CATIE

Canada's source for HIV and hepatitis C information

La source canadienne de renseignements sur le VIH et l'hépatite C

Reaching the Undiagnosed Webinar Series

HIV self-testing in Canada – what should we expect?

Please make sure you access the audio portion:
Toll-free access number: 1-866-500-7712
Access code: 4949626

The webinar will commence shortly.

All participants will be muted until the question period.

Webinar Series 2017-2018

Reaching the Undiagnosed

Innovative approaches for HIV, HCV and other Sexually Transmitted Infection (STIs) Testing

Presented by:

CATIE Canada's source for HIV and hepatitis C information

National Collaborating Centre for Infectious Diseases
Centre de collaboration nationale des maladies infectieuses

REACH 2.0

HIV, HVC and STIs: why is this a global issue?

- **357.4 million new STIs** (CT, NG, Syphilis, TV) in 2012.
  - Pelvic inflammatory diseases, ectopic pregnancy, infertility, chronic pelvic pain, seronegative arthropathy, neurological and cardiovascular diseases, neonatal death.
- **71 million with chronic hepatitis C infection** in 2015
  - 1.7 millions new infections
  - 2.3 million HIV/HCV co-infected
  - 704,000 deaths attributed to HCV in 2013
- **1.8 million new HIV** in 2016
  - 36.7 million people living with HIV in 2016.
  - 53% accessing antiretroviral therapy in 2016.
  - 1 million died from AIDS-related illnesses in 2016.
- Adverse health consequences on individuals and substantial strain on health systems and budgets – important to intervene at early stages

UNAIDS, WHO, Lancet Infectious Diseases Commission

HIV, HCV and STIs: why is this a national issue?

- **118,280 new STIs** in 2012
  - On the rise (2010-2015)↑ **17%** CT; ↑ **65%** NG, ↑ **86%** infectious syphilis
  - 25 to 50% co-infection with HIV
- **Up to 245,987 with chronic hepatitis C infection** in 2011
- **2,570 new HIV infections** in 2014
  - 65,040 Canadians were living with HIV in 2014 .
- **Important inequality** in health and economic burden, for women, for First Nations and Inuit, for the chronically poor

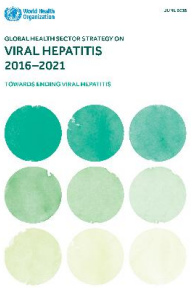
Public Health Agency of Canada, CCDR January 2018

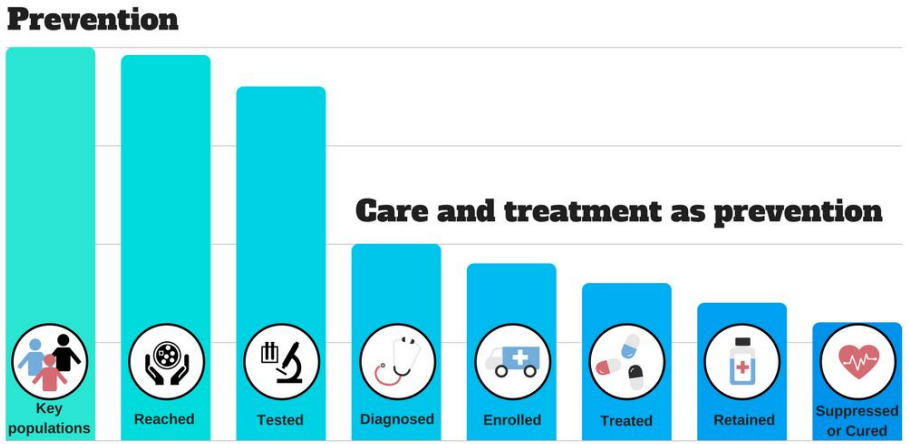
HIV, HCV and STIs: Towards elimination by 2030

Global vision

Country strategies

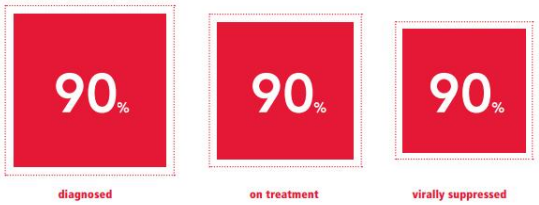
Local actions





Global Targets : How are we doing in Canada?

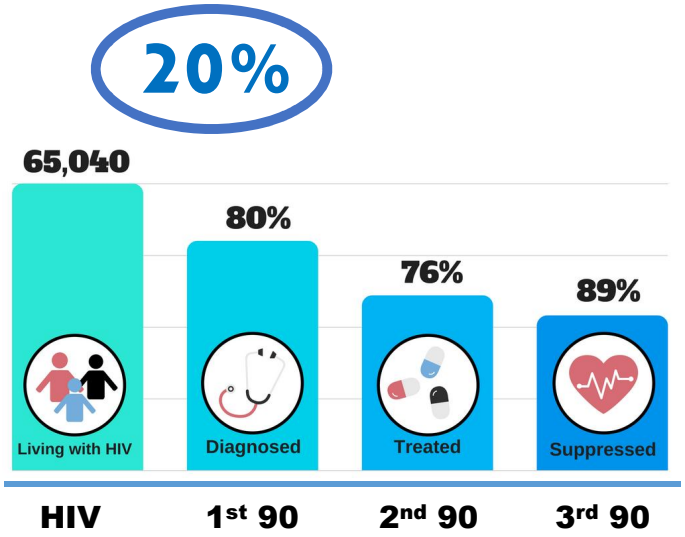
By 2020

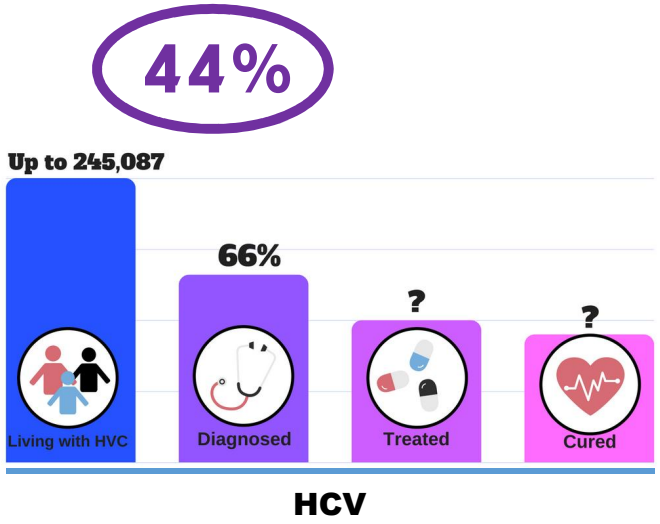


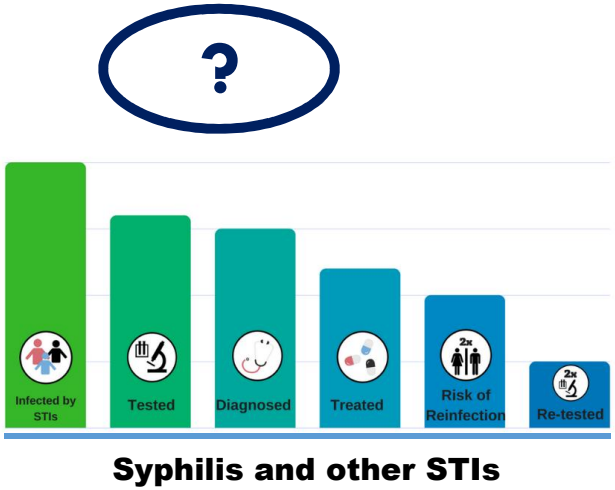
Reducing by 30% new chronic HCV infections

Reducing HCV mortality by 10%

T. Pallidum with the elimination of congenital syphilis, which implies that **strong systems** are in place to ensure **screening and treatment** of all pregnant women and control of syphilis in **specific populations**.







Public Health Agency of Canada

No one-size-fits-all model for testing

Reaching the right people, at the right time, at the right place, with the most effective programs

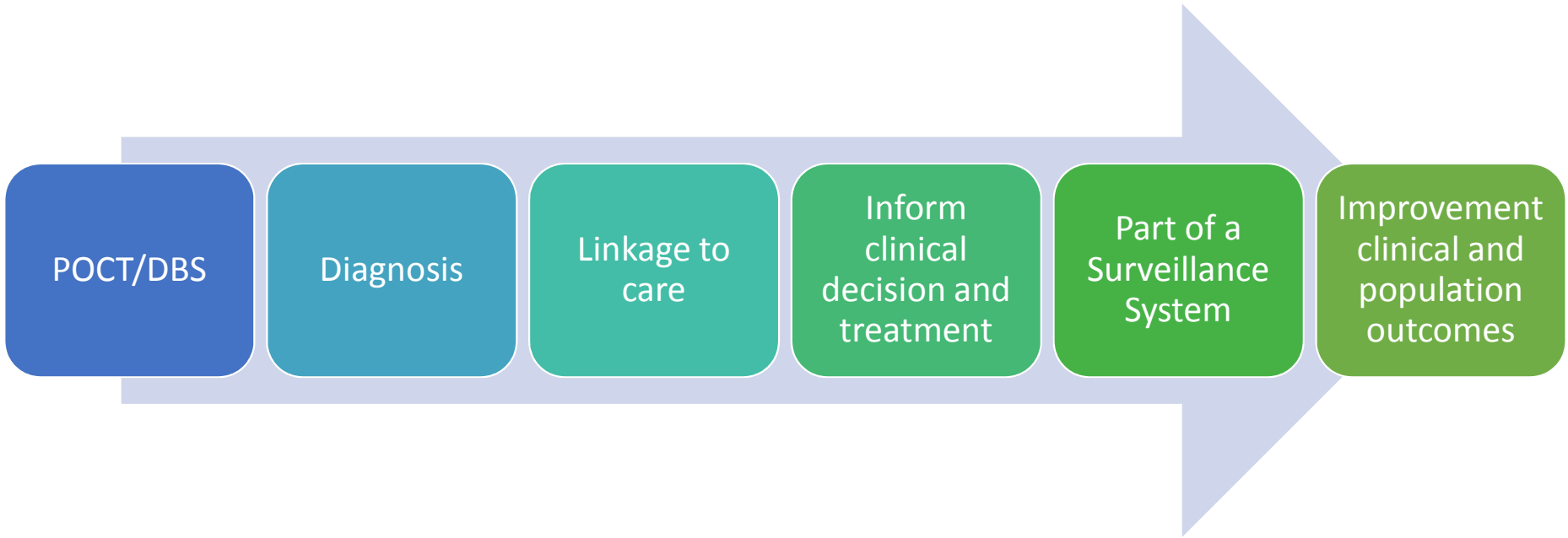
POCT with lay testers integrated in community program and pharmacies

DBS in remote communities

POCT Duo Test in Gay men's Clinic

Self-testing at home

Policy decisions matter more than individual behaviours for impact….



About this series….

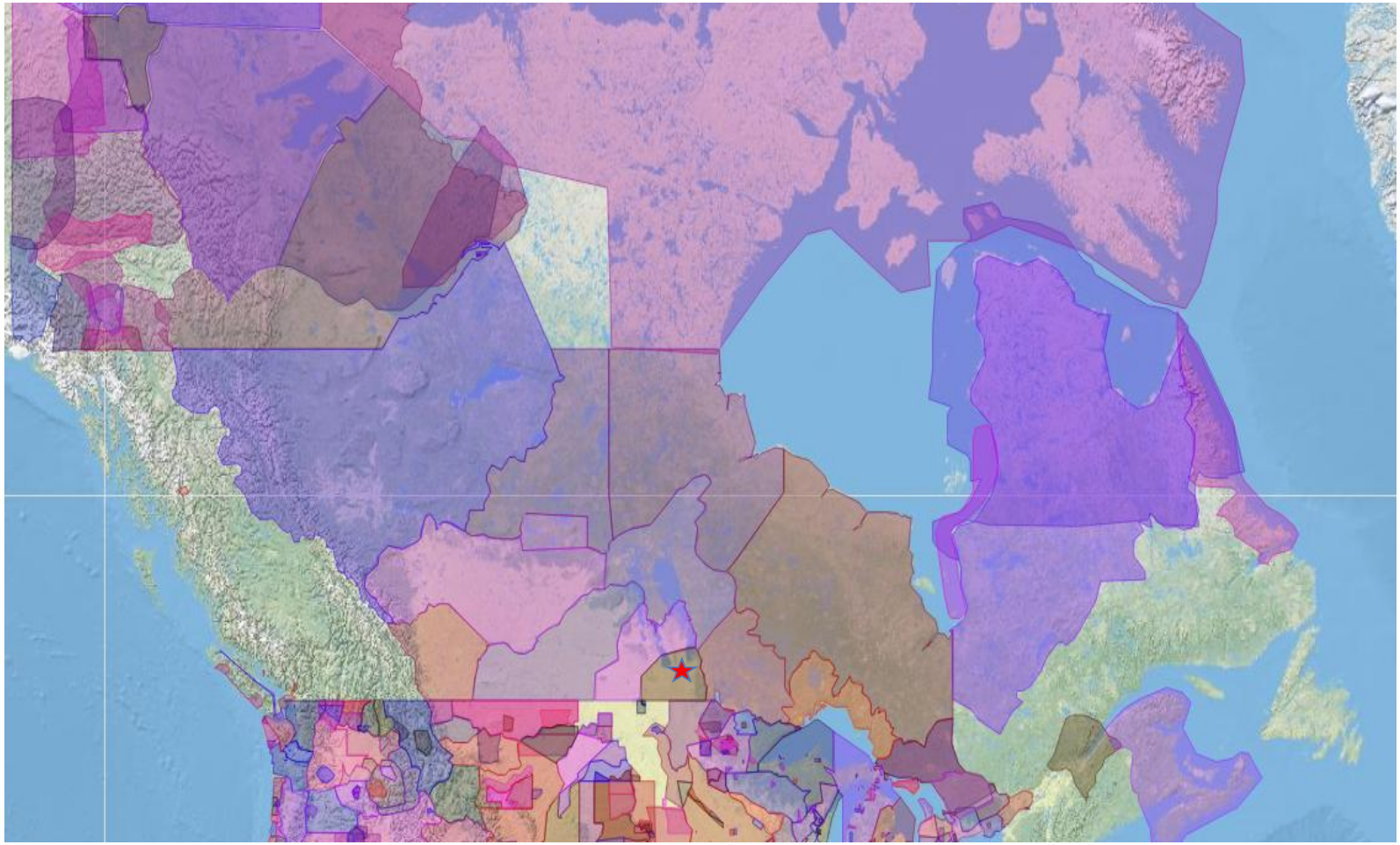
- To explore new ways to reach the undiagnosed.
  - Focus on what has been done in Canada, and could be scaled-up for the benefits of all Canadians.
  - Create a space to understand and discuss barriers and opportunities for the scale-up of these new approaches, recognizing specificities and difference in contexts that exist in this country.
- Webinar 1
  - HIV/Hep C POCT projects in non-traditional settings: reaching people where they are.
- Webinar 2
  - Reflection on Canada's situation compare to other countries in regard to new technologies uptake
  - POC HIV/syphilis dual test: a trade-off between imperfect test and expanded reach; learning from LMIC experience
- Webinar 3
  - Dry Blood Spot - a new strategy option to expand the reach of HIV and hep C testing in communities
- Webinar 4
  - Self-testing in Canada: what can we expect? – Evidence from research and discuss next steps

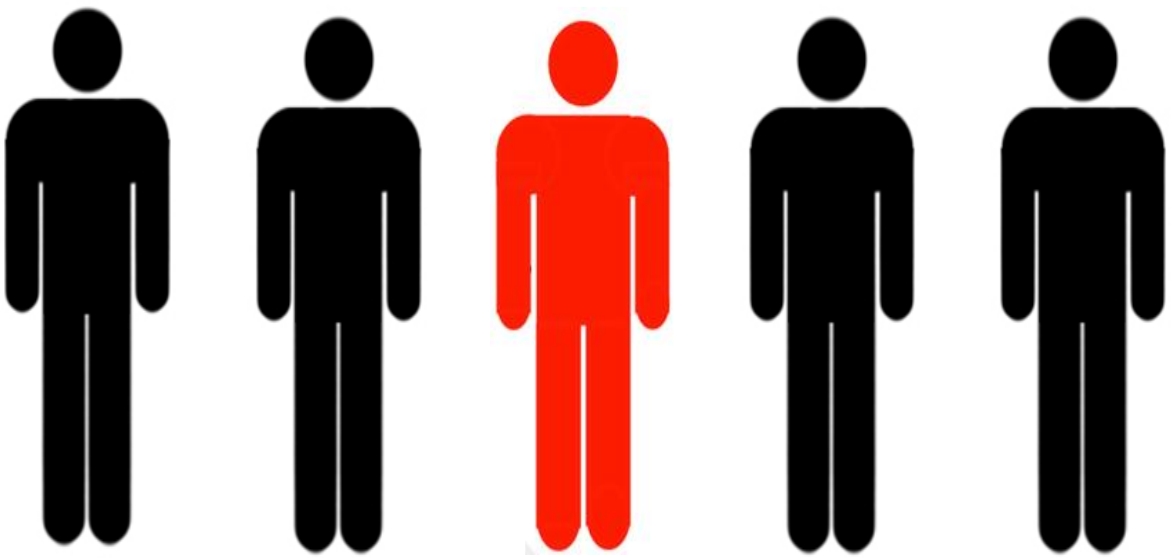
CATIE Canada's source for HIV and hepatitis C information

REACH 2.0

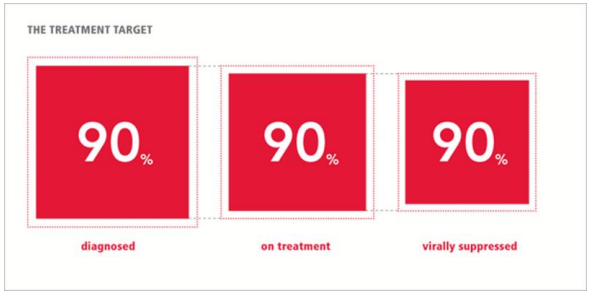
Centre de collaboration nationale des maladies infectieuses
National Collaborating Centre for Infectious Diseases

win-nipi (Winnipeg)



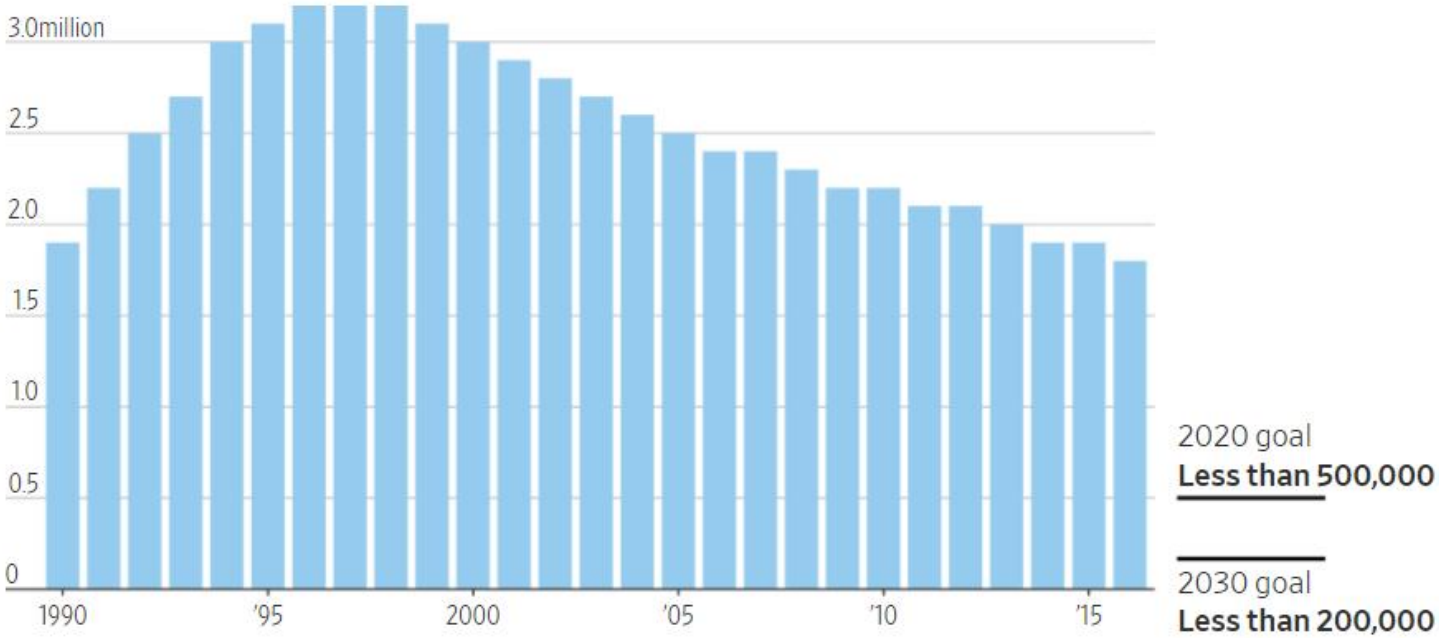


20 %



Slower Progress

New HIV infections around the world have fallen but are still far from targets set by the United Nations.



Source: UNAIDS

Public Health Agency of Canada | Agence de la santé publique du Canada

Canada

Self-Testing as a Novel Public Health Intervention

John Kim
Nikki Pai
Susanne Nicolay

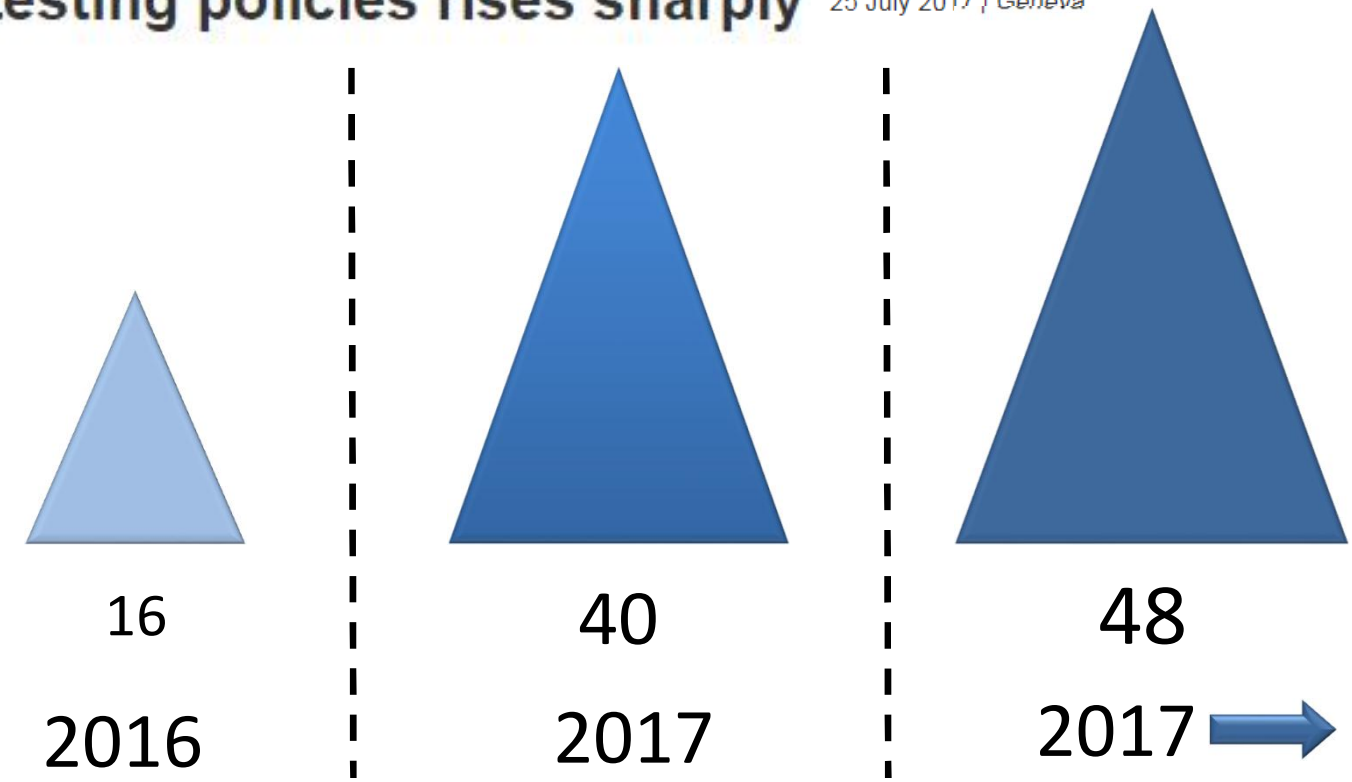
PROTECTING AND EMPOWERING CANADIANS
TO IMPROVE THEIR HEALTH

HIV/AIDS

World Health Organization

Number of countries adopting HIV self-testing policies rises sharply

25 July 2017 | Geneva

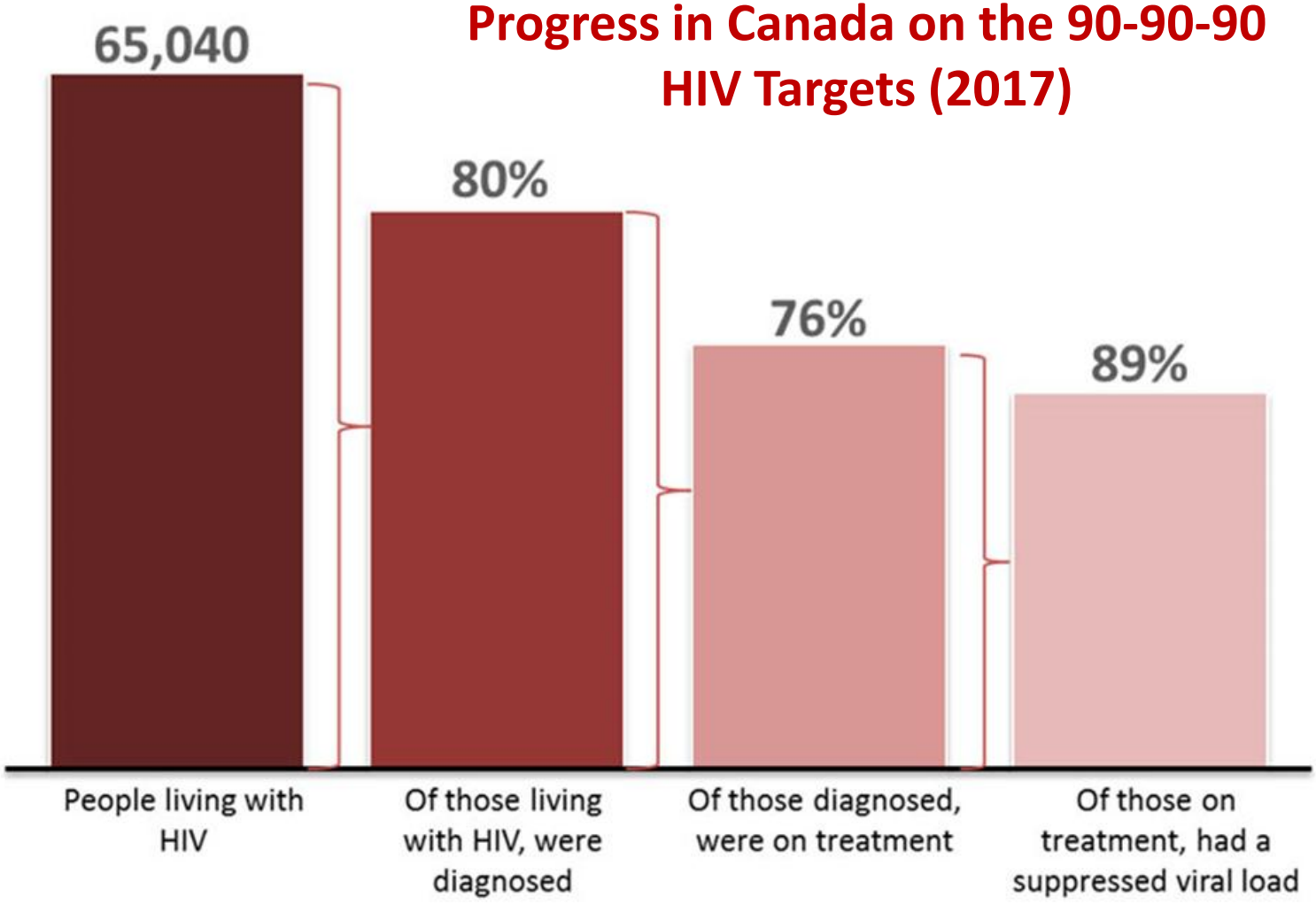


PROMISES


01
02
03
04
Infection Status
Convenience
Decreased Stigma
Increased Privacy

OBSTACLES

Progress in Canada on the 90-90-90 HIV Targets (2017)

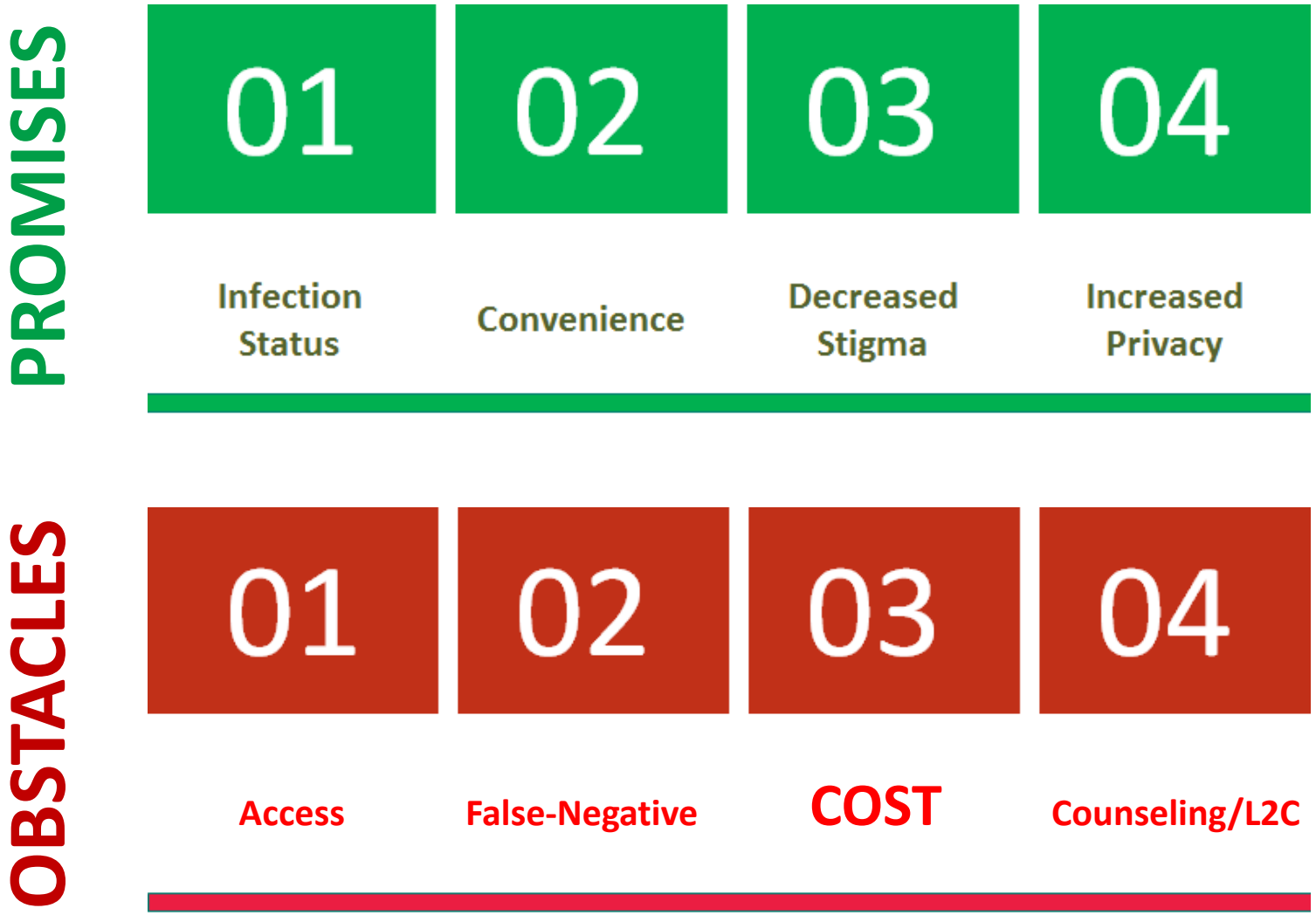


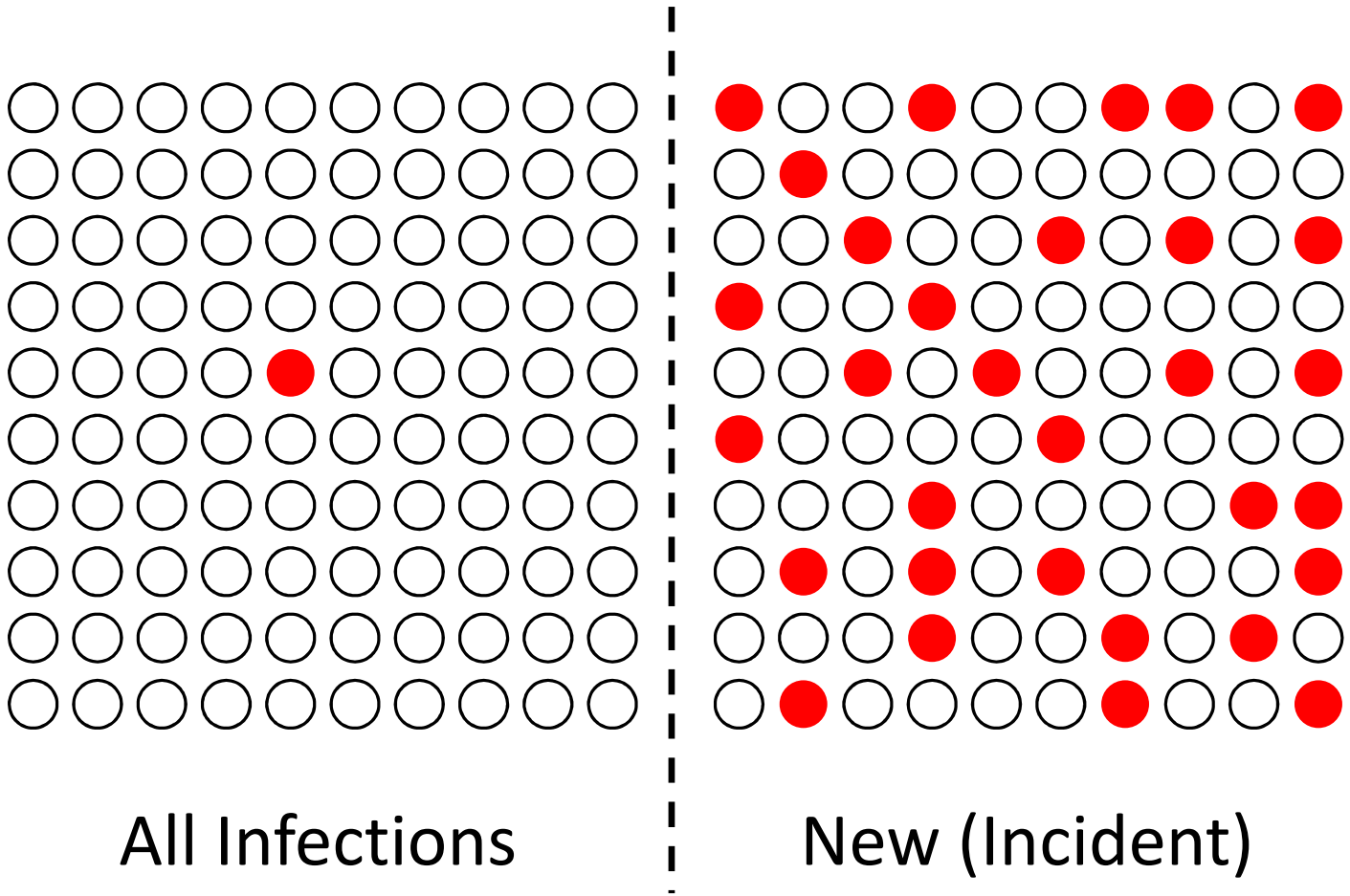
https://www.canada.ca/en/public-health/services/publications/diseases-conditions/backgrounder-progress-90-90-90-hiv-targets.html

merci !

miigwetch !

thank you !


PROMISES
01
02
03
04
Infection Status
Convenience
Decreased Stigma
Increased Privacy
OBSTACLES
01
02
03
04
Access
False-Negative
COST
Counseling/L2C


All Infections
New (Incident)

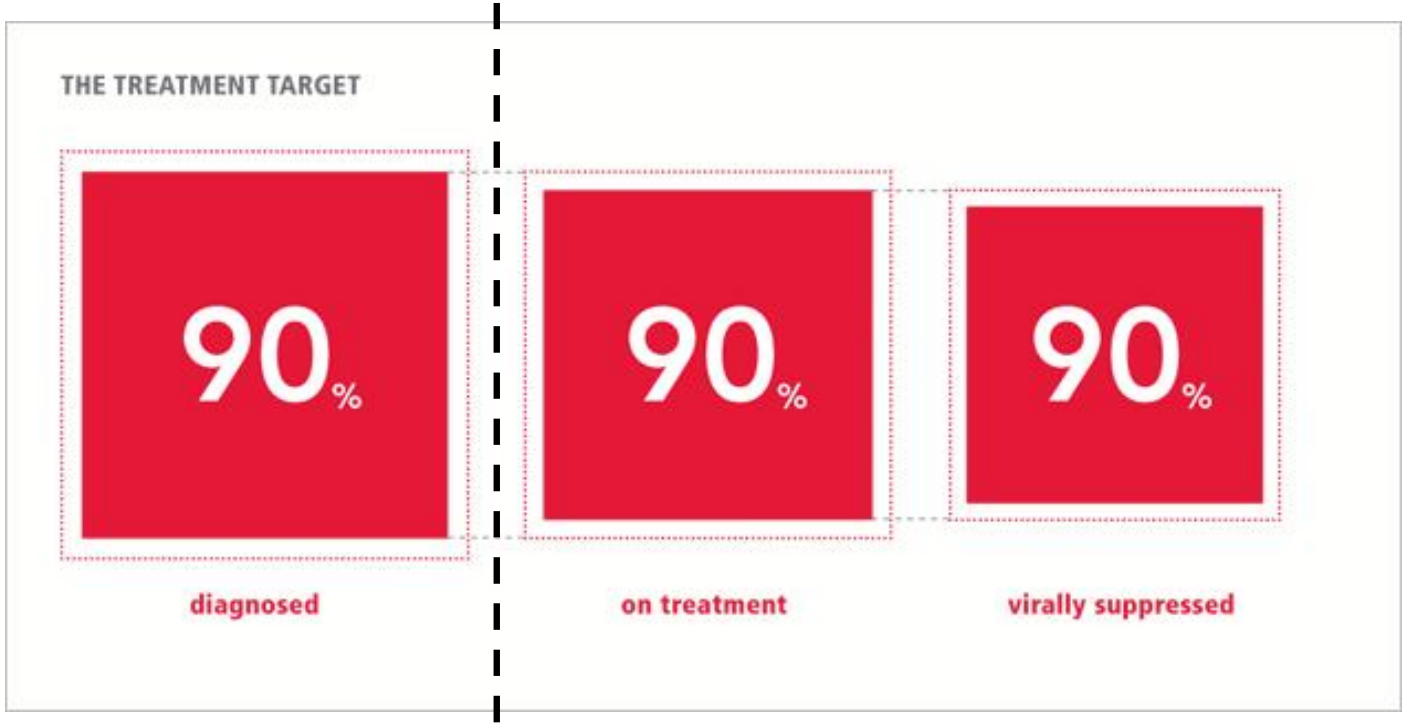
Lesotho: Safeguard Rights in HIV Testing Program for Widespread Outreach Was Underfunded, Incomplete and Ineffective

Cost Effectiveness

Linkage to care

Test more

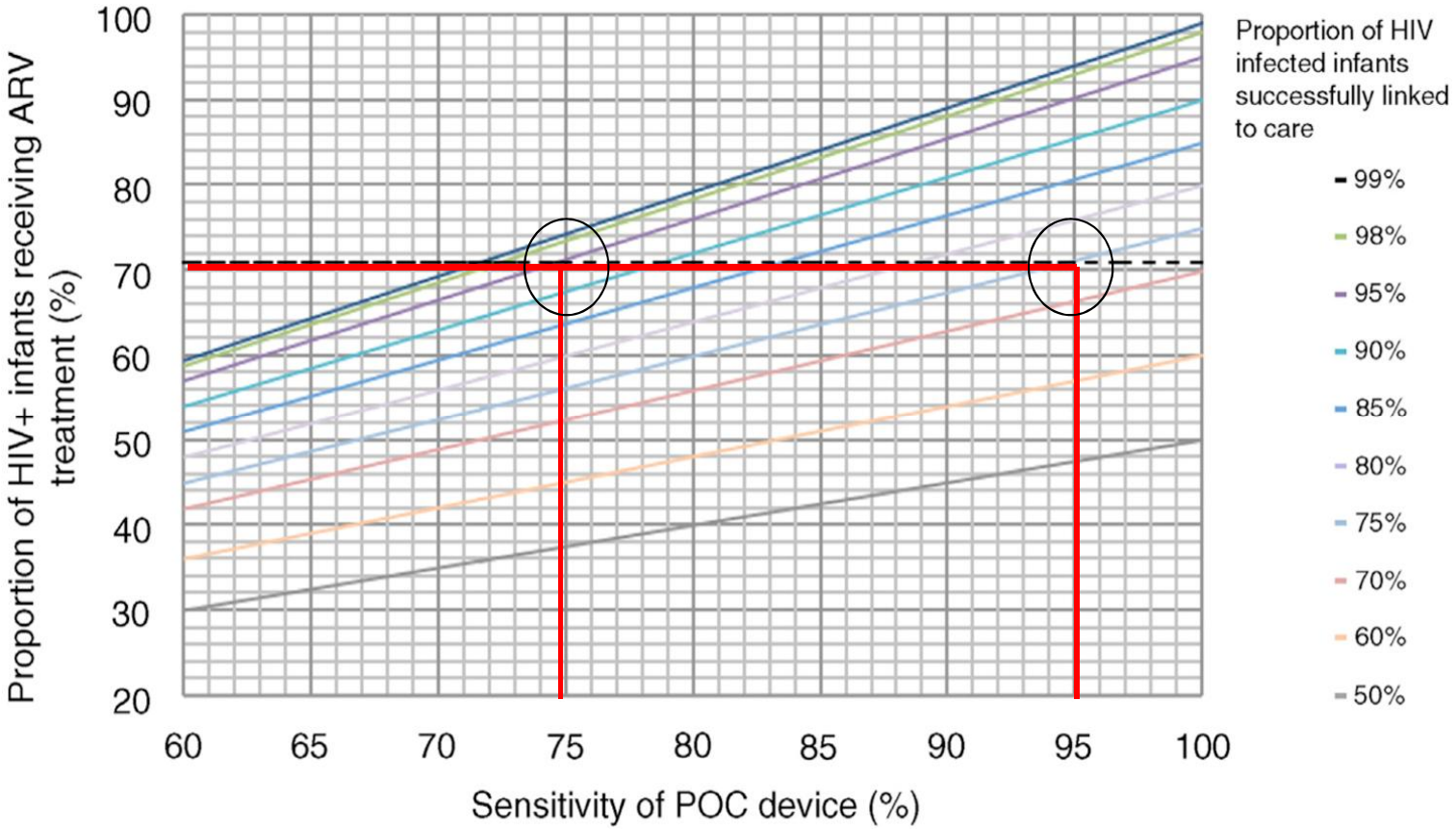
Bendavid E, Branedau M, Wood R, Owens DK. Arch Intern Med 170:1347-1354 (2015)



Linkage to care

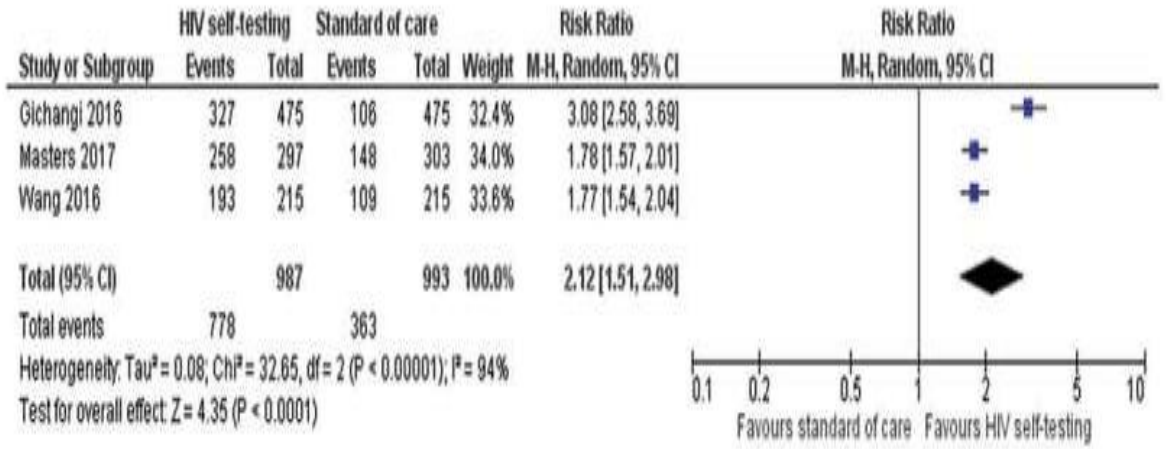
Linkage-to-Care (L2C)

(It's not just about the test !)



Dunning et al, JAIDS 18:20235 (2015)

ACCEPTABILITY



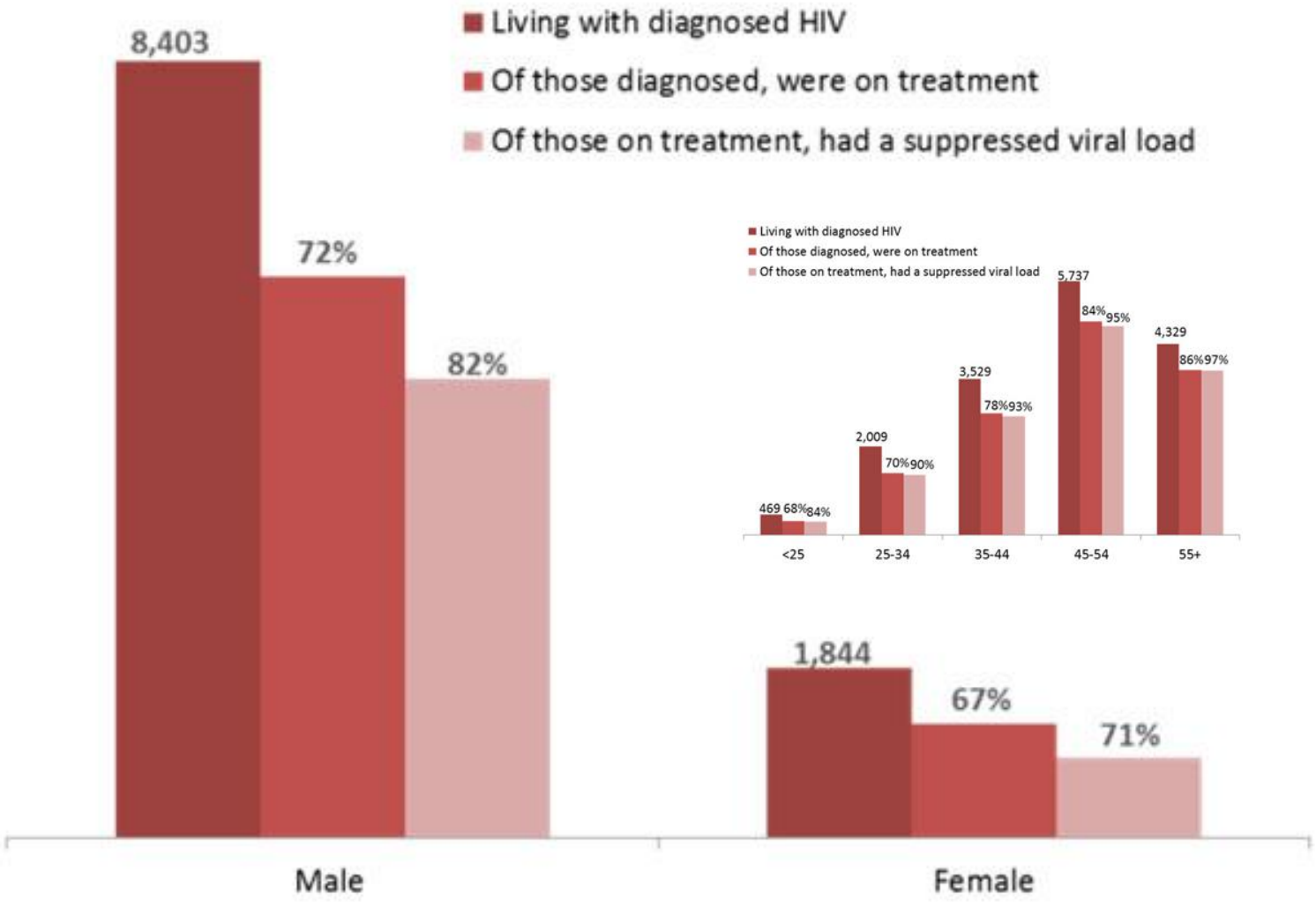
Study or Subgroup	HIV self-testing Events	Total	Standard of care Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Gichangi 2016	327	475	106	475	32.4%	3.08 [2.58, 3.69]
Masters 2017	258	297	148	303	34.0%	1.78 [1.57, 2.01]
Wang 2016	193	215	109	215	33.6%	1.77 [1.54, 2.04]
Total (95% CI)		987		993	100.0%	2.12 [1.51, 2.98]
Total events	778		363			

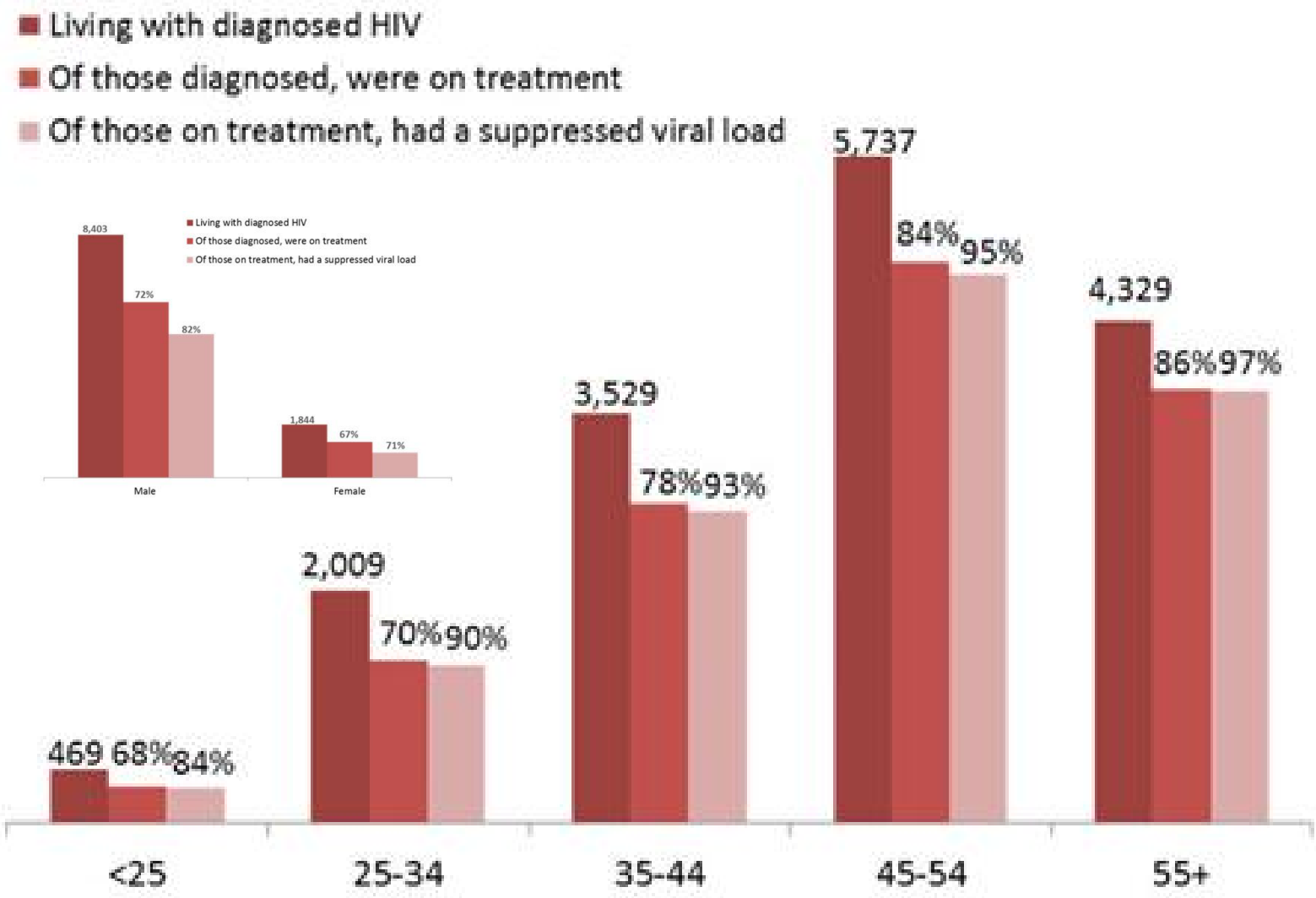
Heterogeneity: Tau² = 0.08; Chi² = 32.65, df = 2 (P < 0.00001); I² = 94%
Test for overall effect: Z = 4.35 (P < 0.0001)

Uptake of HIV testing over three and six month periods among male partners of pregnant women and men who have sex with men.

USABILITY

Examining the effects of HIV self-testing compared to standard HIV testing services: a systematic review and meta-analysis. Johnson CC, Kennedy C, Fonner V et al. JAIDS 20:21594, 2017


Living with diagnosed HIV
Of those diagnosed, were on treatment
Of those on treatment, had a suppressed viral load
8,403
72%
82%
1,844
67%
71%
Male
Female
Living with diagnosed HIV
Of those diagnosed, were on treatment
Of those on treatment, had a suppressed viral load
469 68% 84%
2,009 70% 90%
3,529 78% 93%
5,737 84% 95%
4,329 86% 97%
<25
25-34
35-44
45-54
55+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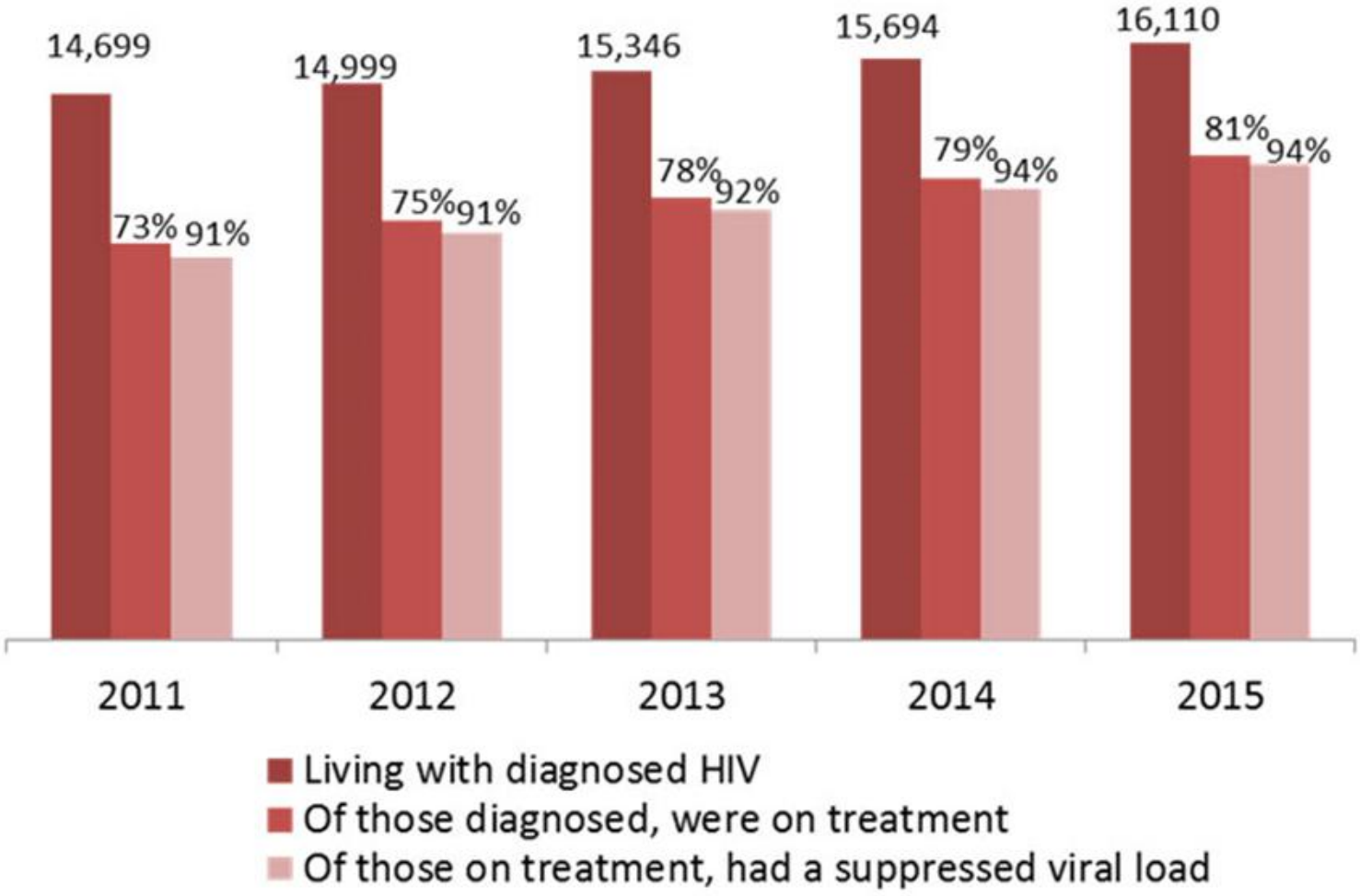
14,699
73%
91%
14,999
75%
91%
15,346
78%
92%
15,694
79%
94%
16,110
81%
94%
2011
2012
2013
2014
2015
Living with diagnosed HIV
Of those diagnosed, were on treatment
Of those on treatment, had a suppressed viral load

HIV SELF TESTING: WHERE ARE WE? EVIDENCE, POLICIES, MOMENTUM

Institut de recherche Centre universitaire de santé McGill

Research Institute McGill University Health Centre

NITIKA PANT PAI., MD., MPH., PHD

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DIVISION OF CLINICAL EPIDEMIOLOGY

MCGILL UNIVERSITY AND MCGILL UNIVERSITY HEALTH CENTER

EMAIL: NITIKA.PAI@MCGILL.CA

WHY HIV SELF TESTING?

PROBLEMS WITH: CONVENTIONAL TESTING

- **To end the HIV epidemic by 2030, UNAIDS 90% tested -90% treated -90 % retained in care.**
  - **This metric translates to 90% undiagnosed tested, 81 of tested positive linked, 73 percent of those linked retained in care and virologicaly suppressed.**
- **30% globally do not know their HIV sero-status**
- **Health facility level**
  - Social Visibility
  - Stigma and Discrimination
  - Long wait times to test results- Delay in receipt of results -Delay in linkages to treatment
  - Lack of confidentiality

HIV SELF TESTING

NEED FOR A PRIVATE STRATEGY

- **Personalized**
- **Affordable Offers time and cost savings**
- **Accessible**
- **Confidential**
- **Convenient**
- **Connections- self testers to counselling and care**

WHAT IS HIV SELF TESTING (HIV ST)?

- HIV self testing is a self screening process whereby an end user (self tester) performs an HIV self test on his/her own, proactively collects his/her own sample, interprets, records and seeks linkages to counselling and care. (WHO HIV ST guidelines 2016; Pant Pai, Plos Med 2013;)
  - Non reactive self test results are considered negative.
  - Reactive or preliminary positive self test test results require a confirmation.
  - Think pregnancy tests.

IN 2018, where are we?
HIV Self testing as an alternative strategy to reach 30% of people with undiagnosed HIV infection.

POLICY BRIEF

HIV TESTING SERVICES

WHO RECOMMENDS HIV SELF-TESTING

DECEMBER 2016

World Health Organization

Reaching people with undiagnosed HIV

HIV self-testing (HIVST) is an empowering and innovative way to reach more people with HIV and help achieve the first of the United Nation's 90–90–90 targets – for 90% of all people with HIV to know their status by 2020. Expanded use of HIVST can contribute to these global targets by reaching first-time testers, people with undiagnosed HIV or those at ongoing risk who are in need of frequent retesting.

HIV self-testing is a process in which a person collects his or her own specimen (oral fluid or blood) and then performs an HIV test and interprets the result, often in a private setting, either alone or with someone he or she trusts.

Source: WHO 2015.

HIVST has been shown to be an empowering, discreet and highly acceptable option for many users, including key populations, men, young people, health workers, pregnant women and their male partners, couples and general population groups.

HIVST represents another forward step in line with efforts to increase patient autonomy, decentralize services and create demand for HIV testing among those unreached by existing services.

UNITAID STAR Project Zimbabwe. © UNITAID/Eric Gauss

HIV self-testing strategy

The result of a single rapid diagnostic test (RDT) is not sufficient to make an HIV-positive diagnosis. HIVST requires self-testers with a reactive (positive) result to receive further testing from a trained provider using a validated national testing algorithm.

THE BLOG

Featuring fresh takes and real-time analysis from HuffPost's signature lineup of contributors

Nitika Pant Pai Become a fan

Physician, Clinical Epidemiologist. Innovator, Social Entrepreneur, Poet, Artist

HIV Self-Testing Can Help End The AIDS Epidemic

Posted: 12/01/2016 6:20 am EST | Updated: 12/01/2016 6:20 am EST

2012- US FDA APPROVED THE FIRST HIV ST- ORAL ORAQUICK HIV ST (SN 91.7, SP 98.7)
THREE FINGER STICK BLOOD BASED TESTS: 1. AUTOTEST VIH, 2. BIOSURE HIV, 3. INSTI HIV, SN (99-100), SP(99.8)

UK France ITALY, NETHERLAND, LATVIA, SPAIN have approved tests for sale

Kenya, Brazil, China, Malta, South Africa -guidelines for HIV ST and tests sold in the country.

40+ countries have HIV ST policies in development

Global momentum on self testing

SELF TESTING STRATEGIES

2 Kinds of Strategies

Unsupervised/ Unassisted self testing:

Participants understand pre test information, conduct and interpret self test, and call the counselor for post test linkages.

Supervised or Assisted self testing

with aid of counselors, educators in a supervised setting, where the self testing process is conducted by the participant in a kiosk.

EVIDENCE: SELF TESTING STUDIES TO DATE GLOBALLY…

- 200+ studies on self testing worldwide (ongoing and published)
- 12+ RCT's proven evidence of its increased uptake of HIV ST, expanded access, increased proportions of individuals who know their sero-status
- 6+ studies on HIV ST's cost effectiveness
- 40+ reviews/editorials/commentaries on benefit of HIV ST

Assessment of the Potential Impact and Cost-effectiveness of Self-Testing for HIV in Low-Income Countries

Valentina Cambiano,[1] Deborah Ford,[2] Travor Mabugu,[5] Sue Napierala Mavedzenge,[7] Alec Miners,[3] Owen Mugurungi,[6] Fumiyo Nakagawa,[1] Paul Revill,[4] and Andrew Phillips[1]

Johnson CC et al. *Journal of the International AIDS Society* 2017, **20**:21594
http://www.jiasociety.org/index.php/jias/article/view/21594 | https://doi.org/10.7448/IAS.20.1.21594

JIAS Journal of the International AIDS Society

Review article

Examining the effects of HIV self-testing compared to standard HIV testing services: a systematic review and meta-analysis

Cheryl C Johnson[1§], Caitlin Kennedy[2], Virginia Fonner[3], Nandi Siegfried[1,4], Carmen Figueroa[1], Shona Dalal[1], Anita Sands[5] and Rachel Baggaley[1]

[§]Corresponding author: Cheryl C Johnson, Department of HIV, World Health Organization, 20 Avenue Appia, Geneva 1201, Switzerland. Tel: +41 22 791 4335. (Johnsonc@who.int)

OPEN ACCESS Freely available o

PLOS MEDICINE

Supervised and Unsupervised Self-Testing for HIV in High- and Low-Risk Populations: A Systematic Review

Nitika Pant Pai[1]*, Jigyasa Sharma[2], Sushmita Shivkumar[1], Sabrina Pillay[1], Caroline Vadnais[1], Lawrence Joseph[2], Keertan Dheda[3], Rosanna W. Peeling[4]

1 Division of Clinical Epidemiology, McGill University Health Centre, Department of Medicine, McGill University, Montreal, Canada, 2 Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Canada, 3 Lung Infection and Immunity Unit, Division of Pulmonology and UCT Lung Institute, Department of Medicine and Institute of Infectious Diseases and Molecular Medicine, University of Cape Town, Cape Town, South Africa, 4 London School of Hygiene and Tropical Medicine, London, United Kingdom

Abstract

Background: Stigma, discrimination, lack of privacy, and long waiting times partly explain why six out of ten individuals living with HIV do not access facility-based testing. By circumventing these barriers, self-testing offers potential for more people to know their sero-status. Recent approval of an in-home HIV self test in the US has sparked self-testing initiatives, yet data on acceptability, feasibility, and linkages to care are limited. We systematically reviewed evidence on supervised (self-testing and counselling aided by a health care professional) and unsupervised (performed by self-tester with access to phone/internet counselling) self-testing strategies.

Methods and Findings: Seven databases (Medline [via PubMed], Biosis, PsycINFO, Cinahl, African Medicus, LILACS, and EMBASE) and conference abstracts of six major HIV/sexually transmitted infections conferences were searched from 1st January 2000–30th October 2012. 1,221 citations were identified and 21 studies included for review. Seven studies evaluated an unsupervised strategy and 14 evaluated a supervised strategy. For both strategies, data on acceptability (range: 74%–96%), preference (range: 61%–91%), and partner self-testing (range: 80%–97%) were high. A high specificity (range: 99.8%–100%) was observed for both strategies, while a lower sensitivity was reported in the unsupervised (range: 92.9%–100%; one study) versus supervised (range: 97.4%–97.9%; three studies) strategy. Regarding feasibility of linkage to counselling and care, 96% ($n = 102/106$) of individuals testing positive for HIV stated they would seek post-test counselling (unsupervised strategy, one study). No extreme adverse events were noted. The majority of data ($n = 11,019/12,402$ individuals, 89%) were from high-income settings and 71% ($n = 15/21$) of studies were cross-sectional in design, thus limiting our analysis.

Conclusions: Both supervised and unsupervised testing strategies were highly acceptable, preferred, and more likely to result in partner self-testing. However, no studies evaluated post-test linkage with counselling and treatment outcomes and reporting quality was poor. Thus, controlled trials of high quality from diverse settings are warranted to confirm and extend these findings.

Please see later in the article for the Editors' Summary.

RESEARCH ARTICLE

A Finger-Stick Whole-Blood HIV Self-Test as an HIV Screening Tool Adapted to the General Public

Thierry Prazuck[1]*, Stephen Karon[1], Camelia Gubavu[1], Jerome Andre[2], Jean Marie Legall[3], Elisabeth Bouvet[4], Georges Kreplak[5], Jean Paul Teglas[6], Gilles Pialoux[7]

1 Department of Infectious Diseases, Centre Hospitalier Régional, Orléans, France, **2** HF Prevention, Trappes, France, **3** Aides, Paris, France, **4** Department of Infectious Diseases, Hôpital Universitaire Bichat Claude Bernard, Paris, France, **5** Centre de Biologie du Chemin Vert (CBCV), Paris, France, **6** INSERM INED, U822, Hôpital Kremlin Bicêtre, Le Kremlin-Bicêtre, France, **7** Department of Infectious Diseases, Hôpital Tenon, Paris, France

* thierry.prazuck@chr-orleans.fr

SO, DO WE NEED AN HIV SELF TESTING OPTION IN CANADA?

- In Canada, 90-90-90 targets proportionally translate to (90-81-73)
  - First 80% (range: 73-87)--- (of 90)------
  - Second 76%(range: 80-89)--(of 81)------
  - Third 87% (range: 82-93)--(of 73)-----
- Self testing could help address the **last mile problem in Canada.**
- We **need** an ***approved HIV self test***.
- Research: Limited studies- Two studies from Quebec

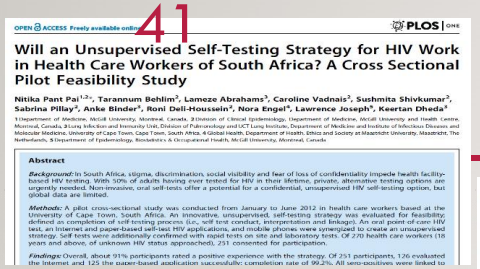
AIDS Behav
DOI 10.1007/s10461-017-1764-z

ORIGINAL PAPER

What do Key Stakeholders Think About HIV Self-Testing in Canada? Results from a Cross-Sectional Survey

N. Pant Pai[1] · M. Smallwood[1] · D. Gulati[2] · N. Lapczak[1] · A. Musten[3] · C. Gaydos[4] · C. Johnston[5] · M. Steben[6] · T. Wong[7] · N. Engel[2] · J. Kim[8]

HIV SELF TESTING IN OUR LAB @



PLOS ONE

Will an Unsupervised Self-Testing Strategy for HIV Work in Health Care Workers of South Africa? A Cross Sectional Pilot Feasibility Study

Nitika Pant Pai[1,2]*, Tarannum Behlim[2], Lameze Abrahams[3], Caroline Vadnais[2], Sushmita Shivkumar[2], Sabrina Pillay[2], Anke Binder[3], Roni Dell-Houssein[2], Nora Engel[4], Lawrence Joseph[5], Keertan Dheda[6]

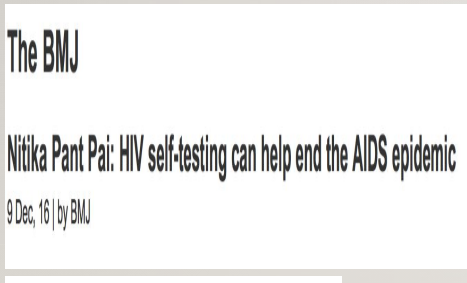
1 Department of Medicine, McGill University, Montreal, Canada, 2 Division of Clinical Epidemiology, Department of Medicine, McGill University and Health Centre, Montreal, Canada, 3 Lung Infection and Immunity Unit, Division of Pulmonology and UCT Lung Institute, Department of Medicine and Institute of Infectious Diseases and Molecular Medicine, University of Cape Town, Cape Town, South Africa, 4 Global Health, Department of Health, Ethics and Society at Maastricht University, Maastricht, The Netherlands, 5 Department of Epidemiology, Biostatistics & Occupational Health, McGill University, Montreal, Canada

Abstract

Background: In South Africa, stigma, discrimination, social visibility and fear of loss of confidentiality impede health facility-based HIV testing. With 50% of adults having ever tested for HIV in their lifetime, private, alternative testing options are urgently needed. Non-invasive, oral self-tests offer a potential for a confidential, unsupervised HIV self-testing option, but global data are limited.

Methods: A pilot cross-sectional study was conducted from January to June 2012 in health care workers based at the University of Cape Town, South Africa. An innovative, unsupervised, self-testing strategy was evaluated for feasibility: defined as completion of self-testing process (i.e., self test conduct, interpretation and linkage). An oral point-of-care HIV test, an Internet and paper-based self-test HIV applications, and mobile phones were synergized to create an unsupervised strategy. Self tests were additionally confirmed with rapid tests on site and laboratory tests. Of 270 health care workers (18 years and above, of unknown HIV status approached), 251 consented for participation.

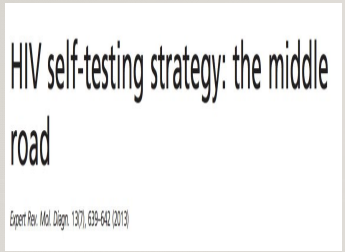
Findings: Overall, about 91% participants rated a positive experience with the strategy. Of 251 participants, 126 evaluated the Internet and 125 the paper-based application successfully: completion rate of 99.2%. All sero-positives were linked to



The BMJ

Nitika Pant Pai: HIV self-testing can help end the AIDS epidemic

9 Dec, 16 | by BMJ



HIV self-testing strategy: the middle road

Expert Rev. Mol. Diagn. 13(7), 639–642 (2013)

OPEN ACCESS Freely available o

PLOS MEDICINE

Supervised and Unsupervised Self-Testing for HIV in High- and Low-Risk Populations: A Systematic Review

Nitika Pant Pai[1]*, Jigyasa Sharma[2], Sushmita Shivkumar[1], Sabrina Pillay[1], Caroline Vadnais[1], Lawrence Joseph[2], Keertan Dheda[3], Rosanna W. Peeling[4]

1 Division of Clinical Epidemiology, McGill University Health Centre, Department of Medicine, McGill University, Montreal, Canada, 2 Department of Epidemiology, Biostatistics and Occupational Health, McGill University, Montreal, Canada, 3 Lung Infection and Immunity Unit, Division of Pulmonology and UCT Lung Institute, Department of Medicine and Institute of Infectious Diseases and Molecular Medicine, University of Cape Town, Cape Town, South Africa, 4 London School of Hygiene and Tropical Medicine, London, United Kingdom

Abstract

Background: Stigma, discrimination, lack of privacy, and long waiting times partly explain why six out of ten individuals living with HIV do not access facility-based testing. By circumventing these barriers, self-testing offers potential for more people to know their sero-status. Recent approval of an in-home HIV self test in the US has sparked self-testing initiatives, yet data on acceptability, feasibility, and linkages to care are limited. We systematically reviewed evidence on supervised (self-testing and counselling aided by a health care professional) and unsupervised (performed by self-tester with access to phone/internet counselling) self-testing strategies.

Methods and Findings: Seven databases (Medline [via PubMed], Biosis, PsycINFO, Cinahl, African Medicus, LILACS, and EMBASE) and conference abstracts of six major HIV/sexually transmitted infections conferences were searched from 1st January 2000–30th October 2012. 1,221 citations were identified and 21 studies included for review. Seven studies evaluated an unsupervised strategy and 14 evaluated a supervised strategy. For both strategies, data on acceptability (range: 74%–96%), preference (range: 61%–91%), and partner self-testing (range: 80%–97%) were high. A high specificity (range: 99.8%–100%) was observed for both strategies, while a lower sensitivity was reported in the unsupervised (range: 92.9%–100%; one study) versus supervised (range: 97.4%–97.9%; three studies) strategy. Regarding feasibility of linkage to counselling and care, 96% ($n = 102/106$) of individuals testing positive for HIV stated they would seek post-test counselling (unsupervised strategy, one study). No extreme adverse events were noted. The majority of data ($n = 11,019/12,402$ individuals, 89%) were from high-income settings and 71% ($n = 15/21$) of studies were cross-sectional in design, thus limiting our analysis.

Conclusions: Both supervised and unsupervised testing strategies were highly acceptable, preferred, and more likely to result in partner self-testing. However, no studies evaluated post-test linkage with counselling and treatment outcomes and reporting quality was poor. Thus, controlled trials of high quality from diverse settings are warranted to confirm and extend these findings.

Please see later in the article for the Editors' Summary.

Are we ready for home-based, self-testing for HIV?

AIDS Research and Treatment

Research Article

Will an Unsupervised Self-Testing Strategy Be Feasible to Operationalize in Canada? Results from a Pilot Study in Students of a Large Canadian University

Nitika Pant Pai,[1,2] Madhavi Bhargava,[2] Lawrence Joseph,[3] Jigyasa Sharma,[1] Sabrina Pillay,[2] Bhairavi Balram,[1] and Pierre-Paul Tellier[4]

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[3] Department of Epidemiology, Biostatistics & Occupational Health, McGill University, Montreal, QC, Canada H3A 1A2
[4] McGill University Student Health Services, Montreal, QC, Canada H3A 0G3

Background. A convenient, private, and accessible HIV self-testing strategy stands to complement facility-based conventional testing. Over-the-counter oral HIV self-tests are approved and available in the United States, but not yet in Canada. Canadian data on self-testing is nonexistent. We investigated the feasibility of offering an unsupervised self-testing strategy to Canadian students. *Methods.* Between September 2011 and May 2012, we recruited 145 students from a student health clinic of a large Canadian university. Feasibility of operationalization (i.e., self-test conduct, acceptability, convenience, and willingness to pay) was evaluated. Self-test conduct was computed with agreement between the self-test performed by the student and the test repeated by a healthcare professional. Other metrics were measured on a survey. *Results.* Participants were young (median age 22 years), unmarried (97%), and 47% were out of province or international students. Approximately 52% self-reported a history of unprotected casual sex and sex with multiple partners. Self-test conduct agreement was high (100%), so were acceptability (81%), convenience (99%), and willingness to pay (74%) for self-tests. Concerns included accuracy of self-tests and availability of expedited linkages. *Conclusion.* An unsupervised self-testing strategy was found to be feasible in Canadian students. Findings call for studies in at-risk populations to inform Canadian policy.

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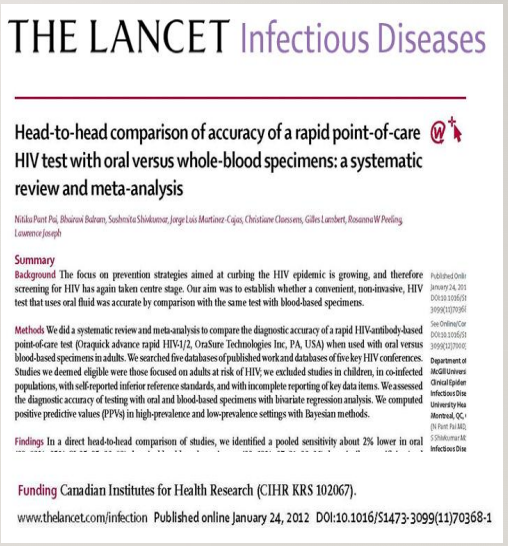
Retrovirology: Research and Treatment

Perspective on HIV Self-testing in North America: A Tale of Two Countries—US and Canada

Nitika Pant Pai

Division of Clinical Epidemiology, Department of Medicine, McGill University and Health Centre, West Montreal, Quebec, Canada.



THE LANCET Infectious Diseases

Head-to-head comparison of accuracy of a rapid point-of-care HIV test with oral versus whole-blood specimens: a systematic review and meta-analysis

Nitika Pant Pai, Bhairavi Balram, Sushmita Shivkumar, Jorge Luis Martinez-Cajas, Christiane Claessens, Gilles Lambert, Rosanna W Peeling, Lawrence Joseph

Summary

Background The focus on prevention strategies aimed at curbing the HIV epidemic is growing, and therefore screening for HIV has again taken centre stage. Our aim was to establish whether a convenient, non-invasive, HIV test that uses oral fluid was accurate by comparison with the same test with blood-based specimens.

Methods We did a systematic review and meta-analysis to compare the diagnostic accuracy of a rapid HIV-antibody-based point-of-care test (Orasquick advance rapid HIV-1/2, OraSure Technologies Inc, PA, USA) when used with oral versus blood-based specimens in adults. We searched five databases of published work and databases of five key HIV conferences. Studies we deemed eligible were those focused on adults at risk of HIV, we excluded studies in children, in co-infected populations, with self-reported inferior reference standards, and with incomplete reporting of key data items. We assessed the diagnostic accuracy of testing with oral and blood-based specimens with bivariate regression analysis. We computed positive predictive values (PPVs) in high-prevalence and low-prevalence settings with Bayesian methods.

Findings In a direct head-to-head comparison of studies, we identified a pooled sensitivity about 2% lower in oral

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See Online/Cor DOI:10.1016/S1 3099(12)70065

Department of McGill Universi Clinical Epidem Infectious Dise University Hea Montreal, QC, (N Pant Pai MC); S Shivkumar Mc Infectious Dise

Funding Canadian Institutes for Health Research (CIHR KRS 102067).

www.thelancet.com/infection Published online January 24, 2012 DOI:10.1016/S1473-3099(11)70368-1

Empowering patients and public

Dr Nitika Pant Pai is revolutionising the diagnosis of infectious diseases with a focus on HIV. Here, she discusses her work and its implications, and highlights the importance of collaboration and open-access science publishing

AIDS Behav
DOI 10.1007/s10461-017-1764-z

CrossMark

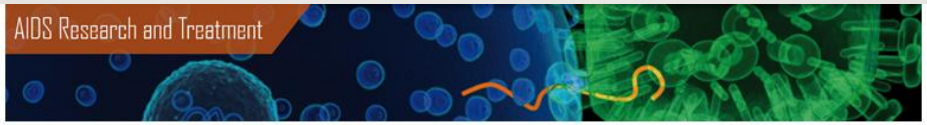
ORIGINAL PAPER

09/04/2018

What do Key Stakeholders Think About HIV Self-Testing in Canada? Results from a Cross-Sectional Survey

N. Pant Pai[1] · M. Smallwood[1] · D. Gulati[2] · N. Lapczak[1] · A. Musten[3] · C. Gaydos[4] · C. Johnston[5] · M. Steben[6] · T. Wong[7] · N. Engel[2] · J. Kim[8]

Our lab has conducted four studies in four sub populations- in two countries.
Study 1: Low risk students



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Pant Pai N, Bhargava M, Joseph L,. Will an Unsupervised Self-Testing Strategy Be Feasible to Operationalize in Canada? Results from a Pilot Study in Students of a Large Canadian University. *Aids Research and Treatment*. 2014

Grand Challenges Canada
Grands Défis Canada
BOLD IDEAS FOR HUMANITY.

STUDY 2- HIV-ST IN HEALTH CARE WORKERS IN SOUTH AFRICA

OPEN ACCESS Freely available online

PLOS ONE

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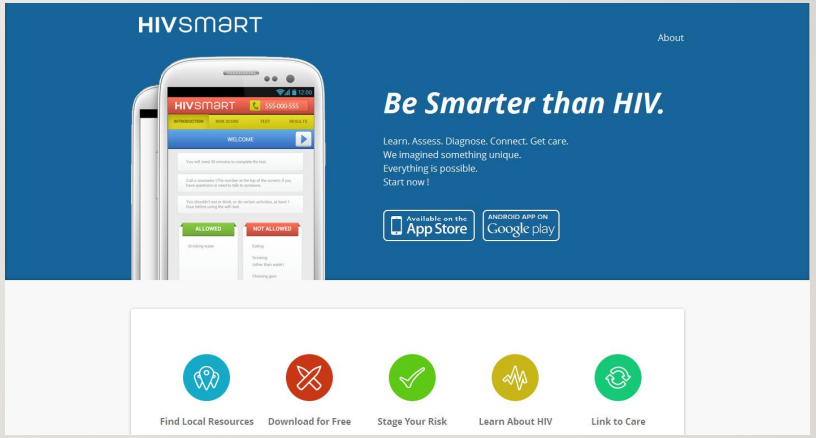
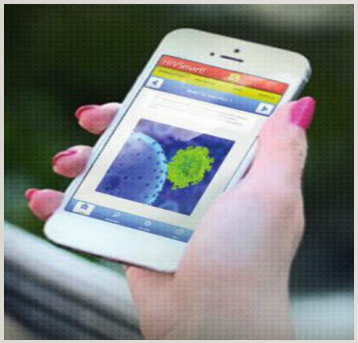
INNOVATION **HIVSMART!**:

AN INTEGRATED SMARTPHONE, TABLET, INTERNET, FEATURE PHONE BASED HIV SELF TESTING STRATEGY FOR SELF TEST CONDUCT, ENGAGEMENT AND RETENTION

- Application, program, web platform that works with any validated self test (both oral and blood)
- **Empowers, engages, informs** individuals to self screen, self stage, self conduct and interpret self tests and **links to counselling /retains in care**
- Developed in Canada /Tested Evaluated in South Africa



Study 3: At risk MSM (STD clinic attendees) Montreal



Will an app optimized HIV self testing strategy work for at risk populations? – complete self testing, seek linkages to care?

- Supervised self testing at a community clinic;
- 510 MSMs; cross sectional;
- Self tests and Tablet application (English and French) provided to the clinic attendees along with self tests;
- Self tests conducted on site but unsupervised to simulate a home environment; linkages operationalized in the same day
- Results presented at the IDSA Conference 2017

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ARE YOU...

- ✓ Male
- ✓ 18 years or older?
- ✓ Sexually active with men?
- ✓ Interested in trying out an innovative HIV self-testing strategy?

To make an appointment, please contact:

Laurence Desjardins
Sexologist, Research Assistant
514-524-3642 x 273
Laurence.Desjardins@lactuel.ca

Participants will be compensated for their time.

Investigators:
Dr. Réjean Thomas
Dr. Nitika Pant Pai

Centre universitaire de santé McGill
McGill University Health Centre

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The HIVSmart! self-testing study

STUDY INFORMATION

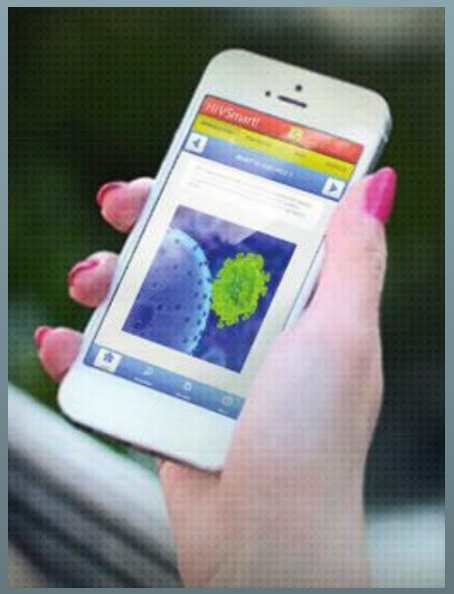

Image: International Innovation 2014

Study 4:
HIV ST in township populations South Africa
HIVSmart! Transition to scale
Gov of Canada and Gov of South Africa

Grand Challenges Canada™
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BOLD IDEAS FOR HUMANITY.™

Institut de recherche Centre universitaire de santé McGill
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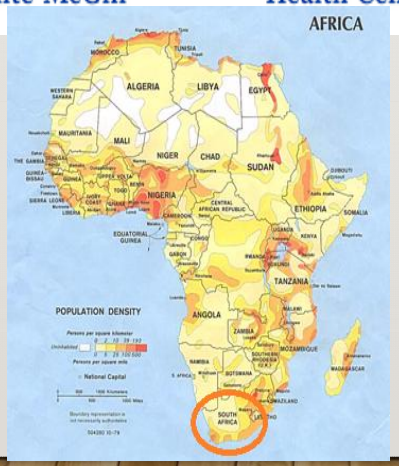


Department of Science & Technology, South Africa

South Africa MRC SHIP program

RI MUHC Montreal Canada

September
18th, 2017

IAPAC INTERNATIONAL ASSOCIATION OF PROVIDERS OF AIDS CARE

Institut de recherche Centre universitaire de santé McGill

Research Institute McGill University Health Centre

Sympact-X

FOR IMMEDIATE RELEASE

IAPAC, RI-MUHC, SYMPACT-X Announce Partnership to Implement HIVSmart!™ Self-Testing App in High HIV Burden Fast-Track Cities

WHAT NEEDS TO BE DONE FOR HIV ST
HIV ST ACTION POINTS

- **Scale up and sustainability of HIV ST within programs**
- **Rapid Approvals of HIV ST (Blood and Oral tests)**
- **Rapid scale up in Fast track cities**
- **Policy and implementation documents from all 140 countries**
- **Service delivery gaps (Innovations to support the process of testing and linkage)**
- **Data on scale up, performance, impact, costs and cost effectiveness**

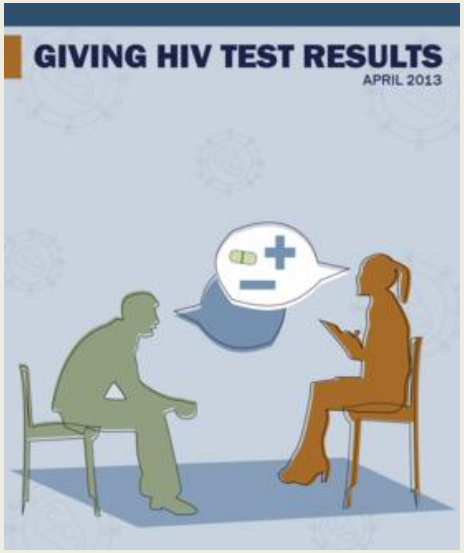
THANK YOU!

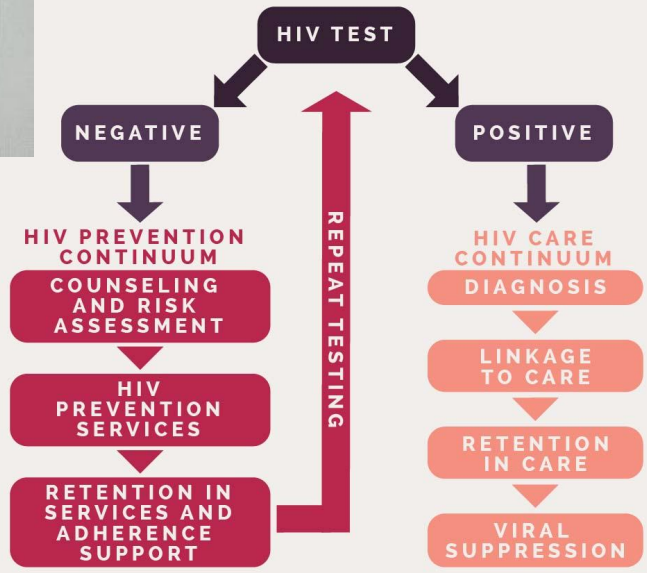
"BE THE CHANGE YOU WISH TO SEE IN THE WORLD"- MAHATMA GANDHI.

Beyond HIV Self-Tests


You are
not alone


bioLytical
INSTI
HIV-1/HIV-2 Antibody Test
INSTI™ HIV-1/HIV-2 Antibody Test
Intended for single use determination of HIV-1/HIV-2 antibodies in whole blood, serum or plasma.
For in vitro diagnostic use only.
Store at 15-30°C.
Not for Donor Screening.
Contents:
1 Membrane Unit
1 Sample Diluent
1 Color Developer
1 Clarifying Solution
1 Single-use Pipette
1 Single-use Lancet
1 Alcohol Swab
1 Package Insert
Catalogue Number 90-1008


GIVING HIV TEST RESULTS
APRIL 2013


HIV TEST
NEGATIVE
POSITIVE
HIV PREVENTION CONTINUUM
COUNSELING AND RISK ASSESSMENT
HIV PREVENTION SERVICES
RETENTION IN SERVICES AND ADHERENCE SUPPORT
REPEAT TESTING
HIV CARE CONTINUUM
DIAGNOSIS
LINKAGE TO CARE
RETENTION IN CARE
VIRAL SUPPRESSION

Beyond HIV Self-Testing

What we know…

- An effective HIV response is MORE than HIV testing.
- HIV testing services are the gateway to prevention, care, treatment.
- Routine offer with/without targeted testing approaches works.
- Complimentary testing technologies can include self-testing.
- Testing coverage remains low in some key populations.
- Reaching the undiagnosed remains a challenge in many communities.

Strengths in HIVST

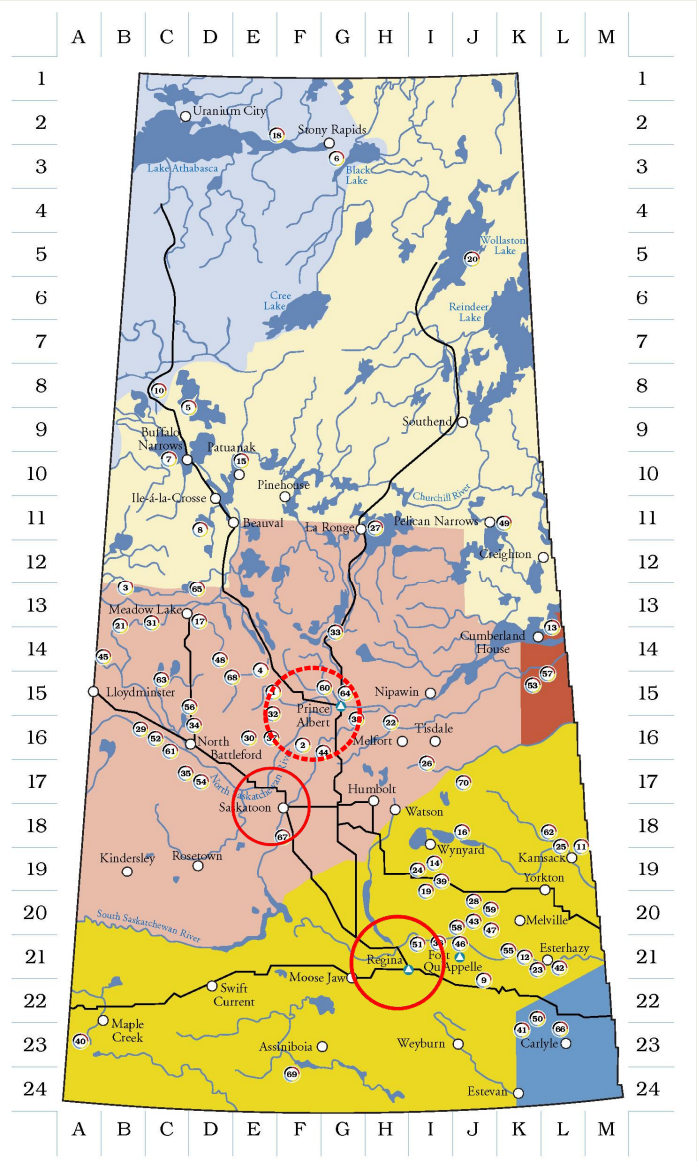
- Increased access to testing
- Privacy and convenience
  - *Includes immediately prior to risk-taking*
- Ease of use
- Increased confidentiality
- Empowerment and self-efficacy
- Acceptability
- Cost
- Less resource intensive (HCPs)

Limitations to HIVST

- Accuracy/possible user error
  - *Screening, not diagnostic*
- Reliable linkage to care pathway
  - *Confirmation*
- Lack of counselling
- Support/ability to cope?
- Potential power imbalance
  - *Safety and vulnerability*
  - *Ethics/unethical use*
- Cost?

Sk Context

- Geography
- Urban/Rural/Remote
- Access to:
  - *Testing*
  - *Counselling*
  - *HIV-specific care*
- Standard and POCT available
- Low testing numbers remain



Lessons Learned from HIV POCT in SK

- HIV POCT has expanded access to HIV testing (60 sites)
  - *Generally accessed via Public Health*
  - *Results not available in the Lab system*
- Options and informed choice remain imperative in HIV testing.
  - *No one size fits all communities/individuals*
- Readiness
  - *Community*
  - *Tester/provider*
  - *Individual accessing test*

HIVST in SK?

- Stigma remains
  - *Includes providers*
- Confidentiality concerns always key in small(er) communities.
- Disparities in equitable access to HIV-related services across SK, including to testing must be acknowledged.
- Access?
  - *Confirmatory testing*
  - *Linkage to care and treatment*

HIVST in SK?

- Access to HIV testing, care and treatment is important from a public health perspective.
  - *UN targets of achieving 90-90-90 achievable with free, convenient and easy access to HIV testing, care and treatment*
- Policy and regulatory frameworks may require review and consideration to ensure equitable and timely access to confirmatory testing, and linkage to care and treatment.
- HIVST can be an additional, complimentary component in an already existing comprehensive HIV testing strategy.

Q & A Period

Type your question in the Chat section, and it will be answered by one of our presenters.

Thank you!

Please evaluate this webinar!