Current State of Global HIV Care Continua

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Last updated: May 2017
90-90-90 and Continuum of Care Targets

Know status: 90%
On treatment: 90%
Virally suppressed: 90%

90-90-90:
- 90% Know status
- 90% On treatment
- 90% Virally suppressed

Continuum of Care Targets:
- 90% Know status
- 81% On treatment
- 73% Virally suppressed
Methodology

Identification (216)
• 35 continuum identified through PubMed search
• 181 continuum identified through UNAIDS country reports, WHO reports, PEPFAR country operational plans, national reports, and conference papers

Screening (120)
120 recent continuum selected (2010-16)

Data collection (109)
For 109 continuum, data were collected on the 4 key continuum indicators

Methods review and data analysis (76)
Each indicator was graded on methods, which was used to grade the continuum. Progress towards the 90-90-90 targets was also analyzed for the 76 continua

Tripled cascades for Africa through PEPFAR open data effort:

96 older and/or duplicate continuum excluded

11 continuum that reported preliminary/ unconfirmed national figures excluded

33 continuum that did not have viral suppression estimates excluded

Search end date: May 2017
People living with HIV diagnosed positive (2010-2016)
UNAIDS target 90%

76 (73% global HIV burden in 2015) with complete care continua
People living with HIV on ART (2010-2016) UNAIDS target 81%

76 countries with complete care continua
People living with HIV with viral suppression (2010-2016)
UNAIDS target 73%

People living with HIV with viral suppression (Target 73%)

76 with complete care continua
Mapping on ART and viral suppression 90-90-90 targets (76 countries)

- ART coverage >81% and viral suppression >73%
- ART coverage 60-80% and viral suppression 50-72%
- ART coverage <60% and viral suppression <50%
- Incomplete or no continua

76 countries with complete care continua
Proportion of people living with HIV diagnosed and on ART

76 countries with data on 1st and 2nd 90
Proportion of people living with HIV on ART and with viral suppression

UNAIDS target: 73%

TARGET

UNAIDS target: 81%

76 countries with complete care continuums
Top 21 countries reporting more than 84% of people living with diagnosed HIV (2010-2016)

- Romania: 98%
- Kazakhstan: 92%
- Denmark: 91%
- Italy: 90%
- Sweden: 90%
- Thailand: 89%
- Austria: 88%
- Netherlands: 88%
- Estonia: 87%
- Hungary: 87%
- Luxembourg: 87%
- UK: 87%
- US: 87%
- Australia: 86%
- Brazil: 86%
- Japan: 86%
- Suriname: 86%
- Germany: 86%
- Belgium: 85%
- France: 84%
- Uzbekistan: 84%

90% 

76 countries with complete care continua
Top 21 countries reporting more than 64% of people living with HIV on ART (2010-2016)

81%

76 countries with complete care continua
Top 20 countries reporting more than 53% of people living with HIV with viral suppression (2010-2016)

76 countries with complete care continua

73%
## Top 10 countries with >67% viral suppression (2010-2016)

<table>
<thead>
<tr>
<th>Country</th>
<th>Diagnosed</th>
<th>On ART</th>
<th>Virally suppressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark*</td>
<td>91%</td>
<td>85%</td>
<td>80%</td>
</tr>
<tr>
<td>Sweden*</td>
<td>90%</td>
<td>86%</td>
<td>78%</td>
</tr>
<tr>
<td>UK</td>
<td>87%</td>
<td>83%</td>
<td>81%</td>
</tr>
<tr>
<td>Netherlands*</td>
<td>88%</td>
<td>77%</td>
<td>72%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>82%</td>
<td>75%</td>
<td>72%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>83%</td>
<td>75%</td>
<td>70%</td>
</tr>
<tr>
<td>Japan</td>
<td>86%</td>
<td>71%</td>
<td>70%</td>
</tr>
<tr>
<td>France</td>
<td>84%</td>
<td>75%</td>
<td>68%</td>
</tr>
<tr>
<td>Germany</td>
<td>85%</td>
<td>72%</td>
<td>67%</td>
</tr>
<tr>
<td>Belgium</td>
<td>84%</td>
<td>71%</td>
<td>67%</td>
</tr>
</tbody>
</table>

### 76 countries with complete care continua

* Marked countries have high quality cascade
Documenting and grading continua methods

<table>
<thead>
<tr>
<th>Country</th>
<th>Data Source</th>
<th>ART Coverage Method</th>
<th>ART Coverage Data Source</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Data on new HIV cases</td>
<td>ART coverage is estimated as average of 4 approaches: ARV</td>
<td>ART coverage is estimated as average of 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>Armenia</td>
<td>Data on new HIV cases</td>
<td>ART coverage is estimated as average of 4 approaches: ARV</td>
<td>ART coverage is estimated as average of 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>Australia</td>
<td>National registration of new diagnosis</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>Belgium</td>
<td>National cohort data</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>Brazil</td>
<td>SINAN and SIM</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>Cambodia</td>
<td>UNAIDS estimate</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>Medium</td>
</tr>
<tr>
<td>China</td>
<td>UNAIDS estimate</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>ACT coverage calculated from 4 approaches: ARV</td>
<td>High</td>
</tr>
</tbody>
</table>

Notes:
- TDRS: Therapeutic Drug Resistance Surveillance
- NCHADS: National Centre for Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
- PLHIV: People Living with HIV

*References not provided in the image.*
ART CD4 cell count initiation for asymptomatic people (123 countries)

2015 WHO Recommendation: Irrespective of CD4 count

Treat all in 47 countries (63% burden)

Source: published policy
Source: www.HIVpolicywatch.org
Availability of Viral Load (55 countries)

- Recommended and widely available
- Recommended with limited availability
- Recommended only for monitoring treatment failure
- Recommended (availability unknown)
- No recommendation

Source: www.HIVpolicywatch.org
Limitations

• Limited to most recent care continua available in public domain---some cascades may have been missed
• Africa is missing complete continua due to lack of people diagnosed and viral load data
• Methods of estimating continua are different across countries
• Viral load access is limited in many settings
• Continua provide a snapshot but do not capture individual and cohort outcomes well
Glass is half full!

- Policy is changing to test and treat
- Countries using 90-90-90 targets
- Over past 6 months care continua in public domain from Africa increased 100%
- Some countries are close to 90-90-90 and it is only 2016
- PEPFAR and Global Fund are backing test and treat and 90-90-90
- Community is embracing earlier treatment
Thank you

www.HIVpolicywatch.org

www.HIV90-90-90watch.org
People living with HIV diagnosed positive (2010-2016)
UNAIDS target 90%

Of the 109 countries with complete or incomplete continua, data were available for 76
People living with HIV on ART (2010-2016)
UNAIDS target 81%

Of the 109 countries with complete or incomplete continua, data were available for 102
People living with HIV with viral suppression (2010-2016)
UNAIDS target 73%
ART initiation criteria in Africa

2015 WHO Recommendation: Irrespective of CD4 count

Source: published policy
<table>
<thead>
<tr>
<th>ART initiation criteria</th>
<th>No. of Countries</th>
<th>People with HIV (2015)</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrespective of CD4 count</td>
<td>47</td>
<td>23,100,000 (63%)</td>
<td>Argentina, Australia, Austria, Botswana, Brazil, Burundi, Cambodia, China, Croatia, Denmark, France, Georgia, Germany, Haiti, India, Italy, Japan, Kenya, Korea (Republic), Lao PDR, Lesotho, Malawi, Malaysia, Maldives, Mexico, Montenegro, Mozambique, Namibia, Netherlands, Norway, Papua New Guinea, Poland, Portugal, Romania, Rwanda, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Turkey, Uganda, United Kingdom, US, Zambia, Zimbabwe</td>
</tr>
<tr>
<td>Consider for &gt;500</td>
<td>5</td>
<td>284,000 (0.8%)</td>
<td>Colombia, Greece, Guyana, Hong Kong, Venezuela</td>
</tr>
<tr>
<td>≤500</td>
<td>32</td>
<td>9,781,000 (27%)</td>
<td>Algeria, Bangladesh, Bhutan, Bolivia, Cameroon, Chile, Democratic Republic of Congo, Ecuador, El Salvador, Ethiopia, Fiji, Gabon, Honduras, Madagascar, Mali, Mauritania, Moldova, Myanmar, Nepal, Nigeria, Oman, Pakistan, Peru, Russia, South Sudan, Sudan, Swaziland, Tanzania, Tunisia, Ukraine, Uruguay, Viet Nam</td>
</tr>
<tr>
<td>≤350 (consider for CD4 ≤ 500)</td>
<td>5</td>
<td>178,000 (0.5%)</td>
<td>Belize, Costa Rica, Finland, Guinea, Philippines</td>
</tr>
<tr>
<td>≤350</td>
<td>25</td>
<td>2,338,600 (6%)</td>
<td>Afghanistan, Angola, Benin, Burkina Faso, Canada, Cote d’Ivoire, Djibouti, Dominican Republic, Ghana, Guatemala, Indonesia, Jamaica, Kazakhstan, Latvia, Marshall Islands, Morocco, Nicaragua, Niger, Panama, Paraguay, Samoa, Sierra Leone, Timor-Leste, Tuvalu, Vanuatu</td>
</tr>
<tr>
<td>≤300</td>
<td>1</td>
<td>200 (&lt;0.1%)</td>
<td>Macedonia</td>
</tr>
<tr>
<td>≤200 (consider for CD4 ≤ 350)</td>
<td>5</td>
<td>66,000 (&lt;0.2%)</td>
<td>Belarus, Cape Verde, Cuba, Estonia, Hungary</td>
</tr>
<tr>
<td>≤200</td>
<td>3</td>
<td>76,500 (0.2%)</td>
<td>Comoros, Liberia, Senegal</td>
</tr>
</tbody>
</table>

Source: published policy