



# HIV Prevention 2020: a framework for delivery and a call for action

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Although effective programmes are available and several countries have seen substantial declines in new HIV infections, progress in the reduction of adult HIV incidence has been slower than expected worldwide and many countries have not had large decreases in new infections in adults despite large reductions in paediatric infections. Reasons for slow progress include inadequate commitment, investment, focus, scale, and quality of implementation of prevention and treatment interventions. The UNAIDS–Lancet Commission on *Defeating AIDS—Advancing Global Health* reported that the provision of large-scale, effective HIV prevention programmes has failed and called on stakeholders to “get serious about HIV prevention”. An ambitious worldwide target has been set by UNAIDS to reduce new infections below 500 000 by 2020—a 75% reduction from 2010. Models show that such a reduction requires a combination of primary prevention interventions and preventative effects of treatment. Achievement of the target will require more effective delivery of HIV prevention for sufficient coverage in populations at greatest risk of infection ensuring that interventions that have proved effective are made available, barriers to their uptake are overcome, demand is created, and use is consistent and occurs at the right scale with high coverage. This paper discusses how programmatic targets for prevention in a worldwide plan could be used to re-energise the HIV prevention approach. A management framework is proposed outlining global, regional, national, and subnational actions and is summarised in a call for action on HIV prevention for 2020.

## Introduction

Three decades of HIV prevention programmes have produced mixed results—a history of success and failure, high expectations, disappointed hopes, and innovations. Examples of effective prevention interventions are available for every epidemic type and population group. Findings from clinical trials have confirmed the prevention efficacy of voluntary medical male circumcision,<sup>1–3</sup> early antiretroviral therapy (ART),<sup>4</sup> and pre-exposure prophylaxis (PrEP).<sup>5,6</sup> Combination prevention programmes have contributed to declines in HIV infection in sex workers,<sup>7–9</sup> men who have sex with men (MSM),<sup>10–13</sup> people who inject drugs,<sup>14–16</sup> and generalised HIV epidemics.<sup>17–21</sup> The estimated number of new adult HIV infections declined by more than 20% in 57 countries between 2000 and 2015, the number of new infections stabilised in 20 countries, but infections increased by more than 20% in 30 countries.<sup>22</sup> In eastern and southern Africa, the region with the greatest burden, new adult HIV infections have reduced by over 50% in Malawi, Namibia, and Tanzania and by 48% in South Africa whereas new adult infections increased in Angola, Kenya, and Uganda. HIV incidence in Botswana peaked in the mid-1990s, declined rapidly up to 2010, since when it has remained stable. The heterogeneity in progress is a result of variation in focus, quality, and coverage of HIV prevention programmes and adoption of preventive behaviours. In countries with high HIV prevalence, condom use reported by men with non-regular partners ranges from 41% in Mozambique to 80% in Namibia,<sup>23</sup> while progress towards country targets for voluntary medical male circumcision ranges from 6% in Namibia to almost 100% in Ethiopia and Kenya.<sup>24</sup> The proportion of people living with HIV who are virally suppressed was estimated to range from 9% in Russia to 68% in

Switzerland in 2014<sup>25</sup> and also reached 67% in Botswana.<sup>26</sup> Overall, heterogeneity in progress shows what was possible to achieve in some settings, but was not achieved in many settings.

## HIV Prevention 2020: towards worldwide plan Lessons from previous targets and frameworks

The first worldwide HIV prevention target was set in the UN General Assembly Special Session on HIV/AIDS in 2001 and called for a 25% reduction in HIV prevalence in young people aged 15–24 years by 2005 in the most affected countries, and by 2010 in all other countries.<sup>27</sup> Whereas a concrete programmatic target was set for treatment of HIV by WHO's 3 by 5 initiative, the prevention target remained a generic target with some associated knowledge and behavioural objectives. A 2010 review<sup>28</sup> confirmed that reductions in HIV prevalence of 25% were achieved in several highly affected countries and coincided with behavioural changes, but HIV prevalence reductions could not be systematically linked to achievements of the programme, partly because of the absence of operational targets and poor tracking.

A more ambitious worldwide target was set at the 2011 UN high-level meeting to reduce sexual transmission and injection-related HIV transmission by 50% by 2015 compared with 2010, thereby reducing HIV transmission in young people and adults overall. Global HIV estimates indicate that the 2015 target of reducing adult HIV transmission by 50% has been missed, because new adult infections remained stagnant at 1.9 million annually between 2010 and 2015.<sup>22</sup> A lesson learned from the 2011–15 implementation period is that setting an ambitious target and disseminating evidence about effective prevention are insufficient to achieve the necessary

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progress. An example of a successful prevention intervention is the elimination of mother-to-child transmission (eMTCT). The reduction of new HIV infections in children by 70% from 2000 to 2015 has been the most consistent worldwide success story in HIV prevention. In 2011, the Global Plan towards the elimination of new HIV infections in children by 2015 and keeping their mothers alive was launched and defined a small number of priorities and operational targets.<sup>29</sup> The plan was developed by a global task team consisting of government, civil society, private sector, people living with HIV, and international organisations. The plan was launched as a major worldwide initiative and included pledges of financial support. Progress is reported annually and accelerated progress has been recorded since the launch of the plan.<sup>30</sup>

New adult infection trends do not yet show large population-level effects of treatment on prevention. Although the scale of the population-level effect of treatment cannot yet be concluded, trend data from countries with good treatment cascades and modelling suggest that ART will make a substantial contribution, but will not be sufficient to end the HIV epidemic,<sup>31</sup> and a combination prevention approach that includes a scale-up of both treatment and prevention (of infection) will still be needed.<sup>32</sup>

Despite various attempts to re-energise the prevention response for adolescents and adults, political leadership, funding, and programmatic action and accountability

have not reached the level of intensity achieved for eMTCT and treatment. Exceptions include a renewed focus on adolescent girls and young women through the Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe women (DREAMS) initiative supported by US President's Emergency Plan for AIDS Relief (PEPFAR) and the All In initiative launched by UNICEF.<sup>33,34</sup> No framework with clearly defined, implementable programmatic coverage targets to link interventions to effect exists and a system for accountability on prevention of adolescent and adult infections from subnational to national and global levels is also absent. Apart from the aggregation of voluntary medical male circumcision country targets,<sup>24</sup> no global level prevention programme targets were set before 2015. At the national level, weak results chains have led to discrepancies between operational inputs, outputs, and behavioural outcomes. For example, the numbers of condoms and population coverage with promotion and demand generation programmes to achieve a certain level of condom use were commonly not estimated precisely, and barriers affecting access by adolescents, young women, or key populations to tailored programme packages was not explicitly considered.

### The right to HIV prevention and prevention choices

Given the evidence on effective prevention interventions gathered from 2005 to 2015, a new worldwide initiative for prevention can be built around the notions of a right to prevention and choice as core principles. The human right to the highest attainable standard of health as stated in the International Covenant for Economic Social and Cultural Rights explicitly comprises treatment and prevention in relation to epidemics.<sup>35</sup> Fulfilling that right requires that people at increased risk of HIV infection have access to effective HIV prevention, testing, and treatment services and the choice to select and access prevention methods that suit their lifestyles, such as condoms and lubricants, clean needles, PrEP, or ART. The right also entails safe sexual choices, in particular the right of every person to decide with whom to have sex, or not, when, and with which type of protection. The notion of prevention choices overcomes the fragmentation of prevention into agendas for different tools and could become the overarching theme for a new prevention movement. Engagement of communities, key populations, and civil society organisations needs to be a central element to the creation of a prevention movement around choice.

### A new impact target

In 2014, UNAIDS called for ending the AIDS epidemic by 2030 and defined the worldwide goal to reduce new adult HIV infections to 500 000 by 2020 and to 200 000 by 2030,<sup>36</sup> which corresponds to a 75% reduction by 2020 and 90% by 2030 from the 2 million infections recorded in 2010. These targets were reinforced with the UN

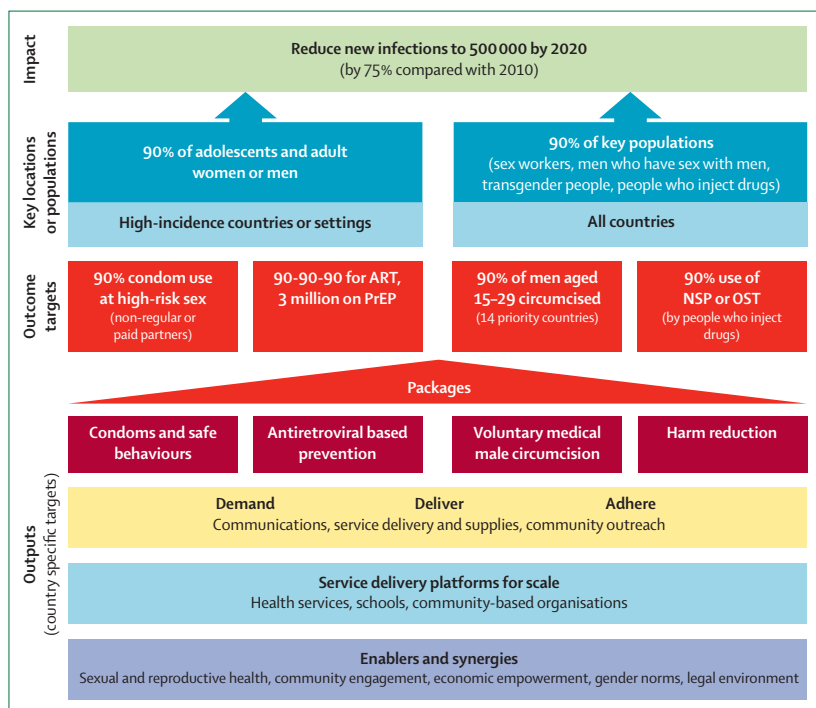


Figure 1: Core results for HIV prevention by 2020

ART=antiretroviral therapy. NSP=needle syringe programme. OST=opioid substitution therapy. PrEP=pre-exposure prophylaxis.

Political Declaration.<sup>37</sup> A simple consolidated framework is proposed in figure 1 with a set of targets for a new worldwide HIV prevention initiative. The framework seeks to do justice to epidemic diversity and implementability, with programmatic targets broadly based on UNAIDS modelling done in 2014.

### Key locations and priority populations

To reach the ambitious impact targets of reducing new infections to 500 000, good access to and use of services is needed in all key locations and by all priority populations, including individuals who were previously difficult to reach, such as sex workers, MSM, transgender people, and people who inject drugs, as well as adolescents, young women, and adult men in high-prevalence countries. Service access targets need to include people who inject drugs and MSM in prisons. The advantage of a worldwide target of 90% coverage in key and priority populations is that it sets a worldwide standard by defining high service access by highly affected groups as good value for money and investment.

Coverage targets for sex workers, MSM, and transgender people apply to almost all countries, whereas service access of people who inject drugs will be a focus in eastern Europe, parts of Asia, and selected other countries, subregions, or cities. Service packages for key populations should be developed at a country-level on the basis of worldwide guidance;<sup>38–40</sup> include condoms (and lubricants as needed), ART, and PrEP where incidence is particularly high; include harm reduction commodities for people who inject drugs and communication on risk and prevention options; demand creation efforts, adherence education, and support; and promote community empowerment on related social norms, addressing HIV and key population stigma and barriers to service access and adherence or consistent use (table 1).

In eastern and southern Africa, and in some parts of west and central Africa, HIV incidence is particularly high in specific groups such as young women aged 15–29 years and men 20–29 years, and, according to available HIV incidence data, in adults aged 30–49 years in some countries.<sup>41–44</sup> Priority populations and locations, in which 90% coverage targets for young women and other priority groups will apply, need to be defined at country-level by use of subnational data on HIV incidence, prevalence, behaviour, and other social dynamics.<sup>45</sup> UNAIDS published a range of examples on how to use location and population-specific information for planning in 2015.<sup>46</sup> Prevention packages for young women, a core target group within these epidemics, will need additional communication and empowerment approaches designed on the basis of country-specific analysis and tested programme approaches. Where transactional and other risky sex are associated with poor resources to keep adolescent girls in school, cash transfers might reduce HIV risk, as confirmed in

Malawi<sup>47</sup> or in Botswana, where an additional year of schooling was associated with reduced HIV prevalence.<sup>48</sup> Efforts to reach and offer HIV tests to men, whose access to testing and treatment lags behind that of women, through partner testing and assisted partner notification also need to be expanded. HIV prevention for men includes voluntary medical male circumcision within a package of sexual and reproductive health communication and services. Although packages for women and men differ, programmes at community-level have been successful when they have addressed both women and men.<sup>49–51</sup>

### Four concrete outcome targets

Four types of priority programme targets which could be cornerstones of a worldwide plan to reduce new adult

	Number of new infections in adults (aged ≥15 years)
South Africa	370 000 (330 000–430 000)
Nigeria	210 000 (150 000–290 000)
Russia*	110 000
Uganda	80 000 (61 000–100 000)
India	76 000 (59 000–100 000)
Mozambique	75 000 (53 000–100 000)
Kenya	71 000 (52 000–100 000)
Indonesia	68 000 (62 000–74 000)
China*†	59 000 (45 000–81 000)
Zimbabwe	59 000 (49 000–69 000)
Zambia	55 000 (48 000–63 000)
USA*	50 000
Tanzania	48 000 (41 000–56 000)
Brazil	44 000 (32 000–59 000)
Cameroon	40 000 (32 000–47 000)
Malawi	28 000 (20 000–38 000)
Ethiopia‡	..
Angola	22 000 (14 000–35 000)
Côte d'Ivoire	21 000 (15 000–28 000)
Lesotho	17 000 (15 000–19 000)
Pakistan	16 000 (11 000–29 000)
Ukraine	15 000 (11 000–20 000)
Vietnam	14 000 (13 000–15 000)
South Sudan	13 000 (5300–20 000)
DR Congo	12 000 (6500–16 000)
Mexico	11 000 (9700–12 000)
Myanmar	11 000 (10 000–12 000)
Swaziland	11 000 (9400–13 000)
Ghana	11 000 (8100–14 000)
Colombia	10 000 (8900–11 000)

Data are number of adult infections (uncertainty bounds) in 2015. \*Estimates include children and uses a different methodology than UNAIDS standard. †Total number of new diagnoses of HIV, not new infections. ‡Estimates were not final at the time of publication. Source: UNAIDS 2016 estimates.<sup>22</sup>

**Table 1: Estimated number of new HIV infections in the 30 countries that account for almost 90% of new HIV infections globally in adults (aged ≥15 years)**

HIV infections (figure 1). The proposed targets are outcome results at the level of service use and associated behaviours, which means that they reflect changes with a direct and proven effect on HIV incidence. As outlined by Hargreaves and colleagues,<sup>52</sup> relevant behavioural and structural synergies are not considered as competing priorities to condoms or lubricant, ART, PrEP, and voluntary medical male circumcision, but as components of the same prevention response. For example, communication about the risk of multiple partnerships is seen as an entry point for generating adequate risk perception and demand for prevention choices including both choices of different prevention tools and when, where, and with whom to have sex. This framework integrates demand for prevention, delivery of services or supplies and support for adherence, and reduction in the barriers to adherence or consistent use.

The first outcome target proposed focuses on condoms and safe behaviours. Within the HIV epidemic areas in sub-Saharan Africa, the front-line target proposed for this area is 90% condom use at last sex with a non-regular partner. For sex workers, 95% condom use at last paid sex, and, for MSM, a target of 90% condom use at last sex with a non-regular partner can be applied. The focus on non-regular partners is based on lessons and evidence that evolved over the past decade. High condom use with non-regular partners is feasible in different populations including in countries with generalised HIV epidemics that experienced HIV incidence declines, such as Namibia, South Africa, and Zimbabwe.<sup>23</sup> Condom distribution targets of 25–50 condoms per year per adult man on average are suggested for priority countries in sub-Saharan Africa on the basis of condom distribution levels in countries with high condom use and needs estimates considering the number of risky sexual acts to be protected. Higher targets will be needed for specific key populations such as female sex workers. Condom promotion and social marketing can be embedded in focused behavioural change programmes.

The second outcome target on antiretroviral-based HIV prevention applies to all epidemic settings and subpopulations. In concentrated epidemics, HIV testing as an entry point for ART should be more actively promoted in key populations; in the generalised epidemics in Africa, ART should be widely promoted in all key locations. The 90-90-90 target defined by UNAIDS calls for 90% of all people living with HIV being diagnosed, 90% of the diagnosed people living with HIV receiving ART and 90% of those on ART being virally suppressed.<sup>53</sup> This would translate into 73% of all people living with HIV being virally suppressed, which would be a substantial contribution to prevention outcomes. Additionally, oral tenofovir-based PrEP is proposed to be offered to all subpopulations at substantial risk, which, according to a WHO recommendation, includes groups in which

HIV incidence exceeds 2–3 in 100 person-years.<sup>54</sup> This suggested focus has been translated into a target of 3 million individuals using PrEP by 2020.<sup>55</sup> This target needs to be further refined for specific subpopulations, including targets for individuals at exceptionally high risk, such as sex workers in many parts of Africa, highly affected groups of transgender women, and MSM in many settings, as well as young women in exceptionally high incidence locations in southern Africa. New approaches under development, such as long-acting injectable antiretrovirals,<sup>56</sup> sustained-release devices for antiretroviral-based microbicides,<sup>57</sup> and vaccines,<sup>58</sup> could become additional prevention choices in future.

A third outcome target to be achieved is voluntary medical male circumcision of 90% of adolescent boys and men aged 15–29 in the 14 identified priority countries. Since male circumcision is a programme with particularly large variation in progress, different countries will need different milestones and timeframes for achieving this target.<sup>24</sup> Country ownership, service delivery efficiencies, such as task shifting and task sharing, use of outreach services, and new technologies and devices to do voluntary medical male circumcision have been identified as facilitating factors for high uptake, whereas limited demand and demand generation were identified as major barriers.<sup>59</sup>

The fourth outcome target is to ensure 90% of people who inject drugs access comprehensive harm reduction services. This target needs to be further disaggregated. A target of 40% of people who inject opioids using opioid substitution therapy is proposed for 2020 with a further increase to 80% by 2030. Additionally, a target of 95% or higher of people who inject drugs having used sterile injecting equipment at last injection is proposed by 2020. Not all people who inject drugs will have to access needle syringe programme sites on a monthly basis, because some people who inject drugs will access needles through secondary exchange and at pharmacies. A worldwide target is expected to facilitate a decision-making process at the country-level, both on policy barriers, increased investment focus on prevention for people who inject drugs, and implementation efficiency to achieve higher coverage with available resources.

All four outcome targets are important and the order in which they were presented does not imply prioritisation or sequencing of implementation, which will depend on the target populations and local contexts.

### Creating a conducive policy environment

Achievement of these four results needs to be supported, and indeed often depends on, efforts to create a conducive policy environment. A range of barriers negatively affect HIV prevention uptake. These include stigma and service-provider bias, sexual violence (particularly affecting sex workers),<sup>60</sup> discrimination, and punitive policies affecting access to harm reduction (particularly affecting people who inject drugs).<sup>61</sup> Structural and policy

barriers have been successfully addressed in some settings. Countries that have adopted a public health approach and evidence-informed policy framework for harm reduction for people who inject drugs have achieved high coverage of effective programmes and reduced infections.<sup>15,16</sup> In San Francisco, USA, an empowered community demanded, and public policy ensured, access to a full range of HIV prevention options including early treatment and use of PrEP by MSM, leading to substantial reductions in new infections.<sup>11</sup> In many other places, homosexuality remains criminalised, highly stigmatised, or both, constituting an important barrier to service access. Similarly, findings from a systematic review<sup>62</sup> showed that community empowerment approaches increased consistent condom use and reduced HIV and sexually transmitted infection outcomes in sex workers, and Shannon and colleagues<sup>60</sup> have produced modelled estimates suggesting that decriminalisation of sex work would reduce HIV incidence in sex workers by 33–46%. Removal of structural barriers to young people accessing reproductive health services—such as restrictive age of consent laws governing access to family planning, HIV testing, condoms, and PrEP services—can enhance use of prevention services. Secondary school attendance can be protective of HIV and increase access to information through age-appropriate comprehensive sexuality, gender, and HIV education.<sup>63,64</sup> A worldwide HIV prevention plan that clearly links the achievement of fast-track targets towards ending AIDS with a coherent results chain will need political commitment and support to implement the policy and normative changes on which effective service delivery depends. Population-specific prevention programme packages for sex workers, MSM, people who inject drugs, and young people at risk in high-HIV prevalence settings will include the four priority outcome areas as appropriate for each population-group and the structural and policy support needed.

### Speed, scale, quality, and sustainability

Effective HIV prevention delivers interventions proven by research with methods proven in real-world implementation. Prevention should be organised in a way that is oriented towards delivery (figure 2). Simultaneously generating speed, investment, and accountability, towards large-scale, high-population coverage and quality implementation in all priority countries should be one core achievement of a worldwide plan for prevention.

Real-world prevention success has been associated with speed and decisive action in Uganda's<sup>7</sup> and Thailand's<sup>7</sup> early campaigns, South Africa's ART programme<sup>65</sup> after 2008 and condom programme<sup>66</sup> after 2013, in Kenya's voluntary medical male circumcision programme,<sup>66</sup> or Avahan's key population programme.<sup>67</sup> In all these cases, high coverage of prevention programmes was achieved within 3–5 year timeframes.

Innovation such as new communication technologies,<sup>68</sup> geographical information systems,<sup>69</sup> denominator planning,<sup>70</sup> and innovative testing strategies have been used in the past 5 years to accelerate implementation.<sup>71</sup> Political leadership is key to generating rapid movement, but needs an evidence-base on the direction to take. HIV investment cases have shown leaders that rapid action and frontloading of investment will not only save lives, but also reduce future health spending, an important argument for ministries of finance.<sup>22</sup> ART will need substantial funding and prevention will require roughly 25% of HIV resources worldwide. UNAIDS has issued a call for investment in prevention entitled a Quarter for Prevention.<sup>72</sup> Different modelling, investment, and optimisation analysis tools are available to determine exact prevention allocations at the country level.<sup>45,73–75</sup>

In many contexts, proven interventions have simply not been delivered at a large enough scale for priority populations and geographical coverage to make a difference. This includes programmes for key populations such as female sex workers in sub-Saharan Africa and people who inject drugs in eastern Europe. Programmes for people who inject drugs have been scaled-up in western Europe and Australia, but also in other countries<sup>76</sup> such as Mauritius, where opioid substitution therapy coverage exceeded 50% in 2014, newly registered HIV infections declined by two-thirds, and the share of new infections attributed to drug injections reduced from 92% to 31% between 2005 and 2014.<sup>77</sup> More than 5000 people remain on opioid substitution therapy in Mauritius, although screening introduced after 2014 might reduce access by new clients. The well-documented scale-up of sex work programmes in India shows key elements of successful programme expansion: epidemic analysis and mapping, implementing first in the areas with highest number or high risk, decentralisation through subcontracting to non-governmental organisations, empowered front-line peer outreach workers, community mobilisation, while applying standardised implementation models with consistent routine monitoring data and routine use of the data at all levels.<sup>78–80</sup>

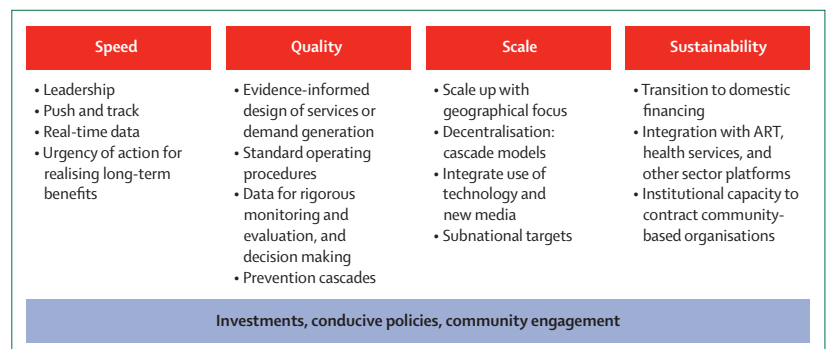


Figure 2: A management framework for HIV prevention  
ART=antiretroviral therapy.

See Online for appendix

Quality in design of prevention programmes has been inconsistent and available instruments have not been widely used to study determinants of demand and uptake. Such information from social marketing programmes, could be more widely used in national programmes and total market approaches.<sup>81</sup> Prevention pathways from Swaziland (appendix) and cascades by Garnett and colleagues<sup>82</sup> show how such information can inform national planning. A systematic framework developed for voluntary medical male circumcision describes how demand generation can be grounded in behavioural science and commercial market research.<sup>83</sup> Quality in implementation can build on existing implementation models and approaches for key populations.<sup>84</sup> Heterogeneity analysis establishes how practice in high-performing sites can be replicated in all sites, an approach which was applied, for example, for needle syringe programme, opioid substitution therapy, and ART services in Ukraine.<sup>85</sup> Setting and tracking decentralised distribution targets proved effective in South Africa, where a target of distributing 50 condoms per man per year has been set and is rigorously tracked district by district. In KwaZulu Natal, the number of condoms distributed per man increased from 8.9 to 59.1 per year from 2010 to 2014.<sup>46</sup> Quality improvements can also be achieved through standard operating procedures, centres of excellence, mentoring, performance-based incentives, training programmes, supportive supervision, and other quality assurance.

Sustainability of the HIV response depends on reducing HIV incidence and thereby effective investment in prevention is an investment in sustainability. Sustainability needs to be built into a new worldwide prevention framework from the onset. HIV prevention has been disproportionately funded through international resources because some governments have preferred investing in clinical services, such as treatment, leaving the more culturally sensitive funding of prevention in key populations to international partners.<sup>86</sup> With stagnating or, particularly in middle-income countries, declining international HIV financing, increased domestic financing in combination with efficiency gains are needed for prevention

programmes. Sustaining HIV prevention and treatment services at scale and high coverage will not be possible at current unit costs. Sustainability requires a combination of unit cost reductions, efficient and differentiated service delivery models, integration of HIV services into universal health coverage schemes, integration of provider-initiated prevention with HIV testing services and ART services, and total market approaches involving public, private, and social marketing sectors. National capacity to contract, monitor, and manage community-based programmes needs to be enhanced in parallel.

### Global, national, and local accountability

Replication of the successful model of eMTCT for prevention in adolescents and adults would need support from political leaders of 25–30 priority countries for a focused worldwide plan with targets, a score card to track progress each year, and peer review meetings of country managers, and specified financial commitments. At the national level, HIV prevention planning has focused on detailed strategy documents and substrategies for individual interventions. These strategy documents provide important background information, but do not ensure the logical flow from investment to coverage, output, outcome, and effect. This logic can be better expressed in quantified results frameworks with clear results chains and associated operational plans with milestones. Community based components are more easily monitored if standard packages of services are defined.

The management system to track progress and solve problems, such as emerging policy barriers, is as important as the framework. By comparison with treatment, national prevention management has been more fragmented with co-ordination functions in national AIDS authorities, technical experts in ministries of health, and management of non-health components by non-governmental organisations. Whether one or several institutions are in the lead, different components of the prevention response must be aligned to each other, so that service coverage can be jointly monitored, prevention communication is



Figure 3: Core capacities needed in a national HIV prevention management team

	Core actions	Responsible groups
National level	Adjust national results frameworks to ensure that 90% of key populations and priority groups in high-prevalence settings access combination prevention Strengthen national HIV prevention management systems to reflect the focus on delivery of core outcomes, with the required geographic coverage, intensity, and quality Develop or adjust a mechanism for accountability, including annual peer review of performance and a scorecard for subnational tracking Analyse determinants of prevention demand, uptake, and adherence; identify bottlenecks, underlying social and gender norms and core structural barriers and strategies to address them, including demand generation and advocacy for policy change Develop or adapt standard operating procedures for prevention, including health and community components that include aspects of demand, delivery, and adherence Develop mechanisms for domestic financing of prevention, including contract arrangements for community components	Ministries of Health, Ministries of Finance, other line Ministries, national AIDS coordinating bodies
Subnational level (district or city)	Develop simple subnational implementation plans (district or city implementation plans) including operational targets for service delivery and demand generation Establish a dynamic implementation management group for HIV prevention (or adapt an existing group) bringing together health and non-health and government and non-government implementers Regular (monthly-to-quarterly) monitoring visits, tracking and review of progress and bottlenecks	District or city authorities, health teams, AIDS coordination groups, implementers
Facility level	Deliver effective prevention services as a population-specific package as defined in the national standard operating procedures with each interaction to promote the full choice of key elements of the package Strengthen provider-initiated approaches on core results including condom and lubricant distribution and promotion, ART, PrEP, voluntary medical male circumcision Integrate prevention and treatment communication and service delivery in line with country epidemic dynamics and priorities Orient all service providers on the right to prevention for everyone who needs access to services including needs of key and priority populations	Facility managers and service providers
Community level	Ensure full community participation in delivery and empowerment of communities to access, use, monitor, and advocate for prevention; strengthen prevention awareness Accelerate evidence-informed integrated demand generation for core prevention outcomes, testing, and treatment Provide community outreach for adherence support for prevention and treatment Streamline delivery system of community-based programmes based on a national minimum package	Community-based organisations, community leadership
Global or regional level	Engage high-level politicians in the 25–30 priority countries and donors to ensure commitment to and investment in scaling and speeding up the delivery of prevention programmes Develop and promote a global plan to reduce new adult infections including a concise results framework as proposed in this Personal View Convene a global consultation with priority country leadership to agree on targets and an accountability mechanism Develop a global management and tracking mechanism including a scorecard for outcomes in priority countries Convene global review meetings of priority countries in 2018 and 2020	UNAIDS, other UN system agencies, the Global Fund, development partners

ART=antiretroviral therapy. PrEP=pre-exposure prophylaxis.

**Table 2: HIV prevention 2020: a call for action**

harmonised, and common policy and management issues are addressed. Core capacities needed in national HIV prevention management teams (figure 3) already exist as working groups, but have not consistently been combined to drive national prevention responses.

Although several countries have been successful in excelling in one or two dimensions of managing prevention, leadership capacity to make all components work synergistically has often been inadequate. Sub-national implementation management groups could focus on moving and tracking core outputs of demand, delivery or supply and adherence or consistent use support, and reducing barriers to access in the public and private sector and contractors of community-based components. The proposed shift would need the gradual movement of human resources from broad coordination of prevention into managing, tracking, and facilitating programme delivery (table 2).

### Conclusions

Strong evidence exists both from clinical trials and real-world implementation that HIV prevention

programmes can work, especially if designed comprehensively as part of combination prevention programming and implemented at scale with sufficient coverage. However, overall implementation has been inconsistent and a re-energised and conceptually renewed push for prevention is needed. With the success of eMTCT as a guide, a new prevention movement needs leadership, a simplified framework at global, national, and subnational levels, and accountable, pragmatic management systems delivering with speed, quality, and the needed scale and coverage to achieve 2020 and 2030 targets of reducing new HIV infections below 500 000 and 200 000 and ending AIDS as a public health threat.

#### Contributors

KLD did the original conceptualisation, led the paper writing team, wrote parts of the paper, contributed to development of figures, and coordinated the review process. GD wrote parts of the paper, contributed to development of figures, review of the paper, and incorporating reviewers' comments. DW, GPG, ML, SK, EB, AF, RCB, LJJ, AB, and MW contributed to writing and review of the paper. CB did the literature search, drafted the outline and first draft of the paper, developed the figures, and revised drafts of the paper.

**Declaration of interests**

We declare no competing interests.

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