



Physician Quality Improvement: Examples and Opportunities

Dr. Amrish Joshi, Dr. Vandad Yousefi, Enrique Fernandez







Territory Honouring

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 1.2 million people, including the First Nations, Métis and Inuit in our region, 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.





A bit about us

Dr. Vandad Yousefi

Department Head, Family and Community Practice



Dr. Amrish Joshi

Palliative MD, Richmond Integrated Palliative Care Program.

Medical QI Lead for Richmond CoC.



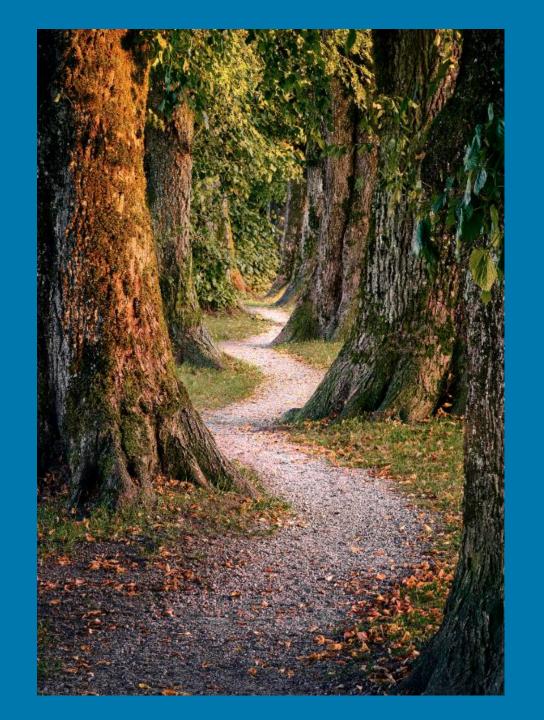
Enrique Fernandez Ruiz

Program Advisor, VCH/PHC Physician Quality Improvement (PQI)



Why are we here today?

- Define Quality Improvement
- Share two physicians' journeys in Quality Improvement Training
- PQI Funding opportunities for you



What is Physician Quality Improvement?

Physician Quality Improvement (PQI) is an SSC (Specialist Services Committee) initiative addressing gaps in quality structures relating to physician participation in QI activities and ensures those physicians have adequate dedicated technical supports (i.e. data analysts, quality improvement advisors, etc.).

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.

MISSION O

Enhancing physician QI capacity, in collaboration with patients and the healthcare system, to create a QI culture and excellence of care.

O VALUES

o VISION

Trust

We create an environment of trust through transparency, integrity, reliability, accountability, and principled actions.

Joy of Work

We promote professional fulfilment and satisfaction, including enriching relationships.

Teamwork

We work together and value the contributions of all, treating each other with dignity, respect, fairness, and empathy.

Innovation

We demonstrate continuous quality improvement through innovation and learning.

Service

We ensure the best possible care, safety, and well being of our patients and fellow providers.

Courage

We drive changes and challenge the status quo to transform healthcare.





POLL

Have you heard about Physician Quality Improvement (PQI)?

(Annotate with a stamp using Zoom / enter response in the Chat)

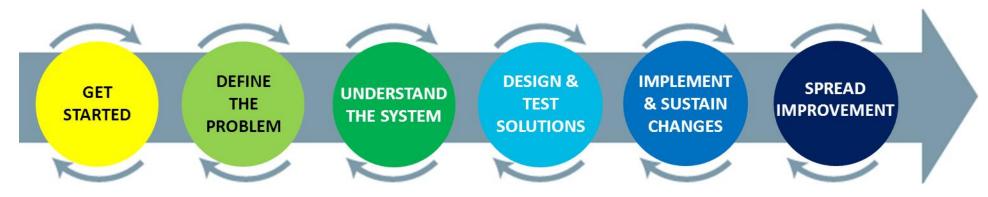
Yes, I have!

Sounds familiar...

No idea!

What is Quality Improvement?

- The systematic approach to making changes that create better outcomes, experiences and processes
- In health care, QI is focused on achieving better
 patient* outcomes and system performance*

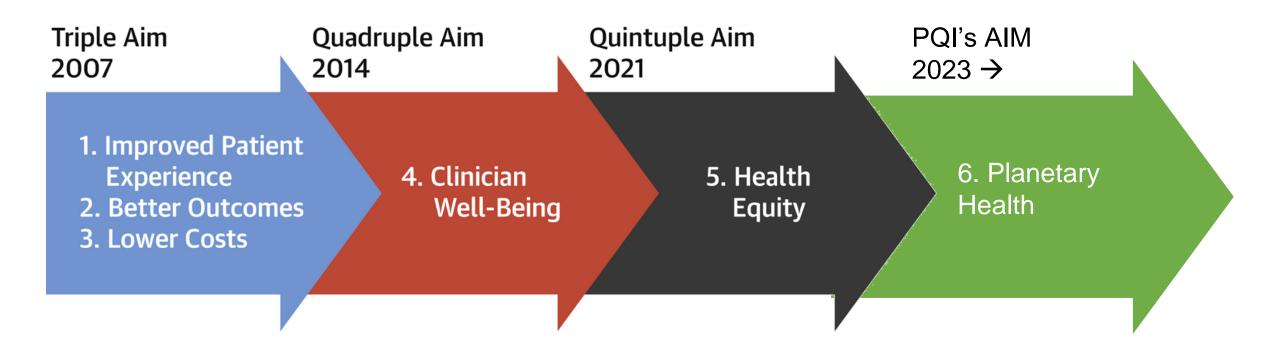


The "Know-Do" Gap

12



These are the domains that we want to make a difference



Adapted from: https://www.jacc.org/doi/10.1016/j.jacc.2021.10.018

Framework for Planetary Healthcare

Net zero healthcare: a call for clinician action

Health professionals are well positioned to effect change by reshaping individual practice, influencing healthcare organisations, and setting clinical standards, argue Jodi Sherman and colleagues

ate engagement of the clini- and our ability to thrive.2 cal community. The covid-19 pandemic has served as a wake-up call for actions taken by individual health high income health systems that resources professionals within the clinical setting, are finite and globally interdependent, vulnerable to massive surges in demands organisations with the communities they and simultaneous infrastructure disruption, and that inequities in access to care collectives in professional societies with threaten health and wellbeing for everyone. regulatory and oversight bodies.

During the first months of the pandemic, the medical community united at a that healthcare consumes finite resources historic pace, rapidly sharing information, and produces harmful pollution, accepting redesigning models of care, conserving that environmental stewardship is integral and innovating resources, and moving to our fundamental duty of care, and that towards a circular economy. In comparison, we are quickly approaching a climate the task of transforming healthcare tipping point. culture and practice to halve healthcare emissions by 2030 as recommended by industries, responsible for nearly 5% of the Intergovernmental Panel on Climate total global greenhouse gases.3 Like all Change1 seems entirely feasible.

chieving net zero emissions health and wellbeing depend.2 This planein healthcare will be possible tary health lens acknowledges crucial links only with radical and immedibetween ecological change, human health,

> Planetary accountability encompasses collective actions of clinicians in healthcare serve, and interactions of individuals and

For clinicians, this means recognising

Healthcare is one of the largest polluting industries, healthcare must rapidly and substantially reduce its greenhouse gas

strands of action: reducing emissions from healthcare services, matching supply and demand, and reducing demand for healthcare.4 Here we provide practical suggestions to help clinicians enact that framework (table 1).

Reducing emissions from supply of health

Reducing emissions from healthcare services encompasses all activities that consume materials and energy. Most healthcare sustainability initiatives focus on large scale facility operations, such as improving hospital energy performance and sourcing renewable electricity, which typically are not under the control of clinicians. However, clinicians influence building use through decisions on care settings-for example, whether to administer monitoring or treatment in the home, clinic, or hospital (which has the highest resource and emissions intensity). 5 Virtual care for patient-provider interactions that do not



Reduce Demand for Health Services









Determinants of Health

Social Health Promotion

Disease Prevention

Chronic Disease Management



Match Supply of Health Services to Demand



Primary and Community Care Services



Ensure **Appropriateness** of Care



Stewardship **Programs**



Reduce Emissions from Supply of Health Services



Green Infrastructure and Operations



Decarbonised Transport



Circular Economy in Supply Chains



Coordinated Care Delivery



Integrated Technology Systems



Virtual Care

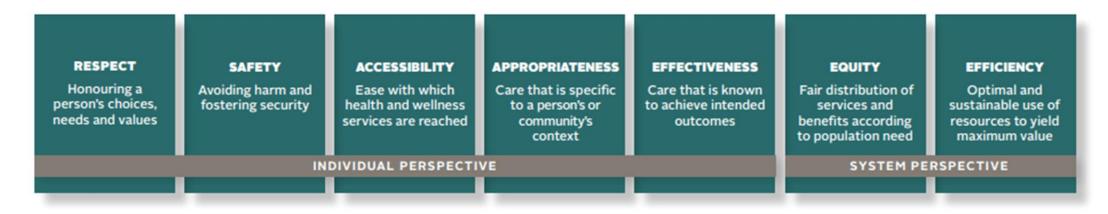
MacNeill A, McGain F and Sherman J.



Planetary Health Care: A Framework for Sustainable Health Systems, Lancet Planetary Health 2021

DIMENSIONS OF QUALITY

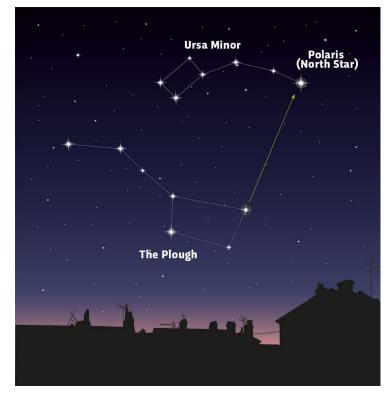
Quality is made up of multiple Dimensions of Quality. Five dimensions focus on the individual experience from both a person and population perspective: Respect, Safety, Accessibility, Appropriateness and Effectiveness. Two dimensions focus on the performance of the systems in which health and wellness services are delivered: Equity and Efficiency.



How do others define Quality Improvement?

"In essence, when used in a health care setting, a common definition involves how well the right care is delivered to the right patient at the right time."





Research VS Quality Improvement

	Research	QI
Purpose	Generate new knowledge	Generate change
Starting point	Hypothesis or question	Aim statement (goal)
Tools	Established methods, Statistical analysis	Established methods, Tools, Statistical analysis (SPC)
Data	Rigorous, "just in case", pre-established N	"Just enough", evolving N
Scope	Generalizable	Specific to environment
Time frame	Months – years	Weeks – months
Dissemination	Posters, Publication (ethics)	Rounds, Storyboards, Posters, Publication
Audience	Scientific community	Local stakeholders, Agency
End Point	Study N achieved, or saturation (qualitative)	When change occurs!

One of my QI Journeys



Research Review

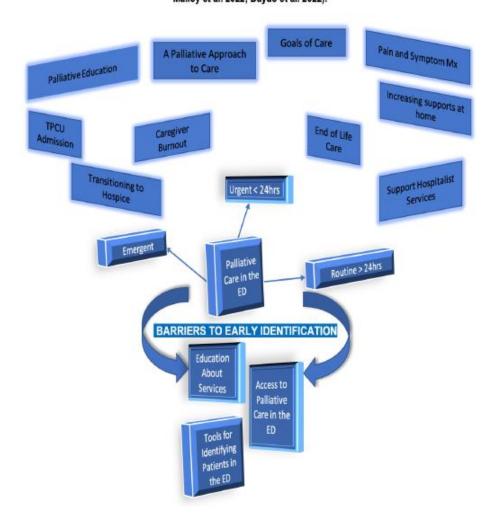
Palliative Care at the 'Doors' of the Hospital

Background

Recently, the Palliative Care Team has been re-evaluating the services provided by the Tertiary Palliative Care Unit (TPCU) within the acute care setting. Anecdotally, the team was noticing challenges with referrals: Late referrals for patients who were already admitted to hospital; lack of clarity on what services were provided by the palliative care team; and when to refer for an admission to the TPCU. A recent survey done with the team of palliative doctors over a the past few months-reasons for a consult-confirmed the concerns of the team; and highlighted possible reasons for contrasting services that 'palliative care' patients were receiving.

A recent Richmond Hospital cohort of Interdisciplinary Learning Reviews (ILRs) has looked at patient journeys from the doors of the hospital (Emergency Department) to a medical unit or the TPCU-generating several Opportunities for Improvement (OFI). The system challenges and the benefits of early palliative care involvement have been highlighted: access to palliative care services at the entrance to the hospital cannot be understated.

Figure 3. Overview of Palliative Care at the Doors (Loffredo et al. 2021; Wang et al. 2017; Malloy et al. 2022; Bayuo et al. 2022).



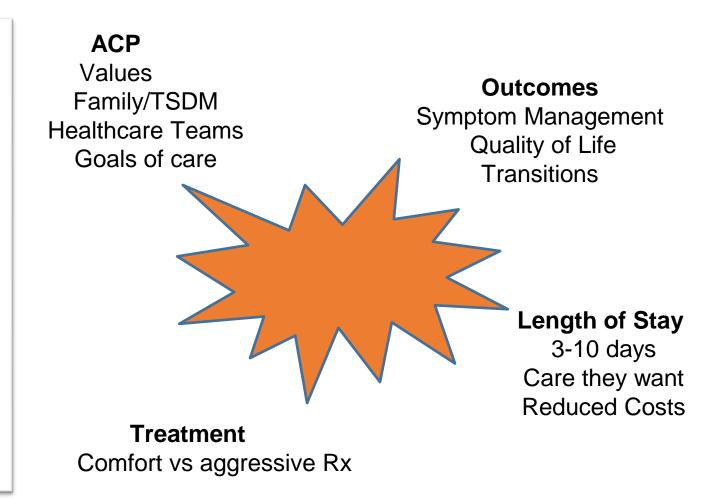
Let's P.A.U.S.E A Moment

P.A.U.S.E.

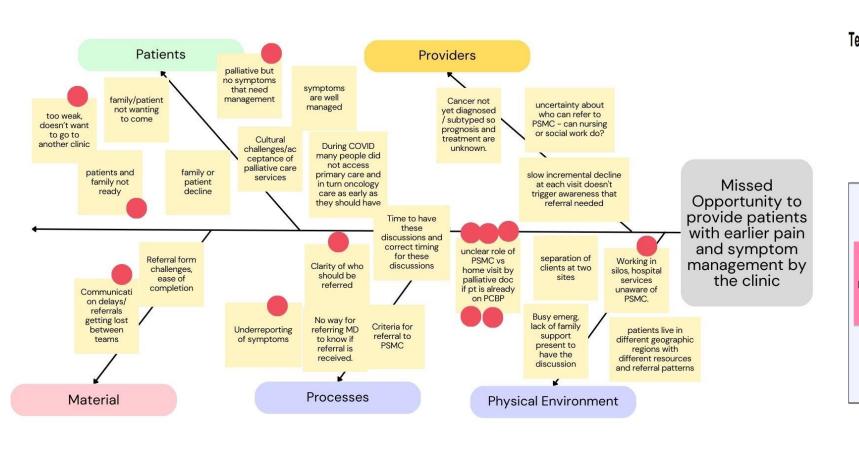
.....and think Palliative Care if

one or more of the following apply:-

- P Palliative care requested by patient or family, or, previously known to palliative care services.
- A -Advanced care planning: assistance desired with decision making around goals of care, e.g. resus status, withdrawal of treatment.
- Uncontrolled symptoms e.g. physical / psychological / declining performance status
- S -Surprise Question Do you think the patient will die in this admission or within the next 12 months?
- E ED repeat attendances over recent months.



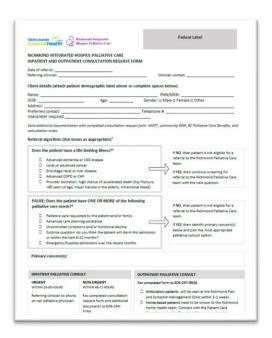
DELIVERY OF QUALITY CARE Oncology and Palliative Team



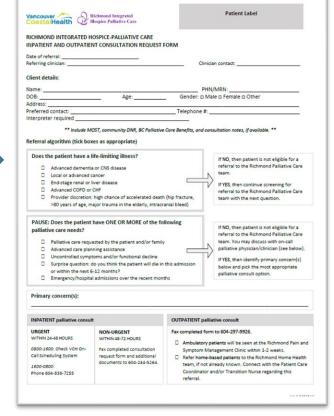
Template: Driver Diagram as to Test or Concepts One form for Secondary Drivers both, tick 1 or Primary Drivers the other or Figure out how to between coordinate Easy home care with GPs versus PSMC referral about Indication for preference for home | palliative visits process visit rather than outpatient visit fo palliative care Simplification of the form. Example rapid access form, More Clear tick box about wha Add referral rather than writing criteria to the referra referral form Early criteria as tick boxes referral to PSMC For instruction on how to go through the exercise please consult the specific IHI toolkit here:

drive.google.com/file/d/ 19vqRP7RMjQC8YnKLIN b9KJMbOkqsS7oU/

Where are we in our PDSA?



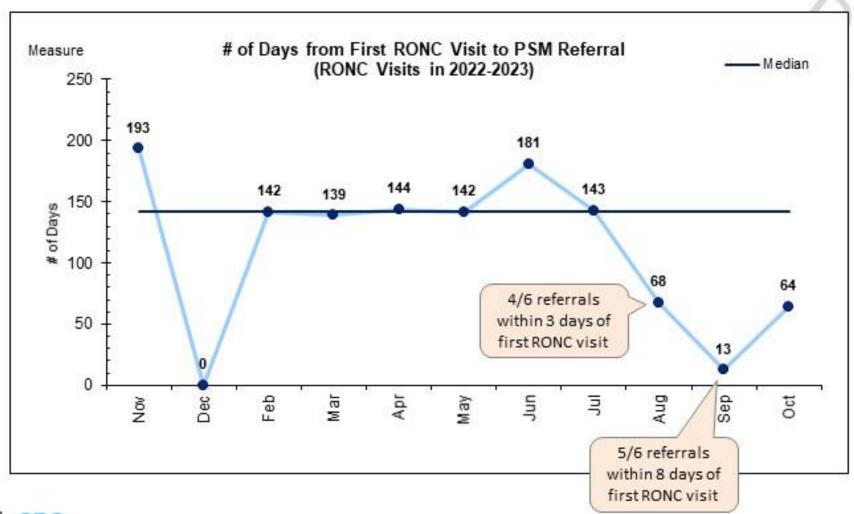






	Hospice	d Integrated Palliative Care	Patient Label				
	ND INTEGRATED HOSPIC		FORM				
Date of re	ferral:						
Referring	:linician:		Clinic	cian contact:			
Client de	tails:						
Name:_			PH	N/MRN:			
DOB:		Age:	Gender: □ M	lale 🗆 Female 🗆 Other			
Address:							
			Telephone#:				
Interpret	er required						
	INCLUDE MOST, O	OMMUNITY DNR, BCPALUATIV	E CARE BENEFITS, AND CO	NSULTATION NOTES, IF AVAILABLE			
Referral a	algorithm (tick boxes as a		,	,			
Doest	he patient have a life-lim	iding iliness?		If NO, then patient is not elig			
	Advanced dementia or CN	S disease		referral to the Richmond Pall	iative Can		
	Early or advanced cancer		1	team.			
	End-stage renal or liver dis	ease		If YES, then continue screening	ngfor		
	Advanced COPD or CHF		'	referral to the Richmond Pall	hmond Palliative Care		
0	Provider discretion: high ch years of age, major trauma in			team with the next question.			
PALISE	: Does the patient have (ONE OR MORE of the fo	llowing				
	ve care needs?	one on mone or are to	noving	If NO, then patient is not elig referral to the Richmond Pall			
	Palliative care requested b	y the patient and/orfamil	у ,	team. You may discuss with o			
	Advanced care planning as	sistance		palliative physician/clinician (palliative physician/clinician (see below		
	Uncontrolled symptoms as		V	If YES, then identify primary concern(
	Surprise question: do you		n this admission below and pick the mo				
_	or within the next 6-12 mg			palliative consult option.			
	Emergency/hospital admis	sions over the recent mon	ths				
Primary	y concern(s):				□Rout		
INPATIE	NT palliative consult		OUTPATIENT pall	liative consult			
URGENT WITHIN 24	448 HOURS	ROUTINE WITHIN 48-72 HOURS	Fax completed form to 604-297-9926.				
0800-16	00: Fax referral form to 604-	Fax completed	 □ Ambulatory patients will be seen at the Richmond Pain as Symptom Management Clinic within 1-2 weeks. □ Refer home-based patients to the Richmond Home Healt team, if not already known, Connect with the Patient Car 				
	4 AND phone palliative	consultation request					
	hysician (check VCH On-Call	form and additional					
	ng System) 00: Phone 604-836-7255	documents to 604- 244-5264.	Coordinator and/or Transition Nurse regarding this referral.				

Average # of Days from First RONC Visit to PSM Referral







Lessons Learned

- Not jumping to conclusions what's the root cause
- Trusting the process it works!
- Building a team collaboration
- Buy in from other members and help spread versus Siloing
- Operations involvement funds, support, connections
- It can be fun!

Another Example of a QI Project

Collaborative Medication Review in High Risk Elderly Patients

A Vancouver General Hospitalist -Pharmacy Patient Safety Collaboration

Polypharmacy in the Elderly

- Polypharmacy is generally defined as the concurrent use of 5 or more medications
 - Various definitions, appropriate vs. inappropriate polypharmacy (MAI, Beers' Criteria, STOPP/START)
- It is associated with higher rates of adverse events
 - Eg. Higher CV death in patients with atrial fibrillation (data from AFFIRM Trial): adjusted RR 1.3 (95% CI 1.03-1.64)*

Polypharmacy in the Elderly

- Polypharmacy is an even more important issue in the elderly because:
 - Increasing prevalence of chronic conditions in the elderly
 - Physiological changes associated with aging
 - Increase in body fat
 - Decreased first-pass metabolism
 - Decreased excretion
 - Decrease in number of receptors

Prevalence of Polypharmacy

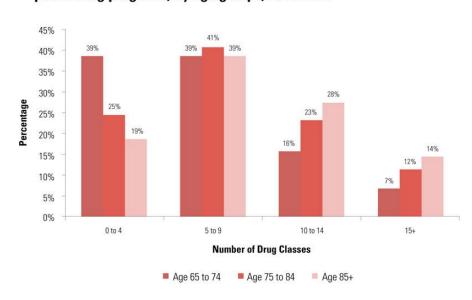
A 2008 Statistics Canada telephone survey
 (Canadian Survey of Experiences with Primary
 Health Care) revealed 27% of seniors were taking 5
 or more medications regularly

Prevalence of Polypharmacy

- Other studies suggest higher levels of polypharmacy:
 - CIHI study of National Prescription Drug Utilization Information System (NPDUIS) suggests 69% of Seniors take ≥ 5 drugs

FIGURE 2.

Percentage of claims for different drug classes among seniors on public drug programs, by age groups, 2010–2011*



^{*} The seven provinces submitting data to the National Prescription Drug Utilization Information System Database as of March 2011: Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island.

Source: National Prescription Drug Utilization Information System Database, Canadian Institute for Health Information, 2010–2011.

Prevalence of Polypharmacy

- Study of seniors admitted to hospitals with Community Acquired Pneumonia in Edmonton showed:
 - n polypharmacy after hospitalization at 1 yr
 - 45% before, 74% within 90 days after discharge, 72%
 - Large number of medication changes in the transition period
 - 80% started at least 1 new medication, 74% stopped at least 1 med
 - Mean number of drug changes:
 - New meds started:3.3 +/- 2.7, meds stopped: 2.4 +/- 2.6

- In 2014, hospitalists at VGH decided to undertake a QI project based on the principles of CWC
 - Reached out to a number of stakeholders (Medicine, nursing leadership, QI/PS)
 - Review of 5 relevant recommendation lists, narrowed down systematically

The American Geriatrics Society has 10 recommendations including:

"Don't prescribe a medication without conducting a drug regimen review"

Multidisciplinary collaboration including

- Hospitalists
- Pharmacists
- Nursing
- Family physicians (Vancouver Division)
- VCH Quality and Safety
- VCH Physician Quality

· Aim:

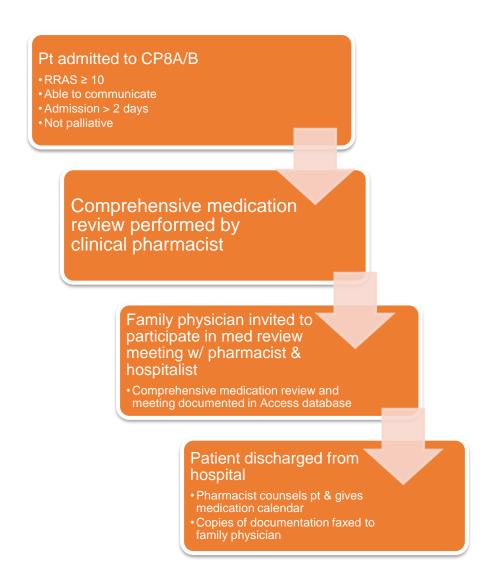
 To conduct a comprehensive medication review on all patients admitted to the hospitalist program at VGH within 12 months

Intervention

Design:

- Quality improvement initiative
- Model for Improvement approach
- Patients have a comprehensive medication review performed within 48 hrs of admission
- Collaborative discussion between hospitalist, family physician, and clinical pharmacist

Intervention



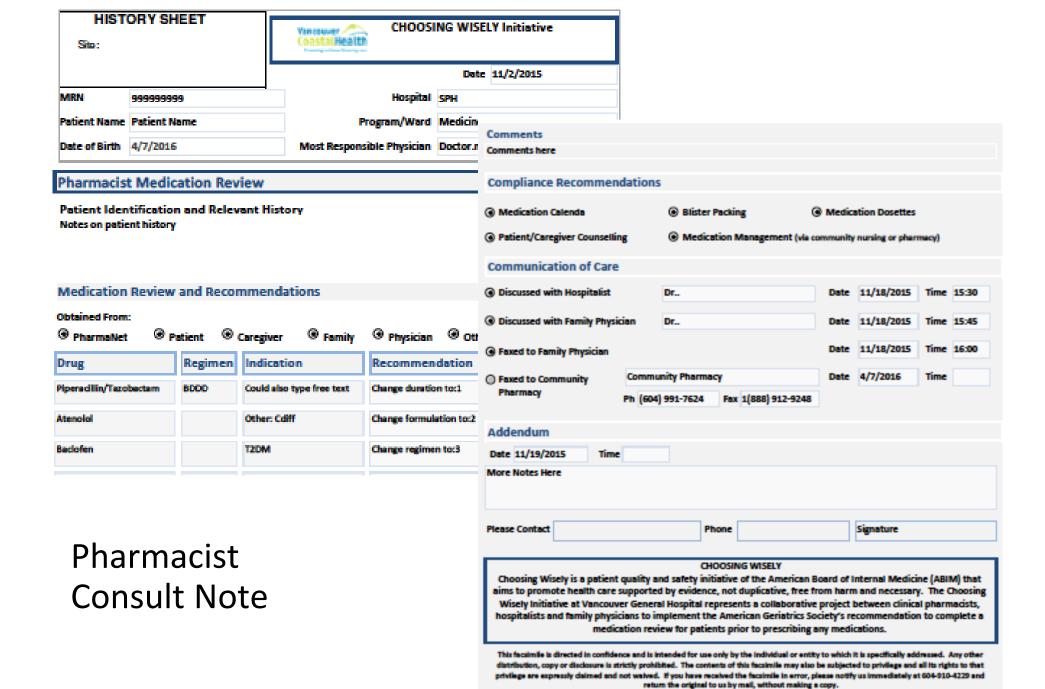
Readmission Risk Assessment Report



Readmission Risk Report for 02/05/2017

Patients on Nursing Unit

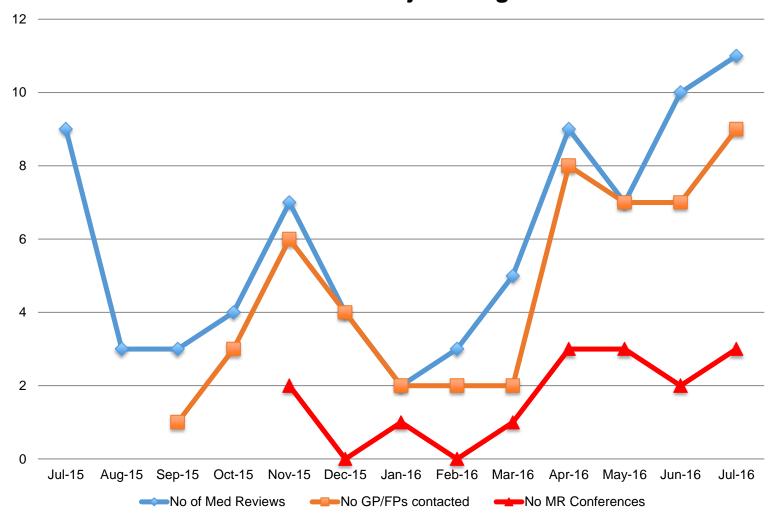
Census Date	MRN	Nursing Unit Code	Patient Service Description	Readmission Risk Flag	Admission Date	LOS
Feb 5 2017		C7E	Hospice (before 25May16: ALC 3)	High	Jan 29 2017	7
Feb 5 2017		C7E	Family Practice	High	Jan 28 2017	8
Feb 5 2017		C7E	Family Practice	High	Jan 27 2017	9
Feb 5 2017		C7E	Home Health (before 25May16: ALC 4)	High	Jan 13 2017	23
Feb 5 2017		C7E	Family Practice	Moderate	Feb 01 2017	4
Feb 5 2017		C7E	Family Practice	Moderate	Jan 31 2017	5
Feb 5 2017		C7E	Family Practice	Moderate	Jan 31 2017	5
Feb 5 2017		C7E	Family Practice	Moderate	Jan 22 2017	14



Process Variables

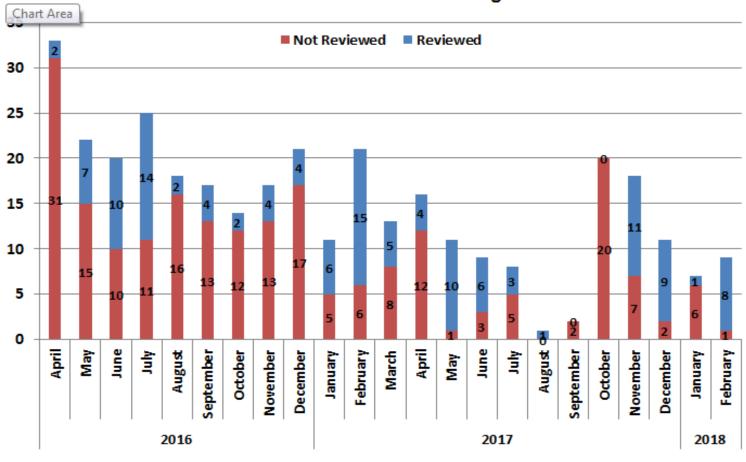
- Number of eligible patients per month/period
- Number of actual reviews per month/period
- Number of case conferences
- Communication with family physician and community pharmacist (# faxes sent/received)
- Estimated time spent by pharmacist

Med Review Project Progress



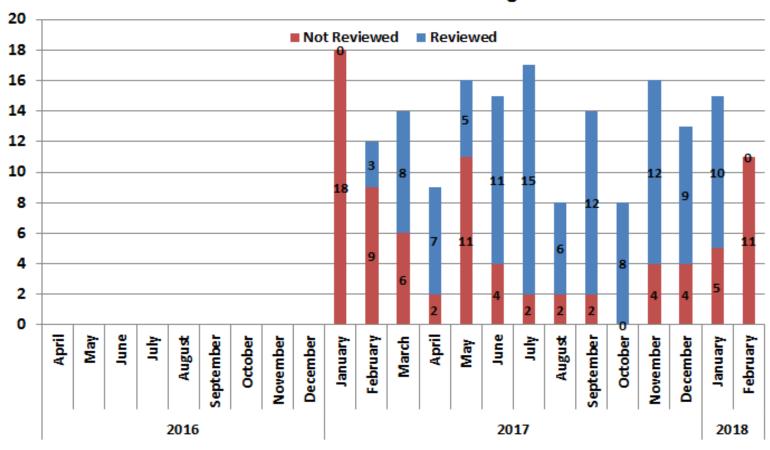
Medication Reviewed by Month at L8A





Medication Reviewed by Month at L7A

Medication Reviewed vs. Not-Reviewed of Target Patients in L7A



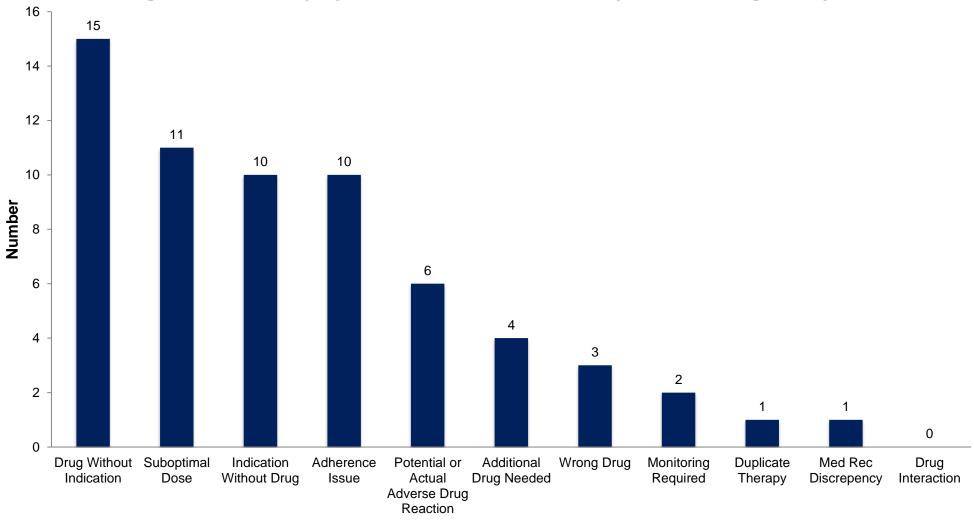
Outcome Variables

- # drug therapy problems
- # interventions (clinical and compliance)
- # meds on admission and discharge
- # Beers list medications on admission and discharge
- Proportion patients taking >5 medications on admission and discharge

	Baseline (July 2014 – June 2015)	Phase 1 (July 2015 – February 2016)	Phase 2 (March 2016 – January 2017)	Total
Number of cases	77	35	62	97
Percent male	53.25	54.29	45.16	48.45
Age (years)	79.40 +/- 11.90	77.74 +/- 6.79	85.82 +/- 5.73	82.91 +/- 7.24
RRAS	11.90 +/- 1.81	11.69 +/- 1.89	11.58 +/- 1.54	11.62 +/- 1.69
Average Number of Medical Conditions	6.26 +/- 2.78	5.88 +/- 3.71	6.08 +/- 2.39	6.01 +/- 2.91
Length of stay (days)	11.68 +/- 8.96	18.63 +/- 14.03	19.58 +/- 20.28	19.19 +/- 17.88
Readmission within 30 days (% of all cases)	9.09	5.71	11.29	9.28

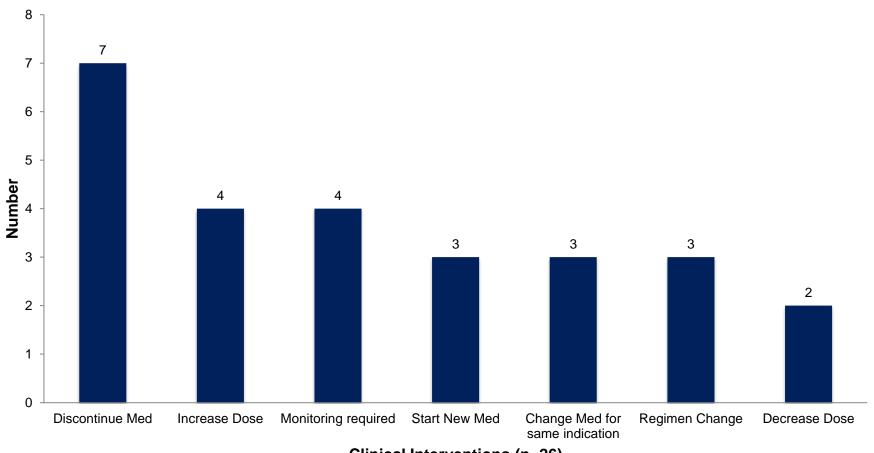
	Baseline (July 2014 – June 2015)	Project (July 2015 – January 2017)
Total medications reviewed	605	781
Number of Medications Prior to admission	8.07 +/- 3.96	8.40 +/- 3.85
Number of Meds on Discharge	9.08 +/- 3.81	9.62 +/- 3.73
Number of Drug-related problems identified	53	201
Average drug problems per patient	0.69 +/- 1.03	2.14 +/- 1.39

Drug Therapy Problems by Category



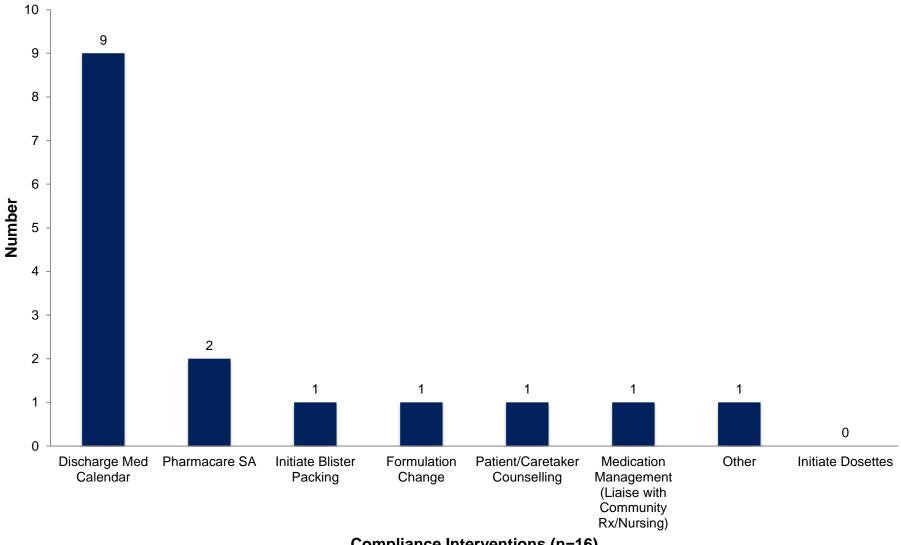
Drug Therapy Problems (n=63)

Clinical Interventions by Category



Clinical Interventions (n=26)

Compliance Interventions by Category



Compliance Interventions (n=16)

Challenges

- Project tool development bottle necks
- Continue to engage all stakeholders (eg. GPs hard to reach)
- Pharmacists time constraints and practice variability
- Expansion to remaining hospitalist units

 Need for a systematic approach to QI – tools, methodologies and knowledge How to get involved with PQI?







FIND A RENEWED SENSE OF PURPOSE: FEEL EMPOWERED TO SOLVE THE PROBLEMS YOU SEE



BREAK THE
MONOTONY: WORK
ON A PASSION
PROJECT



ACCELERATE CAREER DEVELOPMENT



CONNECT WITH TEAM
MEMBERS AND OTHER
LIKE-MINDED
PHYSICIANS

Individual QI Training

1:1 Ad-hoc, on demand, email us anytime
Sessional funding for coaching time

QI Coaching Institute for Healthcare
Improvement (IHI)
Online Open School
Learn at your own pace
5 hours sessional funding

Level 1



Two half-days, offered multiple times a year Interactive zoom-class 7 hours sessional funding

Level 2



Call for applications will open from Dec 8th to Jan 19th

Ten months cohort training from Aug-May Interactive training days and full project support from QI team and data support 100-150 hours sessional funding

Level 3



Team QI Training



Customized QI Workshop for Teams

Are you and your team ready to collaborate and drive change together? The PQI team can work with you to get you started.

Facilitation



PQI has a team of physicians and program advisors trained in QI.



Duration and Location

Depending on the goals of the team, a workshop can range from 1 hour to a half day, at a location that works for you.

We can work with groups of any size, optimal size is from 4 - 15 people (including physicians, residents, fellows, nursing staff, allied health, clerks, etc). Full-staff physicians are eligible for sessional funding at the JCC rate.

Topics Include:

- Intro to Quality Improvement and getting started with your project aim
- Process mapping to understand current state
- Identifying change ideas / opportunities for improvement
- Create a data collection plan and measures of improvement

And many more topics customized to your needs!



CONTACT US FOR MORE INFO

MedicalQuality@vch.ca

Visit our <u>website</u> or scan QR code















Level 3 Advanced Cohort Training - Apply with a QI project

- Cohort length: Ten months from August to May annually
- Interactive training days with lectures and group activities
- Full project support and mentorship from PQI coaches & faculty, program advisor, and data analysts
- Project endorsement from VCH/PHC medical and operational leaders
- Access to data, QI resources and templates
- Sessional funding: 10 or 15 hours per month

Applications open

Dec 8 – Jan 19, 2024

Check website for more details

What makes a good PQI Project?

An ideal quality improvement project:

- ✓ focuses on advancing system priorities (e.g., Ministry of Health; Health Authority; Department/Division), Planetary health
- ✓ has local, operational support
- ✓ is amenable to a QI approach, where changes are developed and then tested locally with PDSA cycles (the project is not simply an implementation of a single preconceived change idea)
- ✓ focuses on a problem that occurs frequently enough for meaningful data to be collected over a 10 month period
- ✓ does not rely on significant investment of new resources (equipment, staff, etc.)

Cancer care

Planetary Health

Addictions care

Equity, Diversity, Inclusion

Surgical Services Indigenous Cultural Safety

Seniors Care





"The joy in moving to quality improvement is that it opens doors to see and enjoy the benefit of our work in the immediate future, whereas with most traditional research only an exceptional few are lucky enough to see the benefits of their work in their lifetime."

- Dr. Jane Lea, Otolaryngology Cohort 2 Physician, Physician Coach

Thanks!

Questions?



Website: https://medicalstaff.vch.ca/working-

for-change/vch-phc-plqi/

Email: medicalquality@vch.ca

Call: Allison Chiu at 604-970-1479, or

Enrique Fernandez at 604-652-0890







Over...

550

Physicians trained in L2 Intermediate training

140

Physicians trained in L3 Advanced Cohort training

Visit our for more info on past projects & poster booklet

PQI projects funded for Family Medicine

- Dr. Evelyne Perron Improving Accessibility to Prenatal Education at St Paul's Maternity Clinic
- Dr. Kara Jansen Improving Patients' Postpartum Breastfeeding Support at SPH
- Dr. Jennifer Baxter Bringing Joy to the Workplace: Enhancing Physician Wellness in the Emergency Department
- Dr. Kimberly Merkli Optimizing Type 2 Diabetes Mellitus care in the Downtown Eastside
- **Dr. Michael Norbury** Improving Access to Primary Care for those facing challenges with Social Determinants of Health in Vancouver Community
- Dr. Nathaniel Winata Improving HIV Care at John Ruedy Clinic
- Dr. Nick Graham Goals of Care Documentation at MSJ Family Practice Teaching Service (Acute Medicine)
- Dr. Olivia Tseng Handover communication among physicians
- Dr. Brian Wang Decreasing number of patients in waiting room at the Maternity Clinic in Richmond
- Dr. Nicholas Lenskyi Increasing pneumococcal vaccination at Heatley Integrated Care Team
- Dr. Olivia Brooks Rapid Kadian Titration Optimization in RAAC
- Dr. Rayna Sivakova Decrease Superficial Surgical Site infection Rates at Sechelt Hospital for Post Caesarian Sections
- Dr. Sarah Bartlett Improve Medication Prescribing and Inefficiencies in Team Processes
- Dr. Jane Donaldson Moving Towards Ideal Care for Newborns in the Richmond Community
- Dr. Jade Koide Increasing Rate if Breast & Cervical Cancer Screening at Heatley Community Health Centre
- Dr. Simona Spassova Improve Healthcare Access to Residents at Ocean Falls
- Dr. Ashley Smith Improving Delivery of Care in the Emergency Department for Patients with Substance Use Disorders
- Dr. Bonnie Law Project TED: Reducing readmissions by communicating effectively during transfers to/from ED
- Dr. Daniel Raff Data-driven OAT Outreach
- Dr. Fiona Duncan Improving Joy in Work at a Community Family Practice
- Dr. Julie Nguyen Improving Advance Care Planning on patients >70 at Lotus Medical

And many more!

Some FAQ

- Can we offer a group session on this topic (QI) in your clinic / work area? Yes, through our Quality Quest initiative (customized QI workshop for teams)
- Would patient panel clean-up be considered a QI project? No a
 patient panel clean up is a 'just do it' activity, where as QI project
 looks to tackle a problem that requires investigation of rootcauses, testing of change ideas, and implementation of successful
 change ideas.
- Is there a way to share successful projects? Yes, refer to the Exchange database (by SSC) which contains a list of QI projects funded by DoBC in the province.