implementing AFHS demonstrated improved retention, while improvements in adherence and VLS were most notable in CoE settings. Improvements have also been observed in access to SRH services, PMTCT outcomes, perceived stigma, data management, and meeting national standards.

COVERAGE AND UPTAKE

- EGPAF Kenya's Red Carpet Program utilises peer navigators to support Young People Living with HIV (YPLHIV) attending services at 50 facilities in six sub-counties; 100% of YPLHIV received peer counselling and psychosocial support[42].
- Adolescents attending the WRHI YCCs in South Africa spent their waiting time engaged in facilitated conversations with peers and health-care providers, unlike adolescents attending SOC who spent more of their waiting time "unengaged". Additionally, YCCs reduced patients' total number of clinic visits by combining ART refills, contraceptive services, and psychosocial support into one visit[43].

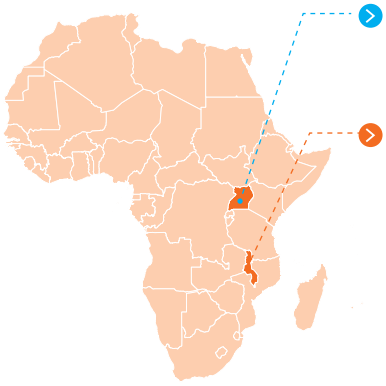
Adolescent-friendly health services

RETENTION, ADHERENCE AND VIRAL LOAD SUPPRESSION

- In a cohort study of 160 facilities across four ESA countries, AFHS were associated with lower LTFU among YPLHIV, particularly after ART initiation. Similarly, facilities also providing SRH services, including condoms, reported significantly lower LTFU after ART initiation[44].
- After implementation of the EGPAF Red Carpet Program in Kenya, the proportion of young people who were retained on ART increased significantly from 66% to 90% at 3 months, and from 54.4% to 98.6% at 6 months[45].
- A cohort analysis of YPLHIV (10-24 years) at 24 HIV clinics in two counties in Kenya found 85.5% retention in facilities where >20% health providers had been trained in AFHS and only 66.4% in clinics where ≤20% of providers were trained. Additionally, facilities using the Kenyan government's adolescent HIV package of care checklist had significantly higher retention among 10–24-year olds (88.9% vs. 69.2%)[46].
- In Uganda, following AFHS quality improvement measures implemented in a government health centre, retention increased from 29.3% to 96.7% over a 3-month period and was maintained above 90% for the next 12 months[47].
- In Kenya, one study found 61% LTFU among young people (15–21 years) enrolled in HIV services at an AFHS youth-friendly clinic compared to 51% at a family-oriented clinic. The study also found that adolescents who had never disclosed their status had a 43% higher likelihood of becoming LTFU, suggesting the importance of a supportive home environment[48].
- In Tanzania 92% of ALHIV engaged in formal transition sessions had good adult clinic attendance, compared to 62% among those who were not engaged. Good adherence (pill count adherence 95–105% at ≥4 visits) was higher among transitioned clients (89% vs 64%), although there was no difference in viral load results[49].
- In Uganda, VLS among adolescents at a tertiary hospital improved from 80% to 88%[50]. Similarly, graduates of transition training at two of Baylor Malawi's CoE sites had improved adherence rates and VLS (<150 copies/ml). At one site, VLS improved from 46% pre-transition training to 65% post-training[51].

ENHANCED ADHERENCE COUNSELLING

Trained counsellors provide EAC to adolescents with viral failure, i.e. VL ≥ 1000 cp/ml. Counsellors assess the major barriers to adherence, including cognitive, behavioural, emotional, and socio-economic factors, while providing practical support and solutions, and recommending changes in regimens as warranted.



In six TASO-supported sites in **Uganda**, after EAC 22% of adolescents previously experiencing viral failure on repeat testing achieved VLS[52].

A viral load audit of 21 EGPAF-supported facilities in **Malawi** revealed that 20% of adolescents had a high viral load. After EAC and repeat testing, 55% were virally suppressed. Among the 45% still not virally suppressed, 90% were switched to second-line ART and 9% died before the repeat viral load results were returned[53].

Adolescent-friendly health services

OTHER OUTCOMES FOR ALHIV WELL-BEING

- Following AFHS changes at a Ugandan CoE clinic, the proportion of ALHIV accessing SRH services increased from 13% to 41%[54].
- In Lesotho, 20 EGPAF-supported health facilities implemented comprehensive AFHS, including antenatal care and PMTCT. These changes led to high uptake of ART at 96.4% among pregnant adolescent girls and young women living with HIV[55].
- A cohort study in South Africa of adolescents attending 53 government facilities looked at the associations between clinic factors, community interventions, and self-stigma. At the clinic level, reliable ART stocks, flexible appointment times, and kind health care providers were found to decrease odds of self-stigma among ALHIV while clinic confidentiality and support group access had no effect[56].

SERVICE DELIVERY OUTCOMES

- Through the PATA REACH programme, 59 peer supporters have been integrated into 20 health facilities across five ESA countries. After the first year, 85% of facilities indicated that peer supporter suggestions resulted in programmatic changes, and 100% of facilities added a new aspect of child- or adolescent-friendly services[57].
- A review of clinical mentoring by a Baylor-supported CoE in Botswana to four outreach sites found significant improvements in correct ART dosing, laboratory monitoring, and documentation of pill count and viral load results. One site demonstrated additional improvements in documenting disclosure[58].
- Following onsite training and mentoring by the Children's HIV Association in 15 facilities in one province of South Africa, 53% of facilities achieved greater than 80% of national AFHS standards[59].

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2.3 Community-based services

Key points:

Achieving good health outcomes for ALHIV requires addressing multiple social and structural challenges. While social protection for vulnerable households is increasing in ESA, few programmes are tailored for adolescents or ALHIV.

Although limited, evidence suggests social protection and economic strengthening programmes help adolescents achieve improved adherence and viral load suppression.

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Adolescents, including those living with HIV, have full and active lives. Many ALHIV feel healthy and may not be concerned about their health or inclined to seek out the health services that they need. The financial cost of accessing health services also acts as a barrier for adolescents with insufficient resources and/or a dependency on others for transport or service fees[60].

Intervention overview

Countries are implementing a range of community-based services for ALHIV, including: individual support from community-based peers and/or community health workers (CHWs), community adherence clubs, camps, school-based activities and mHealth initiatives.

Community adolescent treatment supporters (CATS), generally 18–24 years old and living with HIV, are trained and linked to government health facilities where they are usually supervised by staff and provided with technical support from CHWs. Through monthly home visits, CHWs and CATS assess adolescent clients' needs and provide information and individual counselling. CHWs and CATS also advocate for the rights and needs of clients and are responsible for referrals to other services, such as mental health and social welfare. Intensified visits are conducted for those requiring additional support, i.e. initiating ART, tracking clients LTFU, or following up those who feel unwell. CATS who are also members of the facility's multidisciplinary team are well-positioned to raise concerns regarding an adolescent client and contribute to case management plans. CATS may also be engaged in facilitating support groups, at the facility, in the community and/or on mHealth platforms.

Community adherence clubs, which include group discussions and provision of ARVs, are increasingly available. Generally, community adherence clubs are led by CHWs or adult lay providers and are available for stable clients, i.e. on ART for at least 1 year, with no current illnesses or pregnancy, a good understanding of lifelong adherence and evidence of treatment success (two consecutive viral load measurements of <1000 copies/mL). However, most clubs lack adolescent-specific services.

Camps bring together ALHIV to enhance learning about living with HIV and improve psychosocial support. This is particularly helpful for adolescents from isolated rural areas who need to build connections and those who are recently diagnosed or struggling with adherence or other challenges.

School interventions aim to create supportive school environments, addressing issues such as stigma and attendance at clinic appointments. Government education officials, health facilities and implementing partners work together to create awareness about HIV and build support among school faculty, administration and students for the needs of ALHIV.

Community-based services

Programmatic evidence

Community-based interventions show promise in reaching large numbers of ALHIV, particularly when nested within existing structures and services. Peer-supporters and CHWs are contributing to improved adherence, retention and well-being. School-based interventions are helpful in providing a supportive environment for in-school ALHIV, particularly those in boarding schools. There is limited evidence on the impact of camps and community adherence clubs on positive health outcomes for ALHIV.

COVERAGE AND UPTAKE

- In Zimbabwe, the Zvandiri CATS programme has been adopted as the national model for providing care and support for those 0-24 years living with HIV. Currently CATS operate in 81% of districts across all 10 of Zimbabwe's provinces. In partnership with health and child protection services, 926 CATS are integrated within 613 government health facilities, actively engaging 60,000 children, adolescents and young people. CATS also facilitate dialogue with caregivers and community leaders, strengthening supportive services for ALHIV[61 62].
- The CATS model has been adopted in Eswatini, Tanzania and Mozambique. By March 2019, 187 CATS had been trained and mentored across all three countries, supporting 1224 peers directly and referring 1314 clients to other support services[63].
- In a retrospective cohort analysis of 47 government facilities in three South African provinces, nearly one out of three (31%) ART clients aged 10 -24 years had received community-based support from Kthempilo CHWs[64].
- The Red Carpet programme in Kenya formalized linkages between 70 secondary boarding schools and health facilities in one county, building the capacity of teachers, school matrons, nurses, and boarding in-charge managers. As a result, 50 school health clubs were formed and >3000 students (both HIV+ and HIV-) were reached with education on HIV and SRH. All schools implemented activities for ALHIV and their parents/guardians, including adherence counselling, and provided confidential storage of and access to HIV medications[65].

RETENTION, ADHERENCE, VIRAL LOAD SUPPRESSION AND MORTALITY

- Operational research of the Zvandiri CATS model found improved adherence as evidenced by viral load among those receiving CATS services. A total of 81.7% of 2,378 clients had their viral load taken, and 81% were virally suppressed.[66]
- ALHIV/YPLHIV who received support from Kthempilo CHWs in South Africa had a 40% lower probability of LTFU, although this effectiveness decreased over time, again suggesting that older age groups are more easily LTFU. LTFU was 29.9% for those receiving community-based support compared to 38.9% for those receiving SoC. Although after three years, VLS (<400 copies/ml) rates were similar among those receiving community-based and those receiving SOC (71.8% % vs. 67.3%), after five years VLS increased among those ALHIV receiving support (81.2% vs 63.8%). In addition, after five years on ART, the cumulative incidence of mortality amongst ALHIV/YPLHIV who received and did not receive community-based services was 8.3% and 10.8%, respectively[67].
- Young people (16-24) in community adherence clubs in South Africa had higher risk of LTFU compared to older members (35-44), again indicating the need to specifically address older adolescents needs[68].

OTHER OUTCOMES FOR ALHIV WELL-BEING

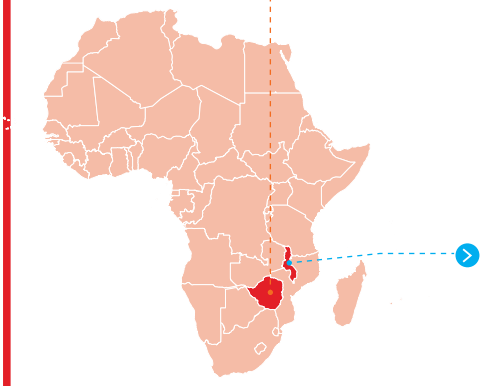
- Zvandiri CATS are integrated into social services systems and refer their peers who are in need of further support, including mental health. A Zvandiri operational research study found a significant increase in reported confidence, self-esteem, self-worth, and quality of life among ALHIV compared to those not receiving CATS support[69].

SERVICE DELIVERY OUTCOMES

- Cost implications were provided in only one published document within this review, but the results are promising: the cost of community-based support by Kthempilo CHWs was US$49.5 per patient per year and the incremental cost per patient-loss averted was US$600 and US$776 after one and two years, respectively[70].

EXPANDING REACH TO ALHIV THROUGH TRADITIONAL AND NEW MEDIA

Increasingly, mHealth is being used to reach more adolescents, facilitate and complement clinic visits, disseminate advocacy messages, and provide information, support and connection for ALHIV. Formative studies on mHealth have found that ALHIV are experienced users of social media and text messaging and would welcome mHealth applications that provide companionship, support and behaviour modelling. Barriers include cost, access to a phone, and confidentiality[71 72 73]. As mHealth grows, programmes have signalled the need for mHealth policies that will ensure that social media sites provide correct information, virtual spaces are safe, confidentiality is protected, and informed consent can be obtained when necessary.



- In **Zimbabwe**, the Zvandiri radio show is designed, produced and staffed by YPLHIV who are responsible for gathering community voices. Forty episodes are being aired on national and local radio stations and social media, with recordings shared with peer support groups. Each 30-minute episode covers a range of topics including HIV testing, ARV side effects, disclosure, and SRH. In addition, using UReport, a free SMS based platform, 5,731 SMS messages have been received containing questions, comments and expressions of interest in joining the Zvandiri programme[74].
- In **Malawi**, Y+ is working with community radio to produce programming for adolescents, alongside youth-led community events and increased access to HIV and SRH services. Of note, under the leadership of the District Youth Officer, Y+ has engaged all of the adolescent groups in the district, including the adolescent LGBTQ community[75].

Social protection and economic strengthening interventions

2.4 Social protection and economic strengthening interventions

Key points:

Achieving good health outcomes for ALHIV requires addressing multiple social and structural challenges. While social protection for vulnerable households is increasing in ESA, few programmes are tailored for adolescents or ALHIV.

Although limited, evidence suggests social protection and economic strengthening programmes help adolescents achieve improved adherence and viral load suppression.

Adolescents in the ESA region face multiple deprivations, including poverty, poor access to education, unemployment, food insecurity, violence and orphanhood[76]. All of these impede adolescent development, especially the cognitive, socio-emotional, and behavioural capacities that support health and well-being[77]. For ALHIV in particular, studies have also shown that when families or caregivers are unable to pay for ART, adequate food, or educational costs, adherence to treatment and overall health outcomes can be negatively affected[78].

Intervention overview

Cash grants or cash-in-kind have contributed to increased education uptake and retention in school for girls and reduced the risk of acquiring HIV[79]. Other economic strengthening interventions for adolescents such as livelihood training, in combination with SRH information, show impact on a range of social, financial, and health outcomes[80]. However, there are few social protection and economic strengthening programmes tailored specifically for ALHIV.

In general, income generation is the primary economic strengthening intervention for ALHIV. ALHIV receive vocational skills alongside start-up capital, financial management training, and psychosocial support. Other social protection interventions include group savings and loans, government welfare grants, food aid, school fees/materials, school feeding programmes, and clothing. These are often delivered alongside 'care,' comprised of HIV support groups, sports/music/art groups, and positive guidance to parents/caregivers.

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Programmatic evidence

Despite the general lack of data on the impact on HIV outcomes for ALHIV beyond HIV knowledge[81], some evidence indicates that social protection and economic strengthening, particularly in combination with 'care,' shows promise in increasing adherence and VLS.

- A cohort study in South Africa of adolescents attending 53 government facilities found a strong association between social protection and ART adherence. Food provision, HIV support group attendance, and high levels of caregiver supervision were significantly associated with decreased self-reported non-adherence. With no social protection, reported non-adherence was 54%; with any one protection provision non-adherence was 39–41%; with any two social protection provisions 27–28%; and with all three, 18%[82].
- A study in Uganda of adolescents in an economic strengthening cohort found that the proportion of virally suppressed participants increased tenfold when compared to the control group[83].

2.5 Adolescent engagement and advocacy

Key points:

When adolescents participate in decisions and processes that are related to their health, both programmes and adolescents benefit. It is critical to work with and for ALHIV as clients, engage them as partners, and support them to gain confidence in their judgment, take initiative, and serve as leaders.

ALHIV are increasingly demanding a role in key programme, policy, and funding decisions. The opportunities for participation are growing as youth-led networks thrive throughout the region, and adolescents increasingly assume leadership roles. ALHIV are amplifying the voices of their peers as powerful advocates in a world where stigma and discrimination are no longer tolerated. Importantly, ALHIV are taking the stage as role models for living positively with HIV, as promoters of HIV testing, and as the living proof of the importance of remaining in care and treatment.

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Intervention overview

Networks of ALHIV extend throughout the ESA region, sharing similar aims:

- Peer education and community outreach to increase understanding around the needs of ALHIV.
- Promoting adolescents' access to HIV services, including addressing age-of-consent barriers.
- Fighting stigma and discrimination in schools and communities.
- Promoting the greater involvement of ALHIV in the HIV response at national and sub-national levels.
- Holding duty bearers accountable for delivering quality services for ALHIV.
- Strengthening ALHIV capacities in leadership and advocacy.

Programmatic examples

ALHIV engagement and advocacy have influenced national policies, strategies, and resource mobilisation, and increased opportunities for social change.

- *READY+* is an international movement of Young People Living with HIV (YPLHIV), including those from key populations[iii]. Members advocate in international, regional and local decision-making spaces for change on pressing HIV issues, such as age of consent barriers to services and access to the latest treatment. For example, in Zimbabwe, READY to LEAD mentors have joined local Health Centre Committees where they lobby for and support young people's interests in their community as well as participate in accountability mechanisms[84].
- *Count Me In* is a platform for YPLHIV and young key populations[iii] to increase engagement in funding processes at the national and global levels as well as youth-friendly programming, specifically for grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria[85].
- *Y+ beauty pageant.* Uganda's YPLHIV network, with over 50,000 members, hosts an annual pageant and advocacy campaign to fight stigma and discrimination. The platform is used to nurture leadership, self-esteem, and advocacy skills, and to encourage young people to know their HIV status and adhere to treatment. Participation and interest in the pageant has increased year-by-year as the winners, crowned 'Ambassadors of Change,' are nationally recognized for their role in the HIV response through blogs, newspaper articles and appearances on local and regional news[86].

iii Key populations include sex workers, people who use drugs, and lesbian, gay, bisexual, transgender and queer (LGBTQ) people

3 Key considerations for service delivery and scale up

The findings from this review serve as a call to action to respond to the growing yet still unmet needs of ALHIV. Importantly, adolescents are far from homogenous; one model will neither fit all ALHIV or address all of their needs. Rather, adolescents will benefit from multiple approaches, tailored to their unique challenges and context. Programmes are exploring diverse ways to engage more adolescent clients, to further understand barriers to participation, and to provide options for older adolescents who are ageing out of services and transitioning to adult care. For example, successful programmes are taking into account age and gender, where ALHIV live, whether they are in or out-of-school, adolescent mobility, and other socioeconomic and cultural factors.

Efforts to scale up interventions shared certain characteristics, embedded in the following key considerations. While the context differs by country, applying these considerations to scale up may extend the benefits to and deepen the impact of promising interventions for more ALHIV.

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3.1. Support national programming and resource allocation

Governments are leading efforts to scale up treatment, care, and support for ALHIV at the national level. This provides a strong mandate for scaling up; helps to ensure participation and accountability at all levels, and facilitates rollout. At the same time, collaboration between government and partners—donors, technical experts, implementers, NGOs and youth-led organizations— encourages collective ownership and commitment.

> Government leadership, partnerships and standardization are key to scale-up

Implementing partners are shifting from delivering services directly to providing technical support. These government-NGO partnerships have resulted in better integrated and potentially more sustainable models. For example, in Zimbabwe, CATS are part of government facility multi-disciplinary teams and supervised by facility staff nurses, while training, mentorship, stipends, and associated costs are supported through the implementing partner.

National models of treatment, care, and support for ALHIV allow for more standardised implementation throughout the country. Normative guidance and standard packages of care will contribute to the quality of the models being implemented and support ease of adoption and delivery of services, especially in countries where multiple models are being implemented. Implementation can be greatly supported by operational resources, such as standard operating procedures, job aids and monitoring tools. For example, in Namibia, a starter pack was developed to support facilities in setting up peer-based group interventions. Developed by implementing partners in collaboration with other stakeholders, it was endorsed by the government as the national guide.

Scale-up implies increased roles and responsibilities of health-service providers; national capacity building efforts are essential for delivering quality care for ALHIV at scale. This can be achieved through pre- and in-service training, sensitization meetings, and ongoing support, including mentorships, regular supervision, and performance reviews. A more structured and longer-term context for delivering services for ALHIV will allow more time for reflection and trouble-shooting as staff gain expertise and confidence in supporting the complex needs of ALHIV.

UGANDA: NATIONAL TRAINING CURRICULUM AND JOB-AID

In 2016, the Ugandan Ministry of Health rolled out a national adolescent-friendly service programme with the purpose of improving HIV treatment outcomes. A 5- day national training curriculum and health worker job-aid was developed to build health worker capacity and train adolescent peer educators. Also, facilities agreed to establish adolescent safe spaces, hold separate clinic days and flexible clinic hours for adolescents. On-site mentorship was provided one- and four-months post-training with additional engagement of health facility management to support the intervention.

A mixed-method cross-sectional process evaluation was undertaken one year post-training in 134 of the 140 facilities. The greatest improvements from baseline were seen in identifying ALHIV through increased testing (HIV yield increased from 2.5 to 3.1%) and linking ALHIV to care (44.6% to 74.3%). Overall 53.5% of YPLHIV were retained in care 24 months post-ART initiation, 56% received a viral load test in the 12 months post-ART initiation and, of those, 77% were virally suppressed.

53.3%

of YPLHIV were retained in care 24 months post-ART initiation

Source: Process Evaluation of Implementation of Adolescent HIV/SRH Responsive services in Uganda Final Report December 2017, STD/AIDS Control Programme, Ministry of Health, Uganda

Taking effective interventions for ALHIV to scale will require a more concerted effort to understand actual costs and include ALHIV programming within existing funding initiatives. Scale up includes undertaking the following sustainable funding solutions:

- Integration of programming activities for ALHIV into district and national workplans to ensure that they are included in government funding mechanisms.
- Preparing defined and costed packages for ALHIV to facilitate inclusion of ALHIV programming into larger funding opportunities and international development operational plans.

THE CHANGING ROLE OF NGOS AND IMPLEMENTING PARTNERS

Implementing partners and NGOs have played vital roles in addressing the treatment, care, and support gaps faced by ALHIV. Much of this work took place prior to the decentralisation of ART care for children and adolescents, when most of the interventions and services were delivered in tertiary facilities and larger urban centres. However, for scale to be achieved, programming and service delivery through decentralised government facilities is essential.

Implementing partners and NGOs have, therefore, noted a shift in their roles from implementation of their own programmes to increasingly facilitating coordination and partnership mechanisms, and providing technical support to government programmes to expand care and support for ALHIV. Technical support has included the development of national standardised packages and operational resources and tools; the provision of training and mentorship; implementation support for new interventions and service delivery innovations; as well as quality improvement measures. This new landscape for implementing partners requires organisational development, strategic planning, closer working partnerships with governmental agencies and ministry partners, and consistent funding streams that will ensure appropriate levels of support.

3.2. Strengthen effective adolescent-centred services for ALHIV

Adolescent-centred services emphasize the needs and expectations of adolescents, rather than focusing on HIV. They reflect adolescents' heterogeneity and the importance of using disaggregated data to tailor services to specific groups. Community health workers, peer providers, school-based interventions and mHealth initiatives have demonstrated operational feasibility and effectiveness in improving health outcomes for ALHIV.

Community health workers: While countries may define the responsibilities of CHWs differently, they share a common mandate – providing basic health care within their communities and linking people to health services. CHWs who provide services to ALHIV have the added advantage of being able to support caregivers, many of whom may also be in need of HIV services. As a pre-existing cadre, CHWs require minimal additional investment to add support to ALHIV to their workload and are often well-equipped to link and refer ALHIV to health and other social services.

Peer providers: Adolescents are important actors in national scale-up processes, with unique capacities to expand the reach of interventions to more adolescents. Investing in peer providers requires policy frameworks that acknowledge and validate their legitimacy and contributions. For example, peer providers must have clear definitions of their roles and responsibilities, with commensurate accountability, compensation, and workplace protections.

As the following example from Tanzania demonstrates, successful scale-up of peer-based interventions has relied on the integration of peer capacity building within national systems.[87]

TANZANIA: INTEGRATING ADOLESCENT CENTERED SERVICES INTO COMMUNITY STRUCTURES AND HEALTH FACILITIES

The Government of Tanzania launched its Differentiated Service Delivery Model (DSDM) in 2017 to reach more ALHIV through decentralized service delivery. UNICEF and implementing partners, Baylor College of Medicine and PASADA, supported the government in developing standardised training materials, guidelines, standard operating procedures, job aids and monitoring tools for community-based HIV care and treatment service for adolescents living with HIV. Recognizing the diversity of ALHIV, peer-support groups were established within 39 rural communities as well as 20 urban health facilities. In addition, all ALHIV obtaining services at health facilities were given an option of obtaining HIV care and treatment services, including ART refills within their communities or at the health facility. Both types of groups were supported by health workers.

An assessment of both approaches concluded the following:

- DSDM allows the government to tailor services to ALHIV according to their circumstances. Most ALHIV living in rural areas preferred to obtain services closer to home while a significant number of urban groups preferred the anonymity of receiving services at ART clinics in health facilities.
- ALHIV who attended community-based groups and received ART refills remained clinically stable, lessening the burden on urban health facilities and decreasing potential loss to follow-up.
- Freedom of choice on the service delivery model is a key rights-based approach among adolescents living with HIV while using peer support groups counteracted stigma and discrimination.
- There was improved adherence and retention among clinically unstable ALHIV attending either peer group over time.
- Caregiver engagement and support was critical to ensuring appropriate dosing and adherence.
- Joint progress reviews, joint field visits and standardised monitoring contributed to robust data collection and use. Continuous engagement by district health management teams and partner coordination in the same geographic area remained a challenge to improving programme efficiency and effectiveness.

Source: UNICEF Tanzania country office implementing partner reports

Schools: ALHIV who attend school must balance the competing demands of attending clinic appointments, ART adherence, managing their illness and treatment side effects, and academic performance. At minimum, the education sector needs to ensure that schools provide confidential, supportive environments that allow ALHIV to access and adhere to treatment. Scaling up these services requires:

- Reviewing, revising and implementing HIV and education policies and strategies.
- Incorporating HIV prevention, care and support for ALHIV into pre- and in-service training.
- Strengthening linkages and referrals to health services.

mHealth: Technology is increasingly central to how we all communicate and learn. For adolescents, it is vital as many of the developmental impulses of adolescence—seeking autonomy, connection, and information; exploration of new concepts, etc.—are in line with how new technology functions. mHealth has the potential to facilitate and complement care and support for ALHIV. Lack of information and developmentally appropriate HIV resources for adolescents were highlighted during consultations with ALHIV as part of this review. Furthermore, not all adolescents are able, willing, or interested in attending in-person, peer-based group interventions.

A powerful channel for reaching more adolescents, mHealth technology offers a dependable supplement to clinic visits and support groups for information, support, and connection. It is already being used by programmes to support providers with communication between adolescents and among other service partners; it is utilised by peer-based group members to keep in touch and provide support outside meeting times; and it is key as a channel for disseminating advocacy messages. In addition, operational tools and guides are being digitised to support all providers. With the increasing reliance on mHealth applications, programmes have signalled the need for policies that will ensure that virtual spaces are safe, confidentiality is protected, and informed consent can be obtained when necessary.

3.3 Support the growing role of young people to scale up the HIV response

The meaningful engagement of adolescents is an essential component of all levels of HIV programming—from national level policymaking to programme design and implementation. ALHIV have an important role to play in both decentralizing and scaling up services. This growing cadre of adolescent peer providers should be explicitly integrated into health development plans and existing structures. To be effective, adolescent peer providers require standardised training and mechanisms for recruitment, remuneration, supervision, mentorship and support.

Peer providers are important sources of support and can reduce the burden on other health care providers, but their participation does not replace the roles and responsibilities of health workers. The scope of their work requires clear boundaries that reflect the limits of their age and training, and their heightened vulnerabilities. Peer providers require ongoing training, mentoring and supervision to build knowledge, skills, confidence, and expertise. It is also important to include aspects of self-care to ensure that their own psychosocial needs are met.

Scaling up peer-based interventions requires the successful incorporation of peers into local facilities. Including them in facility staff structures and activities, such as meetings and committees, provides an opportunity for peer providers to become valuable members of health facility teams.

Being a peer provider is not a long-term career opportunity—young people have other priorities and quickly age out of the youth category. However, programmes have found that keeping peer providers engaged, motivated, and well-supported as long as is feasible is important for programme continuity and impact. At the same time, providing or linking peer providers to skills building, livelihood strengthening, and/or career and educational development opportunities throughout their term of service can contribute towards future employment opportunities and an overall sense of personal growth for the individuals involved.

Expanding regional and country-level ALHIV networks, in terms of influence, reach, and impact, requires greater investment in developing their capacity through organisational strengthening and pro-gramming activities. Suggested support includes:

- Developing strategic plans, work plans and monitoring tools that reflect clearly defined indicators and expected outcomes.
- Capacity building in results-based project management, including proposal writing, reporting and financial management.
- Strengthening partnerships with other national actors to collaborate on advocacy and programming.
- Facilitating south-to-south learning among Y+ networks within the ESA region.
- Promoting diverse ways for ALHIV to engage in advocacy and network activities that do not require them to publicly disclose their HIV status.
- Responding to the different stages of development and needs of specific groups, such as those who are married, living with disabilities, or from key populations, to ensure they are included and engaged in activities and processes.

BUILDING THE CAPACITY OF YOUTH-LED NATIONAL NETWORKS

To harmonise advocacy and capacity building of networks of ALHIV andYPLHIV in the region, several stakeholders partnered to produce a capacity assessment tool that networks could use to determine their learning needs. National youth-led networks from 12 countries completed the assessments in 2017. Data from the self-assessments were used to develop capacity building and resource mobilization plans.

Preliminary findings from this work show that core support facilitates development of networks from being an informal association of young people to more formalized and registered networks, leading to higher profile, a 'seat at the table', and a more prominent voice for adolescents and young people with HIV.

Partners in this work included PATA, Aidsfonds, Frontline AIDS, Y+, AY+, and Adolescent HIV Treatment Coalition.

Source: PATA. HIV Treatment, Care, and Support for Adolescents Living with HIV in ESA: Taking Services to Scale. 2018.

3.4 Understand what works for scale up

The desk review identified an encouraging use of programmatic data, including from cohorts of government facilities. However, numerous programmes were unable to provide evidence to demonstrate the effectiveness or coverage of their interventions or programmes. Data was mainly limited to numbers reached or anecdotal evidence of acceptability from adolescents and caregivers. Additionally, where data may have been available, it was not readily accessible or in a format that could be shared with others. This 'missing' data highlights the increasingly important requirement for programmes to strengthen their data management.

> 'Learning while doing' requires continually collecting, reflecting on, and responding to what the data indicates.

With improvement in age disaggregation across the region, data is becoming more available than ever before to inform adolescent HIV programming. District- and facility-based audits are also assisting the real-time tracking of individual adolescents and programme progress. This visualisation of data helps to identify gaps for further exploration and supports implementation of service delivery improvements.

Programmes that have purposefully improved data collection and use noted how documentation of results and impact supported national programmatic changes and served as a significant advocacy tool for changing policy and mobilising resources. For example, Zvandiri's quarterly scorecard stands out as a way to share information, highlight challenges and hold the government and implementing partners accountable for delivering services[iv]. Improved data collection has been achieved through:

- Strengthening, simplifying, and integrating monitoring and evaluation (M&E) tools into national M&E systems.
- Ensuring accessibility of data to both the clinic and the implementing partners.
- Providing technical support at facility level on age-disaggregated data collection and analysis.
- District- and facility-based data audits to identify gaps and assist real-time tracking of individual adolescents and programme progress.
- Measuring intervention effectiveness through data collection on viral load, CD4 counts, clinic appointment attendance, pill counts and self-reported adherence

Nonetheless, several areas require additional evidence before going to scale. The following are some examples of these data gaps.

iv https://www.africaid-zvandiri.org/programme-results

- Defining a minimum package of services to achieve optimal outcomes for ALHIV.
- Understanding coverage of interventions and the reasons for LTFU for ALHIV is critical for guiding and assessing scale-up, particularly to reach all ALHIV with interventions that increase retention in care and treatment.
- As viral load monitoring coverage increases, assessing ART outcomes needs to be prioritised. At the same time, examining non-clinical outcomes, such as SRH, mental health, and psychosocial outcomes is equally important for assessing the well-being of ALHIV.
- Economic strengthening and entrepreneurship activities require further exploration of impact on outcomes for ALHIV. Similarly, understanding the influence of youth engagement and youth-led advocacy efforts, with clearer indicators is necessary.
- Understanding aspects of feasibility, sustainability and the cost effectiveness of different interventions will guide decision makers in selecting which ALHIV interventions should be brought to scale.

3.5 Integrate HIV within broader adolescent health and strengthen linkages to multisectoral services

The growing momentum on adolescent health presents an opportunity to scale up interventions for ALHIV within the broader adolescent health framework. When HIV is included as an integral component of adolescent health, health systems gain as lessons learned from HIV are applied to other adolescent health issues, while ALHIV benefit from access to sustainable services.

In addition, HIV programmes must recognize the ongoing need of ALHIV for a range of related services. For example, in Zimbabwe, 1090 pregnant and breastfeeding ALHIV were screened for common mental health conditions; 53% were referred for follow up support[88]. In scaling up programmes for ALHIV, the following linkages and referrals should be strengthened:

- Mental health services that are delivered by providers trained to work with adolescents. These include information, screening, and links to or provision of mental health services.
- SRH services and information that are specific to being young, HIV-positive, and sexually active, e.g. how to disclose to partners, rights and responsibilities, risk mitigation, contraception, etc.

While maintaining a focus on ALHIV as an equal part of the prioritization of adolescent health, we cannot lose sight of the multiple needs of adolescents beyond health. Adolescent services cannot be provided in a silo: ALHIV in ESA face many pressing issues, including food scarcity, stigma, poverty, and violence. Strengthening linkages to and collaboration with other sectors, including education, employment, legal and social protection services, is critical to supporting the needs of all of the adolescents we serve.

MOZAMBIQUE: INTEGRATING ALHIV INTO ADOLESCENT HEALTH SERVICES

The Government of **Mozambique** has adopted an integrated approach to providing adolescent-friendly SRH and HIV services at all levels. "Servico Amido do Alescente e Joven (SAAJ)" (Services of friends of adolescents and young people) offers a package of services to adolescents 10-24 years, with a special focus on ALHIV. At the age of 24, young people are transitioned to adult services within the same health facility, maintaining the same health records and often retaining the same health provider. A 2018 study of 5 SAAJ sites in Beira found adherence levels at around 65%, compared to 20% at baseline. Although sites experienced high LTFU (25%), patient tracing successfully returned 5% of adolescents to care. ALHIV cited the benefits of the availability of a range of health services, as well as a friendly environment, individual counselling, and an opportunity to inter-act with peers. The main challenge concerned viral load testing: turnaround times between viral load testing and results could be lengthy and adolescents often did not fully understand their results. Support to caregivers added to adolescents feeling capable of adherence and retention.

Source: Vitali C. Prennushi G, Namarime E, et al. 2019. Retention in HAART among youths accessing SAAJs in Beira, Mozambique. Italian Conference on AIDS and Antiviral Research.

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Resources

ExpandNet. Beginning with the end in mind: Planning pilot projects and other programmatic research for successful scaling up. Geneva, WHO, 2011.

This tool offers recommendations for designing and implementing a pilot, demonstration or implementation research project with scaling up in mind. It is also helpful to make mid-course corrections.

http://expandnet.net/PDFs/ExpandNet-WHO%20-%20Beginning%20with%20the%20end%20in%20mind%20-%202011.pdf

ExpandNet. Nine steps for developing a scaling-up strategy. Geneva, WHO, 2010.

The Nine Steps for developing a scaling-up strategy tool and associated worksheets provide stepwise guidance to develop a scaling-up strategy and manage the scaling-up process.

http://expandnet.net/PDFs/ExpandNet-WHO%20Nine%20Step%20Guide%20published.pdf

ExpandNet. Practical guidance for scaling up health service innovations. Geneva, WHO, 2009

The Practical Guidance tool identifies general scaling-up principles and provides examples from case studies of successful scale-up initiatives. It is helpful at the design stage, during implementation and to manage the scaling-up process

http://expandnet.net/PDFs/WHO_ExpandNet_Practical_Guide_published.pdf

Int. AIDS Alliance. Good Practice Guide: Adolescent HIV Programming. May 2017, Brighton United Kingdom.

This guide provides information, strategies and resources to help implement HIV programming for adolescents.

http://www.aidsalliance.org/resources/922-good-practice-guide-adolescent-hiv-programming

UNICEF. Collecting and Reporting of Sex- and Age-Disaggregated Data on Adolescents at the Sub-National Level, New York, UNICEF, 2016.

This document guides countries through the process of collecting and reporting sub-national data on adolescents to inform programme planning and implementation efforts. It was developed with the specific aim of identifying data gaps for adolescents and informing immediate programme planning needs at the sub-national level.

https://childrenandaids.org/collecting-reporting-sex-age-disaggregated-data

UNICEF. Guidance on Strengthening the Adolescent Component of National HIV Programmes through Country Assessments New York, UNICEF, 2015.

This guidance document and its accompanying tool, the AADM, were developed to facilitate country assessments aimed at strengthening the adolescent component of national, multi-sectoral HIV programmes. The purpose of the country assessments is to: (1) support country teams to identify equity and performance gaps affecting adolescent HIV programming; and (2) define priority actions to improve the effectiveness of the national adolescent HIV response.

https://childrenandaids.org/guidance-on-strengthening-adolescent-component

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Southern Africa Regional Office
P.O. Box 44145 Nairobi, Kenya 00100

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