SSC SPECIALIST SERVICES COMMITTEE

PQI PHYSICIAN QUALITY IMPROVEMENT Specialist Services Committee

SQI SPREADING QUALITY IMPROVEMENT Specialist Services Committee

Physician Quality Improvement & Spread

Cohort 9, Alumni & Spread Projects

2025 - 2026

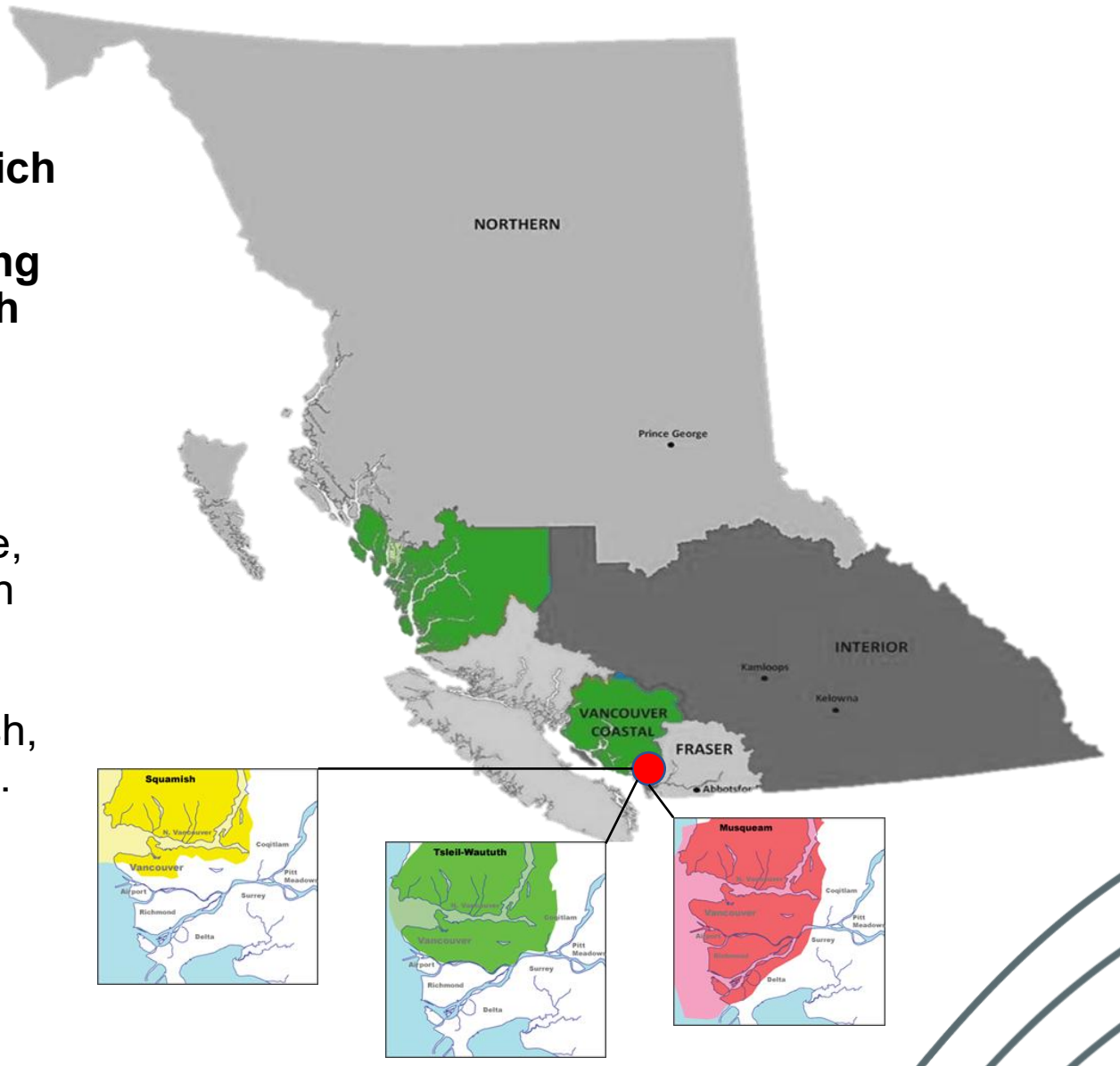
Vancouver CoastalHealth

Providence Health Care
How you want to be treated.

Territory Acknowledgement

We wish to acknowledge that the land on which we gather is the traditional and unceded territory of the Coast Salish Peoples, including the Musqueam, Squamish, and Tsleil-Waututh Nations.

Vancouver Coastal Health is committed to delivering exceptional care to 1.25 million people, including the First Nations, Métis and Inuit, within the traditional territories of the Heiltsuk, Kitasoo-Xai'xais, Lil'wat, Musqueam, N'Quatqua, Nuxalk, Samahquam, shíshálh, Skatin, Squamish, Tla'amin, Tsleil-Waututh, Wuikinuxv, and Xa'xtsa.



Indigenous Health | Vancouver CoastalHealth

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Introduction

The Physician Quality Improvement & Spread (PQI&S) programs is a province-wide initiative and a partnership between Vancouver Coastal Health (VCH), Providence Health Care (PHC), and the Specialist Services Committee (SSC). The vision of PQI&S is to “empower physicians to enable a continuous improvement culture, to achieve excellence in care for patients and families, where BC is a model for health and wellness globally” – PQI&S Vision, Mission, Values.

This years’ 2025-2026 booklet showcases the effort and results of **11** Cohort projects, **2** Alumni projects, and **1** Spreading Quality Improvement (SQI) project completed or near completion this year.

Congratulations to all the physicians and their team members who dedicated their time and effort to improving care for patients.

Foreword: 10 Years of Physician Quality Improvement

It is incredibly meaningful to reflect on ten years of the Physician Quality Improvement (PQI) program at VCH and PHC, a journey I have had the privilege to help initiate and watch grow into a transformative capability-building program within the Provincial health system.

At its core, PQI has always been about people. In 2016, the creation of the PQI program began with a handful of passionate physicians saw of the benefits of a system taking on quality improvement and were keen to share their QI knowledge with their peers. Today, PQI reaches across disciplines, sites, and communities, supported by a strong network of alumni, spread initiatives, and enduring partnerships between physicians and health system leadership. Over 800 clinicians have developed foundational QI skills, with many advancing into deeper levels of expertise. We have seen a shift in mindset: physicians stepping forward as engaged leaders and partners in improving care.

This impact is increasingly visible in initiatives that have moved beyond individual projects to sustained system change, most notably the Group & Screen initiative, which has reduced unnecessary pre-operative testing by 60- 80% across sites while improving patient experience and generating measurable cost savings. Similarly, the CARE Collaborative, which looks to reduce transfers from Long-Term Care to ED by 45%, is spreading across VCH, and potentially, the province.

As you explore this year's posters, I invite you to see them not just as individual projects, but as part of a decade-long story—one of curiosity, collaboration, and a shared commitment to better care.

-Vivian Chan,
Health Authority Sponsor, PQI/S Committee Co-Chair
Senior Director, Medical Quality Leadership Practice, VCH

PQI&S Team

Leadership

Dr. Stephen van Gaal, Neurology, Chair

Vivian Chan, Health Authority Sponsor, Senior Director

Enrique Fernandez, PQI Manager

Amy Chang, SQI Manager

Physician Coaches

Dr. Andrew Kestler, Emergency Medicine

Physician Faculty

Dr. Amrish Joshi, Palliative Medicine

Dr. Amy Bazzarelli, Surgery

Dr. Betty Tang, Psychiatry

Dr. Cole Stanley, Family Medicine

Dr. Darren Lee, Physical Medicine and Rehab

Dr. Jane Lea, Otolaryngology

Dr. Justin McGinnis, Gynecologic Oncologist

Dr. Kelly Mayson, Anesthesiology

Dr. Krista Marcon, Laboratory Medicine and Pathology

Dr. Marla Gordon, Family Medicine

Dr. Matthew Kwok, Emergency Medicine

Dr. Penny Tam, Internal Medicine

Dr. Stephanie Chartier-Plante, Surgery

Dr. Trina Montemurro, Anesthesiology

Dr. Vandad Yousefi, Family Medicine

Patient Partners

Beth Rizzardo

John Con

PQI/S Team

Quality Improvement Leaders

Allison Zentner

David Puddicombe

Hing Yi Wong

Leslie Chan

Data Support

Jing Luo, Manager

Sarah MacDonald, Decision Support Analyst

Guanyi Lu, Business Analyst

Naisargy Shah, Decision Support Advisor

Enya Zeng, Co-op Student

Project Coordination/Administration/ Advisor

Bianca Grosu, QI Advisor

Rochelle Szeto, Project Coordinator

Pheona Lui, Administrative Assistant

Spreading Quality Improvement

Manu Kalia, Change and Improvement Specialist

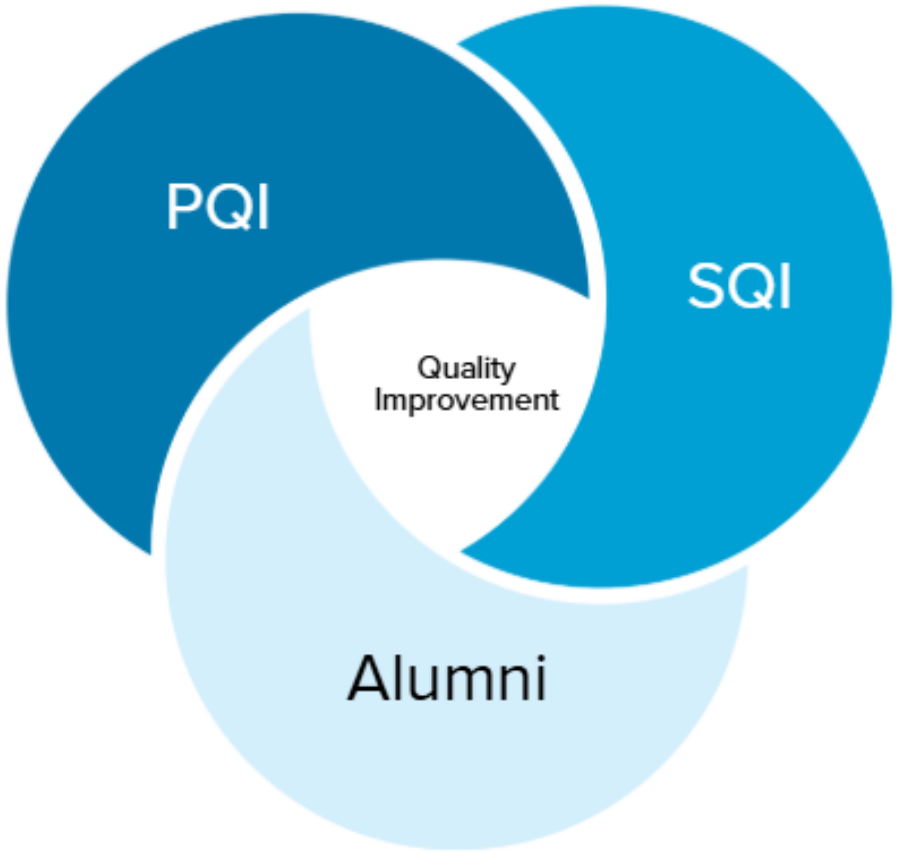
Supporting Medical Staff to be Powerful Health System Partners

Physician Quality Improvement (PQI)

PQI provides training and project support to physicians for in-depth learning about QI theory and tools, and an opportunity to conduct their own QI project. Training opportunities range from self-paced online learning (Level 1), class-based half day Teams sessions (Level 2), to cohort-based learning with full project support (Level 3). We also offer QI coaching as needed.

Alumni

This strategy aims to continue supporting physicians in their QI journey (alumni). The key components we offer are project funding, quality leader support, and data analytics. We continually strive for physicians to become QI leaders within their team and their organization.



PQI Website

SQI Website

Spreading Quality Improvement (SQI)

SQI is an initiative that aims to foster collaborative relationships at the provincial, regional/ organizational and local levels resulting in the spread of QI work funded by the SSC and Shared Care Committee. The goal is to spread successful QI projects to accelerate the impact and transformation for our health care system within the Institute for Health Care Improvement (IHI) Modified Triple Aim framework. SQI provides support to sending and receiving sites in the form of physician funding, QI education, data support, project/change management, and system navigation.

Cohort 9 Projects: Institute for Healthcare Improvement (IHI) – Modified Triple Aim

Cohort 9 Projects	Patient Experience	Population Health	Cost of Care	Provider Satisfaction	Health Equity	Planetary Health
Dr. Andrew Gillooly *Reducing Postoperative Narcotic Usage at Discharge Following Liver Transplant at VGH*						
Dr. Bella Wu *Procedural Tray Optimization: Better Care, Smaller Footprint*						
Dr. Bradley Locke *Standardizing psychiatric orders for seclusion in the ED and PAU*						
Dr. Chantalle Grant *Improving Wait Times for Inpatients with Gallbladder Disease at VGH*						
Dr. Jennifer Leavitt *Ripe for Change: Improving Induction of Labour at St. Paul's Hospital*						
Dr. Marnie Wilson *The Critical Care Recovery Program in Vancouver: Increasing referrals to the CARES clinic in critical care survivors*						
Dr. Melissa Aragon Cantu *Hepatitis C and Syphilis screening in a Rural ED*						
Dr. Mosaed Aldekhayel *Reduce the length of stay for patients undergoing Whipple procedure at VGH.*						
Dr. Rachel Liu Hennessey *Pre-operative Readiness and Engagement Program for Surgery (PREP-Surg): Turning surgical wait time into better health*						
Dr. Renelle Myers *Expanding the Reach of Early Lung Cancer Detection with AI powered IPN detection*						
Dr. Shika Card *Does a VA-ECMO Weaning Protocol Improve Patient Outcomes at St. Paul's Hospital Cardiac Surgical ICU?*						

Patient Experience
Improving patients' (individual's) experience of health care

Population Health
Improving health in the population (addressing cause of illness)

Cost of Care
Improving cost efficiency in health without reducing efficacy

Provider Satisfaction
Improving the experience of those working in health care

Health Equity
Addressing disparities in health outcomes and ensuring that everyone has access to quality care

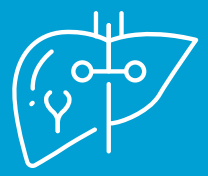
Planetary Health
Transforming healthcare to reduce our environmental impact and support low-carbon, sustainable systems.

COHORT 9 HIGHLIGHTS

10 MONTHS, 11 SESSIONS & 11 PROJECTS

PQI PHYSICIAN QUALITY IMPROVEMENT
Specialist Services Committee

Dr. Andrew Gillooly
reduces unnecessary perioperative narcotic use in post-transplant liver patients

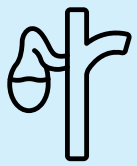


Dr. Melissa Aragon Cantu
Increases Hepatitis C and syphilis screening among eligible patients with positive screens receive confirmatory testing

Dr. Mosaed Aldekhayel
Reduces the length of stay for patients undergoing Whipple procedure

Dr. Renelle Myers
Increases the number of patients screened by IPNs who have had prior CT scans

Dr. Chantalle Grant
Decreases inpatient length of stay for gallbladder disease patients



Dr. Rachel Liu Hennessey
Increases the percentage of patients referred for complex abdominal wall reconstruction who receive structured pre-operative optimization by first surgical consultation

Dr. Marnie Wilson
Recruits and sees 80% of eligible critical care survivors in the CCRP clinic

Dr. Bella Wu
Optimizes surgical tray use to reduce unused instruments, cut second tray openings, replace single-use plastics, and improve efficiency

Dr. Jennifer Leavitt
Improves vaginal birth rates in nulliparous, singleton, vertex pregnancies undergoing labor induction

Dr. Shika Card
Improves the rate of successful VA ECMO weaning for critical care patients

PLANETARY HEALTH IMPACT

Healthcare contributes significantly to global greenhouse gas emissions, and quality improvement offers a powerful pathway for climate action.

This cohort of physicians is the first to apply the Sustainability-Embedded Quality Improvement (SE-QI) Toolkit, developed by the Planetary Health team through a partnership between Vancouver Coastal Health, Interior Health, Health Quality BC, and CASCADES.

The **SE-QI Toolkit** supports individuals and teams to incorporate environmental sustainability into QI initiatives by helping them identify, measure, and report environmental impacts alongside improvement outcomes. Using a structured three-step approach, teams:

1. **Identify which sustainable healthcare principles apply to their project,**
2. **Assess relevant sustainability opportunities and access practical resources, and**
3. **Define the level of sustainability focus and identify meaningful metrics.**

By embedding planetary health into everyday QI work, SE-QI makes climate-conscious care a practical and achievable part of healthcare improvement.


March 31, 2026


FACULTY OF MEDICINE


DICINE


"Every system is perfectly designed to produce the results it gets..."
Dr Paul Batalden
Pediatrician
Institute of Healthcare Improvement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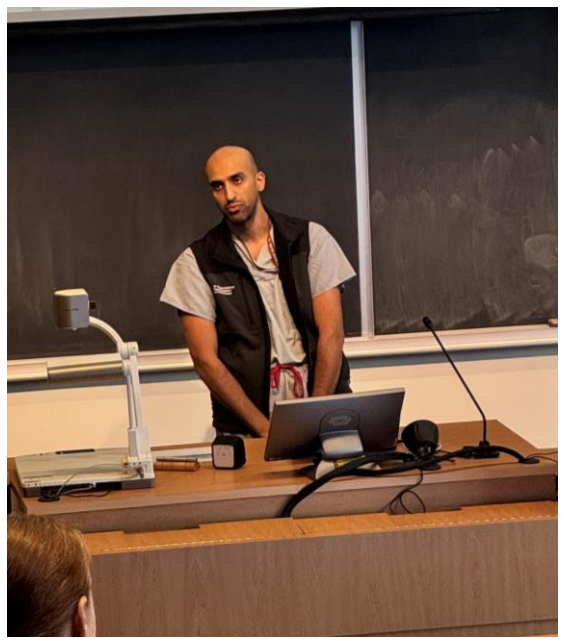


PQI PHYSICIAN QUALITY IMPROVEMENT
Specialist Services Committee

Cohort 9 Projects

Vancouver CoastalHealth

Providence Health Care
How you want to be treated.

Reducing Postoperative Narcotic Usage at Discharge Following Liver Transplant at VGH

Andrew R. Gillooly, MD

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

- Following liver transplant, postoperative pain management can be challenging, highly variable and provider-specific
- Narcotic risks: physical/psychological dependence, GI slowing, diversion
- 107 liver transplants performed in British Columbia (BC) in 2025

AIM Statement

50% reduction in average dosage of narcotics (50% reduction in morphine equivalents) prescribed at time of discharge for post liver transplant patients at Vancouver General Hospital (VGH) over 7 months (October 2025 - April 2026)

Project Strategy

Outcome Measures - Opioid used by recipients while admitted in 24h prior to discharge, and amount prescribed at discharge (measured in ME to standardize)

Process Measures - Percentage of patients whose narcotic Rx aligns with guidelines, percentage of Hepatology fellows or staff trained in narcotic prescription guidelines (TBD!)

Balancing Measures - Number of patients who required/requested additional pain control Rx at outpatient clinic follow-ups

PDSA 1

Plan/Theory: 50% of recipients will be discharged with pain control in accordance with opioid guideline initiation

Do: Train discharging providers (fellows, residents and pharmacists) on updated guidelines

Study: Analyze data to determine # of patients who were discharged in accordance with guidelines

Act: Adapt guidelines to increase proportion of recipients discharged with appropriate Rx, improve education for discharging providers to ensure maximal compliance

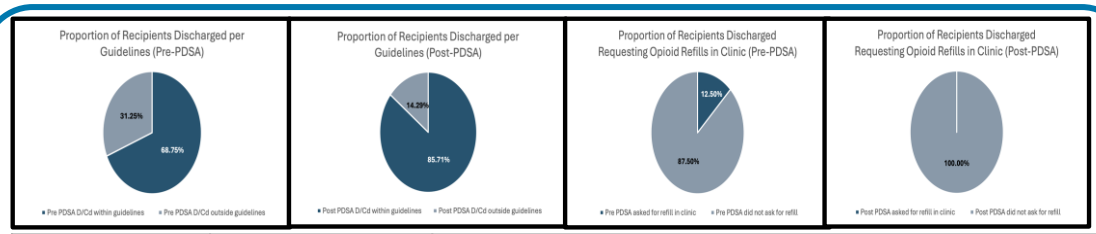
PDSA 2

Plan/Theory: 100% of liver recipients will be discharged with pain control in accordance with opioid guideline initiation

Do: Disseminate educational materials (FLEX student) inpatient areas to ensure maximal compliance at discharge

Study: Analyze data to determine number of patients who were discharged in accordance with updated guidelines

Act: Adapt guidelines to facilitate prescriptions, implement standardized pain evaluation in outpatient clinic



Usage	24-hr HM PO Equiv.	Prescribing Considerations
LOW USE	**< 4 mg**	• Tylenol #3 preferred, short supply (≤ 5 days) w/ 10-15 tabs, ensure scheduled non-opioid analgesics, no refills at discharge
INT. USE	**4-10 mg**	• HM 1 mg PO q4-6h PRN, supply 10-20 tablets, optimize concurrent non-opioid analgesia (APAP, Pregabalin), F/U at Txp Clinic within 7 days
HIGH USE	**> 10 mg**	• HM 2 mg PO q4-6h PRN, calculate D/C dose from inpatient total, CPAS review recommended, close F/U within 3–5 days

Lessons Learned

- Stewardship of opioid prescribing can be efficient, economical and yet still be patient-centric
- Importance of open communication for effective practice changes, especially on large teams (such as Liver Transplant)
- Collaboration is key - invest early in getting stakeholders on board
- Ask for help (and patience), and utilize the skills of specialty training of teammates

Improved Patient Experience

- Reducing # of MEs that are RXd at discharged for liver recipients
- Reducing risk for opioid misuse at home and in community at large
- Still allowing for reasonable AND effective pain control tailored to each patient's needs

Clinician Well Being

- Standardizing and simplifying a portion of discharged that can be medically complicated (for MDs, pharmacists alike)
- Reduced moral injury associated with opioid RX challenges and contributions to 'crisis' of opioid overprescribing

Health Equity

- Reduces stigma of managing postop pain control (more objectivity, with space for patient experience)
- Reduce biases against all groups receiving postop liver care
- Broadly generalizable principles that can be extrapolated to other surgical specialties

Sustainability/ Next Steps

How can we make this last?

- Ease! A simple practice change that is quick to implement at every discharge, especially with a multidisciplinary rounding team
- Invested prescribers, medical AND surgical providers
- Success of other pain control programs within Surgery (including HPB) means changes more likely to stick

What are our next steps?

- Utilizing flex students/next fellow generation to compound and expand exposure to opioid prescription guidelines
- Determine utility in our other Transplant populations (then General Surgery? ACS/Trauma? Urology? GYN?)
- Integrate pain control more easily into post transplant clinic assessments to see if longer term this project remains viable

Acknowledgements
Dr. Darren Lee - Physician Coach; Alison Zentner - Improvement Leader; Naisargy Shah - Data Advisor; Cameron Rankin - Patient advocate/partner; Ava Keshavarzsafiei - FLEX Student, UBC

Acronyms:
GI: Gastrointestinal; VGH: Vancouver General Hospital; ME; Morphine Equivalent; Rx: Prescription; MDs: Medical Doctors; HBP: High Blood Pressure; ACS: Acute Care Surgery; GYN; Gynecology

For questions or for comments, contact Andrew Gillooly at andrew.gillooly@vch.ca

Procedural Tray Optimization: Better Care, Smaller Footprint

Bella Wu, Hing Yi Wong, Jane Lea, Lauren Caswell

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

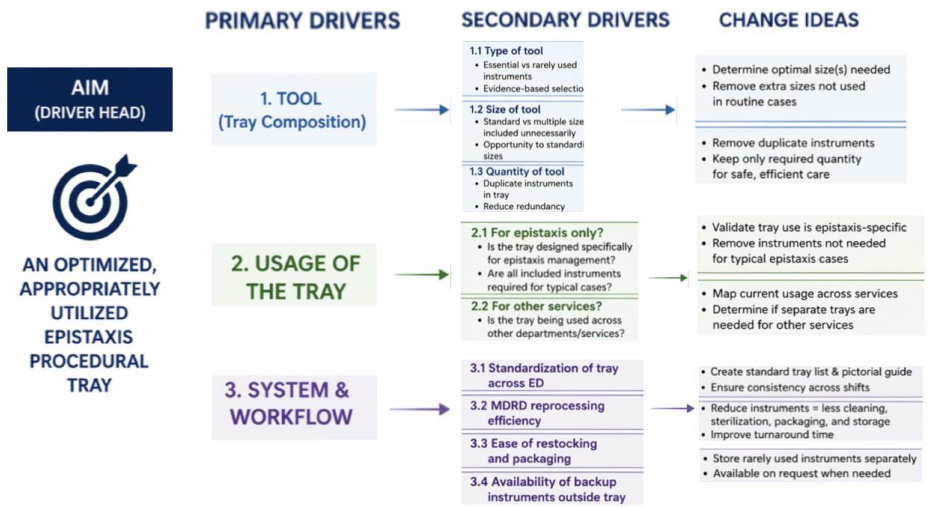
Background

- Richmond Hospital (RH) Emergency Department (ED) is a high-volume acute care center with frequent epistaxis presentations.
- Epistaxis trays are commonly opened, though many instruments remain unused.
- All opened instruments require full reprocessing, regardless of use.
- This leads to increased cost, instrument wear, workflow inefficiency, and environmental waste.

AIM Statement

- To optimize the utilization of the epistaxis procedural tray at Richmond Hospital ER
- To reduce reprocessing time and cost
- To decrease environmental footprint

Project Strategy



PDSA 1

PLAN: Determine which instruments in the current epistaxis trays are used during procedures at RH ED
DO: Collect surveys from ED and ENT physicians and reviewed current tray composition with MDRD
STUDY: Analyze survey results
ACT: Develop a draft optimized tray by removing low-use instruments

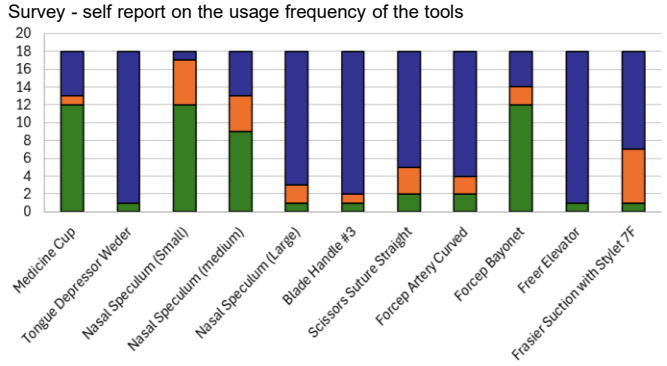
PDSA 2

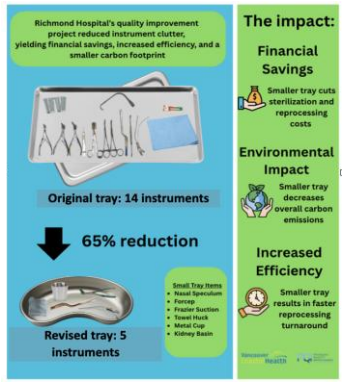
PLAN: Test the feasibility and acceptability of the optimized tray
DO: Presented proposed tray ED operations and MDRD. Gathered feedback on missing instruments and workflow considerations
STUDY: Feedback received indicate that instruments adequately supported routine epistaxis management and operations to purchase missing instruments
ACT: Finalize the optimized tray for implementation

PDSA 3

PLAN: Pilot the optimized tray in ED
DO: Implemented optimized tray in ED procedural supply. Post infographic to increase adoption. Monitored use of new tray. Collected physician feedback with new survey.
STUDY: Optimized tray successfully adopted. Additional instruments rarely required, physicians provided positive feedback, improved MDRD efficiency and environmental impact analysis showed reduction in CO2 emissions
ACT: Continue use of optimized tray, share study result, explore need for additional instruments to be wrapped separately and to optimize other ED procedural trays

Survey - self report on the usage frequency of the tools





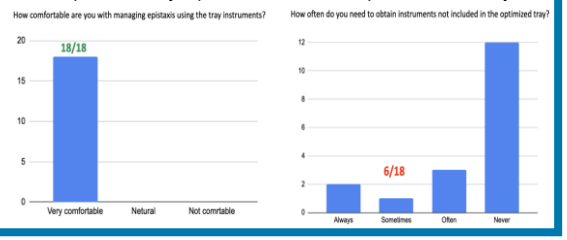
Environmental Impact of Epistaxis Tray Optimization

	Old Epistaxis Tray	Optimized Epistaxis Tray
Instruments per tray	14	5
CO_2 per instrument	70 g	70 g
Total CO_2 per tray	0.98 kg CO_2e	0.35 kg CO_2e

Carbon reduction:
0.98 kg − 0.35 kg = 0.63 kg CO_2e saved
(64% reduction in sterilization carbon footprint)

Driving a car ~2.5 km
Running a LED light bulb for ~100 hours
Charging ~75 smartphones

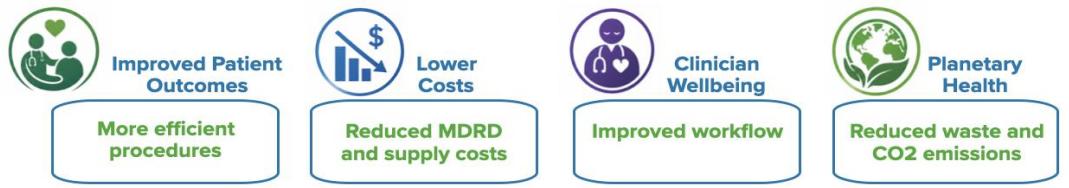
Epistaxis Tray Optimization - Post-Implantation Survey



Lessons Learned

- Small changes in procedural trays can have significant impact
- Engaging frontline clinicians improves adoption
- Collaboration with multiple stakeholders (i.e.: MDRD, Operations) ensures operational feasibility and sustainability
- Data-driven review helps eliminate unnecessary waste
- Similar optimization can be applied to other procedural trays

Impact



Sustainability/ Next Steps

- Monitor adoption and provider satisfaction
- Periodic review of tray contents
- Share results with MDRD, operations, hospital leadership teams
- Share QI journey with colleagues - departmental rounds and meetings
- Expand optimization approach to other procedural trays in the hospital

Acknowledgements:
RH MDRD: Will Popovich; RH ED and Ops Team: Drs. Eliza Chan & Kevin Shi; Jennifer Hunter; ENT colleagues/Planetary Health WG

Acronyms:
ENT: Ears Nose Throat ;MDRD: Medical Device Reprocessing Department; QI: Quality Improvement

For questions or for comments, contact Dr. Bella Wu at: bella.Wu@vch.ca
Quality Improvement team leader and Faculty - Hing Yi Wong, Dr. Jane Lea
Flex Student: Lauren Caswell

Standardizing psychiatric orders for seclusion in the ED and PAU

Bradley Locke, Magda Szumilas, Kalena Ballarin, Michelle Danda, Lara Gurney

Providence Health Care — How you want to be treated.
Vancouver CoastalHealth
PQI Physician Quality Improvement — Specialist Services Committee

Background

At Vancouver General Hospital (VGH), psychiatrists in the Emergency Department (ED) and Psychiatric Assessment Unit (PAU) provide daytime care within a shared, multi-physician service. Clinician observation identified that patients were sometimes kept in seclusion longer than clinically intended, raising safety and human rights concerns. This was attributed to inconsistent ordering and documentation practices, resulting in unclear communication of clinical intent; review showed that required 24-hour renewal or discontinuation of seclusion orders occurred only ~50% of the time, leading to poor alignment between active orders and actual clinical decisions and contributing to unintended prolonged seclusion.

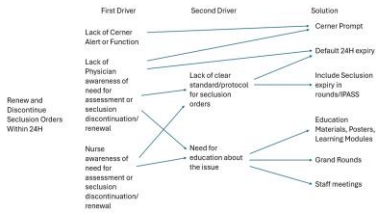
AIM Statement

To increase the rate of QR patients in VGH ED and Acute Psychiatry (PAU) that have a clear and timely order for continuation or termination of seclusion (renew or cancel) within 24 hours from 55% to 75% or greater by end of June 2026.

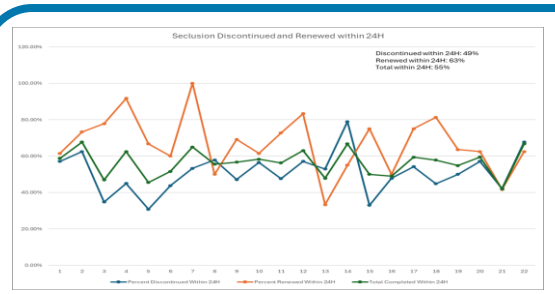
Project Strategy

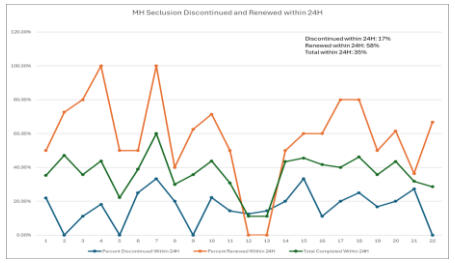
Project Measures:
Outcome: Expired orders (not discontinued or renewed within 24H) - CST data
Process: Orders renewed within 24H, Orders Discontinued within 24H - CST data
Balancing: Surveys on provider satisfaction and physician feedback

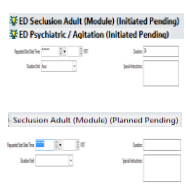
Theory for Change:Consistently aligning seclusion orders with clinical intent will allow for comparison between clinical intent and actual time in seclusion.

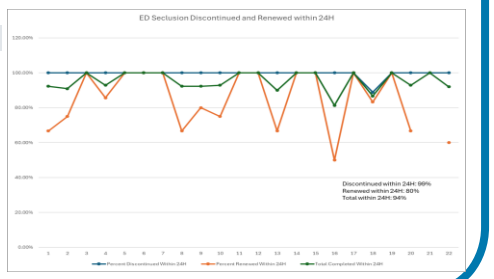


Plans for change and results disseminated in staff meetings, and through posters posted throughout the Psychiatrists' working areas in PAU/ED. Ongoing work to discuss CST Cerner changes to create more effecting and long-lasting change.









PDSA 1

Plan: Increase awareness through Staff meetings with Psychiatry/Resident groups

Do: Changes discussed at A&A, Inpatient, PAU, Resident Meetings

Study: Data suggests minimal significant change

Act: Exploring more effective method of communication to practicing psychiatrists

PDSA 2

Plan: Poster outlining process and clear protocol for seclusion orders in ED/PAU

Do: Posters created and posted

Study: Data suggests minimal significant change

Act: Consider alternative to poster, or more effective method of education

PDSA 3

Plan: CST change to create automatic expiry of seclusion orders after 24H

Do: In progress…

Study: TBD

Act: TBD

Lessons Learned

- Seclusion orders are important and at least at VGH, have not been meeting the standard set by the province, nor the standard that most practicing psychiatrists would like.
- By separating the data further, it became clear that a subset (ED Seclusion orders) had a much better rate of timely renewal or discontinuation, which lead to an understanding of a likely causal factor.

Impact

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity
Duration of seclusion is correlated with trauma, longer length of stay, and other harms. By ensuring clear an appropriate orders seclusion can more likely used only when strictly necessary.	Appropriate management of seclusion orders aligns care at VGH better with the mandated standards already set by the province of British Columbia in 2014	Seclusion requires closer supervision and higher intensity nursing resources.	Maintaining seclusion beyond clinical necessity is likely to lead to a much higher degree of caregiver distress.	Ensuring appropriate use of seclusion helps to ensure that those suffering with severe mental illness are still respected as much as possible.

Sustainability/ Next Steps

- If approved, applying for change to CST to create a default 24-hour expiry of the mental health seclusion module would improve compliance across all sites that use CST Cerner.
- Once successful, this can be paired with a parallel, separate project related to the tracking of seclusion rooms to determine if and to what extent seclusion is being used beyond clinical intent.

Acknowledgements
PQI Team and Program, Psychiatry and ED Leadership - Dr. JJ Sidhu, Cori Ross, Dr. Trevor Skutezky, Lori Quinn and Patient Partner, Alexandra Wade

Acronyms:
ED: Emergency Department; VGH: Vancouver General Hospital; PAU: Psychiatric Assessment Unit; CST Cerner: Electronic Medical Record; A&A: Active and Associates

For questions or for comments, contact Bradley Locke at: bradley.locke@vch.ca

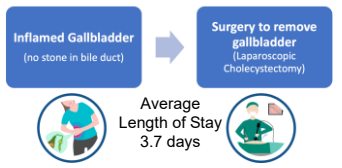
Improving Wait Times for Inpatients with Gallbladder Disease at VGH

Chantalle Grant, David Puddicombe, Stephanie Chartier-Plante

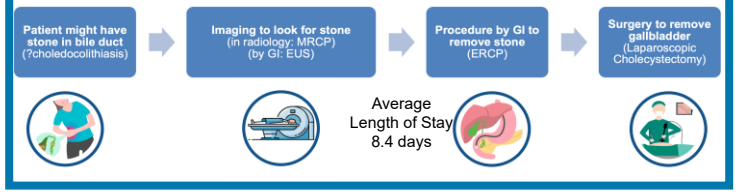
Background

- There are long wait times for patients who need urgent gallbladder surgery at Vancouver General Hospital
- Patients frustrated and 50% found waits “much too long”

Direct to Surgery Group



2+ Step Procedure Group



AIM Statement

We will **decrease the average length of stay (LOS)** for patients awaiting gallbladder surgery on the Acute Care Surgery (ACS) service at Vancouver General Hospital (VGH):

- *Direct to surgery group:* to less than 3 days from 3.7 days
- *2-stage procedure group: t*o less than 5 days (from 8.4 days) for patients who require additional tests or procedures

Timeframe: by December 2026

Project Strategy

Outcome Measures:

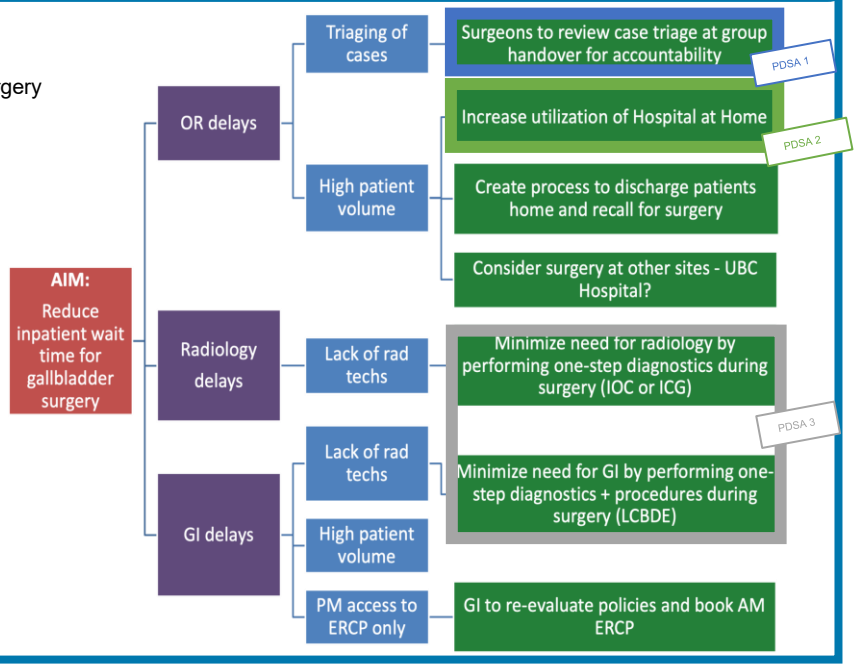
- Overall length of stay
- Time from admission to surgery
- Patient Satisfaction

Process Measures:

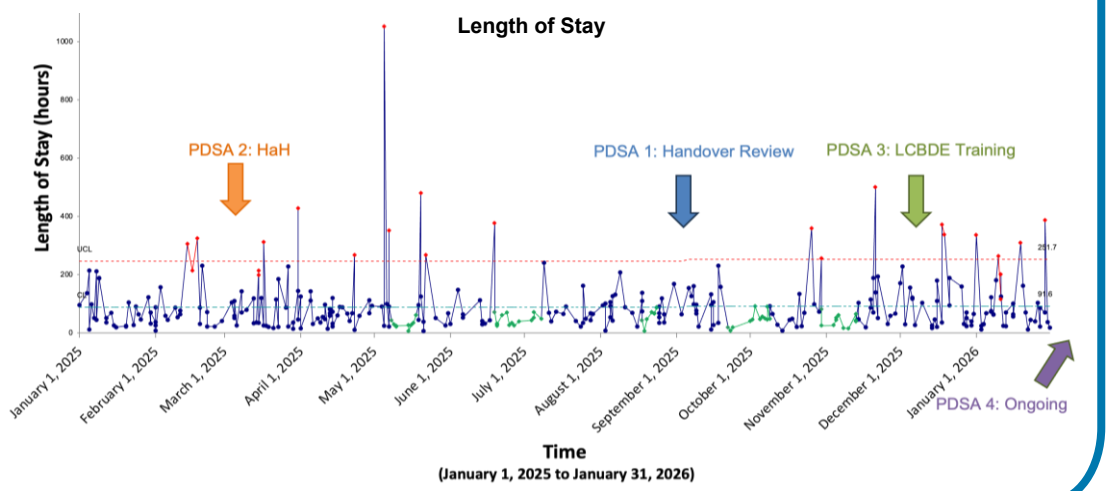
- # of patients in hospital at home
- # of patients discharged and brought back to operating room (OR)
- # of patients undergoing new one-stage procedure (LCBDE)
- Time for each stage (i.e.: ERCP to OR; booking to OR; operative times)

Balancing Measures:

- Length of time spent in surgery
- Complications
- Unplanned readmissions
- Impact on wait times for MRI or ERCP



PDSA 1	PDSA 2	PDSA 3	PDSA 4
Plan: Surgeons reviewed elective cases at handover to reduce bumping	Plan: Increase utilization of hospital at home (HaH) – goal of 2 patients/ month	Plan: New one- stage procedure: LCBDE Training for Surgeons	Plan: Increase LCBDE uptake (goal: 15 cases first year)



Lessons Learned

- Collaboration is crucial (this project involved General Surgery, OR operations, Anesthesia, GI/endoscopy, Radiology, Hospital at Home, Patient partner, and more)
- Think big: innovative pathway design is needed – new procedures, processes, and pathways
- Behaviour change requires its own strategic plan

Impact

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Planetary Health
↓ Time in hospital and waits for surgery ↑ Patient Satisfaction	↓ Length of stay ↓ Complications expected (less gallbladder inflammation the sooner surgery is done)	↑ Cost savings with shorter inpatient stays ↑ Value	↓ Patient frustration leads to … ↑ Provider satisfaction in providing better care	↓ Number of procedures and inpatient stay leads to ↓ Waste

Sustainability/ Next Steps

- Increase uptake of change ideas to increase impact
- Make efficient pathways the default
- Normalize “Why Not?” as part of the system
- Shift from person-dependent changes to built-in sustainable changes with embedded data measurements
- Ongoing operational support as we scale up

Acknowledgements
Laurel Radley, Heather Stuart, Kyra Yatkowsky, Kevin Chen, Angelo Grant, Phil Dawe, Debbie Hendricks, Jessie Rodrigues, Dan O’Connell, Gavin Sugrue, Roberto Trasolini, Ian Gan, Andrew Sawka, Alison McKee, Sharon Dhillon, Sara Suave, Elinor Orsini, Patricia Balmes, Sarah Johnstone, Rhea Menagh

Acronyms:
LCBDE: Laparoscopic Common Bile Duct Exploration; ACS: Acute Care Surgery; HaH: Hospital at Home; ERCP: Endoscopic Retrograde Cholangio Pancreatography; IOC: Intraoperative Cholangiogram; ICG: Indocyanine Green; MRCP: Magnetic Resonance Cholangio Pancreatography; EUS: Endoscopic Ultrasound

For questions or for comments, contact Chantalle Grant at chantalle.grant@vch.ca

Ripe for Change: Improving Induction of Labour at St. Paul's Hospital

Dr. Jennifer Leavitt, QIL David Puddicombe. Physician Coach Dr. Amy Bazzarelli
Flex Student Meghan Henry

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

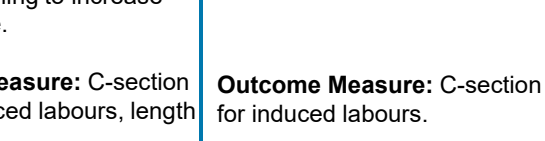
Background

At St. Paul's Hospital Pregnancy, Birthing and Newborn Centre obstetricians, registered midwives and family physicians deliver 1200 babies per year, w**ith a C-section rate of 51% in 2025 in nulliparous, term, singleton and vertex pregnancies (NTSV).** This rate is driven by a high maternal choice C-section rate. **The C-section rate is 33% among NTSV patients choosing to labour (spontaneous or induced).**

AIM Statement

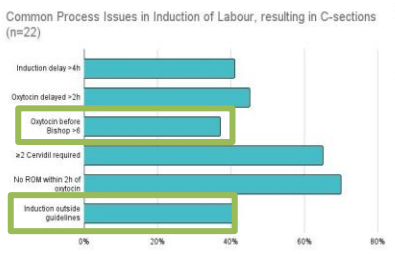
Reduce the NTSV C-section rate for patients choosing to labour from 33% to 29% by March 2027.

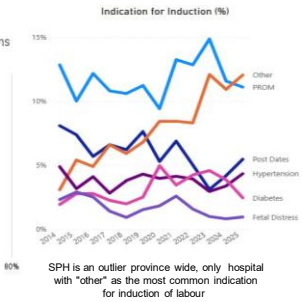
Through a focus on induction of labour (IOL):
1) Reducing the number of inductions
2) Reducing the inductions that end in C-section



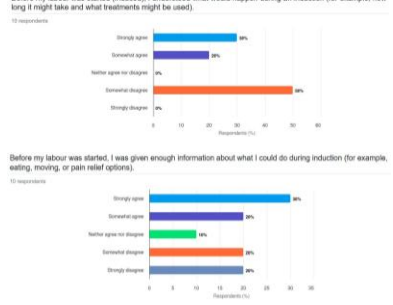
Project Strategy

A root cause analysis using PSBC data, a chart review, patient survey and group brainstorming using Ishikawa/Fishbone and Driver Diagrams highlighted 3 areas of focus:
1) Cervical Ripening
2) Indications for Induction, outside of guideline-based best practices
3) Patient education





SPH is an outlier province wide, only hospital with "other" as the most common indication for induction of labour



PDSA 1

Plan: Evaluate a new IOL booking form which includes evidence-based indications and suggested timing/summary of best practices.

Outcome Measure: Induction rate, induction in line with best practices.

PDSA 2

Plan: Increase use of mechanical methods (catheters) for outpatient cervical ripening to increase bishop score.

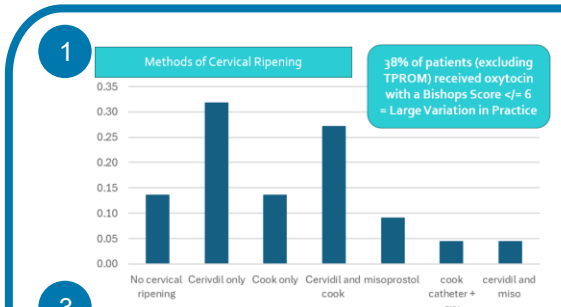
Outcome Measure: C-section rate for induced labours, length of stay.

PDSA 3

Plan: Evaluate an IOL education package for patients, including typical timelines and self-efficacy.

Outcome Measure: C-section rate for induced labours.

1



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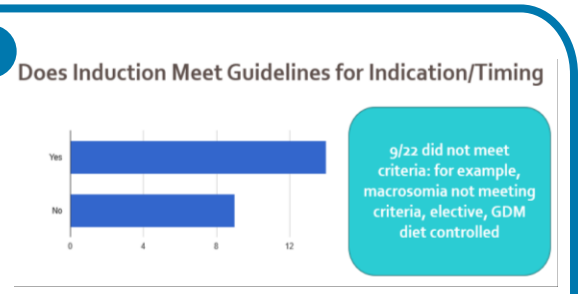

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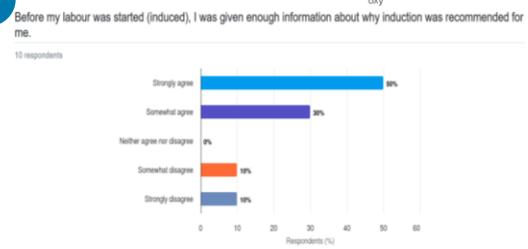
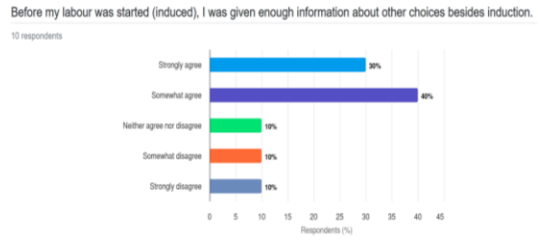




*Several questions from the IOL education package were analyzed; the two graphs shown here provide a small sample of the findings.

Lessons Learned

Process on our unit makes it difficult to do small PDSA/test cycles
- e.g. need for Standardized Operating Procedures/Decision Support Tool in advance of trial, need for published and operable form in advance of testing

Difficult to get prospective data ongoing; lots of missing data from Cerner
- e.g. 30% of patients missing mode of delivery, patients labelled as both having spontaneous onset and induced labours

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity	Planetary Health
Improved neonatal/maternal health, improved patient experience		Reduced length of stay	Improved clinician experience		Reduced operating room time

Sustainability/ Next Steps

- **Next Steps:** Plan to complete PDSA cycles, decide which changes to adopt/abandon/adapt and looks for areas for sustainability/spread.
- **Sustainability:**
  - Embed successful changes into standard work (e.g., finalized IOL booking form, cervical ripening guidance, patient education package).
  - Clarify clinical and operational ownership (who maintains forms, education materials, and data review).
  - Align tools with existing systems (Cerner build, clinic workflows) to reduce workarounds.

Acknowledgements
Funding from SSC
SPH Team : Dr. Rychel, Dr. Kim, Dr. McClenaghan, Patricia Rohlfs RM, Sam Nagalingam RN, Louise Van Vliet RN, Lourdlyn Okoronkwo PIC

Acronyms:
PSBC: Perinatal Services BC
IOL: Induction of Labour
NTSV: Nulliparous, term, singleton and vertex pregnancies

For questions or for comments, contact Dr. Jennifer Leavitt at jennifer.leavitt@vch.ca

The Critical Care Recovery Program in Vancouver: Increasing referrals to the CARES clinic in critical care survivors

Dr. Marnie Wilson, David Puddicombe, Dr. Justin McGinnis, Linda Riches

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

- Nearly half of ICU survivors lack a primary care provider. They are at high risk of medication-related harm, ED use, loss to follow up and unrecognized complications.
- There is frequently uncertainty about recovery expectations, significant mental health concerns, and uncertainty around medication plans
- Patients are often sent home without a clear explanation of what has happened to them

AIM Statement

We aim to optimize the Critical Care Recovery Program (CCRP) clinic referral pathway so that, by July 2026, 80% of eligible ICU survivors are seen in the CCRP clinic at Vancouver General Hospital within 4 weeks of discharge.

Project Strategy

Outcome measure: Percentage of eligible patients seen in clinic in the specified time frame
Process measures: Percentage of patients identified for referral by Cerner reports, percentage of patients told about clinic prior to discharge, percentage of patients agreeing to book appointment when contacted by CARES MOA
Balancing measures: Workload (MOAs, ward teams)

QI tools used: Process mapping, PICK charts, 5-why
Theory for change:
- Reducing human factors: process shouldn't depend on providers entering referral
- "Warm handoff": patients who know about the clinic in advance are more likely to attend

PDSA 1

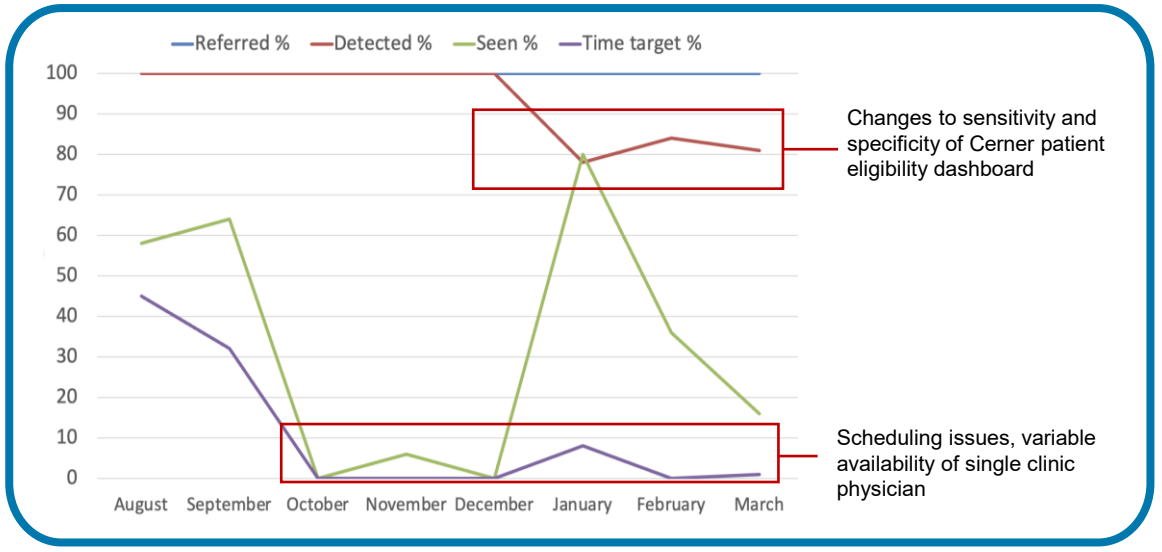
Plan: Provide information about critical care recovery and CCRP clinic visit to survivors in hospital
Do: Materials handed out to ICU survivors / families by CCOT team after transfer
Study: TBD
Act: TBD

PDSA 2

Plan: Use Cerner to identify patients for clinic referral
Do: Dashboard report generated
Study: Ongoing efforts to increase specificity while retaining 100% sensitivity
Act: Intervention retained, ongoing PDSAs!

PDSA 3

Plan: Surveys on how to make the clinic most helpful from a patient perspective
Do: Survey designed, will administer to 20 patients meeting criteria for referral
Study: TBD
Act: TBD



Lessons Learned

- Moving forward, physician availability is a major limiting factor that will need to be addressed for clinic sustainability (and hopefully spread)
- Cerner dashboard reporting is a very useful tool and will improve the referral process, but some manual review of referrals will likely always be necessary
- Patients are happy to come to clinic, and most do require some intervention

Impact

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity	Planetary Health
✓	✓	?	✓	✓	?

Sustainability/ Next Steps

- Ongoing work with the Cerner team to optimize sensitivity and specificity of Cerner detection algorithm
- Patient recruitment in hospital following ward transfer
- Critical Care BC has ICU recovery resources that will be distributed to all ICU survivors along with a notification that they may be contacted for a clinic appointment
- VCHRI TEAMS grant application for multidisciplinary involvement
  - Pharmacy, Physiotherapy and Nutrition are all interested!

Acknowledgements:
Dr. Zachary Schwartz, Paula Neto, Bev Ojeaga, Susnita Lynch and the CARES clinic team
Allan Chou and the team at CST Cerner
Dr. Don Griesdale
Funding from the BC SCC

Acronyms:
CCTO: Critical Care Outreach Team; ICU: Intensive Care Unit; ED: Emergency Department; MOA: Medical Office Assistant; VCHRI: Vancouver Coastal Health Research Institute

For questions or for comments, contact Marnie Wilson at: marnie.wilson@vch.ca

Hepatitis C and Syphilis screening in a Rural ED

Dr Melissa Aragon, Leslie Chan, Dr. Betty Tang

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

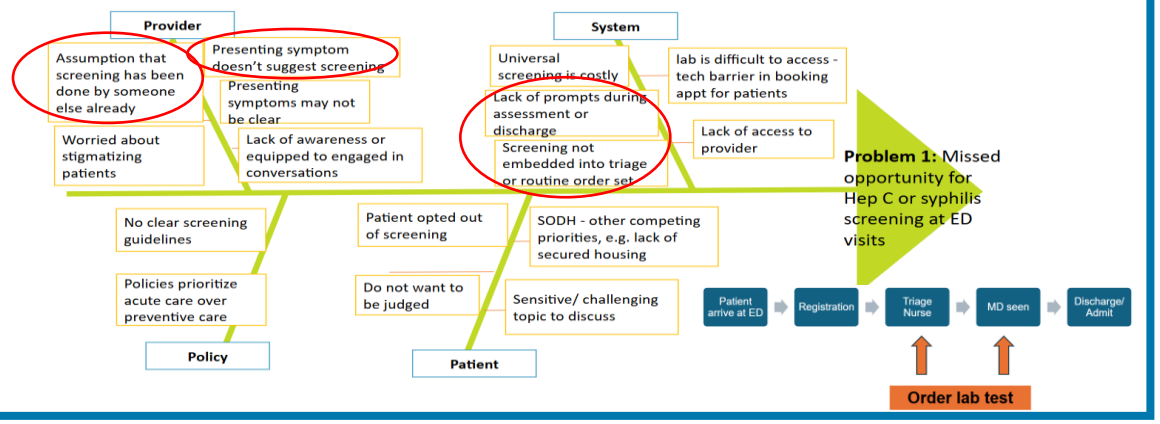
0.56% of Canadians are living with Hepatitis C and 12,500 syphilis cases were reported in 2023. Many individuals are never screened and remain unaware of infection, leading to late diagnosis, leading to preventable complications, ongoing transmission, and increased healthcare burden.

Aim Statement

Aim 1: Increase screening for Hepatitis C and syphilis in those patients having blood drawn and who meet criteria at Squamish General Hospital Emergency Department by 15% by April 2026.
Aim 2: 90% of patients who screen positive for Hepatitis C to receive confirmatory testing, and for 90% of patients with confirmed positive results to be offered treatment when clinically appropriate.*

Project Strategy

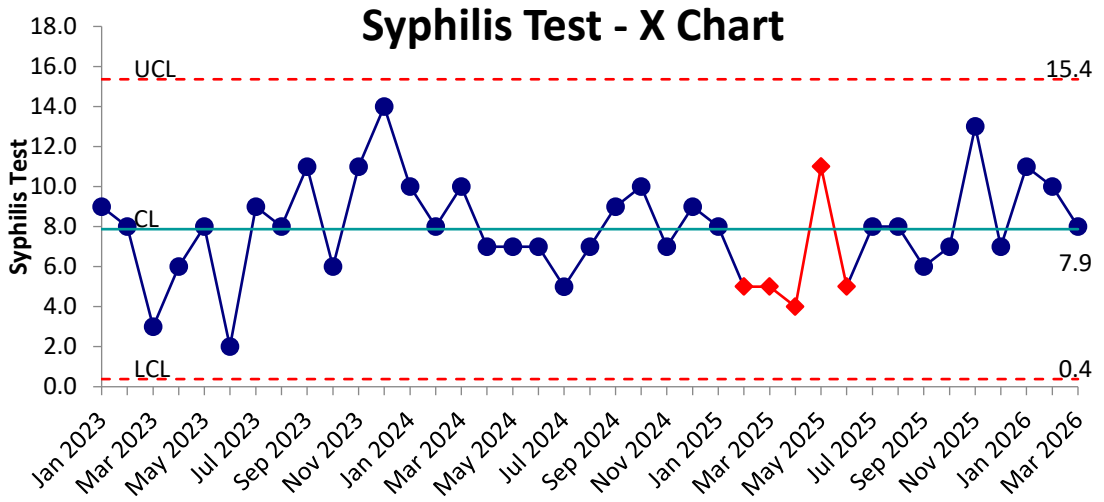
Root Cause Analysis
Fishbone (Ishikawa) Diagram

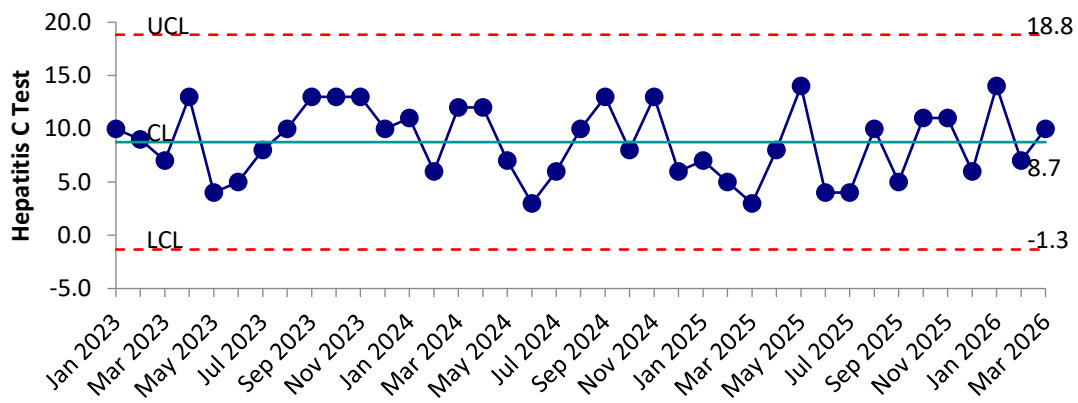


PDSA Cycles

PDSA cycles completed included journal clubs for Emergency Room Physicians (ERPs), displaying posters in the patient waiting room(left poster) and physician lounge (right poster), emailing team to promote awareness. Pending cycles include automation in Cerner.

*Aim 2 postponed due to changes in public health notifications of positive results





Next Steps

- Continue engagement with ERP to raise awareness of missed screening opportunities and reframe ED as a high-impact setting for ID screening through journal clubs, individual physician feedback and education.
- Strength partnership between ED and public health to develop screening and treatment pathways for high-risk infectious diseases.

Next proposed PDSA cycles
- Automation prompts with Cerner and implement triage opt-out ordering

Acknowledgements:
This project was supported by Squamish General Hospital and VCH Coastal Public Health.
Funding was gratefully supported by the Specialists Services Committee.
Additional contributors includes, Guanyi Lu (Data Advisor), Kenny Liu (FLEX Student), Cameron Rankin (Patient Partner).

For questions or for comments, contact Dr Melissa Aragon at: melissa.aragoncantu@vch.ca

Improving Outcomes for Pancreatectomy Patients in VGH

Mosaed Aldekhayel, Michael Bleszynski, Kevin Froehlich

Background

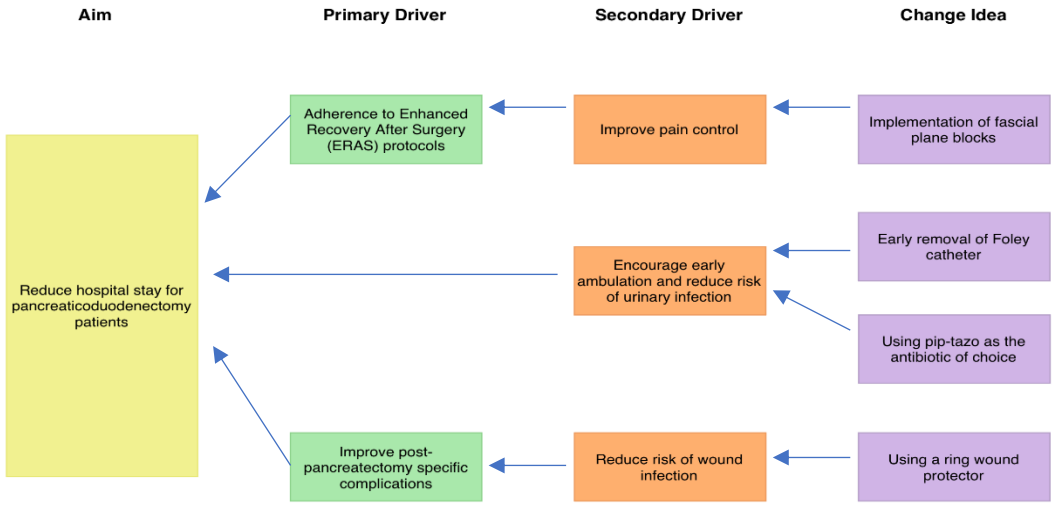
Pancreaticoduodenectomy is offered for patients with pancreatic cancer in VGH. These patients usually get epidural for analgesia post-operatively, and this can be associated with complications such as hypotension and fluid overload that can cause pancreas-specific complications.

AIM Statement

We aimed to reduce hospital stay and step-down unit stay by 2 days by March 2026 for patients undergoing pancreaticoduodenectomy in VGH.

Project Strategy

- **Outcome measures:** hospital length of stay, step down unit length of stay.
- **Process measures:** Amount of post-operative fluid management, ambulation, Morphine milligram equivalent, Foley catheter duration, nasogastric tube duration, and the presence of delayed gastric emptying, and pancreatic fistula
- **Balancing measures:** prescribed opioids at discharge, readmission for inadequate pain

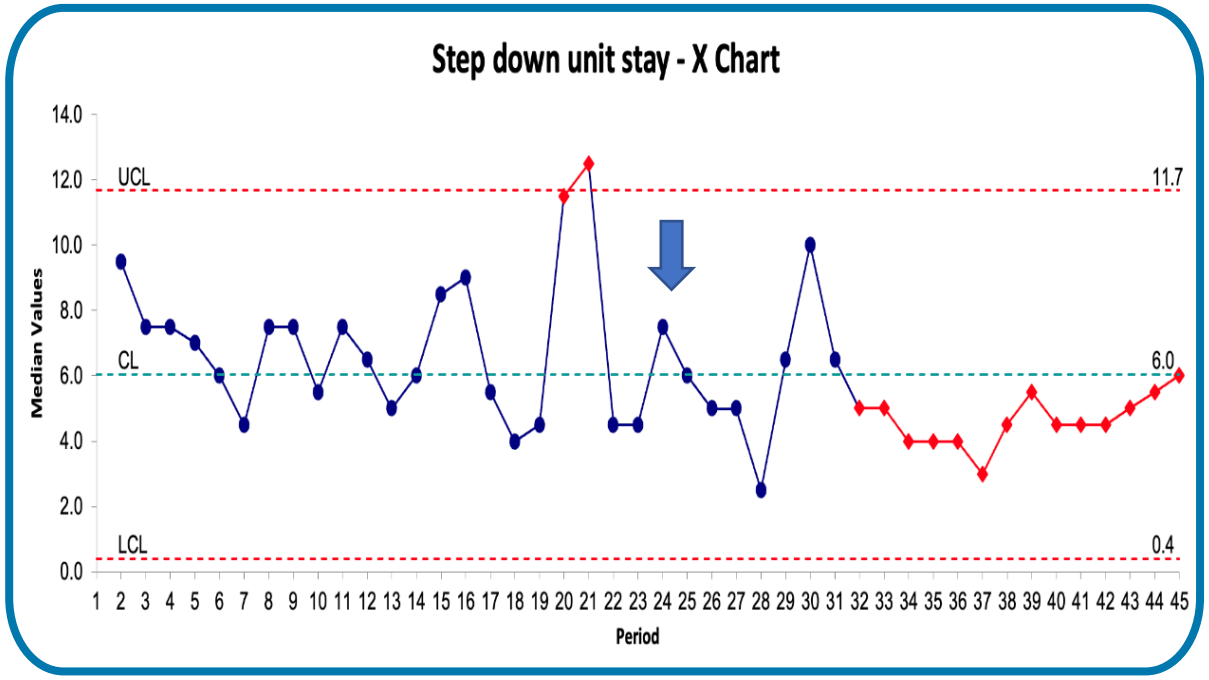


PDSA 1

Implementing fascial plane blocks as analgesia modality

PDSA 2

Changing the time of fascial plane block from end of surgery to before surgery



Lessons Learned

- This is a QI project that focuses on reducing the stay in the hospital and the step-down unit for patients undergoing pancreaticoduodenectomy by implementing fascial plane blocks as the modality to control post-operative pain. This change did show a reduction in hospital stay for 1.5 days and step-down stay for 2 days.

Impact

- **Improved Patient Experience/ Better Outcomes:** Patients with pancreatic cancer suffered less complications without compromising their pain control. Their outcomes were improved.
- **Lower Costs:** Although not measured, by reducing the hospital LOS and step-down unit stay, it might be safe to assume that this project reduces hospital costs.

Sustainability/ Next Steps

- Next step is to ensure sustainability is to establish EOI catheters as the standard of analgesia modality for all patients undergoing pancreaticoduodenectomy.

Acknowledgements
Dr. Stephanie Chartier-Plante;
Leslie Chan (QI Lead), Dr Heather Stuart &
Andrea Bisaillon (Operations)

Acronyms:
VGH: Vancouver General Hospital; QI: Quality Improvement;
LOS: Length of Stay; EOI: External Oblique Intercostal

For questions or for comments, contact Mosaed Aldekhayel at: mosaed.aldekhayel@vch.ca

Pre-operative Readiness and Engagement Program for Surgery (PREP-Surg): Turning surgical wait time into better health

Rachel Liu Hennessey, MD, FRCSC; Allison Zentner; Kelly Mayson, MD, FRCPC; Ran Ke, MD, CFPC; Amy Hao

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

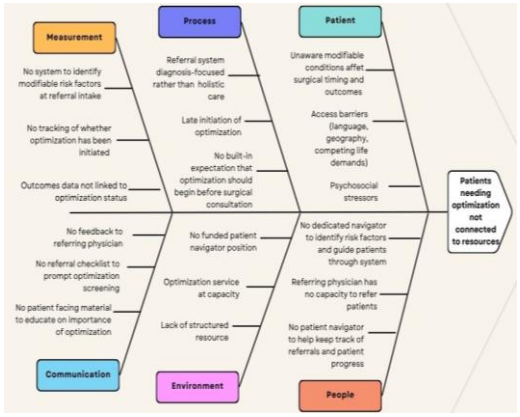
- Division of General Surgery, Department of Surgery, Vancouver General Hospital
- Long waits for surgical consult and procedure and modifiable perioperative risk factors not flagged until surgical consult → OR delays and cancellations, poor outcomes
- Patient care is passive while waiting → missed opportunity for population health impact

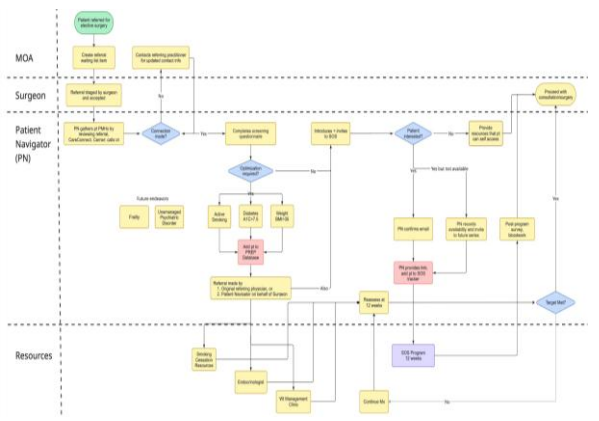
AIM Statement

By May 2026, increase the proportion of patients referred to RLH for elective general surgery at VGH who can benefit from pre-operative optimization and have structured optimization initiated prior to first surgical consultation from <10% to >50%.

Project Strategy

- Proposed changes: Screening and optimization pathway; Patient navigator role; Communication with referring physician; Structured optimization resource





PDSA 1

Plan: Checklist for referring physicians (RPs) with resources
Do: Sent checklist to RPs at time referral received
Study: No responses/acknowledgement
Act: Scrap

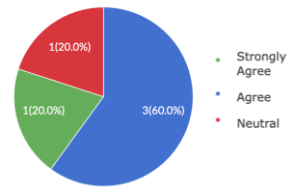
PDSA 2

Plan: Patient navigator/tracking dashboard
Do: Coop student uses pt contact script
Study: Identified shortcomings around tracking
Act: Better database creation on REDCap

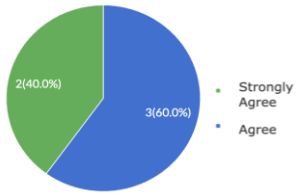
PDSA 3

Plan: SOS Program
Do: 1 cycle of 12-week program with 30 patients invited
Study: 14 patients signed up, 9 patient completed program
Act: More session times opened

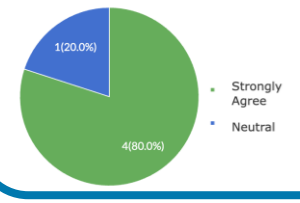
My overall health has improved as a result of the information provided by and the experience in the SOS Program.

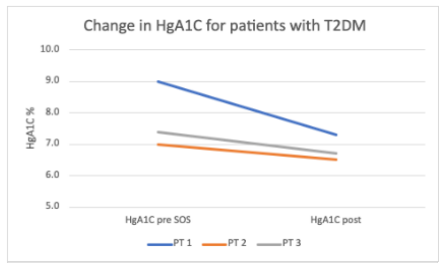


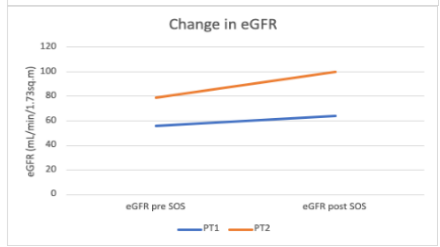
I have a better understanding of my body composition and how it affects my health.



someone else in my situation.







Lessons Learned

- Collaborate with other teams, discuss ideas
- Identify measures and plan data capture early

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity	Planetary Health
Earlier identification and **management** of modifiable risk factors ⬇ risk of postoperative complications ⬆ proportion of patients who are "surgery-ready" at consultation Structured, proactive communication and a clear plan rather than waiting passively	Addresses modifiable risk factors that have broad health impacts beyond surgical context Shift the culture of surgical readiness toward proactive, preventative care across the elective surgery population ⬇ burden of preventable complications on the healthcare system	⬇ postoperative complications reduces hospital readmissions and extended length of stay	More efficient use of surgical consultation time when patients arrive already optimized	Structured, navigator-led intake ensures optimization access is not dependent on a patient's ability to self-advocate Referral resources and patient materials designed with accessibility and diverse backgrounds in mind	⬇ preventable complications, ⬇ unnecessary hospital resource utilization (OR time, ICU beds, medications, supplies) ⬇ repeat clinic visits and emergency presentations Optimized surgical timing ⬇ waste from cancelled procedures and rescheduling

Sustainability/ Next Steps

- REDCap database for proper patient tracking
- SOS groups at 4 different times in the week
- Expansion to patients referred to other General Surgeons, other specialties
- Business plan for funding for Nurse Navigator
- Training MDs interested in leading SOS

PCAN Perioperative Clinical Action Network — Innovation Fund 2026/2027

Acknowledgements
Allison Zentner – QI Leader; Dr. Kelly Mayson – QI Mentor, Anesthesiologist, Prehabilitation Expert; Dr. Ran (Sally) Ke – Family Physician, Lifestyle Medicine Expert; SG & JW – Patient Partners; Amy Hao – Co-op Student, Patient Navigator; Shianne Reporter – MOA; Dr. Don Young, Dr. Victor Tran – Anesthesiologist, Preadmission Clinic Co-lead; Dr. Heather Stuart – Division Head, General Surgery; Jessie Rodrigue – Operations Director, Surgical Inpatient Services Funding from the Specialist Services Committee (SSC)

Acronyms:
RLH: Rachel Liu Hennesey
VGH: Vancouver General Hospital
REDcap: secure web application for building and managing online surveys and databases

For questions or for comments, contact Rachel Liu Hennessey at: rachel.hennessey@vch.ca

Expanding the Reach of Early Lung Cancer Detection with AI powered IPN detection

Renelle Myers, Tony Sedlick, Hing Yi Wong, Crista Bartolomeu, Stephen Van Gaal

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

- Lung cancer remains the number one cause of cancer death
- Incidental Pulmonary nodules are very common and have a 10% cancer incidence yet are rarely followed.
- The IDEAL study used a natural language process (NLP) program to identify, track and manage incidental pulmonary nodules (IPNS), finding a 5% cancer incidence at VGH.
- Standardized clinical workflow, is required to increase early detection

AIM Statement

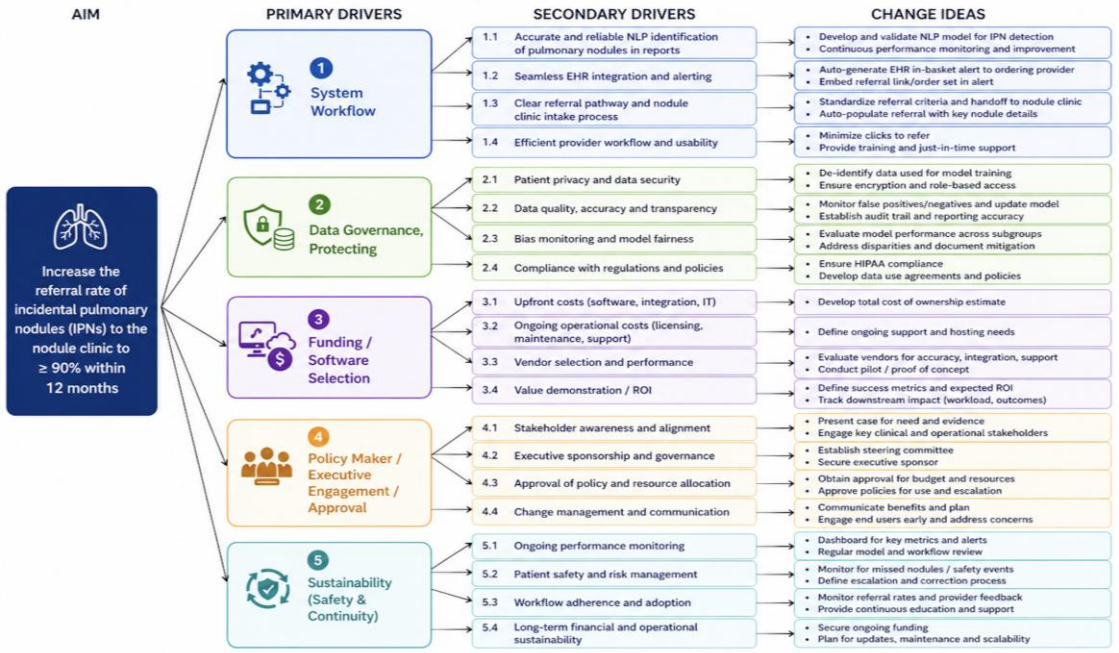
Create an automated clinical workflow to increase the referral of patients with IPNs to a dedicated nodule clinic **by 80% in 6 months.**

Project Strategy

Original Project: Develop a clinical workflow using NLP to identify all 6mm pulmonary modules – on all lung in view scans – with direct to nodule clinic.

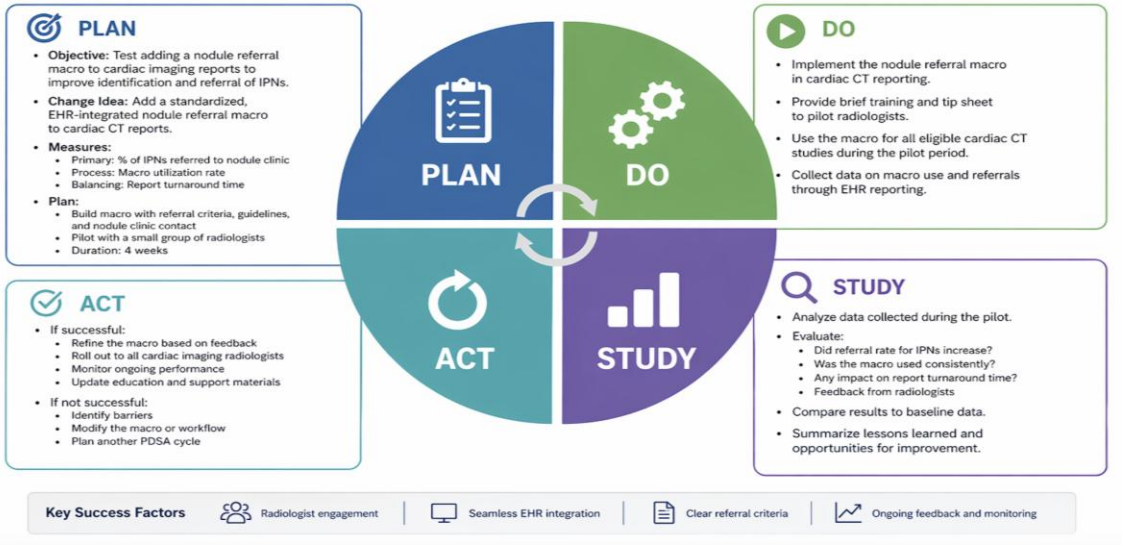
Measures: Number of referrals received in nodule clinic, number of referrals accepted. **Process:** Use study workflow **Balance:** nodule clinic wait times

Driver Diagram: Increase Referral Rate of Incidental Pulmonary Nodules with Automated NLP Identification and Referral



PDSA Cycle: Implement a Nodule Referral Macro in Cardiac Imaging Reports

Aim: Increase the referral rate of incidental pulmonary nodules (IPNs) to the nodule clinic by using a standardized nodule referral macro in cardiac imaging reports.



Lessons Learned

Think **BIG**, start **small**

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity	Planetary Health
Early detection = lives saved	Enhancing the care experience – all patient be offered guideline – based care	Early detection = cost effective	Streamlined automated pathways reduce clinician dependance and stress	Automated unbiased referral – at a "population based' level	Good clinical care creates healthier people and reduces system waste

Sustainability/ Next Steps

BCCA has approved a dedicated nurse practitioner led nodule clinic

Next Steps:

- Data collection from PDSA
- Continue pathways for provincial program
- Secure funding for NLP program

Acknowledgements
Quality improvement team including Hing Yi & Dr. Stephen Van Gaal, Patient Partner, Cameron Rankin; VCHRI ; Canadian Cancer Society; Radiologist, Dr. Tony Sedlick ; Research Manager, Crista Bartolomeu

Acronyms:
EHR: Electronic health record
ROI: Return on Investment

For questions or for comments, contact Renelle Myers at: renelle.myers@vch.ca

Does a VA-ECMO Weaning Protocol Improve Patient Outcomes at St. Paul's Hospital Cardiac Surgical ICU?

Shika Card, MD

Providence Health Care — How you want to be treated. | Vancouver CoastalHealth | PQI Physician Quality Improvement, Specialist Services Committee

Background

PHC Heart Centre is the only heart transplant center in the province with ~30-40 patients annually who require Veno-Arterial Extracorporeal Membrane Oxygenation (VA-ECMO), a life-saving, temporary form of circulatory support, ideally no more than 7 days. The rate of complications increases with longer duration on ECMO. Weaning trials should be done as soon as patients meet eligibility criteria. Best practices have shown improved patient outcomes with a formalized ECMO weaning protocol. Current practice at Saint Paul Hospital (SPH) is individualized per clinician preference and the need for a standardized ECMO weaning guide was identified by the clinical team.

AIM Statement

The duration of VA-ECLS will decrease by 30% by 12 months after implementation of a standardized weaning protocol for patients on VA-ECMO at St. Paul's Hospital Cardiac Surgical Intensive Care Unit (CSICU).

Project Strategy

Outcome Measures

Duration of VA-ECMO
Total days on support

Successful VA-ECMO weaning rate
Proportion successfully weaned

Length of CSICU stay
Total ICU length of stay

Process Measures

Timely weaning trial initiation
Trial within 24–48h of criteria

Protocol adherence
Checklist completion rate

Documentation timeliness
Time to Cerner entry

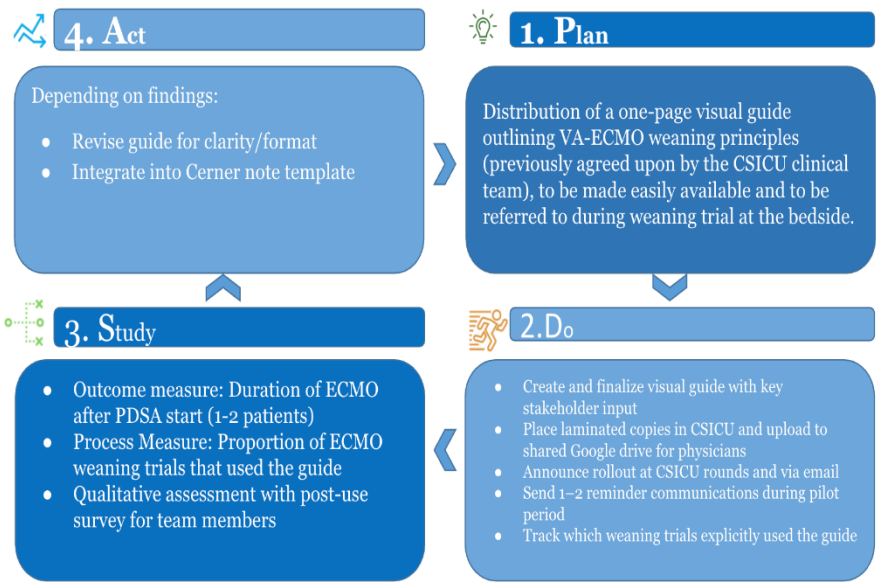
Balancing Measures

Adverse events
Hemodynamic instability or aborted trials

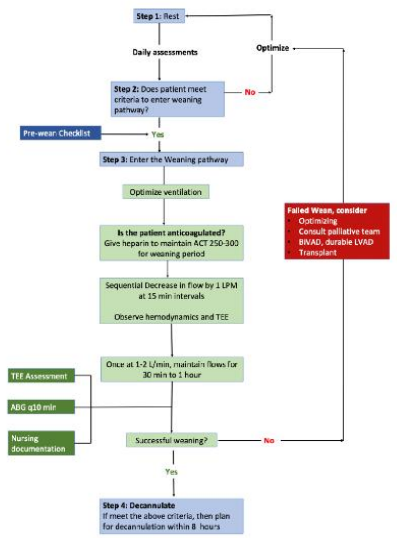
Staff workload/feedback
Perceived burden

OR cancellations
Elective cases cancelled

Planned PDSA #1



St. Paul's Hospital CSICU
VA-ECMO Weaning Principles (May 2026 Version)



St. Paul's Hospital CSICU
VA-ECMO Weaning Principles (May 2026 Version)

Step 2: Does patient meet criteria to enter weaning pathway?

Respiratory Parameters:
- SaO2>90%
- PaO2>80mmHg
- P/F ratio > 200 with circuit FiO2 < 60%
- If inadequate gas exchange, consider VV-ECLS

Pre-Wean Checklist
- ❑ Coordinate with responsible surgeon the day before wean
- ❑ Recent CXR
- ❑ Hold Feeds at 0600
- ❑ Ensure euvolemia
- ❑ Ensure echo availability
- ❑ Start anticoagulation
- ❑ Adjust to usual ventilator settings
- ❑ Milrinone to start night before or morning of wean
- ❑ If not present, discuss insertion of PAC
- ❑ Ensure blood product availability

Hemodynamic Parameters:
- MAP > 60mmHg
- HR < 100 (no arrhythmias)
- CI > 2.2L/min/m2
- SvO2 > 60%
- Stable CVP < 15
- PP > 15mmHg

Vasoactive Medications:
- NE =< 10 mcg/min
- Epi =< 5 mcg/min

Biochemical Parameters:
- Lactate < 2

Step 3: Enter the weaning pathway

Successful wean if:
- MAP drop of <20mmHg or minimal escalation of pressors
- No worsening of tachycardia (HR<100)
- CVP rise of <5
- Stable or improved TEE parameters
- Stable oxygenation/ventilation
- Stable lactate

Lessons Learned

1. Collaboration is key to success (ask for help when needed and don't do it alone) – having multiple perspectives enrichens the work
2. Learning to be patient and trust the process; ensuring all key team members feel supported
3. Project specific - challenges of coordinating individuals from different specialties; gratitude for patient partner voice

Improved Patient Experience	Lower Costs	Clinician Well Being	Planetary Health
Reduced duration on ECMO	Cost of perfusion personnel	Improved team communication	Reduced energy expenditure of powering ECMO circuit
Reduced rate of complications	Fewer cancelled elective OR cases	Ease of workflow	Less plastic and material waste
Earlier time to decision-making	Cost of equipment	Less burnout with improved patient outcomes	

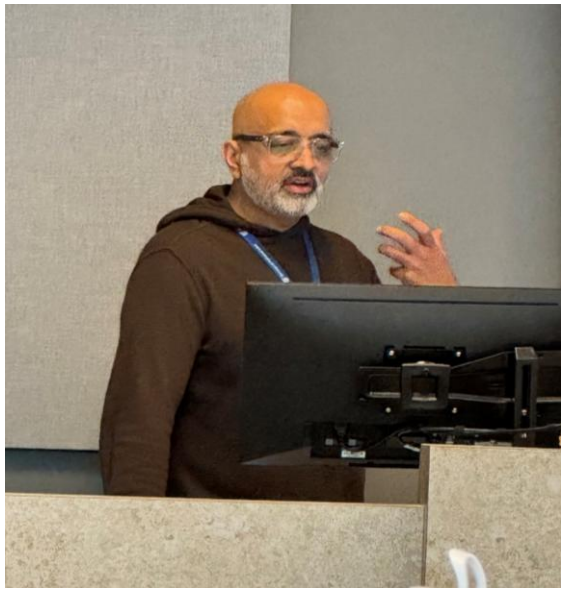
Sustainability/ Next Steps

1. Roll out the visual guide for the first PDSA cycle!
2. Educational workshops for nursing staff
3. Distribution of an informational brochure for family members/caregivers to focus on patient/family experience

Acknowledgements:
Hing Yi Wong, Krista Marcon, Bruce Raber, Lise Flyman, Scarlett Qiao, Terri Sun, Kristin Short, Andrew Woodman, Romene Sablok, Hecel Peakman,

Acronyms:
VA-ECLS: Veno-Arterial Extracorporeal Life Support
CSICU: Cardiac Surgical Intensive Care Unit
ECMO: Extracorporeal membrane oxygenation

For questions or for comments, contact Shika Card at: shika.card@phc.ca




FACULTY OF MEDICINE


Aim Statement
50% reduction in average dosage of narcotics (50% reduction in morphine equivalents) at time of discharge for post liver transplant patients at VGH over 8 months (October 2025 - June 2026)
Change ideas
Measures
What are my measures?
Outcome
Median amount of morphine equivalent in the 24h prior to discharge
Median total amount of morphine equivalent of pt discharge prescription
Process
Percentage of patients w/ CPAS or POPS consults
Median last pain score documented 24h prior to discharge
Balancing
Average reported pain scores on day of discharge
$ savings realized through reduction in Rxs
Physician Name: Andrew Gillooly


The Cordula and Gunter Paetzold
THE EDUCATION CENTRE


Staying Connected with PQI
March 31, 2026

PQI PHYSICIAN QUALITY IMPROVEMENT
Specialist Services Committee

Alumni Projects

Vancouver CoastalHealth

Providence Health Care
How you want to be treated.

Improving Health Care Consent Processes via Regional Policy and Form Implementation

Dr. Eileen M. Wong (Physician Lead QI PHC LTC)

Background

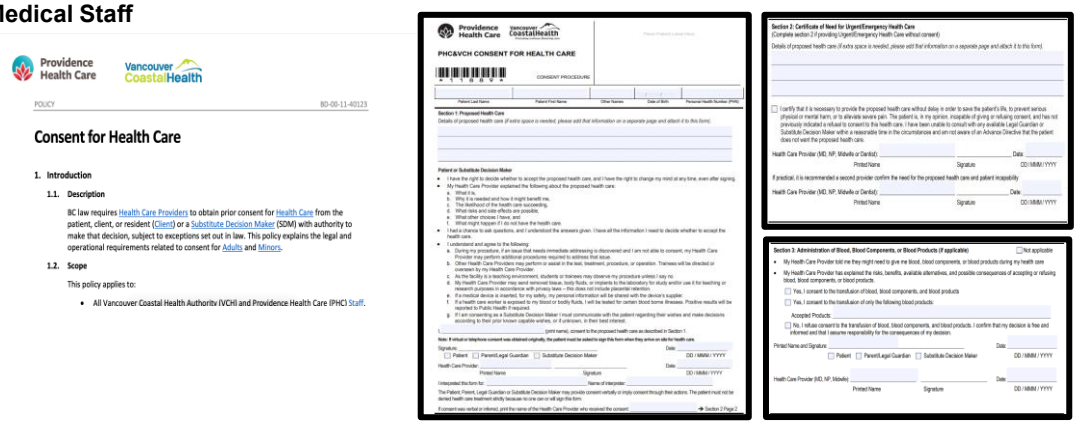
- **Ombudsperson's 2019 Report and audits: historically, poor systemic compliance with BC's legislation**. Non-psychiatric medical care provided under ***BC Mental Health Act*** instead of ***BC's Health Care Consent Act.***
- **Lack of** clear guidance and internal **resources** for Staff and Medical Staff

AIM Statement

Increase staff and medical staff awareness related to, and appropriate use of, Health Care Consent processes through implementation of new VCH/PHC Consent to Health Care Policy and Regional Consent for Health Care Form.

Project Strategy

New Health Care Consent Form and Policy with three sections rolled out to all Staff and Medical Staff



Providence Health Care | Vancouver CoastalHealth

POLICY 80-00-11-40123

Consent for Health Care

1. Introduction

1.1. Description

BC law requires Health Care Providers to obtain prior consent for Health Care from the patient, client, or resident (Client) or a Substitute Decision Maker (SDM) with authority to make that decision, subject to exceptions set out in law. This policy explains the legal and operational requirements related to consent for Adults and Minors.

1.2. Scope

This policy applies to:

- All Vancouver Coastal Health Authority (VCH) and Providence Health Care (PHC) Staff.

PHC&VCH CONSENT FOR HEALTH CARE

Process Measure: Number of Staff and Medical Staff educated about the new Consent to Health Care Policy and regionalized Consent for Health Care Form
Outcome Measures: Staff and Medical Staff feedback survey to gauge understanding

PDSA 1

Educational seminars via video-conferencing for various physician groups with time slots of 15 – 45 minutes each

Deliver education via Train-the-Trainer model as needed.

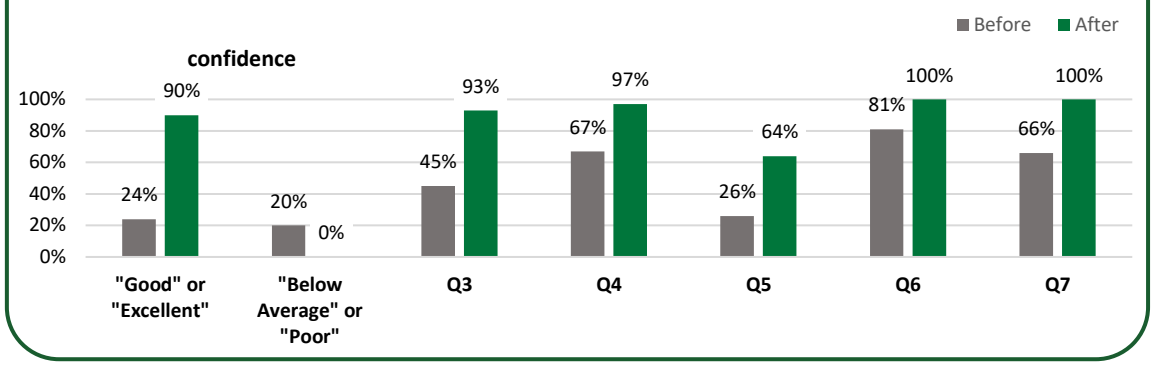
PDSA 2

(Future) Refining physician outreach including physician specific learning materials

PDSA 3

(Future) Electronic formatting of Health Care Consent form

Preliminary analysis of pre- (n=58) and post-education surveys (n=14) for **LTC/Rehab/Family Medicine** indicates that attending an education session is associated with increased confidence and understanding of the Health Care Consent Act:



Lessons Learned

- Physician champions were engaged after Project Charter completed and metrics decided i.e., not involved in the beginning; differing from physician-initiated projects
- Challenge: Finding suitable time for physicians to attend – usually evenings or during Department meetings
- Challenge: Find most effective time frame for presentation (in this case 35 minutes with 10 minutes for questions)
- Challenge: Low post-session survey completion – bias? true comprehension?
- Need robust leadership support

Impact

Improved Patient Experience	Better Outcomes	Lower Costs	Clinician Well Being	Health Equity	Planetary Health
★	★		★	★	

Positive impact through improving patient experience, better outcomes through greater provider knowledge to properly apply Health Care Consent Act and Mental Health Act leading to improved clinician well-being; positive impact also on health equity

Sustainability/ Next Steps

- Explore different ways to support adult learning especially for disengaged physicians
- Explore with physician leadership how to best integrate into practice
- Explore mandatory completion of this as a module e.g., hospital privileges (Hand Hygiene compliance)

SLT/SET priorities:
- Ongoing education including resources
- Continued auditing and monitoring for practice gaps
- Consultation and feedback

Acknowledgements
SLT/SET of PHC/VCH sponsoring the project
SQI funding this project
Maja Kolar (Director) and Aaron Leung (Manager) Legislative initiatives (PHC/VCH)

Acronyms:
VCH: Vancouver Coastal Health
PHC: Providence Health Care
LTC: Long Term Care

For questions or for comments, contact eileen.wong@phc.ca
Survey Questions and Presentation Slide Deck: QR Code

Enhancing Documentation of “Language Preference” and “Interpreter Need” in Cerner at Richmond Hospital Emergency Department

Dr. Matthew Kwok, Project Lead; Rupinder Thandi, Medical Student; Allison Zentner; QI Staff Support

Providence Health Care How you want to be treated. Vancouver CoastalHealth PQI Physician Quality Improvement Specialist Services Committee

Background

Richmond Hospital serves a highly diverse population, with over 76% of patients identifying as visible minorities, many speaking Mandarin, Cantonese and other non-English languages. Accurate EMR documentation of Language Preference and Interpreter Need is essential for equitable care, yet completion rates were low. This is clinically significant, as a 2023 local study showed increased admissions among patients with limited English proficiency, and evidence demonstrates that effective use of virtual interpretation improves communication.

AIM Statement

This project aimed to increase the completion rate of the ”Language Preference” and “Interpreter Need” fields in Cerner to ≥90% within four months at the Richmond Hospital Emergency Department.

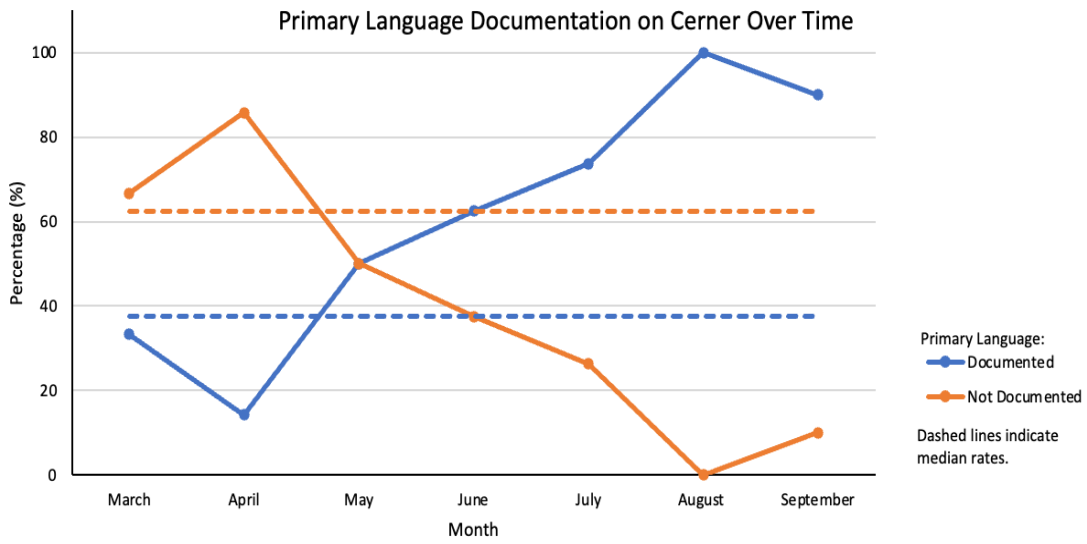
Project Strategy

This quality improvement project aimed to improve EMR documentation of Language Preference and Interpreter Need to support equitable, culturally safe care. The primary **outcome measure** was the completion rate of Cerner’s language field. **Process measures** included the number of staff trained, and a **balancing measure** assessed staff satisfaction related to workflow impact. Completion rates improved from 33% (March) and 14% (April 2025) to 100% in August and 90% in September 2025.

The theory for change was that increasing staff awareness, standardizing documentation workflows, and providing visible performance feedback would improve consistent completion and timely access to interpreter services. QI tools included baseline audits, process observation, and root cause analysis to identify knowledge gaps and workflow barriers.

Tests of change involved targeted in-services, Cerner demonstrations, visual reminders (posters and quick reference guides), huddle prompts, and the use of clinical champions. Results and plans were shared through staff education sessions, posters, and weekly unit-level digital dashboards to sustain engagement and improvement.

PDSA 1	PDSA 2	PDSA 3
Education-focused interventions (posters, quick reference guides, huddle reminders, and targeted Cerner in-services) were used to improve staff awareness and skills in completing language fields.	Clinical champions (charge nurses and triage nurses) were engaged to reinforce language field documentation at the point of care and provide peer-to-peer support.	Weekly unit-level completion rates were shared via digital dashboards to provide feedback, reinforce accountability, and sustain high completion rates.



Lessons Learned

- There is clear improvement in documentation rates from March (33%) to August (100%).
- The decrease in rate of undocumented language fields highlights the improvement in data collection and workflow consistency.
- Focusing on improving Cerner documentation of language needs has led to enhancement of communication and interpretation process, promoting equitable and inclusive care for LEP patients.

Impact

- Components of the Modified Triple Aim impacted by the project include:
  - Improving the patient experience of care (including quality and satisfaction), improving the health of populations, reducing the per capita cost of health care, improving provider/care-team, advancing healthy equity, and planetary health.

Sustainability/ Next Steps

- Documentation expectations to be integrated into onboarding materials for new staff.
- Review of completion rates on a quarterly basis as a part of routine quality metrics.
- Clinical champions will continue to reinforce importance of accurate documentation in culturally competent care.

References:
1. Kwok MMK, Sandarage R, Kahlon M. Observational study on resource utilisation of patients with limited English proficiency (LEP) at a high-LEP serving community hospital emergency department. BMJ Open Quality. 2023;12:e002053. doi:10.1136/bmjoq-2022-002053
2. Kwok MMK, Chan RK, Hansen C, et al. Access to Translator (AT&T) project: Interpreter on Wheels during the COVID-19 pandemic. BMJ Open Quality. 2021;10:e001062. doi:10.1136/bmjoq-2020-001062

Acronyms: PQI: Physician Quality Improvement; SSC: Specialist Services Committee; VGH: Vancouver General Hospital; LEP: Limited English Proficiency; AT&T: Access to Translator EMR: Electronic Medical Record

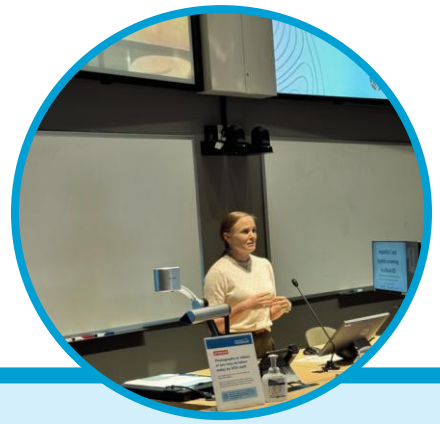
For questions or for comments, contact Matthew Kwok at matthew.kwok@vch.ca







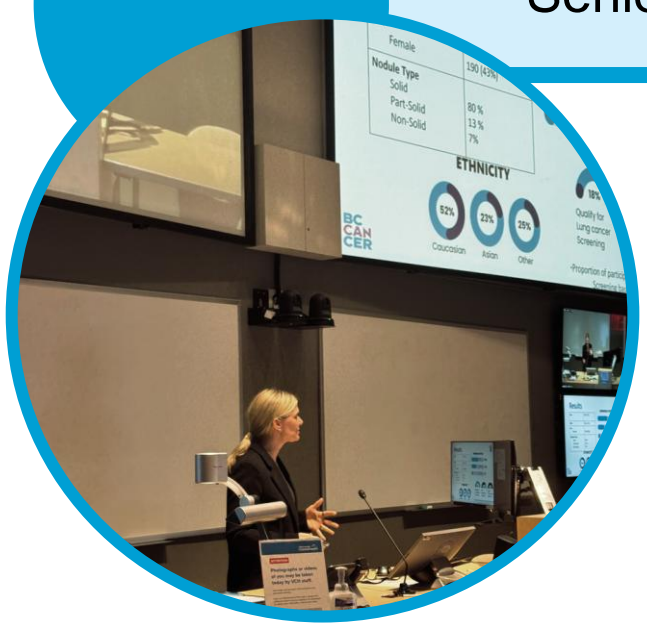


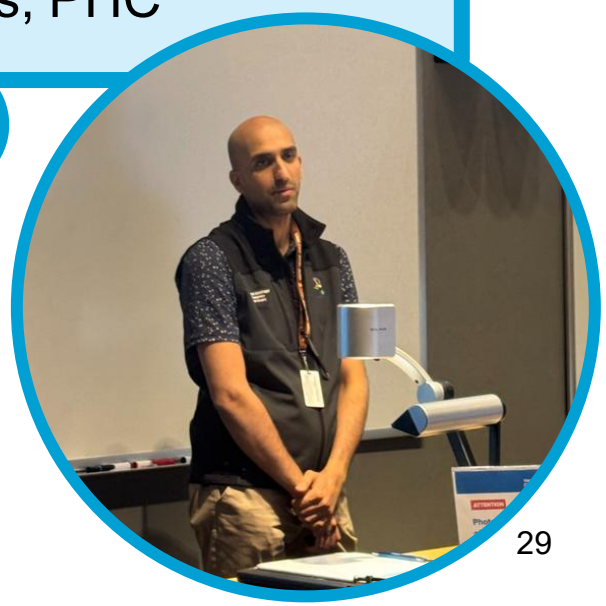


"Amidst another fast-paced and demanding year, the work this cohort has put together is nothing short of incredible, meaningful, and impactful. I was truly impressed.

This cohort has shown what it means to lead in quality, demonstrating a consistent commitment to putting the needs of patients first. All of which was accomplished by striving for safety, effectiveness, and continuous improvement. The work demonstrated by this cohort reflects both in this mindset and meaningful action."

Dr. Julia Raudzus
Senior Medical Director, Quality and Clinical Operations, PHC





SQi SPREADING QUALITY IMPROVEMENT
Specialist Services Committee

SQI Projects

Vancouver CoastalHealth

Providence Health Care
How you want to be treated.

Preventing Risks of Thrombosis through Effective Coagulation Therapy (PROTECT)

Dr. Winnie Wu, Dr. Harpinder Nagi, Dr. Tyler Smith, Dr. Puneet Vashisht

Background

- **Guideline-practice gap**: Venous Thromboembolism Risk Assessment Model (VTE RAM) recommended but poorly applied, leading to inappropriate prophylaxis in low-risk patients
- **Impact:** Patient harm risk increased (bleeding, pain, etc.), environmental burden (**porcine-derived heparin**) and increased cost
- **Origin Site:** Saint Paul Hospital Anticoagulation Stewardship Program **(**SPH ACSP) Team identified gap and initiated intervention development
- **VGH data**: Retrospective review of VGH T10C &T10H (Dec 2023–Jul 2024) revealed that **30%** of low-risk patients received unnecessary heparin and **91.5%** had no documented assessment

AIM Statement

To improve adherence to VTE prophylaxis guidelines, resulting in a **20% relative reduction** in **heparin and enoxaparin utilization** over 9 months (March to December 2025)

Project Strategy

- **Measures: Outcome**: Enoxaparin and heparin utilization; **Process**: RAM documentation rates, prescribing appropriateness, recommendation acceptance; **Balancing**: Provider/patient experience
- **Key drivers**: Improve awareness, standardization, and point-of-care prompting to support appropriate prescribing
- **Interventions:** Education sessions, screening and recommendation services (2x/week), standardized RAM auto-text, and reassessment for prolonged admissions

PDSA 1

Improved feasibility:
- Extended RAM documentation window (24h → 48h)
- Added point-of-care reminders (posters, reference cards)

PDSA 2

Reduced variability:
- Clarified RAM use (e.g., pre-existing anticoagulation, cirrhosis)
- Standardized RAM criteria in CERNER

PDSA 3

Addressed overuse:
- Introduced reassessment for prolonged admissions (≥7 days)
- Redefined criteria for complex cases (mobility changes etc.)

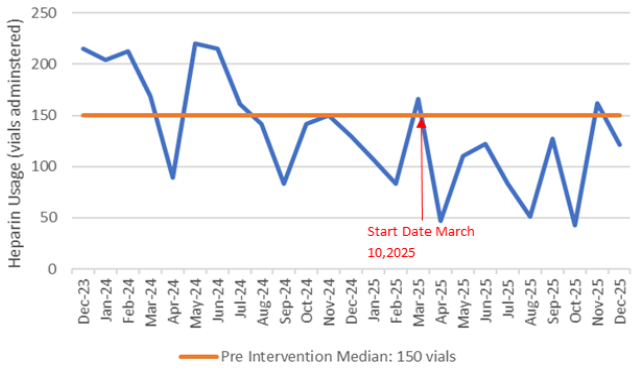


Fig. 1 Monthly Heparin Utilization

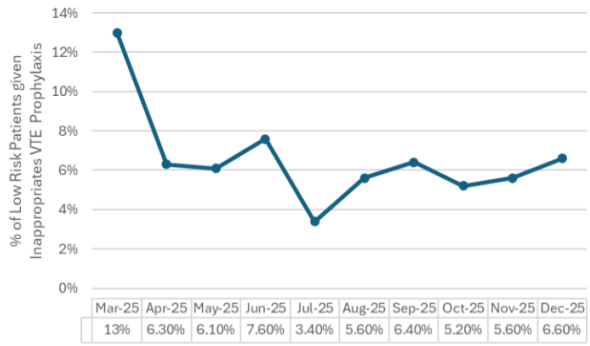


Fig. 2 Inappropriate VTE prophylaxis in Low-Risk Patients

Lessons Learned

Sustainable change requires dedicated resources and workflow-integrated prompts

- **Dedicated team & time**: Consistent education / screening and review drove impact; effectiveness declined with limited coverage
- **Transferable model**: Low-cost, multimodal approach (education + standardized tools + embedded prompts) is scalable across settings

Impact

- **Improved patient experience:** Fewer unnecessary injections; low reported discomfort
- **Clinician well-being:** Clear prescribing process with minimal workflow burden
- **Better outcomes:** Decreased inappropriate prophylaxis in low-risk patients **(30% → <10%);** appropriate use maintained in high-risk patients
- **Lower cost:** Reduced heparin utilization **(↓23%)** resulted in cost savings
- **Planetary health:** Heparin production is resource-intensive with high emissions and a fragile supply chain; reducing unnecessary use lowers environmental impact and preserves supply

Sustainability/ Next Steps

- **Sustainment:** Orientation-embedded education, standardized RAM auto-text, and ongoing clinical pharmacist reinforcement
- **Next steps:** Scale to additional units like hospitalist wards and implement technology-enabled screening like AI-supported tools in collaboration with SPH ACSP

Acknowledgements
SQI team: Manu Kalia and Amy Chang, VGH Pharmacy Department : Dr. Nilu Partovi , St. Paul's Hospital Anticoagulation Stewardship Team: Dr. Tony Wan and VGH Department of Medicine for support and funding PROTECT

Acronyms:
SQI: Spreading Quality Improvement; VTE: Venous Thromboembolism; SPH: St. Paul's Hospital
VGH: Vancouver General Hospital; RAM: Risk Assessment Model; ACSP: Anticoagulation Stewardship Program

For questions or for comments, contact Winnie Wu, Planetary Health Pharmacist at: Winnie.wu@vch.ca

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