

ANNUAL REPORT 2018-2019



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Executive Summary

Our quality initiative is Back to the Basics. Following outbreaks of CPO and observations of practice, IPAC identified the need for the organization to focus on the basics of infection prevention and control practice with a presentation to the Quality and Safety Committee. The committee interpreted this as a call to action throughout the organization. A Demonstration Unit was created to model best practices with the lofty goal of making Hospital Acquired Infections Never Events.

Surveillance continues with work being done to develop surveillance procedures to monitor cardiac procedure and renal transplant infections. Work continues on automation of data in preparation for the implementation of the Cerner Electronic Health Record in November 2019.

Clinical rounding by the Infection Control Practitioners is working well, with Just in Time teaching and support related to basic practice as well as to less common infections occurring on the units daily. Curricula have been developed so that Unit Educators have the ability to provide standardized education to their staff. A one page Bug Byte is being developed to provide clear concise information on a variety of topics related to the practice of infection prevention and control. We continue to emphasize the importance of hand hygiene and are encouraging the adoption of the concept of Bare Below the Elbows in the clinical environment.

The IPAC Team has high visibility on the units and we look forward to the challenges ahead in making HAIs Never events.













St. Paul's Hospital

Mount Saint Joseph Hospital

St. Vincent's: Brock Fahrn

St. Vincent's: Langara

Holy Family Hospital

Youville Residence

Background

In collaboration with the Division of Cardiac Surgery, IPAC has conducted SSI surveillance for coronary artery bypass graft (CABG) surgery and cardiac valve replacement surgery for the past seven years. Cases are identified by weekly review of the consults seen by the Infectious Diseases service and through cardiac nurse practitioners notifying IPAC of any suspected SSI, via a dedicated phone line.

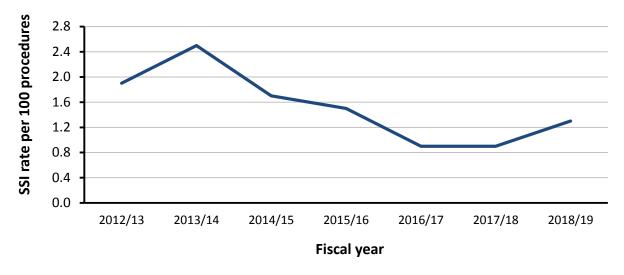
Outcome

- 996 CABG and cardiac valve replacement surgeries were performed at PHC during 2018/19.
- There were 13 cardiac SSI cases (1.3 per 100 procedures).
- Among the 13 cardiac SSI cases, infections were classified as:

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46% superficial (4 cases)
31% deep-incisional (6 case)
23% organ space (3 cases)
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10 (77%) infections were identified in patients' sternum and 3 (23%) were from vein harvest site. Appropriate pre-operative antibiotics were used in 100 % of the SSI cases.

Figure 1: SSI rate per 100 procedures following CABG and valve surgery, 2012/13 to 2018/19



What we are working on

We are exploring ways to better ensure we have adequate case ascertainment. We will work with nurse practitioners and the cardiac surgeons to identify ways for more efficient and comprehensive case follow-up.

Caesarean Section (C-Section) Surgery

Background

Since 2009/2010, IPAC has been working with the Department of Obstetrics and Gynecology at Providence Health Care to conduct SSI surveillance after a Caesarean section. Since length of stay in hospital is short for this procedure, post-discharge surveillance is critical.

Cases are found through daily rounds, review of readmissions and visits to the Emergency Department (ED), and post-discharge surveillance.

In 2015/16, we initiated a web-based platform (Q-Care) to automatically email and text patients for post-discharge surveillance. This became our standard approach in 2017/18.

Outcome

573 C-sections were performed at St. Paul's Hospital in 2018/19

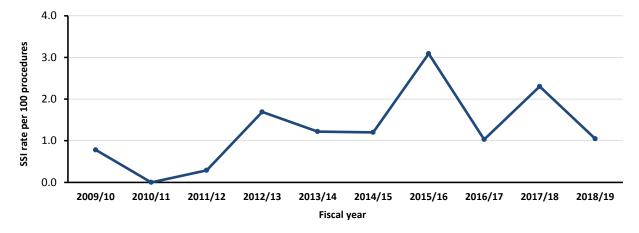
- 70% response rate to 30 day follow-up
- 6 SSIs were identified
- The SSI rate was 1.0 per 100 procedures

Infections were classified as

- 17% organ space (1 case)
- 83% superficial (5 cases)

2018/19 post-discharge surveillance response rate (70%) is consistent with the 2017/18 (69%) rate. The SSI rate this year (1.0 per 100 procedures) was not significantly lower than the SSI rate in the previous year. We continue to streamline resources for our post-discharge follow-up process to ensure that it is sustainable and effective.

Figure 2: SSI rate following Caesarean Section

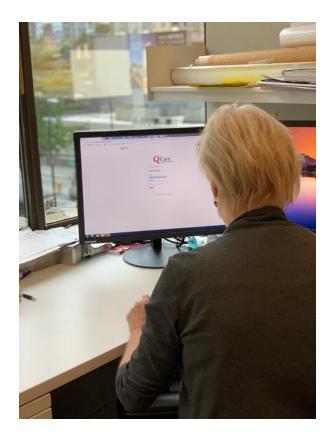


This year we have been able to expand the automated component of post – discharge surveillance to support sustainability by automating transfer of information directly from our operating room

information system to QCare. Furthermore, we have been able to improve the patient experience by collecting phone number and emails of patient at the time of registration.

What we are working on

We are working with Clinical Systems Transformation (CST) team to sustain data automation once CERNER is implemented.



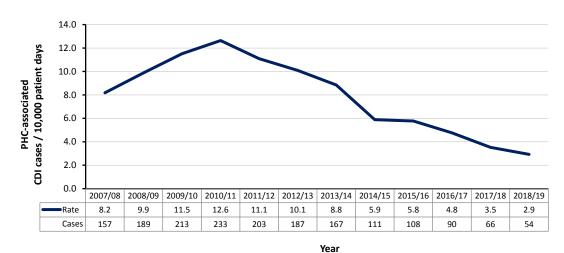


Figure 3: PHC-associated CDI incidence rate in acute care facilities, 2007/08 to 2018/19

CDI cases and rates exclude colonization.

Background

Clostridium difficile (C. difficile) is the most common cause of health care-associated infectious diarrhea. IPAC is actively involved in preventing transmission of C. difficile at Providence Health Care sites by engaging in the following activities

- providing education for staff and patients on all positive cases and providing regular education on units with respect to appropriate isolation precautions, cleaning and disinfection practices, and hand hygiene;
- increasing the frequency of communication with environmental cleaning staff to inform them of patient rooms that require enhanced bleach disinfection;
- creating a process for environmental cleaning staff to inform unit staff upon completion of bleach disinfection; and
- notifying the Antimicrobial Stewardship Program (ASP) of inpatient and outpatient cases to
 ensure our patients and residents receive timely, effective and optimal antimicrobial therapy
 and management

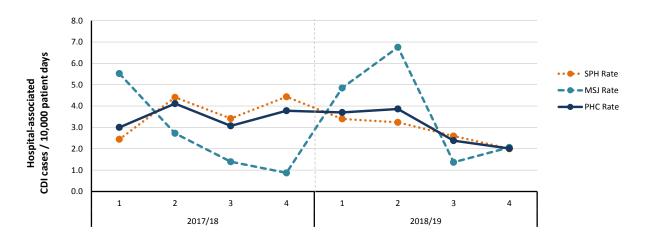
Outcome

There were 108 new cases of *C. difficile* infection (CDI) identified at PHC in 2018/19.

- 57(53%) of these were classified as PHC-associated cases and of these, 54 (95%) were from acute care facilities.
- The incidence rate of PHC-associated CDI in acute care facilities was 2.9 cases/10,000 patient days (95% CI: 2.2-3.8). This is the lowest rate since we started CDI surveillance in 2007.
- The CDI incidence rate at St. Paul's Hospital was 2.8 cases/10,000 patient days (95% CI: 2.0-3.7). This rate was similar to the last fiscal year (3.8 cases/10,000 patient days, 95% CI: 2.9-4.9, p=0.12).

- The CDI incidence rate at Mount Saint Joseph Hospital was 3.7 cases/10,000 patient days (95% CI: 1.9-6.4). This rate was similar to the last fiscal year (2.4 cases/10,000 patient days, 95% CI: 1.0-4.7, p=0.36).
- The unadjusted incidence, which includes patients colonized with *C. difficile*, was 5.1 per 10,000 patient days (95% CI: 4.1-6.2). This rate was similar to the unadjusted incidence from last fiscal year (4.9 cases/10,000 patient days, 95% CI: 3.9-6.0, p=0.76).

Figure 4: PHC-associated CDI incidence rate by acute care facility site and fiscal quarter, 2017/18 to 2018/19



CDI cases and rates exclude colonization.

Issue

Patients can be colonized with *C. difficile* prior to entering our hospitals and remain asymptomatic without clinical disease, only to develop CDI after receiving antibiotics in hospital. As a result, some CDI cases that are acquired in the community are misclassified as health care-associated CDI.

This year was the third year that IPAC, along with the ASP, clinically reviewed every case of CDI to determine whether the patient had a true infection, rather than colonization. This information is reflected in this year's rate.

What we are working on

IPAC continues to collaborate with the PHC ASP. This collaboration ensures that upon a patient's new positive or indeterminate *C. difficile* result, the ASP pharmacist and physician receive real-time alerts.

Infection control practitioners continue to round on every CDI case, providing education on contact precautions and hand hygiene for both patients and staff.



Surveillance - Bacteria

Methicillin Resistant *Staphylococcus aureus* (MRSA)

Figure 5: PHC-associated MRSA incidence rate in acute care facilities, 2007/08 to 2018/19



Year

Background

MRSA are antibiotic-resistant bacteria that are transmissible in hospital, long-term care and community settings. MRSA has the potential to cause serious infection for which treatment options are limited.

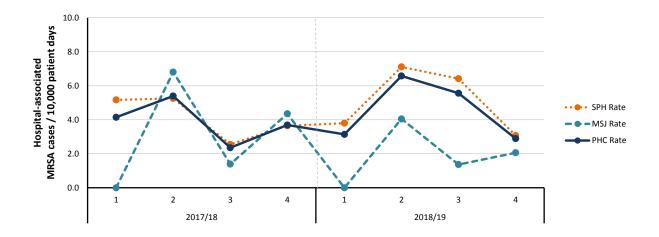
In hospital, MRSA infections are associated with increased length of stay, higher mortality and increased costs. Early identification of patients colonized with MRSA through admission screening and prompt implementation of infection control measures can prevent transmission of MRSA. Admission screening at St. Paul's Hospital (SPH) and Mount Saint Joseph Hospital (MSJ) is risk-factor based, except for in General Medicine and the Intensive Care Unit (ICU) where all patients are screened. In the ICU, they are screened on admission and subsequently at weekly intervals.

Outcome

In 2018/19, there were 674 new cases of MRSA identified at PHC facilities.

- 99 (15%) of these were classified as PHC-associated cases and of these, 83(84%) were from acute care facilities.
- The PHC-associated incidence rate was 4.4 cases /10,000 patient days (95% CI: 3.5-5.5).
- The PHC-associated MRSA rate in 2018/19 was not statistically significantly different compared to last fiscal year (p=0.49).
- 73% of PHC-associated cases were identified through hospital admission screening programs, while remaining cases were identified from clinical specimens.

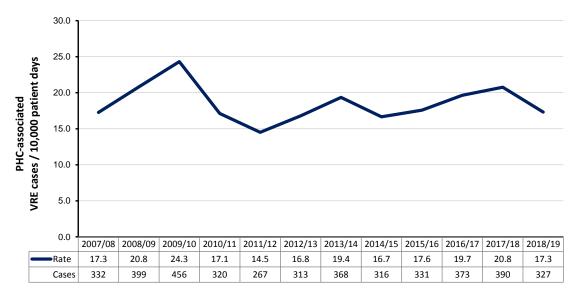
Figure 6: PHC-associated MRSA incidence rate by acute care facility site and fiscal quarter, 2017/18 to 2018/19



What we are working on

IPAC continues to work closely with leaders and frontline staff of the Emergency and Medicine Departments to ensure timely ordering and collection of the admission screens.

Figure 7: PHC-associated VRE incidence rate in acute care facilities, 2007/08 to 2018/19



Year

Background

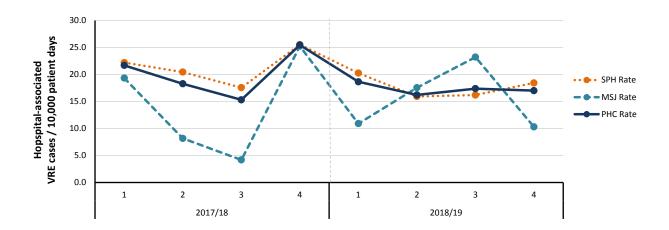
VRE are antibiotic-resistant bacteria that can be transmitted to patients in health care facilities. Colonization with VRE is more common than infection, and since colonization is the first step towards infection, prevention is crucial.

Outcome

There were 548 new cases of VRE identified at Providence Health Care facilities.

- 337(61%) of these were classified as PHC-associated cases and of these, 327 (97%) were from acute care facilities.
- The PHC-associated incidence rate was 17.3 cases/10,000 patient days (95% CI: 15.5-19.3).
- The PHC-associated VRE rate in 2018/19 was statistically significantly lower compared to last fiscal year (p<=0.05)
- 78% of PHC-associated cases were identified through hospital admission screening, while remaining cases were identified through clinical specimens.

Figure 8: PHC-associated VRE incidence rate by acute care facility site and fiscal quarter, 2017/18 to 2018/19



Issue

Discussion continues over the utility of VRE prevention and control programs in Canadian hospitals. The Centers for Disease Control and Prevention (CDC) and Public Health Agency of Canada (PHAC) guidelines currently recommend Contact Precautions for patients with VRE.

Some hospitals have either discontinued or scaled back their VRE prevention and control efforts. Revising precautions for VRE may result in increased transmission of VRE in health care settings, with unexpected impact on neighbouring facilities.

What we are working on

IPAC continues to recommend a risk-informed VRE control program to prevent transmission and protect our most vulnerable patients.



Surveillance - Bacteria

Carbapenemase Producing Organisms (CPO)

Background

CPO are gram-negative bacteria that are resistant to carbapenems (considered antibiotics of last resort) and many other antibiotic classes. CPO infections are associated with high morbidity and mortality. Once established in a healthcare facility, CPO is difficult to control.

In Canada, cases (infection or colonization) have primarily been identified in patients previously hospitalized in endemic countries (e.g., China, India, USA and Greece). Healthcare-associated transmission of CPO within British Columbia facilities has also been documented. In December 2016, CPO was added to the list of reportable communicable diseases in BC.

At PHC, an Antibiotic Resistant Organism (ARO) Admission Risk Assessment Order was created and implemented in May 2014 in response to the BC CPO Working Group recommendations for identifying and screening high-risk patients on admission to acute care facilities. Further amendments to the Admission Risk Assessment Form were made in 2017 to create a more focused screening assessment.

Outcome

A total of 718 screening swabs were collected for CPO at PHC facilities.

CPO screening was primarily conducted on inpatient units at St. Paul's Hospital and Mount Saint Joseph Hospital but also in the Emergency Department, Community Hemodialysis Units and Holy Family Rehab.

14 CPO cases have been identified at PHC following screening. Of these, two (14%) were secondary cases identified after contact tracing. This is a significant increase from screening swabs collected (n= 267) and newly identified cases (n=4) in 2017/18.

KPC (43%) was the most prevalent carbapenemase gene identified followed by NDM (29%) and OXA-48 (14%). Other genes including VIM and OXA-54/24 accounted for 7% each (Table 1). One organism had 2 different carbapenemase genes identified.

Four patients (29%) reported a healthcare encounter outside of Canada in the 12 months prior to detection. A total of seven (50%) patients were considered to have an infection (rather than colonization), of which there was one (7%) ICU admission and subsequent mortality.

We investigated one CPO outbreak in 2018/19. The outbreak was identified in May 2018 in a hemodialysis unit. IPAC worked with the unit to improve adherence to infection control precautions, decluttered the shared spaces on the unit and revised procedures for cleaning/disinfecting of beds after hemodialysis. Screening of potential contacts was also conducted (114 patients), and no additional cases were identified beyond the initial cases.

An ongoing investigation is underway as 3 (21%) CPO cases were identified in recent renal transplant patients in the 2018/19 fiscal year. The IPAC team is working closely with the renal unit and BC Transplant Society.

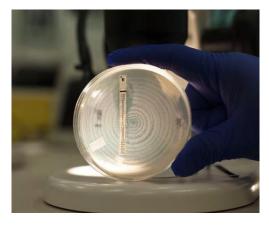
Table 1: Distribution of genes identified in CPO positive patients, 2018/19

Fiscal year	КРС	NDM	OXA -48	VIM	IMP	Multiple genes
2018/19(n=14)	6 (43%)	4 (29%)	2 (14%)	1 (7%)	0	1 (7%) OXA-54/24
2017/18 (n=4)	0	2 (50%)	1 (25%)	0	0	1 (25%) OXA-54/24
2016/17 (n=3)	0	2 (67%)	1 (33%)	0	0	0
2015/16 (n=2)	1 (50%)	0	0	0	0	1 (50%) OXA-54/23
2014/15 (n=1)	0	1 (100%)	0	0	0	0
2013/14 (n=0)	0	0	0	0	0	0
2012/13 (n=3)	0	0	0	2 (67%)	1 (33%)	0

What we're working on

PHC continues to collaborate with other Health Authorities to maintain a provincial approach to preventing CPO transmission in healthcare facilities in British Columbia.

Due to the recent identification of CPO cases among renal transplant patients, we are working with renal transplant pharmacists, urology, nephrology and BC Transplant Society to prevent CPO transmission within this patient population. We are also exploring options for implementing a renal transplant surgical site surveillance system.



An Etest is utilized for antimicrobial susceptibility testing to determine the minimum inhibitory concentration to an antibiotic.

Surveillance - Bacteria

Mycobacterium tuberculosis (TB)

Background

St. Paul's Hospital (SPH) and Mount Saint Joseph Hospital (MSJ) frequently manage patients with active tuberculosis (TB) infection. As TB can be difficult to identify and diagnose, the most important contributor to health care-associated transmission is patients with unrecognized respiratory TB disease. Therefore, preventing in-hospital transmission of tuberculosis relies on a number of components including:

- Early identification of patients who are at high risk for active pulmonary disease.
- Prompt implementation of airborne precautions when active pulmonary disease is a consideration.
- Maintenance of appropriate precautions until either TB is ruled out and an alternate diagnosis is identified, or the patient is no longer considered infectious.

Outcome

- There were 13 cases of active pulmonary TB diagnosed at PHC acute care facilities. Of these, 9 (70%) were inpatients.
- Three (33%) inpatient cases required contact tracing which resulted in 24 patients being identified as contacts. This is consistent with 6 inpatient cases identified in 2017/18 of which 2 (33%) required patient screening and 25 exposed patients screened.
- On follow-up, VCH Public Health did not find evidence of TB transmission among any of these contacts.

Prevention of in-hospital TB transmission is focused on promoting the appropriate transmission-based precautions for suspect or confirmed TB cases. Physicians and other frontline staff should maintain a high index of suspicion for TB among high risk groups and consult with IPAC before discontinuing airborne precautions.

We continue to improve utilization of the Assessment, Communication and Education (ACE) tool to guide risk assessments and standardize Infection Control Practitioners' documentation and recommendations. We also work closely with VCH Public Health, Occupational Health & Safety and Workplace Health Call Centre to align our efforts in contact tracing.



Background

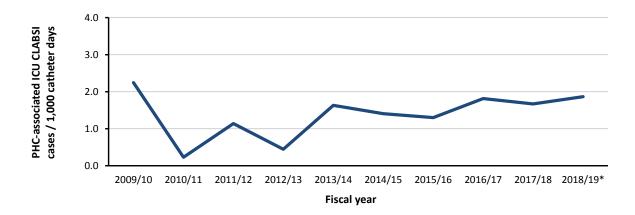
Central Line-Associated Bloodstream Infection (CLABSI) continues to be one of the most costly hospital-associated infections resulting in prolonged hospital stays and increased patient morbidity and mortality.

IPAC's CLABSI surveillance is focused on cases associated with the intensive care unit (ICU) at St. Paul's Hospital (SPH). Detection of CLABSI-related cases is based on ICP review of all ICU-associated positive blood cultures. We use standardized case definitions and methods from the Centers of Disease Control and Prevention's (CDC) National Healthcare Safety Network. Cases are confirmed by an IPAC physician.

Outcome

• There were 7 CLABSI in 2018/19 and the rate of infection was 1.9 cases per 1,000 catheter days.

Figure 9: PHC-associated ICU CLABSI incidence rate by fiscal year, 2009/10 to 2018/19



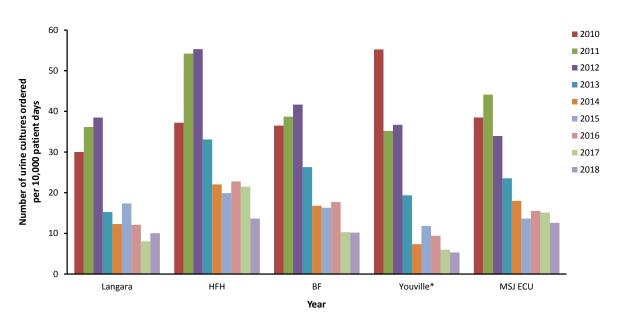
What we are working on

IPAC continues to promote best practices in reducing the risk of infection for ICU patients, as well as monitoring and analyzing CLABSI cases. Our efforts continue to be focused on sharing the surveillance information with the ICU to advance the education provided for those inserting and maintaining central lines.

^{*}Data for SPH ICU only



Urinary Tract Infections (UTI) and Asymptomatic Bacteriuria in Residential Care



Note: Intervention of audit and feedback occurred at St. Vincent's Langara in 2013

Urine culture collection is a primary driver of increased antimicrobial use.

Our goal is to reduce the number of unnecessary urine cultures collected from residents at PHC residential care homes.

IPAC focused on auditing and providing feedback to nurses and physicians for all urine cultures collected at St. Vincent's residence from January to December 2013. This project was collaboration with the PHC Antimicrobial Stewardship Program.

The intense phase of review and feedback stopped at the end of 2013, but we continued to collect data on the total number of urine cultures ordered and collected at the residential care sites. We conducted annual follow-up to see if the initial intensive audit, feedback and education for the residential care facilities would be sustained without the need for intense phase interventions. We have continued to see a sustained significant decrease in urine cultures collected from all residential care sites.

The most significant decrease was seen at Langara, where the most intense audit and feedback interventions occurred. The Langara urine culture rate in 2018 (10.0 urines/10,000 resident days) is significantly lower than the pre intervention rate in 2012 (38.5 urines/10,000 resident days p<0.01). All of the other sites have had a significantly lower rate of urine cultures collected since 2012. Antimicrobial use also decreased for suspected UTIs.

^{*} Residential care only

Clinical Systems Transformation (CST)

PHC IPAC has been actively engaged in Clinical & Systems Transformation (CST) to implement a new electronic health records system in the Lower Mainland (http://cstproject.ca/), in collaboration with our IPAC colleagues at Vancouver Coastal Health (VCH) and Provincial Health Services Authority (PHSA). All sites within the three health organizations will be transitioned to Cerner, enabling one common health records system to improve patient safety, access to patient information and quality care.

Over the past several years, PHC IPAC has worked with CST to ensure that infection prevention and control issues were considered and addressed within the new system, such as:

- Implementation of a routine screening tool in ED to identify patients at risk for harbouring highly transmissible organisms
- Automation of infection control precautions for patients colonized with antibiotic resistant organisms (ARO)
- Maintenance of our newly automated surveillance system for ARO's
- Development of and ICP Worklist

The official go-live date for implementation at PHC sites is November 16, 2109. The PHC IPAC team is preparing for the launch, not only for the transition of practice within IPAC but for education and support for frontline staff on IPAC related Cerner issues.



Demonstration Unit

Following a number of infections including a cluster in the Cardiac Procedure Room and two CPO outbreaks, one in the Hemodialysis Unit and the other in the kidney transplant population, the Medical and IPAC Directors observed practices in many areas and concluded that basic infection prevention and control practices needed improvement. The Directors shared their findings in a presentation to the Quality and Safety Committee which generated a Call to Action to improve infection control practices.

One initiative in this Call to Action was the creation of a Demonstration Unit on 7A with the purpose of

"...creating a physical and cultural environment that will be a model unit that supports world class care where obtaining a hospital acquired infection is a "Never Event".

An assessment of the unit identified areas for improvement: changes to the physical environment including a new and reliable flusher-disinfector, renovations to the soiled utility room to enable the sanitary disposal of bodily waste; creation of a soiled equipment room to enable proper holding and cleaning of soiled equipment and minor changes to the Clean Equipment room to provide easy access to clean equipment. Renovation plans were developed, costed and approved. A new flusher-disinfector has been installed.

Other practices are in progress such as decluttering of corridors and bed spaces with appropriate alternative storage space for patient belongings and bringing supplies closer to the point of care. The unit will be assessed for damages that need repair and a terminal clean of the unit will occur followed by painting and installation of disposable privacy curtains.

Changes in the practices of providing care will encompass new isolation procedures that enable staff to properly apply and remove personal protective equipment and bring hand hygiene dispensers to the point of care. The focus will be on the hygiene of the environment with all staff and patients responsible for maintaining a clean and safe environment. This is taking infection prevention and control back to the basics which is necessary as we are facing extensively drug resistant organisms that cause infections with few treatment options.

By creating the Demonstration Unit and focusing on the basics of infection prevention and control, we will develop an environment and culture that will reduce the transmission of infectious organisms that can be introduced to other units and applied to the building of our New St. Paul's Hospital.

Redevelopment: The New St. Paul's

Key elements and features of the physical environment play a significant role in the complex pathways leading to transmission of pathogens in the health care setting. IPAC continues to be involved with the planning of the New St. Paul's Hospital (NSP) providing advice to the NSP Redevelopment Team on infection prevention and control requirements for new construction.

Much of IPAC's recent work related to the NSP has been to provide input to help shape the clinical and technical specifications which will ultimately guide design choices to ensure the design, layout and physical aspects of the NSP will facilitate best infection control practices and include key elements within the built environment to help prevent the acquisition and transmission of infections.



Hand Hygiene

Background

Effective hand hygiene is the single most important strategy to prevent health care - associated infections.

In 2018/19 we started electronic capturing of hand hygiene observations and automation of data analysis and reporting. In addition, we have expanded our observations from a 3 week period per quarter to auditing throughout the quarter in hopes of minimizing Hawthorne effect.

Outcome

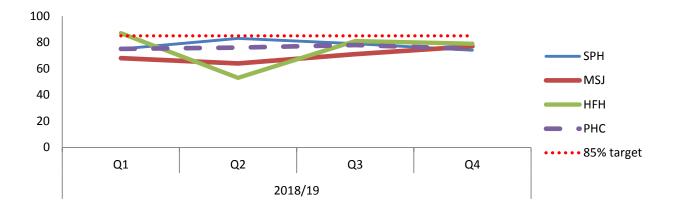


Figure 10: Hand Hygiene Compliance (%) by facility for 2018/19

In 2018/19, average PHC hand hygiene compliance across all health care workers in acute care facilities was 76%:

65% before patient contact

82% after patient contact

Average PHC hand hygiene compliance across all health care workers in residential care facilities was 55%:

48% before patient contact

60% after patient contact

Both, "before" and "after" patient contact compliance was lower in acute and residential care compared to 2017/18. We believe that the new methodology, as well as auditing throughout the quarter reduced the Hawthorne Effect, giving a more realistic assessment of hand hygiene compliance. This past year, we continued expansion of the patient hand hygiene initiatives and emphasis on hand hygiene "before" patient contact. Additionally, we have implemented "just in time" education for hand hygiene in both acute and residential care.

What we are working on

We will continue to emphasize just in time education, activities around improving compliance "before" patient contact and patient hand hygiene. Facility risk assessments will be completed to target staff engagement and hand hygiene infrastructure improvements.



Outcome

In 2018/19 there were a total of 17 influenza like illness (ILI) and gastrointestinal illness (GI) outbreaks in Providence Health Care facilities. Of these nine (53%) were in acute care facilities (1 GI and 8 ILI) and eight (47%) in long term care facilities (2 GI and 6 ILI). All of the ILI outbreaks were caused by influenza A.

A total of 94 patients/residents were affected and affected areas were closed for a total of 115 days.

The majority of the outbreaks (65%) took place in the last fiscal period of 2018/19.

The number of outbreaks was similar to the previous fiscal year.

Debrief meetings after each outbreak with IPAC and the management team provides an opportunity to review outbreak processes, identify strengths and opportunities for improvement.

Opportunities for improvement include

- Early communication of suspected cases of influenza like illness;
- Communication of outbreak status to families and visitors; clarification of patient, resident, and health care worker movement on and off of a unit under outbreak precautions; and
- Timely staff and resident annual influenza vaccinations, as well as ensuring appropriate precautions implemented for unvaccinated staff.

What we are working on

IPAC continues to focus its outbreak education on improving frontline awareness of signs and symptoms, rapid containment of symptomatic patients/residents, and communication within the clinical team. The management and containment of outbreaks is contingent on a partnership with site and unit leadership, nursing, physicians, allied health, laboratory staff, pharmacy, and support services, such as housekeeping and food services. This collaboration enables ICPs to more fully support the identification, containment and implementation of outbreak measures.

Education

The IPAC department is focusing on going back to the basics based on the observations of practice made during the outbreaks. Six Infection Control Practitioners were assigned to do clinical rounding throughout acute and residential care, developing relationships with frontline leadership and staff.

Clinical rounding included

- Follow-up of patients with significant laboratory results relevant to IPAC (e.g. *C. difficile,* MRSA, VRE, CPO and influenza) including counseling patients and staff on the organism, and methods to prevent transmission in healthcare facilities
- Development and provision of educational pamphlets for patients to reinforce the teaching by ICPs
- Discussion with staff and unit leadership regarding appropriate precautions for patients, and education on pathogen transmission and containment
- Observation and emphasis on compliance with hand hygiene and appropriate use of personal protective equipment
- Response to and clarification of other infection prevention and control issues arising on the unit

During the CPO outbreak in hemodialysis, a curriculum was developed for preventing the transmission of CPO. The ICP responsible for education worked with the unit educators to deliver the education and provided them with the curriculum and lesson plans for on-going education of staff. A Back to Basics curriculum is in development so there is consistency in the theory and skills considered to be the basics of infection prevention and control.

A very successful program was developed for Hand Hygiene week that evolved from low hand hygiene rates identified during audits and inappropriate use of gloves. The team travelled to all areas reinforcing the fact that hand hygiene is the best way to prevent the transmission of infectious organisms and when gloves are worn without cleaning hands first, it increases the risk of transmitting organisms through contaminated hands and supplies. Glo Germ and UV light were utilized for staff education to show how "organisms" are left behind on hands and equipment when they are not properly cleaned and disinfected, enabling transmission to patients and other surfaces. This demonstration is now incorporated into new staff orientation and was done for orientation of our new medical resident staff as well as for the nursing practice group, the clinical nurse leader/educator group and the Quality and Safety Committee. Seeing the "invisible" was an "ah ha" moment for many staff for the proper cleaning and disinfection of hands, equipment and surfaces.

The orientation for new staff is being revised to have its focus on the patient /family journey and the basics that clinical staff require to give safe care such as Point of Care Risk Assessment, Routine Practices including hand hygiene, use of PPE, aseptic technique and sharps safety and Additional Precautions that

are required when patients have infections with specific organisms that must be confined to prevent spread. It is proposed that all staff attend this revised orientation as it includes concepts required by all staff working in a hospital/residential care environment. Bare Below the Elbows is another initiative we are implementing which makes care "cleaner". Environments require decluttering so proper cleaning and disinfection of facilities can be achieved and initiatives are underway to achieve this on the Demonstration Unit which will expand to other areas with the goal of reducing healthcare associated infections.



PHC Facilities

St. Paul's Hospital

- Acute care, teaching and research hospital
- 433 beds
- SPH sees over 174,000 patients annually, accounting for 500,000+ patient visits

Mount Saint Joseph Hospital

- Acute care community hospital with 101 beds
- 100-bed extended care unit for residents
- Multicultural focus

Holy Family Hospital

- Extended care for 142 residents
- Specialized rehabilitation for older adults (65 acute rehab beds)

St. John Hospice

12-bed hospice, end-of-life care

Providence Crosstown Clinic

Substance-use clinic

Granville Youth Health Clinic

 Primary care and outreach services for youth and young adults, ages 24 and under

St. Vincent's: Langara

- Complex care residential facility
- 197 residents

 Specialized unit for 20 adult mental health clients

St. Vincent's: Brock Fahrni

- Complex care residential facility
- 148 residents many armed forces veterans

Youville Residence

- Complex care residential facility
- 42 residents
- Specialized unit for 32 older adult mental health clients

St. Vincent's: Honoria Conway

- Assisted living for 60 tenants
- Supportive housing for 8 young adults with disabilities

St. Michael's Centre

- Complex care residential facility located in Burnaby
- 128 residents
- 16 hospice patients

PHC Community Dialysis Units

- Vancouver Community Dialysis Unit
- East Vancouver Community Dialysis
- North Shore Community Dialysis Unit
- Richmond Community Dialysis Unit
- Squamish Community Dialysis Unit
- Powell River Community Dialysis Unit
- Sechelt Community Dialysis Unit

IPAC Team

IPAC's vision and mission are aligned with those of Providence Health Care (PHC).

The vision of the IPAC team is to stop preventable infections.

The purpose of the IPAC team is to protect everyone at PHC from preventable infections and improve health outcomes with our partners.

Our vision and mission are incorporated into the activities provided by IPAC for PHC:

- Surveillance
- Case management
- Outbreak management

- Education
- Research
- Policies and procedures

2018/19 PHC INFECTION PREVENTION AND CONTROL TEAM

Ron Carere, MD Vice president, Medical Affairs

Camille Ciarniello, BSN, LLB Corporate Director, Quality, Patient Safety, Risk Management, Patient Relations & Infection Prevention and Control

Bonnie Lantz, RN, BSN, MEd, CPN (C) Director of Risk Management and IPAC

Victor Leung, MD, FRCPC Medical Director, Infection Prevention and Control

Christopher Lowe, MD, FRCPC Infection Control Physician / Medical Microbiologist

Nancy Matic, MD, FRCPC Medical Microbiologist

Azra Sharma, MLT, MSc Epidemiologist

Mary McNaughton, RN, MSA, CIC Infection Control Practitioner

Danielle Richards, RN, MA Infection Control Practitioner

Thomas Kind, RN
Infection Control Practitioner

Ted Pincock, RN
Infection Control Practitioner

Glenn Cardinal, RN Infection Control Practitioner

Emily Aubry, RN Infection Control Practitioner

Leah Diamond, RN
Infection Control Practitioner

Jason Kent, RN
Infection Control Practitioner

