

PHYSICIAN QUALITY IMPROVEMENT COHORT 3

PROJECT SUMMARIES

Overview

The Physician Quality Improvement (PQI) program is a collaboration between Island Health and the Specialist Services Committee of Doctors of BC. PQI offers a range of training and education options that all work to build medical staff capacity to participate in and lead quality improvement.

The PQI Program is led by the PQI Joint Steering Committee, which consists of four major stakeholder groups: clinically active physicians, patient partners, Island Health representatives and Specialist Services Committee representatives. This committee is responsible for setting and supervising the strategic direction of the PQI Program.

PQI Cohort training is a one-year program in which QI skills are developed through learning action projects. The application process is competitive and guided by the Island Health PQI Steering Committee. Medical staff accepted to the program work closely with the PQI team, which consists of two Physician Advisors, a Manager and five support staff.

Cohort 3 began the program in September 2018. In September 2019, 10 medical staff graduated from Island Health PQI Cohort 3. This is a summary of their achievements.

Project Summary

Name & Specialty	Location	Project Aim
Dr Wilma Arruda Pediatrics	Nanaimo	Within 6 months, 100% of marginalized children at Georgia Avenue Elementary School without a family physician who need pediatric support will be identified and referred for school-based pediatric services.
Dr Joyce Coutts Geriatrics	Victoria	To increase availability of information specific to older adults and substance use for patients, families and care providers within Geriatric Specialty Services Outreach, by 90% by August 2019.
Dr Dee Hoyano Public Health	Victoria	To increase immunization coverage rates (all antigens) at 2 years of age for the Victoria health units by 10% by August 31, 2019.
Dr Jennifer Kouwenberg Pediatrics	Nanaimo	Increase successful rooming-in of opioid-exposed babies born to medically stabilized mothers at NRGH, to 100% by September 2019, through supporting the mother-baby dyad with a family centered and Trauma informed approach.
Dr Sarah Lea Family Practice/Addictions	Victoria	To improve identification to 100% for pregnant women who use substances and who wish to access maternity and addiction care at VGH, RJH and in the community by August 2019.
Dr Kathleen McFadden Family Practice	Campbell River	To increase the number of patients who are 70 years and older with one complex medical problem at CRH up in a chair for breakfast by 50% as of August, 2019.
Dr Jennifer Oates Geriatric Psychiatry	Victoria	By August 2019 100% of GEM team senior care recommendations will be followed by the ward teams at Victoria General Hospital.
Dr Julie Paget Anesthesia	Victoria	To create a system that permits identification of all anemic patients in Victoria scheduled for radical cystectomy with at least 21 days to optimize pre-operatively, by March 2020.
Dr Nisha Pillay Neonatology	Victoria	To improve the Mother-Babe Dyad without compromising the care of the at risk newborns through the implementation of the use of Dextrose Gel 40% at VGH by 85% by the end of September 2019.
Dr Chaundra Willms Nurse Practitioner	Nanaimo	To have 100% of NPs prescribing blood products privileged within 6 months of initiation of the process. To have 100% of NPs new to prescribing blood complete mentorship process within 6 months of privileging.

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Improving pediatric care for marginalized children & their families at Georgia Avenue Elementary School in Nanaimo

Physician Lead: Dr Wilma Arruda

Location: Nanaimo
Specialty: Pediatrics

Background:

- Many children and youth are identified as needing a pediatric assessment by schools, mental health clinicians, health nurses, social workers, family support workers, early identification and rehab specialists and other community based professionals.
- In BC, children receive an assessment by a pediatrician only after referral from another physician, most often a family physician.
- In Nanaimo some children and their families live in marginalized circumstances and have difficulty accessing services through this traditional physician referral process.
- As such, these children and their families have difficulty accessing pediatric care.

Problem:

- How many children/youth are not receiving pediatric assessments and support when needed as they may be living in marginalized situations, underserved or unattached to a family physician?
- How do schools or community providers identify these children/youth?
- How do schools or community providers assist referral/refer children/youth for assessment by a pediatrician?
- What is the impact on the child, their families and the schools when they cannot access pediatrician services?
- Is there a different model of care that can improve access and support that is different than the traditional model of referral practice?

Aim of Project:

Within 6 months, 100% of children who fit the project criteria (children at Georgia Avenue Elementary School without a family physician who need pediatric support) will be identified and referred for school-based pediatric consults through a standardized process.

Actions Taken:

1. Develop and implement standardized processes at Georgia Avenue Elementary School for children and their families who are not attached to a family physician, are underserved, or are living in marginalized circumstances and cannot access pediatric services through the standard referral pathway.

Specific actions included:

- identification of children who need pediatric assessment and support
- obtaining parent/guardian consent for referral/assessment

- referral of children to pediatric services

2. Evaluate the outcome of the assessments

Data Analysis:

Referral criteria were developed in collaboration with school district representatives. Data was collected through the development and use of a standardized referral tool that captures:

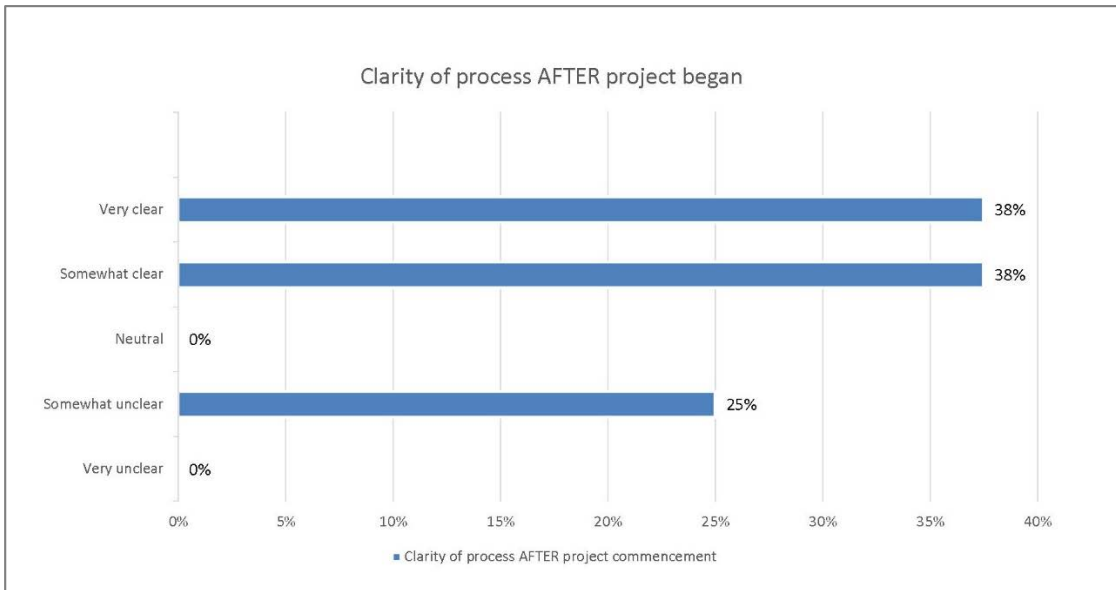
- Health system interactions
- Previous interventions
- Psychosocial barriers (poverty, transience etc.)

80% of children referred had no GP or were unable to access a GP

80% of referrals resulted in a face-to-face pediatric assessment.

40% of children seen were referred for other health services

Feedback from school-based team on the clarity of the process



Lessons Learned & Next Steps:

- Due to their life circumstances some children do not receive pediatric assessment when it is needed. These are children who are not well represented in Ministry of Health data and should be seen as “invisible” by the health care system. Early findings suggest that an alternative model of care more appropriately supports these children’s health care needs and, as such, will support the health and wellbeing of the child in the family structure.
- Include front-line staff and “process owners” on your team to champion your QI efforts.
- Understanding the current state and its gaps from the perspectives of the people doing the work is essential in planning improvement.
- Next steps include trialing of revised Student Referral Form by the School Based Team, implementing “one piece flow” process of referral through to assessment using one form that doubles as a data collection tool.

Addressing Problematic Alcohol Use in Older Adults

Physician Lead: Dr. Joyce Coutts

Location: Victoria General Hospital
Specialty: Geriatrics

Background:

- Older adults experiencing problematic alcohol use can be very successful in making changes to unhealthy drinking, however few supports exist, in Island Health or elsewhere, to address the unique needs of this population
- A key recommendation in the 2018 report by the Canadian Centre on Substance Use “Improving Quality of Life: Substance Use and Aging” calls for a greater awareness of the issue among healthcare providers and caregivers
- GSS outreach teams are in a unique position to understand the complexities of this issue

Problem:

- Older adults inconsistently receive information to improve understanding and support change related to problematic alcohol or other substance use
- Due to accessibility and prevalence of use, as well as biologic effects, alcohol is the psychoactive substance producing greatest risk and range of harms among older adults
- Harms related to problematic alcohol use are far-reaching and impact the individual, their loved ones, the healthcare system and society as a whole
- BC is the province with the highest rate of alcohol related hospitalizations and older adults have higher rates than any other age group

Aim of Project:

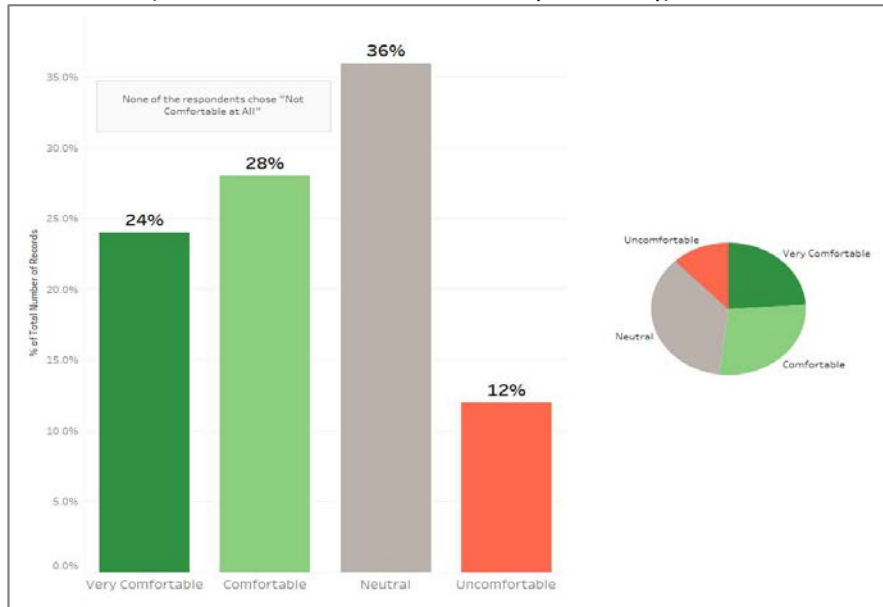
Increase availability of information specific to older adults and substance use for patients, families and care providers within Geriatric Specialty Services Outreach, by 90% by August 2019.

Actions taken:

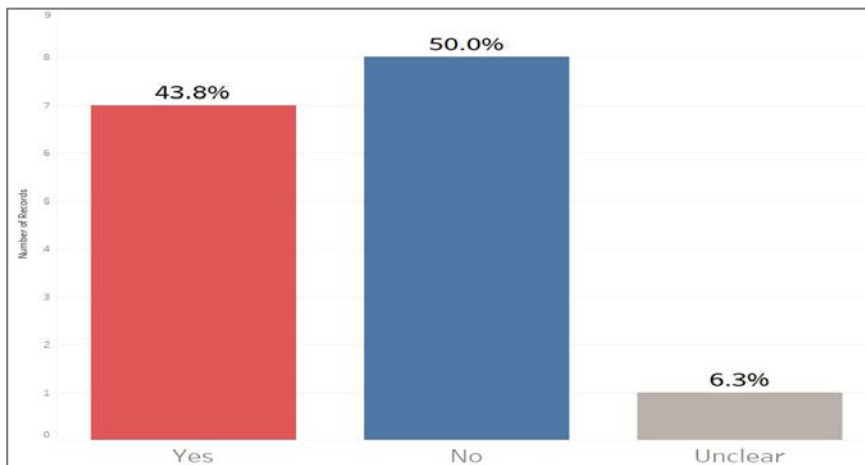
- Staff survey identified a resource need of “written information for patients and families”
- Development of a pamphlet, with evidence informed content, to support clinicians, patients and their loved ones in beginning to address problematic alcohol use

Data Analysis:

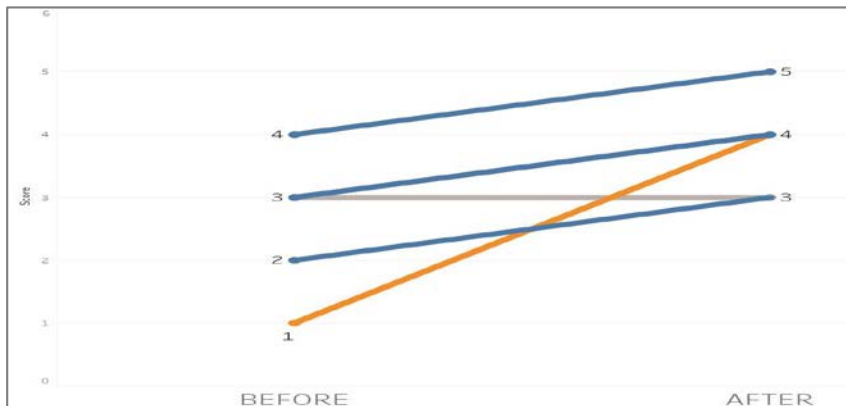
PRE-CHANGE SURVEY Question: How comfortable are you providing specific support for older adults who use substances? (n=25; November 2018 Staff/Participant Survey)



PRE-CHANGE PATIENT CHART REVIEW: Substance Use of Concern (n=16; August 2018 Patient: GSS Outreach PowerChart review)



PATIENT VOICE SURVEY Comparison of score difference question: On a scale of 1 to 10, how much did you know about alcohol and healthy aging (before and after reading the pamphlet)? (n=6; July 2019; Data: respondents)



Lessons learned & Next steps:

- Improvements in quality of life and health outcomes result when older adults have the information and supports they need to make healthier choices about alcohol. There are many places within Island Health where older adults experiencing problematic substance use interface with the system of care and many opportunities for care providers to initiate conversations that can inspire healthy change. Having a tool to support conversations with patients about this issue is one step toward improving care for this vulnerable population.

A Shot of Prevention: Improving Childhood Vaccination Coverage for Island Health

Physician Lead: Dr. Dee Hoyano

Location: Victoria

Specialty: Public Health

Background:

- Immunizations rates for children on Vancouver Island fall well below provincial and national targets (95% coverage) and put individual children and communities at risk of disease outbreaks.
- 2 year old immunization coverage rates have not been improving over last several years and hover around 75-80% for South Vancouver Island

Problem:

Drops in immunization coverage have been noted after 12 months of age. This is likely multifactorial including: increased family demands (return to work for mothers), bottlenecks in appointment availability, lack of consistent reminders or recall, misinformation or vaccine hesitancy.

Aim of Project:

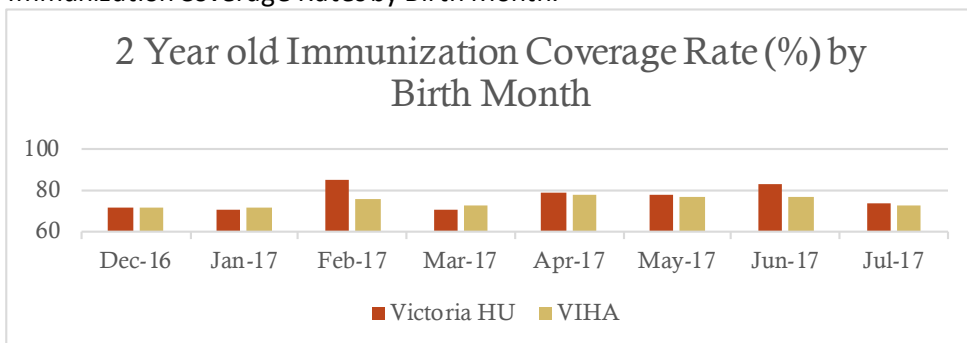
To increase immunization coverage rates (all antigens) at 2 years of age for the Victoria health units by 10% by August 31, 2019.

Actions Taken:

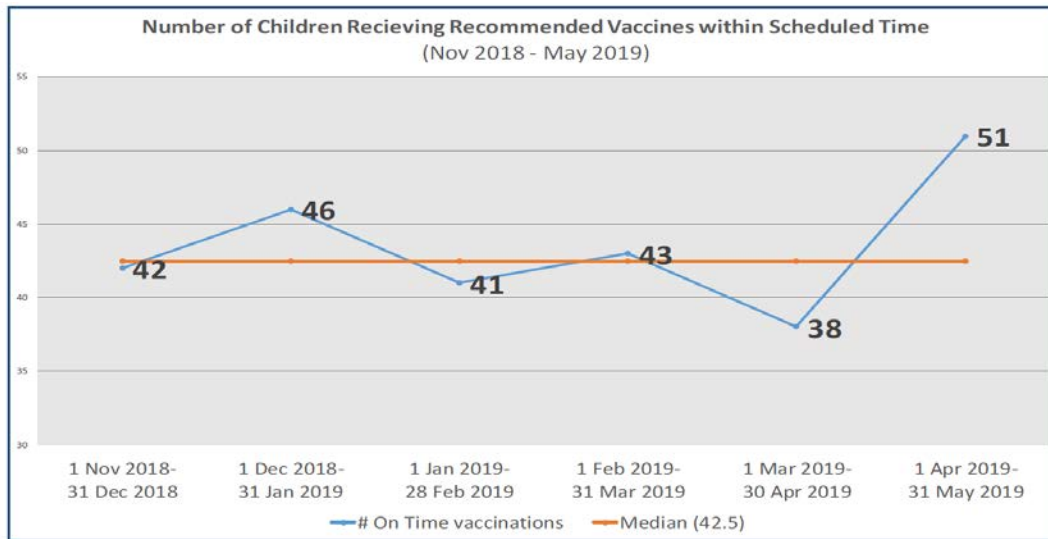
- Reminder system including email, text and other modalities (selfie booth)
- Standardized chart note for overdue patients to capture patient/family barriers to immunization
- Consistent recall system for overdue vaccinations

Data Analysis:

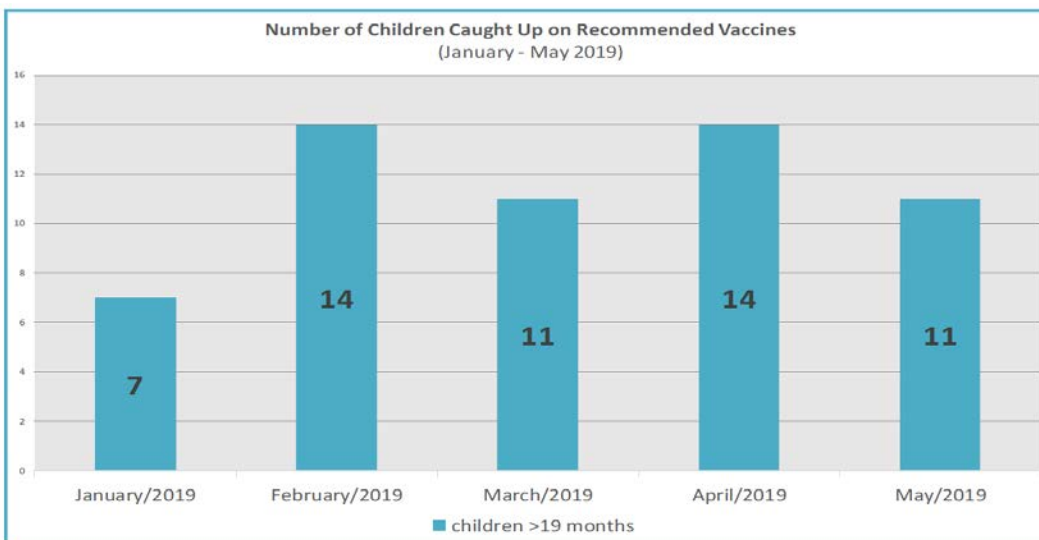
Immunization Coverage Rates by Birth Month.



Number of children receiving vaccines on time during study period



Number of children receiving catch-up vaccinations during study period.



Lessons Learned & Next Steps:

- Partial immunization contributes to most of the coverage gaps, not complete refusal of vaccination. This is an opportunity for action.
- Current patient reminder systems are inadequate, rely on outdated technology, manual tasks and patient initiative
- No consistent recall system is in place region-wide, staffing limitations and concern about patient-provider relationships are barriers
- Patients are open to email and texting reminders, high acceptance rate
- Explore other ways to celebrate families that vaccinate their children and motivate them to make this the social norm
- Recall activities should be standardized into program deliverables and monitoring so that it is not at risk with shifts in resource allocation

The Cedar Circle Project

Physician Lead: Dr. Jennifer Kouwenberg

Location: Nanaimo Regional General

Specialty: Pediatrics

Background:

Canadian Pediatric Society Position Statement 2018 “Managing infants born to mothers who have used opioids during pregnancy”:

All infants at risk for developing neonatal opioid withdrawal should be evaluated using a reliable, valid neonatal withdrawal score instrument.

Information and guideline for HCPs on managing infants born to opioid-dependent mothers should outline the continuum of care. Strategies to support keeping mothers and infants together and breastfeeding are essential. Providing non-pharmacological interventions, such as skin-to-skin contact, developmental positioning, comfort measures, minimizing environmental stimuli, ensuring adequate nutrition and providing pharmacological treatment when indicated, are key components of a comprehensive plan.

Problem:

Opioid-exposed mother-baby dyads are separated at Nanaimo Regional General Hospital (NRGH) when infants show signs of withdrawal and are admitted to Neonatal Intensive Care Unit (NICU). This leads to:

- Newborns separated from mothers
- Impaired early attachment
- Reduced breastfeeding
- Increased withdrawal symptoms
- Increased need for opioid replacement
- Increased length of stay
- Reduced incidence of discharging babies into their mother’s care
- Greater MCFD apprehension

Aim of Project:

Increase successful rooming-in of opioid-exposed babies *born to medically stabilized mothers* at NRGH, to 100% by September 2019, through supporting the mother-baby dyad with a family centered and Trauma informed approach

Patient Voice:

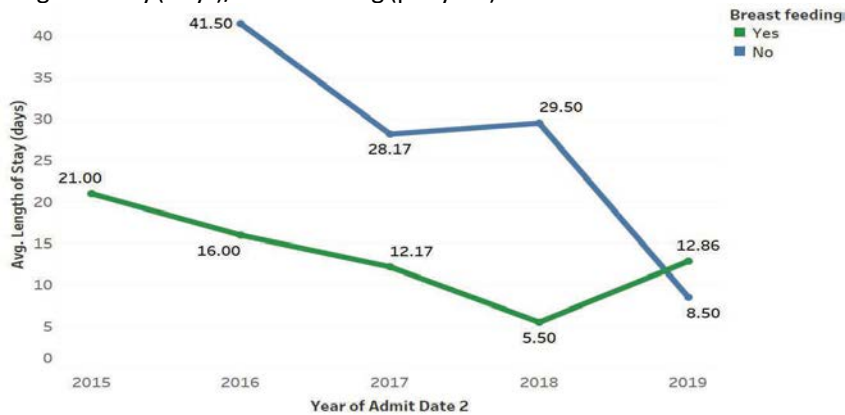
- “Once you become a mother, you become sacred” – Connie Paul (Snuneymuxw Leader, RN)

Actions Taken:

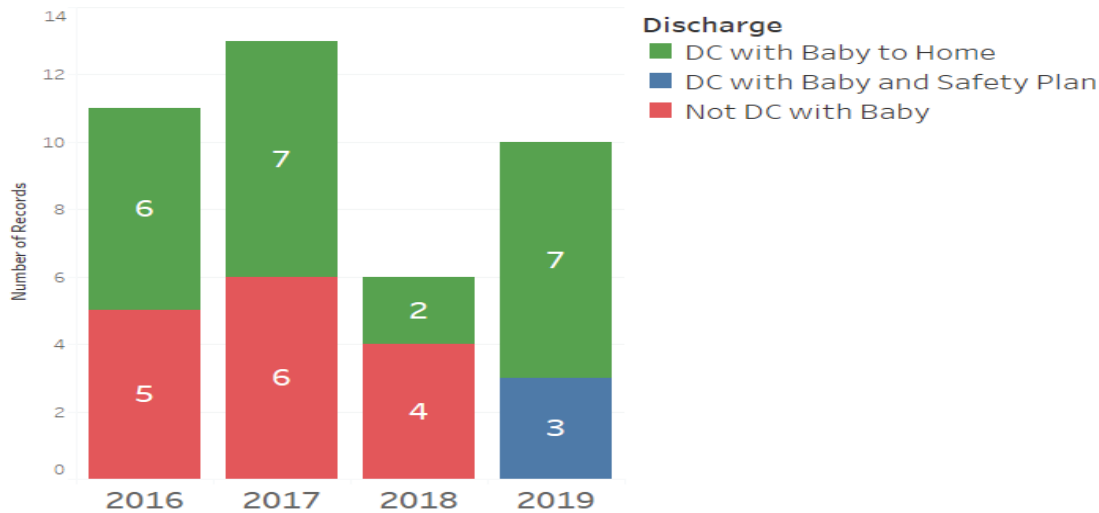
1. Moving all ‘at-risk’ babies to NICU with mother
2. Antenatal Consultation for at risk families
3. Consistent Care Provider (Pediatrician) to provide consultation service regarding overall care while baby admitted to hospital
4. Education for Staff -Trauma Informed Practice
5. Training of Nurses on pediatrics with scoring tool & education on planned model of care - ongoing
6. Education for Pediatricians regarding planned rooming-in model of care

Data Analysis:

Average length of stay (days)/Breastfeeding (per year)



Discharge Outcome by year



Lessons Learned & Next steps:

Rooming mother and baby dyads is associated with improved incidence of ongoing breastfeeding, improved success of discharge of intact mother-baby dyad, reduced need for pharmacologic intervention for infant withdrawal symptoms.

Rooming in is now seen as national standard of care and is endorsed by the Canadian Pediatric Society (CPS) in institution recommendations and guidelines. Improved outcomes for mother and infant are seen, including improved success of ongoing breastfeeding at discharge, improved attachment and bonding, reduced symptoms of withdrawal and therefore reduced requirement for pharmaceutical intervention with opioid replacement. Patients prefer a rooming-in approach as it involves the family in family-centered care. Staff education in Trauma Informed Care aids delivery of care in a culturally safe and sensitive environment, acknowledging the past impact of trauma, and seeking to minimize propagation of further potential trauma induced by separation from newborn infant while in hospital, during a critical stage of bonding and attachment.

Faces of Motherhood: Supporting women in pregnancy affected by substance use

Physician Lead: Dr. Sarah Lea

Location: Victoria

Specialty: Family Practice/Addictions

Background:

- Women are at highest risk for developing a substance use disorder during their reproductive years (ages 18 – 44)
- Linked with harmful maternal and fetal consequences
- Critical time to engage women in treatment/support
- Motivation to change unhealthy or harmful behaviors is increased during pregnancy
- Pregnant women with substance use disorder tend to avoid care for fear of judgment, history of trauma, fear of stigmatization and ultimately for fear of losing their baby to care

Problem:

- At present, there currently numerous gaps in care for this vulnerable population
- There is no mechanism in place to identify and characterize the features of women who use opioids during pregnancy.
- There is no system in place to ensure they can access low barrier, co-located services for addictions and maternity care.
- There are no policies or standardized care plans to ensure these mothers get access to timely acute care services
- Improvements need to be made to allow for rooming-in for this mother-babe dyad

Aim of Project:

To improve identification by 100% for pregnant women who use substances and who wish to access maternity and addiction care at VGH, RJH and in the community by August 2019.

Actions Taken:

- Baseline survey data collected
- Process inventory of access, services and ideal resources and barriers collected with HerWay Home staff
- Staff Resource list developed
- Clinical order set developed
- Physician education event on cannabis and opioid use, and community services available
- In collaboration with Shared Care Committee a patient journey map including current state and ideal future state developed

neonatal opioid withdrawal syndrome (NOWS)

- Continue to build community supports and resources with groups such as Emergency Medicine providers, Divisions of Midwifery, and Divisions of Family Practice
- Advocate for supportive housing and a shift in culture with MCFD to support mother and baby dyad in early parenting

Up for Breakfast: Optimizing care for frail elder patients at Campbell River Hospital

Physician Lead: Dr Kathleen McFadden

Location: Campbell River Hospital
Specialty: Family Medicine

Background:

Evidence demonstrates that encouraging patients to sit up for their meals is associated with better health outcomes and decreased lengths of stay.

Problem:

At Campbell River Hospital patients over age 70 are provided with meals in bed

Aim of Project:

To increase the number of patients who are 70 years and older with one complex medical problem at CRH up in a chair for breakfast by 50% as of August, 2019.

Action Taken:

Engagement event for multidisciplinary care team

Encourage patients to sit up in a chair for their meals by introducing a patient-driven “score card” tool and a white board magnet to remind staff and visiting family/friends.

- Distributed to patients meeting project criteria.
- Completed scorecards provided to Unit Clerks.
- Measure uptake via number of scorecards submitted.

Staff survey to increase input into change ideas and elicit feedback

Data Analysis:

Location of patient during meal – baseline data collection

- 81.8% of patients 70+ eating meals in bed with a tray.
- 32.35% of patients required assistance getting up and/or eating.
- Patients between 80-89yrs least likely to be up for meals (36.36%)

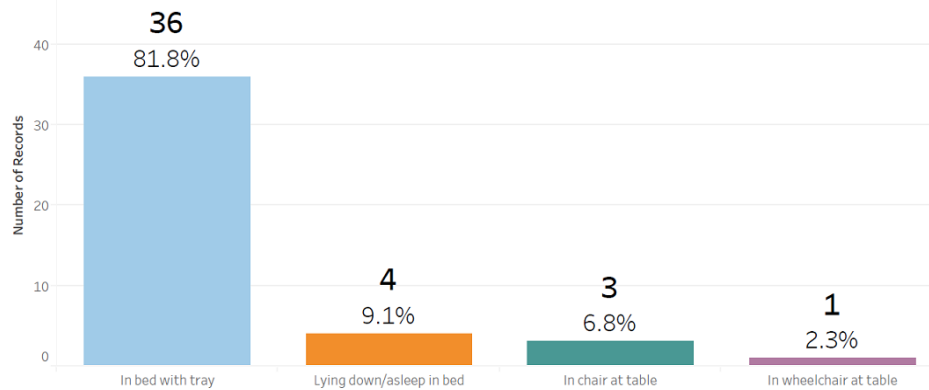
Physician Quality Improvement (PQI)

Optimizing Care for Elder Patients at CRH

February - March 2019

Location of patient during meal

Number of Records
Percent of Total



February - March 2019

Encounter Site: Campbell River Hospital

Patient: 70+years in age, admitted into hospital

Physician Lead: Dr.Kathleen McFadden

Data Analyst: Curtis Bilson

Data Source: Primary Data Collection

PQI is a collaborations between Island Health and the Specialist Services Committee

Lessons Learned & Next Steps:

- Multidisciplinary team were highly committed to C.A.R.E. values and understand the systemic drivers of the problem very well, but also feel that their workflow leaves no time for additional support activities like getting patients up for breakfast
- Patient transfer impact the ability to scope the project within a small team
- Opportunities for physicians to engage broadly with the multidisciplinary team are limited and could be improved through leveraging existing quality structures
- Volunteer services may be valuable additions to the QI team
- A holistic Island wide approach to improving care for the elderly would be of value

Promoting better senior friendly hospital care at VGH with the Geriatric Evaluation and Management (GEM) team

Physician Lead: Dr Jennifer Oates

Location: Victoria General Hospital

Specialty: Geriatric Psychiatry

Background:

- Frail elder patients account for over 60% of acute care stay days and over 80% of major hospital harms (delirium, UTI, pneumonia) occur in elderly patients
- The need for senior friendly care has been promoted with many reports and initiatives in Island Health over at least the past 5-10 years

Problem:

- Elder care remains inadequate. Basic care practices and documentation are uncompleted and harmful/neglectful care is not uncommonly provided
- The GEM team provides recommendations and support to acute care teams caring for the frail elderly but recommendations are often not followed or not passed on and carried forward.

Aim of Project:

GEM team will support VGH ward teams in providing evidence-based senior friendly care with clear recommendations, care process monitoring and improvement strategies

By August 2019 100% of GEM team senior care recommendations at Victoria General Hospital will be followed by the ward teams.

Actions Taken:

- Literature review on existing, successful senior friendly hospital care
- Contact CADTH (Canadian Agency for Drugs and Technologies in Health) for elder care research and guidelines
- VGH care staff survey
- Focus group and process mapping

Data Analysis:

GEM Referrals Data (for June-November 2018)

- Fairly even distribution (20-25% each) between 75-79, 80-84, 85-89 and 90-94 age groups
- Dementia, delirium and falls/fracture most common primary diagnoses; dementia, depression and delirium most common RFR

- Referrals to GEM are definitely increasing (trend data for October 2017-January 2019 show doubling from previous median since October 2018)

Staff survey results

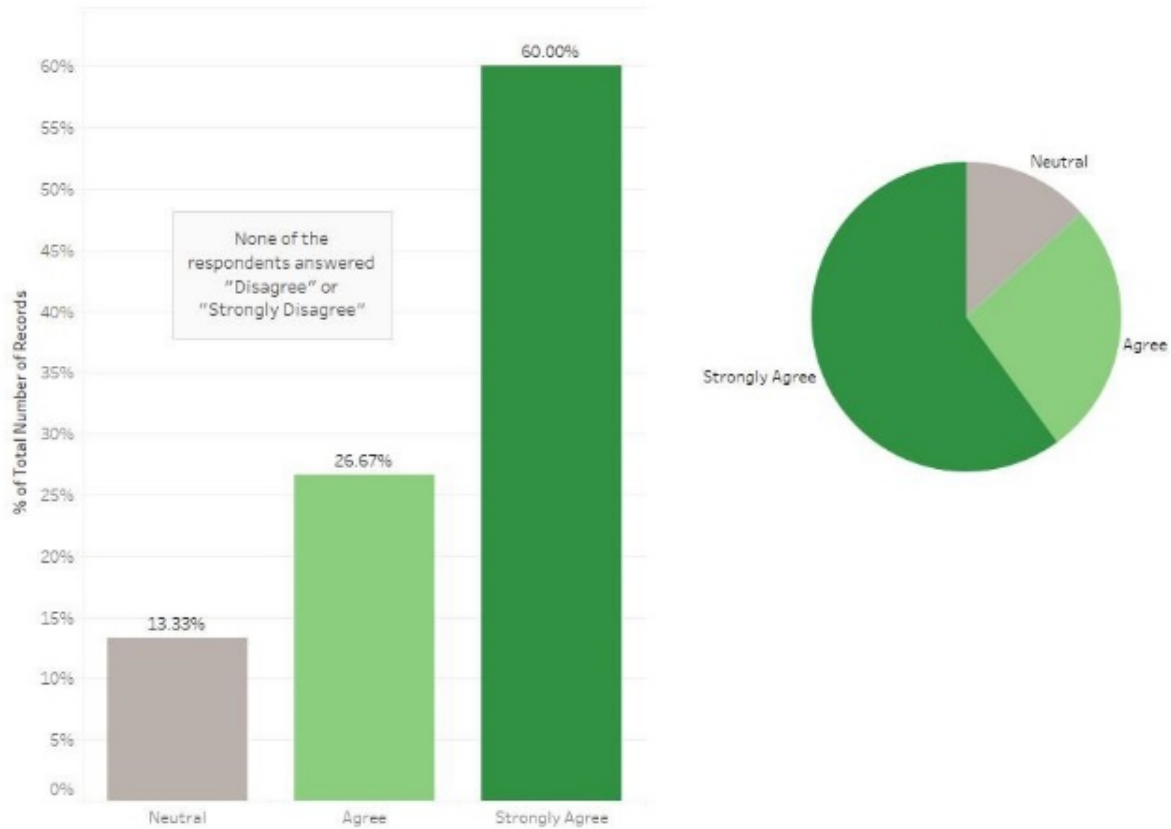
Physician Quality Improvement (PQI)

Senior Friendly Hospital Improvement - VGH

December 2018

Staff Survey

Q2: The involvement of the GEM team is helpful in supporting the ward team in the care of patients who are frail and elderly or have dementia.



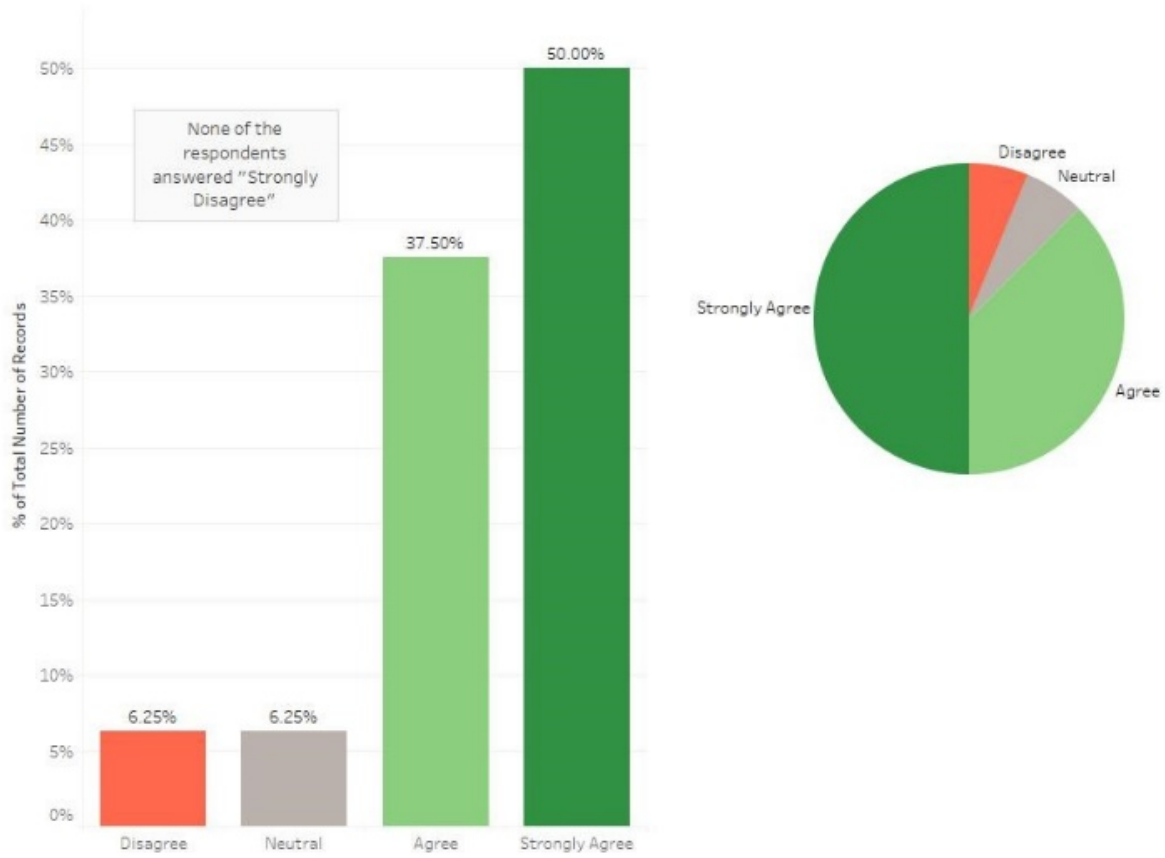
Physician Quality Improvement (PQI)

Senior Friendly Hospital Improvement - VGH

December 2018

Staff Survey

Q6: I have the training necessary to follow the recommendations of the GEM team.



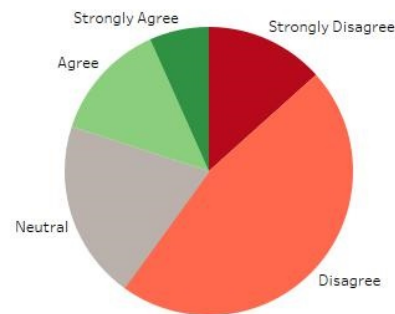
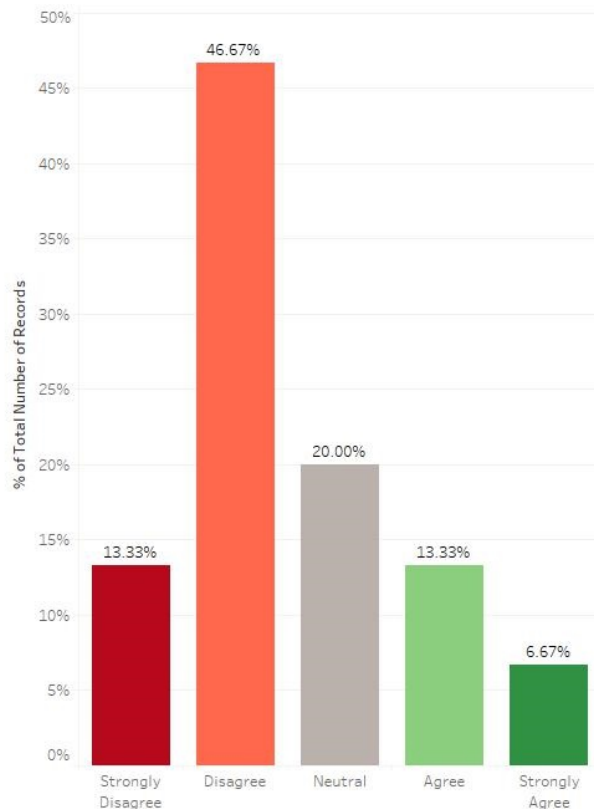
Physician Quality Improvement (PQI)

Senior Friendly Hospital Improvement - VGH

December 2018

Staff Survey

Q7: I have the supports and resources needed to provide quality care to my patients who are frail and elderly or have dementia.



Lessons Learned & Next Steps:

“More GEM team, advise us on all patients over 80, proactive”; “GEM team is very helpful”; “More GEM!”
“It’s impossible to provide competent and ethical care to the frail elderly patients when we have 4-5 other acute patients”; “4:1 nurse to patient, not 5-7:1”

Some excellent reports and recommendation papers on Geriatric Services in Acute Care, System of Care for the Frail Elderly population, previous 48/6 initiative etc on Island Health intranet also not being practiced or followed.

Next steps

- Ongoing refinement of data collection for care processes
- Get patient/family input and perspective
- PDSAs on more effective/efficient means of providing GEM recommendations to care teams – ward rounds, “GEM Rx”, better use of whiteboards
- Collaborate further with care staff in ER and wards on documentation and care improvement
- Follow up on meeting with VGH directors on incorporating senior care processes into daily visual management, ward rounds and charting to improve quality care and reduce harms
- Collaborate with Patient Safety and Seniors Quality Council on reducing hospital harms to senior patients through better care

Pre-operative Hemoglobin Optimization

Physician Lead: Dr Julie Paget

Location: Victoria
Specialty: Anesthesia

Background:

Patient Blood Management (PBM) is an evidence-based multidisciplinary approach to optimizing the care of patients who might need a transfusion. It is based on 3 pillars of care:

- Optimizing Erythropoiesis
- Minimizing blood loss and bleeding
- Harnessing and optimizing physiologic reserve

Problem:

Pre-operative anemia increases risk of transfusion in high blood loss surgeries. Transfusion and anemia independently increase risk of morbidity and mortality. Patients undergoing cystectomies are at risk of pre-op anemia, intra-operative blood loss, and transfusion. In Victoria, there is no program in place for identifying and treating patients pre-operatively.

Aim of Project:

To create a system that permits identification of all anemic patients in Victoria scheduled for radical cystectomy with at least 21 days to optimize pre-operatively, by March 2020.

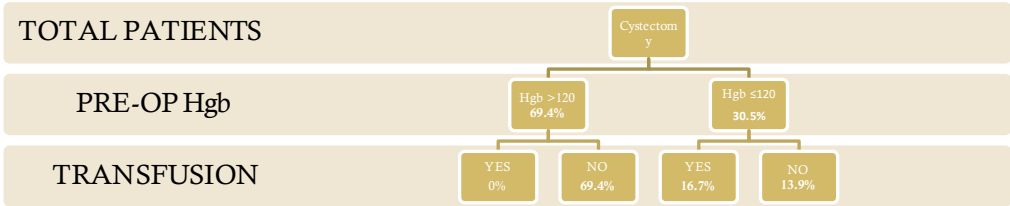
Action Taken:

- The project team developed a *Process Map of Radical Cystectomy Procedures*. This map shows where the patient has direct contact with the health care system, visualizing the steps prior to the surgical procedure, and the current average time durations for each of these steps.
- Educational events have been held for the Department of Anesthesiology, Divisions of Family Practice and the South Island Surgical Services Physician Advisory.
- A pre-operative anemia multidisciplinary event is planned for late fall.

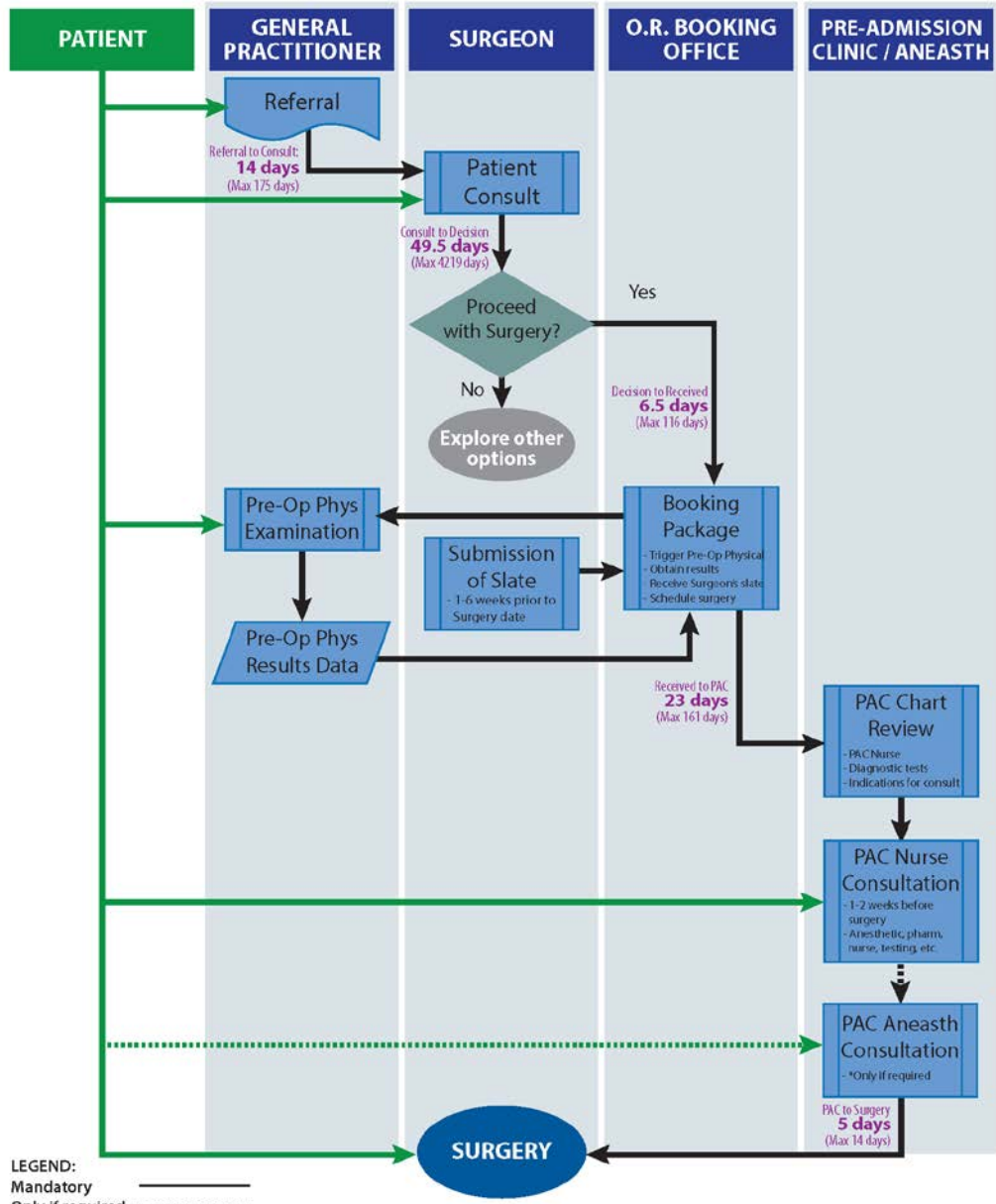
Data Analysis:

- Looking at patients who underwent radical cystectomies from July 2018 to June 2019 there was a high incidence of pre-operative anemia. All patients who received transfusions had a starting Hemoglobin of less than 120.
- It was shown that patients are currently being identified at the Pre-Admission Clinic (PAC) an average of 5 days pre-operatively. This does not allow sufficient time for the diagnosis and treatment of anemia.

Radical cystectomies from July 2018 to June 2019



Island Health Pre-Surgical Process Map
Radical Cystectomy Procedures, July 2018 - June 2019



LEGEND:
 Mandatory —————
 Only if required
 Median Wait Days

Lessons Learned & Next Steps:

- The ultimate goal of this project is to create a system-wide pre-operative hemoglobin optimization program for South Island. The initial challenge has been in identifying patients with sufficient time for optimization while minimizing workload impacts. The first step is to create a model to identify, investigate and treat cystectomy patients and subsequently apply this model to all high risk surgical patients.
- A pre-operative anemia multidisciplinary event is planned for late fall.

Just a Spoonful of Sugar to keep the Mother-Babe dyad together

Physician Lead: Dr Nisha Pillay

Location: Victoria General Hospital
Specialty: Neonatology

Background:

- Neonatal hypoglycemia is a global health problem and a preventable cause of neurological injury during the neonatal period.
- Approximately 15% of neonates are at risk for hypoglycemia.
- Some of these infants fail to normalise their blood glucose level by feeds alone and require IV dextrose therapy.
- A newborn with hypoglycemia will undergo a potentially painful procedure, and in most institutions will require transfer to a higher level of care and consequent greater utilisation of health care resources.
- Other effective and less invasive options that might prevent the need to treat with IV dextrose are highly desirable.

Problem:

Prior to 2019, the at risk hypoglycemic newborns at the Victoria General Hospital (VGH) were generally admitted to the Neonatal Intensive Care Unit (NICU) and received a glucose level at 2 hours of age or following a low glucose level in the Mother-Babe unit, the newborns were subsequently admitted to the NICU for further monitoring.

This mother- infant separation resulted in:

- disrupted maternal / infant bonding
- increased maternal anxiety
- breastfeeding failure

For these reasons, other effective and less invasive options that may prevent the need to treat with IV dextrose and avoid separation are highly desirable.

Aim of Project:

We aim to improve the Mother-Babe Dyad without compromising the care of the at risk newborns through the implementation of the use of Dextrose Gel 40% at VGH by 85% by the end of September 2019.

Action taken:

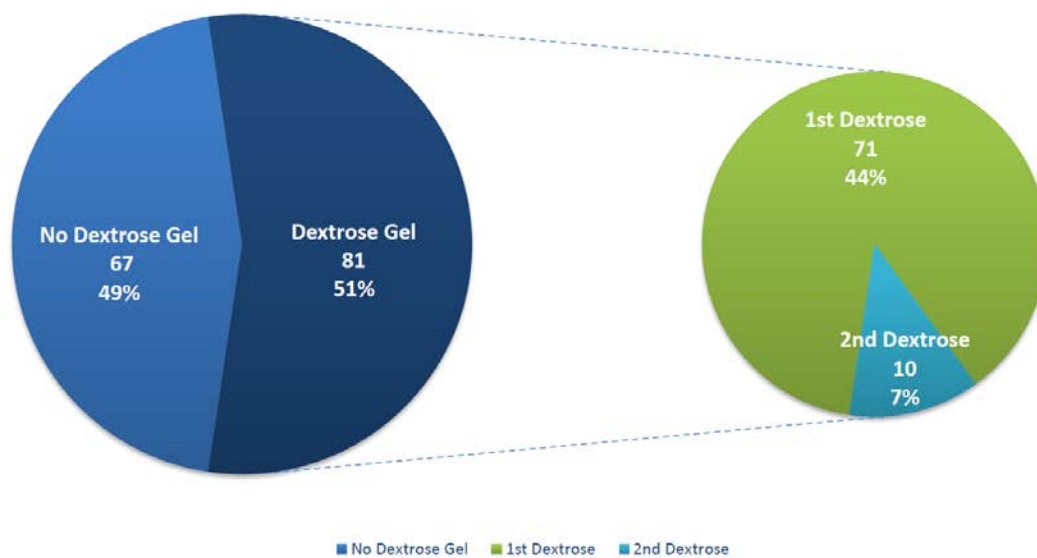
Starting in January 2019, we have implemented the use of Dextrose Gel 40% at VGH to our current hypoglycemia protocol for the at risk hypoglycemic newborns.

- "Sugar Sugar where art thou?"- Perinatal Rounds capturing midwives, family physicians, pediatricians
- Regular education days with nursing staff
- Journal in resource room for anonymous nursing feedback
- Development of a data collection sheet for staff to use
- Concerns on viscosity of the gel and red dye resulted in a parental handout with information

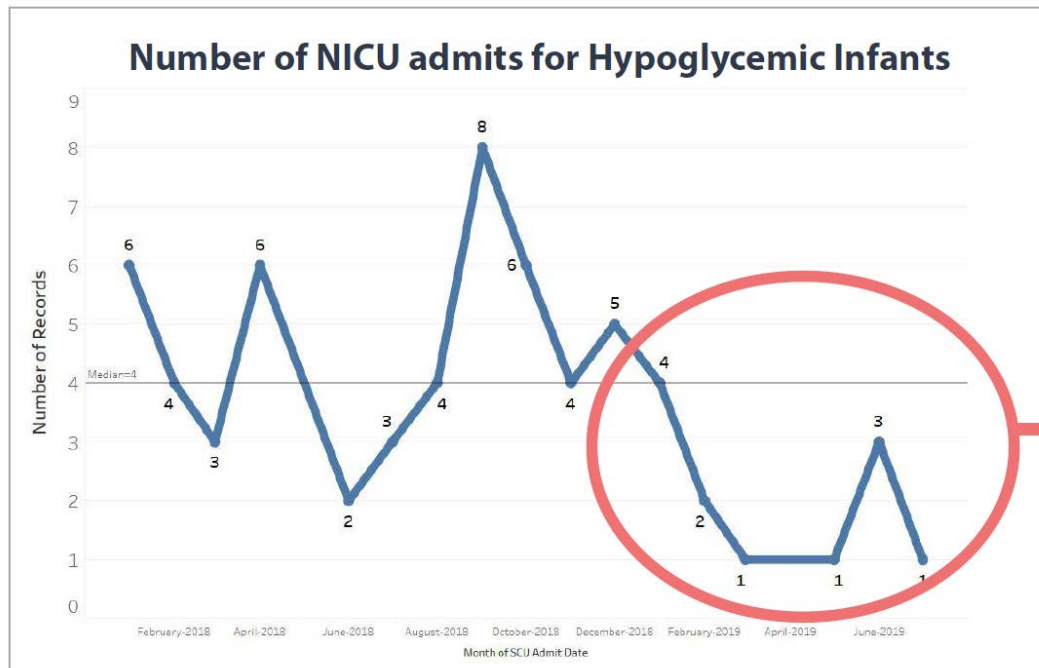
Data Analysis:

Use of dextrose gel for treatment of hypoglycemia during project period

Dextrose Gel Treatment for Hypoglycemic Infants
(January 20 - July 7, 2019)



Number of NICU admits for hypoglycemic infants February 2018 - June 2019



The identification of 6 data points on or below the median line signals there has been non-random change in the system

Lessons learned & Next steps:

Importance of including multidisciplinary team in decision making

Value of alignment with breast feeding initiative

Next steps

- The hope is to have the Dextrose Gel 40% available and incorporated island wide as part of the hypoglycemia protocol.
- As the gel does contain less than 1% preservatives, which does pose a low risk, it would be ideal to have a custom made neonatal dextrose gel.
- Incorporating information on Dextrose gel 40% to prospective parents with at risk newborns during their physician or midwife visits.

Reducing Inappropriate Blood Prescribing

Nurse Practitioner Lead: Chaundra Willms

Location: Nanaimo

Specialty: Nurse Practitioner

Background:

Concerns have been expressed about Nurse Practitioners prescribing blood in acute care. National Choosing Wisely guidelines indicate that 80% of blood transfusions should be done at a Hemoglobin (Hb) threshold of 80g/dL and 65% of blood transfusions should be single unit.

- ◆ Local experts indicate that there is inappropriate prescribing of blood products in acute care
- ◆ Concerns were expressed that NPs might not have adequate educational preparation to prescribe blood and blood product and should not prescribe blood independently
- ◆ NP scope includes prescribing blood after additional education

Problem:

- ◆ Education for physicians and NPs prescribing blood is not standardized
- ◆ There has been no data gathered to confirm or evaluate inappropriate prescribing
- ◆ The privileging requirements for NPs prescribing blood and blood products has not been determined.

Aim of Project:

To have 100% of NPs prescribing blood products privileged within 6 months of initiation of the process. To have 100% of NPs new to prescribing blood complete mentorship process within 6 months of privileging.

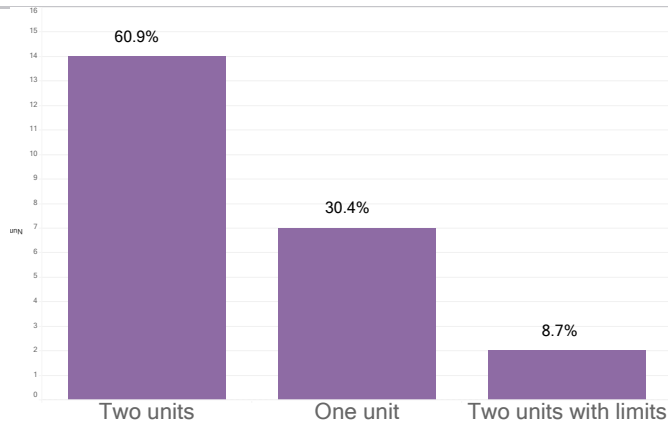
Actions Taken:

- Chart review: 30 inpatients at RJH prescribed blood in September 2018
- Set 'NP Transfusion Boot Camp' as NP privileging requirement
- Implement mentorship program for NPs new to prescribing blood and blood products.

Data Analysis:

Baseline data collection

- **73.9%** of transfusions patient HGB < 80
- **39.1%** of transfusions 1unit
- **26.1%** of prescriptions met *Choosing Wisely Canada* Transfusion Recommendations of single unit and meeting the Hb threshold
- **73.9%** of prescriptions may be **inappropriately prescribed.**



Lessons learned & Next steps:

- No NP prescribers were identified;
- Prescribing practices were not meeting national standards
- The Division of NPs will standardize education requirements for privileging NPs to prescribe blood products and implement a mentorship program for new NP prescribers.
- Chart review findings reveal current state practice among physician RBC prescribers does not reflect Choosing Wisely recommendations.
- In order to evaluate NP practice more rigorously than physician practice, NPs' RBC prescribing patterns will be evaluated through the first year of practice against Choosing Wisely recommendations to evaluate the effectiveness of the change ideas.