**Routine HIV Testing in Acute Care**

**Programming Connection**

**Case Study**

**Organization:** Vancouver STOP Project  
**Region:** Vancouver, British Columbia  
**Prepared:** 2013

### Quick Facts

<table>
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<th><strong>Goal (immediate)</strong></th>
<th>To embed the routine offer of HIV testing into clinical practice to expand access to HIV testing in hospitals in Vancouver</th>
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<td><strong>Goal (ultimate)</strong></td>
<td>To improve early diagnosis and treatment of HIV by routinely offering HIV testing to all patients in hospitals in Vancouver</td>
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<td><strong>Participants</strong></td>
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<td><strong>Type of Program</strong></td>
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| **Required Resources** | 1. Project administrator  
                          2. Project manager  
                          3. Clinical leader  
                          4. Project nurses  
                          5. Supportive hospital leadership from both the operational and clinical sides  
                          6. Strong support of the medical health officer for communicable disease  
                          7. Endorsement from the College of Physicians and Surgeons of British Columbia  
                          8. Strong clinical and public health rationale |
| **Scope and Duration** | Four Vancouver hospitals, ongoing                                                                               |
| **Date Started**     | 2011                                                                                                             |
| **Region**           | Vancouver, British Columbia                                                                                      |
Recruitment: Health-authority initiated; recruitment of patients with the routine offer of HIV testing upon admission

Challenges:
1. Lack of provincial or national public health recommendation for routinely offering HIV tests.
2. Clinician concerns about patient acceptability of test
3. Workload burden on busy physicians and residents
4. Shift work as it relates to training for hospital staff
5. Admissions processes in departments of surgery

Evaluation:
1. Department-level chart audits to measure offer and acceptance rates
2. Tracking of surveillance data on hospital-level admissions, testing and positivity rates
3. Qualitative research among physicians and residents about their experience of implementation

Introduction

“We feel like we moved a mountain.”

It’s hard to miss the posters and the banners as you walk into any hospital in Vancouver. They all claim that HIV testing is “different now.” And in Vancouver, it is. Since October 2011, everyone admitted to four hospitals in Vancouver—St. Paul’s Hospital, Mount Saint Joseph Hospital, Vancouver General Hospital, and the University of British Columbia Hospital—should be offered an HIV test as part of routine care. This is a dramatic shift in the HIV testing paradigm in the city. “We feel like we moved a mountain,” says Réka Gustafson, one of Vancouver’s medical health officers and director of Vancouver Coastal Health Disease Control.

The goal of this initiative, and other testing programs developed by the Vancouver Seek and Treat for Optimal Prevention of HIV/AIDS (STOP) Project and its partners between 2010 and 2013, is to expand testing opportunities for everyone in Vancouver and thus increase early diagnosis. Early diagnosis is the first step in the treatment cascade and allows people living with HIV to benefit from treatment, care and support that is available and effective. Early diagnosis is better because it allows a person that is ready to engage in care to optimize the benefits of treatment, care and support.

The phased integration of a routine offer of HIV testing in hospitals has been a success. Not only is the routine offer of testing acceptable to people in Vancouver (the acceptance rate across hospitals is 94 percent), but as of May 2012, the initiative has made between three and eight new HIV-positive diagnoses for every 1000 tests performed. This makes the initiative highly cost-effective.

Although successful, the rollout has also been challenging. In the absence of provincial or national recommendations on HIV testing, the Vancouver STOP Project had to develop a solid clinical and public health rationale for a routine offer of testing. Barriers between people and testing also had to be reduced. This included the simplification of pre-test guidelines, though rightly, the need for verbal informed consent for each test was maintained.

In addition, barriers between providers and the routine offer of testing had to be reduced. The primary concern of healthcare providers in hospitals was the time and expertise needed to provide follow-up and linkage-to-care services for people newly diagnosed with HIV. While hospital physicians can continue to offer these services if they want, for those who do not have the skills, a follow-up process was articulated that allows physicians to delegate these responsibilities to nurses from the Vancouver Coastal Health Communicable Disease Control.

The initiative, and the policy changes required to integrate routinely offering HIV testing to all patients in hospitals in Vancouver, have contributed to making HIV tests more like other diagnostic tests performed hundreds of times a day in hospitals across Vancouver. “We have affected the knowledge of patients, the providers, and the general public about HIV testing, HIV infection and the benefits of treatment,” says Afshan Nathoo, the Clinical Leader of the...
What is the STOP HIV AIDS Project?

Seek and Treat for Optimal Prevention of HIV/AIDS (STOP) was a $48 million, four-year (2010-2013) pilot project funded by the government of British Columbia. This project aimed to increase the quality of life of people living with HIV and reduce the number of new HIV infections by taking a proactive public health approach to finding people living with HIV, linking them to HIV care and treatment programs and supporting them to stay in care. STOP aimed to improve the experience of people living with HIV or AIDS in every health and social service interaction and significantly improve linkage and engagement across the full continuum of services in HIV prevention, testing and diagnosis, treatment, care and support.

STOP was rolled out in Vancouver and Prince George. It was made up of numerous interconnected and discrete clinic-based, hospital-based, community-based and policy-focused programs implemented through the collaboration of a significant number of stakeholders. In Vancouver, Vancouver Coastal Health and Providence Health Care partnered to form the Vancouver Project. Through this partnership, these two organizations shared governance, funding and reporting for most of the initiatives that took place in Vancouver between 2011 and 2013.

Between 2011 and 2013, the Vancouver STOP Project integrated the routine offer of HIV testing at four acute care facilities in the city: St. Paul's Hospital, Mount Saint Joseph Hospital, Vancouver General Hospital and the University of British Columbia Hospital. The Vancouver STOP Project accomplished this by supporting acute care leaders and frontline providers to implement this change themselves. Several strategies were used: active engagement of hospital and department leadership, repeated training sessions for staff, implementation support from the project team, delegated follow-up support for patients and a health promotion campaign.

What is the program?

Between October 2011 and March 2013, the Vancouver STOP Project, a partnership between Providence Health Care and Vancouver Coastal Health, initiated the phased introduction of the routine offer of HIV tests in four hospitals: St. Paul's Hospital, Mount Saint Joseph Hospital, Vancouver General Hospital and the University of British Columbia Hospital. Initial implementation took place in departments of medicine, followed by departments of surgery. In the spring of 2012, emergency departments began to offer the test.

Once this new approach to HIV testing has been fully implemented, all people admitted to medical, surgical, emergency and most other units should be provided with written information about HIV and offered the option of taking an HIV test.

Implementing the routine offer of HIV testing in the hospital (acute care) setting required significant policy and practice change in the participating hospitals. A small project team was established to lead and manage the change required, to educate and follow up with a large number of stakeholders and to provide ongoing support and quality improvement feedback. Although the team offered logistical support, the change was led by both operational and clinical leadership at each site.

Why Was the Program Developed?

The Vancouver STOP Project focused one part of its efforts to expand access to HIV testing in Vancouver on rolling out the routine offer of an HIV test to patients admitted to hospitals.

The acute care initiative is part of a wider shift in the testing paradigm that took place in Vancouver between 2010 and 2013. This shift included three approaches to testing:

1. the introduction of the routine offer of HIV testing in acute care, which is the focus of this case study
2. the introduction of the routine offer of HIV testing in family practice
3. the expansion of HIV testing in programs that serve clients who experience ongoing high risk of HIV infection

For more information on the expansion of testing in family practice and in targeted settings, please see the Routine HIV testing in family practice case study and the Targeted testing case study.

Both the rationale for the wider shift in the testing paradigm to include routinely offering HIV tests to people in a
variety of settings and the specific rationale for offering this test in hospitals were explained to leaders and frontline healthcare workers at the four hospitals to generate buy-in. These rationales rest on four key points:

1. Routinely offering HIV testing increases testing and early detection: 65 percent of people diagnosed with HIV in Vancouver are diagnosed when they are already eligible for treatment, according to treatment guidelines. This indicates that they are being tested too late. Further, many of these people had multiple missed opportunities for earlier diagnosis recorded in their medical histories. This means that they previously had engaged with the healthcare system but had not taken an HIV test. When HIV testing is routinely offered in hospitals, everyone has the opportunity to get tested.

2. Early diagnosis, through expanded opportunities for testing, and early treatment, as a result of early diagnosis, can enable HIV-positive individuals to have a near-normal lifespan.

3. With early diagnosis and treatment, the likelihood of onward transmission of HIV is reduced: the HPTN 052 study demonstrated that the positive partner in sero-discordant couples is 96 percent less likely to transmit HIV to their partners if they start treatment early.

4. Routine offer of HIV testing is cost-effective: with a diagnosed prevalence of 12.1/1000 (for every 1000 people in Vancouver, 12 are living with HIV), Vancouver meets the cost-effectiveness threshold of a diagnosed prevalence of 2/1000.

**How Does the Program Work?**

**Policy change**

The requirements that the testing physician must offer mandatory pre- and post-test counselling and provide follow-up services and support were considered significant barriers to implementing the routine offer of an HIV test in acute care. Committed to obtaining informed consent from individuals to be tested and to continuing to provide strong follow-up services to people diagnosed with HIV in the hospital, the Vancouver STOP Project developed guidelines and strategies to continue to meet the standard of care while offering simplified systems for routinely offering HIV testing.

**Pre- and post-test counselling**

Obtaining clear verbal informed consent from a person before administering an HIV test is the standard of care in Vancouver. However, before 2011, to obtain informed consent, the provider had to offer pre-test counselling to anyone seeking or being offered an HIV test, according to the BC Centre for Disease Control. This counselling had to be offered verbally and could take as long as 20 minutes per patient. In a survey conducted before the initiative was rolled out, physicians cited this as one of the most important barriers to offering HIV testing routinely to patients. Pre-test counselling is also considered a barrier for some patients asking for and receiving this potentially lifesaving diagnostic test.

The Vancouver STOP Project worked closely with the BC Centre for Disease Control as well as AIDS Vancouver, Positive Living BC and the B.C. Centre for Excellence in HIV/AIDS to change the HIV pre- and post-test guidelines. Evidence was gathered from a similar jurisdiction that does not require counselling (e.g., San Francisco) and literature was reviewed that documented counselling as a known barrier to HIV testing.

The BC Centre for Disease Control released its new **HIV Test Pre and Post Test Guidelines** in September 2011. These guidelines no longer require verbal pre-test counselling (providing written information to patients about HIV and HIV testing is considered sufficient for informed consent), but they do continue to require verbal consent. Providers are required to ask patients for permission to order an HIV test.

A list of patients’ **frequently asked questions (FAQ) about HIV and HIV testing** was created with the input of Positive Living BC to fulfill the informed consent requirement and was distributed to patients by various methods before the verbal offer of an HIV test. This FAQ is available in nine languages.

**Creation of a new patient follow-up process**

In addition to pre- and post-test counselling, the former requirement that the ordering physician provide follow-up services, including contact tracing and linkage to care, was a significant barrier to implementing routine offer of HIV testing in acute care. Acute care physicians do not have an ongoing clinical relationship with most patients, nor do they have the time or the expertise to offer adequate public health follow-up and linkage-to-care services to people
newly diagnosed with HIV.

The standard of care in Vancouver is, however, to offer public health follow-up and linkage to healthcare and support services for all people newly diagnosed and their contacts. To maintain this standard, the Vancouver STOP Project developed a delegated follow-up system that ensures newly diagnosed people receive post-test counselling, education, public health follow-up and linkage to care. In this model, physicians delegate diagnosis, public health follow-up and linkage-to-care services to the medical health officers of the Vancouver Coastal Health Communicable Disease Control (VCH CDC). VCH CDC undertakes these activities with patients in the hospital if the patient’s HIV test result is available before they are discharged, or in the community if the result becomes available after they are discharged.

This new process builds on an existing mechanism in Vancouver’s public health infrastructure. All new positive HIV results are reported to the medical health officer at VCH CDC. Under the direction of the medical health officer, a public health nurse will contact the ordering physician to determine who will be responsible for providing the diagnosis, post-test counselling and follow-up support. In 99 percent of cases under the new system, the ordering physician has delegated follow-up to the VCH CDC nurse.

This delegated follow-up process, however, means that a person cannot have a non-nominal HIV test in hospital. Although non-nominal testing continues to be an important option for some people seeking an HIV test, it cannot be offered in this context because the patient uses their healthcare card to seek hospital care. Patients wishing to be tested non-nominally are referred to testing services in the community for testing upon discharge.

Physicians are able to provide diagnosis, public health follow-up and support to their patients if they choose to; the delegated process is in place to support those physicians who are not able to provide these services because of constraints of time or expertise. If they decline to use the delegated follow-up system, they are responsible for ensuring that the services that would have been offered by VCH CDC are provided. The VCH CDC nurses will offer to support the physician with this process if they want.

Negative results are communicated to people who are still in hospital by the ordering physician. If negative results become available after a patient has been discharged, the patient can receive their results from their family physician (if the physician was copied on the order) or they can call the HIV Results Line, which was set up before rollout to provide this service.

Critically, the College of Physicians and Surgeons of British Columbia endorsed this follow-up process. This endorsement was important to physicians who wanted assurance that their regulatory body approved the process as best care for patients and to physicians who were concerned about medical and legal liability.

**Implementation**

**Phased rollout of the routine offer of HIV testing**

The rollout of the routine offer of HIV testing was phased across hospitals and among departments and units. Three criteria were used to select departments for the first phase of the rollout. First, they had to have pre-existing structures and cultures to support successful practice change. Second, they had to already offer the sort of care where HIV testing could be most easily implemented (e.g., where patients are acutely ill and where doctors are seeking a diagnosis). Third, they had to have a straightforward admission process, as HIV tests are offered upon admission (e.g., direct admission through the emergency department.) Departments of medicine fit these criteria and were selected to first roll out HIV testing.

In the second phase, departments of surgery, respiratory and neurology and renal and cardiac units rolled out testing. At Vancouver General Hospital and the University of British Columbia Hospital, the department of psychiatry also rolled out routine testing in this phase. In the final phase, emergency departments and outpatient services introduced routine testing.

The hospitals best equipped to support effective change led the rollout: St. Paul’s Hospital and Mount Saint Joseph Hospital implemented the routine offer of testing first in each phase. St. Paul’s was particularly well placed to implement the routine offer of HIV testing because it is home to the John Ruedy Immunodeficiency Clinic and the B.C. Centre for Excellence in HIV/AIDS and has a culture of HIV care that facilitates linkage to care for people who
receive positive diagnoses.

This phased approach allowed the Vancouver STOP Project to trial specific aspects of the implementation process and modify them as needed before implementation in other settings. Changes were made as necessary to clinician education, the process for ordering HIV testing, the notification and support processes, and the feedback and continuous quality improvement mechanisms.

**Leadership engagement**

Implementation of the routine offer of HIV testing in acute care was a Vancouver Coastal Health initiative, and thus it was not optional for hospitals. Although this facilitated the introduction of this initiative to a certain degree, the operational and clinical leadership of the hospitals had to support the concept for the change to be implemented successfully. Without their buy-in and willingness to spearhead the change, it would have been impossible for the project team to change the HIV testing culture in these environments.

Memos were prepared by hospital administrators and the relevant medical health officer to prepare staff for change. Once these memos were circulated, each department and each unit identified both an operational and a clinical leader to champion the initiative. These individuals became the key people that the project team would contact to organize training and offer follow-up support. They also helped the project team understand the unique workflows and culture of each unit.

Once these operational and clinical leaders were identified, the medical health officer and her team met with them to present the clinical and public health rationales for the routine offer of HIV testing in acute care (the rationales are explained in the “**What is the program**” section), dispel any myths or concerns and answer any questions about this change.

**Incorporating HIV testing in acute care**

The project team did not want the addition of HIV testing to change the workflow of any given unit. Rather, it was important that the routine offer of an HIV test, and any follow-up work that was needed, fit as seamlessly into the process of the unit’s other work as possible.

Once the rationale was delivered, the project team met with the unit leadership to observe the unit’s workflow and make note of the roles and responsibilities of allied health professionals, nurses, physicians and unit clerks. This allowed the project team to better understand how blood work was ordered and processed and how results were returned to physicians. In some departments, new clinical initiatives (new tests or ways of providing care) are introduced every few months. This means that staff are familiar with effecting change in their workflow and clinical practice. The project team leveraged this experience and asked clinicians how they had previously effectively changed clinical practice. They then used these proven methods to facilitate the implementation of the routine offer of HIV testing.

On the basis of their workflow analysis the project team drafted two or three possible implementation strategies for each unit and presented them to the department leadership. Units could choose to use an HIV testing stand-alone preprinted order form, embed HIV testing into their existing preprinted orders or embed HIV testing into the electronic medical system. Importantly, the HIV testing orders were not implemented as pre-checked orders. Instead, physicians were required to complete the consent and orders activities outlined on the order forms, which were available in their chart packs.

**When to offer an HIV test**

On the basis of these discussions and meetings about unit workflow, it was decided that the routine offer of HIV testing in acute care would happen during admission and that the offer would be tendered by the physician.

**Education and training for healthcare providers**

Broad and sustained training on how to routinely offer HIV testing was found to be important to the smooth introduction of the initiative in acute care. HIV testing, treatment, prognosis and care and support services have changed significantly in the last decade, and many clinicians were not aware of these advances. Crucially, the
training also presents staff with the clinical and public health rationales for testing, the new pre-test guidelines and the new delegated follow-up process and explains the support that is available to them through the project team, all significant facilitators to the implementation of routine testing. Staff are also offered a clear overview of how the introduction of routine testing will affect their work, even if that modification is expected to be slight.

Training and information sessions are delivered on the basis of staff’s role, and training has been embedded into the existing educational opportunities for all providers.

**Physicians**

Physicians are presented with the clinical rationale, epidemiological information and an outline of the implementation process at physician rounds, monthly meetings, lunchtime meetings and one-on-one learning opportunities with project staff. The team presents several educational sessions before the go-live date to ensure that the information is presented to as many physicians as possible. Typically, the education is offered by the relevant medical health officer for communicable disease or the clinical leader of the project team.

**Residents**

Residents at all participating hospital sites rotate to a new department every four weeks, which poses a significant challenge to the project team because they are constantly required to present the initiative to new residents. The team has to rely on the existing educational opportunities for residents to deliver the message to each new group. The project team presents at the monthly orientation for residents at each hospital. Because this session is mandatory for residents, this has been the most effective mechanism for reaching them.

Given that physicians and residents are the hospital staff with the primary responsibility for offering an HIV test, added resources were developed to support them to offer the test. Key speaking points about HIV testing were tailored to a physician’s discussion with patients about blood work. For example, physicians were offered stock sentences that they could use or adapt, such as “We routinely offer an HIV test to all patients. Can I add an HIV test to your other blood work today?” The availability of stock phrases on which to draw makes it easier and quicker for physicians to offer and get consent for the test.

**Nurses**

In-service and other nursing educational sessions are leveraged to deliver training to nurses. Typically, 30-minute in-service trainings are offered to cover the information about HIV testing. To reach all nurses on the unit, the nurse educators on the project team offer the initial in-service training for eight weeks before implementation. Nurses are trained on their responsibilities, which largely focus on patient education.

**Support staff**

Support staff, including social workers, staff with nutritional services and unit clerks, are trained at the same time as the nurses. Allied health staff and unit clerks are given specific direction about the activities associated with their workflow. Such specific instructions are particularly important for unit clerks, who are responsible for distributing physicians’ orders, ordering tests, processing tests in the electronic system, retrieving results and ordering supplies including preprinted orders. Although they are not responsible for follow-up, they are informed of the process so that they are aware that people newly diagnosed receive good follow-up care.

**Other staff**

Housekeeping staff are instructed that every bed prepared for a new admission should include a patient FAQ sheet about HIV testing. Admitting clerks in emergency departments also distribute the patient FAQ sheet.

**Ongoing support**

As each hospital unit implements the routine offer of HIV testing, the project team acts as a resource to answer questions and to help overcome obstacles. This is particularly crucial early in the implementation process. The availability of dedicated project staff who are often on site enables staff to get immediate answers to any questions. In addition, nursing in-services and monthly resident orientation educational sessions are provided after implementation to educate and engage large professional groups with high turnover.
At Vancouver General Hospital and St. Paul’s Hospital, project nurse educators are on site to provide residents and nurses with additional ongoing support, which has been helpful for them as they integrate change.

Initial follow-up

Generally, eight weeks after the launch of the routine offer of HIV testing, every unit is provided additional training in which data related to testing since implementation are presented and the successes of and barriers to the implementation process are discussed. The clinical leader of the project team is present at these sessions to seek guidance from leaders and staff on new or more effective change management strategies, provide support to frontline staff and determine if further education is required.

Typically, this training takes place during monthly physician departmental meetings, resident academic half-days, nursing in-services and monthly operations and directors’ meetings or at quality improvement council meetings.

Ongoing follow-up

Ongoing follow-up with physicians is usually scheduled every second month. At these meetings, the clinical leader of the initiative presents the offer rates, testing rates, acceptance rates and yield within the department. Notably, the clinical leader also provides case-based information to physicians about recent HIV diagnoses in acute care. This learning, which usually profiles the case of a patient, has enhanced the commitment of physicians to offering an HIV test to all patients, including elderly patients, as the empirical evidence strongly supports the routine offer of HIV tests.

In addition, Vancouver’s hospitals have been heavily papered with the message of the It’s Different Now social marketing campaign, which advises all people in hospital that everyone is being offered an HIV test. For more information on this campaign, please see the Program Materials section of this case study or the It’s Different Now campaign case study.

The campaign also has a physician influencer component, as it is considered important to provide ongoing reminders to physicians. Posters have been created that remind doctors that it is recommended that they offer an HIV test, and items branded with the It’s Different Now campaign messages, including lanyards, notebooks and screen savers, have been distributed to physicians. In possibly the most unique strategy, pies were sent to the physician and nurse lounges on each unit in the second phase of implementation, in pie plates bearing the brand of the It’s Different Now campaign and encouraging physicians to do their part to end HIV.

Next steps

As of January 2013, efforts are underway to make the routine offer of an HIV test a provincial policy in all British Columbian hospitals. In addition, the chief medical health officer of British Columbia is developing a guideline that will make the stage of disease at the time of diagnosis (e.g., the presence of an AIDS-defining illness at diagnosis) a public health measure for quality of care provincially. It is hoped that both of these policy shifts will help embed the routine offer of an HIV test into clinical practice across many healthcare settings.

Required Resources

Human resources

- **Project administrator**: 1.0 full-time equivalent (FTE). Completes all chart audits and provides administrative support to the project team.
- **Project manager**: 0.5 FTE. Coordinates the project components of the initiative including engagement, timelines, budgets, tracking, issue management and reporting.
- **Clinical leader**: 1.0 FTE. Develops content, meets with unit leadership and physicians, contributes to implementation process on each unit, provides change management strategies, coordinates and drafts communications material, develops and disseminates physician and resident education, analyzes and presents data and reports to project team and leadership.
- **Project nurses**: 1.0 FTE and 0.6 FTE. Provide nursing education and education to allied health staff. Provide follow-up support to units seeking additional training or support.
- **Medical health officer**: offers strong support and endorsement for the initiative.
Hospital leadership, both operational and clinical, that is supportive, available and committed to implementing the routine offer of HIV testing in acute care.

Other

- Endorsement of routine testing and the delegated follow-up process from the College of Physicians and Surgeons of British Columbia
- A strong clinical and public health rationale

Barriers to Implementation

- **Lack of high-level recommendation.** The Vancouver STOP Project launched the implementation of the routine offer of HIV testing in acute care without the support of a recommendation from a provincial or national public health body, such as the Public Health Agency of Canada. This meant that the project team had to build its own clinical and public health rationale and present it to all operational and clinical leadership.

- **Verbal consent.** Obtaining verbal consent from patients before performing an HIV test is the most significant barrier to integrating routine HIV testing in acute care. Verbal consent is required for HIV testing, but not for any other diagnostic tests physicians order in hospitals. Embedding this step into physicians’ practice continues to challenge providers.

- **Shift work.** Given the nature of hospital shift work and the high turnover of staff, providing extensive education and communication was challenging. For example, some staff only work night shifts, and residents change over every four weeks. By scheduling training and information sessions over two months before implementation, the project team was able to reach the majority of staff with its key messages.

- **Department of surgery.** Owing to the various pathways of entry into the surgical system, most blood work required for surgery is completed in the community and not in the hospital. As a result, it has been a lot more challenging to introduce routine testing on surgical units. Work continues on how to improve offer rates in surgical departments.

Evaluation

Impact

There have been several obvious impacts of this initiative. First, the routine offer of an HIV test in acute care allows physicians to diagnose patients with HIV, including many in the acute phase of their illness. As of December 2012, 37 people have been diagnosed with HIV since the start of the initiative.

Second, the initiative has managed to reach a population who may not access care in the community and who come into the hospital quite sick, including older adults. Significantly, some of the positive HIV test results have occurred in people in their 70s. In addition, the expansion of testing is also reaching a population of people who do not know and/or disclose their risk for HIV infection to their healthcare providers.

Finally, the initiative has affected the knowledge of patients, providers and the general public on HIV testing, HIV infection and the benefits of early diagnosis and treatment. The routine offer is one part of Vancouver’s efforts to reduce the stigma associated with HIV and HIV testing.

Evaluation of the initiative

There have been several types of formal evaluation for the acute care testing initiative. These include chart audits, the tracking of hospital-level testing data and qualitative research on implementation processes.

Chart audits are conducted by each unit during the first few months after implementation. This allows the project team to collect data on offer rates, testing rates, acceptance rates and number of new positive diagnoses. It also provides insight on the reasons for which patients refuse testing. Although chart audits have been an effective means of gathering data on specific units, they are labour intensive to conduct and so are not considered to be a sustainable means of evaluation.

Once a department has launched testing, hospital-level tracking takes place, which is a more sustainable method of evaluation. In this type of assessment, hospital admission and laboratory testing data are linked to provide hospital-level testing data and to track the number of new positive diagnoses; these data can then be compared with baseline (before project implementation) testing data and yield. This has provided the project team and the
Vancouver STOP Project leadership with information on the overall impact of the acute care strategy.

Qualitative research on the initiative is being conducted and prepared for academic publication. A pre-implementation survey was sent to all hospital staff before the rollout of routine testing and a follow-up survey will be sent out at the one-year mark to gauge staff experience of the initiative. As part of this evaluation, residents were also separately surveyed and participated in focus groups to determine the challenges and strengths of the initiative.

Learned and Confirmed

1. **Develop a strong rationale.** The development of a public health rationale and the analysis of data on the current epidemic and state of testing, along with the approval of senior leaders from the health authority and participating hospitals, were crucial drivers for this initiative.

2. **Ensure that strong quality improvement structures are present.** Vancouver’s hospitals have strong quality improvement structures, with quality improvement groups present on most units. Introducing the routine offer of HIV testing fit into these structures and the wide strategic objective of improving patient care.

3. **Embed education and information into existing communication pathways.** The project team provides education through pre-existing structures. In all cases, the project team has used existing channels of communication to deliver messages and leveraged hospitals’ natural hierarchy to ensure the message about routine testing is disseminated.

4. **Provide reality-based case information to physicians.** During follow-up with physicians and leaders in each unit, the project team provides case-based learning to physicians, to which they respond positively. The team uses recent diagnoses in acute care to describe how a patient presented to the hospital, their symptoms and their medical history, including missed diagnoses. This has been especially helpful in promoting the routine offer for older adults, for whom many physicians question the value of testing.

5. **HIV testing in acute care is acceptable.** Routine HIV testing is acceptable to patients in Vancouver’s hospitals, where the refusal rate is between three and eight percent. This high acceptability helped relieve physicians’ anxiety regarding possible negative patient reactions to being offered a test.

6. **Streamlined procedures.** Both pre-test counselling and public health follow-up were identified as significant barriers to integrating HIV testing in acute care. The consent process was streamlined and a delegated follow-up process was formulated.

Program Materials

- HIV acute care testing—Talking to your patient handout
  (https://www.catie.ca/sites/default/files/Talking to Your Patient Handout.pdf)
- It's Different Now poster—profile of Dr. Ron Carere
  (https://www.catie.ca/sites/default/files/It's Different Now Poster--Dr. Ron Carere.pdf)
- It's Different Now poster for patients
  (https://www.catie.ca/sites/default/files/It's Different Now Poster--Patients.pdf)
- Providence Health Care Nursing—frequently asked questions
  (https://www.catie.ca/sites/default/files/Providence Nurses--FAQs.pdf)
- FAQ sheet for physicians
  (https://www.catie.ca/sites/default/files/FAQ_Sheet_for_Physicians.pdf)

Other Useful Materials

Information found on the CATIE website

- Testing and Diagnosis Fact Sheet
  (http://www.catie.ca/en/prevention/testing-and-diagnosis#hiv-testing)
- CATIE Ordering Centre Testing and Diagnosis Materials

Contact Information

For more information, please contact:

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Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

CATIE provides information resources to help people living with HIV and/or hepatitis C who wish to manage their own health care in partnership with their care providers. Information accessed through or published or provided by CATIE, however, is not to be considered medical advice. We do not recommend or advocate particular treatments and we urge users to consult as broad a range of sources as possible. We strongly urge users to consult with a qualified medical practitioner prior to undertaking any decision, use or action of a medical nature.

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