REACHING 90% OF PEOPLE AT RISK OF HIV WITH COMPREHENSIVE PREVENTION

CONTROLLING THE HIV EPIDEMIC SUMMIT, May 3-4, 2018, Geneva, Switzerland

Karl Dehne
Outline

▪ Why primary prevention

▪ Recap of what works

▪ Prevention programme targets

▪ Gaps in prevention coverage

▪ Global HIV prevention coalition and HIV Prevention Roadmap 2020

▪ Conclusions
Why primary prevention?
New HIV infections are not declining fast enough
New HIV Infections and People Living with HIV on Antiretroviral Therapy, 2010–2016
New HIV Infections and People Living with HIV on Antiretroviral Therapy, 2010–2016 and 2020 Targets

- People living with HIV on antiretroviral therapy
- New HIV infections

2020 Target

2020 Target

[Graph showing trends from 2010 to 2016 for HIV infections and people living on antiretroviral therapy, with targets for 2020 indicated.]
Treatment cannot do it all

• **UNAIDS modelling:** treatment can avert 60% of new infections *(UNAIDS, 2015)*

• **Phylogenetics:** Recent HIV infections at least 30 times more infectious than older infections *(Fraser C, HIV Phylogenetics: Lessons for HIV Prevention. CROI, 2017)*
  • **Swiss Study:** 50% of MSM transmission may occur within one year of infection *(Marzel A et al, Clin Infect Dis, 2015)*

• **Quality of treatment/adherence:** Patients in US 25% of time disruptions of viral transmission (> 1500 copies) and at risk of transmission *(Marks G et al, AIDS Care, 2015)*

• **Evidence from high treatment performing countries/cities:** e.g. Botswana, San Francisco
HIV PREVENTION IS A RIGHT

Fulfilling this right begins with providing people who are at increased risk of HIV infection with unhindered access to effective prevention services and empowering them to protect themselves.
Lancet Paper 2016: Key results by 2020

Reduce new infections to 500,000 by 2020
(by 75% compared to 2010)

Key Locations/Populations
- 90% of young & adult women/men
  High-incidence countries/settings
- 90% of key populations
  (sex workers, men who have sex with men, transgender, people who inject drugs)
  All countries

Outcome targets
- 90% condom use at high-risk sex
  (non-regular or paid partners)
- 90-90-90 for ART; 3 million on PrEP
- 90% of men aged 15-29 circumcised
  (14 priority countries)
- 90% use of NSP/OST
  (by people who inject drugs)

Packages
- Condoms & safe behaviors
- ARV-based prevention
- Voluntary medical male circumcision
- Harm reduction

Outputs (country specific targets)
- DEMAND
  Communications - service delivery and supplies - community outreach
- DELIVER
  Service delivery platforms for scale
  Health services, schools, community-based organizations
- ADHERE
  Enablers and synergies
  Sexual and reproductive health, community engagement, economic empowerment, gender norms, legal environment
The 5 pillars of Combination Prevention

1. Combination prevention for adolescent girls and young women
2. Combination prevention with key populations
3. Comprehensive condom programmes
4. Voluntary medical male circumcision and sexual and reproductive health services for men and boys
5. Rapid introduction of pre-exposure prophylaxis

What works
Combination prevention – proven impact

- Condom programmes
- Pre exposure prophylaxis
- Voluntary medical male circumcision
- Needle-syringe programmes and OST
- Treatment to reduce onward transmission
Combination prevention – proven impact

– Empowerment of women - cash transfers
– Secondary education for girls and young women and girls
– Community empowerment of sex workers
– Harm reduction policies
Example of a combination HIV prevention package for young people in high prevalence sites in southern Africa

- HIV testing services + antiretroviral medicine-based strategies (antiretroviral therapy, pre-exposure prophylaxis)
- Condom programmes
- Social protection, including cash transfers to young women
- Social and behaviour change communication, demand creation
- Voluntary medical male circumcision

90% access to tailored prevention services
Example of a combination HIV prevention package for gay men and other men who have sex with men

HIV testing services + antiretroviral medicine-based strategies (antiretroviral therapy, pre-exposure prophylaxis)

Empowerment: addressing laws and rights of men who have sex with men

Other health services (sexually transmitted infections)

90% access to tailored prevention services

Opinion leaders and new media approaches

Condoms and lubricant programming

Community/peer-led outreach services
Example of a combination HIV prevention package for sex workers

- HIV testing services + antiretroviral medicine-based strategies (antiretroviral therapy, pre-exposure prophylaxis)
- Condoms and lubricant programming
- Clinical health services (sexual and reproductive health, family planning, sexually transmitted infections)
- Community/peer-led outreach services
- Community empowerment
- Addressing violence against sex workers

90% access to tailored prevention services
Prevention Programme Targets
Ensure access to combination prevention options, including PrEP, harm reduction, VMMC and condoms to at least 90% of people (at risk) by 2020, especially young women and girls in high prevalence countries and key populations – gay men and other men who have sex with men, transgender people, sex workers, people who inject drugs and prisoners.

Output targets (by 2020):
- Reach 3 million with PrEP
- Reach 25 million men with VMMC
- Make 20 billion condoms available in LMIC
Corresponding country targets

- 90% of key populations reached with effective combination prevention packages
- 90% of adolescent girls and young women in priority settings
- 90% men 15-49 circumcised in 14 countries
- 25-50 condoms distributed per man and year across African countries
- About 10% of (key) populations at high risk on PrEP
Subnational focus: HIV Incidence among adolescent girls and young women

Source: UNAIDS 2016 estimates
Prevention Programme Gaps
Gap in condom procurement and distribution

- 0.5 billion (2000, sub-Saharan Africa)
- 2.7 billion (2015, sub-Saharan Africa)
- 7 billion (2020, sub-Saharan Africa)
- 20 billion (2020 global target)

2030 | Ending the AIDS epidemic
Condom distribution and use in Mozambique & Zimbabwe

Condom use with non-regular partner (men)

Zimbabwe
Mozambique

Condoms distributed per man 15-64

Condom distribution per man

UNAIDS

2030 | Ending the AIDS epidemic
Gap in Voluntary Medical Male Circumcisions
(14 priority countries in Africa)

2010 | 570,000
2015 | 11.4 million
2020 target | 36.4 million
Prevalence of VMMC by Country

Source: latest available data from population-based surveys. Self-reported and include all type of circumcisions
Estimated Number of People taking PrEP Worldwide

Cumulative number starting PrEP

Estimated active users
Feb 2018
HIV Prevention Services for Sex Workers in 4 Cities

Coverage of DREAMS and other programs for adolescent girls and young women, Mozambique

Highest incidence region

Funding:
- DREAMS
- The Global Fund
- DREAMS* and the Global Fund
- National government
- National government and the Global Fund
- DREAMS*, National government, and the Global Fund

Source: Agency reports, 2016
**HIV Prevention Dashboard**

**HIV Prevention Score Card: The big picture**

Scores are based on specific indicators and provide initial insights, not a full assessment.

*New infection trends and scores reflect different time periods and cannot be directly linked.*

<table>
<thead>
<tr>
<th>Country</th>
<th>Scores</th>
<th>Scores</th>
<th>Scores</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Condoms</td>
<td>VMNC</td>
<td>PiP</td>
<td>Sex</td>
</tr>
<tr>
<td>South Africa</td>
<td>8</td>
<td>5</td>
<td>10</td>
<td>6</td>
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<td>Tanzania</td>
<td>56</td>
<td>5</td>
<td>10</td>
<td>6</td>
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<td>Lesotho</td>
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<td>Zambia</td>
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<td>16</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Zimbabwe</td>
<td>8</td>
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<td>6</td>
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<td>Ghana</td>
<td>11</td>
<td>17</td>
<td>2</td>
<td>na</td>
</tr>
<tr>
<td>Mozambique</td>
<td>12</td>
<td>13</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Malawi</td>
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<td>1</td>
<td>9</td>
<td>nd</td>
</tr>
<tr>
<td>DR Congo</td>
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<td>na</td>
<td>1</td>
<td>nd</td>
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<tr>
<td>Kenya</td>
<td>64</td>
<td>6</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Cameroon</td>
<td>29</td>
<td>28</td>
<td>4</td>
<td>na</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>59</td>
<td>16</td>
<td>nd</td>
<td>na</td>
</tr>
<tr>
<td>Zambia</td>
<td>55</td>
<td>50</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>15</td>
<td>26</td>
<td>4</td>
<td>10</td>
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<tr>
<td>Swaziland</td>
<td>11</td>
<td>8</td>
<td>nd</td>
<td>na</td>
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<tr>
<td>Uganda</td>
<td>73</td>
<td>47</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Angola</td>
<td>21</td>
<td>21</td>
<td>4</td>
<td>na</td>
</tr>
<tr>
<td>Namibia</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Ukraine</td>
<td>16</td>
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<td>4</td>
<td>nd</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>1</td>
<td>nd</td>
<td>1</td>
</tr>
</tbody>
</table>

**Legend**

- **Very good**: Green
- **Good**: Light Green
- **Medium**: Yellow
- **Low**: Orange
- **Very low**: Dark Red
- **na**: Grey
- **Not applicable**: Pink

*Version 1.16*
## Country Example

### South Africa

<table>
<thead>
<tr>
<th>New HIV infections (ages 15+, in 1000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
</tr>
<tr>
<td>350</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>200</td>
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<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

#### Score

<table>
<thead>
<tr>
<th>Programme area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Condom programming:</strong></td>
</tr>
<tr>
<td>Distribution and use with non-regular partners</td>
</tr>
<tr>
<td><strong>Voluntary medical male circumcision:</strong></td>
</tr>
<tr>
<td>Progress towards national targets</td>
</tr>
<tr>
<td><strong>Pre-Exposure Prophylaxis:</strong></td>
</tr>
<tr>
<td>Index of policy and programmatic readiness</td>
</tr>
<tr>
<td><strong>Key populations:</strong></td>
</tr>
<tr>
<td>Program coverage and outcomes (condom use/safe injections) for 1) sex workers, 2) men who have sex with men and 3) people who inject drugs</td>
</tr>
<tr>
<td><strong>Adolescent girls &amp; young women:</strong></td>
</tr>
<tr>
<td>Program coverage and outcomes (condom use) in high-incidence settings</td>
</tr>
</tbody>
</table>

#### Legend including scoring levels

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good (9.0-10.0)</td>
<td>Detailed information on indicator definitions and values is available on the website of the Global HIV Prevention Coalition. *</td>
</tr>
<tr>
<td>Good (7.0-8.9)</td>
<td>No or insufficient data</td>
</tr>
<tr>
<td>Moderate (6.0-6.9)</td>
<td>Pillar not applicable in country</td>
</tr>
<tr>
<td>Low (5.0-5.9)</td>
<td></td>
</tr>
</tbody>
</table>

## Country Example

### South Africa

#### Output

<table>
<thead>
<tr>
<th>Prevention strategy &amp; systems</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic results frameworks, operational plans &amp; targets for all priority pillars</td>
<td>Yes</td>
</tr>
<tr>
<td>Sub-national management mechanisms for implementation &amp; tracking for all priority pillars</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Condoms

- Number of condoms distributed (millions, 2016): 839
- Number of condoms distributed/sold per man 15-64: 47
- % of condom distribution need met: 100

#### Voluntary medical male circumcision (VMMC)

- Number of VMMCs conducted/year (in thousands): 497

#### ARV-based prevention

- % of PLHIV on ART: 56
- Aggregated PrEP score (0.0 - no progress; 3.0 - most progress): 3.0

#### Key populations

<table>
<thead>
<tr>
<th>Sex workers (SW)</th>
<th>Condom use with non-regular partners (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size estimate for female sex workers available</td>
<td>60</td>
</tr>
<tr>
<td>% of SWs who received at least two HIV prevention interventions (past 3 m)</td>
<td>47</td>
</tr>
<tr>
<td>% of SWs who avoided health care because of stigma/discrimination</td>
<td>nd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Men who have sex with men (MSM)</th>
<th>Condom use with non-regular partners (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size estimate for men who have sex with men available</td>
<td>69</td>
</tr>
<tr>
<td>% of MSM who received at least two HIV prevention interventions (past 3 m)</td>
<td>69</td>
</tr>
<tr>
<td>% of MSM who avoided health care because of stigma/discrimination</td>
<td>nd</td>
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<table>
<thead>
<tr>
<th>People who inject drugs (PWID)</th>
<th>% with safe injecting practices</th>
</tr>
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<tr>
<td>Population size estimate for people who inject drugs available</td>
<td>54</td>
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<td>% of PWID who received at least two HIV prevention interventions (past 3 m)</td>
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<td>% of PWID who avoided health care because of stigma/discrimination</td>
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<table>
<thead>
<tr>
<th>Young women (YW) &amp; men in high-HIV prevalence settings</th>
<th>Condom use with non-regular partners (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of priority districts (admin. areas) with dedicated programs for YW &amp; partners</td>
<td>62</td>
</tr>
<tr>
<td>% of girls who completed lower secondary education</td>
<td>76</td>
</tr>
<tr>
<td>% of women 15-49 who experienced physical or sexual violence from a husband/partner</td>
<td>5</td>
</tr>
<tr>
<td>% who had multiple sexual partners</td>
<td>17</td>
</tr>
</tbody>
</table>

#### Impact

- New HIV infections (ages 15+, in 1000s)
  - 2010: 260
  - 2015: 88

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**Acronyms:** na … not applicable; id … no data; sn … sub-national

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**Notes:**

- In March 2018, Provincial and Multi-sectoral District Implementation Plans that operationalize the NSP contains mechanisms for all prevention areas and includes the priority pillars will be launched.
### Ghana

**New HIV infections (ages 15+, in 1000s)**
- 2010: 17
- 2015: 15
- 2020: 3

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- **Very good (9.0-10.0)**
- **Good (7.0-8.9)**
- **Moderate (6.0-6.9)**
- **Low (5.0-5.9)**
- **Very low (0.0-4.9)**
- **No or insufficient data**
- **Pillar not applicable in country**

Detailed information on indicator definitions and values is available on the website of the Global HIV Prevention Coalition. *

A Word on HIV Prevention Financing
Insufficient Investments: Effective prevention accounts for < 10% of total HIV investments, 4 countries, 2014

Source: Global AIDS Response Progress Reporting.
Estimated Prevention Spending and Resource Needs to reach 90% prevention coverage targets (per five pillars)
Namibia Estimated Funding Gap By 2020 - Five Pillars

- AGYW
- Key populations
- Condoms
- VMMC
- PrEP

Global Fund HIV Prevention budget: total expenditure and as % of total HIV budget
The Global HIV Prevention Coalition
**Founding Members of the Global HIV Prevention Coalition**

**CO-CONVENERS**
Michel Sidibé, Executive Director, Joint United Nations Programme on HIV/AIDS
Natalia Kanem, Executive Director, United Nations Population Fund

**UNITED NATIONS MEMBER STATES**
- Angola
- Brazil
- Cameroon
- China
- Côte d’Ivoire
- Democratic Republic of the Congo
- Ethiopia
- France
- Ghana
- Germany
- India
- Indonesia
- Kenya
- Lesotho
- Malawi
- Mexico
- Mozambique
- Namibia
- Netherlands
- Nigeria
- Pakistan
- South Africa
- Sweden
- Uganda
- Ukraine
- United Kingdom of Great Britain and Northern Ireland
- United Republic of Tanzania
- Zambia
- Zimbabwe

**CIVIL SOCIETY ORGANIZATIONS & NETWORKS**
- African Youth and Adolescent Network on Population and Development (AFRIYAN)
- AVAC
- Global Action for Trans Equality (GATE)
- Global Forum on Men who Have Sex with Men and HIV (MSMGF)
- Global Network of People living with HIV (GNP+)
- Global Network of Sex Work Projects (NSWP)
- International Community of Women Living with HIV (ICW)
- International HIV/AIDS Alliance
- International Network of People Who Use Drugs (INPUD)
- International Network of Religious Leaders Living with or personally affected by HIV and AIDS (INERELA+)
- International Planned Parenthood Federation (IPPF)

**INTERNATIONAL ORGANIZATIONS**
- Bill & Melinda Gates Foundation
- Children’s Investment Fund Foundation
- Joint United Nations Programme on HIV/AIDS Secretariat and Co-sponsors
- The Global Fund to Fight AIDS, Tuberculosis and Malaria
- United States President’s Emergency Plan for AIDS Relief

**OTHERS**
- Centre for the AIDS Programme of Research in South Africa (CAPRISA)
- Hornet, International AIDS Society (IAS)
- Joint United Nations Programme on HIV/AIDS Reference Group on HIV and Human Rights
- StarTimes, China
HIV Prevention 2020
Road Map

Accelerating HIV prevention to reduce new infections by 75%
Ten-point plan for accelerating primary HIV prevention at the country level

1. Conduct a strategic assessment of key prevention needs and identify policy and programme barriers to progress.

2. Develop or revise national targets and road maps for HIV prevention 2020.

3. Strengthen national prevention leadership and make institutional changes to enhance HIV prevention oversight and management.

4. Introduce the necessary policy and legal changes to create an enabling environment for prevention programmes.

5. Develop guidance, formulate intervention packages and identify service delivery platforms, and update operational plans.


7. Establish or strengthen social contracting mechanisms for civil society implementers and expand community-based programmes.

8. Assess available resources for prevention and develop a strategy to close financing gap.

9. Establish or strengthen HIV prevention programme monitoring systems.

10. Strengthen accountability for prevention, including all stakeholders.
Conclusions & Recommendations

- Primary prevention requires strengthening as treatment alone cannot end the epidemic by 2030

- Ambitious prevention targets were adopted in 2016 and need to be domesticated and used, together with 90:90:90 treatment targets

- Prevention program gaps need to be estimated and funding gaps closed, and programs systematically implemented

- The newly launched global HIV Prevention Coalition and HIV Prevention Roadmap 2020 provide platform

- IAPAC is very welcome to join the effort, perhaps starting with helping cities set their own prevention targets