New South Wales HIV Diagnosis and Care Cascade 2016: Meeting the UNAIDS 90-90-90 Targets

Phillip Keen, Richard T Gray, Rebecca Guy, Barbara Telfer, Denton Callander, Heather-Marie Schmidt, Jo Holden, Bill Whittaker, Marlene Velecky, David P Wilson, David A Cooper, Martin Holt, Garrett Prestage, Christine Selvey, Andrew Grulich, on behalf of the NSW HIV Prevention Partnership Project  | ASHM HIV Conference, 6 November 2017

By 2020
• 90% of PLHIV diagnosed
• 90% of PLDHIV on ART
• 90% of PLDHIV on ART with viral suppression
• 73% of PLHIV with viral suppression
Sweden, the first country to achieve the Joint United Nations Programme on HIV/AIDS (UNAIDS)/World Health Organization (WHO) 90–90–90 continuum of HIV care targets

Michael Gissén,1 Y Svedhem,2 I Lindberg,1 L Flamholc,3 H Neerup,3 S Wendahl,4 M Axelsson4 and Å Sannerborg5,6
1Department of Infectious Diseases, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden, 2Department of Infectious Diseases, Karolinska Institute, Karolinska University Hospital, Stockholm, Sweden, 3Department of Infectious Diseases/Sven Hedin, South General Hospital, Stockholm, Sweden, 4Department of Infectious Diseases, Skåne University Hospital, Malmö, Sweden, 5Department of Clinical Sciences Lund, Lund University, Lund, Sweden, 6Department of Infectious Diseases, Sunderby Hospital, Umeå, Sweden, 7Public Health Agency of Sweden, Solna, Sweden and 8Department of Clinical Microbiology, Karolinska Institute, Karolinska University Hospital, Stockholm, Sweden

78.5% of PLHIV virally suppressed

ENDING AIDS
PROGRESS TOWARDS THE 90–90–90 TARGETS

Met 90-90-90:
• Denmark and Sweden

Countries above 73% of PLHIV with viral suppression:
• Botswana, Cambodia, Denmark, Iceland, Singapore, UK

Cities that have met 90-90-90 or are close:
• Amsterdam, Melbourne, New York City, Paris
Developed criteria to grade cascades as High, Medium or Low quality

High quality:
- National estimates of PLHIV from nationally representative surveys/surveillance
- A cohort or national program service database of everyone diagnosed with HIV
- A national cohort or program service database for those on ART
- Individual viral load data for everyone on ART or representative cohort/surveys

---

**2016 NSW Cascade**
Diagnosed: 9,230

NSW Health enhanced surveillance

- 6-month follow-up of newly diagnosed PLHIV from 2013
- High short-term emigration rate (9.7%) among overseas-born PLHIV following diagnosis
- Used to refine the estimated emigration rate

Diagnosed 91.3% of all PLHIV

Living with HIV: 10,110

Number of people undiagnosed calculated

Back-projection method based on CD4 at diagnosis
NSW Cascade 2016: Meeting the UNAIDS 90-90-90 Targets

Receiving ART: 8,490
92.0% of PLD HIV

De-duplicated PBS data on ART prescription claims among NSW residents

+ an estimate of Medicare ineligible people (172)

NSW Cascade 2016: Meeting the UNAIDS 90-90-90 Targets

Virally suppressed: 8,020
94.5% of PL HIV on ART

Expansion of the ACCESS network

All SHCs, 7 GP clinics, 2 hospital clinics

87% coverage of all PL HIV in NSW

Linkage across clinics to remove duplicates
NSW Cascade 2016: Meeting the UNAIDS 90-90-90 Targets

Living with HIV 10,110
Diagnosed 9,230
On ART 8,490
Suppressed 8,020

79.3% of all PLHIV virally suppressed

Conclusions

NSW met the 90-90-90 targets in 2016

Enhanced data collection introduced in NSW improved the quality of methods and data sources

NSW cascade methods and data likely ‘high quality’ according to Granich criteria

Enhanced data collection introduced in NSW could feasibly be introduced in other Australian jurisdictions
• 95% of PLDHIV on ART

• 90% of PLDHIV on ART within 6 weeks of diagnosis and to reduce this interval over the life of the Strategy