

# Thriving in the second decade: Bridging childhood and adulthood for South Africa's adolescents

*Elona Toska,<sup>a</sup> Rebecca Hodes,<sup>b</sup> Lucie Cluver,<sup>c</sup> Millicent Atujuna<sup>d</sup> and Christina Laurenzi<sup>e</sup>*

South Africa is home to over 10 million adolescents, defined by Statistics South Africa as those aged between 10 and 19.<sup>1</sup> Adolescence is a life stage of immense biological, cognitive, emotional and social change. The second decade of life is a time in which many young people aspire to greater individual autonomy, establish a sense of self, and explore relationships beyond familial bonds with peers and romantic and sexual partners.

It is also a time of potential increased exposure to a range of physical, social and emotional challenges. Adolescence is characterised by significant transitions from childhood to adulthood, from dependant to caregiver roles, from paediatric to adult health services, from legal minority to legal majority, some of which overlap and are cyclical. These transitions in social and legal roles are formally recognised in different ways by many laws and policies in South Africa. For example, as children grow older, they are afforded greater autonomy under South African law, such as the right to access health services, including sexual and reproductive health, without caregiver consent.

A growing body of evidence confirms that experiences in adolescence – both adversity and resilience – shape long-term outcomes across multiple domains of well-being and development, particularly health. For this reason, adolescence is a critical period for health promotion, resilience-building, and protection from risk. South Africa's adolescents experience multiple – and at times overlapping – health challenges, including HIV, exposure to and perpetration of violence, poor mental health and substance use. This essay focuses on the following questions:

- What makes adolescence unique?
- What are the key considerations for the health of adolescents in South Africa?
- What are key features of the South African legal and policy environment on adolescent health?
- What are some of the current and emerging opportunities for promoting adolescent health?

- What is our vision for the health of South Africa's adolescents?

## What makes adolescence unique?

Starting in the second decade of life, adolescence is a period of transition from childhood to adulthood, accompanied by profound biological, physical, psychosocial, cognitive and emotional changes. While this is an exciting time of identity exploration and development, it can be a tumultuous period for adolescents as they test out new social roles, strive for greater autonomy, and form new emotional and social attachments.<sup>2</sup> Different societies have their own ways of defining adolescence and the transition to adulthood: from legal entitlements, such as the age at which young people can vote, to physical developments such as the onset of menstruation among young women, the completion of circumcision and manhood rites among young men, starting a family or working towards financial independence.<sup>3</sup> Increasingly, there is a notable and widening gap between biological maturation, occurring first, and social transition to adulthood, in part due to a longer time in the education system and delayed age of first employment.<sup>4</sup> This has led some to call for expanding the definition of adolescence beyond the second decade of life until the age of 24.<sup>5</sup>

Research on adolescent brain development suggests that the adolescent brain tends to satisfy immediate needs and under-estimate short-term dangers.<sup>6</sup> As a result, adolescents may show limited ability to control their behaviours, and may be prone to rash decisions and increased risk-taking.<sup>7</sup> Adolescent brains are also particularly sensitive to biological and social stress. Adolescents' desire to be both "normal" and "unique": they want to fit in with their peers, and develop an individual identity.<sup>8</sup> During this period of significant emotional development, adolescents are also hyper-sensitive perceived criticism, not only by peers, but also by adults in their families, social networks, communities – and via the internet and social media.<sup>9</sup>

a Centre for Social Science Research, University of Cape Town; Department of Social Policy and Intervention, University of Oxford

b AIDS & Society Research Unit, University of Cape Town; Department of Social Policy and Intervention, University of Oxford

c Department of Social Policy and Intervention, University of Oxford; Department of Psychiatry and Mental Health, University of Cape Town

d Desmond Tutu HIV Centre, University of Cape Town

e Institute for Life Course Health Research, Stellenbosch University

In other words, adolescents are particularly vulnerable to a range of stressors at a time when their skills to navigate these challenging social, economic and health circumstances are still developing.<sup>10</sup> Experiences and transitions during adolescence have implications for how adolescents understand and act on information, formulate decisions, conceive of their futures, and act in response to new experiences such as parenthood, partnerships and employment.<sup>11</sup>

### **What are the key considerations for the health of adolescents in South Africa?**

South Africa's adolescents face several key health and well-being challenges (see Table 9), although comprehensive and representative data for the second decade of life are not always available. While many of these health issues are common for adolescents around the world, others are unique or more severe among adolescents in South Africa. Mortality and morbidity among 10 – 24-year-olds in South Africa are driven by injuries and violence as well as communicable diseases such as HIV/AIDS and TB.<sup>12</sup>

Adolescents living in HIV-affected households, whether orphaned due to AIDS or living with an AIDS-ill caregiver, are also more likely to have multiple experiences of trauma and poorer mental health, drop out of school, engage in high-risk sex and live in more precarious households.<sup>13</sup> Although HIV prevalence in the age group has decreased over time, rates of HIV incidence remain high.<sup>14</sup> Most of the burden of HIV infection in this age group is borne by young women, who accounted for over a third of all new infections in 2017.<sup>15</sup> Worryingly, HIV incidence among adolescent boys – although low – is on the rise,<sup>16</sup> particularly among young men who have sex with men. Young men are also less likely to use health services, get tested for HIV and adhere to antiretroviral treatment (ART).<sup>17</sup>

For adolescent girls in particular, early exposure to sexually-transmitted infections and unintended pregnancies contributes substantially to the morbidity of this age group and undermines outcomes such as school completion, employment and the health of the next generation.<sup>18</sup> Although rates of adolescent pregnancy have decreased over time, adolescent mothers and their children have worse health outcomes, including worse retention in HIV treatment after giving birth, and higher rates of HIV transmission to their children.<sup>19</sup> Pregnancy-related mortality among adolescents is closely linked to preventable and manageable issues: hypertension, unsafe abortion and injuries.<sup>20</sup> Efforts to prevent adolescent pregnancies continue – though with limited effectiveness – but programmes to support

adolescent mothers to care for themselves and their children, while negotiating return to school or entering the workforce, are scarce.<sup>21</sup>

Globally, and in South Africa, mental health issues among adolescents account for a growing burden of morbidity,<sup>22</sup> and adversely affect young people's education and employment.<sup>23</sup> According to the World Health Organization's Global Health Observatory data, suicide mortality rates among adolescents in South Africa increase dramatically with age, from 0.2 – 0.7 suicides per 100,000 in young adolescents aged 10 – 14, to 4.4 – 11.4 suicides per 100,000 in older adolescents aged 15 – 19.<sup>24</sup> Adolescents living in socially and economically disadvantaged homes and communities experience poorer mental health outcomes; for example, adolescents living in AIDS-affected households or those who have been exposed to violence are more likely to report high levels of depression and post-traumatic stress disorder.<sup>25</sup> Mental health issues, many of which emerge in adolescence, are compounded by exposure to physical, emotional and sexual violence at home, schools, clinics and communities. With growing exposure to the internet, adolescents in South Africa are also increasingly exposed to cyberbullying, which has been linked to poor emotional and academic outcomes.<sup>26</sup> Moreover, mental health issues during childhood and adolescence are linked to mental health problems in adulthood (see chapter 7 on mental health).<sup>27</sup>

### **Social determinants of adolescent health**

It is also important to consider the social determinants of adolescent health that intersect in complex ways to shape health risk exposures, practices and outcomes.<sup>28</sup> South Africa's adolescents have low rates of high school graduation, high rates of violence victimisation and perpetration, and live in households and communities which face considerable challenges, such as unemployment, migration, crowding, and high rates of burdened caregivers. Recent studies among school-going young adolescents have found that more than one in three adolescents report experiences of violence, while one in five report perpetrating violence.<sup>29</sup> Analyses of 12 years of data (1997 – 2009) among women in South Africa found that adolescent girls and young women were the most likely to report physical and sexual violence.<sup>30</sup> A recent large-scale national study found that 9.1% of adolescent boys and 14.5% of adolescent girls reported forced sexual experiences in their lifetime.<sup>31</sup> Experiences of violence are associated with sexual risk-taking<sup>32</sup> and lower adherence to antiretroviral therapy (ART) among adolescents living with HIV<sup>33</sup>. Orphanhood and fathers' absence from the

**Table 9: Adolescent health and well-being data tracker on Sustainable Development Goals (SDGs) for South Africa**

Adolescent health and well-being domain and related SDG	Indicator	Adolescent data	(age   year)
Poverty (SDG 1)	Adolescents living below the poverty line	62.2% <sup>1</sup>	(15 – 24-year-olds   2016)
Food security (SDG 2)	No food in the house for breakfast	33.3% <sup>2</sup>	(10 – 14-year-olds   2011)
	Overweight	4% males 4% females <sup>3</sup>	(10 – 14-year-olds   2011)
	Obesity	8% females 1% males <sup>3</sup>	(10 – 19-year-olds   2016)
Health (SDG 3)	Adolescent mortality rate	128.7/100,000 <sup>4</sup>	(10 – 19-year-olds   2015)
	Suicide mortality rate	4.2/100,000 <sup>4</sup>	(10 – 19-year-olds   2016)
	Suicide ideation (ideas)	17.6% <sup>5</sup>	(13 – 19-years olds   2011)
	Adolescent fertility rate	68/1,000 <sup>6</sup>	(15 – 19-year-olds   2017)
	HIV-prevalence rate	11.3% females 3.7% males <sup>7</sup>	(15 – 24-year-olds   2018)
	HIV-incidence rate	1.59% females 0.49% males <sup>8</sup>	(15 – 24-year-olds   2017)
	ART-initiation rate (among those living with HIV)	39.9% <sup>8</sup>	(15 – 24-year-olds   2017)
	Viral suppression rates (among those on ART)	47.7% <sup>8</sup>	(15 – 24-year-olds   2017)
	TB prevalence	107/100,000 305/100,000 <sup>9</sup>	(10 – 14-year-olds   2016) (15 – 19-year-olds   2016)
Education (SDG 4)	Completed primary education	95% <sup>10</sup>	(20 – 24-year-olds   2014)
	Completed secondary education	49% <sup>10</sup>	(20 – 24-year-olds   2014)
	Proficiency in mathematics and language in grade 9	Language = 48% Maths = 3% <sup>10</sup>	Grade 9 learners
Clean water and sanitation (SDG 6)	Access to improved sanitation	82.5% <sup>3</sup>	(15 – 24-year-olds   2016)
Gender equality (SDG 5)	Contraception use (any modern method)	24.9% <sup>3</sup>	(15 – 19-year-olds   2016)
Decent work and economic growth (SDG 8)	Unemployment	27.0% <sup>6</sup>	(15 – 24-year-olds   2018)
	Not in employment, education or training	36.6% females 31.2% males <sup>11</sup>	(15 – 24-year-olds   2018)
Peace and violence prevention (SDG 16)	Homicide mortality rate	8.22/100,000 <sup>12</sup>	(10 – 17-year-olds)
	Physical abuse by an adult	34.8% <sup>13</sup>	(15 – 17-year-olds)
	Lifetime sexual abuse	35.4% <sup>13</sup>	(15 – 17-year-olds)
	Lifetime forced sex (attempted or took place)	11.7% <sup>13</sup>	(15 – 17-year-olds)

**Source:**

- Poverty and Inequality Initiative (2019) *Youth Explorer. PII, SALDRU, University of Cape Town*. Viewed 10 November 2019: <https://youthexplorer.org.za>. Poverty defined as upper-bound poverty line of R779 per person per month (2011).
- Shisana O (2013) HIV/AIDS in South Africa: At last the glass is half full. In: *6th South African AIDS Conference*. Durban, South Africa: Human Sciences Research Council. Viewed 10 November 2019: [www.hsrc.ac.za/en/media-briefs/hiv-aids-stis-and-tb/plenary-session-3-20-june-2013-hiv-aids-in-south-africa-at-last-the-glass-is-half-full](http://www.hsrc.ac.za/en/media-briefs/hiv-aids-stis-and-tb/plenary-session-3-20-june-2013-hiv-aids-in-south-africa-at-last-the-glass-is-half-full)
- National Department of Health, Statistics South Africa, South African Medical Research Council and ICF (2017) *South Africa Demographic and Health Survey 2016: Key Indicators*. Pretoria and Rockville, Maryland: NDoH, Stats SA, SAMRC & ICF.
- World Health Organization (2019) Global Health Observatory Data. Viewed 10 November 2019: <https://www.who.int/gho/en/>
- Reddy SP, James S, Sifunda S, Ellahebokus A, Kambaran N & Omardien R (2013) *Umntsho Uhlaba Usamila - The 3rd South African National Youth Risk Behaviour Survey 2011*. Cape Town: HSRC.
- World Bank (2019) World Bank Open Data. Viewed 10 November 2019: <https://data.worldbank.org/>
- UNAIDS (2019) *Country Fact Sheet: South Africa 2018*. Viewed 10 November 2019: <https://www.unaids.org/en/regionscountries/countries/southafrica>
- Simbayi LC, Zuma K, Zungu N, Moyo S, Marinda E, Jooste S, Mabaso M, Ramlagan S, North A, van Zyl J, Mohlabane N, Dietrich C, Naidoo I and the SABSSM V Team (2019) *South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2017*. Cape Town: HSRC Press.
- Snow KJ, Sismanidis C, Denholm J, Sawyer SM & Graham SM (2018) The incidence of tuberculosis among adolescents and young adults: A global estimate. *European Respiratory Journal*, 51(2): 1702352.
- South African Human Rights Commission & UNICEF South Africa (2016) *Global Goals for Every Child: Progress and disparities among children in South Africa*. Pretoria: SAHRC & UNICEF.
- Statistics South Africa (2019) *General Household Survey 2018*. Pretoria: Stats SA. Analysis by Katharine Hall and Winnie Sambu, Children's Institute, UCT.
- Mathews S, Abrahams N, Jewkes R, Martin LJ & Lombard C (2013) The epidemiology of child homicides in South Africa. *Bulletin of the World Health Organization*, 91: 562-568.
- Ward CL, Artz L, Leoschut L, Kassanjee R & Burton P (2018) Sexual violence against children in South Africa: a nationally representative cross-sectional study of prevalence and correlates. *Lancet Global Health*, 6(4): e460-468.

home are also predictors of early sexual risk-taking,<sup>34</sup> which is linked to a higher risk of HIV and other sexually-transmitted infections and unintended early pregnancies. Moreover, the combination and overlap of multiple risk factors heighten the vulnerability of adolescents in South Africa, with cumulative risks resulting in long-term negative outcomes.<sup>35</sup>

Despite all these negative experiences, adolescents in South Africa – whether or not they are living with a chronic illness – aspire to have families, become contributing members of society, and want to be heard.<sup>36</sup> Policies and guidelines linked to age of consent to services and products in the health, education and other sectors are key to shaping adolescent well-being, as outlined in the next section. Cultural and societal values, particularly those linked to gender norms, violence and discipline play a major role in framing and shaping adolescents’ attitudes, practices and outcomes – both directly and through caregivers and adults on whom they model their lives.

### **What are the key features of the South African legal and policy environment affecting adolescent health?**

South Africa is signatory to numerous international frameworks, including the Sustainable Development Goals, the African Union’s Agenda 2063, the United Nations Convention on the Rights of the Child, and the African Charter on the Rights and Welfare of the Child. These international frameworks set ambitious targets for improving the health, education, security and livelihoods of children, adolescents and young people.<sup>1</sup> South Africa has put in place a rich legal and regulatory framework that defines the rights of children, adolescents, and young people,<sup>37</sup> and outlines the state’s commitment to providing basic education, health care, social services, social security, and housing, water and sanitation.

In recent years, there has been a growing emphasis on meeting the needs of adolescents and young adults. The National Youth Development Policy Framework (2015 – 2020) defines ‘young people’ as the group aged between 14 and 35,<sup>38</sup> while other youth-focused policies use different definitions, drawing on international norms which are themselves disputed. In keeping with the definition by the World Health Organization, South Africa’s National Adolescent and Youth Health Policy (2017) defines adolescents and young people as those between the ages of 10 and 24.<sup>39</sup>

These different definitions of adolescence pose a challenge to service providers: what is the “cut-off”

age for adolescents’ entitlement to targeted services or development programmes and when – and how – do they transition to adult services? While these questions remain unanswered, due to the many different approaches of key policy documents, broadening the definition of adolescence to 24 years old would allow for a more sustained focus on the particular needs of adolescents and young people.

It is extremely difficult to tailor services to the unique needs of children and adolescents in the absence of data.<sup>40</sup> Most of the data available on the health and life outcomes of South Africa’s adolescents focuses on 5 – 14-year-olds and 15 – 24-year-olds, with limited access or reporting of data further disaggregated by age. As we move forward, it is crucial to collect and analyse data in five-year age bands: 10 – 14, 15 – 19 and 20 – 24-year-olds to design and deliver services and programmes that are more attuned to the changing needs of adolescents. This data collection approach should be applied to both routinely collected administrative data in the health, education, social development and labour sectors, and to research endeavours.<sup>41</sup>

In recent years, early childhood development services have increasingly commanded the state’s attention as they are crucial for improving the health, care and education of younger children.<sup>42</sup> There is also growing recognition of the need for programmes and interventions targeted at older children, adolescents and young people. Health programming should not only focus on reaching South Africa’s adolescents with appropriate medical products and services. Escalating rates of unemployment, persistent high rates of AIDS mortality, and violence among adolescents,<sup>43</sup> require an expanded intersectoral approach to adolescent health programming in South Africa. In particular, there is an urgent need for interventions that fill the gap between late childhood and early adolescence, where young people may become disconnected from opportunities without the necessary support.

Highly vulnerable adolescents, including adolescents living with chronic illnesses and adolescents in state care, require careful consideration to support their transitions from pediatric to adult health services or moving out of foster care.<sup>44</sup>

South Africa has several policies that focus directly on adolescent and youth development, as outlined in Table 10. Key policies focusing on adolescents and young people generally recognise the challenges and risks that adolescents face, including poor schooling, persistent unemployment,

i Additional global policies to which South Africa is a signatory that focus on youth health include the World Health Organization’s Global Strategy for Women’s, Children’s and Adolescent’s Health (2016 – 2030) and the World Health Organization’s Global Standards for Quality Healthcare Services for Adolescents.

**Table 10: An adolescent health lens on national policies and guidelines**

	Law, policy or regulation	Adolescent health focus
GENERAL	National Development Plan 2030: Our Future, Make It Work <sup>46</sup>	Does not refer to “adolescents”, but focuses on youth more broadly, as those aged 15 – 35 years old. Highlights need for economic empowerment, job creation and skills advancement among youth.
	Children’s Act <sup>47</sup>	Defines children as 0 – 18 years old, but no mention of adolescents.
	National Youth Development Policy 2015 – 2020 <sup>48</sup>	Adolescents are lost within the broader focus on youth aged 15 – 35. The only specific mention of adolescents in the text calls for improved sexual and reproductive health education within families.
HEALTH	National Adolescent and Youth Health Policy <sup>49</sup>	Defines youth as those aged 10 – 24. Crosscutting, approaches adolescents from different developmental perspectives. Focuses on improving sexual and reproductive health; violence; nutrition and obesity; substance abuse; and the empowerment and representation of youth.
	National Contraception Clinical Guidelines; <sup>50</sup> National Contraception and Fertility Planning Policy and Service Delivery Guidelines (2018 update) <sup>51</sup>	Defines adolescents as 12 – 19 years old. Includes adolescents in the chapter focusing on contraception for special populations and special considerations for service delivery. States that: “No medical reason exists for denying any contraceptive method based on young age alone.” <sup>52</sup>
	National Strategy for STI, HIV and TB 2017 – 2022 <sup>53</sup>	Includes adolescent girls and young women in the targets for all goals. Notes that adolescent boys and young men should not be left behind.
EDUCATION	Integrated School Health Policy <sup>54</sup>	Clarifies roles and responsibilities of the national and provincial departments of Health and Education for the delivery of health programmes and interventions in schools. Sets consent age for health services and products at 14 years of age. Provides a framework for the provision of services and support to learners on the following: (1) personal and environmental hygiene, (2) nutrition, (3) TB, (4) abuse (sexual, physical and emotional abuse including bullying, violence), (5) sexual and reproductive health services and products, (6) menstruation, (7) contraception, (8) STIs, incl. HIV, (9) male circumcision, (10) adolescent pregnancy, including prevention-of mother-to-child transmission of HIV, (11) HIV counselling and testing and stigma mitigation, (12) drug and substance abuse, and (13) suicide.
	National School Safety Framework <sup>55</sup>	Notes importance of screening for violence in adolescence. Applies a socio-ecological model, which takes into account individual, family/community and structural-level factors.

high rates of violence and gender inequality, epidemics of communicable and non-communicable diseases, and substance abuse.<sup>45</sup> But these policies are also united in their vision of realising the potential dividends of young people, rather than treating them as a danger to society.<sup>56</sup>

### Synergies and challenges in policy implementation

The central objectives of each policy reflect those of the agencies and government departments which wrote them, and their content conveys some of the tensions inherent in implementing multi-sectoral programmes. For instance, the National Youth Policy, written by the National Youth Development Agency, focuses principally on employment and livelihoods, drawing attention to the effects of school drop-out and inadequate skills development on young people’s employability.

A recent example of a holistic and intersectoral approach to adolescent health is the South African National Adolescent and Youth Health Policy. Driven by consultations with adolescents and young people together with strong evidence reviews, the policy focuses on combinations of interventions which maximise gains across seven priority areas: adolescent and youth-friendly services, drug and substance abuse, HIV/AIDS and TB prevention and treatment, mental health/illness, sexual and reproductive health, and violence prevention. Another example of an intersectoral policy is the Integrated School Health Policy, co-developed by the Departments of Basic Education and Health.<sup>57</sup> Although much work remains to be done in implementing these existing policies, and ensuring they reach the adolescents who need them, increasing concerted efforts are in place to implement intersectoral policies.

Yet South African policies sometimes provide conflicting guidance on adolescents' ability to access health services, programming and interventions. For example, the Children's Act recognises children's evolving capacities and right to participate in health care decision-making and enables children to consent to medical treatment from the age of 12. The Integrated School Health Policy, on the other hand, adopts a more conservative approach and only allows children to access health services without parental consent from the age of 14.<sup>58</sup> As a result, there are limited avenues for adolescents who have become parents themselves to consent to treatment or access to services for themselves or their children.<sup>59</sup>

Some of these policies may result in highly vulnerable adolescents, such as pregnant learners and adolescent girls in relationships with older sexual partners, struggling to access health products and services such as condoms, contraception, or post-exposure prophylaxis. Some of these tensions are addressed in the detailed Standard Operating Procedures for the Provision of Sexual and Reproductive Health, Rights and Social Services in Secondary Schools, issued by the Department of Basic Education in 2019. These procedures align the implementation of the school-based policy with the Children's Act, so that secondary school students are able to access sexual and reproductive health services from the age of 12 if informed and voluntary consent processes are followed.<sup>60</sup>

Despite the above tensions, South Africa's legal and regulatory framework on adolescent health is rich and visionary, aiming to ensure that the country's adolescents – who are currently one in five of all people living in South Africa – do not only survive, but thrive. A recent positive example is the Department of Basic Education Draft National Policy on the Prevention and Management of Learner Pregnancy in Schools. The draft policy builds on existing policies by committing to provide comprehensive sexual and reproductive health services, empower learners to make informed decisions, facilitate access to antenatal care, ensure learners return to school and complete their education post-delivery, and ensure schools are stigma-free, non-discriminatory, non-judgmental environments that promotes pregnant learners' physical and psychological health and dignity.<sup>61</sup>

However, many of the policies highlighted in Table 2 do not have specified budgets or clear implementation plans with measurable timelines and targets, and this may hinder their roll-out and reach. Funding for health-care products and services for adolescents is available under the purview of various national and provincial departments,

including Health, Basic Education, Higher Education and Training, Social Development, and Labour. The South African experience to date has shown that implementation on specific issues could be coordinated through multi-sectoral platforms, for example, HIV prevention for adolescent girls and young women under the DREAMS and SheConquers initiatives which are discussed later.

Much work remains to be done to reach the shared vision for zero new HIV infections among adolescent girls and young women. The recent Standard Operating Procedures for the Integrated School Health Policy provides comprehensive steps to roll out the vision set in the policy. A unified vision and roadmap are needed so that programmes delivered by different sectors complement one other, address the structural drivers of poor adolescent health, and close the gaps to ensure services reach highly vulnerable adolescents such as out-of-school adolescents and adolescent parents.

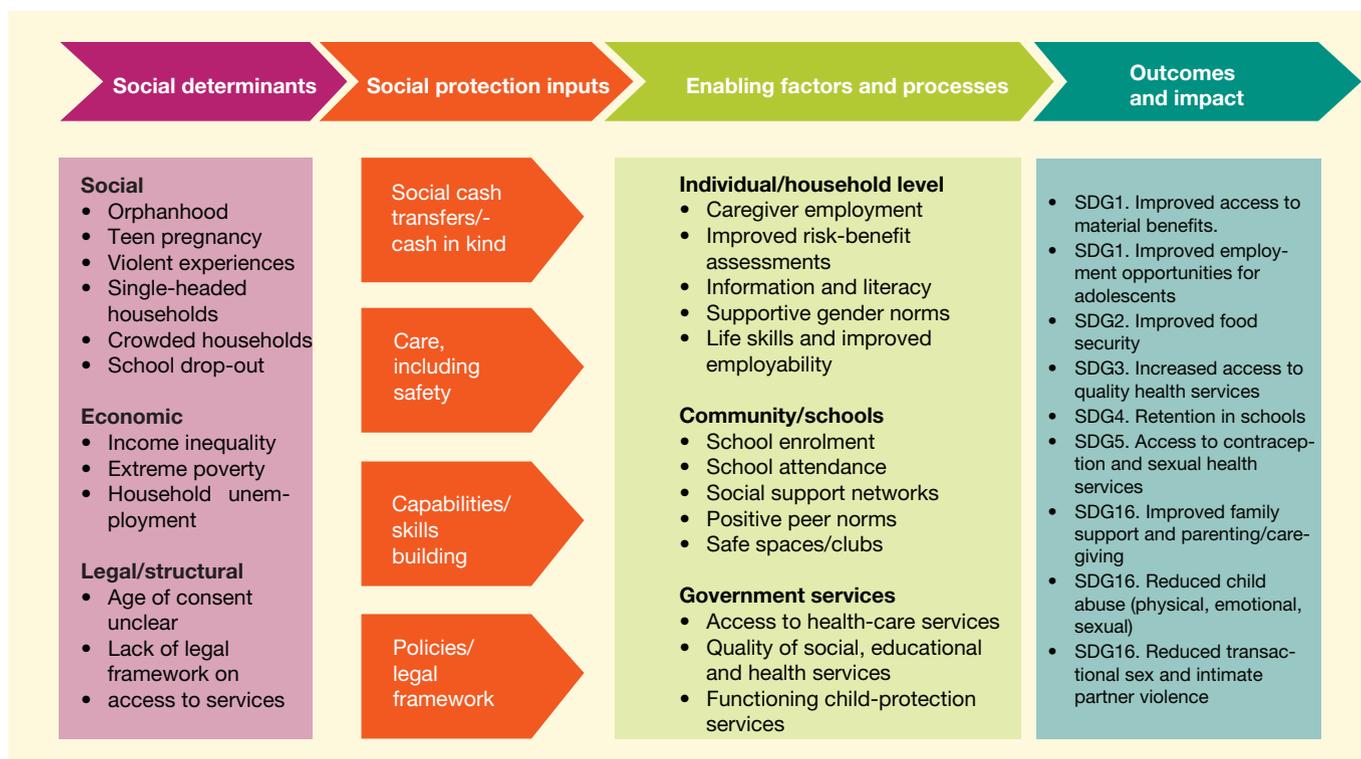
### **What are current and emerging opportunities for promoting adolescent health?**

#### **A holistic approach to adolescent health**

A growing body of evidence highlights the important role of structural drivers such as poverty, hunger, inequality and violence on adolescent risk-taking and health-seeking behaviour.<sup>62</sup> Responding to these complex challenges requires a holistic approach to address the social determinants of health at the individual, family, or community and structural levels while acknowledging the transitions that adolescents are experiencing.<sup>63</sup> The socio-ecological model provides a useful framework for outlining social determinants of health at different levels and the interactions between different factors.<sup>64</sup> It highlights the importance of moving beyond a focus on individual issues, such as education, health or HIV, and addressing adolescent health and well-being more broadly across multiple life spheres.

Programming for adolescent health may take the form of individual, family, school, clinic or community-based interventions or a combination of these. Social protection is an emerging approach that aims to tackle the structural drivers of adolescent health by addressing both economic and social vulnerabilities through interventions that address both immediate (proximal) and structural (distal) factors (Figure 28).<sup>65</sup> Adolescent-sensitive social protection addresses different dimensions of adolescent well-being. It also addresses social disadvantages, risks and vulnerabilities that children may be born into and those that are acquired later in childhood with the goal of maximising opportunities and developmental outcomes.<sup>66</sup>

**Figure 28: Addressing the social determinants of adolescent health**



Adapted from: Toska E, Gittings L, Cluver LD, Hodes RJ, Chademana E & Gutierrez VE (2016) Resourcing resilience: social protection for HIV prevention amongst children and adolescents in Eastern and Southern Africa. *African Journal of AIDS Research*, 15(2): 123-140.

In South Africa, social protection programming includes a range of interventions such as the Child Support Grant (CSG), school feeding scheme, fee-free schools, job-seeker support for young people, housing support, and caregiver support programmes. Some of these programmes are directly targeted at young people, but most aim to address structural issues that adolescents also face within households, schools and communities.<sup>67</sup> Although the evidence on the benefits of social protection for adolescents has been focused primarily on HIV prevention and treatment support, there is growing evidence that social protection has a positive impact on other spheres of health and well-being, building resilience in adolescents and young people in the face of adversity by reducing the perpetration and experience of violence, and improving mental health and educational outcomes.<sup>68</sup>

Adolescent health programmes, products and services, including social protection, should be delivered in the spaces where adolescents live, learn, love, play and work – at home, at school colleges and universities, in health facilities, in the community and in the workplace – with a focus on providing adolescents with the resources they need to become resilient. We briefly review current and planned programmes for adolescent health in each of these contexts.

### Individual and family-based programmes

Programming for adolescent health takes many shapes, including individual behaviour change interventions (for example, Stepping Stones to prevent adolescent pregnancies), family-centred initiatives focused on specific health outcomes (for example, VUKA on improving ART adherence), or broader social protection initiatives such as no-fee schools. Initiatives such as loveLife, b-Wise and MomConnect use individual, peer-based, and mHealth (mobile health) approaches to tackle specific health issues such as HIV, sexual health, pregnancy and motherhood.

A recent review identified over a dozen interventions which included an mHealth component, yet none had been evaluated,<sup>69</sup> despite over a third of all adolescents preferring to get health information on their mobile phones.<sup>70</sup> This was confirmed from preliminary analyses from the Mzantsi Wakho study, which found that young men, in particular, preferred to use their phones to access information about health.<sup>71</sup> Given young people's growing access to mobile phones in South Africa, it is worth exploring the potential of mHealth platforms, while remaining mindful that many young people in South Africa still struggle to access data, airtime and network coverage – especially in more rural settings.<sup>72</sup>

Following a decade of research and development, parenting programmes such as Sinovuyo Teen – Parenting for Lifelong Health and Families Matter! are being rolled out across South Africa by governmental and non-governmental bodies.<sup>73</sup> Such programmes involve sessions with caregivers and their adolescents focused on developing skills for conflict management and problem-solving in intergenerational households. Through improved adolescent–caregiver relationships, care-centred programmes can reduce exposure to violence and psychosocial stress, reduce adolescent problem behaviours – “acting out” and “rule-breaking” – and, through these pathways, improve educational outcomes and health-seeking practices.<sup>74</sup>

Feedback from adolescent girls and young women suggests that peer-based facilitated programmes such as RISE clubs and Choma Café help them learn self-respect and improve their self-esteem by creating spaces in which young women can support each other. However, these positive programmes are not always accessible to the most vulnerable adolescents, especially when juxtaposed with a lack of health services at schools, which are where young adolescents generally spend most of their time.

### Schools as a “social vaccine”

Although not all adolescents remain in the education system throughout adolescence, schools are recognised as powerful platforms for delivering adolescent health programming.<sup>75</sup> Keeping adolescent girls longer in school is strongly linked to reduced sexual risk, delayed unintended pregnancies, and lower rates of HIV incidence.<sup>76</sup> This may be due to the positive effect of school-based services such as school feeding and comprehensive sexuality education.<sup>77</sup> School attendance may also have protective effects by reducing exposure to risks, providing opportunities to access supportive services, and increasing opportunities for employment.

Schools also provide spaces to reinforce positive peer influences and establish safe and healthy relationships in early adolescence.<sup>78</sup> School-based safety and violence prevention interventions have demonstrated potential to improve school outcomes and reduce problem behaviour.<sup>79</sup> In recognition of the growing evidence of schools’ potential to deliver adolescent health programmes, the South African Medical Research Council is leading the development of a Social Impact Bond<sup>ii</sup> support adolescent girls to return to school to prevent HIV and delay pregnancy. .

Although less than half of all children in South Africa who start school progress to matric, over 150,000 young men and women entered tertiary educational institutions for the first time in 2016.<sup>80</sup> These institutions provide additional opportunities for reaching older adolescents with health services and products. Programming led by HEAIDS – Higher Education and Training HIV/AIDS – reached over 200,000 students with sexual reproductive health and HIV services and products in 2017, and with positive feedback from participants.<sup>81</sup>

### Health facilities – caring for the most vulnerable adolescents

Health-care products and services are critical during adolescence. Multiple studies in South Africa in the last two decades have found that adolescents want health-care workers who actively listen without judgment, are patient, provide adequate time and space to discuss challenges openly, offer correct information, and respect their right to privacy and confidentiality.<sup>82</sup> The World Health Organization advocates for adolescent-responsive health systems, for which it has developed a set of global standards.<sup>83</sup>

South Africa introduced the National Adolescent Friendly Clinic Initiative (NAFCI) in 1999, led by a consortium of 10 non-governmental organisations within the context of the loveLife campaign.<sup>84</sup> The NAFCI rolled out a national set of 10 standards to ensure the quality of adolescent-friendly services. Following implementation, NAFCI clinics performed significantly better than control clinics.<sup>85</sup> The Ideal Clinic Initiative now includes a checklist (Figure 29) to measure progress towards five minimum standards for adolescent- and youth-friendly services in South Africa. These include: (1) a management system to support the effective provision of adolescent and youth health programmes, (2) access and availability of adolescent and youth services, (3) relevant information, education, and communication, (4) individualised care that ensures privacy and confidentiality, and (5) proper referral systems to ensure continuity of care.<sup>86</sup>

Adolescents living with communicable or chronic illnesses, such as TB, HIV, diabetes or epilepsy, require additional attention when accessing health-care services in facilities, particularly with regard to transitions in care. For example, adolescents living with HIV require special attention as they move regularly between different types of facilities including paediatric departments, primary health-care clinics, antenatal care, and infectious disease departments.

---

ii Social impact bonds are a relatively new financing mechanism that leverage private sector finance to deliver social services that were historically funded and implemented directly by government. They have been introduced where there are misaligned resources or inefficient service delivery to develop and effectively implement services that have measurable outcomes.

**Figure 29: Ideal Clinic checklist for adolescent and youth-friendly services**

Item	Score
The National Adolescent and Youth Health Policy is available	
A poster indicating that the facility allocates dedicated time to consult adolescents and youth after school hours is visibly posted in the reception area and in consulting rooms(s) where AYFS are provided	
The facility's staff development plan makes provision for all healthcare professionals to be trained in AYFS	
The training register/record reflect that the healthcare professionals providing comprehensive integrated package of service to young people are trained on AYFS	
Facility's clinic committee includes a representative of the adolescent and youth sector aged 16 – 24 years	
At least 10% of the sample of PEC survey include adolescents and youth aged 10 – 24 years	
Facility has a brief profile of adolescents and youth in its catchment area, including their challenges.	
<b>Total score</b>	

Source: Department of Health (2018) *Ideal Clinic Manual Version 18. 1 April 2018*. Pretoria: DoH.

Other transitions that need to be managed carefully include referrals between different levels of care, and the transition from paediatric to adult services when adolescents turn 15 – or in some cases as early as young as 12 years old.<sup>iii</sup> Age-based transitions in care often do not take into account the competence and maturity of individual patients, and may result in care that is not responsive to the unique needs of each adolescent. Schools and educational institutions could also play a critical role in identifying and supporting adolescents with long-term health conditions, particularly for illnesses that require both regular monitoring and medication.<sup>87</sup>

### Community spaces, recreational facilities, and workplace

Several adolescent programmes acknowledge the importance of supportive environments beyond families and homes. Community-based programmes can provide comprehensive psychosocial support; involve young people in sports, arts and culture; make health services available to adolescents in unconventional spaces; or help adolescents access opportunities beyond school, for example, by linking them

to their first jobs through internships. These interventions address some of the structural vulnerabilities that result in poor adolescent health and, if rolled out more widely, may reach adolescents who are not in employment, education or training – amongst the most vulnerable and likely to fall through the cracks of the formalised services for adolescent health.

### Combination interventions

Programmes delivered through each of these platforms can help address critical drivers of adolescent health, but a more integrated approach is needed to address the complex interplay of risk factors.<sup>88</sup> A growing body of evidence supports the delivery of interventions that combine material support – government child-focused cash transfers such as the CSG,<sup>89</sup> no-fee schools, free school uniforms – with care such as parenting programmes, peer supporters or community health workers (see Figure 30).

Although designed as a poverty alleviation provision, the CSG has also had positive effects in reducing adolescent pregnancies, sexual risk-taking and HIV exposure by reducing household economic stress and keeping young adolescents in school.<sup>90</sup> Recent data from the Mzantsi Wakho study suggest that combining child-focused cash transfers with parenting programmes and safe schools improves HIV-related health outcomes, reduces violence exposure, supports school progression, and lowers sexual risk-taking among adolescents living with HIV in South Africa. Adolescents receiving the three provisions – parenting support, safe schools and child-focused grants – consistently at baseline and follow-up – were more likely to experience greater positive effects across multiple health and well-being than those who received only one of these provisions.<sup>91</sup>

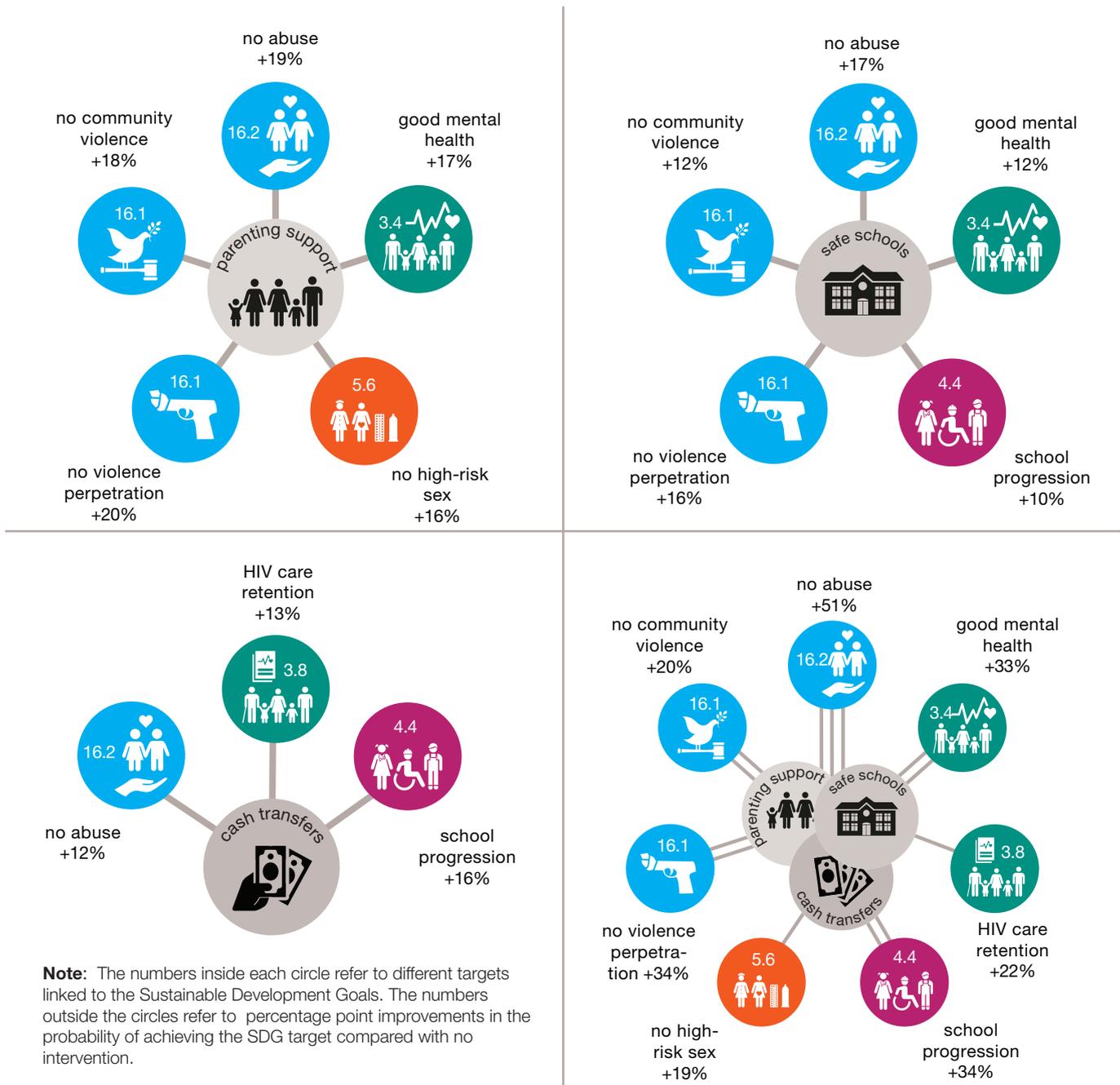
### Roll-out and challenges

Adolescents, researchers and policymakers need to work together to turn evidence into national programmes. Although South Africa is home to a large and growing number of adolescent health research initiatives, translating evidence from research into large-scale policy and programming remains challenging. Researchers working in partnership with the national departments of Health, Social Development and Education, and the South African National AIDS Council (SANAC) have identified a set of key strategies.

First, research conducted in real-world conditions increases confidence that a programme will work when rolled out. This can include pragmatic randomised trials or observational

<sup>iii</sup> For example, adolescents living with HIV could experience a transition out of hospital-based paediatric care to a primary health-care clinic where they receive generalised, non-paediatric HIV care.

**Figure 30: Individual and combined effects of cash, care and safe schools on adolescent development**

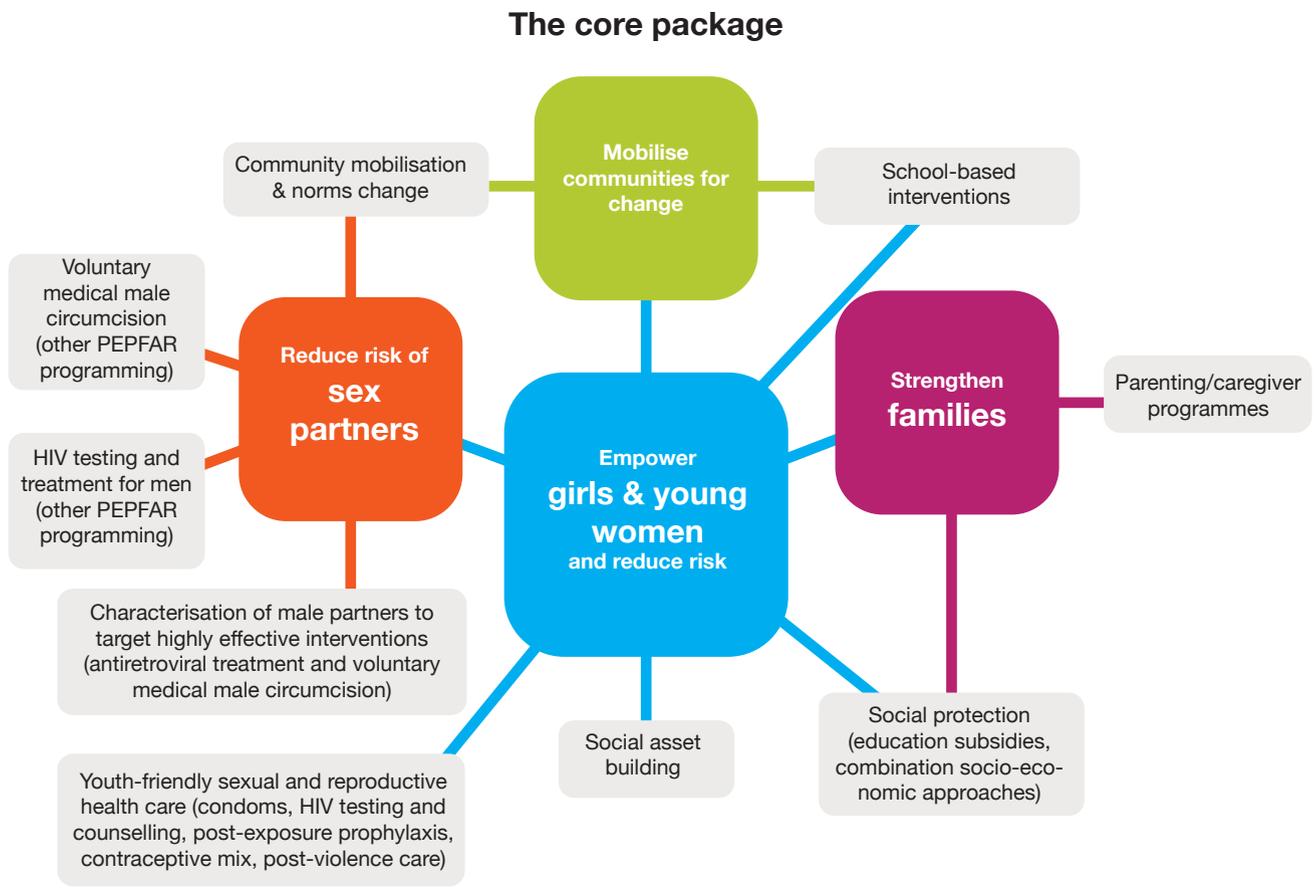


Source: Cluver LD, Orkin FM, Campeau L, Toska E, Webb D & Carlqvist A (2019) Improving lives by accelerating progress towards the UN Sustainable Development Goals for adolescents living with HIV: a prospective cohort study. *The Lancet Child & Adolescent Health*, 3(4): 245-254.

“natural” experiments. Instead of testing these programmes in perfect conditions and relying on highly qualified professionals, they should be tested with the populations that will be using them on a large scale when delivered in state or non-governmental services. Studies need to describe which adaptations work best without compromising effectiveness, and to test programmes in both urban and rural settings, and not just the highest-resourced provinces.

Initiatives such as the DREAMS Intervention package (Figure 31) require multi-sectoral approaches which may be easier to deliver in better-resourced settings. Translating the evidence on what works into implementation also requires strong intersectoral collaboration, and bodies like SANAC have helped coordinate national efforts such as the DREAMS package of interventions and the SheConquers campaign.

**Figure 31: DREAMS: Elements of the core package**



The DREAMS initiative is a public-private partnership designed to prevent HIV infections among adolescent girls and young women in sub-Saharan Africa. DREAMS has resulted in large reductions in HIV infections in 10 sub-Saharan African countries through a combination of interventions across four domains that aims to: empower girls and young women and reduce risk of infection, strengthen families, mobilise communities for change, and reduce risk in their sexual partners.<sup>92</sup>

SheConquers is a three-year campaign to coordinate the planning and monitoring of programmes for adolescent girls and young women in order to maximise impact of numerous interventions in South Africa. The campaign focuses on five shared targets: (1) decrease new HIV infections in adolescent girls and young women by at least 30%, (2) reduce teen childbearing by at least 30%, (3) keep girls in school until matric by improving retention by 20%, (4) decrease sexual and gender-based violence by 10%, and (5) increase economic opportunities for young people by 10%.<sup>93</sup>

Finally, government partners emphasise the value of cost-effectiveness or allocative efficiency analyses to guide decisions on which specific programmes to fund and prioritise to ensure the greatest impact. Understanding whether programmes work at scale, when delivered by community members, in challenging contexts, and whether they are cost-efficient can make those decisions as evidence-based as possible.

**What is our vision for the health of South Africa’s adolescents?**

Programming for adolescent health is at a crossroads: while South Africa has addressed individual health issues in policy and implementation mandates, it has to maximise adolescent health outcomes. National intersectoral campaigns and programming can be powerful tools but roll-out at scale remains challenging throughout the continent with coverage varying by location (rural or urban), age group (early vs late adolescents) and sex (girls or boys). Moreover, evidence on

what interventions are appropriate and effective in filling the age gap between child-centred and adolescent-centred programming is limited. Such programming needs to address risk and vulnerability while acknowledging adolescents' growing need for independence and cognitive maturation.

As adolescents in South Africa navigate the tempestuous and exciting second decade of their lives, our joint efforts need to support their long-term resilience in the face of the layered and overlapping vulnerabilities that they are exposed to. In particular, this requires supporting them to build safe and healthy relationships at home, in schools, with sexual and romantic partners, and in the workplace.<sup>94</sup> Supporting them through transitions, including home-to-love, school-to-workforce, child-to-parent, requires age- and stage-appropriate interventions that acknowledge the evolving nature of adolescent health needs, as well as young people's agency and role in society.

The National Development Plan includes a comprehensive list of programmatic recommendations for young people, with a particular focus on education and economic empowerment.

## References

**Acknowledgments:** Lori Lake, Ariane De Lannoy, Eugene Davids, Jane Ferguson, Nadia Ahmed, Cathy Mathews, Melanie Pleaner, and reviewers.

- 1 Statistics South Africa (2018) *Demographic Profile of Adolescents in South Africa*. Pretoria: Stats SA.
- 2 Jaworska N & MacQueen G (2015) Adolescence as a unique developmental period. *Journal of Psychiatry & Neuroscience*, 40(5): 291; Arnett JJ (2000) Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5): 469.
- 3 Ledesma RG (2005) Defining adolescence. *Psychocritiques*, 42(2): 119-119. doi:10.1037/000574
- 4 World Health Organization (2017) *Global Accelerated Action for the Health of Adolescents (AA-HAI): Guidance to support country implementation*. Geneva: WHO.
- 5 Sawyer SM, Azzopardi PS, Wickremaratne D & Patton GC (2018) The age of adolescence. *The Lancet Child & Adolescent Health*, 2(3): 223-228; Kinghorn A, Shanaube K, Toska E, Cluver L & Bekker L-G (2018) Defining adolescence: Priorities from a global health perspective. *The Lancet Child & Adolescent Health*, 2(5): e10.
- 6 Shatkin J (2017) *Born to Be Wild: Why teens and tweens take risks, and how we can help keep them safe*. Penguin Publisher Group.
- 7 See no. 6 above; [Shatkin J.]
- 8 Romer D (2010) Adolescent risk taking, impulsivity, and brain development: Implications for prevention. *Developmental Psychobiology*, 52(3): 263-276.
- 9 See no. 6 above.
- 10 See no. 6 above.
- 11 Christie D & Viner R (2005) Adolescent development. *The BMJ*, 330(7486): 301-304.
- 12 See no. 6 above.
- 13 Hodes R & Gittings L (2019) 'Kasi curriculum': What young men learn and teach about sex in a South African township. *Sex Education*, 2019: 1-19.
- 14 Statistics South Africa (2018) *Demographic Profile of Adolescents in South Africa*. Pretoria: Stats SA; Mahlangu P, Gevers A & De Lannoy A (2014) Adolescents: Preventing interpersonal and gender-based violence. In: Mathews S, Jamieson L, Lake L & Smith C (eds) *South African Child Gauge*. Cape Town: Children's Institute, UCT.
- 15 Cluver L & Gardner F (2007) Risk and protective factors for psychological well-being of orphaned children in Cape Town: A qualitative study of children's views. *AIDS Care*, 19(3): 318-325; Cluver LD, Orkin M, Boyes ME, Gardner F & Meinck F (2011) Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. *Journal of Acquired Immune Deficiency*

But the siloed approach of national departments in implementing policies can weaken the potential impact of crosscutting interventions. South Africa's first generation of "Born Frees" are now aging into adulthood but, for far too many, their prospects remain to be realised. It is essential to design and implement strategies and interventions that are tailored to adolescents' developmental needs. This is possible through multi-sectoral efforts that are well financed.

Meeting adolescents' needs requires both a public health and human rights-based approach. This means designing health-care products and services *with* adolescents, rather than just *for* them, and ensuring adolescents' access to material and psychosocial resources. Promising models in South Africa abound, and our efforts must focus on taking them to scale to improve adolescent health and well-being across multiple domains with a focus on resourcing adolescent resilience and equipping them with the tools and skills they need to succeed as adults.<sup>95</sup>

- 16 *Syndromes*; 58: 336-343;
- 17 Nyberg BJ, Yates DD, Lovich R, Coulibaly-Traore D, Sherr L, Thurman TR, Sampson A & Howard B (2012) Saving lives for a lifetime: Supporting orphans and vulnerable children impacted by HIV/AIDS. *Journal of Acquired Immune Deficiency Syndromes*, 01 Aug 2012, 60(Supplement 3): S127-135; Thurman TR, Brown L, Richter L, Maharaj P & Magnani R (2006) Sexual risk behavior among South African adolescents: Is orphan status a factor? *AIDS and Behavior*, 10(6): 627-635.
- 18 Human Sciences Research Council (2018) *The Fifth South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2017: HIV impact assessment summary report*. Cape Town: HSRC.
- 19 See no. 14 above.
- 20 See no. 14 above.
- 21 Colvin CJ (2019) Strategies for engaging men in HIV services. *The Lancet HIV*, 6(3): e191-e200; Joint United Nations Programme on HIV/AIDS (2017) *A Snapshot of Men in South Africa*. Geneva: UNAIDS.
- 22 Patton GC, Olsson CA, Skirbekk V, Saffery R, Wlodek ME, Azzopardi PS, Stonawski M, Rasmussen B, Spry E, Francis K, Bhutta ZA, Kassebaum NJ, Mokdad AH, Murray CJL, Prentice AM, Reavley N, Sheehan P, Sweeny K, Viner RM & Sawyer SM (2018) Adolescence and the next generation. *Nature*, 554(7693): 458.
- 23 Ramraj T, Jackson D, Dinh T-H, Olorunju S, Lombard C, Sherman G, Puren A, Ramokolo V, Noveve N, Singh Y, Magasana V, Bhardwaj S, Cheyip M, Mogashoa M, Pillay Y, Goga AE (2017) Adolescent access to care and risk of early mother-to-child HIV transmission. *Journal of Adolescent Health*, 62(4): 434-443; Horwood C, Vermaak K, Butler L, Haskins L, Phakathi S & Rollins N (2012) Elimination of paediatric HIV in KwaZulu-Natal, South Africa: Large-scale assessment of interventions for the prevention of mother-to-child transmission. *Bulletin of the World Health Organization*, 90(3): 168-175.
- 24 De Wet N (2016) Pregnancy and death: An examination of pregnancy-related deaths among adolescents in South Africa. *South African Journal of Child Health*, 10(3): 151-155.
- 25 Toska E, Roberts KJ, Laurenzi C, Cluver L & Sherr L (2019) *Adolescent Mothers Affected by HIV and Their Children: Understanding and meeting their needs in our HIV response and global commitments*. London: Coalition for Children Affected by HIV/AIDS.
- 26 Das-Munshi J, Lund C, Mathews C, Clark C, Rothern C & Stansfeld S (2016) Mental health inequalities in adolescents growing up in post-apartheid South Africa: Cross-sectional survey, SHaW study. *PLOS One*, 11(5): e0154478.
- 27 Patel V, Flisher AJ, Hetrick S & McGorry P (2007) Mental health of young

- people: A global public-health challenge. *The Lancet*, 369(9569): 1302-1313.
- 24 World Health Organization (2019) *Global Health Observatory Data*. Viewed 26 October 2019: [www.who.int/countries/zaf/en/](http://www.who.int/countries/zaf/en/).
  - 25 Cluver LD, Orkin M, Gardner F & Boyes ME (2012) Persisting mental health problems among AIDS-orphaned children in South Africa. *Journal of Child Psychology and Psychiatry*, 53(4): 363-370;
  - Flisher AJ, Dawes A, Kafaar Z, Lund C, Sorsdahl K, Myers B, Thom R & Seedat S (2012) Child and adolescent mental health in South Africa. *Journal of Child and Adolescent Mental Health*, 24(2): 149-161.
  - 26 Farhangpour P, Maluleke C & Mutshaeni HN (2019) Emotional and academic effects of cyberbullying on students in a rural high school in the Limpopo province, South Africa. *South African Journal of Information Management*, 21(1), a925. doi:10.4102/sajim.v21i1.925
  - 27 Belfer ML (2008) Child and adolescent mental disorders: The magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry*, 49(3): 226-236.
  - 28 See no. 4 above;
  - Solar O & Irwin A (2010) *A Conceptual Framework for Action on the Social Determinants of Health*. Social Determinants of Health Discussion Paper 2 (Policy and Practice). Geneva: World Health Organization.
  - 29 Kuo C, Mathews C, LoVette A, Harrison A, Orchowski L, Pellowski JA, Atujuna M, Stein DK & Brown LK (2019) Perpetration of sexual aggression among adolescents in South Africa. *Journal of Adolescence*, 72: 32-36;
  - Mathews C, Eggers SM, Townsend L, Aarø LE, De Vries PJ, Mason-Jones AJ, De Koker P, McClinton Appollis T, Mtshizana Y, Koech J, Wubs A & De Vries H (2016) Effects of PREPARE, a Multi-component, School-Based HIV and Intimate Partner Violence (IPV) Prevention Programme on Adolescent Sexual Risk Behaviour and IPV: Cluster Randomised Controlled Trial. *AIDS and Behavior*, 20(9): 1821-1840.
  - 30 De Wet N (2018) Violence against young females in South Africa: An analysis of the current prevalence and previous levels of youth mortality. In: *Gender-Based Violence: Perspective from Africa, the Middle East, and India*. Springer International Publishing. PP. 33-55.
  - 31 Ward CL, Artz L, Leoschut L, Kassinjee R & Burton P (2018) Sexual violence against children in South Africa: a nationally representative cross-sectional study of prevalence and correlates. *Lancet Global Health*, 6(4): e460-468.
  - 32 Toska E, Cluver LD, Boyes ME, Isaacsohn M, Hodes R & Sherr L (2016) School, supervision and adolescent-sensitive clinic care: Combination social protection and reduced unprotected sex among HIV-positive adolescents in South Africa. *AIDS and Behavior*, 21(9): 2746-2759.
  - 33 Cluver L, Meinck F, Toska E, Orkin FM, Hodes R & Sherr L (2018) Multitype violence exposures and adolescent antiretroviral nonadherence in South Africa. *AIDS*, 32(8): 975-983.
  - 34 Ellis BJ, Bates JE, Dodge KA, Fergusson DM, Horwood LJ, Pettit GS & Woodward L (2003) Does father absence place daughters at special risk for early sexual activity and teenage pregnancy? *Child Development*, 74(3): 801-821;
  - Operario D, Underhill K, Chuong C & Cluver LD (2011) HIV infection and sexual risk behaviour among youth who have experienced orphanhood: Systematic review and meta-analysis. *Journal of the International AIDS Society*, 14: 25.
  - 35 Scott V, Schaay N, Schneider H & Sanders D (2017) Addressing social determinants of health in South Africa: the journey continues. *South African Health Review*, 2017(1): 77-87.
  - 36 Hodes R, Doubt J, Toska E, Vale B, Zungu N & Cluver L (2018) The stuff that dreams are made of: HIV-positive adolescents' aspirations for development. *Journal of the International AIDS Society*, 21(S1): e25057.
  - Toska E, Zhou S, Laurenzi C & Cluver LD (2019) Adolescent hormonal contraception use and childbearing ideation in the era of HIV – findings from a large community-based study in South Africa. In: *AIDS Impact*. London, United Kingdom. Viewed 10 November 2019: <http://www.aidsimpact.com/static/AIDSImpact%202019%20-%20Programme.pdf>
  - 37 Proudlock P & Rohrs S (2018). Recent developments in law and policy affecting children. In: Hall K, Richter L, Mokomane Z & Lake L (eds) *South African Child Gauge 2018*. Cape Town: Children's Institute, UCT.
  - Hall K & Richter L (2018) Introduction: Children, Families and the State. In: Hall K, Richter L, Mokomane Z & Lake L (eds) *South African Child Gauge 2018*. Cape Town: Children's Institute, UCT.
  - 38 The Presidency, Republic of South Africa (2015) *National Youth Policy 2015 – 2020*. Pretoria: The Presidency.
  - 39 Department of Health (2017) *National Adolescent and Youth Health Policy 2017*. Pretoria: DoH.
  - 40 See no. 5 above (Kingham et al).
  - 41 See no. 5 above (Kingham et al).
  - 42 Ozah K & Skelton A (2018) Legal perspectives: Children, families and the state. In: Hall K, Richter L, Mokomane Z & Lake L (eds) *South African Child Gauge 2018*. Cape Town: Children's Institute, UCT.
  - 43 See no. 33 above;
  - Dyer CEF, Campeau L, Toska E, Hodes R & Cluver LD (2019) *Are Youth Living with HIV in South Africa Reaching the Sustainable Development Goals?* CSSR Working Paper No. 434, April 2019. Cape Town: Centre for Social Science Research, UCT.
  - 44 Haghight R, Toska E, Cluver LD, Gulaid L, Mark D & Bains A (in press) Transition pathways out of pediatric care and associated HIV outcomes for adolescents living with HIV in South Africa. *Journal of Acquired Immune Deficiency Syndromes*.
  - 45 See no. 39 above.
  - 46 See no. 38 above.
  - 47 National Planning Commission (2012) *National Development Plan 2030: Our Future, Make It Work*. Pretoria: The Presidency.
  - 48 Children's Act 38 of 2005.
  - 49 See no. 38 above.
  - 50 See no. 39 above.
  - 51 Department of Health (2012) *National Contraception Clinical Guidelines*. Pretoria: DoH.
  - 52 Department of Health (2018) *National Contraception and Fertility Planning Policy and Service Delivery Guidelines* (2018 update). Pretoria: DoH.
  - 53 See no. 51 and 52 above.
  - 54 South African National AIDS Council (2017) *National Strategy for STI, HIV and TB 2017 – 2022*. Pretoria: SANAC.
  - 55 Department of Health & Department of Basic Education (2012) *Integrated School Health Policy*. Pretoria: DoH & DBE.
  - 56 Department of Basic Education, UNICEF & Centre for Justice and Crime Prevention. (2015) *The National School Safety Framework*. Viewed 10 November 2019: [www.education.gov.za/Portals/0/Documents/Publications/School%20Safety%20Framework%202016.pdf?ver=2016-02-19-133421-363](http://www.education.gov.za/Portals/0/Documents/Publications/School%20Safety%20Framework%202016.pdf?ver=2016-02-19-133421-363)
  - 57 See no. 54 above.
  - 58 See no. 54 above;
  - See no. 47 above.
  - 59 United Nations Population Fund (2017) *Harmonizing the Legal Environment for Adolescent Sexual and Reproductive Health and Rights: A review of 23 countries in east and southern Africa*. Pretoria: UNFPA.
  - 60 Department of Basic Education (2019) *Standard Operating Procedure for the provision of Sexual and Reproductive Health, Rights and Social services in secondary schools*. PP. 2-18
  - 61 Department Basic Education (2018) Draft National Policy on the Prevention and Management of Learner Pregnancy in Schools. Notice 128, *Government Gazette* No. 41456, 23 February 2018.
  - 62 See no. 33 above;
  - Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA & Harlow SD (2004). Transactional sex among women in Soweto, South Africa: Prevalence, risk factors and association with HIV infection. *Social Science & Medicine*, 59(8): 1581-1592;
  - Jewkes RK, Dunkle K, Nduna M & Shai N (2010) Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: A cohort study. *The Lancet*, 376(9734): 41-48.
  - 63 Pettifor A, Stoner M, Pike C & Bekker LG (2018) Adolescent lives matter: Preventing HIV in adolescents. *Current Opinion in HIV and AIDS*, 13(3): 265-273.
  - 64 World Health Organization (2019) *The Determinants of Health*. Viewed 26 October: [www.who.int/hia/evidence/doh/en/](http://www.who.int/hia/evidence/doh/en/).
  - 65 United Nations Children's Fund (2012) *Integrated Social Protection Systems: Enhancing Equity for Children*. New York: UNICEF.
  - 66 Toska E, Gittings L, Cluver LD, Hodes RJ, Chademana E & Gutierrez VE (2016) Resourcing resilience: Social protection for HIV prevention amongst children and adolescents in Eastern and Southern Africa. *African Journal of AIDS Research*, 15(2): 123-140.
  - 67 See no. 66 above.
  - 68 Cluver LD, Orkin FM, Meinck F, Boyes ME, Yakubovich AR & Sherr L (2016) Can social protection improve Sustainable Development Goals for adolescent health? *PLOS One*, 11(10): e0164808.
  - Cluver L, Pantelic M, Orkin M, Toska E, Medley S & Sherr L (2018) Sustainable survival for adolescents living with HIV: Do SDG-aligned provisions reduce potential mortality risk? *Journal of the International AIDS Society*, 21: 4-9.
  - 69 United Nations Children's Fund (2017) *MHealth and Young People in South Africa*. Pretoria: UNICEF.
  - 70 See no. 69 above.
  - 71 Carty C, He E, Toska E, Cluver LD & Hodes RJ (2017) Efficacy of mobile health platforms for health information seeking among South African adolescents. *American Public Health Association*. Viewed 10 November 2019: <https://apha.confex.com/apha/2017/meetingapp.cgi/Person/358534>
  - 72 Hampshire K, Porter G, Owusu SA, Mariwah S, Abane A, Robson E, Munthali A, DeLannoy A, Bango A, Gunguluzo N & Milner J (2015) Informal m-health: How are young people using mobile phones to bridge healthcare gaps in Sub-Saharan Africa? *Social Science & Medicine*, 142:90-9.
  - 73 Ward C, Makusha T & Bray R. Parenting, poverty and young people in South Africa: What are the connections? In: De Lannoy A, Swartz S, Lake L & Smith C (eds) *South African Child Gauge 2015*. Cape Town: Children's Institute, UCT.
  - 74 Cluver LD, Orkin FM, Meinck F, Boyes ME & Sherr L (2016) Structural

- drivers and social protection : Mechanisms of HIV risk and HIV prevention for South African adolescents. *Journal of the International AIDS Society*, 19: 20646.
- 75 See no. 4 above.
- 76 Hardee K, Gay J, Croce-Galis M & Afari-Dwamena NA (2014) What HIV programs work for adolescent girls? *Journal of Acquired Immune Deficiency Syndromes*, 66: S176–S185.
- 77 Mehra S, Daral S & Sharma S (2018) Investing in our adolescents: assertions of the 11th World Congress on Adolescent Health. *Journal of Adolescent Health*, 63(1): 9-11.
- 78 See no. 29 above (Mathews et al).
- 79 See no. 29 above (Mathews et al); Cluver LD, Orkin FM, Campeau L, Toska E, Webb D & Carlqvist A (2019) Improving lives by accelerating progress towards the UN Sustainable Development Goals for adolescents living with HIV: A prospective cohort study. *The Lancet Child & Adolescent Health*, 3(4): 245-254.
- 80 Statistics South Africa (2019) *Higher Education and Skills in South Africa 2017*. Education Series Volume V. Pretoria: Stats SA.
- 81 Mbelle N, Mabaso M, Chauke T, Sigida S, Naidoo D & Sifunda S (2018) Perceptions and attitudes about male and female condom use amongst university and technical and vocational education and training (TVET) college students in South Africa: A qualitative enquiry of the 2014 Higher Education and Training HIV/AIDS (HEAIDS) Programme First Things First campaign. *Journal for HIV and AIDS*, 4(1): 031.
- 82 See no. 33 above; [Toska E, Cluver LD, Boyes ME, et al 2016] Cluver L, Pantelic M, Toska E, Orkin M, Casale M, Bungane N & Sherr L (2018) STACKing the odds for adolescent survival: Health service factors associated with full retention in care and adherence amongst adolescents living with HIV in South Africa. *Journal of the International AIDS Society*, 21(9): e25176; Wood K & Jewkes RK (2006) Blood blockages and scolding nurses: Barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters*, 14(27): 109-118.
- 83 See no. 4 above.
- 84 Dickson KE, Ashton J & Smith JM (2007) Does setting adolescent-friendly standards improve the quality of care in clinics? Evidence from South Africa. *International Journal for Quality in Health Care*, 19(2): 80-90.
- 85 See no. 4 above;  
See no. 84 above.
- 86 Department of Health South Africa (2018) *Ideal Clinic Manual. Version 18. 1 April 2018*. Pretoria: DoH.
- 87 Toska E, Cluver L, Orkin M, Bains A, Sherr L, Berezin M & Gulaid L (2019) Screening and supporting through schools: Educational experiences and needs of adolescents living with HIV in a South African cohort. *BMC Public Health*, 19(271): 1-10.
- 88 Padian NS, McCoy SI, Balkus JE & Wasserheit JN (2010) Weighing the gold in the gold standard: Challenges in HIV prevention research. *AIDS*, 24(5): 621-635; Cluver LD, Orkin MF, Yakubovich AR & Sherr L (2016) Combination social protection for reducing HIV-risk behavior amongst adolescents in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 72(1):96-104.
- 89 United Nations Children's Fund, Department of Social Development & South African Social Security Agency (2012) *The South African Child Support Grant Impact Assessment: Evidence from a survey of children, adolescents and their households*. Pretoria: UNICEF South Africa.
- 90 Cluver LD, Orkin FM, Boyes ME & Sherr L (2014) Cash plus care: Social protection cumulatively mitigates HIV-risk behaviour among adolescents in South Africa. *AIDS*, 28(S3): S389-397; Audrey P, McPhail C, Kahn K, Maman S, Chirayath S & Thirumurthy H (2010) *HPTN 068: Effects of cash transfer for the prevention of HIV in young South African women*.
- 91 Cluver LD, Orkin FM, Campeau L, Toska E, Webb D & Carlqvist A (2019) Improving lives by accelerating progress towards the UN Sustainable Development Goals for adolescents living with HIV: a prospective cohort study. *The Lancet Child & Adolescent Health*, 3(4): 245-254.
- 92 Department of State (2018) *2018 Progress Report - PEPFAR Strategy for Accelerating HIV /AIDS Epidemic Control (2017 – 2020)*. Washington D.C.
- 93 SheConquers (2019) SheConquers home page. Viewed 23 October 2019: <http://sheconquerssa.co.za/>.
- 94 See no. 29 above.
- 95 See no. 66 above;  
See no. 91 above.