STOP PROGRAM EVALUATION

Katherine Heath, PhD

STOP OBJECTIVES

► **Reduce HIV/AIDS cases - incidence**

► **Improve effectiveness of HIV screening and early detection**

► **Ensure timely access to high-quality and safe HIV care and treatment**

► **Improve patient experience**

► **Demonstrate cost-optimization**

CURRENT EVALUATION STRATEGY: MONITORING "INDICATORS"

- **Quantifiable, objective outcomes that can be assessed at regular intervals to measure the effects of STOP activities**

- **36 clinical, surveillance, economic, and social**

  - Reflect important goals of STOP

  - Selected by a technical indicators working group- constant and ongoing evolution to be meaningful

DATA LINKAGE PARTNERSHIPS

- **BC Centre for Excellence in HIV/AIDS**
  - Treatment history, laboratory outcomes (ex. CD4 at first treatment)
- **BC Centre for Disease Control**
  - HIV and other testing data (ex. date of first positive test)
- **Ministry of Health-administrative databases**
  - MSP billing, Discharge Abstract Database, Mental Health, Addictions, PharmaNet, Home and Community Care (ex. resource utilization patterns)
- **Others under negotiation**

INDICATOR 14: PROPORTION OF INDIVIDUALS STARTING ART LATE IN THE COURSE OF HIV DISEASE

▶ **Definition- the proportion individuals who have cd4 cell counts <200 cells at ART initiation (advanced disease and require immediate therapy)**

▶ **Goal- decrease**

INDICATOR 14: PROPORTION OF INDIVIDUALS STARTING ART LATE IN THE COURSE OF HIV DISEASE
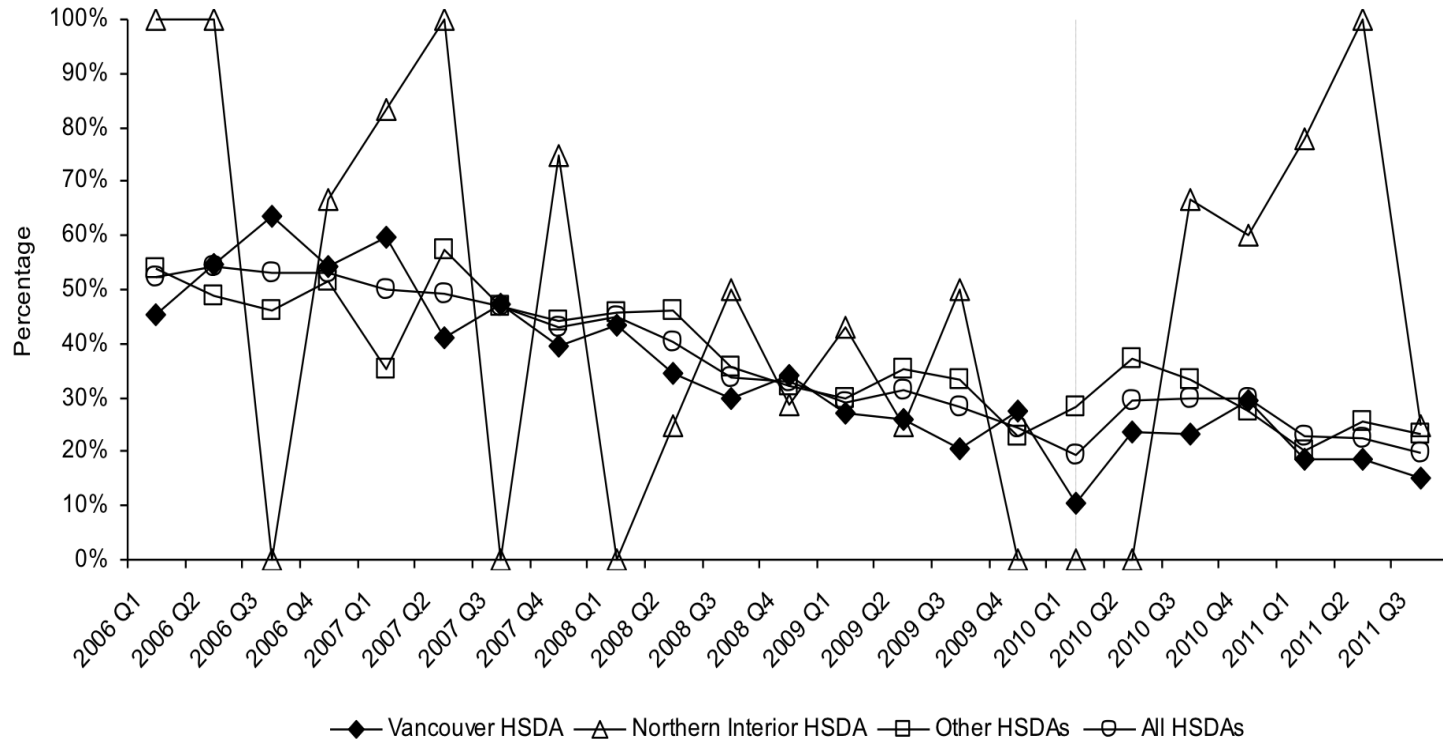
GOOD MEASUREMENT

▶ **As provincial roll out begins HSDA will want to know their "baselines" and engage in evaluation of new programs.**

▶ **Use measures that are:**

  ▶ Objective – an inch is an inch, well and strictly defined

  ▶ Consistent – an inch is an inch this week and next year, underwater or on the moon

  ▶ Comparable – your ruler measures an inch the same way as my ruler

WHY SHOULD HSDA PERFORM EVALUATIONS

- **Provincial level- Assess progress over time towards program goals**

- **Allows valid and reliable comparisons:**
  - before and after programming changes
  - between competing programs
  - to other regions or provincial statistics
  - Between patient populations

WHY SHOULD HSDA PERFORM EVALUATIONS 2

- **Feedback to provincial evaluation strategy**

- **Example – 20% of patients starting ARV with CD4<200**
  - VCH investigates
  - Large proportion of individuals diagnoses late!
  - Enhanced testing

Development of a HSDA-specific indicator

↓

New indicator for consideration

PARTNERSHIP

▶ **The BC Centre for Excellence in HIV/AIDS is conducting the Provincial level ongoing evaluation and monitoring.**

▶ **BCCDC works to monitor the epidemic**

▶ **HSDA evaluations should be valid and complimentary**

- ▶ Use validated tools- don't re-invent

- ▶ Use STOP indicator standardized definitions- ex. PVL suppression- <200 at 9 months

- ▶ Talk to your partners at the BCCfE and BCCDC for information and expertise

SUMMARY

- **Only by measuring can we monitor our progress**

- **Evaluation is not an afterthought but part of novel programing**

- **Use valid, reliable previously agreed upon tools for measurement**

- **Engage with BCCfE and BCCDC**

Monitoring and evaluation:
The role of the BC Centre for Disease Control

Mark Gilbert, MD, MHSc, FRCPC

STOP HIV/AIDS Provincial Expansion Knowledge Kick Off

February 1, 2013

Clinical Prevention Services Division

- Provincial surveillance for HIV and AIDS
    - Case report data for new HIV diagnoses, AIDS
    - Conduct provincial analyses of data
    - Acting on behalf of the Provincial Health Officer
    - Also conduct for STIs, TB, Hepatitis B, C (co-infections)

- Collaborate in regional surveillance activities
    - Regional surveillance is conducted under the authority of the local Medical Health Officer
    - With approval from the local MHO:
        - Provide surveillance data for analysis (line-listed)
        - Conduct analysis of surveillance data on their behalf

Key provincial surveillance objectives

- Describe and monitor the distribution and trends of indicators by age, sex, region, ethnicity, exposure group:
  - New HIV diagnoses
  - Stage of infection (acute, advanced)
  - Co-infections (e.g,. HIV/HCV)
- In order to:
  - Provide data for effective prevention programs
  - **Support functions of PHO and respond to needs of MHO & designates, FNHA**
  - Identify early changes in trends
  - Evaluate the impact and effectiveness of public health programs, inform policy development, guide program planning

Role in STOP HIV/AIDS

- Collaborate with BCCFE on generation of monthly and quarterly indicator reports

- Partner in STOP HIV/AIDS evaluation data linkage initiative

- Provide provincial and regional partners with data/analysis needed for program planning and evaluation

- Conduct analyses of provincial level data to describe and understand trends
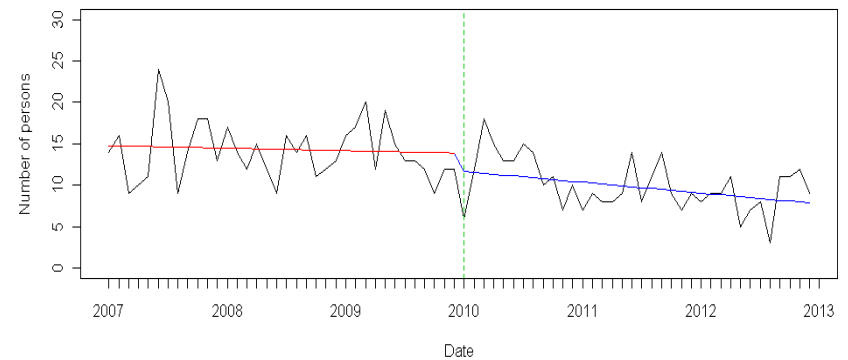
Trends in HIV diagnoses

Number of new HIV diagnoses in Vancouver HSDA, 2007 to current (month)
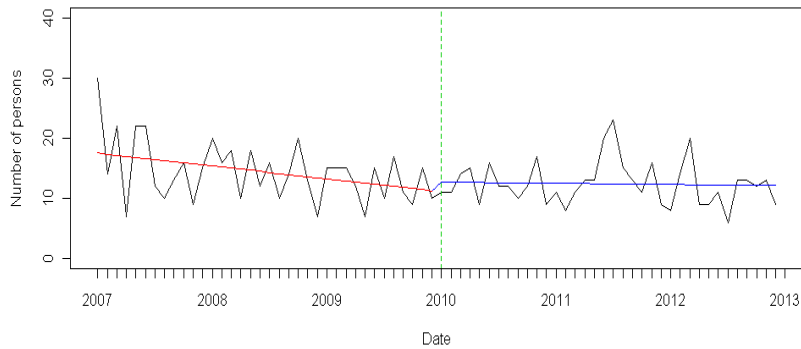
Number of new HIV diagnoses in Northern Interior HSDA, 2007 to current (month)
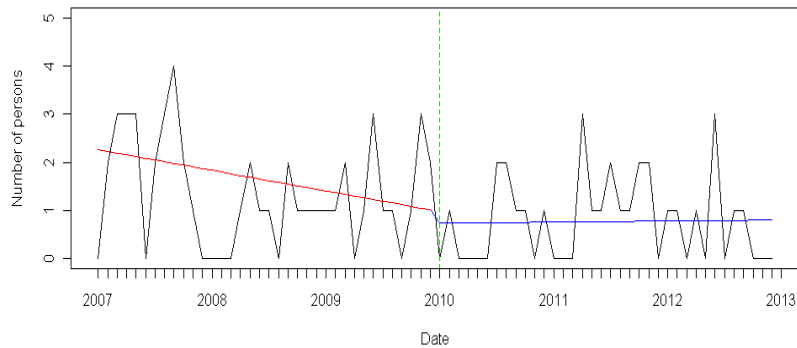
Number of new HIV diagnoses in Other HSDA, 2007 to current (month)

Partnership with PHSA Laboratories (BC PHMRL)

- BC Public Health Microbiology Reference Laboratory
- ~90% of all screening HIV tests, all confirmatory testing
  - Other: Providence Laboratory, Victoria General Hospital Laboratory
- Describe trends in HIV test volumes
  - Age, sex, region, ordering provider or clinic
  - Prenatal vs non-prenatal
- Established use with PHMRL:
  - In aggregate based on age, sex, region
  - For ordering provider or clinic, requires agreement/consent
    - At HA level (STOP leads) for health authority staff or facilities
    - At individual provider level
- Other analyses possible but may need formal data request

Trends in HIV testing

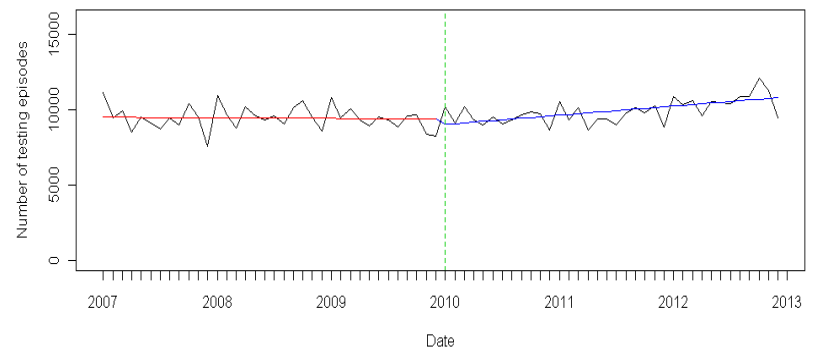- Includes PHMRL, Providence, and Point-of-Care tests

**Number of HIV tests done in Vancouver HSDA, 2007 to current (month)**
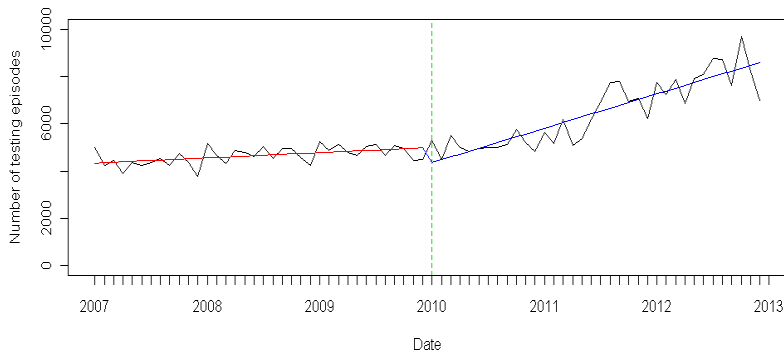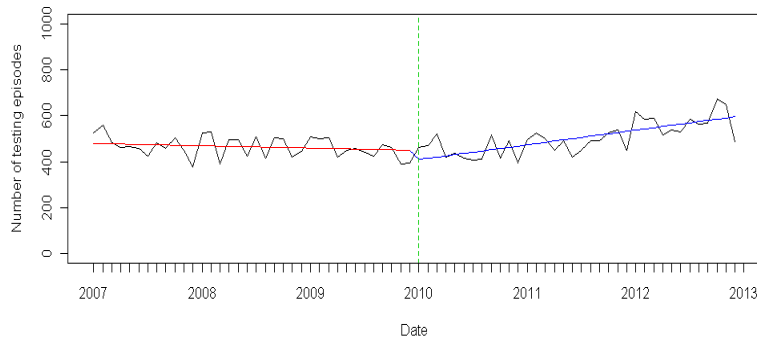
Number of HIV tests done in Other HSDA's, 2007 to current (month)

**Number of HIV tests done in Northern Interior HSDA, 2007 to current (month)**

Trends in Point of care (rapid) HIV tests

Number of POC HIV tests done by Vancouver HSDA, 2010 to current (quarter)

Number of POC HIV tests done in Northern Interior HSDA, 2010 to current (quarter)
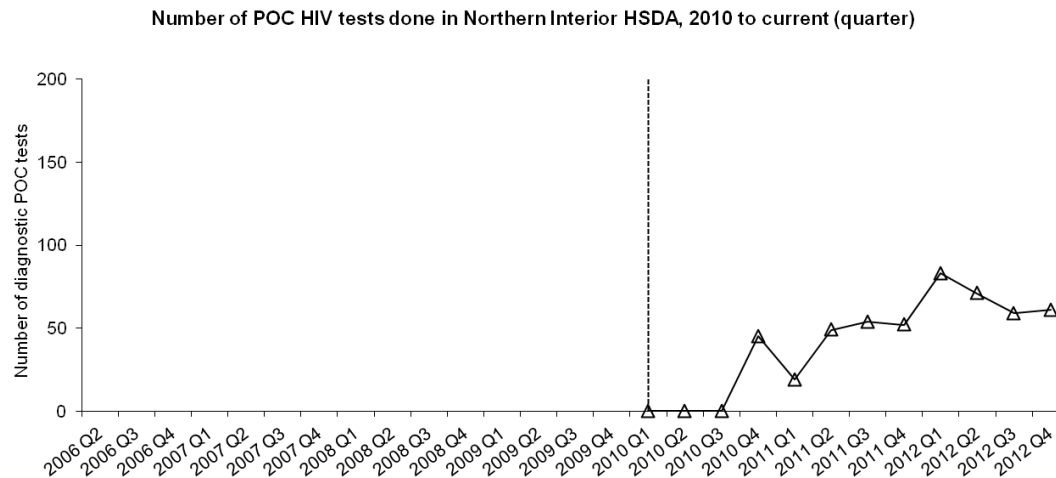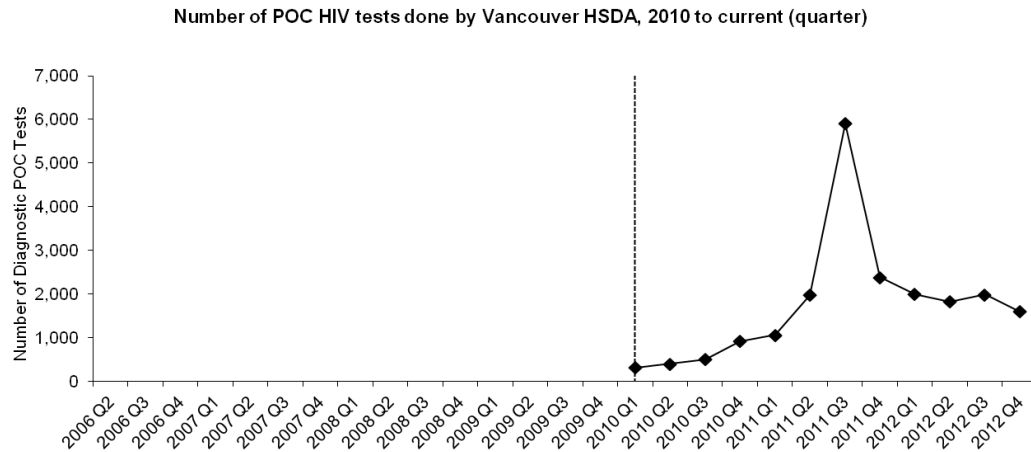
New approaches to case and testing data

- Discussion among STOP pilot partners at beginning of project: what indicators would best reflect program/priorities?

- Measures of testing recommendations & strategies
  - HIV diagnosis and syphilis testing
  - Co-testing for syphilis & HIV
  - HIV testing following STI diagnosis
  - HIV testing following Hepatitis C diagnosis

- Opportunities to revise / consider new indicators
  - First known HIV test at diagnosis
  - Time from last HIV negative to first HIV positive test (inter-test interval)

Testing example:
Syphilis test with HIV test same visit
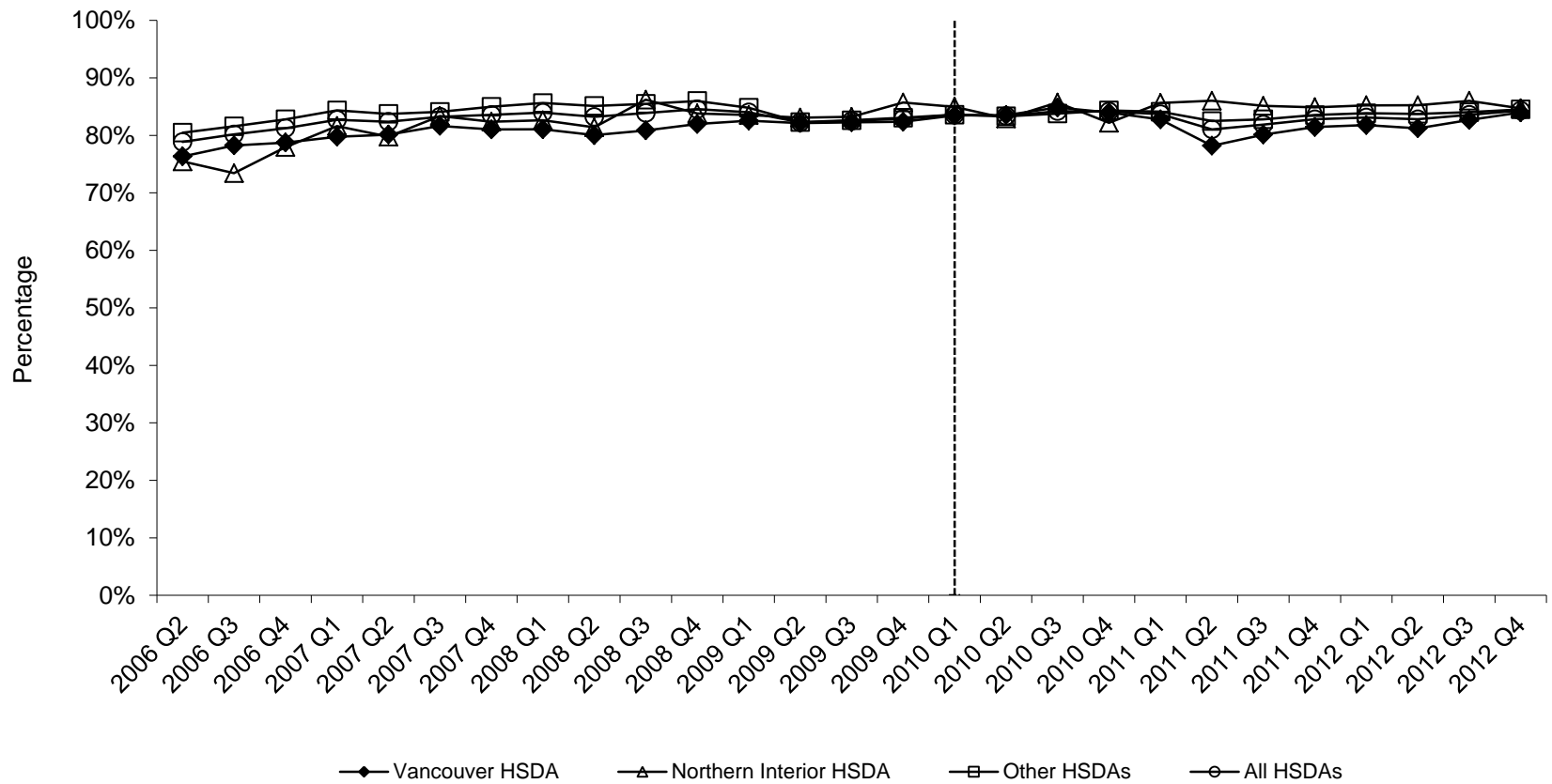
Care example:
Syphilis test following HIV diagnosis
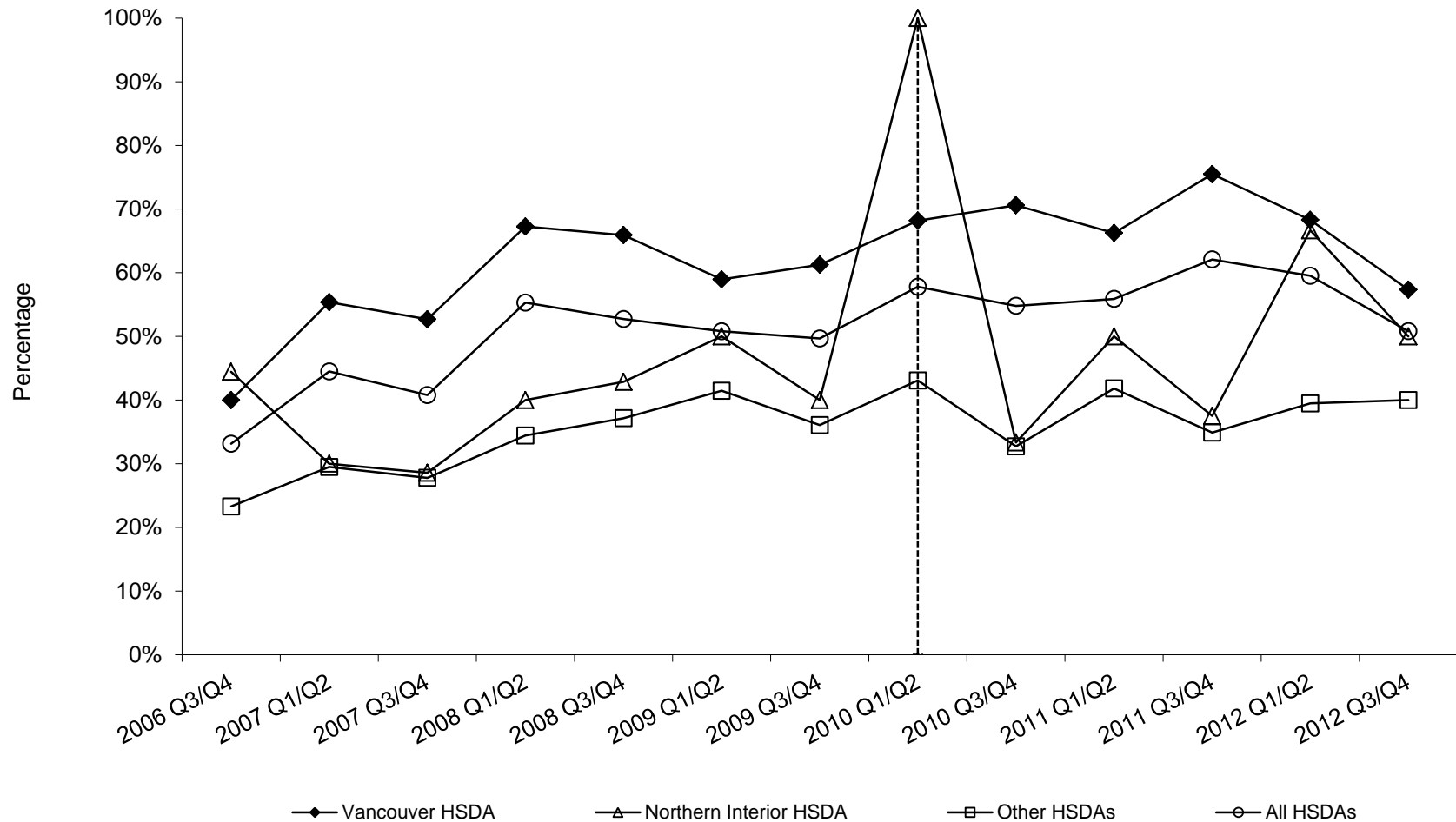
Lessons learned

- Two way exchange: most useful information coming out of discussion between provincial and regional partners

- Indicators need to be meaningful
  - Need to be valid (measure what they're intended to measure)
  - Need to describe progress towards achieving program goals, are based on program objectives
  - Need to be periodically reviewed, and revised

- Barriers can be overcome
  - Mechanisms for sharing of data (e.g. Providence laboratory data)
  - Develop new capacity for linkage and analysis

Take home messages

- Here to help, and to learn

- Aim to set up efficient process for working with different regional partners

- Point of contact for requests for surveillance and testing data (will facilitate permissions with BC PHMRL if needed)

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STOP Program Economic Evaluation

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BRITISH COLUMBIA
CENTRE *for* EXCELLENCE
in HIV/AIDS

Providence
HEALTH CARE
How you want to be treated.

UBC

Mathematical Modeling in HIV

- Mathematical modeling:
  - A means of synthesizing information to forecast outcomes over the long term
  - Commonly used to guide policy in HIV
    - UNAIDS HIV Investment Framework
    - US-Based Cost-effectiveness of Preventing AIDS complications (CEPAC) Model

- Health Administrative Databases:
  - Provide detailed population-level data to validate, inform model development

Health Economic Evaluation

- Economic Evaluation Defined:
  - The comparative analysis of alternative courses of action in terms of both their costs and consequences.

- Aim of Economic Evaluation:
  - To inform decisions on how best to allocate available resources to maximize health of population.

- Mathematical Modeling in economic evaluation:
 - Long-term/patient lifetime horizon required to capture all costs and benefits attributable to a given intervention

Inputs into mathematical model

Parameter	Source
HIV Transmission	BC CfE Drug Treatment Program (DTP), published literature
HIV Testing	BC CDC
Disease Progression	BC CfE DTP, BC Vital statistics
Rate of Treatment Entry	BC CfE DTP
Costs of treatment	BC CfE DTP, PharmaNet
Costs of inpatient care	Discharge Abstract Database
Costs of outpatient care	MSP database
Costs of ancillary care	AIMS, HCC, MHS
HRQoL	Peer-Reviewed Literature

Flow diagram of the STOP HIV/AIDS cohort selection process
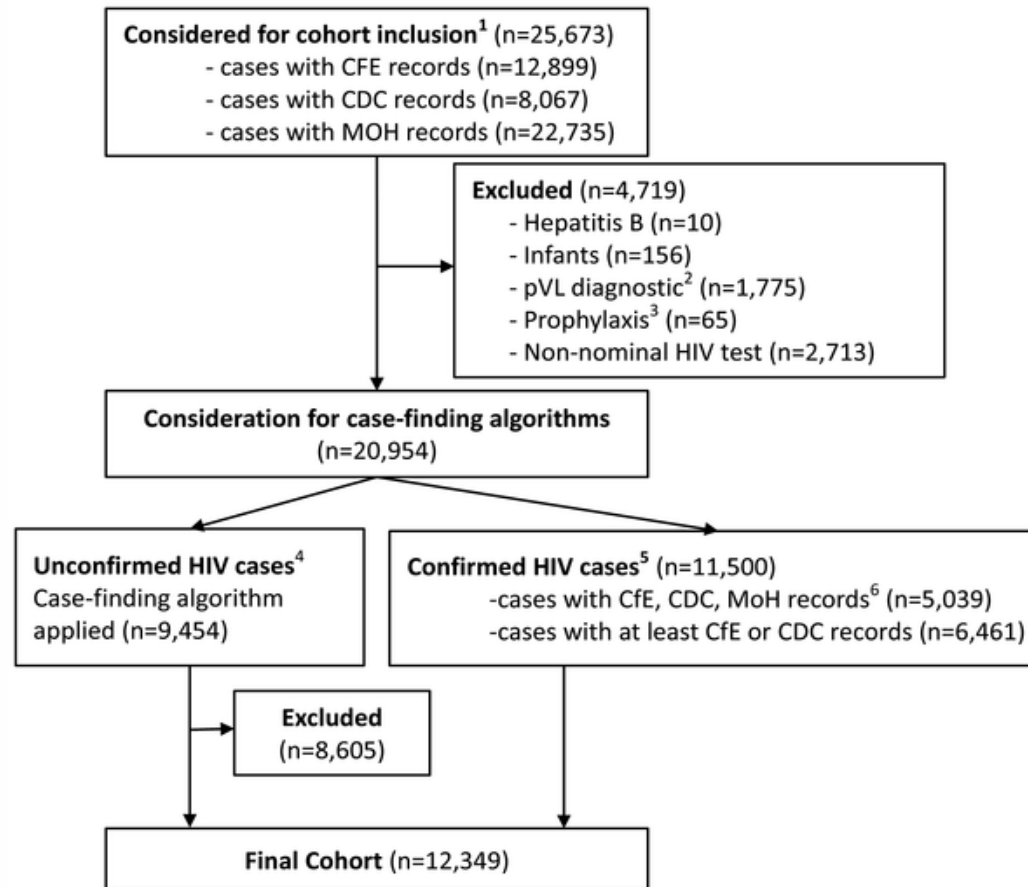
Nosyk B, Colley G, Yip B, Chan K, et al. (2013) Application and Validation of Case-Finding Algorithms for Identifying Individuals with Human Immunodeficiency Virus from Administrative Data in British Columbia, Canada. PLoS ONE 8(1): e54416. doi:10.1371/journal.pone.0054416
http://www.plosone.org/article/info:doi/10.1371/journal.pone.0054416

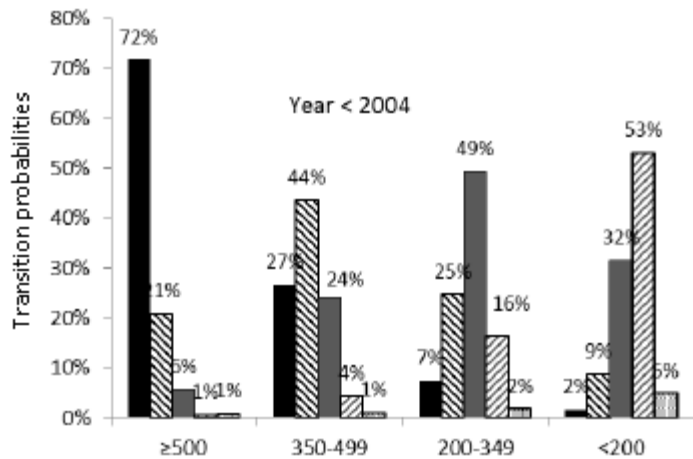BRITISH COLUMBIA
CENTRE *for* EXCELLENCE
in HIV/AIDS

Changing costs of HAART
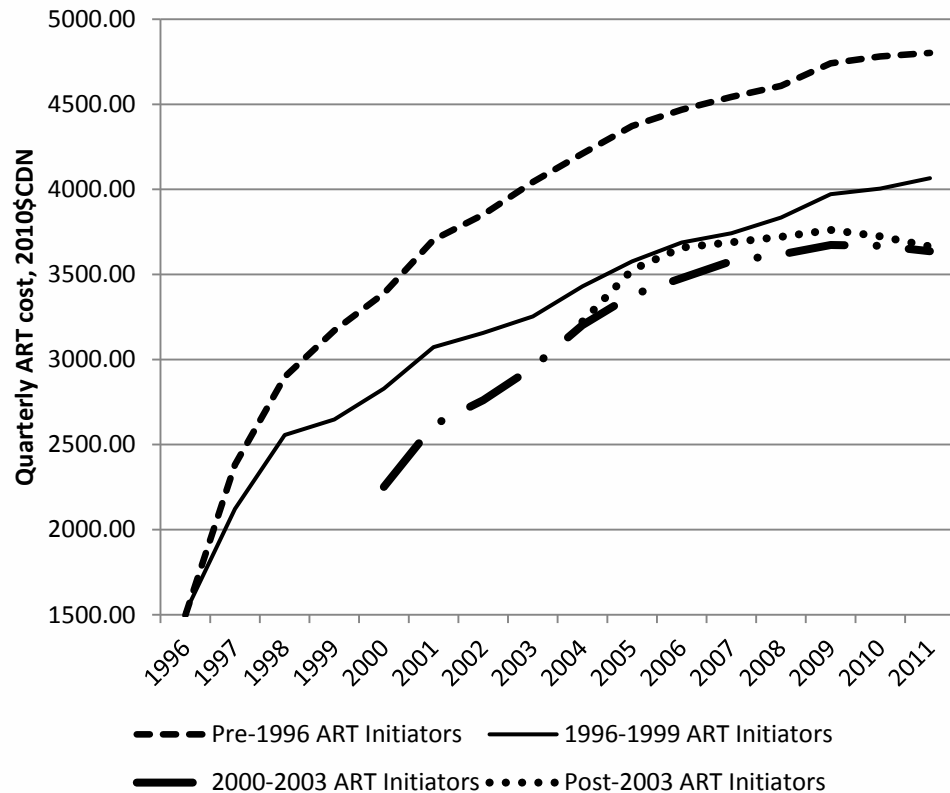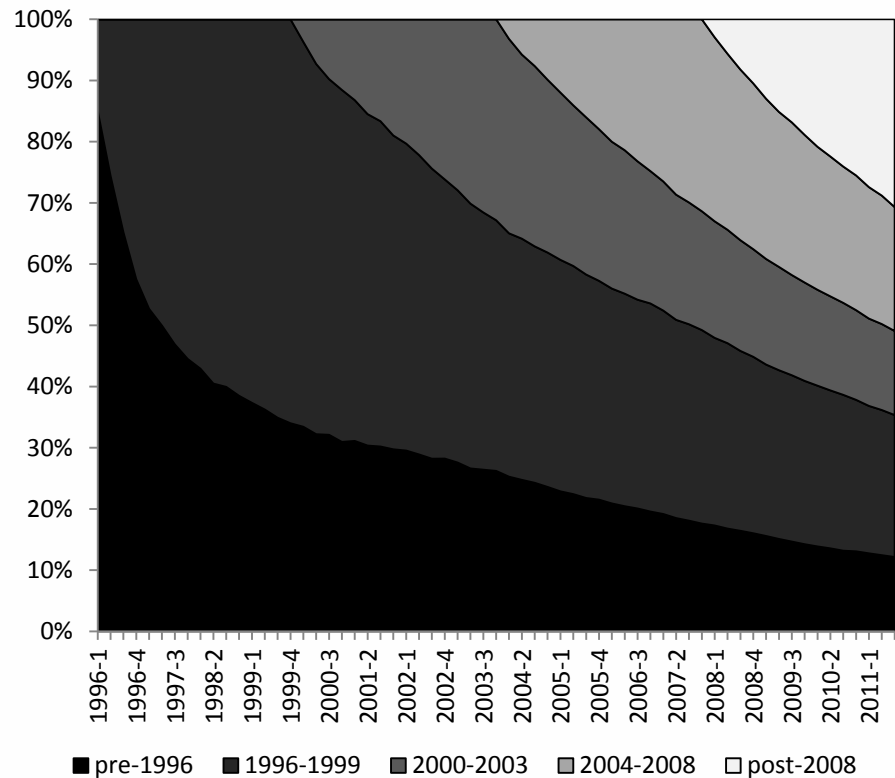
- Quarterly costs stabilized since 2006
- Highest costs attributable to pre-HAART initiators

CD4 Disease Progression during HAART
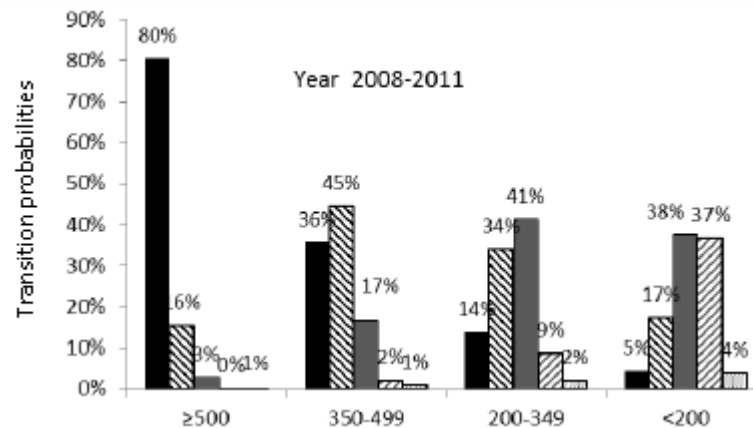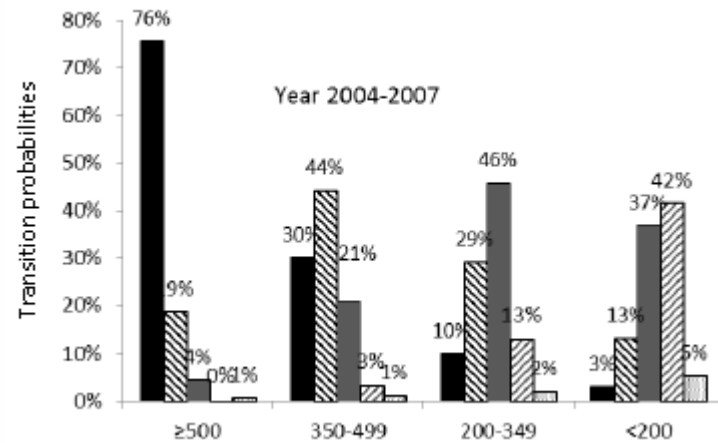
Quarterly non-HAART Medical Costs
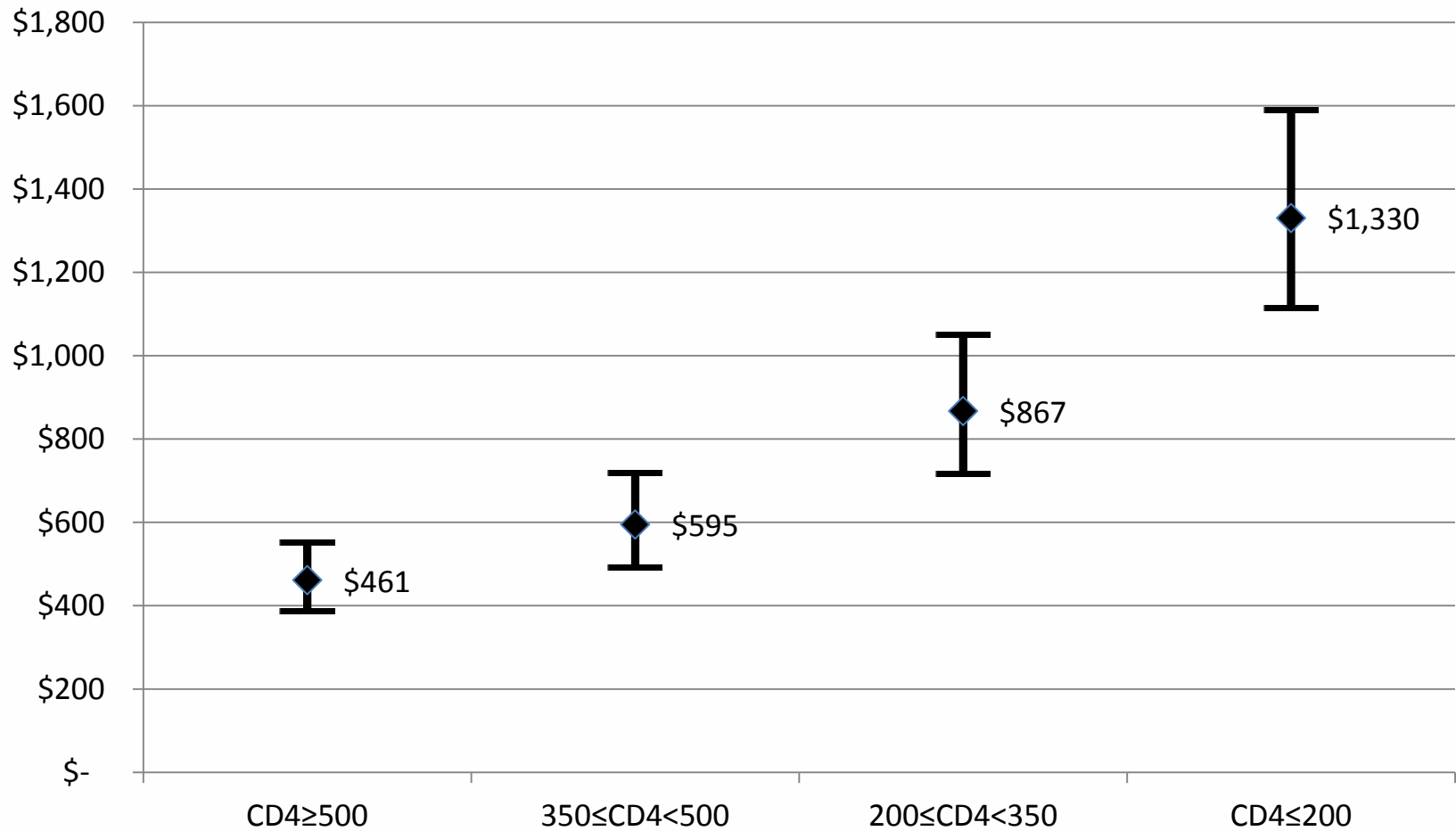
Structure of Mathematical Model

π=recruitment rate into susceptible population; λ=force of infection; μ=probability of mortality. j = (1,...,5): 1. CD4 > 500; 2. 350 < CD4 ≤ 500; 3. 200 < CD4 ≤ 350; 4. 50 < CD4 ≤ 200; 5. CD4 ≤ 50. Transitions into states W, I and T dependent on International AIDS Society (IAS) Guidelines. Transitions between states W_j, I_j and T_j may occur between transitions in states of disease progression: j -> j+1.
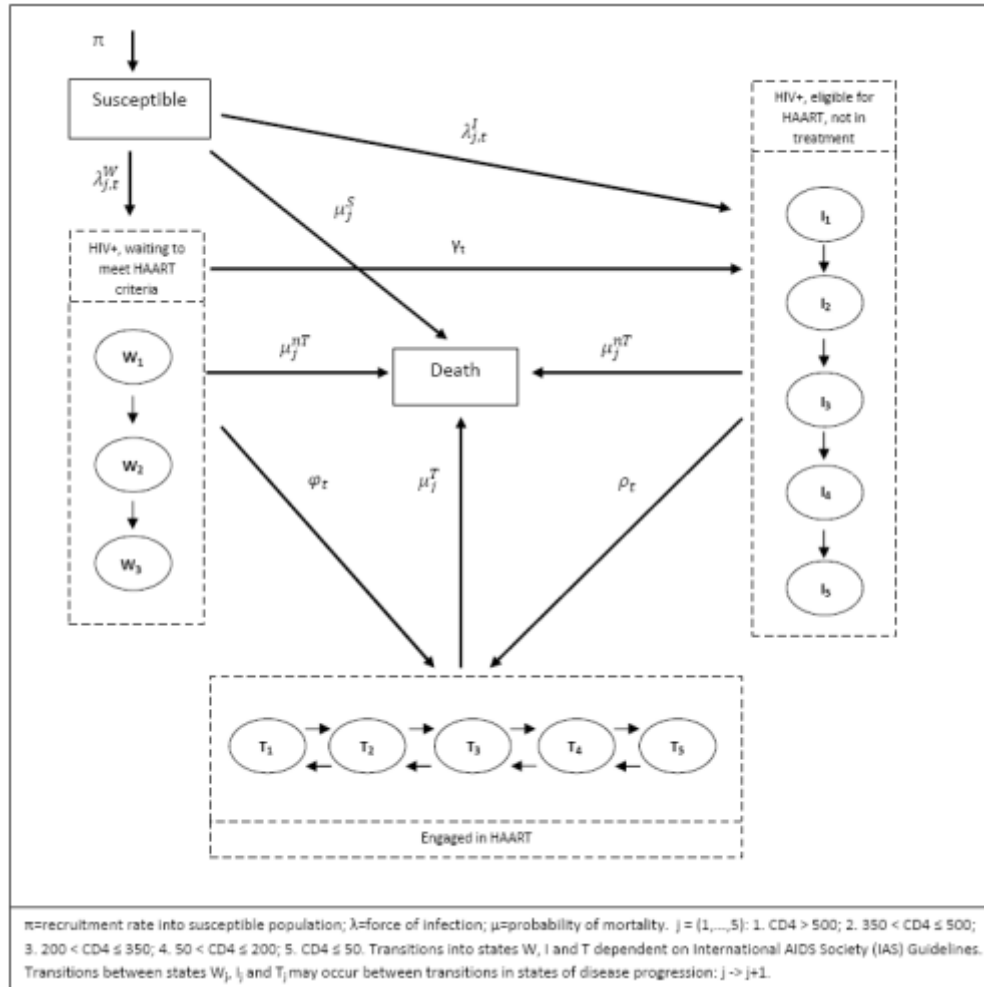
Next Steps: Optimizing Engagement in HIV Care
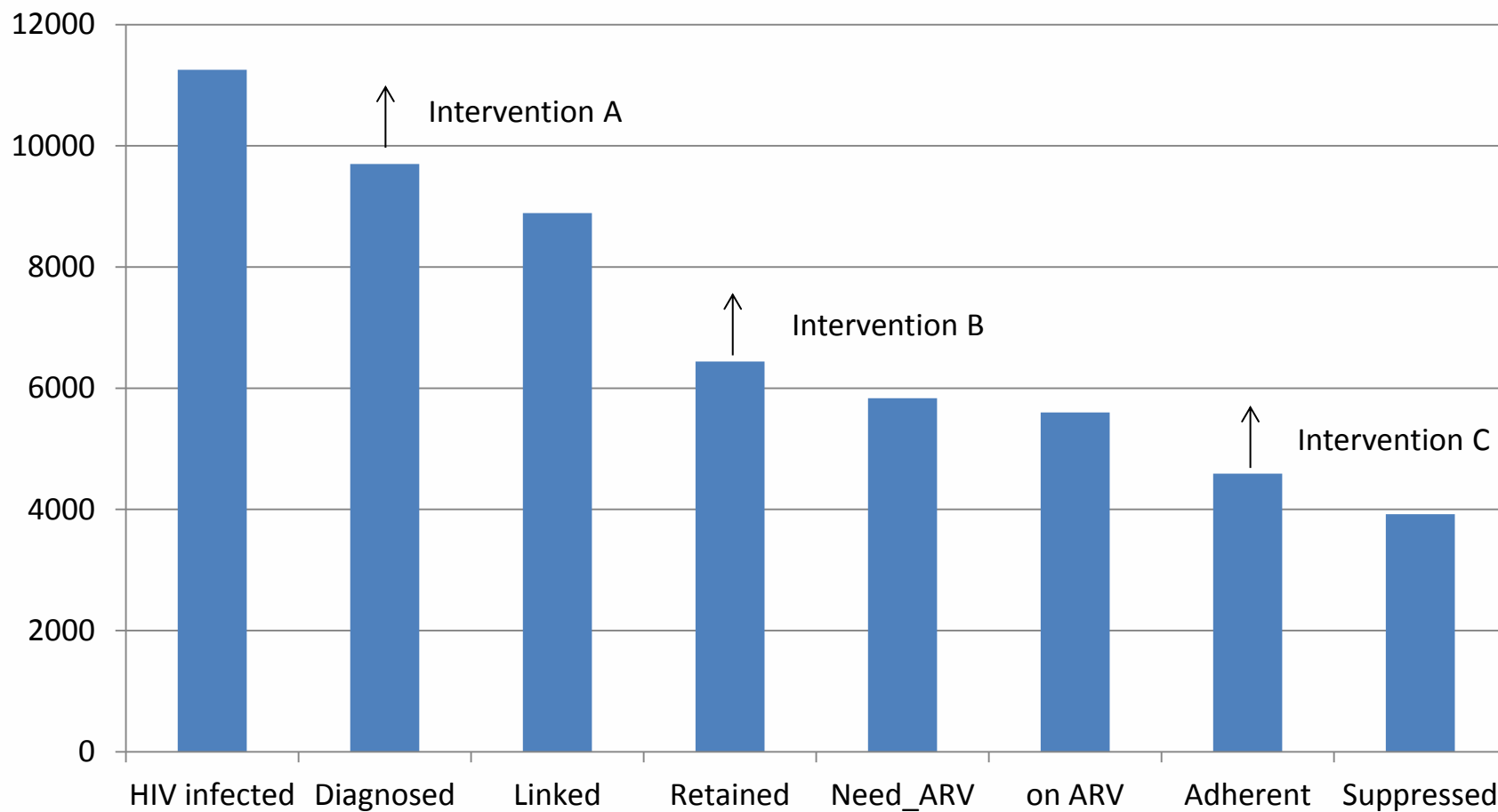
Summary

- Economic evaluation is about informing decisions on how to focus resources: *Evidence-based decision-making*

- Mathematical modeling is required to make the right long-term decisions

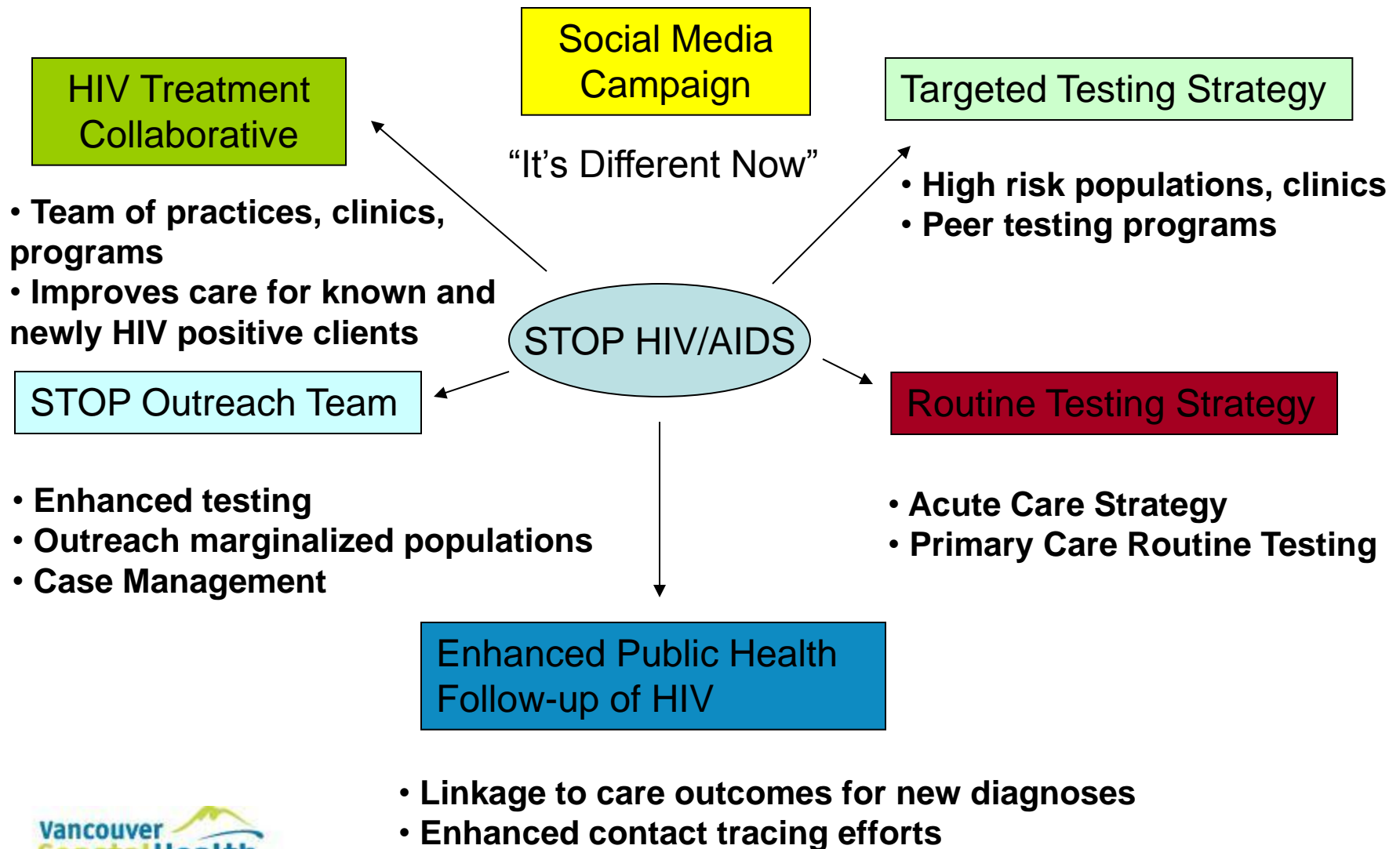- These models require high-quality data to be valid, useful decision-making tools

Monitoring of the Vancouver STOP HIV/AIDS Pilot Projects

STOP HIV/AIDS Provincial Expansion Knowledge Exchange
February 1st 2013

Jat Sandhu PhD

Regional Director
Public Health Surveillance Unit
Office of the Chief Medical Health Officer
Vancouver Coastal Health Authority

VCH Pilot Projects and Activities

Social Media Campaign

"It's Different Now"

Targeted Testing Strategy

HIV Treatment Collaborative

- **Team of practices, clinics, programs**
- **Improves care for known and newly HIV positive clients**

STOP HIV/AIDS

- **High risk populations, clinics**
- **Peer testing programs**

STOP Outreach Team

- **Enhanced testing**
- **Outreach marginalized populations**
- **Case Management**

Routine Testing Strategy

- **Acute Care Strategy**
- **Primary Care Routine Testing**

Enhanced Public Health Follow-up of HIV

- **Linkage to care outcomes for new diagnoses**
- **Enhanced contact tracing efforts**

Vancouver CoastalHealth
Promoting wellness. Ensuring care.

Monitoring and Evaluation
VCH Funded Projects/Activities

Program Level Evaluation

Population Level Monitoring

Evaluates activities by each MOU

Developed logic models

Assess short term & long term outcomes

Quantitative and qualitative data

Evaluates population-level indicators across Vancouver HSDA

Population level datasets from multiple sources

Sophisticated data linkages

Pre – during - post intervention analyses

Allows stratification by important subgroups

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Methods

- **Monitoring Framework & Indicators**
  - Indicators developed and approved by STOP Core Team
  - Represent phases of the patient journey

- **Data Collection and Linkage**
  - Data access requests, privacy agreements
  - HIV Public Health Surveillance data
  - BC CfE Drug Treatment Program data
    - Deterministic data linkages
  - Provincial Laboratory HIV testing data
  - VCH/PHC Decision Support

- **Pre-During-Post Intervention Analysis**
  - Pre: Historical Baseline Period (2008-2009)
  - During: STOP HIV/AIDS (2010-current)
  - Post: April 2013 onwards

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QUARTERLY MONITORING REPORT

HTTP://WWW.VCH.CA/YOUR_HEALTH/DISEASE_SURVEILLANCE/HIV-AIDS/

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STOP HIV/AIDS Monitoring Indicators
Quarterly Summary Report
Quarter 3 2012 (July 1 - September 30, 2012)

Providence HEALTH CARE
How you want to be treated.

Indicator Number	Indicator Name	Counts by Quarter				STOP HIV/AIDS (July 1, 2010 to date)			2-year Historical Baseline (Jan 1, 2008 to Dec 31, 2009)			Year to Date Cases		Significance
		Current Quarter	Apr-Jun 2012	Jan-Mar 2012	Oct-Dec 2011	Avg	Min	Max	Avg	Min	Max	Year 2012	Year 2011	
VCH8a	Overall number of HIV lab tests (either from VCH residents or those who tested at a VCH clinic)	29145	26760	26611	22853	22768	19084	29145	18308	17539	19364	82516	60779	S+H+Y+
VCH8b	Number of HIV lab tests from all clinics in VCH	27689	25500	25400	21628	21685	18221	27689	17073	16166	18059	78589	58073	S+H+Y+
VCH8c	Number of HIV lab tests from all Vancouver HSDA clinics	23513	21481	21126	17819	17892	14667	23513	13701	12925	14555	66120	47282	S+H+Y+
VCH11a	Number of HIV lab tests from residents of VCH (only those with known VCH residence)	18059	17384	17476	15488	14722	12294	18059	11502	10924	12325	52919	39300	S+H+Y+
VCH11b*	Number of HIV lab tests from residents of Vancouver HSDA	18349	16399	16010	13968	13812	11205	18349	11003	10449	11739	50758	36293	Q+S+H+Y+
VCH11c	Number of HIV lab tests from residents of Richmond and Coastal HSDAs	4508	4432	4739	4249	3992	3470	4739	3270	3126	3428	13679	10921	S+H+Y+
VCH11d	Number of HIV lab tests from non-residents of VCH, who tested in VCH	11082	9331	9171	7411	8053	6722	11082	6805	6432	7187	29584	21498	Q+S+H+Y+
VCH13a	Number of positive HIV diagnoses for VCH residents	39	33	43	40	41	31	58	44	36	57	115	137	Q+H-Y-
VCH13b*	Number of positive HIV diagnoses for Vancouver HSDA Residents	34	29	42	36	38	29	51	41	34	54	105	126	Q+H-Y-
VCH13c	Number of positive HIV diagnoses for Richmond and Coastal HSDAs	5	4	1	4	4	1	7	3	1	6	10	11	Q+S+H+
VCH14a	Percent positivity (%) of VCH residents	0.22	0.19	0.25	0.26	0.28	0.19	0.42	0.38	0.31	0.52	0.22	0.35	H-Y-
	Percent positivity (%) of Vancouver													

(left side vertical label: Testing Indicators)

Number and Percent Positivity of HIV Lab Tests from Residents of Vancouver HSDA
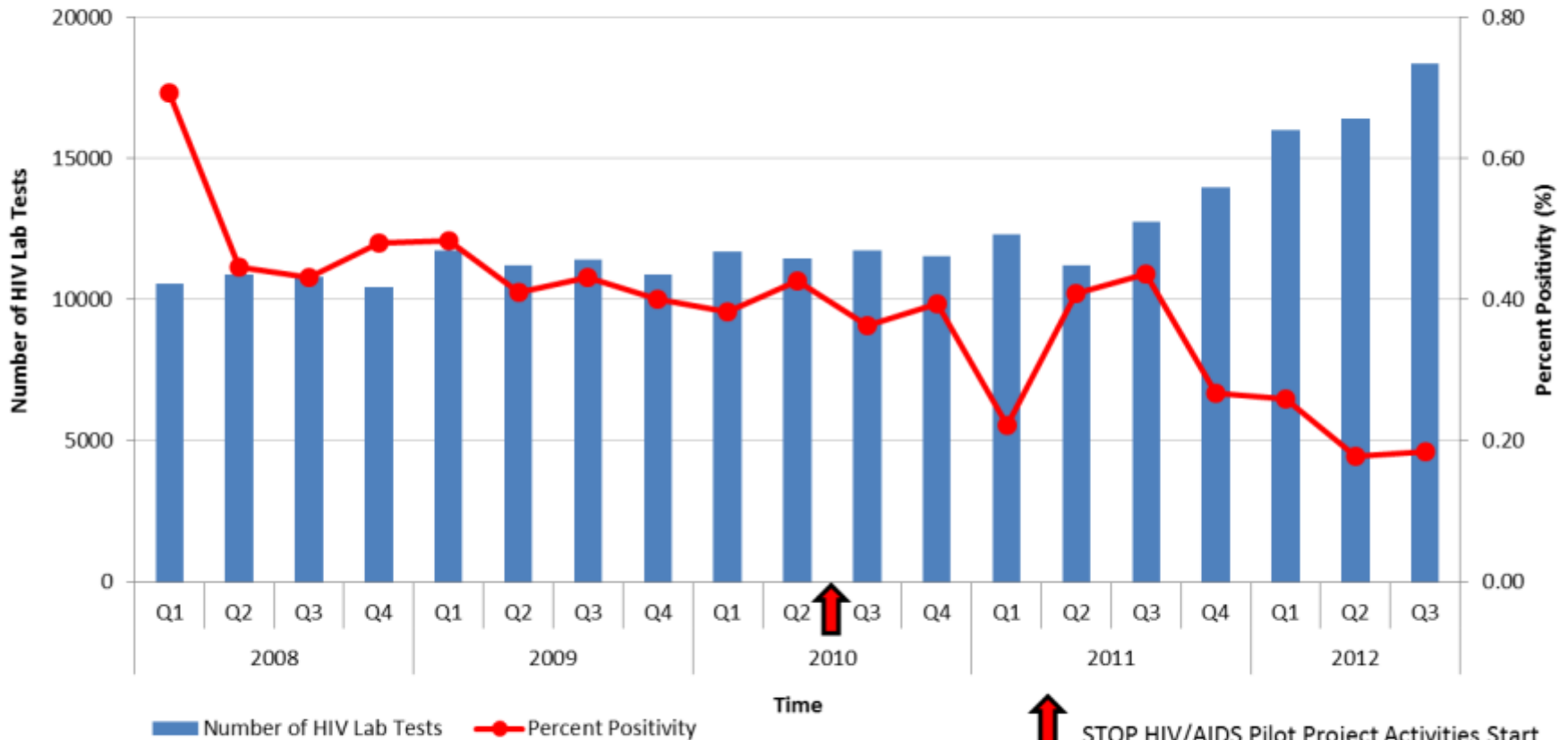
Source: Public Health Surveillance Unit (HIV Surveillance Data); Provincial Public Health Microbiology and Reference Laboratory (Misys Laboratory Database) & Providence Health Care Virology Laboratory Database.
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. August 27, 2012.

Mean monthly rate of HIV lab tests for Vancouver residents per 10,000 population
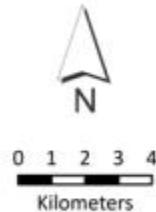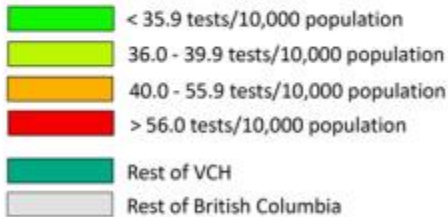
Map 1. Historical value (2008 - 2009)

Map 2. Since July 2010 to current.

Map 3. Since April 2012 to current

HIV lab tests per 10,000 population

- < 35.9 tests/10,000 population
- 36.0 - 39.9 tests/10,000 population
- 40.0 - 55.9 tests/10,000 population
- > 56.0 tests/10,000 population

- Rest of VCH
- Rest of British Columbia

N

0 1 2 3 4
Kilometers

Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit, November, 2012.
Spatial source: BC STATS, BC Ministry of Labour and Citizens' Services.
Population data source: BC STATS, BC Ministry of Labour and Citizens' Services (Population Estimates).
Data source: Provincial Public Health Microbiology and Reference Laboratory (Misys Laboratory Database) & Providence Health Care Virology Laboratory.

Proportion of Patients by CD4 Cell Count at Diagnosis

Mean CD4 cell count (cells/mm3) at diagnosis for all HIV positive individuals [VCH45].

Number of Contacts Notified and Tested for HIV, and Percent Positivity Due to Contact Tracing
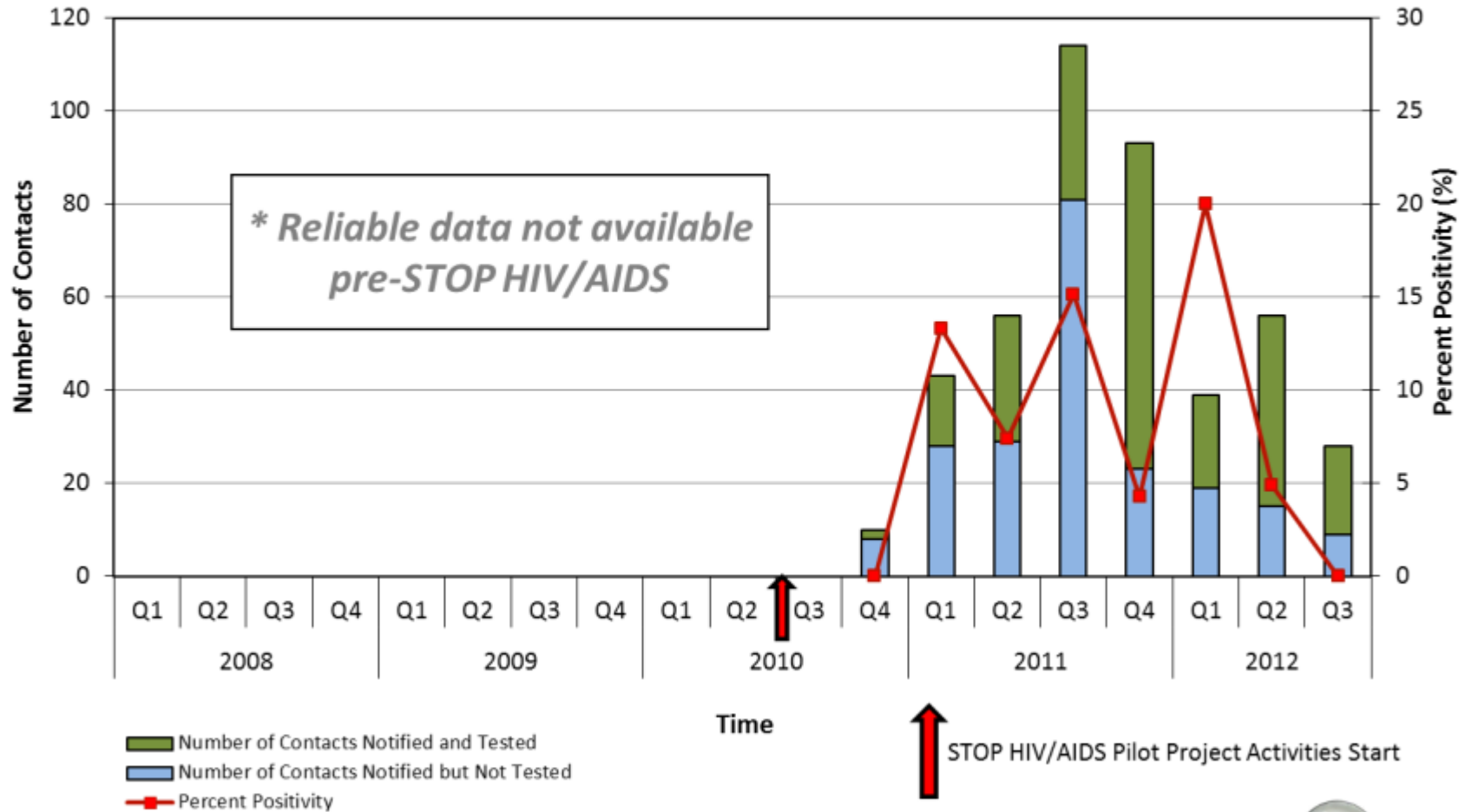
Source: Enhanced HIV Contact Tracing Form
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. November 7, 2012.

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Proportion of patients linked to care within 30 days and median days to linkage to care
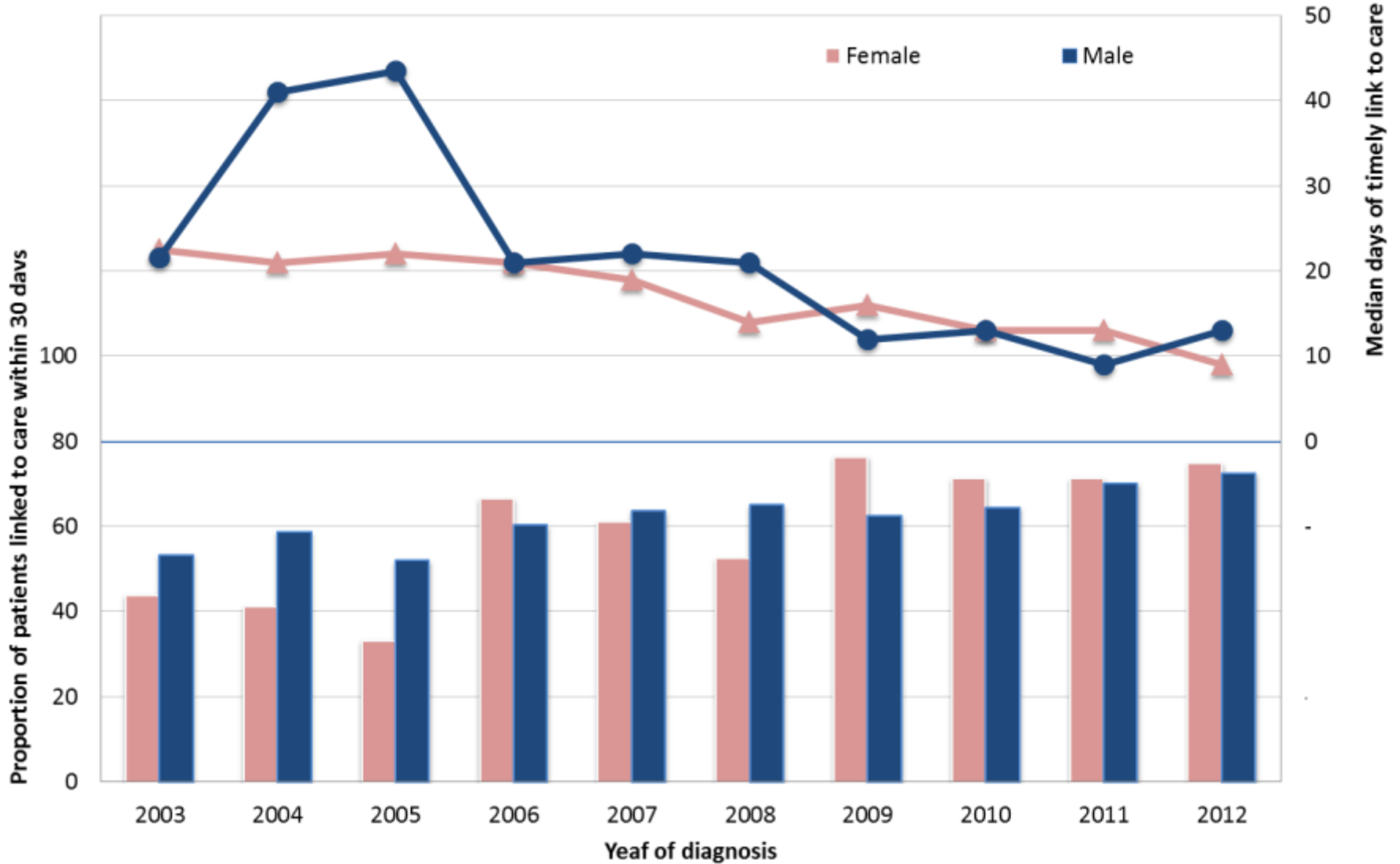
Number and proportion of patients actively engaged in care by year of care
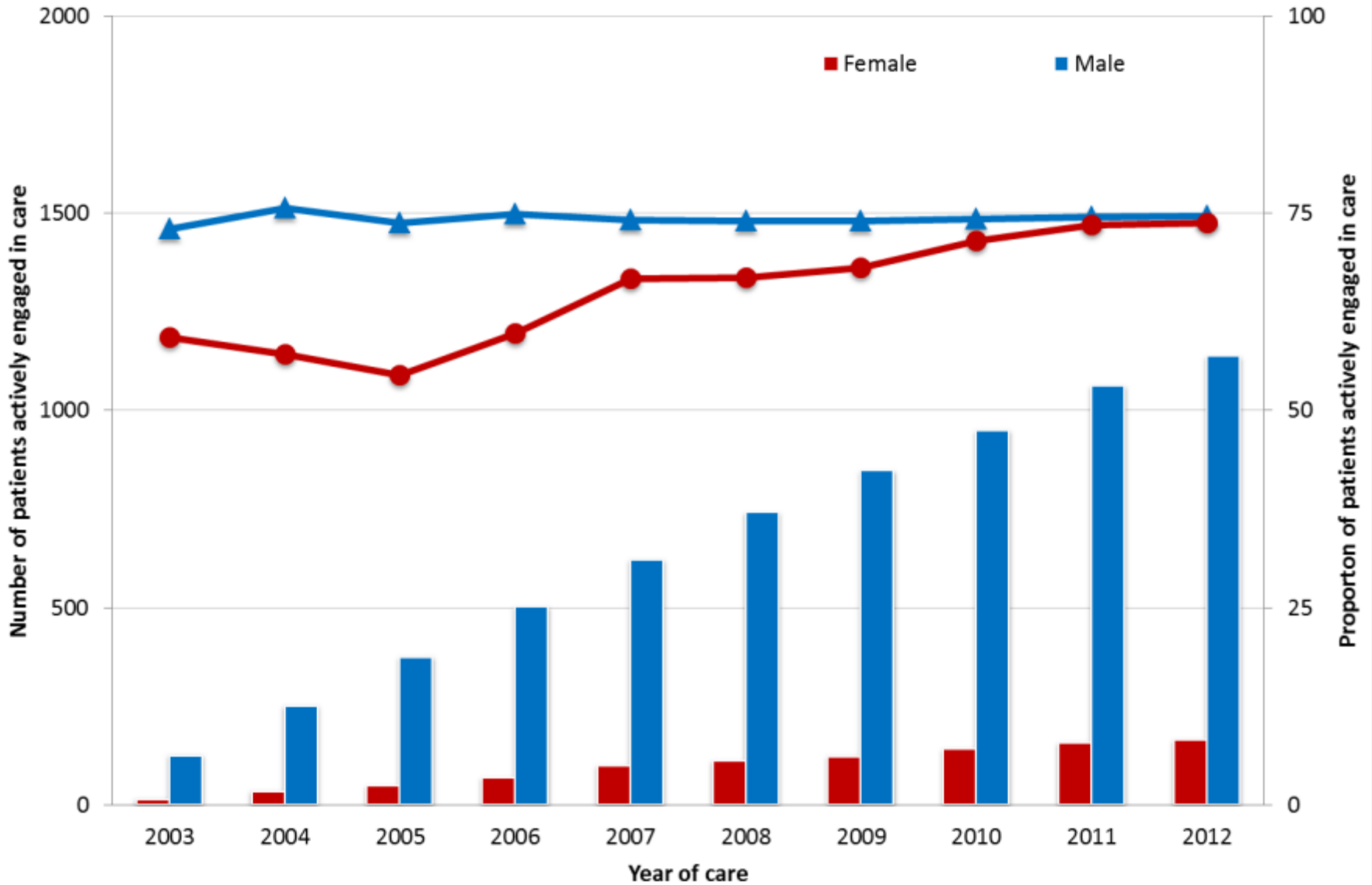
Mean Community Viral Load and Proportion of HIV Positive Individuals Not Fully Suppressed
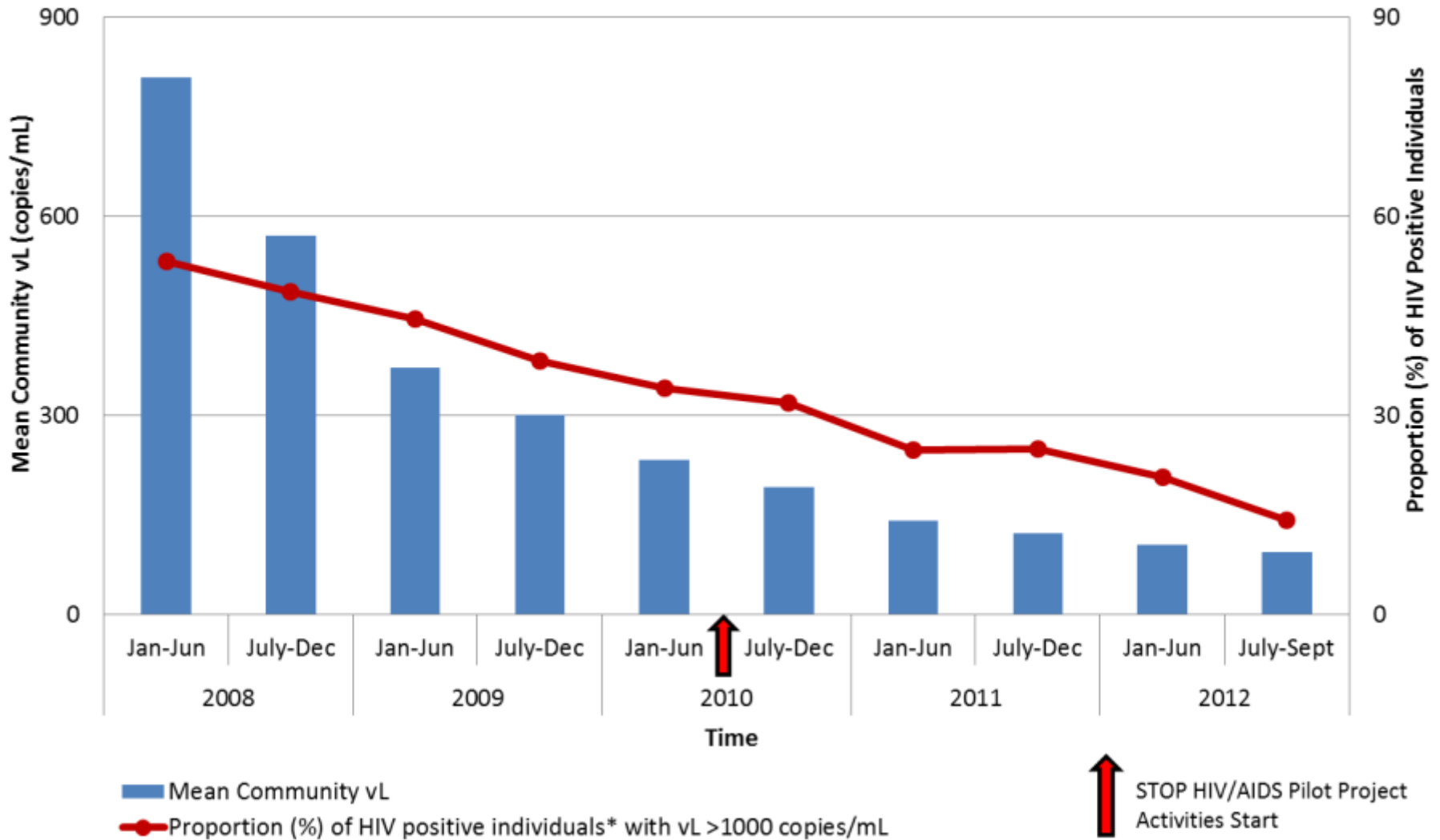
Mean community viral load (copies/mL) for all HIV positive individuals

Survey of Healthcare Provider's Attitudes and Perceptions
Phase 1 – Prior to Launch of Initiative (n=404)

- 54% agree the incidence of HIV is high enough to justify implementation of routine screening.

- 74% agree detection and treatment of HIV is cost-effective.

- 68% agree HIV testing should be offered to all patients who enter the hospital.

- 62% expressed the need for more education and training to fulfill their role in HIV testing strategy

- Among those *not having* attended an HIV testing orientation, they are 3 times more likely to **strongly disagree** with the appropriateness of their workplace setting for HIV testing.

- Among those *having* attended an HIV testing orientation, they are twice as likely to **strongly agree** that HIV fits accepted criteria to justify routine testing and should be part of routine care.

Number of HIV Tests at Vancouver Hospitals by Month and New Positives at all Sites, 2010-2012
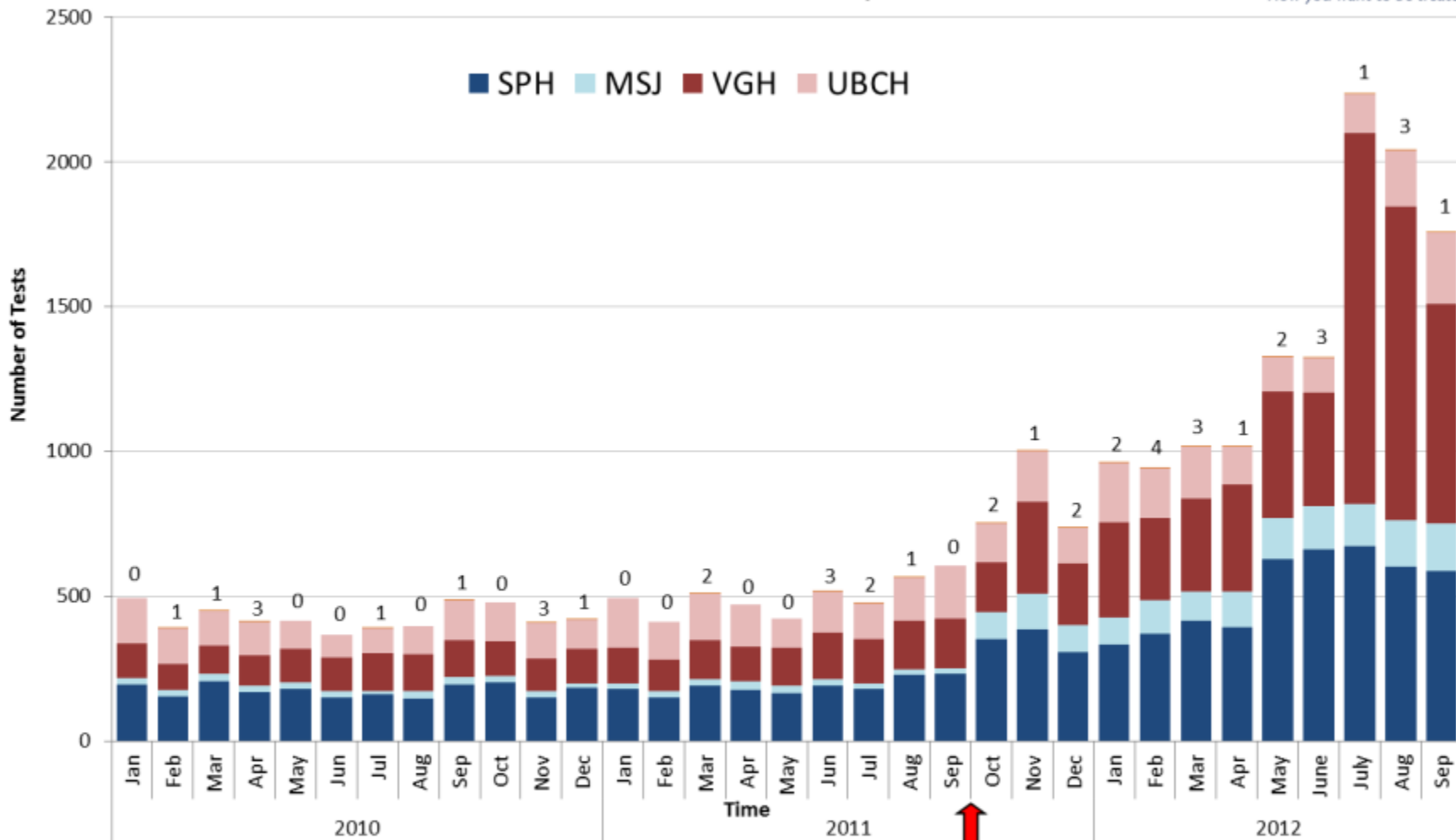
Graph represents all tests ordered (except SPH Immunodeficiency Clinic) in an acute facility regardless of admission status.
Values above bars represent number of positives diagnosed each month from all sites.
Time parameters determined by date of test.
Source: Providence Health Care Virology Laboratory Database & Vancouver General Hospital Laboratory Database.
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. December 3, 2012.
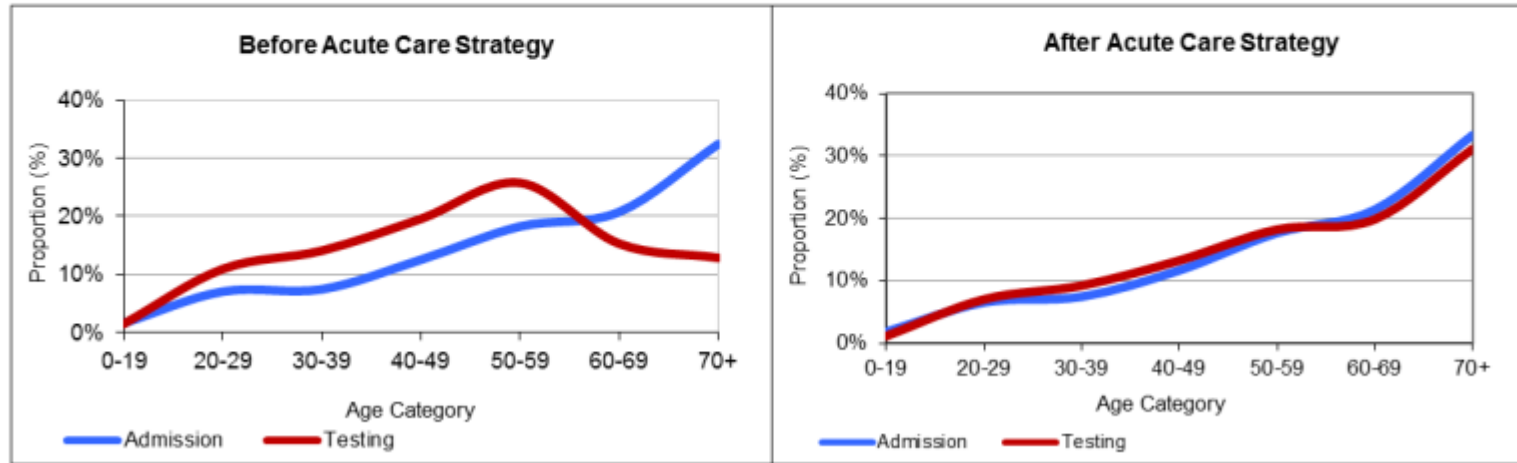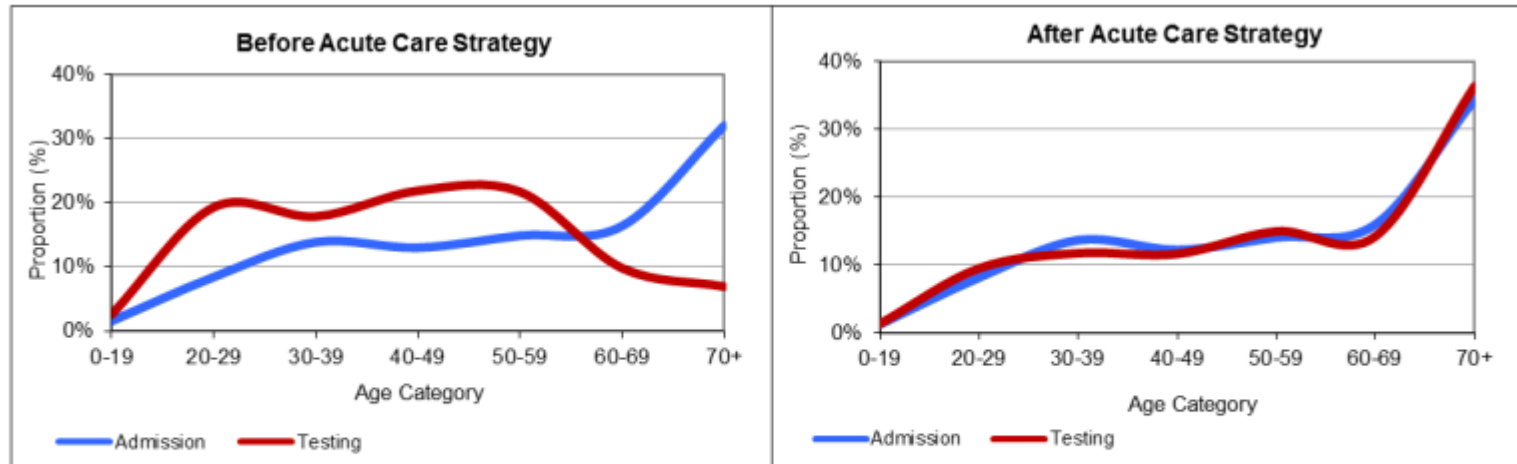
Note: Period before acute care strategy includes Q3 2010-Q2 2011.
Period after acute care strategy includes Q4 2011- Q3-2012.
Source: Providence Health Care Virology Laboratory & Vancouver General Hospital Laboratory Database.
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. December 6, 2012.

Progress in Acute Care Testing Initiative

- Up to September 30th 2012:
  - 6,291 HIV tests have been conducted among admitted patients (13% of all admissions)
  - 1 new positive for every 274 tests (overall percent positivity of 0.4%)
- Characteristics of those diagnosed:
  - ↑ Heterosexual, ↓ MSM exposure risk factors
  - ↑ Advanced stage of disease
  - ↓ Mean CD4 (Δ193 cells per mm³; 95% CI 88 – 299, p<0.001)

Acknowledgements

- Microbiology & Virology at Providence Health Care - Willson Jang, Technical Leader

- Public Health Microbiology and Reference Laboratory - Yin Chang, Laboratory Surveillance and Outbreak Coordinator & Rob MacDougall, Laboratory Information Management Coordinator

- Vancouver Coastal Health STOP Outreach Team - Meaghan Thumath, Clinical Practice Initiatives Lead and the STOP Outreach Team

- BC Centre for Excellence in HIV/AIDS - Benita Yip & William Chau, Analysts and Dr. Kate Heath, Epidemiologist

- Vancouver Coastal Health Communicable Disease Control - Margot Smythe, Communicable Disease Nurse Educator; Logan Chinski, HIV Communicable Disease Control Nurse & the Communicable Disease Control Nurses

- Vancouver Coastal Health STOP HIV/AIDS Core Project Team

Public Health Surveillance Unit

Supporting regional public health practice:

- – Health Assessment
- – Disease Surveillance
- – Epidemiological Investigations
- – Knowledge Transfer

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Monitoring and Evaluation at a Population Level

How monitoring and evaluation supported the initiative

Dr. Réka Gustafson

How did monitoring and evaluation make a difference?

- Kept us focused on testing and treatment
- Helped define where we started
- Helped define where we were going
- Showed us if we were getting there
- If not, helped us define why we were not

Where are we?

Figure 4a
Proportion of Patients by CD4 Cell Count at Diagnosis and Year of Diagnosis [VCH45]

Source: Public Health Surveillance Unit (HIV Surveillance Data) & BC CfE Drug Treatment Program Data.
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. December 22, 2011.

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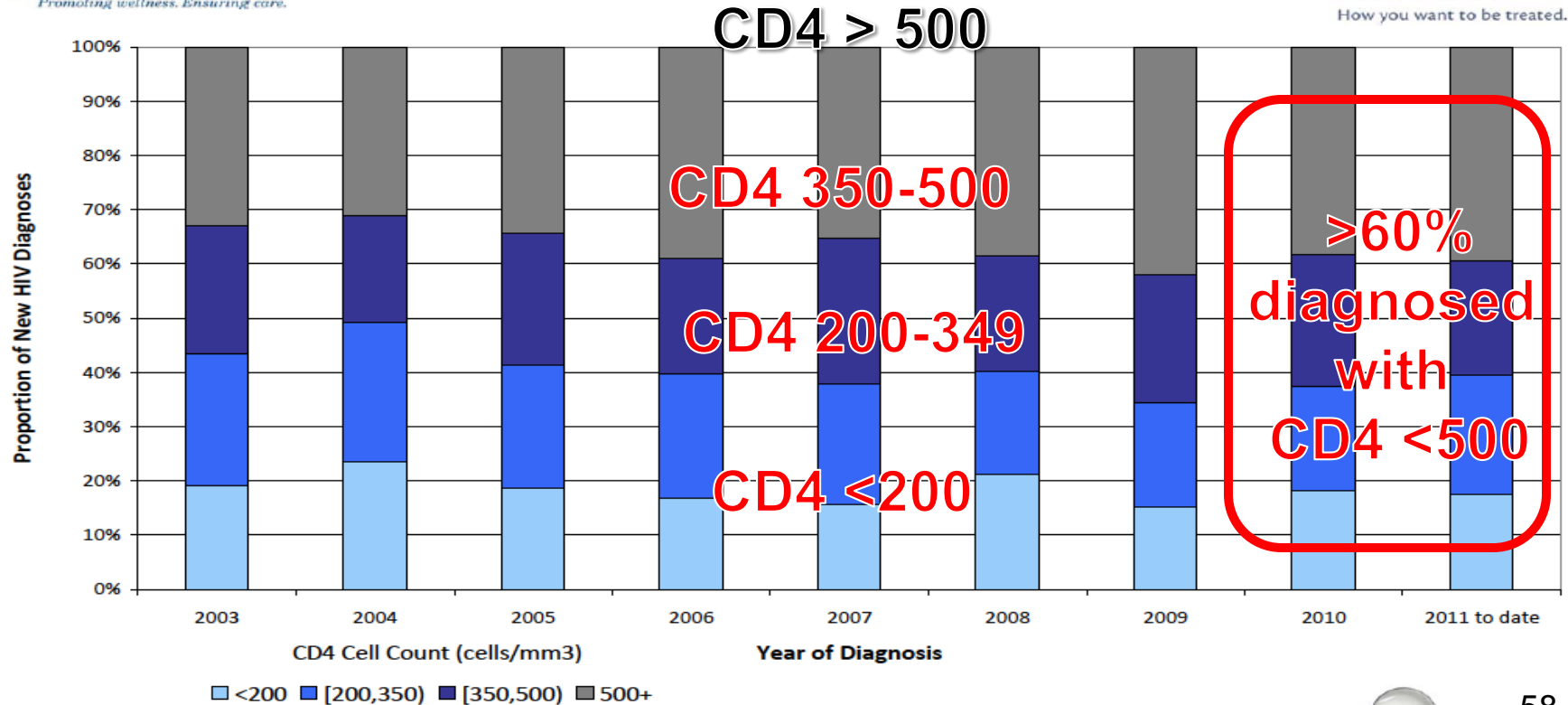
Why are we here?

Percent & proportion of new HIV diagnoses with ≥1 prior Outpatient, Lab, ER or Inpatient encounter, by CD4 count

CD4 Count*	≥ 1 prior encounter
< 200	58% (30/52)
< 350	60% (64/107)
< 500	55% (97/177)

Only 57.5% (291/506) of new HIV Dx had a CD4 count on record at time of Dx

Are we getting there?

Number of HIV tests done in Vancouver HSDA, 2007 to current (month)
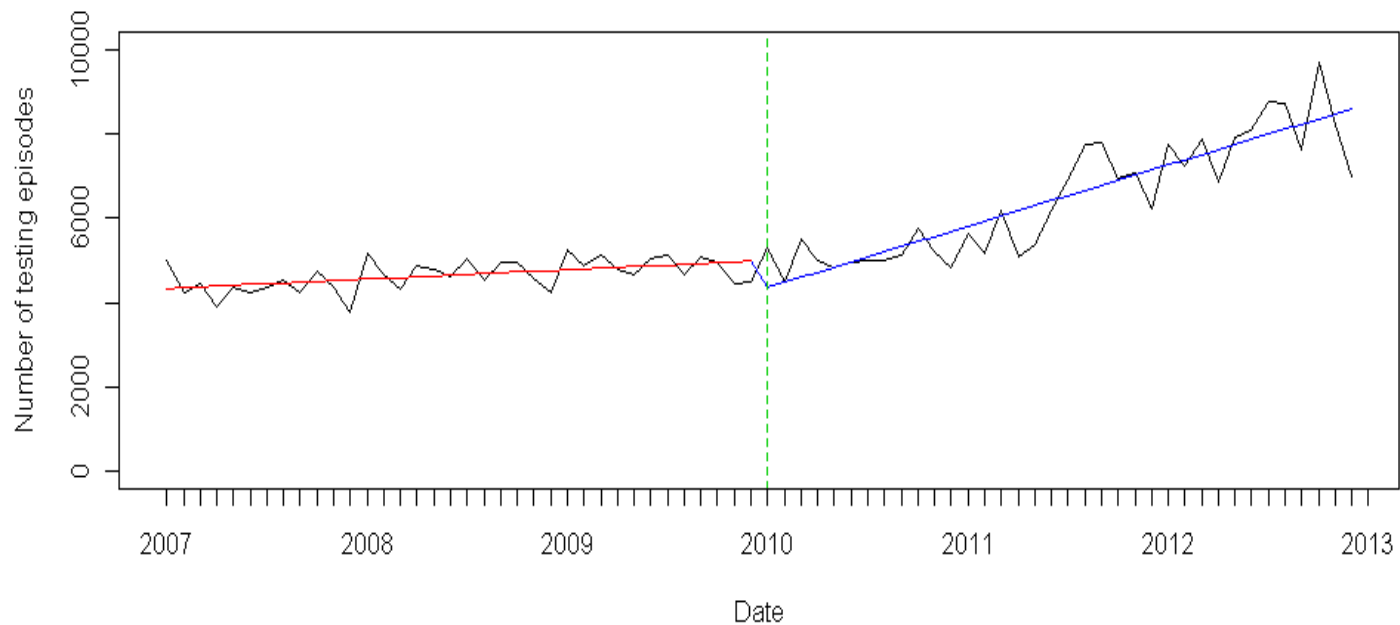
If we are not getting there, why not?

Department of Medicine: October 2011 – December 30, 2012

Site	Number of Admissions	Number Offered	Number Tested	Acceptance Rate	% Offered	% Tested	Number of Positives	Positivity Rate per 1000
SPH	3769	1717	1439	97%	46%	38%	11	~ 8/1000
MSJ	1644	1051	781	85%	64%	48%	3	~ 4/1000
VGH	4689	1590	1270	96%	34%	27%	4	~ 3/1000
Total	10102	4358	3490	94%	43%	35%	18	~ 5/1000

What got us there?
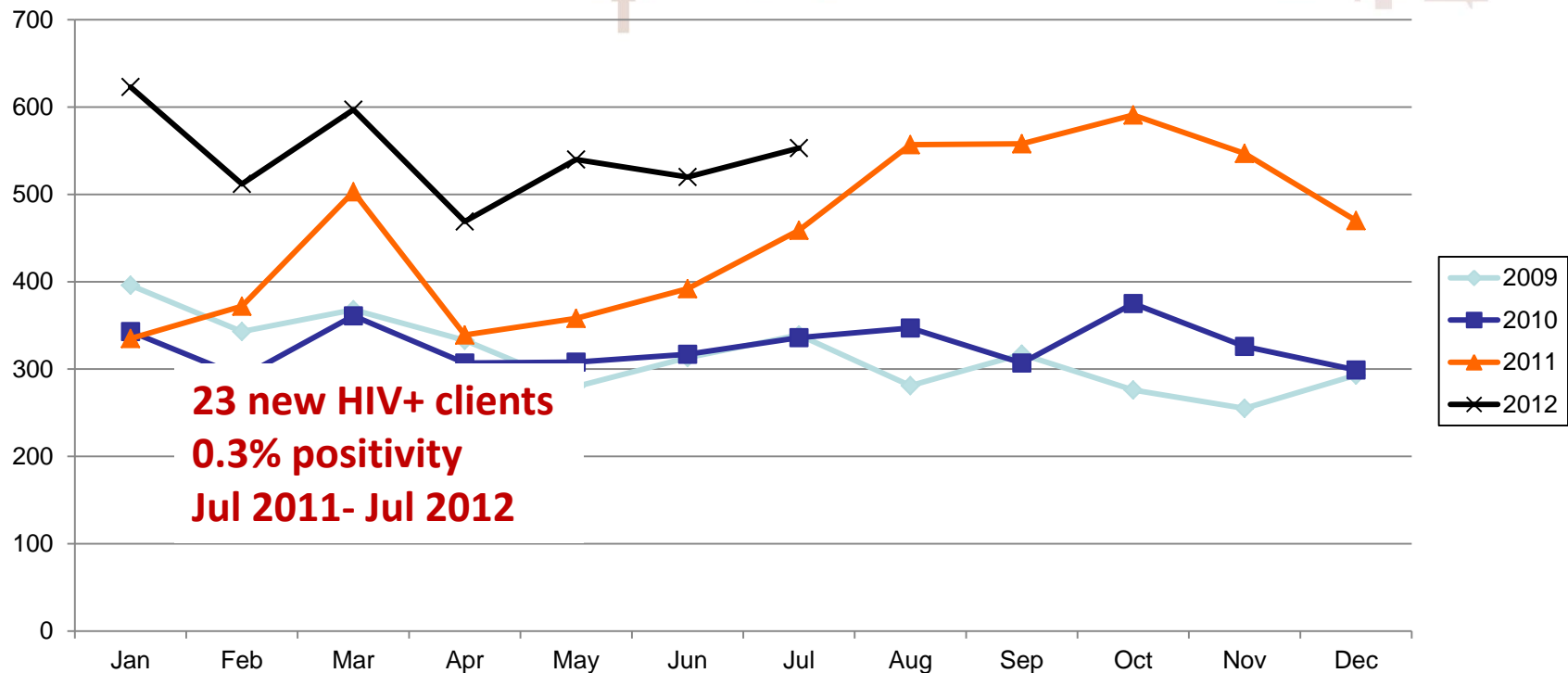
**23 new HIV+ clients
0.3% positivity
Jul 2011- Jul 2012**

Legend:
- 2009
- 2010
- 2011
- 2012

HIV Test Volumes By Year - VCH Primary Care

July 2010 (initiation of STOP Project) to July 2012
41 new positives, 11,285 tests, 0.4% positivity

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Where is it working?

Setting	Proportion Positive	Percent Positivity
Acute Care: Provider - Initiated	25 total	TBD
	(14/2,496) Dept of Med	0.6% (approx. from Dept of Medicine)
Acute Care: Patient - Initiated	22/1,216	1.8%

Setting	Proportion Positive	Percent Positivity
STOP Outreach Team	35/1,622	2.2%
Partner Notification	16/135	12%
Bathhouse Testing	13/422	3.1%
DTES Peer Testing	10/4,773	0.2%

**Routine testing cost-effectiveness threshold:
1 positive per 1,000 tests[1]**

[1]Qaseem, A., Snow, V., Shekelle, P. et al. (2009). Screening for HIV in health care settings: A guidance statement from the American College of Physicians and HIV Medicine Association. *Ann Intern Med* 150:125-131.

What is the population level impact?

Figure 6. Proportion of Patients by CD4 Cell Count at Diagnosis and Year of Diagnosis [VCH45]

Source: Public Health Surveillance Unit (HIV Surveillance Data) & BC CfE Drug Treatment Program Data.
Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit. June 27, 2012.

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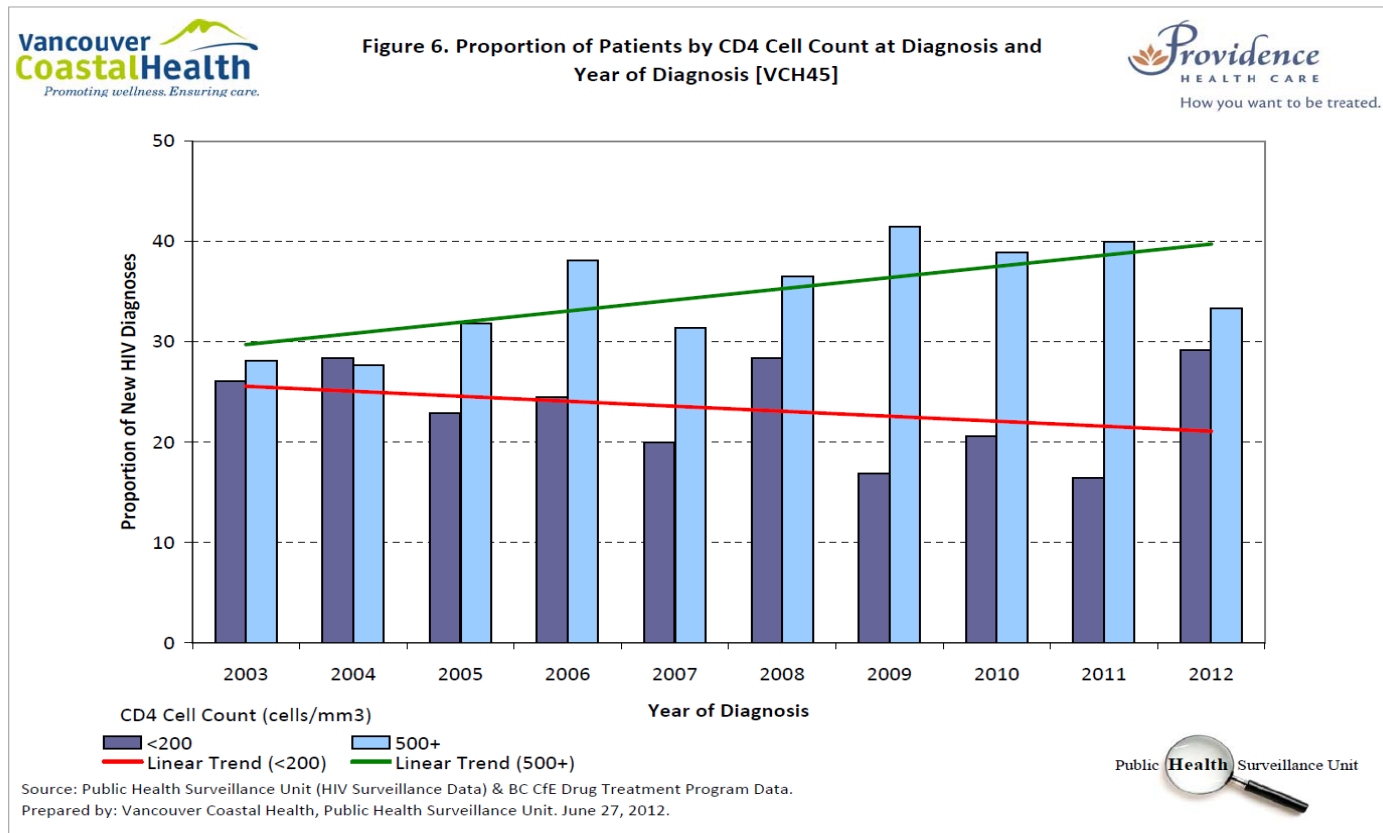
Is it making a difference in my neighbourhood?

Testing

Vancouver CoastalHealth — Promoting wellness. Ensuring care.

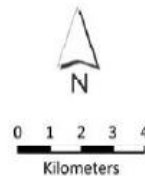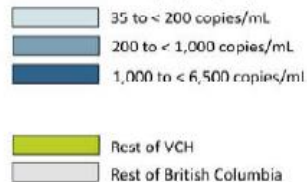Mean monthly rate of HIV lab tests for Vancouver residents per 10,000 population [VCH11c].

Map 1. Vancouver local health areas, 2008 - 2009.

Map 2. Vancouver local health areas, since STOP HIV/AIDS July 1, 2010 to current.

HIV lab tests per 10,000 population
- < 35.9 tests/10,000 population
- 36.0 - 39.9 tests/10,000 population
- 40.0 - 55.9 tests/10,000 population
- > 56.0 tests/10,000 population
- Rest of VCH
- Rest of British Columbia

N
0 1 2 3 4
Kilometers

Public **Health** Surveillance Unit
phsu@vch.ca

Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit, November, 2012.
Spatial source: BC STATS, BC Ministry of Labour and Citizens' Services
Population data source: BC STATS, BC Ministry of Labour and Citizens' Services (Population Estimates).
Data source: Provincial Public Health Microbiology and Reference Laboratory (Misys Laboratory Database) & Providence Health Care Virology Laboratory.

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Providence HEALTH CARE

Diagnosis

Mean CD4 cell count (cells/mm3) at diagnosis for all HIV positive individuals [VCH45].

Map 3. Vancouver local health areas, 2008 - 2009.

Map 4. Vancouver local health areas, since STOP HIV/AIDS July 1, 2010 to current.

Mean CD4 cell count (cells/mm3)
- < 200 cells/mm3
- 200 to < 350 cells/mm3
- 350 to < 500 cells/mm3
- 500+ cells/mm3
- Rest of VCH
- Rest of British Columbia

Prepared by: Vancouver Coastal Health, Public Health Surveillance Unit, November, 2012.
Spatial source: BC STATS, BC Ministry of Labour and Citizens' Services
Population data source: BC STATS, BC Ministry of Labour and Citizens' Services (Population Estimates).
Data source: Provincial Public Health Microbiology and Reference Laboratory (Misys Laboratory Database) & Providence Health Care Virology Laboratory.

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Treatment

Keeping momentum

Did I really change my practice?

Dr. XXX (99999)
HIV Testing Summary

HIV test Summary 2011 - current*	2011	2012 Year to date (to Aug 31, 2012)	2012 Month of August
Total HIV tests processed	70	65	10
Monthly average	5.8	8.1	
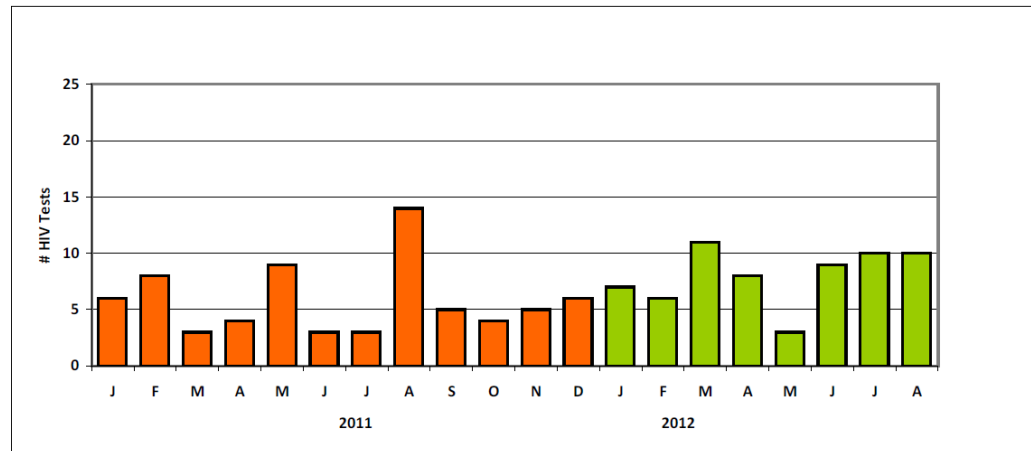
Summary

- Data to engage the community, leaders and providers

- Data to evaluate progress and change direction if needed

- Data to monitor the project overall

- Data to maintain momentum

- Data to celebrate success