Lessons from HIV Response in Managing Other Communicable Diseases

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Commitments on ending AIDS and Fast-Track targets
Regional overview
Public health model of HIV
How HIV response model can benefit other communicable diseases
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Regional overview

Public health model of HIV

How HIV response model can benefit other communicable diseases
**SDG AIDS target for 2030**

**Zero new HIV infections**

**Zero discrimination**

**Zero AIDS-related deaths**

**End the AIDS epidemic**

**Key AIDS-related SDGs for 2030**

- **SDG 3**: Good health and well-being
- **SDG 5**: Gender equality
- **SDG 10**: Reduced inequalities
- **SDG 16**: Just, peaceful and inclusive societies
- **SDG 17**: Global partnerships

**Strategic milestones for 2020**

- Fewer than 500,000 new HIV infections
- Fewer than 500,000 AIDS-related deaths
- Elimination of HIV-related discrimination

**Targets for 2020**

1. **Target 1**: 90% of PLHIV know their status
2. **Target 2**: 90% of PLHIV receive treatment
3. **Target 3**: 90% of people on treatment have suppressed viral loads
4. **Target 4**: High prevalence setting: 90% of women, men and young people have access to HIV combination prevention & SRH services
5. **Target 5**: High-prevalence setting: VMMC (27 million additional men)
6. **Target 6**: 90% of key populations, have access to HIV combination prevention services
7. **Target 7**: 90% of women and girls live free from gender inequality and gender-based violence
8. **Target 8**: 90% of people living with, at risk of and affected by HIV report no discrimination
9. **Target 9**: Investment: LMIC reach at least USD 30B with continued increase from the current levels of domestic public sources
10. **Target 10**: 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection

Source: UNAIDS Strategy 2016-2021
Fast-Track commitments to end AIDS by 2030

1. **90-90-90**
   - 90-90-90 treatment target by 2020

2. **Eliminate new HIV infections among children**
   - Eliminate new HIV infections among children by 2020

3. **Access to combination prevention (at least 90% among key populations)**
   - Access to combination prevention (at least 90% among key populations)

4. **Eliminate gender inequalities**
   - Eliminate gender inequalities

5. **90% of young people have the skills, knowledge and capacity to protect themselves from HIV**
   - 90% of young people have the skills, knowledge and capacity to protect themselves from HIV

6. **75% of people living with and affected by HIV benefit from social protection**
   - 75% of people living with and affected by HIV benefit from social protection

7. **At least 30% of all service delivery is community-led by 2020**
   - At least 30% of all service delivery is community-led by 2020

8. **HIV investment increase to 26 B by 2020, quarter for prevention, 6% for social enablers**
   - HIV investment increase to 26 B by 2020, quarter for prevention, 6% for social enablers

9. **Empower people living with HIV, at risk and affected by HIV to know their rights and access justice and legal services**
   - Empower people living with HIV, at risk and affected by HIV to know their rights and access justice and legal services

10. **Taking HIV out of isolation through people centered systems**
    - Taking HIV out of isolation through people centered systems

Source: UNAIDS. (2016). Fast-Track Commitments to End AIDS by 2030
## Global Fast-Track Targets

<table>
<thead>
<tr>
<th>By 2020</th>
<th>By 2030</th>
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<tbody>
<tr>
<td>Fewer than 500 000</td>
<td>Fewer than 200 000</td>
</tr>
<tr>
<td>new infections</td>
<td>new infections</td>
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<tr>
<td>500 000</td>
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<table>
<thead>
<tr>
<th>Fewer than 500 000</th>
<th>Fewer than 200 000</th>
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<tr>
<td>AIDS-related deaths</td>
<td>AIDS-related deaths</td>
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<tr>
<td>500 000</td>
<td>200 000</td>
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**ZERO**

<table>
<thead>
<tr>
<th>discrimination</th>
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<tbody>
<tr>
<td>ZERO</td>
<td>ZERO</td>
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Source: UNAIDS (2016). Press Statement for 2016 High Level Meeting Political Declaration on HIV and AIDS
Asia and the Pacific Fast-Track Targets

By 2020

Fewer than 90 000 new infections

More than 4.2 million on treatment

ZERO discrimination

Source: UNAIDS. (2016). Fast-Track Commitments to End AIDS by 2030
Commitments on ending AIDS and Fast-Track targets

Regional overview

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How HIV response model can benefit other communicable diseases
Regional snapshot of HIV infections and AIDS-related deaths

HIV and AIDS in Asia and the Pacific, 2016

- People living with HIV: 5.1 million
  - Women living with HIV: 1.8 million
  - Children living with HIV: 190,000
- New HIV infections: 270,000
- Young people living with HIV: 510,000
- Deaths: 170,000

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on UNAIDS 2017 HIV Estimates
HIV response has achieved notable success in declining new infections globally and regionally: a model and roadmap for other health threats

**Global**

- **16% decline** between 2010 and 2016
- **1,800,000** new HIV infections in 2016
- **Fast-Track Target 2020:** 500,000 new HIV infections

**Asia and the Pacific**

- **13% decline** between 2010 and 2016
- **270,000** new HIV infections in 2016
- **Fast-Track Target 2020:** 90,000 new HIV infections

*The 2020 target is equivalent to a 75% reduction since 2010.*

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on UNAIDS 2017 HIV Estimates
A significant variation in new HIV infections trends in Asia and the Pacific countries

Percent change in new HIV infections between 2010 and 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>% change in new HIV infections between 2010 and 2016</th>
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<tbody>
<tr>
<td>China</td>
<td>-22%</td>
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<tr>
<td>India</td>
<td>-21%</td>
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<tr>
<td>Indonesia</td>
<td>39%</td>
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<tr>
<td>Pakistan</td>
<td>141%</td>
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<tr>
<td>Myanmar</td>
<td>-26%</td>
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<tr>
<td>Philippines</td>
<td>-50%</td>
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<tr>
<td>Vietnam</td>
<td>-34%</td>
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Distribution of new HIV infections by country, 2016

- **China**: 22% (22%)
- **Indonesia**: 48,000, 18% (48,000, 18%)
- **India**: 80,000, 30% (80,000, 30%)
- **Pakistan**: 19,000, 7% (19,000, 7%)
- **Philippines**: 11,000, 4% (11,000, 4%)
- **Viet Nam**: 11,000, 4% (11,000, 4%)
- **Thailand**: 6,400, 2% (6,400, 2%)
- **Others**: 9% (9%)

270,000 new HIV infections in Asia and the Pacific in 2016

Source: Prepared by www.aidsdatahub.org based on UNAIDS 2017 HIV Estimates
## Progress towards the 90–90–90 targets: global versus Asia and the Pacific, 2016

### Global

<table>
<thead>
<tr>
<th>Percentage</th>
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<tbody>
<tr>
<td>70%</td>
<td>[51 – 84%]</td>
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<tr>
<td>77%</td>
<td>[57 – &gt;89%]</td>
</tr>
<tr>
<td>82%</td>
<td>[60 – &gt;89%]</td>
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### Asia and the Pacific

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<th>Percentage</th>
<th>Range</th>
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<tbody>
<tr>
<td>71%</td>
<td>[47 – &gt;89%]</td>
</tr>
<tr>
<td>66%</td>
<td>[44 – &gt;89%]</td>
</tr>
<tr>
<td>83%</td>
<td>[55 – &gt;89%]</td>
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</tbody>
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- **70%** of people living with HIV know their status
- **71%** of people living with HIV who know their status are on treatment
- **82%** of people on treatment are virally suppressed

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org) based on UNAIDS special analysis, 2017
Regional overview: Prevention of mother-to-child transmission

Percentage of pregnant women living with HIV who received ARVs to reduce the risk of mother-to-child transmission of HIV, 2016

Increased government investments in AIDS to fill the gap of decline in international funding

CHINA
- 2010: 860 Million US$
- 2015: 250 Million US$
% change: 70%

INDIA
- 2010: - Million US$
- 2015: 250 Million US$
% change: -92%

INDONESIA
- 2010: 110 Million US$
- 2015: 125 Million US$
% change: 133%

MALAYSIA
- 2010: 53 Million US$
- 2015: 59 Million US$
% change: 12%

MYANMAR
- 2010: 85 Million US$
- 2015: 370 Million US$
% change: 370%

PHILIPPINES
- 2010: 18 Million US$
- 2015: 286 Million US$
% change: 286%

THAILAND
- 2010: 250 Million US$
- 2015: 250 Million US$
% change: 1%

VIET NAM
- 2010: 125 Million US$
- 2012: 88 Million US$
% change: 42%

Legend:
- Domestic expenditure
- International expenditure

Support countries to put in place guarantees against discrimination in law, policies, and regulations

Legal barriers to the HIV response remain in 38 UN Member States in Asia and the Pacific

- 37 countries criminalize some aspect of sex work
- 17 countries criminalize same-sex relations
- 11 countries confine people who use drugs in compulsory detention centres
- 15 countries impose death penalty for drug-related offences
- 10 countries impose some form of HIV-related restriction on entry, stay or residence

Source: Prepared by www.aidsdatahub.org based on UNAIDS, Punitive Laws Hindering the HIV Response in Asia and the Pacific (as of June 2016)
Scale-up key human rights programmes alongside HIV prevention, testing and treatment services

17 out of 22 reporting countries have had training and/or capacity-building on HIV-related rights for people living with HIV and key populations in the past two years.

20 out of 23 reporting countries with training programmes for health-care workers on human rights and non-discrimination legal frameworks as applicable to HIV.

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Public health approach to communicable diseases

**Public health model**
- Healthy population
- Infection exposure
- Disease
- Morbidity and/or death

**Medical model**
- Healthy population
- Infection exposure
- Disease
- Morbidity and/or death

**Target**
- Public health model: targets population at risk with strong prevention focus
- Medical model: targets diagnosis and treatment of sick person

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org)
HIV is not a stand-alone issue and our responses need to be comprehensive

- **Co-infections due to immunosuppression** (E.g. TB, meningitis etc.)
  - PLHIV has 1 in 8 risk every year of acquiring TB as compare to 1 in 10 life time risk of HIV uninfected individuals
    - 45% of AIDS-related deaths among PLHIV in Asia and the Pacific are TB deaths.

- **Co-infections due to associated risk behaviors** (E.g. STIs, Hepatitis B and C, etc.)
  - Co-infection with HIV and Hep C increases risk of sexual transmission of Hepatitis C
    - 28-88% of PWID living with HIV in the region are co-infected with Hepatitis C

- **Health needs of people living with and affected by HIV** (E.g Sexual and reproductive health, mental health, etc)
  - Up to 40% of women living with HIV in Indonesia were asked to undergo sterilization; 13% of women living with HIV had been advised to have an abortion in Hai Phong and Ho Chi Minh City in Viet Nam; 45% of MSM in Nepal ever attempted suicide

- **Other associated non-communicable diseases** (diabetes mellitus, hypertension, etc)
  - Random sample of PLHIV on treatment showed 9% and 15% prevalence of diabetes mellitus and hypertension respectively in Cambodia

- **Stigma and discrimination towards key populations and people living with HIV**
  - Barriers in access to HIV and other health services, violence, issues in employment opportunities, housing, inheritance etc.

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org)
HIV response model: an evolving comprehensive approach with scale, focus and innovation

- People centered public health approach
- Location-population approach
- Early diagnosis and optimize linkages for early treatment model
- Point-of-care rapid diagnostic test model
- Service delivery models tailored to the needs of populations served (eg. CoC)
- Peer adherence support model
- Treatment as prevention model
- Comprehensive case management model
- Task-shifting approach
- Integrated health care approach (one-stop shop)
- Innovation – new approaches for high-impact interventions
- Making use of advances in technology
- Enablers and synergies approach

Source: Prepared by www.aidsdatahub.org
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Community model and people-centered approach of HIV response

COMMUNITY of KEY POPULATIONS

Primary prevention
Community-led prevention interventions – from conventional outreach to new tools such as peer outreach, use of digital social media and PrEP

Secondary prevention
Community-led case finding, linkages to care and treatment

Tertiary prevention
Adherence support, legal support, advocacy for structural interventions such as employment opportunities

Roles of community

Public health impacts applicable to other disease

- Greater coverage with higher impact
- Element of trust particularly for innovative approaches. (e.g. 72% of surveyed MSM in HCMC in Viet Nam wanted to received PrEP from CSO; 70% of recent HIV tests among TG in Cambodia were at local NGO or community-based testing sites)
- More PLHIV identified with less leakages to care and treatment continuum
  - (e.g. 100% of identified HIV positive MSM were enrolled in treatment through KHANA programme in Cambodia)
- Significantly higher adherence to treatment even among people who inject drugs (e.g. Nai Zindagi project in Pakistan - 77% adherence among PWID as compared to 51% among control group)
- Addressing mandatory testing for employment and denied employment opportunities

Getting to zero

Source: Prepared by www.aidsdatahub.org
Relationship between HIV testing coverage and community-based HIV testing approaches

HIV testing coverage among people who inject drugs by HIV testing approaches, 2014-2016

- Community-based testing + lay-provider and/or self-testing available
  - Malaysia: 38%
  - Cambodia: 75%
  - India: 72%
  - China: 73%

- Community-based testing available
  - Myanmar: 22%
  - Bangladesh: 27%
  - Nepal: 49%
  - Viet Nam: 53%
  - Thailand: 61%

- Both community-based and lay-provider testing NOT available
  - Sri Lanka: 8%
  - Afghanistan: 23%
  - Indonesia: 39%
  - Pakistan: 39%

Source: Prepared by www.aidsdatahub.org based on Global AIDS Monitoring 2017 Reporting
UNAIDS goal and targets of “Ending AIDS by 2030” - a trendsetter

18 November 2014
UNAIDS announced that taking a Fast-Track approach will allow the world to end the AIDS epidemic

By 2020
90–90–90 HIV treatment
500 000 New adult HIV infections
Zero Discrimination

By 2030
95–95–95 HIV treatment
200 000 New adult HIV infections
ZERO Discrimination

By 2035
95% reduction TB deaths
90% reduction TB incidence
Zero TB-affected families facing catastrophic costs

By 2030
>90% reduction malaria incidence
Eliminate malaria at least 35 countries

By 2035
90% reduction new cases of hepatitis B and C
65% reduction hepatitis B and C deaths

Source: Prepared by www.aidsdatahub.org
In order to realize the goal – elimination of viral hepatitis as a public health threat, some very significant barriers need to be addressed:

1. Uneven leadership and commitment
2. Inadequate data
3. Limited coverage of prevention programmes
4. Most people do not know their hepatitis status
5. Few have access to treatment and care services
6. Medicines and diagnostics are unaffordable for most
7. Public health approach to hepatitis is lacking
8. Structural barriers that increase vulnerability and prevent equitable access to services

How HCV response can be built upon the existing HIV public health model

• People centered public health approach with strong community engagement at all levels that is responsive to community needs

• Location-population approach that has proven high impact on turning the HIV epidemic around (100% CUP in Thailand, Cambodia and many Asian countries – an approach credited with substantial reduction in new HIV infections from the peaks of epidemic)

• A strong foundation of existing HIV prevention models (targeted outreach, peer outreach, NSEP, OST programmes)

• Broad expansion of screening and assessment of HCV infections through replication of/coupling with evolving HIV testing strategies (such as HIV testing and counseling (HTC), partner counseling and testing, community-based HIV testing, self-testing)

• Increased access to health services including HCV treatment and retention in care through:
  – Service delivery models tailored to the needs of key populations affected by HCV as being exampled in HIV model (eg. Boosted Continuum of Prevention to Care and Treatment approach of Cambodia National HIV Health Strategy); Addressing stigma and discrimination particularly in health care setting; Making treatment affordable
Cambodia example: referral and service linkages for the Boosted CoPCT

Coordination and follow up by Outreach workers and Entertainment establishment owners

Source: National Center for HIV/AIDS, Dermatology and STD (NCHADS), Ministry of Health Cambodia (2013) Standard Operating Procedures (SoP) for Boosted Continuum of Prevention to Care and Treatment for Most at Risk Populations in Cambodia
How HCV response can be built upon the existing HIV public health model

• **Treatment as prevention model** that has been proven effective in HIV and has become a new narrative that lays the groundwork to end the AIDS epidemic

• **Integrated health care approach (one-stop shop)** for prevention and treatment of communicable diseases

• **Making use of advances in technology** as well exampled in HIV model
  – iMonitor; Blued – a dating app in China; HIV and AIDS Data Hub for Asia and the Pacific web platform and mobile application

• **Enablers and synergies approach**
  – Social protection and social services; addressing violence against people who are affected by and living with HIV and gender based violence; community empowerment, legal literacy, and rights; address punitive laws and policies, stigma and discrimination that deter the effective programme response at all levels

Source: Prepared by [www.aidsdatahub.org](http://www.aidsdatahub.org)
Achievement of ending the TB epidemic goal by 2035 requires:

1. expanding the scope and reach of interventions for TB care and prevention, with a focus on high-impact, integrated and patient-centered approaches
2. eliciting full benefits of health and development policies and systems;
3. pursuing new scientific knowledge and innovations

How tuberculosis programmes can benefit from the HIV public health model

- TB and HIV prevention and care interventions are mutually reinforcing. Interventions to tackle tuberculosis and HIV can occur as a comprehensive integrated approach

- Early diagnosis and optimize linkages for early treatment model

- **Point-of-care rapid diagnostic test model** to expand and enhance case detection and linkage to care

- **Comprehensive case management model** tailored to the needs of the clients rather than disease centered approach

- **Peer adherence support model** has proven positive outcomes in maintaining people under treatment and it can be incorporated in and re-packaged the DOTS model of TB treatment
  - PDI+ - peer driven intervention plus programme – implemented by KHANA Cambodia shows almost 90% of enrollment and retaining in care among MSM and TG clients

- **Addressing vulnerable population and prioritized location approach** that has proven high impact on turning the HIV epidemic around can be also beneficial to TB programmes
Integration gap: the need to move away from disease centered approach to people centered approach

**HIV programme**
- 69% of PLHIV enrolled in care screened for TB
- 31% GAP

**TB programme**
- 42% of notified TB cases (new and relapse) tested for HIV
- 58% GAP

How tuberculosis programmes can benefit from the HIV public health model

• **Increase access to health services** including treatment and retention in care through
  – Service delivery models tailored to the needs of populations affected (Sundown Clinics in Quezon City, Philippines); addressing stigma and discrimination particularly in health care setting, work places and community

• **Task-shifting approach**
  – SMARTgirl programme - community-based testing programme in Cambodia; Task shifting and differentiated care approach successfully implemented in MSF supported HIV care and treatment in Myanmar.

• **Innovation – new approaches for high-impact interventions**
  – PrEP – an innovative prevention tool – has moved from effective trials towards implementation

• **Making use of advances in technology**
  – Voice4U – a programme by KHANA Cambodia – providing interactive voice response system for free HIV, key populations related information and counseling; LoveYourself - virtual outreach programmes - in Philippines that provide information, behavioral change communications, risk assessment and link to screening and treatment services

• **Enablers and synergies approach**
  – Social protection and social services; addressing violence against people who are affected by and living with HIV and gender based violence; community empowerment, legal literacy, and rights; address punitive laws and policies, stigma and discrimination that deter the effective programme response at all levels

Source: Prepared by www.aidsdatahub.org
Similarly, HIV model can be transferred and applied to HPV response

Life cycle approach of HPV and cervical cancer prevention and treatment programmes: a call for integrated and comprehensive public health response model

**PRIMARY PREVENTION**

Girls 9–13 years
- HPV vaccination

Girls and boys, as appropriate
- Health information and warning about tobacco use*
- Sexuality information tailored to age and culture
- Condom promotion/provision for those engaged in sexual activity
- Voluntary medical male circumcision

* tobacco use is an additional risk factor for cervical cancer

**SECONDARY PREVENTION**

Women >30 years of age
Screening and treatment as needed
- “Screen and treat” with low cost technology VIA followed by cryotherapy
- HPV testing for high risk HPV types (e.g. types 16, 18 and others)

**TERTIARY PREVENTION**

All women as needed
Treatment of invasive cancer at any age
- Ablative surgery
- Radiotherapy
- Chemotherapy

AIDS free generation: from single to triple elimination

• In 2009, UNAIDS executive director called for elimination of mother-to-child transmission of HIV

• It led to the conceptualization and implementation of “Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive” and successive global and regional elimination agendas

  – Dual elimination of parent-to-child transmission of HIV and Syphilis in Asia and the Pacific in 2015 and beyond
    • Thailand has achieved the elimination of mother-to-child transmission of HIV and syphilis, becoming the first country in Asia and the Pacific region and also the first with a large HIV epidemic in the world

  – Regional Framework on Triple Elimination of Mother-to-Child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018-2030 is currently underway of finalization and to be reviewed by Member States and representatives.
    • Viet Nam has already piloted an innovative approach to triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B since 2015

Source: Prepared by www.aidsdatahub.org
Commitment of member states on eMTCT in Asia and the Pacific

Australia (eMTCT by 2021)
New Zealand (eMTCT by 2021)

Source: Prepared by www.aidsdatahub.org based on Global AIDS Monitoring 2017 Reporting
“We have seen that the AIDS response is a powerful pathfinder. As we strive to end this epidemic as a public health threat, we are also on a path towards better health, education and employment for families and communities….”

“We expect there are many lessons learned that could add value towards the new global goals as a model for a people-centred approach for development. This is the legacy we bring to future generations.”

Michel Sidibé
UNAIDS Executive Director
THANK YOU
www.aidsdatahub.org