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FROM
Hope
TO
Health

Towards an AIDS-free Generation

December 2012



Ministry of
Health

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Director, Blood Borne Pathogens
Ministry of Health**

**Pacific AIDS Network
September 23, 2015**



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An AIDS-free Generation

No children are born with the virus

As children become teenagers and adults, they will be at a far lower risk of acquiring HIV

For people living with HIV, early diagnosis through regular testing offers

Prevent development of advanced illness through comprehensive care, treatment and support



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Goals

1. Reduce the number of new HIV infections in BC
2. Improve the quality, effectiveness, and reach of HIV prevention services
3. Diagnose those living with HIV as early as possible in the course of their infection
4. Improve quality and reach of HIV support services for those living with and at risk of HIV
5. Reduce burden of advanced HIV infection on health system



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Milestones for Achievement, by 2016

1. Rates of HIV testing in each health service delivery area will be at or above 3,500 per 100,000 people, and each HSDA will have increased HIV testing by at least 50 percent.
2. The proportion of people diagnosed early in the course of infection will meet or exceed 50% in each health authority.
3. Of those diagnosed early in the course of their infection, there will be zero case reports of progression to AIDS.
4. At least 90% of those medically eligible and willing to access HIV treatment in each health authority will be on treatment.



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By 2015:

- HIV testing will be occurring in a variety of settings, with complementary use of targeted testing and routine offers of testing.
- All individuals testing for hepatitis C and/or STIs will also have had an HIV test at the same time.
- The proportion of newly diagnosed HIV clients who engage in partner notification will be at least 75% of all new cases.



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By 2016:

- There will be equitable reach of harm reduction supplies proportionate to population density in each Local Health Area (LHA) in the province.
- The proportion of all clients on HIV therapy who do not have suppressed viral load will decrease by 50%.
- The proportion of people diagnosed late in their course of their infection (CD4 count <200 cells/mm³) will decrease to 10% of all new diagnoses.
- The proportion of clients on HIV therapy receiving standard of care laboratory monitoring will increase by 50%.
- All health authorities will have initiated and evaluated client engagement and client satisfaction activities.



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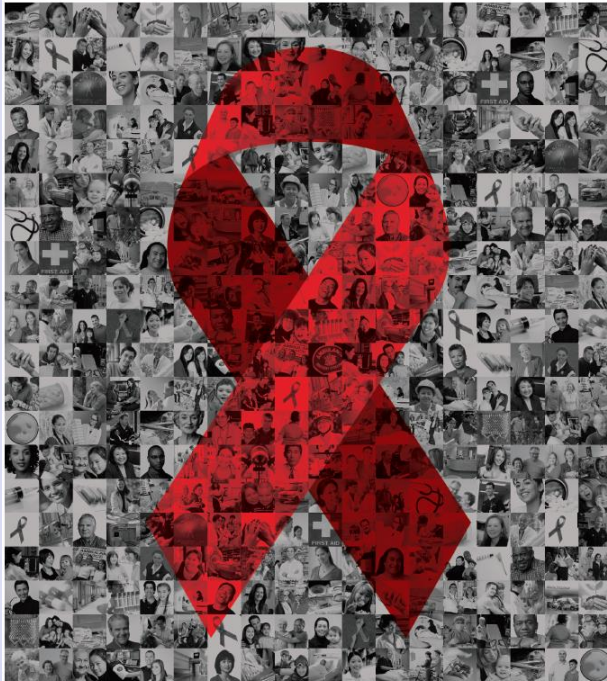


Guiding Principles

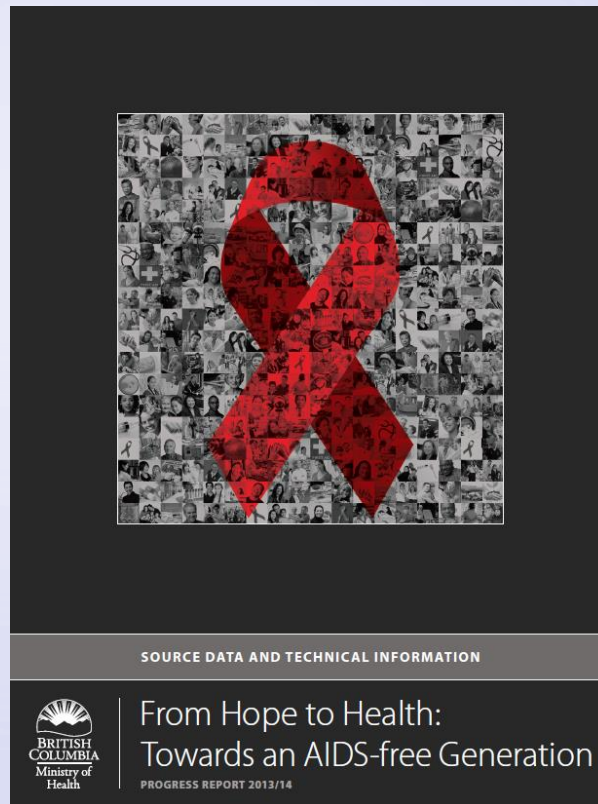
1. Addressing stigma and discrimination
2. Reach and engagement
3. Community involvement
4. Aboriginal engagement
5. Ensuring consent for testing and care



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From Hope to Health:
Towards an AIDS-free Generation
PROGRESS REPORT 2013/14





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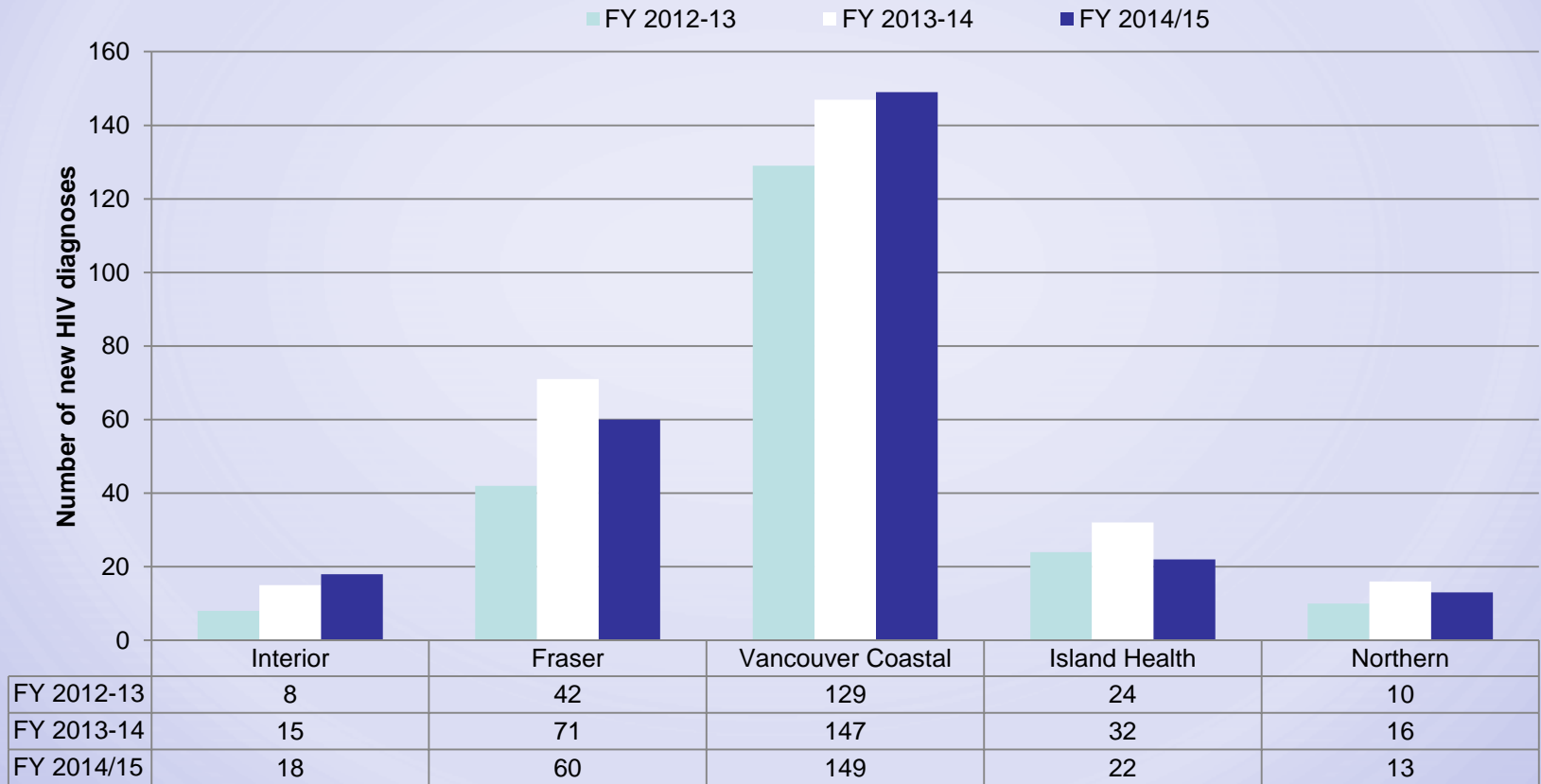


Progress after Year 1: 2013 / 2014

- Testing increased in every region, with some non-pilot regions close to implementing a routine offer of HIV testing in acute care and family practice.
- Added intensity to ensure equitable reach of sterile needles and condoms varies across the province, and current data indicates most regions requiring further work to ensure supplies reach everyone who needs them.
- Fewer people in B.C. who are receiving treatment are living with a detectable viral load.



New HIV diagnoses



2012/13: **213** 13/14: **281** 14/15: **~262**



Pilot regions testing rates and increases over baseline

HSDA	2009/10 rate per 100,000 people	2013/14 rate per 100,000 people	Increase in testing episodes
Vancouver	9,221	18,852	116 percent
Northern Interior	3,422	6,155	86 percent

HSDAs over 3,500 tests/100,000 at the end of 2013/14

Interior – Okanagan

Fraser - South and North

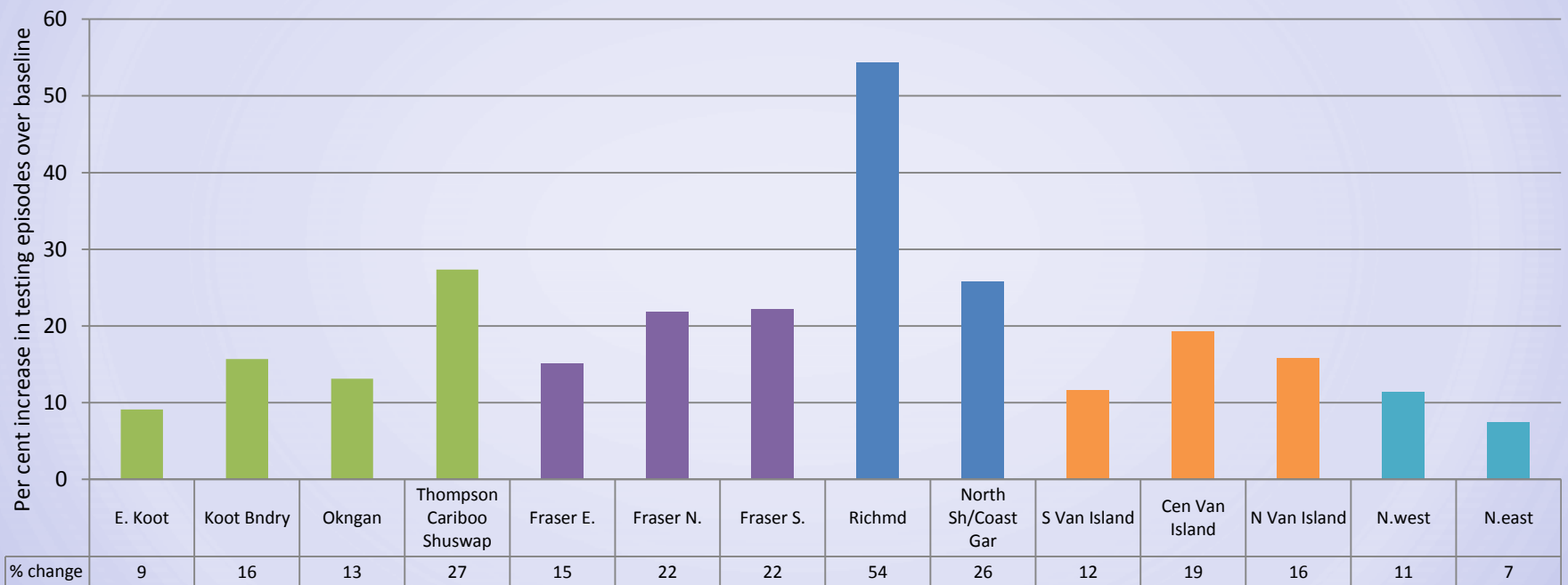
Vancouver Coastal – Richmond, Vancouver, North Shore

Island - South Vancouver Island

North – Northwest, Northern Interior and Northeast



Per cent increases in HIV testing episodes across B.C. by HSDA





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Equitable reach of sterile needles and condoms

Varies across the province, and current data indicates most regions requiring further work to ensure supplies reach everyone who needs them.

Work is ongoing with regions to better measure reach of sterile needles and condoms



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Region	Sterile Needle orders per 100,000 people in the region		Increase / decrease	Condom orders per 100,000 people in the region		Increase/ decrease
	Baseline	Fiscal 2013/14		Baseline	Fiscal 2013/14	
Interior	95,024	127,123	↑	97,407	133,301	↑
Fraser	42,579	65,266	↑	38,335	49,173	↑
Vancouver Coastal	97,623	149,842	↑	269,556	280,555	↑
Vancouver Island	143,939	159,897	↑	127,663	129,364	↑
Northern	167,123	196,161	↑	276,360	149,130	↓
B.C.	74,215	120,096	↑	135,548	140,433	↑



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Viral suppression

Fewer people in B.C. who are receiving treatment are living with a detectable viral load.



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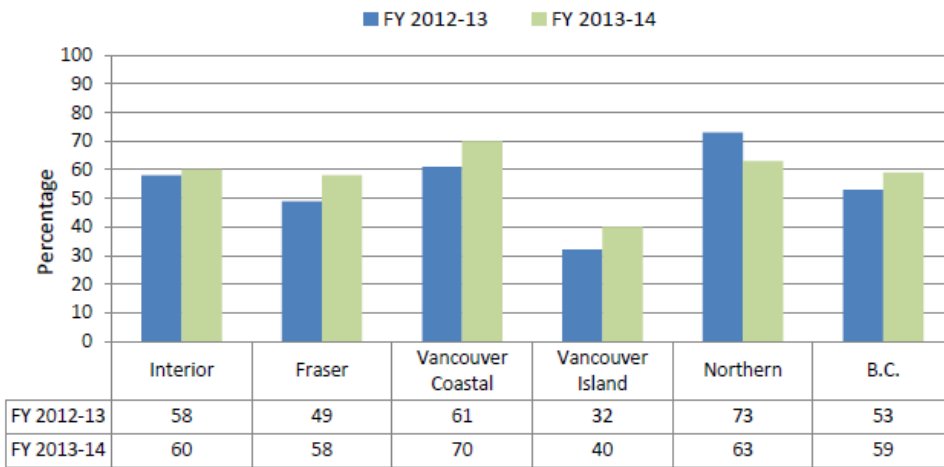
Baseline and first year progress on the proportion of those on HIV treatment who do not have a suppressed viral load, by region, with goal

Region	Target for the region	Proportion that do not have a suppressed viral load (baseline)	Proportion that do not have a suppressed viral load (2013/14)	Change over baseline ↑ ↓
Interior	15%	29%	30%	↑
Fraser	13%	26%	23%	↓
Vancouver Coastal	10%	20%	19%	↓
Vancouver Island	15%	29%	28%	↓
Northern	25%	49%	37%	↓
B.C. overall	13%	25%	22%	↓



HIV test with other STI test or HCV test

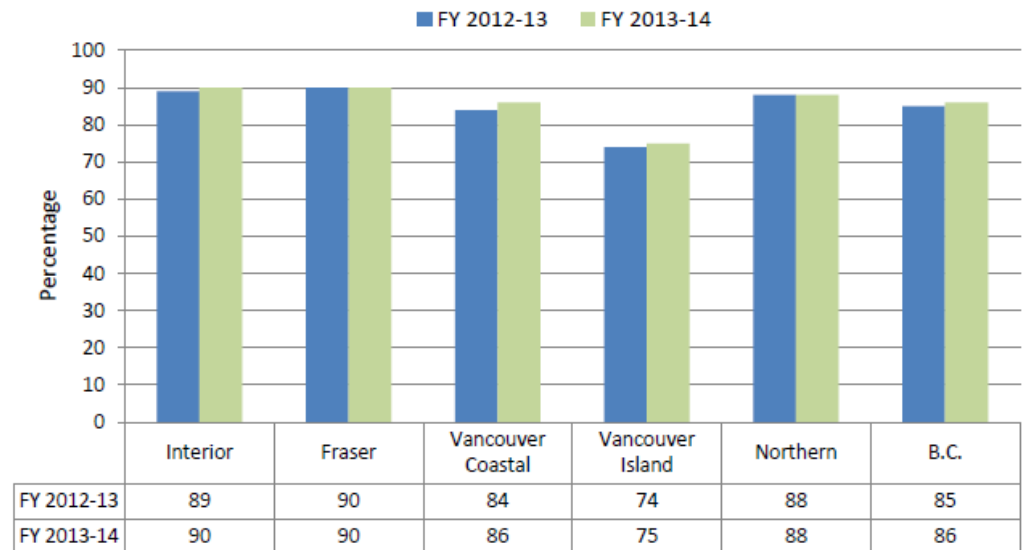
- *Increases in the people diagnosed with HCV who were offered an HIV test.*
- *HIV tests with a syphilis test remains stable.*
- *A proportion of people testing for and STI will do so nominally, yet request non-nominal HIV testing.*



HIV test with a hepatitis C diagnosis



HIV test with a syphilis test





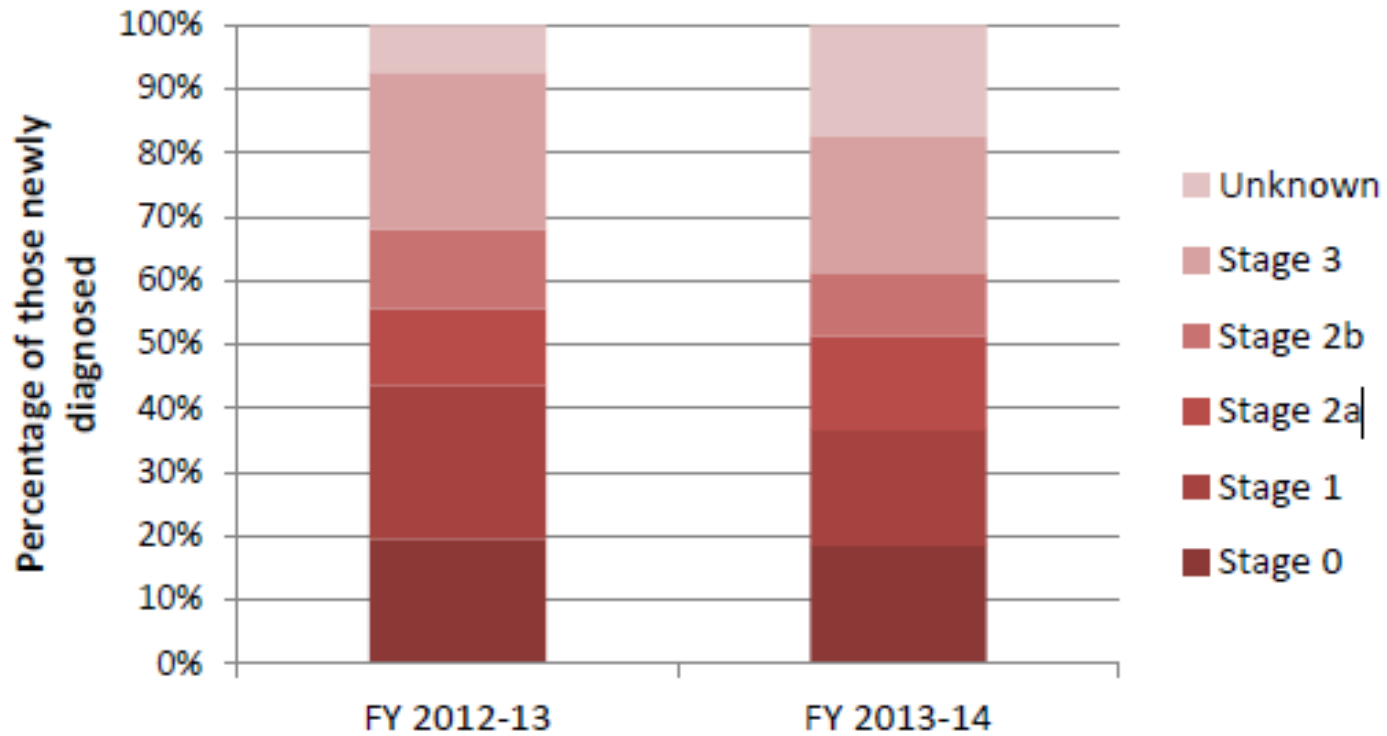
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Finding people earlier in their infection

Variable results –

Pilot areas found initially through regular offers in primary/acute care that people were found in later stages (people who may not have been found at all).





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AIDS case reports in people diagnosed early in their infection in the past – target of zero

Four people in BC were diagnosed early in their infection at some point in the past, yet progressed to AIDS in 2012/13.



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Progress Report Year 2

In development!



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Thank You

From Hope to Health:

<http://www.health.gov.bc.ca/library/publications/year/2012/from-hope-to-health-aids-free.pdf>

Year One Progress Report:

<http://cat.hlth.gov.bc.ca/uhtbin/cgisirsi.exe/?ps=iL4NNq1dhW/x/273780009/88>

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And Technical Report:

<http://cat.hlth.gov.bc.ca/uhtbin/cgisirsi.exe/?ps=iL4NNq1dhW/x/273780009/88>

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Seek and Treat to Optimally Prevent HIV/AIDS (STOP HIV/AIDS)

Evaluation and Monitoring



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in HIV/AIDS

 *Providence*
HEALTH CARE
How you want to be treated.



Collaborative

- A partnership between BC Ministry of Health and other agencies with the British Columbia Centre for Excellence in HIV/AIDS given the broad evaluation mandate
- Data collaborators include: BCCDC, First Nations Health Authority, MoH datasets, PharmaNet, BCCfE and Vital Statistics.

Database

- Created a cohort of all persons living with HIV in BC via data on testing, HIV treatment/labs and HIV-related care provision
- Data includes:
 - HIV testing and diagnostic data from BC CDC.
 - Treatment and laboratory monitoring data from BC CfE
 - Detailed health records from administrative databases: medical services plan, discharge abstract database, pharmacare, home and community care via MoH
 - Vital statistics (mortality data)
 - First Nations Client File (First Nations status)
- Anonymized, comprehensive, population-based, real world dataset of all interactions between those living with HIV and the care system.

Database (2): Data Lag

- Some datasets/elements are almost real-time (BC CfE 1 month), others lag substantially (DAD 1 year).
- Data refresh (re-linkage) is annual but time consuming and analyses adds yet more time.
- Current data is from 2011

Deliverables

- Broad array of analyses conducted, reported and published including:
 - Cohort building and profile
 - Cascade of HIV Care in BC including stratification by patient demographic, risk or treatment characteristics
 - Treatment outcomes, morbidity and mortality
 - Cost-effectiveness analyses to optimize HIV care
 - Treatment retention and characterization of those not retained in HIV care
 - Estimating HIV incidence
- Quarterly Monitoring Report

QMR Indicators

Testing Episodes

HIV Testing Rate

New HIV Diagnoses

Stage of HIV Infection at Diagnosis

HIV Cascade of Care

Programmatic Compliance Score (PCS)

New Antiretroviral Starts

CD4 Cell Count at ART Initiation

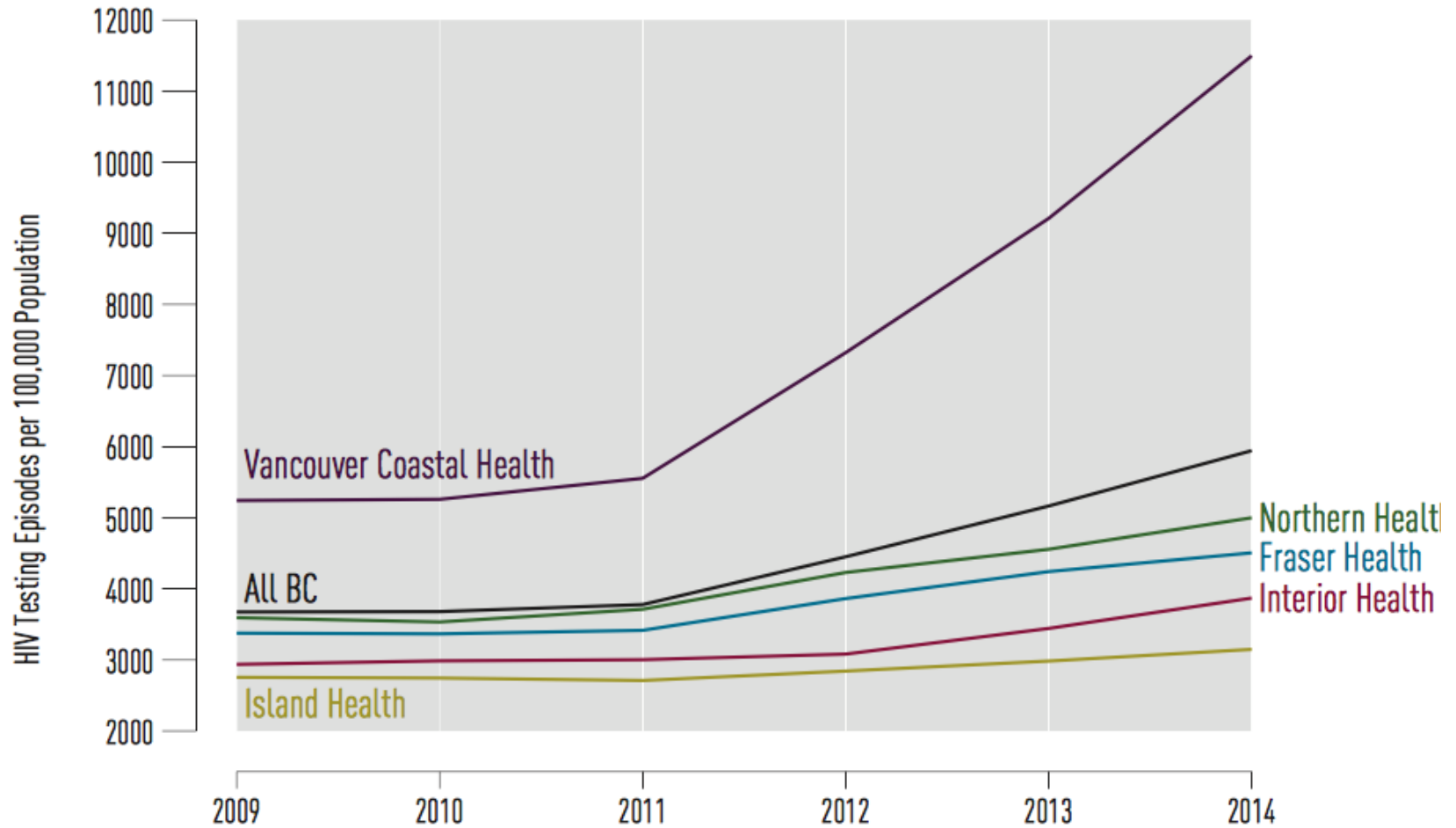
Active and Inactive Drug Treatment Program Participants Antiretroviral Adherence Level

Resistance Testing Results by Resistance Category

AIDS-Defining Illness

HIV-Related Mortality

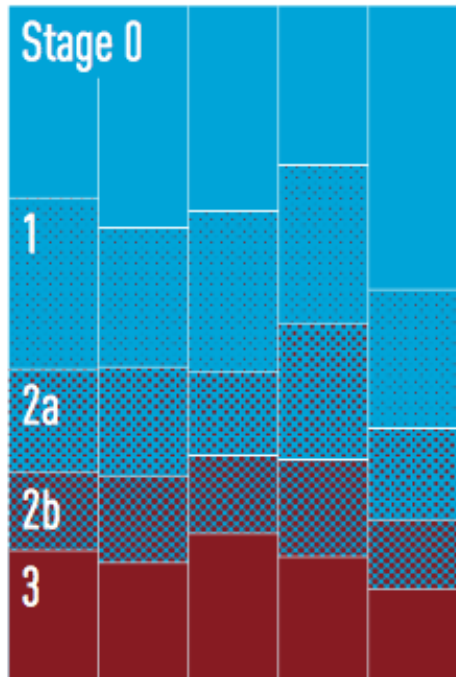
Rate of HIV testing by HA



Stage of HIV Infection at Diagnosis by Exposure Category for BC, 2010–2014

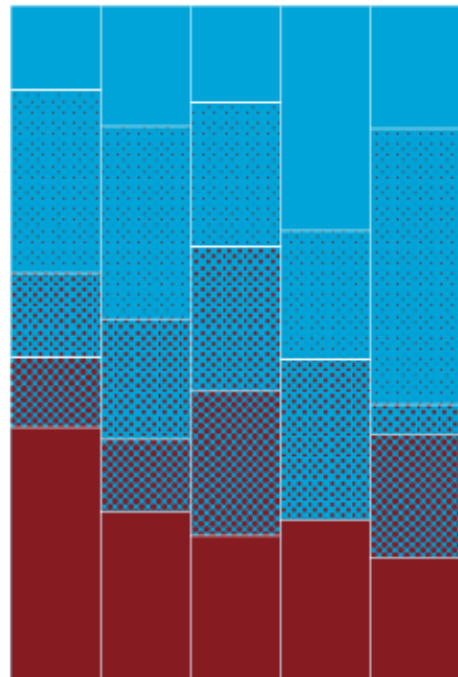
MSM

2010 2011 2012 2013 2014



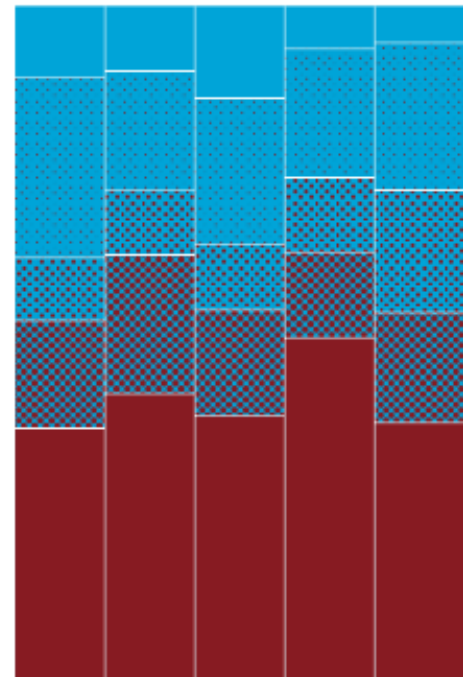
IDU

2010 2011 2012 2013 2014



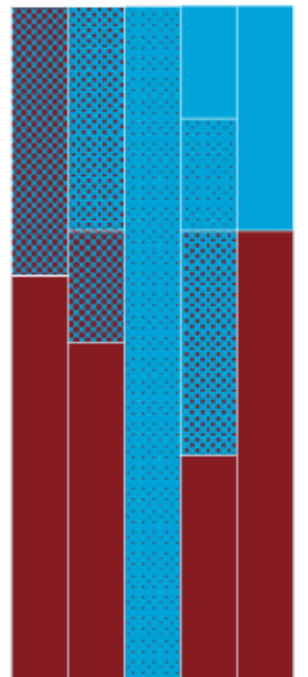
HET

2010 2011 2012 2013 2014

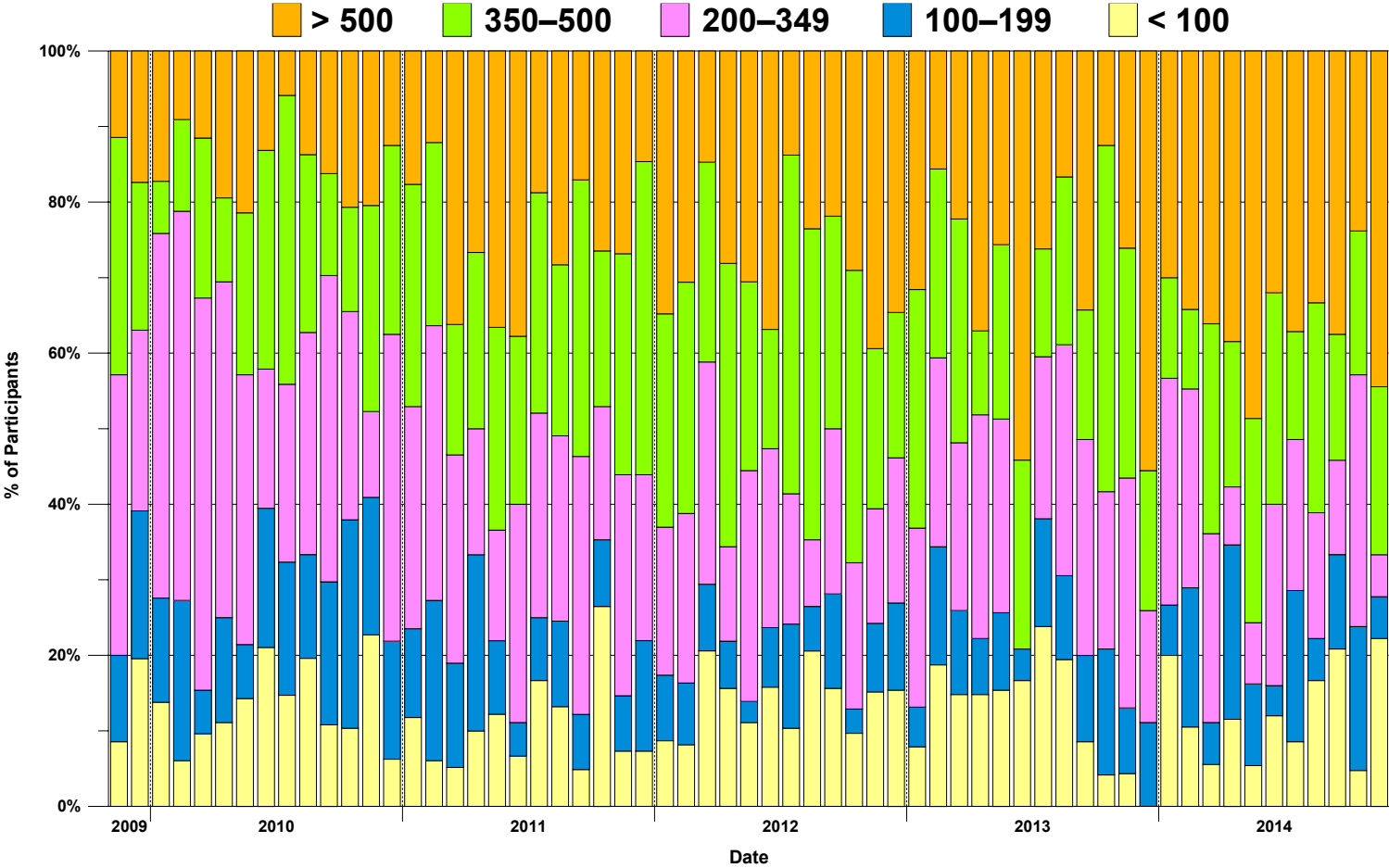


Other

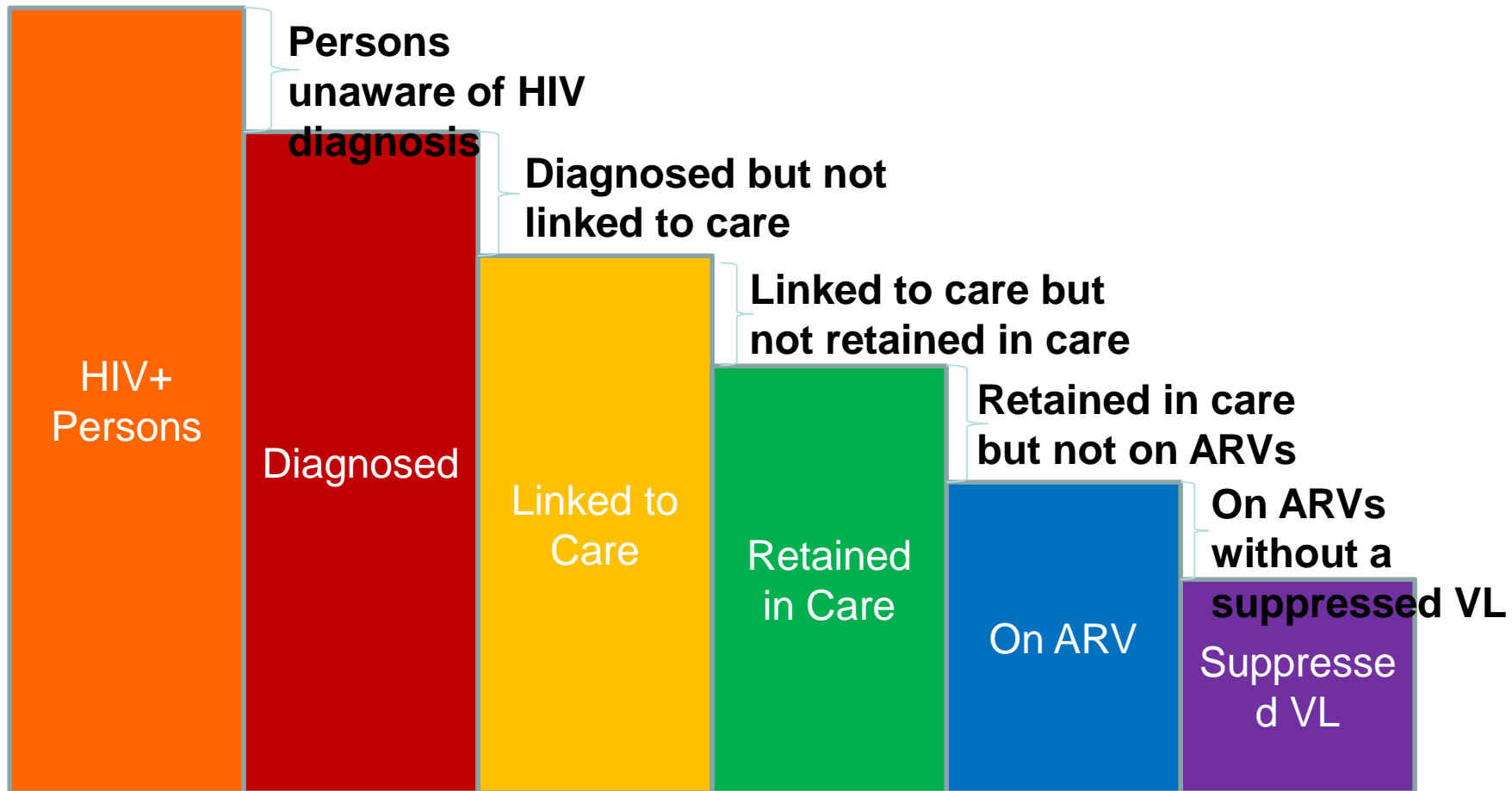
'10 '11 '12 '13 '14



Baseline CD4 Among ARV First Starts



The Cascade of Care



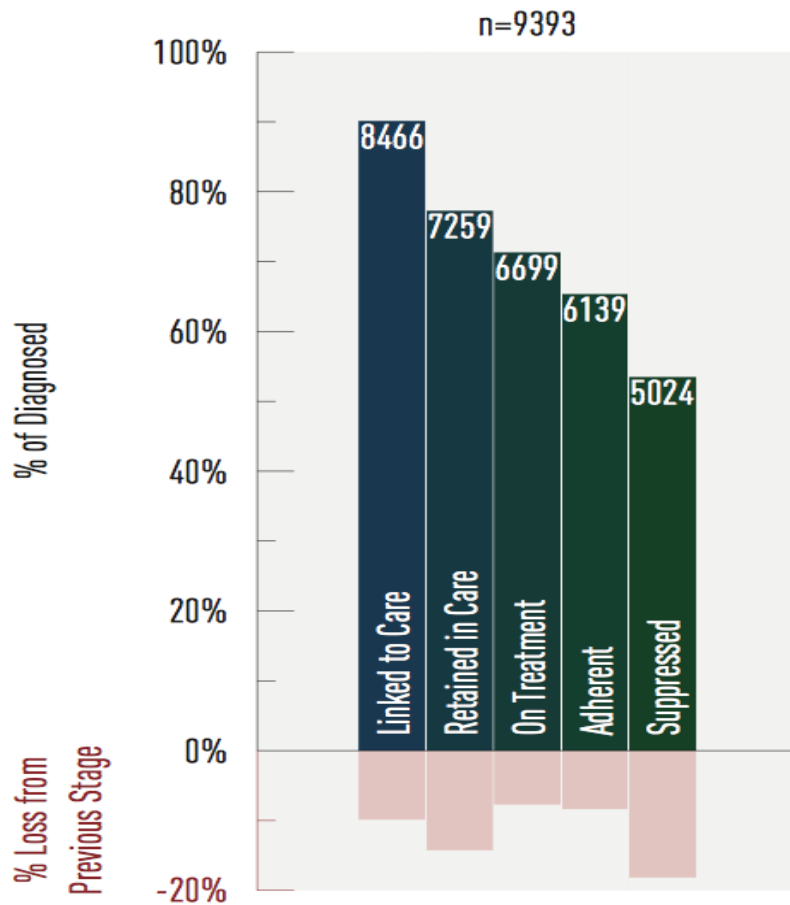
Model based on Gardner et al., 2011 Clinical Infectious Diseases

Cascade Estimation

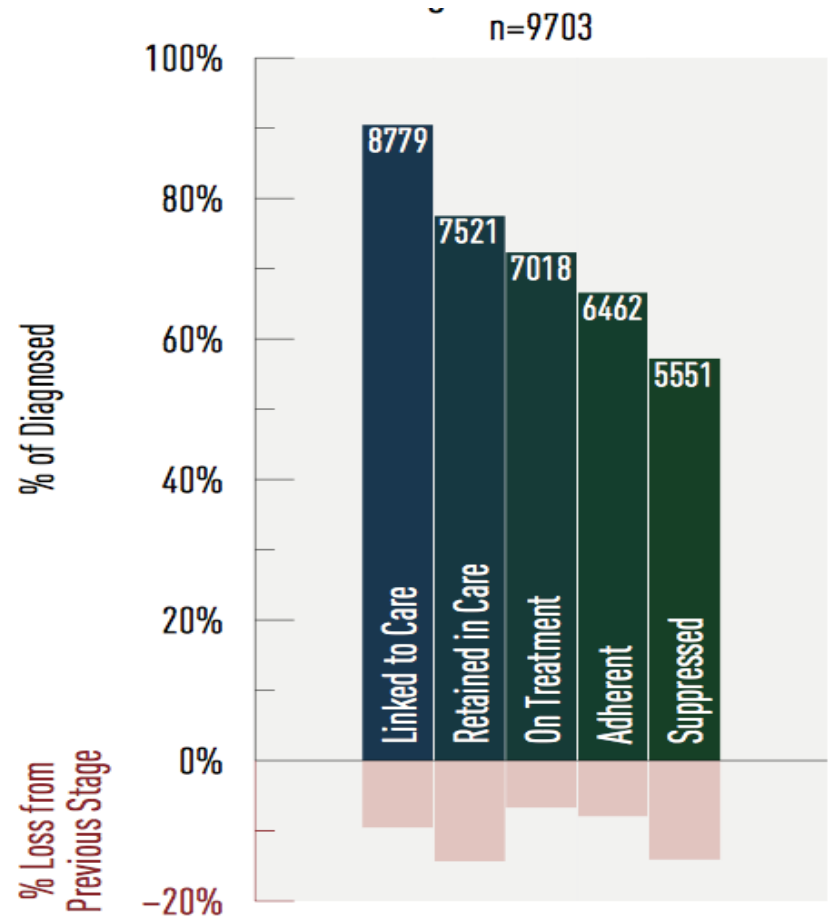
- Cascade must be estimated forward using cascade data from 2011 until data refresh is complete (i.e., projected)
- See technical report for full description
- Complete up-to-date data for all cascade steps is only known for those in the DTP at the CfE- diagnosis to suppression.
- Data refresh complete- 2014 data available in a few months

Cascade of Care BC

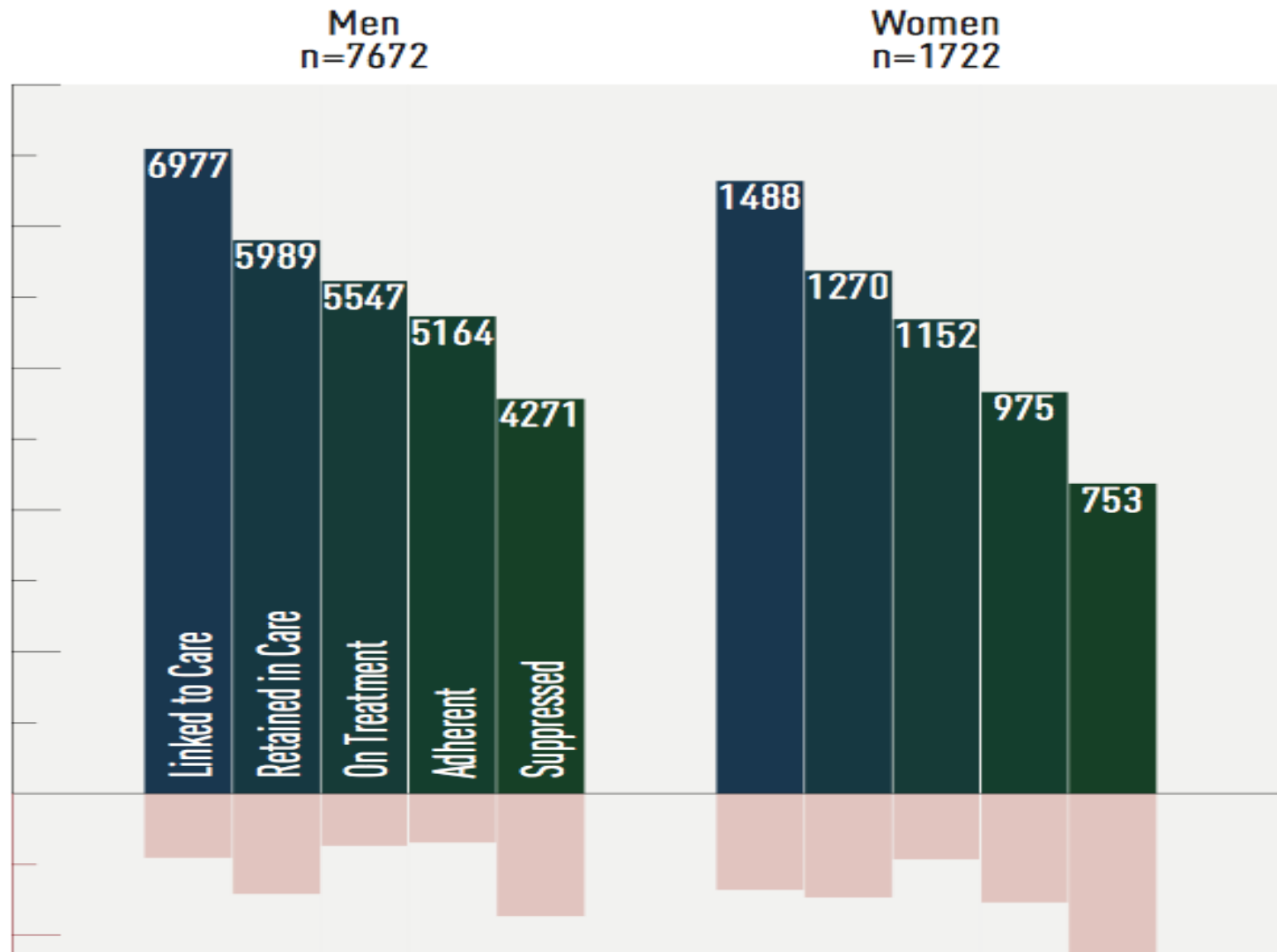
Q2 2013 to Q1 2014



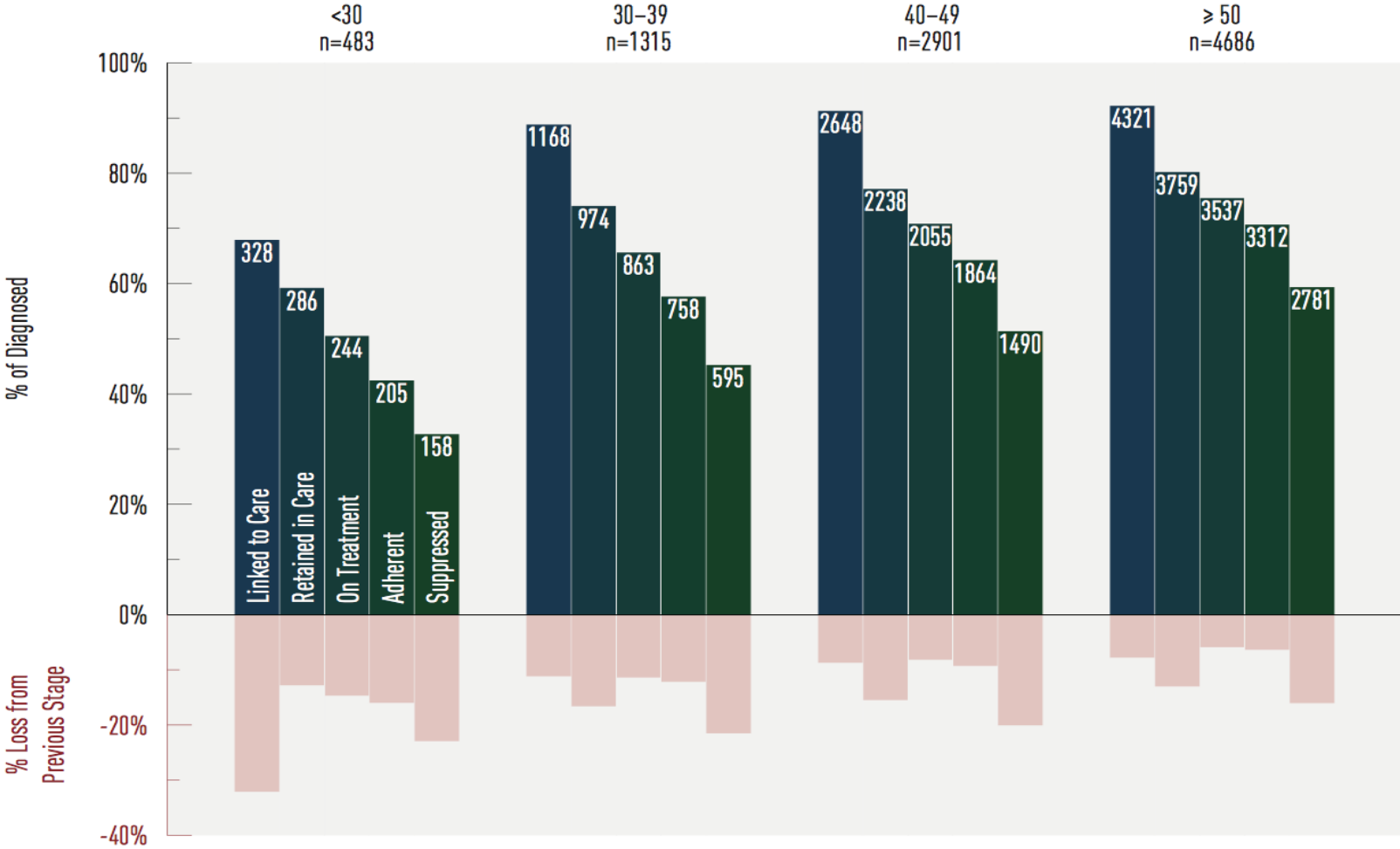
Q3 2014 to Q2 2015



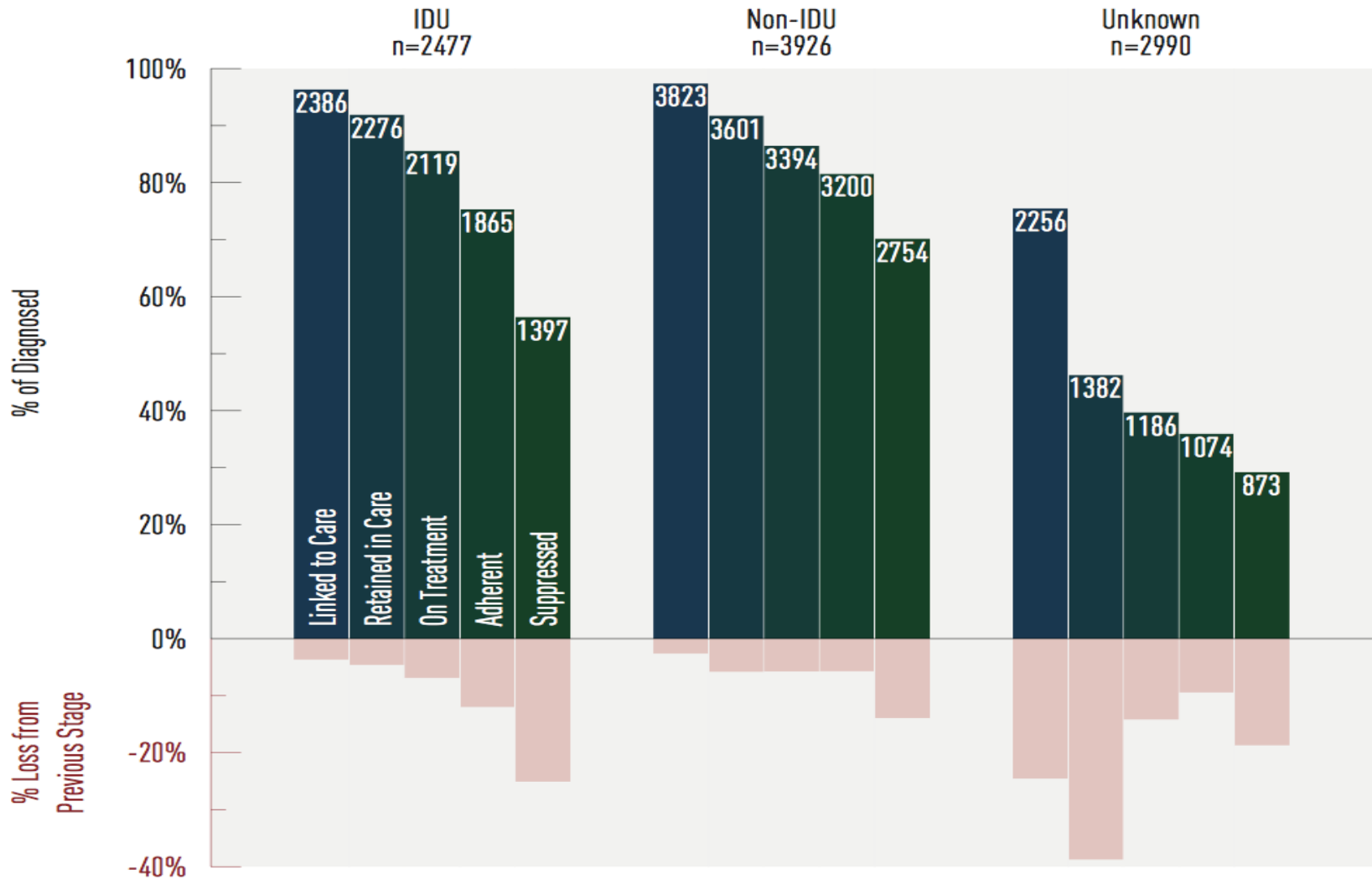
Cascade by Gender BC



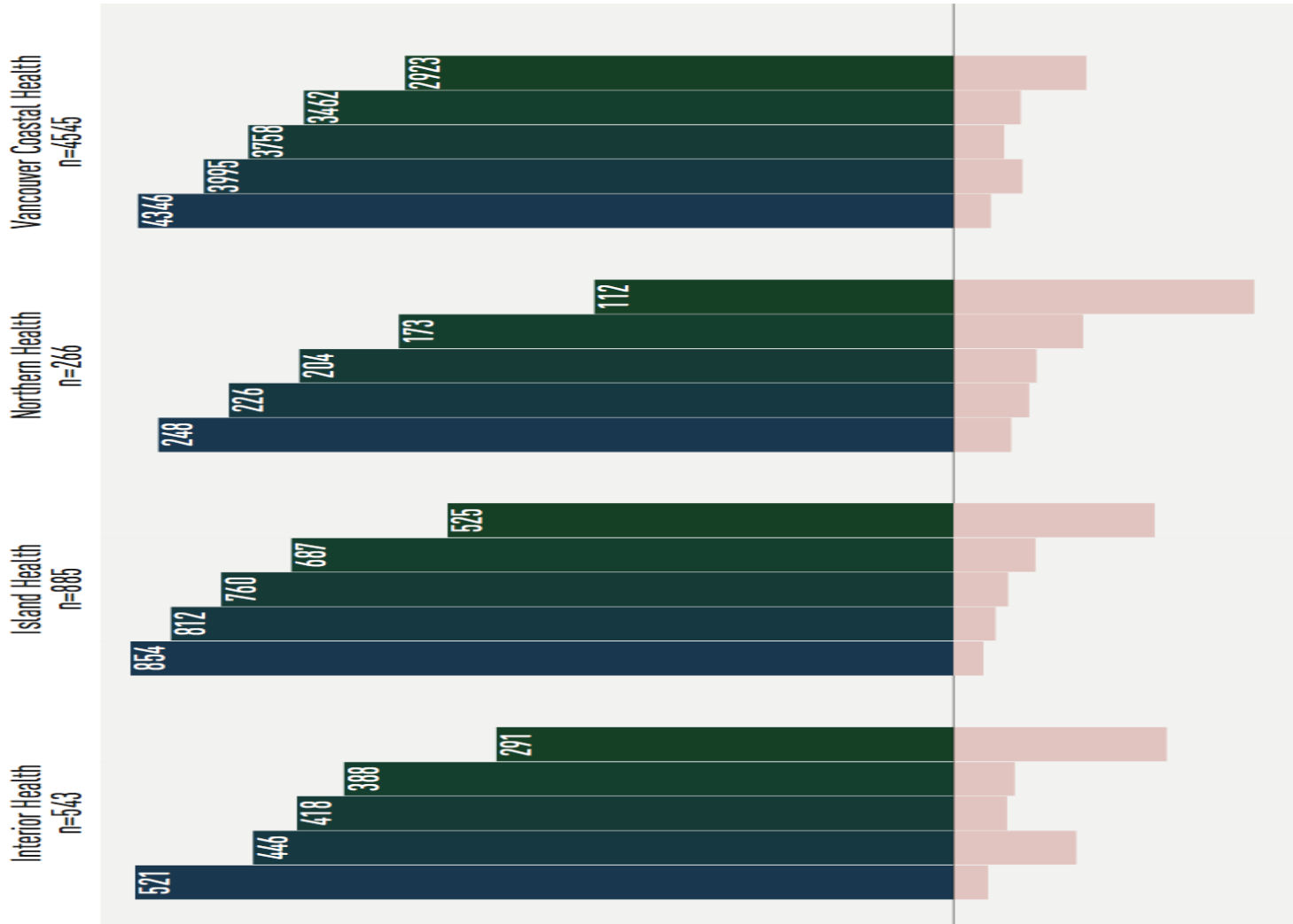
Cascade by Age- BC



Cascade by Risk IDU



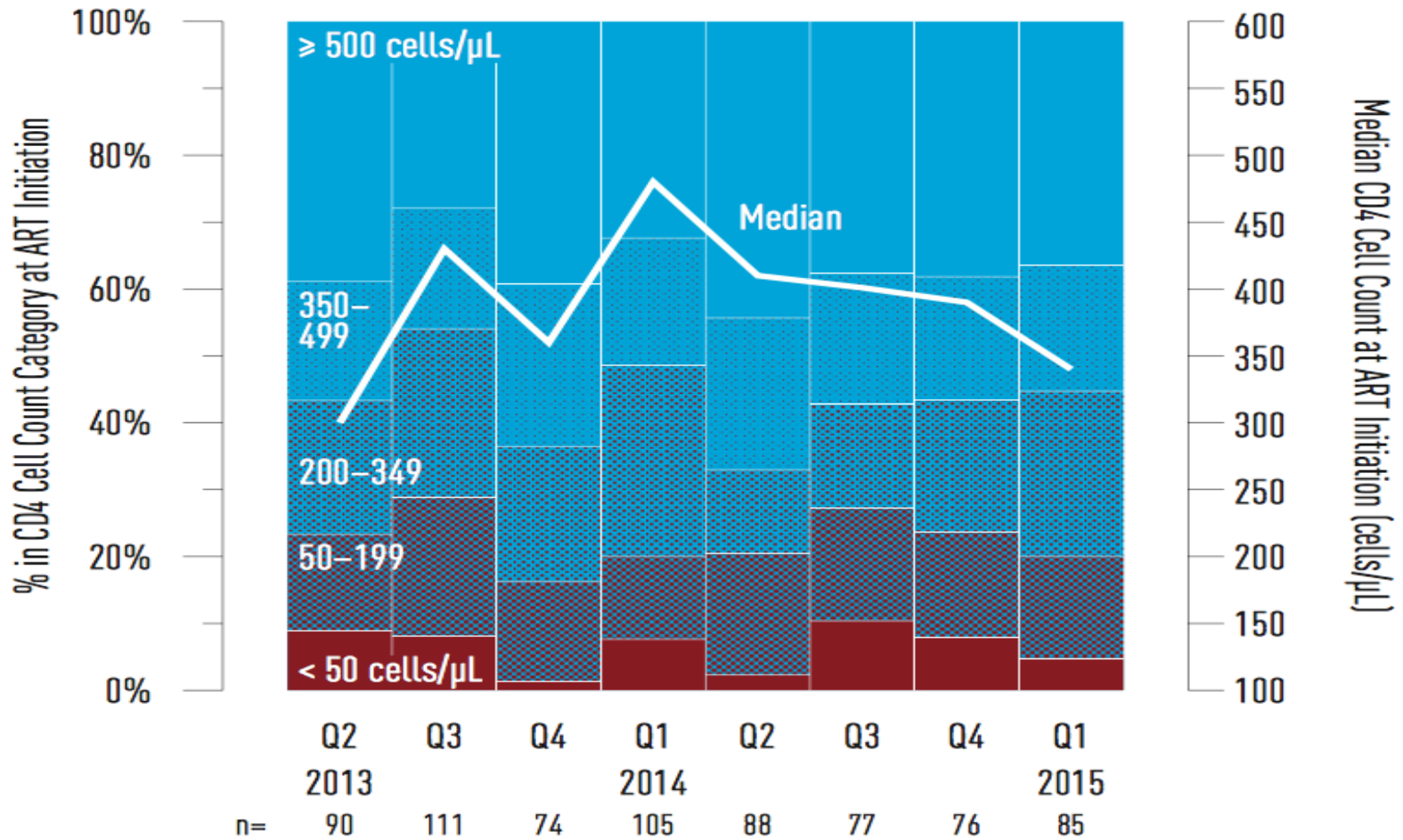
Cascade by Health Authority



Distribution of People on ART for BC by HA

		Fraser	Interior	Island	Northern	Vancouver Coastal	Total BC
Age	< 30	89	15	26	13	143	286
	30–39	257	54	88	53	524	977
	40–49	534	104	229	68	1129	2065
	≥ 50	839	272	479	92	2131	3814
Gender	Male	1322	350	663	143	3459	5940
	Female	397	95	159	83	468	1202
Exposure	MSM	535	128	217	30	1853	2765
	IDU	456	147	276	124	1137	2141
Total		1719	445	822	226	3927	7142

CD4 Cell Count at ART Initiation of ART-Naïve DTP Participants in BC, 2013 Q3–2015 Q2



Current Projects

- Updating the cohort profile via data update
- Effect of Opioid Substitution Treatment on HAART
- Stratification of the Cascade of Care
- Cost-effectiveness analysis to optimize the cascade of HIV care
- HAART retention as a recurrent event process- CHURN
- Characterizing unconfirmed HIV positive cases from STOP cohort
- Characterizing persons not retained in HIV care

Thank you



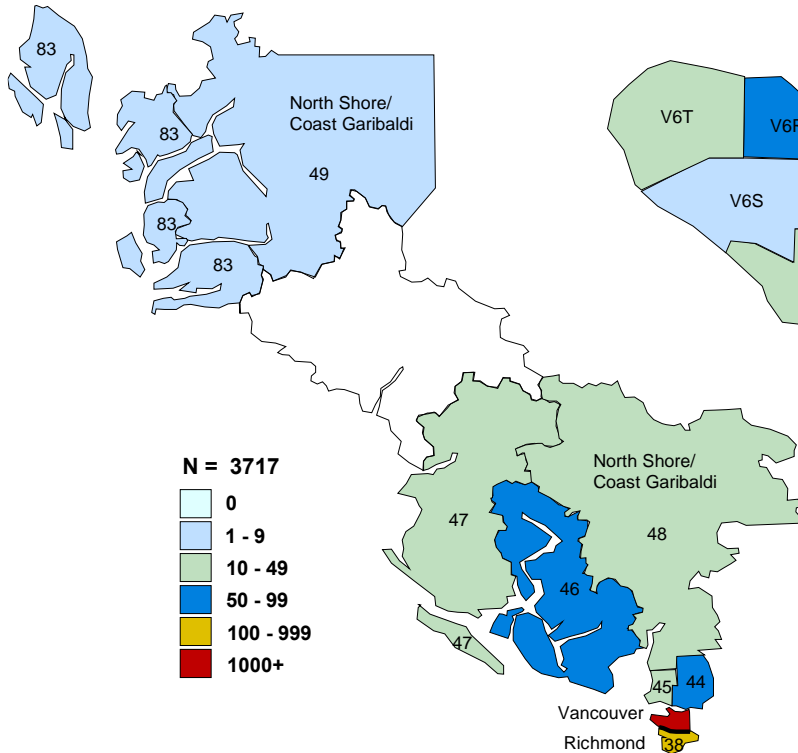
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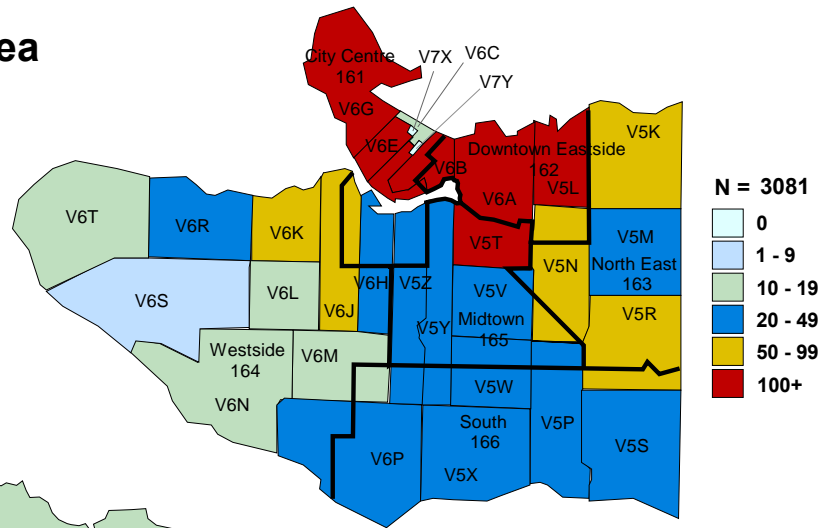


Example: Distribution of Active DTP Participants

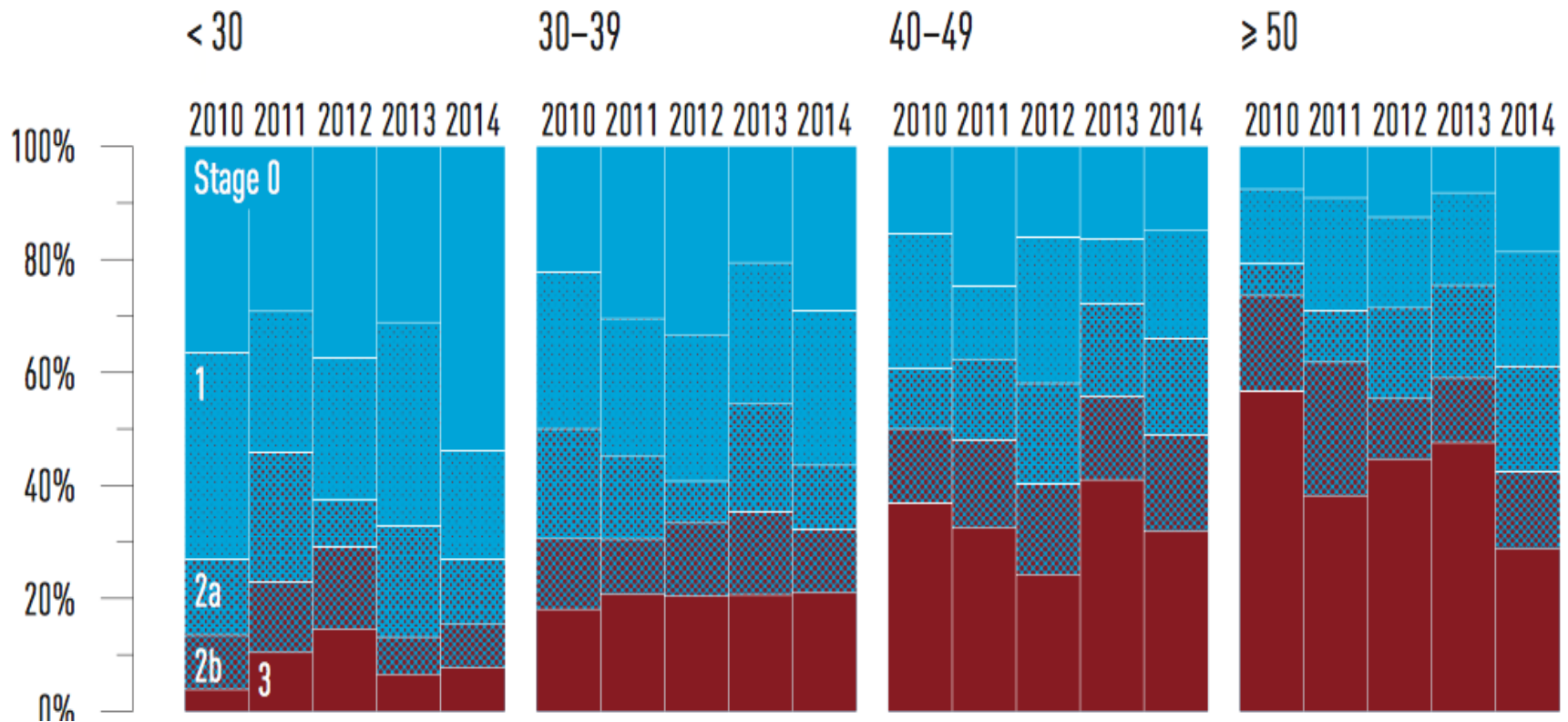
**Vancouver Coastal Health
Authority by Health Services
Delivery Area/Local Health Area**



Vancouver by Postal Code



Stage of HIV Infection at Diagnosis by Age Category for BC, 2010–2014



**GIPA = Greater Involvement
of People with HIV/AIDS**

**MIPA = Meaningful
Involvement of People with
HIV/AIDS**

GIPA/MIPA

GIPA empowers people living with HIV/AIDS to take a leading role in the work that most affects them, acknowledging the valuable contribution they make in advancing the HIV/AIDS movement.

From CAS Website