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BACKGROUND NOTE

HIV PREVENTION 2020: A GLOBAL PARTNERSHIP FOR DELIVERY

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For further reference, the case studies can be found online as a Conference Room Paper via the PCB website: UNAIDS/PCB (40)/CRP4

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INTRODUCTION

1. At its 39th meeting in December 2016, the UNAIDS Programme Coordinating Board (PCB) decided that "HIV Prevention 2020: a global partnership for delivery" would be the subject of the 40th Board thematic segment. The focus comes at a critical time. Due to stagnating new HIV infection trends there is a sense of urgency that HIV prevention needs to be re-invigorated if global targets are to be achieved. The focus also provides an opportunity to consider how and to what extent the embedding of HIV interventions into wider efforts to achieve the SDGs could accelerate progress.

2. The segment follows a series of previous Board meetings that reaffirmed the importance of HIV prevention. In 2000, for instance, the PCB recommended that governments, bilateral partners, nongovernmental organizations (NGOs) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) support the acceleration of prevention in all affected areas through country-based regional and global efforts.[1] In 2005, UNAIDS published its policy position paper, *Intensifying HIV prevention* (UNAIDS/PCB (16)/04.3).[2] The PCB urged the Joint Programme to take the lead in intensifying HIV prevention, and emphasized the need to translate HIV prevention into effective actions at country level and address the fundamental drivers of the epidemic.[3] In 2012—five years ago—an entire PCB thematic segment was devoted to "Combination prevention: addressing the urgent need to re-invigorate HIV prevention response globally by scaling and achieving synergies to halt and begin to reverse the spread of the AIDS", in line with the Millennium Development Goals.

3. The 2012 background paper reviewed much of the evidence of what works in HIV prevention, noted the need to scale up the right combinations of interventions in the right places, and also noted the "unique challenges of combination prevention programmes whose impact is achieved as a result of a mix of activities to implementation and evaluation".[4] In its subsequent decision points, the Board took note of the HIV prevention goals and targets adopted in the 2011 UN Political Declaration and called on the Joint Programme, governments, civil society organizations and other development partners to increase the focus on all dimensions of evidence-based combination programmes.[5]

4. More recently, several specific thematic PCB events were related to HIV prevention among specific population groups, including "HIV, adolescents and youth" in 2013, "Halving HIV transmission among people who inject drugs" in 2015, and "The role of communities in ending AIDS by 2030" in 2016. HIV in prisons and other closed settings was also addressed during the 37th Meeting in 2016.[6] Following the session on adolescents and youth, and noting with great concern that young women aged 15-24 years have HIV infection rates twice that of young men, the PCB encouraged members to urgently scale up evidence informed, gender-responsive, youth-friendly HIV prevention. It also encouraged members to increase access to paediatric treatment and care, and urged them to strengthen initiatives that would increase the capacities of young women and adolescent girls to protect themselves from HIV infection.[7]

5. The 35th meeting of the PCB in 2014 was told that new HIV infections among people who inject drugs had declined only marginally and that the 2011 Political Declaration target related to HIV transmission among persons inject drugs was almost certainly going to be missed.[8] The PCB recognized the need to strengthen action to address transmission of HIV among people who use drugs, by adopting and implementing comprehensive drug policies that are based on evidence and respect for human rights, and informed by the harm reduction interventions related to HIV and people who use drugs, as set out in the WHO, UNODC and UNAIDS technical guide.[9] In the "Role of communities" segment, the PCB heard of the importance of communities working with Governments to contribute to changing risk behaviours, creating demand for and delivering prevention interventions, and challenging harmful social cultural norms and attitudes to improve prevention outcomes. Communities would also help expand the scale and reach of prevention services, advance

human rights, and reduce gender inequalities, stigma and discrimination.[10] The PCB subsequently encouraged Member States to remove regulatory and cultural barriers and to ensure the meaningful participation of civil society and people living with HIV and other key populations in policies and programmes.[11]

6. Building on these previous discussions, this background paper aims to:

   - Describe the progress made since the last comprehensive PCB discussion on the state of HIV prevention in 2012 and the specific sessions on adolescents and drug use that followed;
   - Review what works in HIV prevention and which stakeholders need to be involved, and analyse why—despite repeated political commitments from UN Member States and calls by the Board—prevention programme scale-up has been inadequate;
   - Describe new opportunities for re-invigorating primary prevention, including through closer links with wider efforts to achieve the SDGs; and
   - Propose elements of a global HIV prevention framework and a partnership for delivery.

7. The focus of this paper and the thematic segment is on HIV primary prevention, the empowerment of, and the promotion and provision of effective tools so that people at risk can protect themselves and stay free of HIV infection. Key evidence is also presented on the preventive effects of HIV treatment and the role of treatment as prevention as part of broader efforts to reduce new infections, but it is not the focus of this paper. Combination prevention packages combine a range of biomedical, behavioural and structural approaches, including testing and linkage to care.

EPIDEMIOLOGICAL EVIDENCE

Despite the availability of a widening array of effective HIV prevention tools and methods, the annual numbers of new HIV infections among adolescents and adults have generally remained largely unchanged in recent years, and global prevention targets are being missed by a wide margin. The numbers of new infections in sex workers have also changed little, whereas new infections in gay and other men who have sex with men and people who inject drugs have increased. The number of new infections among adolescent girls and young women in high-prevalence countries in sub-Saharan Africa remains particularly high, despite signs that incidence among girls may have started to decline. The total number of young people at risk of HIV is increasing. Large numbers of older adults in these countries, both women and men, are also getting infected calling for a prevention approach covering the full life-cycle.

Global and regional new infections trends

8. Despite the availability of a widening array of effective HIV prevention tools and methods and a massive scale-up of HIV treatment in recent years, new infections among adults globally have not decreased sufficiently. From 2005 to 2015, global new infections per year declined from 2.5 million [2.3 million – 2.8 million] to 2.1 million [1.8 million – 2.4 million]. However, since 2010, the annual number of new HIV infections has remained unchanged at approximately 2 million since 2010. The 2011 Political Declaration target to reduce new infections acquired through sexual transmission or injecting drug use by 50% between 2010 and 2015 was missed by a wide margin[a].[12]

9. At the same time, considerable progress was made in reducing new infections among children—from 450 000 [390 000–510 000] in 2005 to 150 000 [110 000–190 000] in 2015. Much of that progress can be ascribed to actions outlined in the *Global Plan toward the elimination of new child infections and keeping their mothers alive*. Globally, the percentage of pregnant women reached with services to prevent HIV transmission from mothers to children, using existing platforms for antenatal care, increased from 16% [14–18%] to 77% [69–86%] between 2005 and 2015.

10. In 2015, almost 90% of new adult infections occurred in 35 countries which have been identified as Fast-Track countries in the UNAIDS Strategy. South Africa accounts for the largest number of new infections, with 380 000 [330 000–430 000], followed by Nigeria and India. Only 6 of the 35 Fast-Track countries achieved a decrease in new infections of more than 30% in 2010–2015, 17 countries saw a modest decline of less than 30% and 12 countries experienced an increase in the number of new infections.[13] No country reached the target of the 2011 Political Declaration, to reduce sexual and drug related transmission by 50% by 2015.

11. There was a modest decline in new adult HIV infections of 4% in eastern and southern Africa in 2010–2015, while trends in Asia and the Pacific, West and central Africa, and Latin America and the Caribbean were flat. New adult infections were estimated to have increased in the Middle-East and North Africa and in eastern Europe and central Asia during that period, including in some countries not identified as Fast-Track countries.[14]

[a] While almost 100% of adult HIV infections are transmitted through these two modes, blood safety and universal precautions to prevent nosocomial infections in the health sector also remain essential.

New infection trends in key populations

12. Approximately 45% of all new infections worldwide are estimated to occur among key populations and their sexual partners.[15] In regions outside sub-Saharan Africa, over 60% of new infections are associated with key populations.[16] In sub-Saharan Africa, this proportion is less but also significant. In Benin, for example, approximately 20% of new HIV infections are among sex workers, their clients and partners.[17] In a 2013 review, almost half of HIV infections in a state in Nigeria occurred among all key populations, including sex workers and their clients, men who have sex with men and drug users and their sex partners.[18] Some researchers have estimated that a large proportion of new HIV infections in western and central Africa occurs in the context of sex work.[19]

13. Recent analyses suggest that the annual number of new HIV infections among sex workers has remained unchanged globally in recent years, while the incidence of new HIV infections among people who inject drugs and men who have sex with men has increased.[20] This is despite prevention successes in those populations in some countries and cities, including among sex workers in Thailand,[21,22] people who inject drugs in Ukraine[23] and gay and other men who have sex with men in several cities in the United States[24],[25] and in London.[26] In Boston, for instance, where gay and other men who have sex with men account for approximately 64% of people living with HIV, new HIV infections among men declined by 31% between 2005 and 2013.[27]

    Trend data are not readily available for key populations other than sex workers, persons who inject drugs and men who have sex with men. However, transgender people and prisoners or indigenous populations, while comparatively smaller in number than other key populations, are also more vulnerable to HIV than other adults.[28,29,30,31,32] Canada, for instance, recorded 179.2 HIV diagnoses per 100 000 indigenous people in 2011 compared with 29.2 HIV diagnoses per 100 000 non-indigenous people. The disparity was even more pronounced among indigenous women.[33] Furthermore, in some regions, including Europe, substantial proportions of new HIV diagnoses are among migrants, including infections acquired after arriving in their new host countries. This indicates the need for targeted interventions for this vulnerable population.[34] As a general pattern, key populations are between five (prisoners) and 49 times (transgender women) more likely to be infected than other adults in the same country.[35]

14. Infection rates can be very high. In Rio de Janeiro, Brazil, for instance, HIV prevalence among transgender women was found to be 31%,[36] compared with 0.6% [0.4–0.8%][37] among adults in the overall Brazilian population. In some populations groups, such as sex workers in southern Africa[38] and gay men and other men who have sex with men in some cities,[39] incidence may be as high as 10%, meaning 10% become newly infected very year.

New infections in adolescent girls and young women and their male partners in high-prevalence countries

15. Total numbers of adolescent girls and young women newly infected remain unacceptably high. In 2015, 240 000 [200 000–270 000] new infections occurred among young women aged 15–24 years in eastern and southern Africa, including 100 000 [89 000–120 000] in South Africa and 23 000 [17 000–34 000] in Kenya.[40] In Swaziland, 47% of women aged 25–29 are already infected.[41] Nineteen percent of new infections worldwide occurred among young women (ages 15–24) in 2015, and an estimated 79% of those infections occurred in sub-Saharan Africa.

16. Young women in sub-Saharan Africa face particularly high risks of HIV infection compared with their male counterparts. For a variety of biological, demographic, social and economic reasons[42,43] young women (aged 15–24 years) are between 3 and 7 times more likely to be infected than their male counterparts in over 15 countries in that region.[44] Women's inferior

social and economic status, combined with their unequal power relations in sexual relationships, often hinders their abilities to protect themselves against HIV infection.[45]

17. Violence or the fear of violence has been found to be an important barrier to uptake of HIV prevention and treatment services.[46,47] Several studies established associations between the prevalence of physical and emotional intimate partner violence and women's HIV risk.[48,49] In addition, research in Botswana and Swaziland has found that women who were food-insecure were 70% less likely to exercise personal control in sexual relationships, and were 70% more likely to have unprotected sex.[50]

    There are signs that moderate declines in HIV incidence in young women may be underway in some high-prevalence countries such as South Africa, while the (lower) infection rates in boys and young men are remaining stable.[51] However, demographic changes mean that increasing numbers of young people are reaching sexual maturity, which means that the numbers of new infections in young people remain high, andmay increase if programmes do not keep pace.

Infection rates along the life-cycle

18. Large numbers of both adult women and men above the age of 25 are also acquiring HIV in high-prevalence countries, with rates of new infections essentially flat in both genders 25–49 year-old in recent years. Men are at higher risk as life progresses, implying an increased risk of older men transmitting the virus to younger female partners.[52] The proportion of people newly infected with HIV globally who are men increases from 35% among people aged 15–19 years to 63% among people aged 40–44 years. Even in eastern and southern Africa, where predominantly male key populations account for a much smaller proportion of new infections than the global average, 54% of new HIV infections among people aged 30–34 years in 2015 were men.[53] Furthermore, an estimated 57 000 [49 000–56 000] people over the age of 50 became newly infected with HIV in eastern and southern Africa in 2015.[54]

19. UNAIDS is therefore promoting a life-cycle approach to prevent new infections, and is calling for stronger programmatic focus on and engagement with men. This life-cycle approach emphasizes the need to understand developments in the epidemic in different age groups, as well as in different geographic region and sub-populations. Recent efforts to develop maps of epidemiological, behavioural and programme data are supporting efforts to focus HIV prevention efforts on the locations and populations that are at highest risk of infection.[55]

EVIDENCE AND GUIDANCE: WHAT WORKS

There is robust evidence than biomedical prevention methods such as condoms, harm reduction (such as needle and syringe programmes, and opioid substitution therapy), voluntary medical male circumcision (VMMC) and pre-exposure prophylaxis (PrEP) work for primary prevention, when combined with behavioural and structural approaches, such as women's empowerment, education, stigma reduction and a strong community mobilization component. Furthermore, there is strong evidence that HIV prevention is highly cost-effective and cost-saving if focussed on people most at risk and if delivered with sufficient quality and intensity. Recent efforts of the Joint Programme have focused on describing tailored packages of interventions for each population group and issuing implementation guidance to support countries in their programming.

20. Although progress on reducing new HIV infections globally falls well short of the targets set out in the 2011 and 2016 UN Political Declarations, this aggregate trend hides local and national successes that show how the intensification of HIV prevention efforts alongside HIV testing and treatment scale-up yields strong results. These successes have generated a robust body of evidence on the policies, programmes and approaches that work and are required to reduce new HIV infections. Since the last comprehensive PCB segment on prevention in 2012, this evidence has been further strengthened and consolidated, and a series of reviews and reference and guidance documents has been published.

Biomedical interventions and approaches

21. There is clear evidence that (male and female) condoms are effective tools for reducing HIV infection rates, preventing sexually transmitted infections and unwanted pregnancy.[56] Increased condom use has been credited with prevention successes in Thailand[57] and in various communities in India.[58] In 10 countries with more than a 25% decline in new HIV infections among adults between 2000 and 2015, nationally representative population-based survey data show steady increases in condom use by both men and women at last sex with a non-regular partner during the same period.[59] In Zimbabwe[60] and South Africa,[61] two high-prevalence countries, increased condom use has been found to have contributed to reductions in HIV incidence. Where condoms are easily accessible, women with greater autonomy in decision-making are more likely to negotiate safe sex and use condoms.[62] In one global modelling study, condoms were credited with averting nearly 50 million HIV infections since the start of the epidemic.[63]

22. A similarly strong body of evidence exists on the effectiveness of harm reduction, needle-syringe programmes and opioid substitution therapy, which form the basis for a comprehensive package of interventions recommended by WHO, UNODC and UNAIDS for preventing the spread of HIV and reducing other harms associated with drug use. Countries that have adopted a comprehensive approach to harm reduction are delivering better health outcomes for people who inject drugs, including reductions in HIV infections and more effective management of drug use and drug-related crime. Across eight countries in eastern Europe and central Asia, a tripling of needle–syringe programme coverage between 2005 and 2010 reduced risk behaviour related to HIV and hepatitis C virus and reduced new infections.[64] In the Islamic Republic of Iran, improvements in drug dependence treatment, the expansion of needle–syringe distribution and comprehensive prison programmes coincided with a fall in newly reported HIV cases among people who inject drugs from a peak of 1,897 in 2005 to 684 in 2013.[65] [66] [67] Ten years of needle-syringe programming in Australia reduced the number of cases of HIV by up to 70% and reduced the number of cases of hepatitis C by up to 43%.[68]

Public health policy and harm reduction in Switzerland

From the 1980s onwards, Swiss drug policy changed from maintaining public order to ensuring public health, and included four pillars: drug use prevention, dependency treatment, harm reduction as well law enforcement and control. The Federal Office of Police, together with the Federal Office of Public Health is co-chairing a national working group which facilitates cooperation and develops best practices. Harm reduction and treatment services include exchange of syringes, provision of sterile equipment, offering contact to safe injecting rooms, and various types of psychosocial support and therapy, including OST, which is nowadays one of the standard therapies in case of opioid addiction in Switzerland. While persons who injected drugs accounted for almost 50% of all new infections in Switzerland in the 1980s, now only 3% of all new HIV infections are among persons who inject drugs. In 2013, only 12 men and 3 women who injected drugs were newly infected.

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23. The toolkit for HIV prevention has expanded in recent years. Voluntary medical male circumcision is a cost-effective, one-time intervention that provides lifelong partial protection against female-to-male HIV transmission, and is recommended in 14 countries with high HIV prevalence in southern and eastern Africa. A 2009 meta-analysis of three large randomized controlled trials found that circumcised heterosexual men were 38–66% less likely to acquire HIV in the two years following surgery.[69] VMMC is also expected to have indirect benefits for women.[70] Modelling suggests that VMMC could avert 3.4 million new infections by 2025, with net savings of US$ 16.5 billion if the intervention is scaled up fully.[71]

24. Pre-exposure prophylaxis (PrEP) is the latest addition to efforts to expand combination prevention options for people at high risk of HIV infection. Evidence from trials shows that PrEP is highly effective if taken regularly.[72] Oral PrEP empowers individuals with limited personal prevention options to discreetly manage their own HIV risk by taking daily doses of the antiretroviral (ARV) medicine tenofovir disoproxil fumarate. Early efforts to establish population-wide PrEP programmes are showing results. In the United States of America (USA), San Francisco's addition of PrEP to a comprehensive city-wide AIDS response focussing on gay men and other men who have sex with men was associated with a 29% reduction in new HIV infections from 2012 to 2014.[73] In New York State, the use of PrEP by Medicaid-insured persons increased substantially between 2012 and 2015 following campaigns by both the state government and New York City to increase knowledge among people at high risk of HIV infection.[74] New HIV infections in New York have declined at the city and state level since 2011.[75]

Treatment as prevention

25. Antiretroviral therapy (ART) has a powerful effect in preventing onward HIV transmission. Strong adherence to ART suppresses the viral load to undetectable levels in people living with HIV, greatly reducing the risk of transmitting the virus to others.[76] When large proportions of people living with HIV in a community are adhering to HIV treatment, it can lead to a preventive effect within that community.[77,78,79] However, 40% of people living with HIV remain unaware of their HIV status, including a large proportion of young people in sub-Saharan Africa, as shown in recent population impact assessment studies in three countries.[80] This indicates the need for close attention to the specific needs of young people for HIV prevention, testing and treatment. In addition, HIV transmission risk is particularly high among people who recently acquired HIV, with studies showing that viral load in individuals recently infected with HIV can be 300 times higher than individuals living with long-term infections.[81] There is also research evidence that as much as 50% of all new infections among gay and other men who have sex with men may be acquired from individuals with recently acquired infections themselves.[82]

26. Systematically linking people newly diagnosed with HIV to treatment remains difficult.[83] In a study of newly diagnosed individuals in South Africa who were eligible for ART, 20% refused referral to initiate treatment, 2% of who continued to refuse treatment after two months of counselling.[84] Maintaining high levels of retention in care, and maintaining high levels of treatment adherence are also challenging.[85] When adherence is not sufficiently strong there may be significant disruptions of viral suppression and increased transmission risks.[86]

27. Epidemiological models and programmatic experience suggest that achieving the Fast-Track target of reducing new infections to 500 000 by 2020 will require high coverage of high-impact HIV primary prevention interventions alongside the continued scale up of HIV treatment.[87] In the Fast-Track scenario, 37% of all new infections in eastern and southern Africa, which accounts for about half of all new infections globally, could be averted with effective ART at sufficient scale and adherence, 37% of infections could be averted if individuals with multiple partners use condoms consistently, and 16% of infections could be averted through VMMC. The remainder of new infections would be averted with programmes for key populations, PrEP and cash transfers. In concentrated epidemics, 48% of infections would be averted due with ART, 26% with programmes for key populations, including PrEP, and 18% with condom use during high-risk sex. A balanced approach to scaling-up treatment and (primary) prevention is therefore required,[88,89]

28. As biomedical tools are rolled out, effective social-behavioural and structural interventions and approaches help maximize their acceptance, adherence and efficacy, and are critical aspects of combination prevention packages and programmes. Biomedical, social-behavioural and structural interventions are closely linked and mutually dependent.

Behavioural interventions

29. Evidence suggests that behaviour change communication programmes can make a significant contribution to other prevention approaches if they are well designed and properly implemented. Early declines in HIV incidence in sub-Saharan Africa were associated with changes in behaviour.[90] There is some evidence of effect (measured by biological endpoints) of interventions such as peer education,[91] mass media communication,[92] school-based sexuality education[93] and behavioural counselling (e.g. for discordant couples).[94] However, the effects of those interventions on their own are usually small, and the interventions should be implemented alongside actions that increase access to health services or may risk stimulating demand that cannot be met.

30. Examples of large-scale multichannel programmes that achieved high coverage and measurable effects on attitudes, condom use and uptake of HIV testing services have included the LoveLife multimedia campaign in South Africa,[95] Zimbabwe's national behaviour change programme[96] and the multicountry One Love campaign in southern Africa.[97]

31. Comprehensive and quality sexuality education has been shown to positively influence HIV-related knowledge, skills, attitudes and behaviours.[98] A 2014 review of school-based sexuality education programmes has demonstrated increased knowledge, self-efficacy related to condom use, contraceptive use and refusing sex, and later initiation of first sexual intercourse.[99] Integrating content on gender and human rights has been shown to make quality sexuality education even more effective.[100]

32. Reviews examining effective prevention strategies for specific groups[101,102,103,104,105,106] or in specific regions[107,108,109,110,111,112] indicate that combinations of social change and communication interventions designed for these populations and context have enhanced the adoption of HIV prevention behaviours and the uptake of services—provided that services are available.

Structural interventions

33. Biomedical and behavioural components of HIV combination prevention need to be supported by structural interventions to reduce vulnerability and empower uptake of services. Community empowerment and mobilization and addressing structural barriers in order to increase service accessibility and uptake constitute critical elements of combination prevention. These include education, women's economic empowerment,[113] in addition to social protection coverage and the strengthening of legal and policy frameworks. The latter should include steps to remove punitive laws, policies and practices, to reduce stigma, discrimination and violence, and to strengthen community empowerment.

34. Increasing educational achievement among women and girls is linked to improved sexual and reproductive health outcomes, including reduced HIV infection, delayed childbearing, safer births and other beneficial development outcomes.[114] In Botswana, each additional year of secondary education was found to reduce cumulative risk of acquiring HIV among women by 12%.[115] The educational and economic empowerment of women and girls are also fundamental to preventing gender-based violence.[116] Social protection measures such as cash transfers have been shown to empower young women, enable them to remain in school, as well as reduce transactional sex in some settings.[117,118] A community mobilization approach developed for preventing violence against women in Uganda not only lowered social acceptance of violence and actual experience of intimate partner violence, but also reduced HIV incidence.[119]

35. Other effective structural prevention interventions include measures to remove punitive laws, policies and practices, and reduce stigma, discrimination and violence against people who are at risk of, or living with HIV. As noted in a forthcoming paper,[120] reducing the sexual stigma gay men face could help reduce high levels of sexual risk behaviours,[121,122] increase HIV testing rates, [123,124] and uptake of and adherence to services.[125] Evidence-informed analyses indicate that community empowerment of sex workers and decriminalization of sex work could prevent sex workers from acquiring HIV through the combined effects on violence, police harassment and safer work environments, and the resulting ability to negotiate condom use and safer sex.[126,127] Similarly, legal environments that allow for the provision of comprehensive harm reduction have been shown to reduce HIV transmission.[128] Law enforcement policies and practices that reflect a public health approach and the use of alternatives to incarceration can reduce the number of prisoners

acquiring HIV, TB and hepatitis infection, as well as improve access to HIV services for persons who use drugs in prisons.[129]

HIV prevention is a good investment

36. Evidence-based prevention programmes such as condoms,[130] VMMC,[131] key population programmes[132,133] and PrEP[134] are all cost-effective and -saving when focussed on people who are at high risk of infection. Condoms also bring wider benefits by preventing transmission of other sexually transmitted infections and unintended pregnancies. The economic empowerment of adolescent girls and young women (e.g. via cash transfers) can also result in increased education and reduced teenage pregnancy. Opioid substitution therapy reduces HIV transmission[135] and hepatitis C infection,[136] while also reducing drug-related crime.[137] [138] In a study in Canada,[139] every US$ 1 spent on community-based HIV prevention programmes saved US$ 5 in treatment costs. Another study estimated that every averted HIV infection in the USA avoided US$ 230 000 in lifetime medical costs.[140] An allocative efficiency study by the World Bank in South Africa showed that treatment needs and costs are reduced if ART scale-up is combined with VMMC, condom promotion and distribution, and comprehensive services for sex workers and young women.[141]

37. Modelling analysis shows how adequately funded HIV prevention can bend the trajectory of the epidemic. In Botswana, for example, modelling indicated that increasing the share of HIV spending devoted to prevention from 10% during 2010–2012 to 29% in 2014–2030 could help reduce new infections from over 9,000 in 2015 to fewer than 3,000 in 2030. Modelling for Belarus suggests that doubling HIV investments and allocating a quarter of HIV spending to prevention programmes that focus on harm reduction for people who inject drugs and combination prevention programmes for men who have sex with men and sex workers, could avert 10 000 new infections by 2020.[142]

Combination prevention packages and implementation guidance

38. In recent years, the UNAIDS Secretariat and Cosponsors and other stakeholders, including civil society organizations, have made significant efforts to describe the synergies between the different interventions and show how combination prevention packages can be tailored for specific population groups.[143] All recommended HIV prevention service packages are based on existing conceptual frameworks, such as ecological models of health that acknowledge the importance of individual risk, peer and family influence, along with societal and structural factors.[144] All core packages contain a combination of condom provision and promotion, testing and treatment interventions, as well as demand generation and behavioural elements, and require strong community empowerment. In addition, they need to be linked to a wider system of critical enablers, in particular health systems strengthening, education, social protection, supportive legislation, programmes that address stigma and discrimination, and programmes that reduce violence and change harmful gender norms. Inclusion of other biomedical components such as PrEP, voluntary medical male circumcision and harm reduction depend on the epidemiological and geographical context, and the specific populations that are at risk.[145]

39. Guidance and implementation tools—including for sex workers,[146] gay and other men who have sex with men,[147] people who inject drugs[148], persons in prisons and other closed settings[149,150] transgender people,[151] adolescent girls and young women[152]—have been developed for programmes that can implemented with and by those population groups. The guidance describes the required actions and provides examples of community empowerment, geographic focus and planning, community-based and clinical service delivery, monitoring and programme management. The new strategic framework for VMMC2021[153] also includes guidance for including VMMC in other service packages for men and boys, for example ones that provide sexual and drug use counselling, address gender norms, promote condom use, or provide HIV testing and referrals for treatment. The

International Technical Guidance on Sexuality Education provides a comprehensive review of the goals, objectives, outcomes, content and implementation approaches for planning and delivering comprehensive sexuality education programmes as part of an HIV response.[154]

40. There is strong consensus on what works in HIV prevention, based on the evidence accumulated over more than two decades. The update provided here has highlighted recent research findings. In addition, a robust set of implementation guidance and reference materials is available for use by countries, donors and national programmes as they invest in and scale up effective HIV prevention.

WHY SUFFICIENTLY LARGE-SCALE PREVENTION HAS NOT YET HAPPENED

Despite wide consensus on what works in HIV prevention and a large body of implementation guidance, there are wide gaps in the implementation of prevention programmes at scale. Good practices exist, but they often have remained the exceptions. Three interconnected reasons seem to underpin the failure to implement effective programmes at scale: lack of political commitment and, as a result, inadequate investments; reluctance to address sensitive issues related to young people's sexual and reproductive needs and rights, and to key populations and harm reduction; and a lack of systematic prevention implementation even where policy environments permit it.

Previous documentation of prevention gaps and efforts to address them

41. In 2010, the UNAIDS High-Level Commission on HIV called for a prevention revolution. The scientific knowledge available at the time convinced Commissioners that much greater progress on HIV prevention could be achieved if broad political support could be generated. The Commission's manifesto advocated for bold targets, which were ultimately adopted at United Nations General Assembly Special Session in 2011. Those targets included halving the number of new HIV infections acquired through sexual transmission and injecting drug use between 2010 and 2015. Four key elements were identified for the prevention revolution: a rapid increase in practical prevention actions; efforts focussed where the epidemic is most severe; accountability of leaders; and protection of human rights.[155]

42. The Commission's work led to significant global political mobilization for HIV prevention, but only a few countries, such as Kenya, appear to have launched their own prevention revolution roadmap in line with the Commission's recommendations. In 2013, at the mid-point between the 2011 and 2016 Political Declarations, UNAIDS warned that prevention responses were not achieving sufficient momentum, and that some programmes were weakening.[156]

43. In 2014, the UNAIDS-Lancet Commission on Defeating AIDS and Advancing Global Health noted that significant reductions in new infections were not materializing because effective HIV prevention interventions were not being used at a large-enough scale.[157] The Commission noted that HIV funding priorities were predominately focused on HIV treatment at the expense of prevention, and this meant that fewer than one in five people at risk of HIV infection had access to effective prevention programmes. Despite strong evidence supporting combination prevention approaches, most national and sub-national programmes were heavily reliant on new biomedical approaches and did not include sufficient efforts to address the underlying causes of the HIV epidemic. The Global Commission on HIV and the Law had warned, in its 2012 report, that scientific break-through would not fundamentally change the trajectory of the epidemic without a new focus on implementing evidence-informed laws, policies and practices that protect at-risk communities.[158]

UNAIDS *Prevention gap report*

44. The 2016 UNAIDS *Prevention gap report* showed that the scale up of services to prevent mother-to-child transmission of HIV had not been matched with a scale up of other key prevention programmes, leaving sizable gaps across the five pillars of combination HIV prevention programmes:[159]

    i. Combination prevention, including comprehensive sexuality education, economic empowerment and access to sexual and reproductive health services for young women and adolescent girls and their male partners in high-prevalence locations.

    ii. Evidence-informed and human rights-based prevention programmes for key populations, including dedicated services and community mobilization and empowerment.

    iii. Strengthened national condom programmes, including procurement, distribution, social marketing, private-sector sales and demand creation.

    iv. VMMC in priority countries with high levels of HIV prevalence and low levels of male circumcision, as part of wider sexual and reproductive health service provision for boys and men.

    v. PrEP for population groups at higher risk of HIV infection.

45. The geographic coverage of intensive and comprehensive programmes targeting adolescent girls and young women and their sexual partners remains far too low. One result is that too many young people lack the knowledge they need to make informed decisions about their sexual health. In sub-Saharan Africa, only 26% of girls and 36% of boys possess comprehensive and correct knowledge about HIV.[160] The DREAMS ("Determined, Resilient, Empowered, AIDS-free, Mentored and Safe women") programme initiated by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) aims to reduce HIV infections in 10 sub-Saharan African countries by empowering young women and girls and reducing their vulnerability to HIV.[161] The programme is expanding to additional geographic areas, and five additional countries have received funding for DREAMS-like activities. These investments aiming to reduce new infections in adolescent girls and young women are complemented by the Global Fund to Fight Aids, Tuberculosis and Malaria (Global Fund), governments and other partners Despite this concerted effort, however, national programmes still fall short of the coverage and intensity needed to significantly reduce new HIV infections nationally in countries with large epidemics in this group.

46. There is also limited reach of tailored programmes targeting key populations—for instance sex workers in low-income countries and particularly in sub-Saharan Africa where infection rates are highest.[162] Key harm reduction services are not available in many of the countries where injecting drug use has been documented.[163] A number of countries have not yet estimated the size of their key populations and are unable to set meaningful targets for the number of persons that should be reached with combination prevention.[164]

47. Progress in the provision and use of male and female condoms has generally stalled. The condom gap in sub-Saharan Africa was estimated at more than 3 billion male condoms a year in 2016, roughly 50% of the estimated need, and investments in condom marketing and promotion have been shrinking.[165] Partially as a result, there are large differences in condom use with non-regular partners, ranging from 41% in Mozambique to 85% in Zimbabwe among men, and 34% in Mozambique to 76% in Lesotho among women.[166] Only a few countries—Brazil, South Africa and Zimbabwe among them—promote and distribute female condoms at significant scale, and there has been no significant expansion in the global market in the past 15 years. After a period of rapid expansion, annual uptake of VMMC in 14 priority countries declined in 2015 compared to 2014.[167]

48. The promise of one of the newest tools in the HIV prevention arsenal, PrEP, is only just beginning to be seen as a handful of countries move forward from successful PrEP demonstration projects to full regulatory approval and programme rollout. Considerable additional effort will be required to reach the global target of 3 million people at substantial risk of HIV infection accessing PrEP by 2020.

49. The potential preventive effect of ART has not yet been fully realized, as coverage of ART among people living with HIV remains too low: 38% [35–41%] of people living with HIV globally d not know their HIV status and 62% [59–65%] of people living with HIV globally are not virally suppressed.[168] This means that almost two thirds of people living with HIV, including many of those who recently acquired the virus, are at risk of transmitting the virus unless they are provided with the prevention tools and use them to prevent transmission.

Reasons for persistent failure to bring HIV prevention programmes to scale

50. Various analyses and reports, including the UNAIDS 2016–2021 strategy, point to three interrelated reasons why large-scale implementation of effective prevention programmes has often failed: (i) a lack of political commitment and a resulting lack of sufficient investments; (ii) a reluctance to meaningfully address sensitive societal issues, such as the sexual and reproductive health needs of young people, gender norms and key populations, and to provide an enabling environment for effective prevention, and; (iii) a lack of systematic implementation, managerial oversight and accountability of prevention programmes.[169]

Inadequate political commitment and investments

51. UN Member States committed in the 2016 UN Political Declaration to allocate an average one-quarter of total HIV resources to prevention. However, the 2016 *Prevention gap report* provided several examples where prevention investments (excluding PMTCT) by national Governments and donors comprised less than 10% of total HIV investment. In-country allocations of the two major donors, PEPFAR and the Global Fund, amounted to about 13–16% of total HIV funding, although significant additional PEPFAR central funding was not included in the analysis.[170] A study of Global Fund grants prepared on behalf of the International Council of AIDS-Service Organizations and the Eastern Africa National Networks of AIDS Service Organizations for this PCB confirmed those findings.[171] Preliminary assessment of recent Global Fund proposals suggests that the share of prevention financing for future grants may be even lower, mainly because of large treatment and laboratory budgets that crowd out prevention spending.[172]

52. Donor investments in key populations programmes, community responses and condom programmes have been particularly low, with 4% of PEPFAR[173] and around 7% of Global Fund[174] budgets allocated to HIV prevention for and with key populations, and less than 1% to condom procurement, promotion and programming respectively.[175] Analysis of the most recent rounds of PEPFAR and Global Fund allocations are ongoing.

53. Domestic investment trends are even more concerning. In recent years, donors have financed the majority of HIV prevention activities in many middle-income countries with HIV epidemics that are concentrated in key populations, including countries such as Bangladesh, Guatemala, Malaysia and Ukraine.[176] Notable exceptions include countries such as Brazil and India, where virtually all HIV programmes, including prevention for key populations, are funded domestically. In 2016, Ukraine began funding opioid substitution therapy programmes out of the state budget started for first time.[177] Following the thematic segment of the 37th meeting of the PCB, UNAIDS Board has called for greater shared responsibility and global solidarity in the financing of HIV programmes. This includes prevention programmes for key populations.

Reluctance to address sensitive issues

54. Another reason why sufficient prevention scale-up has not materialized is the reluctance of countries to deal with sensitive societal issues in meaningful ways. Legal and policy barriers to successful scale-up and wide uptake of HIV prevention services persist in many countries, although improvements have been made in some. Laws that require third-party authorization for accessing sexual and reproductive health services continue to deny many adolescent girls and young women the information and services they need to stay healthy and HIV free. Seventy-two of the 90 countries with available data in 2016 required young people to obtain the consent of parents or legal guardians in order to access one or more sexual and reproductive health services, and 58 countries required the consent of parents or legal guardians for accessing HIV testing.[178] Laws and practices related to women's property and inheritance rights, which disempower women, and rules and regulations prohibiting access to sexual and reproductive health remain commonplace and have proved difficult to dislodge.

55. Punitive laws, policies and practices affecting key populations block their access to HIV-related services. This is particularly true for laws and policies that criminalize drug possession and use, sex work, same-sex sexual relations, cross-dressing or activities considered to be imitating the opposite sex. For example, when possession of injecting equipment or condoms is used by criminal justice systems as evidence of drug use or sex work, people at high risk of HIV infection are less likely to use those prevention tools.[179,180,181] Criminalization of same-sex sexual acts may deter gay and other men who have sex with men from seeking out HIV prevention, testing and other services,[182]and criminalization and penalization of sex work makes it more difficult for sex workers to access HIV and sexual and reproductive health services.[183] In some countries, recent changes to laws and law enforcement practices have had a negative impact on HIV prevention by restricting and deterring access to services.[184]

Lack of systematic implementation

56. In contrast to ART and prevention of mother-to-child transmission programmes (PMTCT), most countries have not put in place systems to systematically implement large-scale (primary) prevention. Enabling environments are important, but community and facility-based prevention programmes that are tailored to the needs of different population groups can operate even if the legal environment is not perfectly conducive. The largest key population programme in the world, in India, for instance, has empowered sex workers to organize and protect themselves despite a legal and policy environment in which soliciting commercial sex remained illegal and police often used various regulations including the so-called public nuisance act to various regulations to harass and arrest sex workers.[185] Effective programmes and services for gay men and other men who have sex with men can be provided even where homophobia remains strong.[186] South Africa has massively scaled up condom distribution in recent years, including through projects in schools including by using peer educators, school health services and referrals to outlets outside schools,[187] despite widespread resistance from many parents and school authorities. Ethiopia and Kenya have successfully scaled up VMMC among communities even though male circumcision had not been a common cultural practice.

57. Such examples show that prevention scale-up is possible, and that it can be done rapidly if political will, sufficient funding and implementation capacity exist. In India, the number of sex workers reached with targeted and largely community-led programmes increased from 30 000 to more than 350 000 between 2004 and 2008.[188] In South Africa's KwaZulu-Natal province, the number of condoms distributed rose from 8.2 condoms per adult male (>15 years) in 2010 to a provincial average of 59.1 condoms per adult male in 2014,[189] after programme planners had noticed a drop in condom use among youth in a national

survey.[190] In Mozambique, the number of voluntary medical male circumcisions performed increased from just 100 in 2009 to almost 200 000 in 2015.[191]

Condom programming in KwaZulu-Natal, South Africa

Between 2008 and 2010, only 8 condoms were being distributed per male per year in KwaZulu-Natal, the province with the highest HIV prevalence in South Africa. In Western Cape province, meanwhile, almost 40 condoms were distributed per male per year. The Government embarked on a large-scale effort that involved massive distribution at identified "hot spots", re-invitalization of the existing "Choice" brand with a new line of coloured and flavoured condoms, the use of subnational data to plug gaps in distribution, and strengthening of the supply chain by partnering with South African Breweries. As a result, condom distribution increased to almost 60 condoms per adult male in 2014.

Source: On the Fast-Track to end AIDS by 2030: focus on location and population. Geneva: UNAIDS; 2015.

58. Unfortunately, these examples are not yet the norm, as many prevention programmes remain too small in scale, and too scattered and poorly coordinated among different implementers who may be operating without national oversight. Programmes targeting key populations exist, including in most sub-Saharan African countries, and some have reached considerable scale—as in Ghana (see box),[192] where an estimated 60% of sex workers in Ghana are being reached with prevention services. Coverage of services was considerably lower, however, in the majority of the almost 30 case studies on key population projects gathered for this thematic segment. With some notable exceptions, such as programmes in Brazil,[193] Dominican Republic[194] and Switzerland,[195] most of the successful key population projects were reported by civil society organizations. Many governments may still lack the experience, policies and administrative procedures to systematically contract and fund, mentor and monitor civil society implementers.

Sex worker programme in Ghana

Ghana provides HIV interventions to female sex workers and gay and other men who have sex with men, despite laws that criminalize those populations. An initial, 1996 agreement between the Ministry of Health and WAPCAS, the implementing Ghana West Africa to Combat AIDS and STI called for adopting a "low-key" approach, since sex work (and homosexuality) was not socially accepted. After a year of implementation in Accra, a project focusing on sex workers expanded to Kumasi. By 2006, supported by a CIDA grant, the project was active at sites in 8 of Ghana's 10 regions. The approach involves community outreach and linkages to 21 sexually transmitted infection (STI) clinics established at health facilities to provide services to female sex workers and other clients. There is collaboration with the police which is being sensitized to sex workers' and other key population's rights. HIV prevalence among sex workers in Ghana declined from 34% in 2006 to 7% in 2015.

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59. There are other examples of small but innovative projects, including two involving friendly spaces for gay and other men who have sex with men in Morocco[196] and Paraguay,[197] a project with transgender women in India, and projects that aim to empower community leadership and women in Guatemala[198] and Canada.[199]

Sexual health centre for gay and other men who have sex with men in Marrakesh, Morocco

Responding to the increased HIV risk among men who have sex with men in Morocco, *Association de Lutte contre le SIDA*, an NGO, established a programme for and with gay and men who have sex with men in the 1990s. However, the service packages and delivery approaches were considered inadequate, partially because of a hostile legal environment. Homosexual activity is punishable with between 6 months and 3 years imprisonment in Morocco, and gay and other men who have sex with men lacked spaces where they could discuss their sexuality and sexual health. Backed with the permission of local authorities, the NGO in 2010 opened the first sexual health centre "Dar El Borj" in Marrakesh. It provides a range of health and psychosocial services, including HIV counselling and testing and STI diagnosis, and mental care. Six hundred sixty-five men have registered with the centre, and about 60 more join every year.

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60. No national government proposed case studies on condom or VMMC programme scale-up for this segment, with PEPFAR submitting the only two cases. This may reflect a lack of domestic attention and commitment to such programmes. By contrast, a programme entitled "Fight against STIs, HIV, AIDS and early pregnancies in school settings" in Côte D'Ivoire,[200] is remarkable not only because it is one of the few that describe larger-scale integrated efforts to prevent HIV and unintended pregnancy among adolescent girls, but also because it demonstrates impact (see box).

Prevention of teenage pregnancy and HIV in school settings in Côte d'Ivoire

Almost 100 cases of HIV infections and more than 5,000 cases of teenage pregnancy were reported among adolescent pupils in Côte d'Ivoire in 2012–2013. To address this situation, the Government launched a "zero pregnancy at school" campaign, which involved adding life skills and sexual and reproductive health modules to school curricula, engaging political and religious leaders, communities and parents, reviewing legislation regarding the protection of girls against harassment and violence, a multimedia campaign, and the provision of integrated and quality HIV and sexual and reproductive health services in schools, including male and female condoms and emergency contraception. More than 135 000 girls were reached, and 80 000 of them used modern contraceptives. Teenage pregnancies decreased by 25%.

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61. Where the political will exists to scale up programmes, a focus on key locations and populations, standard operating procedures, and a strong monitoring system can provide the necessary rigour to enable prevention programme to demonstrate coverage and impact. India's Management Model for Prevention for Key Populations through Civil Society Organizations is an example of a system that includes supportive monthly supervision and mentoring, quarterly grading of implementers on critical performance indicators, and periodic third-party evaluation.[201] The Kenya "situation room", originally set up to track HIV treatment performance, will now also include real-time monitoring of NGO implementation and condom distribution, among other activities.[202] Another excellent example of how

monitoring can lead to quality improvements in HIV programmes is documented in “Quality Action: Improving HIV prevention in Europe”.[203]

62. In a recent *Lancet HIV* article, HIV prevention focal points from global agencies and other experts listed common factors of success and requirements for systematic and rapid scaling-up of combination prevention programmes and issued a call for action.[204] The requirements included: strengthened national prevention frameworks that define population and location priorities; national and sub-national prevention targets against which programmes are implemented; evidence-informed design of services and demand creation; defined service packages and standard operating procedures; capacity to contract, monitor and mentor civil society implementers; and regularly updated (if possible real-time) programme data.

63. The article also describes critical core skills and capacities required to successfully manage large-scale prevention programmes, including in strategic epidemic, response, market and social analysis; translating evidence into policy and programmes; decentralized planning, implementation and tracking; design of effective interpersonal media and information technology-based communications; selecting, contracting and management of NGOs; community engagement; and prevention commodity procurement and supply chain management. Gaps in prevention programme management and implementation capacity need to be assessed and filled if scaling-up is to be successful.

NEW INITIATIVES, OPPORTUNITIES AND CHALLENGES

Several recent developments provide new opportunities, along with new challenges to the HIV prevention agenda. They include the opportunity to link up with constituencies that pursue the Sustainable Development Goals (SDGs), many of which are highly pertinent to the AIDS response; opportunities and challenges to integrate HIV primary prevention into universal health coverage schemes; the UNAIDS Strategy, which focuses strongly on primary prevention alongside treatment; and several HIV-specific initiatives. The 2016 International AIDS Conference in Durban, South Africa, generated fresh momentum for HIV prevention. There is growing recognition that the right to HIV prevention is an element of people's right to health. Technological advances such as PrEP, the widespread use of new social media and creative HIV testing approaches have the potential to add new momentum to prevention.

64. Several recent developments and initiatives carry the potential of generating stronger momentum for HIV prevention. However, new risks and challenges also need to be taken into account. The disappointingly slow decline in new infections among adults during a period of rapid treatment scale-up confirms that primary HIV prevention remains critically important.

The right to HIV prevention

65. The right to prevention is an important element of people's right to the highest attainable standard of health, and should be used to advocate for access to effective and unhindered HIV prevention and treatment services.[205] The right to health includes freedoms and entitlements. Freedoms include the right to control one's health and body, including sexual and reproductive rights, and entitlements include the right to a system of health protection that affords everyone an equal opportunity to enjoy the highest attainable level of health.[206] Everyone should have the freedom to choose and access HIV prevention methods that fit their needs and circumstances and to be empowered to protect themselves from HIV infection.

The Sustainable Development Goals

66. To achieve their full potential, HIV prevention efforts need to link with broader efforts to achieve the 2030 Sustainable Development Agenda. The UNAIDS Strategy 2016–2021 result areas correspond to several SDGs, including SDG 3 on health and wellbeing, SDG 4 on adequate education, SDG 5 on gender equality, and SDG 10 on reduced inequality. Improved high-quality education, including comprehensive sexuality education, can empower young people and promote improved health outcomes, and HIV-sensitive universal health coverage can play a vital role in promoting health equity. Integration of HIV services with services for sexual and reproductive health and rights, non-communicable diseases and tuberculosis (TB) can improve both HIV and health outcomes generally.[207] Protection against discrimination, along with access to legal services, rights literacy, and justice and international protection can empower people to claim their rights and can enhance access to HIV services, in line with SDG 10 and SDG 16. Partnerships (SDG17) are also critical, since new and strengthened alliances across sectors and stakeholders are needed for successful scale-up of HIV prevention (see next section).

67. Focusing on the populations and locations that are most affected is vital for HIV prevention and the Sustainable Development Agenda. Commitments made in 2013 by 20 Ministries of Health and Education for improving access to comprehensive sexuality education and

youth friendly health services were re-affirmed at the 2016 International AIDS Conference, but gaps remain in girls' secondary school education attendance and completion. Less than half of girls in countries such as Lesotho, Malawi, Mozambique, Swaziland, Uganda and the United Republic of Tanzania are able to complete lower secondary education.[208]

68. Social protection programmes, including those that empower women, are expanding. Almost every country in sub-Saharan Africa now operates some kind of cash transfer programme. However, coverage is uneven and many of the programmes are small in scale and do not reach the majority of those most affected by HIV.[209] Despite the laudable efforts of global, regional and country-level development agencies, the strongest voices advocating for access to services and legal support for key populations still come from within the HIV response, including from key populations themselves.

69. The integration of HIV prevention in strategy papers and work plans of existing sexual and reproductive health initiatives (such as the FP2020, Every Woman Every Child, or the Global Financing Facility) can be strengthened further in key areas, such as HIV prevention among adolescents and adults, and access to sexual and reproductive health services, including triple protection against HIV, STIs and unwanted pregnancies. The Children Investment Fund recently provided funding to the UNAIDS Secretariat to analyse and develop strategies for maximizing the integration of sexual and reproductive health and HIV services.

Universal health coverage

70. Universal health coverage schemes are opportunities to expand HIV prevention. Health insurance schemes in middle- and high-income countries can, in principle, cover prevention commodities and services for insured individuals, such as for testing and treatment, VMMC and PrEP. Kenya is considering the inclusion of VMMC in its financing scheme,[210] while health insurance in France[211] and some insurers in the USA[212] now cover PrEP. Scotland recently approved PrEP prescriptions through its National Health Service. Elsewhere in the UK, individuals can receive consultations free of charge but are required to pay out-of-pocket for the medication (and typically buy it online).[213] Opioid substitution therapy is covered in the health insurance schemes of many European countries. The universal health coverage scheme in Thailand covers HIV testing and treatment for citizens. The provision of condoms and lubricants for gay and other men who have sex with men, transgender persons and sex workers, and condoms (but not lubricants) for people who inject drugs is covered through AIDS funds managed by the National Health Security Office.[214] Insurance schemes for universal health coverage are not likely to explicitly cover the cost of public goods such as community mobilization or condom promotion, nor do they cater to key populations and poor people in low-income countries.[215]

The 2016 Political Declaration and UNAIDS Strategy 2016–2021 commitments

71. The UNAIDS Strategy 2016–2021 calls for a strong focus on combination prevention.[216] The Strategy also informed negotiations among UN Member States on the 2016 Political Declaration on Ending AIDS, which includes a full set of primary prevention targets. New HIV infections are to be reduced to fewer than 500 000 by 2020 and to fewer than 100 000 in adolescent girls and young women. It will require major efforts to achieve those targets.

72. For the first time in the history of the AIDS response, prevention impact targets are underpinned by prevention programmatic and financing targets that indicate how these reductions can be achieved. Ninety per cent of key populations and young people at risk are to access combination prevention services by 2020. Twenty billion condoms are to be made available annually in low- and middle-income countries, with sub-Saharan accounting for an estimated one third of need. Three million people at high risk of HIV infection are to be enrolled in PrEP, and an additional 25 million men are to receive VMMC.[217] These targets are underpinned also by targets for the elimination of gender inequality and violence, young people's knowledge, skills and capacity to protect themselves, social protection and access to justice.

73. The 2016 Political Declaration also commits UN Member States to collectively invest US$ 26 billion annually in AIDS responses in low- and middle-income countries by 2020, with one quarter of total investment going towards HIV prevention and 6% supporting social enablers.

74. At the 2016 UN General Assembly Special Session on the World Drug Problem, Member States called for a health-oriented, human rights and gender-sensitive approach to drug control. They re-affirmed their commitment to ending AIDS by 2030 among people who inject drugs, and encouraged all countries to adopt and implement comprehensive services to address HIV and drug use.

International AIDS Society conferences

75. The 2016 International AIDS Conference in Durban, held soon after the UN High-Level Meeting on Ending AIDS, discussed key prevention topics, including HIV prevention for girls and young women and for key populations, including prisoners, and PrEP. The conference closed with a strong call for action, prompting hopes that the gathering would prove to be as important for the global HIV prevention agenda as the previous International AIDS Conference in Durban, 16 years earlier, had been for the HIV treatment roll-out.[218]

76. The conference has been followed by series of dedicated consultations engaging multiple stakeholders and country teams to further explore how to revitalize primary prevention, with a focus on southern and eastern Africa. Consultations have included recent meetings in Namibia[219,220] and a large regional experts meeting hosted by the Government of Zimbabwe and UNAIDS.[221] The 2018 International AIDS Conference in Amsterdam will be an opportunity to assess the momentum of efforts.

Regional, city and donor initiatives

77. The regional experts meeting in Zimbabwe was preceded by three ministerial meetings in 2016 which featured renewed commitments to strengthen HIV prevention and adoption of , a regional roadmap for revitalizing prevention in eastern and southern Africa.[222] In Latin America, at a joint regional meeting with the Caribbean in August 2015 in Rio De Janeiro, regional prevention and human rights targets were set and aligned with the UNAIDS Strategy.[223] Several countries in the region have established national HIV prevention targets for key populations, in line with the 2016 UN Political Declaration.[224] In Asia and the Pacific, a regional prevention project has focused mainly on the introduction of PrEP. These regional initiatives are providing fresh momentum for prevention. They now need to be translated into tangible changes at country level, including core national prevention targets against, increased funding for prevention and the scale up of programmes.

78. The UNAIDS Fast-Track Cities initiative is another opportunity for strengthening prevention. Many cities around the world are scaling up proven, high-impact HIV prevention services and addressing the needs of key populations. There are multiple examples of cities expanding outreach and condom distribution to key populations, increasing access to harm reduction, introducing PrEP, strengthening comprehensive sexuality education and establishing youth-friendly services, and creating friendly policy environments. More than 200 cities and municipalities have signed up to the Paris Declaration on Fast-Track Cities Ending the AIDS Epidemic, which commits them to achieve the 90–90–90 treatment targets, accelerate comprehensive HIV prevention and establish an environment free of stigma and discrimination.[225] The initiative now needs to clearly define primary prevention targets, alongside 90–90–90 treatment targets, including intended reductions of new infections, numbers (or proportions) of people who inject drugs, sex workers, gay men and other men who have sex with men and young people reached with and accessing sexual and reproductive health services including condoms and lubricants, harm reduction and PrEP.

79. The *Start Free Stay Free AIDS Free* framework may also be generating additional momentum. It builds on the success of the *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive*.[226] [227] The Global Plan galvanized global political will and national action for PMTCT, expanding coverage of services and reducing HIV infections among children aged 0–14 years. The *Stay Free* component of the new initiative focuses on achieving the commitment in the 2016 Political Declaration to reduce the number of new HIV infections among adolescent girls and young women to less than 100 000 per year. This component will require harmonization with other initiatives, such as DREAMS and ALL IN, and with existing UN guidance.

80. Two recent HIV donor initiatives have the potential to contribute to addressing the gaps in national prevention responses: the US$ 100 million PEPFAR Key Population Investment, announced in 2016, for which reviews of applications are underway; and the Global Fund's US$ 800 million catalytic funding for adolescent girls and young women, key populations, community rights, and gender and human rights during its 2017–2019 grant cycle.[228,229] To improve sustainability, these catalytic investments are offering funds that incentivize programming for key and vulnerable populations and human rights. Limited funding for centrally managed strategic initiatives will also be provided. These are important initiatives. Donors need to convert them into core prevention allocations, and national Governments need to gradually take ownership and institutionalize programmes.

Technological advances

81. Technological advancements themselves may have the potential to re-energize prevention programmes and perhaps even shift the course of the prevention effort. Some communities of gay men and other men who have sex with men have welcomed PrEP as an additional prevention option, and PrEP may also become an important prevention option for other populations at substantive risk for infection, including sex workers in sub-Saharan Africa, transgender women, and adolescent girls and young women in settings with very high HIV incidence. The 6 case studies on PrEP submitted for this segment from Brazil,[230] France,[231] Nigeria,[232] Morocco,[233] Thailand[234] and southern Africa[235] indicate the progress made towards introducing PrEP into national programmes, including risk assessments, pilot projects, advocacy for registration and actual roll-out. New female condoms with various colours, scents and flavours are becoming available and may increase demand.[236] New female-controlled prevention technologies such as the dapivirine ring are in the pipeline, and plans for a rapid introduction and roll-out should be developed.

PrEP in Thailand

In response to the continuing high HIV incidence among gay and other men who have sex with men and transgender women, Thailand included PrEP in its 2014 National Guidelines on HIV Treatment and Prevention. Several PrEP demonstration projects have been implemented, with PrEP offered initially at the Thai Red Cross AIDS Research Centre in Bangkok. Partnerships with civil society and community-based organizations and international funders were established, and 2 additional sites began to offer PrEP in Bangkok and Chiang Mai. As a result, the number of people using PrEP in Thailand increased from less than 10 in 2014, to 300 in 2015 and 2,000 in 2016. Plans for further scale up include enhancing the capacity of health care professionals to increase access to PrEP and determining the most suitable PrEP service models for scale up at national level.

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82. Self-testing and community-based testing could contribute to primary prevention if linked more systematically to prevention programmes for people who test HIV-negative. Supporting the testing of partners of persons living with HIV can be an effective way to facilitate both prevention in sero-discordant relationships and can support early diagnosis and linkage to ART. HIV self-testing has the potential to reach people who do not test in formal settings but are at high risk of infection, and can help link them to and retain them in prevention programmes. There are encouraging early results for self-testing to increase demand for VMMC and as a first step in seeking PrEP services.[237]

83. Furthermore, new HIV recency essays may help better target programmes. Gender disaggregated antenatal programme data can be used to identify geographic areas with large numbers of pregnant girls and young women and large number of new HIV diagnoses in order to target prevention interventions in those areas. If disaggregated HIV data are not available, data on school dropout rates and teenage pregnancy rates can be used to identify and target high-risk areas. The use of recency assays for identifying people with very recent HIV infections can pinpoint areas or populations with high rates of ongoing HIV transmission. Those areas or populations can then be targeted for increased condom education and distribution, VMMC and PrEP.

84. In addition, new information and communication technologies, including web-based and smartphone apps, have a huge potential to help create demand for prevention and to link people to services. The use of smartphones to access social media websites and apps is significant, with more than 40 countries reporting that over half their adult smartphone users are accessing social networks.[238] A consultation in Harare in 2015 explored the potential of using these tools for sexual and reproductive health and HIV prevention

programmes in countries with high HIV prevalence. In some countries, the use of mobile apps and social media platforms is particularly prevalent among gay and other men who have sex with men, with studies showing that as many as three quarters of gay men and other men who have sex with men have a Facebook profile and that they are twice as likely as their heterosexual counterparts to have a Twitter account.[239] This "connectivity" offers major opportunities for reaching this key population with information on sexual health and other services.

85. Information and communication technology (ICT) is also transforming the sex work industry, making it easier and safer for sex workers to work flexible hours and independently, without the need for a third-party agent. ICT provides sex workers with varied options and methods for organizing, sharing information and providing mutual support, and may even reduce the risk of police and client violence, abuse and harassment, though that hypothesis requires further research.[240]

THE ROLE OF DIFFERENT STAKEHOLDERS IN HIV PREVENTION

Effective prevention responses continue to require the active engagement of government sectors other than health, such as education, social welfare and justice, as well as a strong response from civil society response and the private sector. Regardless of the prevention architecture in a given country, comprehensive results frameworks and strong prevention management and coordination capacity are needed to ensure that programmes are implemented at scale an reach in need. The co-sponsored Joint Programme, with its diversity and comparative strengths, is uniquely placed to oversee a new focus on HIV primary prevention and to assist countries in strengthening their programmes.

86. Multisectoral and multistakeholder engagement remains critical to the success of HIV prevention efforts, with the health sector, other government sectors, civil society and private sector all playing crucial roles, and UNAIDS and Cosponsors providing strategic support.

Government sectors

87. In most countries, the Ministry of Health or multisectoral national AIDS committees coordinate and oversee the national AIDS response. Where national AIDS committees exist, they focus largely on liaison with other sectors and partners, including civil society, and on monitoring and evaluating the response. The Ministry of Health typically take the lead on health sector interventions, such as VMMC, HIV testing and treatment and PrEP. Condom programmes may be led by Ministries of Health or as part of family planning portfolios.

88. Irrespective of a country's prevention architecture, there is a need for comprehensive results frameworks and adequate prevention management capacity to achieve a consistent focus on providing tailored packages of quality services to the populations and locations with the greatest need. UNAIDS and partners in Kenya and Zimbabwe, for example, are piloting a prevention assessment checklist that covers elements such as the overall prevention framework, targets, priorities, implementation, capacity and coordination with the aim of helping to identify and address gaps.

89. The education sector plays a key role. Girl's secondary school attendance is proving to be a key factor in reducing HIV risk, and comprehensive sexuality education for adolescents is critical for combination prevention strategies and linkages to components such as VMMC. Integrating HIV considerations in the sector and strengthening school health service platforms is a promising way to reach young people and address their needs. Led by UNESCO, the Joint Programme is working with the education sector to integrate HIV-sensitive indicators in national education management and information. In 2013, Ministries of Education and Health in southern and eastern Africa committed to ensure quality and comprehensive sexuality education and youth-friendly sexual and reproductive health services in their region. Several steps have already been taken towards that goal.[241]

90. Ministries of Social Welfare and Gender can play important roles in protecting the rights of vulnerable people, boosting the economic empowerment of women and poor households, and helping to prevent and treat gender and sexual based violence.[242] As signatories to the Commission on the Status of Women Resolution 60/2 on Women, the Girl Child and HIV and AIDS,[243] Ministers of Gender requested the Southern African Development Community Secretariat to support the development of a regional programme of action to address the gender inequality driving the HIV epidemic among women and girls.[244] The programme of action is focused on promoting equal economic opportunities and decent work for women and girls; ensuring the full engagement of men and boys; promoting completion of girls'

education; addressing gender-based violence; and scaling up comprehensive sexuality education and sexual and reproductive health services.

91. In 2014, the World Bank and the UNAIDS Secretariat hosted a consultation with Ministries of Social Welfare to explore how social protection programmes can serve the needs of adolescent girls and young women at risk of HIV. Participants called on Governments and national and regional partners to strengthen social protection, including cash transfers, for the health, education and employment of girls and young women.[245]

92. Wherever key populations are at high risk of HIV, Ministries of Justice and Ministries of the Interior, parliamentarians, drug control agencies, local authorities and law enforcement agencies have major roles in achieving a supportive legal and policy environment for HIV prevention. Myanmar's Ministry of Home Affairs, supported by the United Nations Office on Drugs and Crime and the UNAIDS Secretariat, has formed Harm Reduction Township Steering Committees in areas with high prevalence of drug use, such as Kachin and Shan States. The Committees include local representatives of law enforcement and health sectors, civil society and community groups, representatives of drug users, and religious and community leaders. Their aim is to improve coordination, increase the coverage of harm reduction services and collaboratively identify and deal with pressing issues.[246] In Malaysia, where opioid substitution therapy and needle-syringe programmes are a "cornerstone of the Government's HIV prevention strategy",[247] a standard operating procedure on needles and syringes has been issued so that police "avoid taking action that would discourage individuals from obtaining sterile needles and syringes".[248]

93. In Zimbabwe, the Constitutional Court of Zimbabwe has ruled that a group of women arrested on suspicion of sex work had been denied their constitutional rights.[249] The ruling was widely seen as a rebuke for police harassment of suspected sex workers and as a step forward in facilitating sex workers' access to health services. As part of follow-up on legal environment assessments done in 52 countries, UNDP has assisted line ministries and Parliaments in Belize and Seychelles in passing legislation that decriminalizes sex between men.

Civil society

94. Community engagement remains a fundamental aspect of HIV prevention, with civil society playing a major role in advocating for and implementing programmes. The health sector cannot effectively pursue a national HIV prevention strategy in isolation from other government sectors, nor can governments effectively implement HIV programmes in isolation from civil society and affected communities. Advocacy networks and civil society implementers have been key allies throughout the AIDS response, and need to continue playing a central role in HIV prevention.

95. In many countries, civil society organizations representing gay men and other men who have sex with men advocate for HIV programmes that affirm and promote the rights of this community, including people's rights to health and dignity and to live free from violence, discrimination and stigma. They also campaign for national health plans that recognize the elevated HIV risk and vulnerability of gay and other men who have sex with men, and that ensure that health services are safe, available, affordable, acceptable and accessible.[250] In Venezuela, before the current political crisis, for example, such advocacy had resulted in improved quality of care in clinics, with service-providers starting to provide non-discriminatory, responsive and confidential care for members of sexual minorities.[251]

96. Similarly, sex worker organizations are strong advocates for their rights and important contributors to strategies that can increase access to HIV prevention services. The Global Network of Sex Work Projects (NSWP) has member organizations in 81 countries, 15 of which are represented on Global Fund Country Coordinating Mechanisms. NSWP co-authored the Sex Worker Implementation Tool, which provides practical guidance on HIV

and STI programming for sex workers, including condom and lubricant programming.[252] Condom use is vital for sex workers' occupational health, and sex workers typically report higher levels of condom use than other key populations. However, greater support is needed to increase access to more affordable and varied supplies, and to remove punitive laws such as those enabling the possession of condoms to be used as evidence of sex work.[253]

97. People who inject drugs have also been instrumental in advocating for their own rights, including access to harm reduction services, often in hostile legal and social contexts. Without those efforts, harm reduction services would not be available at all in some countries.[254] For example, the Eurasian Harm Reduction Network and the Eurasian Network of People Who Use Drugs have successfully urged governments in central and eastern Europe and in central Asia to expand harm reduction, including programmes addressing gender inequality, beyond the small pilot schemes funded by international donors.[255]

98. Young women's organizations have also become strong advocates for HIV prevention. Utilizing social media such as WhatsApp and Twitter conversation, the WhatWomenWant platform, established by the Athena network, has been facilitating discussions on HIV prevention among adolescent girls and young women in Kenya, Malawi and Zimbabwe.[256]The International HIV Alliance Link-Up initiative advocates for and helps young people exercise their sexual and reproductive health rights.[257] Networks of women living with HIV have proven to be strong advocates and add vital perspectives to the prevention agenda.

99. In addition to their role as advocates, nongovernmental and civil society organizations are increasingly recognized as effective implementers of rights-based HIV prevention services for key populations.[258,259] Key population organizations have participated prominently in the development of implementation guidance tools. In 2016, UNAIDS reviewed the experiences of six countries where community-based HIV programmes (particularly for prevention) ahd been supported through a variety of mechanisms, including direct allocation of domestic and Global Fund resources to civil society organizations.[260] The review found that successful programmes had formed strong partnerships between government and community-based organizations, fostered community engagement in the response to HIV, decentralized services to local level and focused investments on hard-to-reach populations.

Private sector

100. The private sector is increasingly recognized as a valuable partner in HIV prevention. In South Africa, for instance, some mining corporations provide family housing to reduce spousal and family separation,[261] a move that may also help reduce HIV-related vulnerability and risk.[262] Manufacturers of branded and generic PrEP medicines have shared information on manufacturing capacity, pricing and regulatory issues.[263] The medium- and long-term future of condom access in the developing world requires robust private sector sales within a total market approach. While the private sector market share of condoms is likely to remain small in many high-prevalence countries in the short term, efforts are underway to establish public-private partnerships for the development of sustainable markets and distribution systems outside the public sector.[264,265]

101. The information and communications technology sector, including interactive social media platforms and dating apps, is a potentially valuable contributor to the prevention agenda. That potential could be realized through collaboration between Governments, telecommunications corporations and programme implementers. There have been recommendations to UN agencies to initiate a dialogue with international regulatory bodies for the telecommunications sector, Governments and health NGOs to set ethical standards that would govern pricing for health communications that are delivered to mobile phones. Departments of Health have also been encouraged to request telecommunications companies to incorporate support for e-health initiatives into their licensing agreements.[266]

The Joint Programme

102. The UNAIDS Joint Programme was established to leverage the comparative advantages of 11 cosponsoring UN agencies, and to mobilize those various sectors and build partnerships. It was also expected to develop evidence-based guidance and to provide technical support to countries' HIV prevention programmes. Within the UNAIDS Division of Labour, UNFPA and the World Bank convene on reducing sexual transmission of HIV, focuses on HIV prevention among people who inject drugs and in prisons and other closed settings, UNDP and UNFPA work on empowering gay and other men who have sex with men, sex workers and transgender people to protect themselves from HIV infection, and UNICEF and UNFPA focus on HIV protection for young people. UNFPA also convenes specifically on condom supply and distribution and (together with UNDP, UNODC and WHO) on key populations. UNESCO focuses on comprehensive sexuality education and the education sector, while UNDP works for the removal of legal barriers to prevention, addresses stigma and discrimination, and supports the expanded access to justice programmes. WHO leads on health sector programmes and biomedical interventions, and UNDP, UNFPA and UN Women jointly work to meet the HIV needs of women and girls, and to halt sexual and gender-based violence. UNHCR and WFP co-convene on populations affected by humanitarian emergencies. The UNAIDS Secretariat is responsible for coordination, coherence and partnership building across all those areas.

103. Considering the multisectoral nature of HIV responses, and of primary HIV prevention in particular, the divisions of labour all remain relevant. The rationale for the mandates and roles of the Joint Programme remains strong, and exemplifies SDG17. Several organizations have worked together to issue the harmonized guidance referred to in earlier sections, and have organized policy dialogues and capacity building around key issues. Technical support for prevention strategies has been uneven, however. While there has been significant support for key population programmes, an informal survey of UNAIDS Technical Support Facilities in 2016 showed that little specific support had been provided through that mechanism to strengthen countries' national condom, VMMC or PrEP programmes or to strengthen HIV prevention programmes for adolescent girls and young women.[267] Some support has however been provided directly to countries, by technical agencies such as WHO. The Joint Programme should strengthen its provision of technical

support for prevention, address relevant policy issues and programme components, and focus its resources where the need is greatest.

TOWARDS A GLOBAL PARTNERSHIP FOR HIV PREVENTION

A new effort to reinvigorate primary HIV prevention is needed urgently. Such an effort can build on lessons learned through other successful initiatives such as the Global Plan, as well as previous prevention initiatives. The overarching goal of the coalition would be to strengthen and sustain political commitment for primary prevention by setting a common agenda among key policymakers, funders and programme implementers, and establishing accountability for delivering services at scale to achieve the targets of the 2016 Political Declaration.

A sense of urgency

104. The need for a new push to reinvigorate primary HIV prevention is clear. Globally the annual number of new HIV infections has not decreased significantly in recent years, HIV programmes are not at sufficient scale and budgets do not allocate adequate shares of resources to HIV prevention. The 2011 Political Declaration prevention targets were missed, and efforts are currently not on-track to achieve the prevention programme coverage and incidence-reduction targets in the 2016 Political Declaration.[268] Epidemiological models show that a balanced approach, including high coverage of a combination of high-impact HIV prevention interventions and continued scale up of treatment, is needed to end AIDS by 2030.[269] At the same time, there are important opportunities that must be taken.

Learning from previous experiences

105. Experience from the 2011–2015 implementation period shows that it is not enough to set ambitious (impact) targets to reduce new HIV infections as part of a Political Declaration and disseminate evidence about effective HIV prevention programmes. The treatment and PMTCT scale-up initiatives sustained political commitment and boosted scale up efforts by developing global operational targets and national monitoring and evaluation frameworks which clearly linked programme achievements to impact measures, such as reductions in AIDS-related deaths.[270]

106. Additional lessons can be learned from the Global Plan, which successfully catalyzed the scale-up of PMTCT services that led to steep reductions in new HIV infections among children. The Global Plan was developed by a global task team comprising the Governments of priority countries, donors, the UN and other key stakeholders. It was launched as a major global initiative and included pledges of financial support. Comprehensive progress reports and annual stakeholder meetings helped maintain commitment across the five-year period of the Global Plan.

107. The inclusion of a set of operational and financial targets for HIV prevention in the 2016 Political Declaration lays a strong foundation for generating new momentum. It is now possible for countries and partners to hold each other accountable for concrete progress. The UNAIDS 2016–2021 Strategy further elaborates key results areas, such as demand creation for traditional and new prevention technologies; addressing laws, policies and norms that undermine the sexual and reproductive health and rights of adolescents and young people, as well as key populations; strengthening prevention programme oversight and management; and ensuring sufficient investments to reach one quarter of global total HIV investments. The strategy also commits the Joint Programme to strengthen multistakeholder partnerships that engage Governments, civil society, the private sector, the scientific community, foundations and local authorities to mobilize and share knowledge, expertise, technology and financial resources.[271]

HIV Prevention 2020 framework

108. The complexity of primary prevention remains challenging. The milestones, targets and result areas described earlier need to be synthesized into a simple framework that can galvanize global commitment and stimulate national and subnational levels to set targets, allocate resources and establish solid monitoring and evaluation frameworks, including clear baselines. There needs to be clarity about the intended results so that progress can be monitored and compared across countries. The HIV Prevention 2020 framework proposed in the *Lancet HIV* advocates for adjusted national results frameworks to ensure access to combination prevention for 90% of key populations and priority groups; strengthened prevention management systems; simple subnational implementation plans; and streamlined delivery of community-based programmes with empowered communities participating in delivery. The framework also calls for a global plan or roadmap with a concise results framework. A coalition of priority country leaders, donors and other stakeholders would agree on strengthened accountability, and scorecards would be developed to track outcomes in priority countries.[272]

Towards a global prevention coalition

109. In December 2016, the UNAIDS Executive Director announced the establishment of a global partnership to stimulate action across the five pillars of combination HIV prevention. Drawing on the models of the Global Plan and the 90–90–90 initiative, the global prevention partnership will include political leaders of the countries with the highest numbers of new HIV infections, as well as implementers and communities. The overarching goal of the coalition will be to strengthen and sustain commitment for primary prevention. It will do so by setting a common agenda among key policymakers, funders and programme implementers. They will hold each other accountable for delivering services at the scale and intensity needed to achieve the targets of the 2016 UN Political Declaration.

110. The inaugural meeting of the global prevention partnership is planned for October 2017. It is intended to create a dynamic platform for exchange between HIV prevention champions and implementers. It will also propose and endorse mechanisms to strengthen the accountability of all stakeholders, as well as technical support, towards achieving the 2016 Political Declaration prevention targets and commitments. Key steps and milestones will be developed in a Prevention 2020 roadmap to ensure effective programme scale-up.

111. A prevention focal point core group has been established. It comprises representatives of the UNAIDS Secretariat and four Cosponsors[b], PEPFAR, the Global Fund, the AIDS Vaccine Advocacy Coalition, the International HIV/AIDS Alliance, the Children's Investment Fund Foundation, the Bill & Melinda Gates Foundation and the UNAIDS Monitoring and Evaluation Reference Group, as well as the directors of the national AIDS coordinating bodies in Kenya and Zimbabwe, who will coordinate the preparations.

112. The planned prevention coalition will create the opportunity for the Joint Programme to recommit and refine its work around a common purpose, supporting countries and mobilizing resources to support strong, coherent, focused and scaled-up prevention responses.

113. The PCB is requested to endorse the establishment of this partnership and advise the Joint Programme on its proceedings. Some of the preparations for the inaugural meeting have been agreed to already. They include further analysis of the successes and lessons learned from the 2010 Prevention Commission, and the establishment of small working groups to develop discussion papers with clear recommendations to key stakeholders on: HIV prevention leadership and financing; accountability to reach the prevention targets and

[b] UNFPA, UNICEF, World Bank and WHO

commitments in the Political Declaration 2016; scaling-up and service delivery; organizing learning, exchange and technical support for HIV prevention; and community-perspectives on a person-centred approach to prevention. Country consultations may then be organized, after which a Prevention 2020 roadmap with key recommendations would be discussed and adopted at the coalition meeting in October 2017.

RECOMMENDATIONS

Business as usual is not an option if the agreed goal of ending AIDS as a public health threat by 2030 is to be achieved. The PCB should encourage Member States, other stakeholders and the Joint Programme to take bold and decisive actions to scale up prevention programmes and meet the agreed targets and commitments. In previous phases of the HIV response, strengthened HIV prevention was seen as one among several core priorities. Given the comparative success of PMTCT and treatment programmes, the number one priority now has to be the achievement of drastic reductions in new HIV infections. Hence, the Board could recommend the following:

- UNAIDS should circulate more widely the various prevention evidence reviews, guidance documents and implementation tools that have been issued in recent years, package the evidence and practical programmatic guidance in ways that make them easy and attractive to use, and encourage Member States and other stakeholders to put them to good use.

- All countries need to set national prevention programme, financing and impact targets for 2020, alongside already established 90–90–90 treatment targets, in line with the UNAIDS Strategy and the 2016 Political Declaration, and should introduce the necessary policy changes and rapidly scale up efforts to reach those targets.

- Members States and key donors should be encouraged to invest adequately in HIV prevention as part of a fully-funded global response, so that one quarter of HIV spending goes towards prevention programmes on average (the target agreed to in the 2016 Political Declaration). This can be done by earmarking specific proportions of budgets for primary prevention, agreeing on country-specific prevention earmarks, reinvesting efficiency gains made in other parts of the response (e.g. in programme management, insufficiently focussed prevention programmes, and/or laboratory costs) in effective prevention, and by establishing dedicated funding streams for neglected components such as condom promotion.

- The Joint Programme should accelerate efforts to develop strong synergies with existing sexual and existing reproductive health initiatives, and with other efforts to achieve relevant SDGs.

- The Joint Programme should establish a global coalition of Member States, donors, civil society and implementers to strengthen and sustain the global prevention agenda. This coalition will agree on concrete steps to be taken to achieve the targeted reductions in new infections and will endorse plans to convert the existing global prevention focal point group into a technical working group or secretariat supporting the coalition.

- As part of the global coalition, and building on the existing Global AIDS Monitoring process, the Joint Programme should establish an accountability mechanism that takes stock of progress against national prevention targets, for example, in the form of a country scorecard or dashboard.

- The UNAIDS Secretariat and Cosponsors should develop an efficient modality to provide countries with technical support for HIV prevention, and to strengthen overall prevention programme management and programme delivery for the five pillars (i.e. HIV prevention among adolescent girls and young women and their sexual partners, key populations, condom programmes, PrEP and VMMC) as well as for the behavioural and structural components of those programmes.

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ACRONYMS

AIDS	acquired immune deficiency syndrome
ARV	antiretroviral
ART	antiretroviral therapy
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored and Safe women
Global Fund	Global Fund to fight AIDS, Tuberculosis and Malaria
ICT	information and communications technology
NCD	noncommunicable disease
NGO	nongovernmental organization
NSWP	Global Network of Sex Work Projects
PCB	Programme Coordinating Board
PMTCT	prevention of mother-to-child transmission (of HIV)
PrEP	pre-exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief

SDG	Sustainable Development Goal
STI	sexually transmitted infection
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
VMMC	voluntary medical male circumcision
WHO	World Health Organization