

### Seeing the Invisible Children Improving pediatric care for marginalized children & their families by developing a model for elementary school-based pediatric services

### PROBLEM

Many children and youth are identified as needing a pediatric assessment by schools. In Nanaimo some children and their families live in marginalized circumstances and have difficulty accessing services through the traditional physician referral process. As such, these children and their families have difficulty accessing pediatric care.

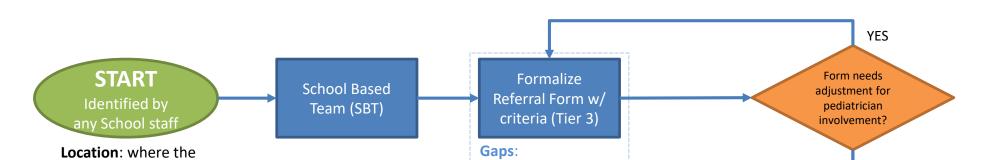
- 1. What is the impact on the child, their families and the schools when they cannot access pediatrician services?
- **2.** Is there a different model of care that can improve access

### **PDSA Cycles**

PDSA 1: Mapping ideal process with project team

#### **Process Map Results:**

making sense of the current state



### **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:

- D.O.B.
- Health system interactions (e.i. GP yes/no)
- Previous interventions -
- Psychosocial barriers (poverty, transience etc.)

and support that is different than the traditional model of referral practice?

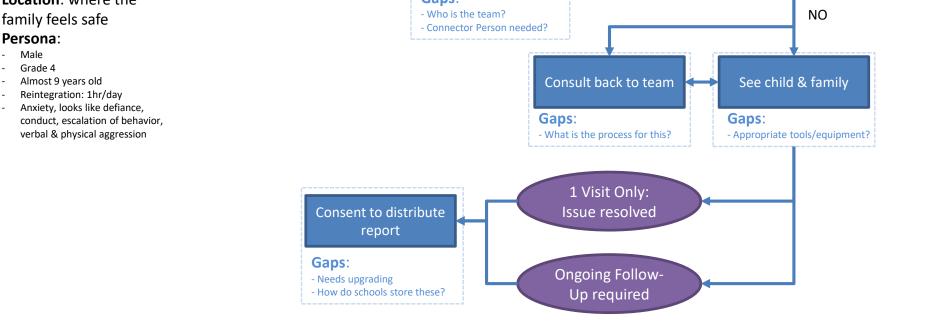
### **AIM STATEMENT**

Within 6 months, 100% of children who fit the project criteria will be identified and referred for school-based pediatric consults through a standardized process.

### CHANGE IDEA

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:

1. To develop and trial standardized processes at Georgia Avenue Elementary School for:



#### PDSA 2: Creating/distributing new Consent & Referral Forms

Physician Quality Improveme

cipate in a pilot program that is part of

sultations on-site at Georgia Avenue F

d. I understand that my child will be seein

rticipating in this activity, beyond those ris

have read the information above. By signing

nsenting to my child's participation in Dr.

rysician Jality PROVEMENT			STUDENT I FOR ON-SITE PEDI	REFERRAL FORM ATRIC* CONSUI		
t Participant Consent Form		School: Primary school cor	itact:	Referral #:         Date referral completed:           [e.g. GA-2019-01]         [DDMMMYY]		
			Studen	t Information		
or Pediatric Consultations		Name		First: Last:		
lementary School		DOB/PHN/PEN	DOB: [DDMMMYY]	PHN:	PEN:	
guardian name), understand that I am be	ina	Grade/Teacher	Grade:	Teacher's name:	56-1	
(print child's name) hysician Quality Improvement project at		Previous pediatrici		Yes No Unknown		
d to halp children to receive podiateirian		Outside agency inv	olvement?	Yes No Unknown		
d to help children to receive pediatrician ntary school.		Does the student h	nave a family doctor (GP)?	Yes No Unknown		
Dr. Arruda in person at the school, and the participation, without consequence, at any w will not be shared with anyone, and wi Health. pt confidential, used only for the purpose that can identify me or my child. All	y ill es of		vious interventions: DUNSELLOR   INCLUSION   SSP	SLP SCHOOL P	SYCHOLOGIST 🗌 CYFSW 🗌 IEP	
articipation and any follow-up referrals w stand that there are no risks involved in		Parent/Guar		rdian Information	1	
experienced in everyday life.		Parent/Guardian N	lame	First:	Last:	
		Parent/Guardian N	lame	First:	Last:	
elow and returning this form, I am Ima Arruda's Physician Quality Improvem	ent	Known communica	ntion barriers? 🗌 Yes 🗌 No	Please describe:		
		On a scale of 1-10	), how engaged is this child's family with the school?	1 2 3 Not engaged	4 5 6 7 8 9 10 Very engaged	
you have other questions concerning your participati mation provided above.	ion in	Comments:				
			Demogra	phic Information		

### FINDINGS

- 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



### CONCLUSION

- Identification of children who need pediatric a. assessment and support.
- Obtaining parent/guardian consent for b. referral/assessment.
- Referral of children to pediatric services. C.
- To use these tools to evaluate the outcome of the assessments.

### **PROJECTTEAM**

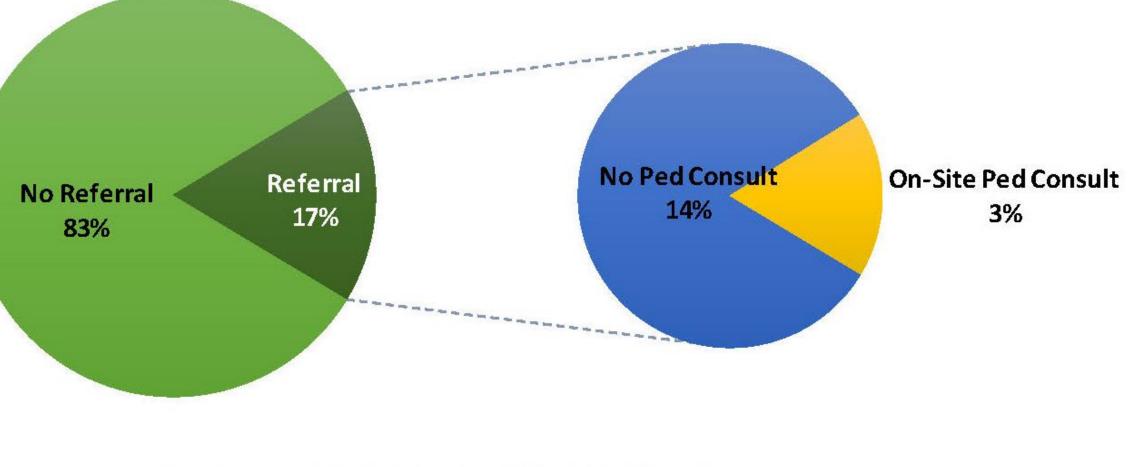
PQI Physician Lead: Dr. Wilma Arruda

**Project Participants:** 

- Cindi Ashbee (CYC Georgia Avenue),
- Claudio Aguilera (Manager TLAFCHC),
- **Bob Esliger** (A Superintendent SD 68),
- **Deb Chaplain** (Director CYMH IH),
- Jan Tatlock (Director PH),
- Erin Kenning (CC PH Nanaimo).

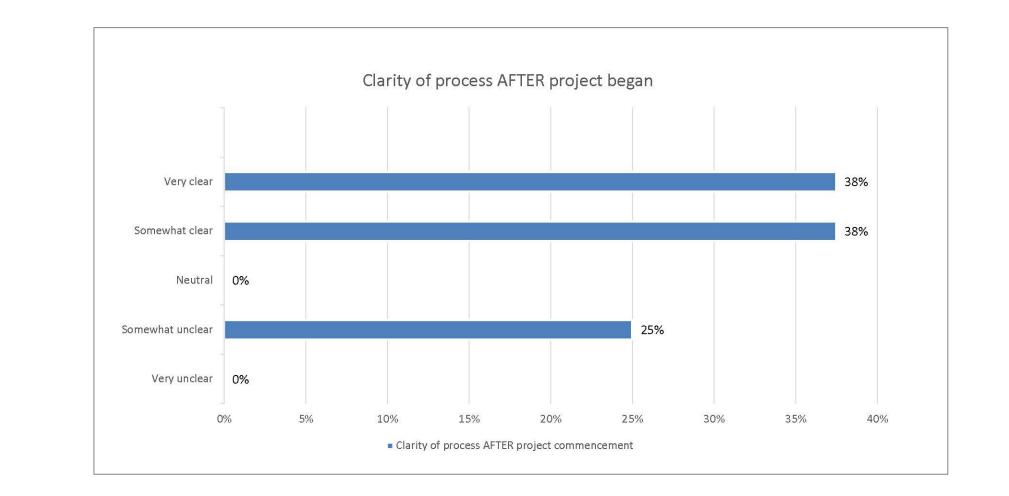


Number of On-Site Pediatric Consults 2018/19



No Referral No Ped Consult On-Site Ped Consult

#### PDSA 4: Collecting feedback from school-based team



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 MoH data and should be seen as "invisible" by the health care system. This project is not yet complete but 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.

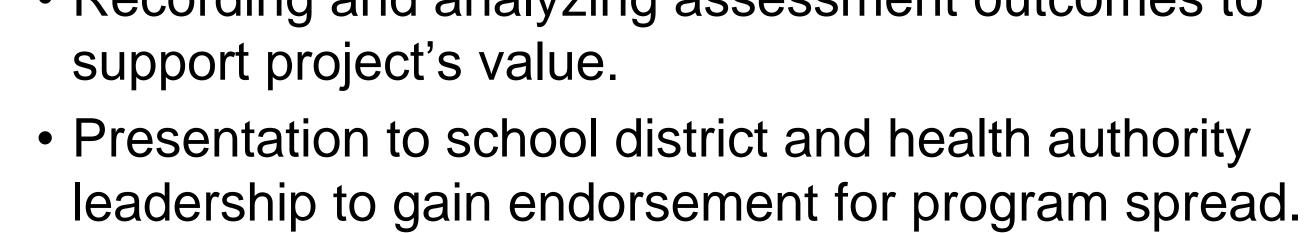
### PROJECT SPREAD

 Standardized package for interested schools. Implementing "one piece flow" process of referral through to assessment using one form that doubles as a data collection tool.

island health

Recording and analyzing assessment outcomes to

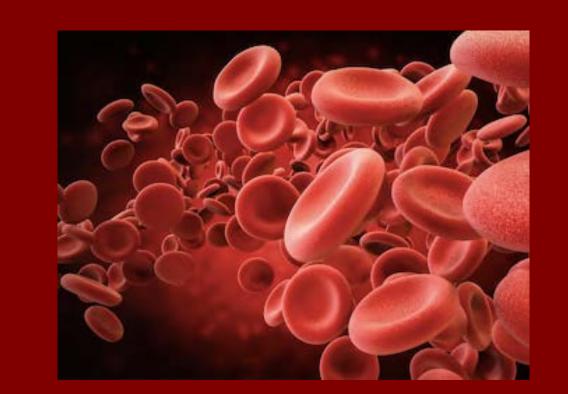
• Kirstin Funke Robinson (SD 68 Psychologist), • Lynn Brown (SW, SD 68) • Chelsea Wakelyn (PQI Coordinator) • Curtis Bilson (PQI Data Analyst)







# Pre-operative Hemoglobin Optimization



### BACKGROUND

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

- 1. Optimizing Erythropoiesis
- 2. Minimizing blood loss and bleeding
- 3. Harnessing and optimizing physiologic reserve

### PROBLEM

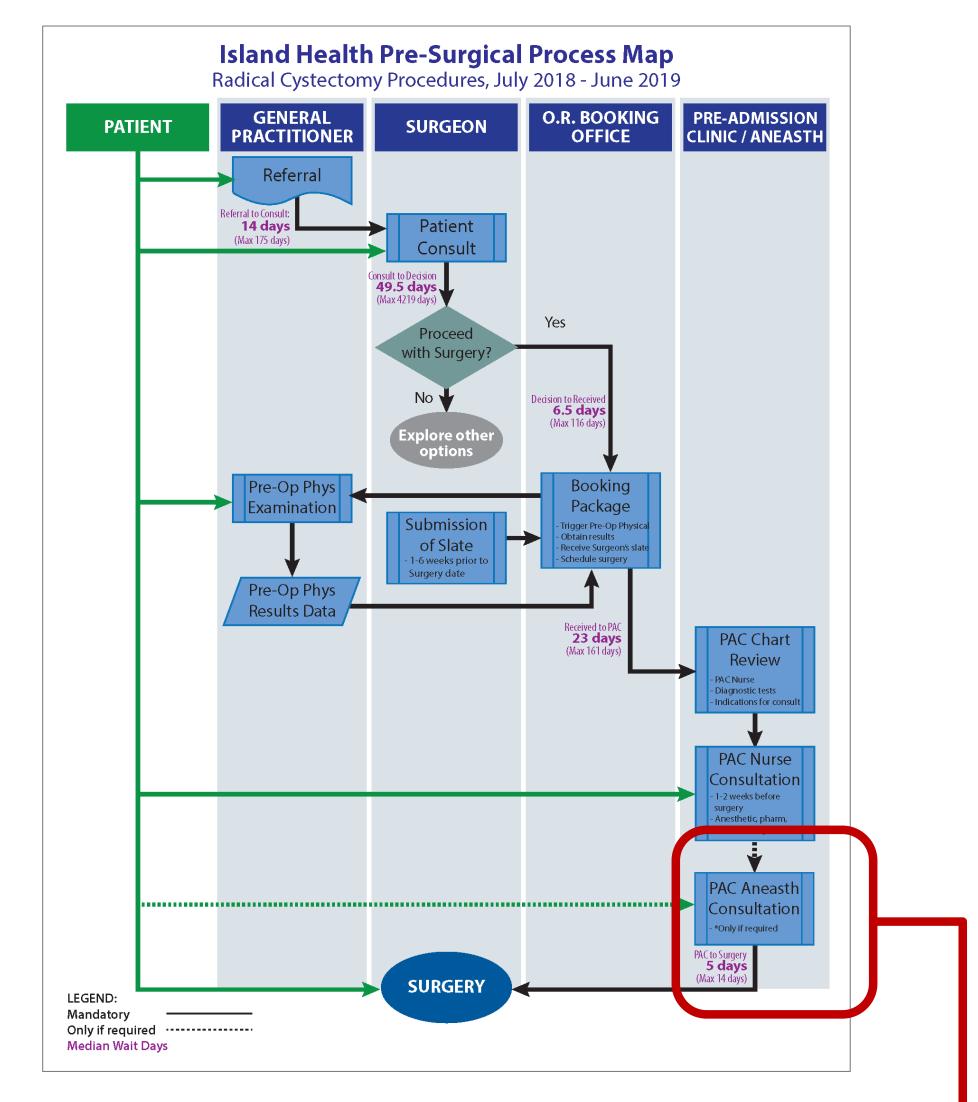
Pre-operative anemia increases risk of transfusion in high blood loss surgeries. Transfusion and anemia independently increase risk of morbidity and mortality. Patients undergoing cystectomies are at risk of pre-op anemia, intra-operative blood loss, and transfusion. In Victoria, there is no program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

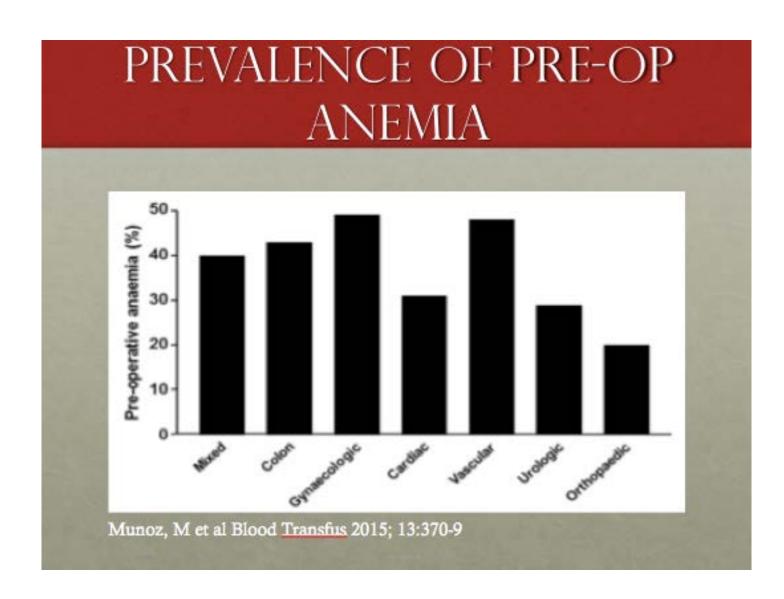
### **AIM STATEMENT**

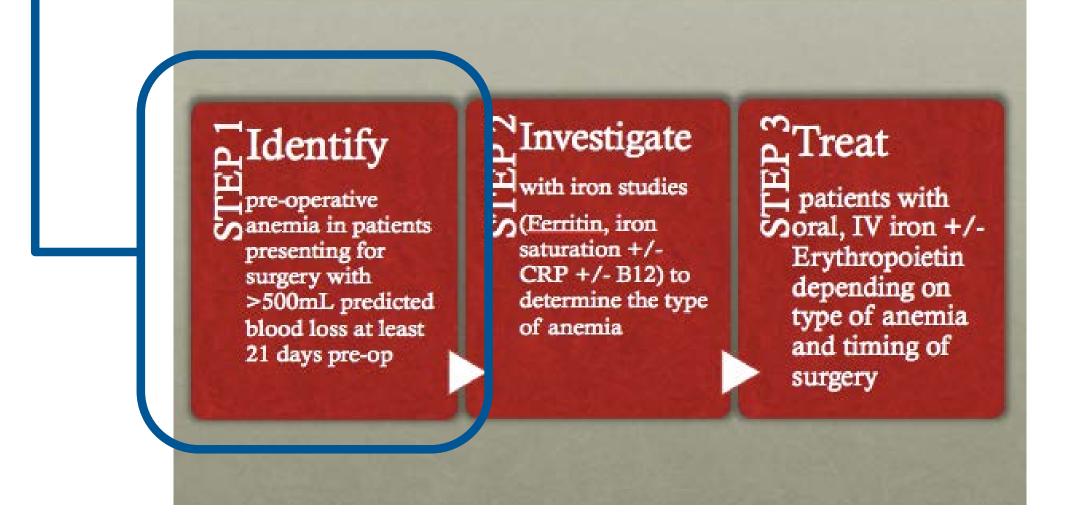
To create a system that permits identification of all anemic patients in Victoria scheduled for radical cystectomy with at least 21 days to optimize pre-operatively, by March 2020.

### **PROCESS MAP**

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.







### **RESULTS SO FAR**

Looking at patients who underwent radical cystectomies from July 2018 to June 2019 there was a high incidence of preoperative anemia. All patients who received transfusions had a starting Hemoglobin of less than 120.

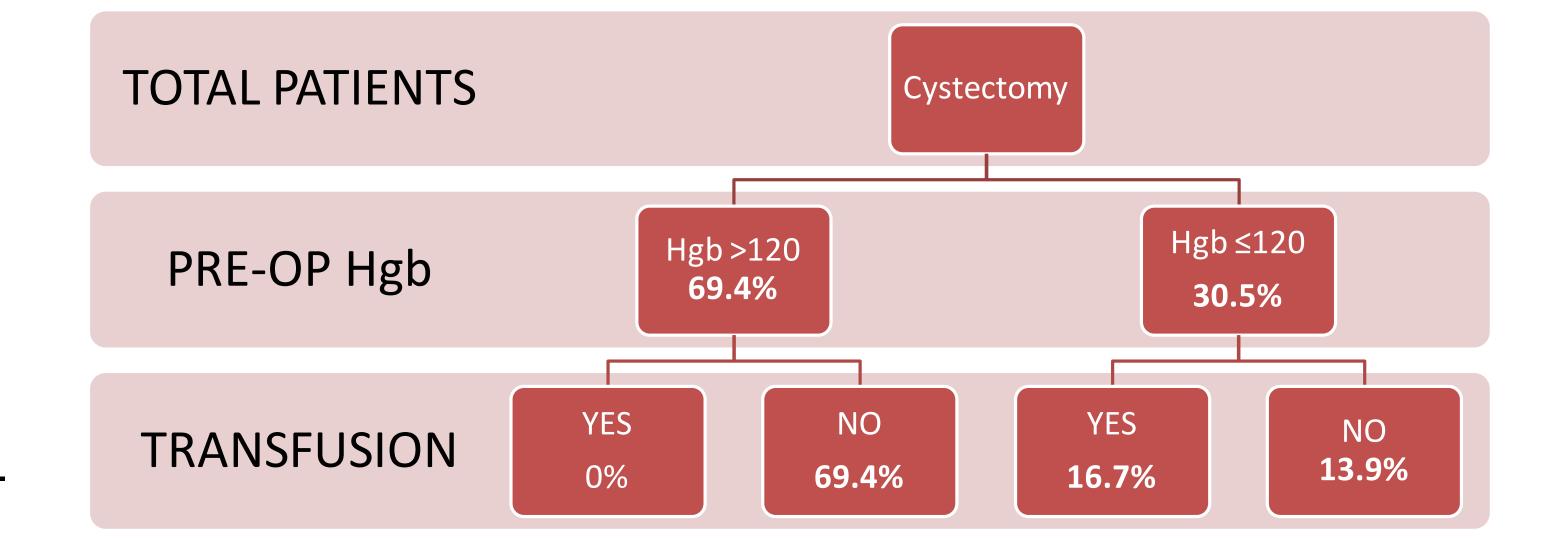
### PROJECTTEAM

Dr. Julie Paget – **Project Lead** 

#### **Project Participants:**

- Dr. Tom Ruta Department Head and Medical Director Department of Anesthesiology
- Dr. John Kinahan Urologist
- Dr. Mike Metcalfe Urologist

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.



- Dr. John Galbraith, Medical Microbiologist, PQI Mentor
- Dr. Brian Berry, Hematopathologist
- Dr. Jesse Pewarchuk-Internist, Co-founder Revive Clinic
- Curtis Bilson, PQI Data Analyst
- Chelsea Wakelyn, PQI Project Coordinator
- Jason Price, PACU/SDC RJH Manager
- Rachel Wilson, Clinical Nurse Educator

### PROJECT SPREAD

Educational events have been held for the Department of Anesthesiology, Divisions of Family Practice and the South Island Surgical Services Physician Advisory

### **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.





# PHYSICIAN QUALITY IMPROVEMENT

### Addressing Problematic Alcohol Use in Older Adults

### 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

### 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

hospitalizations and older adults have higher rates than any

BC is the province with the highest rate of alcohol related

other age group

### **AIM STATEMENT**

- Increase familiarity of patients, families and care providers within Geriatric Specialty Services (GSS) Outreach, with information specific to older adults experiencing problematic alcohol use
- by 90% by August 2019.

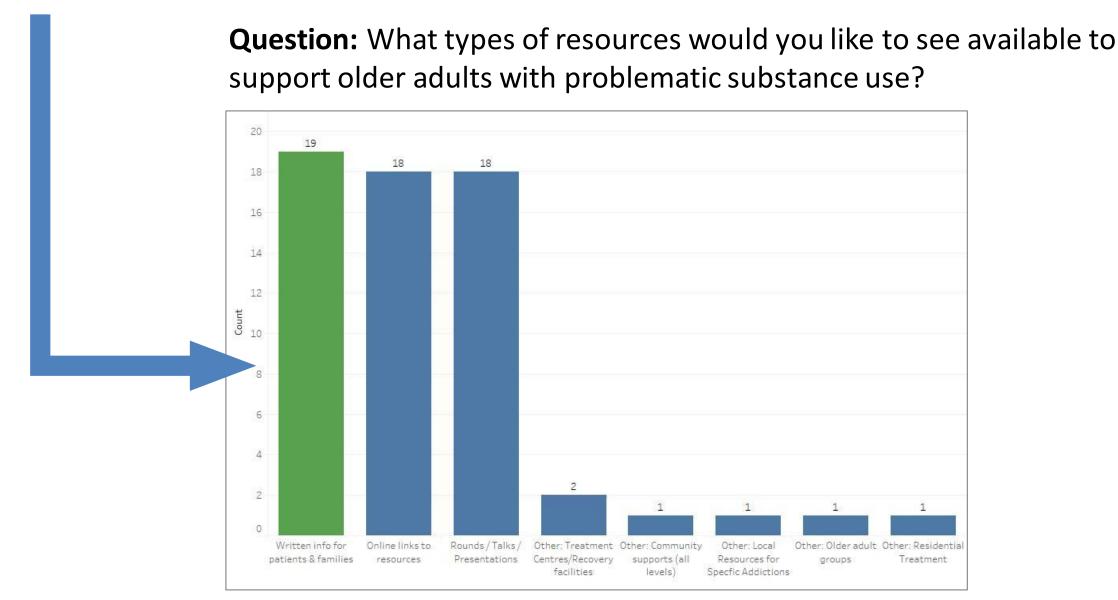
position to understand the complexities of this issue



August 2018

### STAFF SURVEY

Based on survey feedback from GSS clinicians which identified a resource need of 'written information for patients and families'



CHANGE IDEA

Develop a pamphlet, with evidence informed content, to support clinicians, patients and their loved ones in beginning to address problematic alcohol use

Recommendations for Older Adults	Age Related Changes	Alcohol and Health	Questions for Reflection	
Many adults enjoy having a drink when socializing and relaxing. Understanding issues unique to older adults and alcohol can help you make choices about alcohol to optimize your well-being. Safer drinking guidelines for healthy adults over the age of 65 include: $\frac{Max. drinks}{per day} \frac{Max. drinks}{per week}$ $\frac{Max. drinks}{per day} \frac{Max. drinks}{per week}$ $\frac{Max. drinking}{2} \frac{Max. drinks}{2} \frac{Max. drinks}{2}$ $\frac{Men}{2} \frac{2}{7}$ *with 1-2 non-drinking days per week Any amount of alcohol may be harmful for some people. One standard drink is:12oz / 341ml (5%) beer, cider, cooler5 5oz / 142ml (12%) wine1.5oz / 43ml (40%) hard liquorsuch as vodka, rum, whiskey, gin, etc.	As we grow older, the way our body processes alcohol changes. Some of the changes include: Our liver doesn't get rid of toxins as quickly The filtering system between our blood & brain isn't as effective Water content of our bodies decreases causing higher blood levels with the same amount of alcohol Prescribed & over the counter medications can interact with alcohol to cause problems	<ul> <li>Although some studies suggest an association between small amounts of alcohol and specific health benefits, there are other ways to achieve those benefits. Alcohol can have negative effects on almost every body system.</li> <li>With healthy changes in alcohol use older adults can experience:</li> <li>improved mood, energy and sleep</li> <li>clearer thinking</li> <li>less risk of falls and injuries</li> <li>decreased risk of many common medical conditions including some forms of cancer</li> <li>reduced need for medications</li> <li>increased enjoyment of activities</li> <li>improvements in relationships</li> <li>reduced financial strain</li> </ul>	<ul> <li>I. When talking with others, do you underestimate how much you drink? YES NO</li> <li>2. After a few drinks, have you sometimes not eaten or been able to skip a meal because you din't feel hungry? YES NO</li> <li>3. Does having a few drinks help decrease your shakiness or tremors? YES NO</li> <li>4. Does alcohol sometimes make it hard for you to remember parts of the day or night? YES NO</li> <li>5. Do you usually take a drink to relax or calm your nerves? YES NO</li> <li>6. Do you drink to take your mind off your problems? YES NO</li> <li>7. Have you ever increased your drinking after experiencing a loss in your life? YES NO</li> <li>8. Has a doctor or nurse ever said they were worried or concerned about your drinking? YES NO</li> <li>9. Have you ever made rules to manage your drinking? YES NO</li> <li>9. Have you feel lonely, does having a drink help? YES NO</li> <li>10. When you feel lonely, does having a drink help? YES NO</li> <li>Talk to your healthcare provider about your answers to these questions.</li> </ul>	
	adults can be very successful making healthy changes to unhealthy drinking.		Vancouver Island Crisis Line I-888-494-3888 to talk to a mental health counsellor 24 hours a day	POOL PHYSICIAN GUALITY IMPROVEMENT AN GOVEMENT

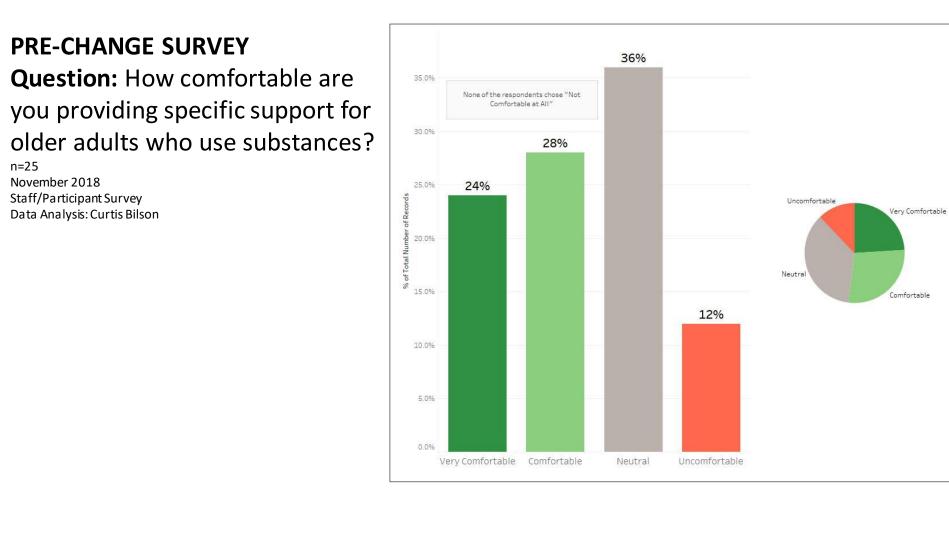
### PDSA CYCLES

- Survey of team needs
- Written resources review (other pamphlets, CCSU summary and key information resources)
- Initial pamphlet draft 1 structured to support approach of Screening, Brief Intervention and Referral to Treatment (SBIRT\*) plus harm reduction tips
- GSS team working group meeting for summary of issues, initial pamphlet review, brainstorming content, review of local resource experience
- Revision draft 2 (add SMAST-G screening tool, delete local resources as they were felt to not be suitable to specific needs of older adults, change info sequence)
- Pamphlet feedback patient voice and RAAC team, Umbrella
- Revision **draft 3** (increased focus of content on health impacts)
- Pamphlet feedback patient voice
- Revision draft 4 (reintroduction of local resource list, after further discussions of how to better meet specific needs of older adults in some of those settings)
- GSS outreach family physician feedback 10.
- Revision **draft 5** (language and wording modifications)
- Pamphlet feedback patient voice (independent living setting and community)
- Pamphlet **draft 6** (change panel order)

Distribution with informal and formal orientation to pamphlet content as needed be effective and cost-effective in reducing harmful levels of drinking and alcohol-related harm for patients in primary care

### **MEASURES and DATA ANALYSIS**

### PROJECT SPREAD



PROJECTTEAM

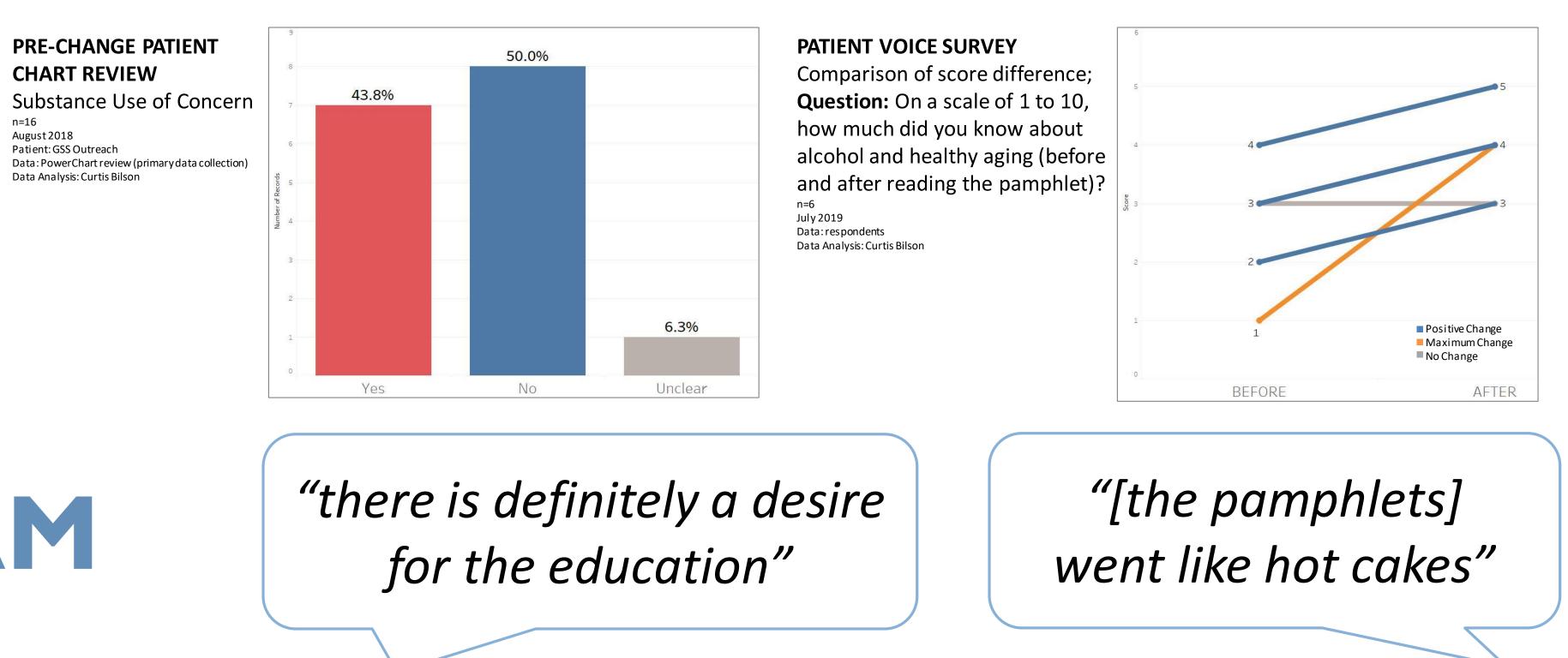
**Project Lead: Dr. Joyce Coutts,** Geriatric Specialty Services

**Dr. Marilyn Malone,** Sponsor/ Medical Director Seniors Strategy

**Geriatric Specialty Services Outreach Teams:** 

Nurses, social workers, occupational therapists, family doctors, geriatric psychiatrists **Patient Voices:** 

Community members accessing Island Health Services, various sites **Rapid Access Addiction Clinic (RAAC) team:** 



#### Continue to work with 'early adopters' within GSS outreach to develop familiarity with the pamphlet and it's use by GSS team and associated homecare clinicians

- Distribution of pamphlet to services expressing interest and previously participating in development (RAAC, SOPC, Umbrella) with associated informal or formal information sessions as needed
- Presentation and pamphlet distribution at Addiction Medicine Day for Primary Care Providers in September
- Consider distribution to Independent and Assisted Living settings (as per patient voice feedback), through Seniors meeting centres, with 'Boost your Brain Power' or similar educational settings
- Pamphlet designed with insert for local resources to allow easy adaptation to other Island Health sites

### CONCLUSION

Improvements in quality of life and health outcomes result when older adults have the information and supports they

Nurses, social program officers/SPOs, medical students and residents Umbrella workers (esp. Louise)

Amanda Chapman, Coordinator, Addiction Medicine Education & Forums/ Primary & Community Care Island Health

The PQI Team

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.







## **GROWING the HERD** Improving 2 Year Old Immunization Rates at Victoria Health Unit

### PROJECT TEAM

Dr. Dee Hoyano - Project Lead

**Project Participants:** 

- Charlotte Brown, Public Health Nurse - Morgan Fankboner, Public Health Nurse - Tia Ndjalski, Coordinator, Public Health Nurse - Kathy Palmer, Public Health Nurse - Hilary Planden, Coordinator, Public Health Nurse - Cathy Pyett, Administrative Coordinator - Melinda Warren, Lead Administration, Victoria Health Unit - Dr. Daisy Dulay, PQI Physician Advisor - Dr. John Galbraith, PQI Physician Advisor - Rosie Holmes, PQI Coordinator - Curtis Bilson, PQI Data Analyst

### 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

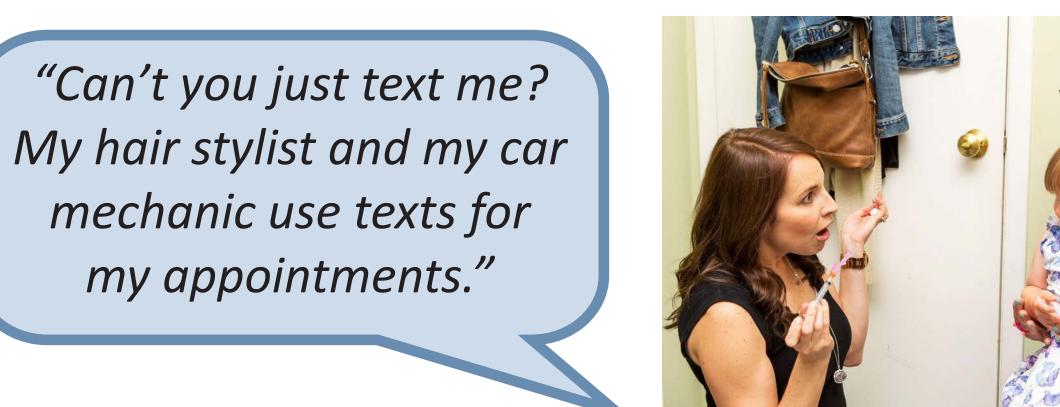
### PROBLEM

Drops in immunization coverage have been noted after 12 months of age. This is likely multi-factorial 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.

### PATIENTVOICE



### CHANGE IDEA

• 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

### PDSA

#### **Staff Focus Group:**

- Qualitative data on current practices
- Barriers and Opportunities
- completed TRIZ exercise

### PDSA 2

**Project Data:** Data collection and analysis of under-immunized cohort

### PDSA 3

**QI Board Data Visualization:** Designed to recognize the work the staff have done

### PDSA 4

**Technology Reminders:** Email and text reminders for 18 month immunizations

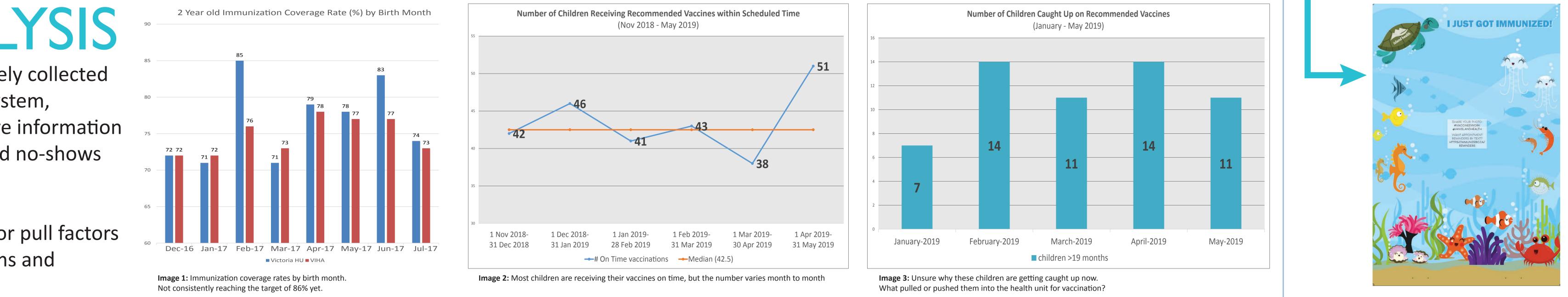
### PDSA 5

**VHU Selfie Stand:** Visual backdrop for parents to take photo of child with



(Nov 2018 - May 2019)

(January - May 2019)



 Immunization coverage is routinely collected in the public health information system, Panorama. However, administrative information such as appointment bookings, and no-shows are kept in separate systems.

 Most of the immunization push or pull factors are not captured by current systems and difficult to measure.

### FINDINGS

- 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 Have not yet seen an impact on overall coverage rates

### NEXT STEPS

- Email and text reminders are acceptable to patients. Need to monitor for impact on vaccination outcomes, as well as adapt implementation in the most streamlined manner in all health units
- Need to dedicate staff time to reminder & recall activities
- Explore feasibility of extending reminder system to younger cohort (at birth or 2 months of age)
- Adapt implementation for admin staff by minimizing data collection and input
- 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



For more information on Island Healt Email: PQI@ or follow QR Code to v island health





# the cedar circle project



### project team

Project Leader - Dr. J. Kouwenberg

#### **Project Participants:**

**Rosie Holmes and Curtis Bilson**, *Physician Quality Improvement* **Robyn Wells,** *RN, NRGH Perinatal Harm Reduction Lead* Juanita Parsonage, NICU Clinical nurse Educator RN **Shannon Scarisbrick,** *Pediatrics Clinical nurse Educator RN* **Susan Panton,** NRGH Mother/Child SW Julie Rogers, 'Partners in Parenting' Community SW **Dr. Evelyn Eng**, *MD OBGYN* Dr. Sharon Chan-Yan, FMD **Trina Knight,** *Child Youth and Family NRGH* Nicole Puckering, Nanaimo MCFD SW **Gillian McKay,** *Patient voice - Grandmother of infant, Primary care provider* 

### background

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

### problem

Separation of an infant from their opioid - dependent mother increases the risk of the infants experience of withdrawal and distress, resulting in dramatic influence on early attachment opportunities.



 Communication tools with staff (nursing and social work) and with providers (Nurses, OB, Midwives) • Request for Antenatal Consultation with Pediatrician for planned births for those with opioid exposure in utero Staff Education on Trauma Informed Care for this often stigmatized and highly at-risk population • Questionnaires for staff feedback regarding areas of education need Relocation of infants to NICU with mother/family during entire length of stay after immediate post-partum stabilization

### aim statement

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

### pdsa cycles

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 7. Project Spread - Second stage of project includes planned relocation to Pediatrics Department

 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

### patient voice

"Once you become a mother,

you become sacred."

- Dirty Lake, Traditional Midwife, Okanagan First Nation

### data analysis

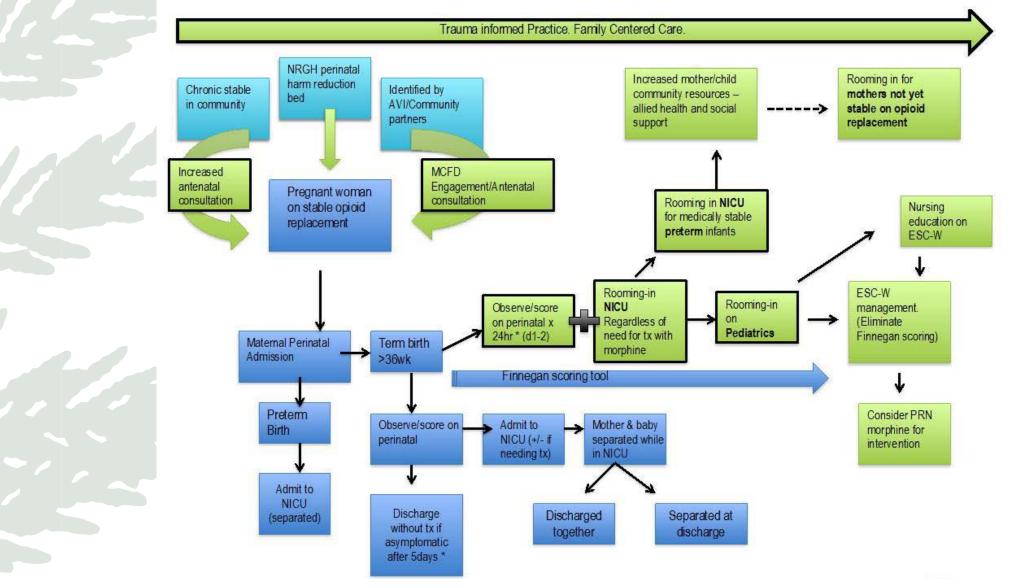
 Manual retrospective chart review Population included all Opioid exposed Mother/Baby  Education for nursing on Pediatrics for planned relocation of mother-baby dyads from NICU

#### **Cedar Circle Project Flow**

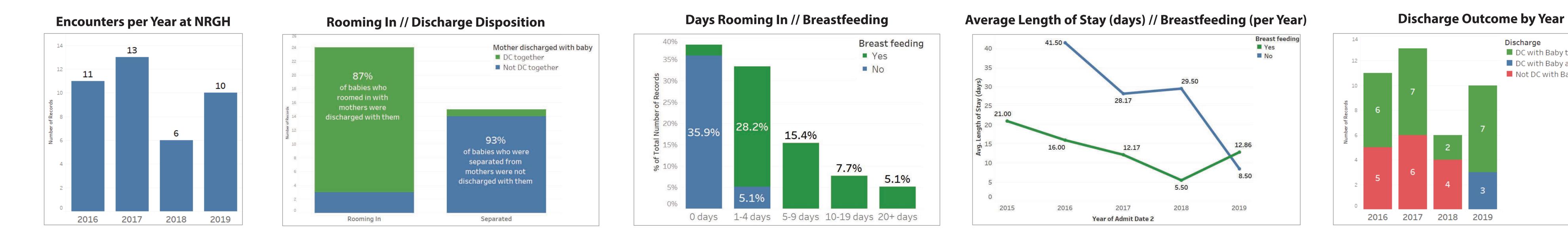
DC with Baby to Home

Not DC with Baby

C with Baby and Safety Plan



dyads at NRGH from January 2016 - 2019 Data points: Length of Stay, Breast feeding incidence, discharge of intact mother-baby dyad



### finidngs

Rooming mother and baby dyads is associated with improved incidence of ongoing breastfeeding,

### conclusion

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.

#### improved success of discharge of intact

mother-baby dyad, reduced need for pharmacologic

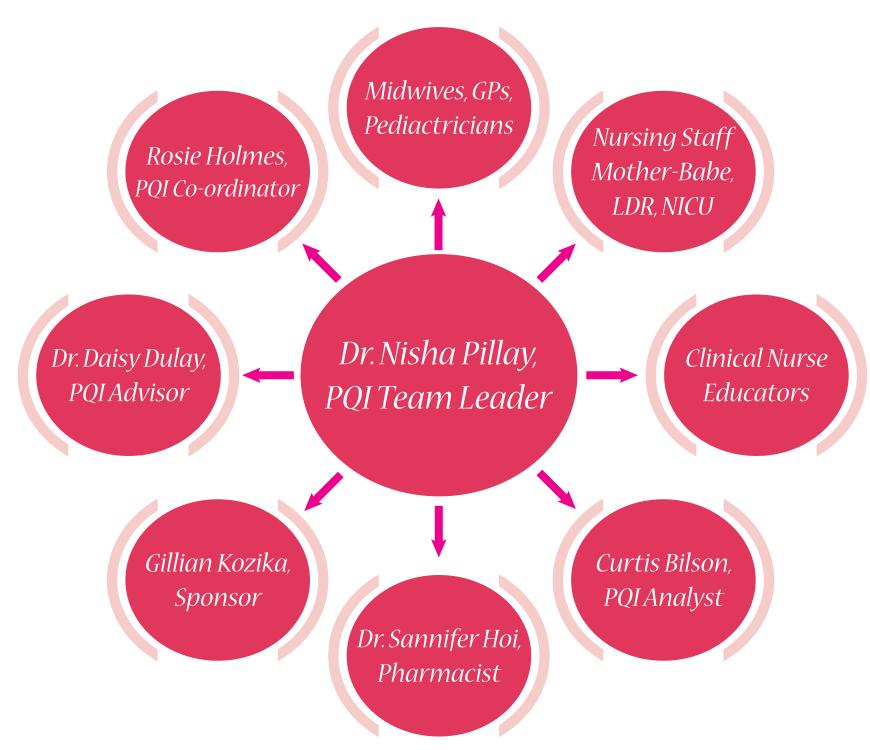
intervention for infant withdrawal symptoms.





### Just a Spoonful of Sugar to Keep the Mother-Babe Dyad Together

### Project Team



### Background

Prior to 2019, the at risk hypoglycemic newborns at the Victoria General H ospital (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.

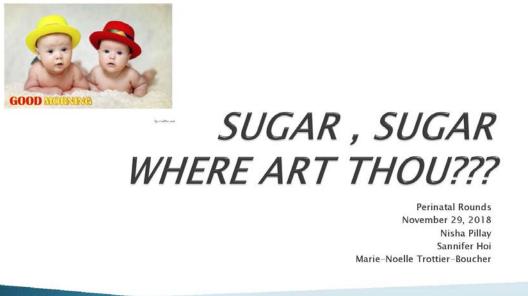
### Problem

Criteria for at risk newborns:
Infant of a Diabetic Mother
Less than 37 weeks GA
BWT < 10%ile</li>
BWT > 90%ile.

During this period of the newborn in the NICU, they are separated from their mothers, breastfeeding is delayed and parents commonly feel their babies are abnormal due to this separation.

### PDSA Cycles

**PDSA 1:** Dextrose Gel 40% implemented following nursing education





**PDSA 2:** Development of a data collection sheet for staff to use





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.
An audit tool is completed by nurses.

### AIM Statement



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



Dextrose G	runeli stelovy	re	<u>atme</u>	<u>nt</u>	Place patient label sticker here
DATE:TIN Birth Weight: Ges				_	
RISK FACTORS	YES	NO	N/A	NOTES	S (optional)
RISK FACTORS	YES Y	NO N	N/A N/A	NOTES	S (optional)
<u> </u>	- 33930836 - 44	>200051 0 41	1050 <b>#</b> 89100	NOTES	5 (optional)
RISK FACTORS	Y	N	N/A	NOTES	5 (optional)

FIR	ST GLUCOSE	CHEC	K (Typically at 2 hours of age)				
TIME:	Gluco	Glucose Level:					
Dextrose Gel given	Y	N	Volume:				
EBM feed given	Y	N	Volume:				
Formula feed given	Y	N	Volume:				

SE	COND GLUC	OSE C	CHECK (Typically 1 hour later)
TIME:	Gluco	ose Le	vel:
Dextrose Gel given	Y	N	Volume:
EBM feed given	Y	N	Volume:
Formula feed given	Ŷ	N	Volume:

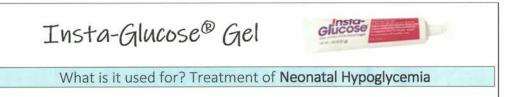
THIRD GLUCOSE CHECK {Typically 1 hour later)						
TIME:	Glucose Level:					
Dextrose Gel given	Y	Ν	Volume:			
EBM feed given	Y	N	Volume:			
Formula feed given	Y	Ν	Volume:			

DECISION (check one):

Continue Q3 – 4 hourly glucose monitor
Transfer to the NICU
Other, please specify:

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**PDSA 3:** Concerns on viscosity of gel and red dye. This Resulted in Parental Handout with information.



#### What is Neonatal Hypoglycemia? A medical condition when your baby's blood glucos Some common risk factors include prematurity ast

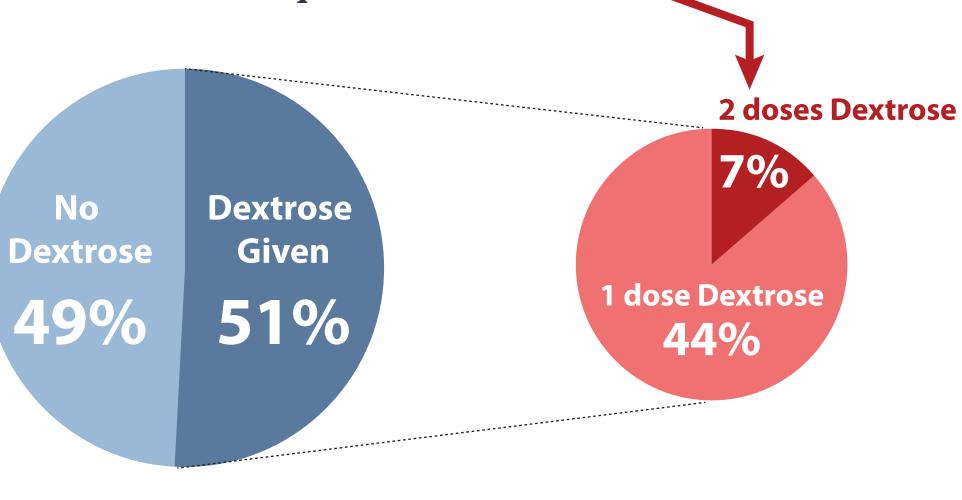
 Some common risk factors include prematurity, extremely small or large for gestational age an diabetes in the mother

Why treat Neonatal Hypoglycemia?
 If untreated, risk factors include a potential loss of vision and learning challenges
 What are some common symptoms of Neonatal Hypoglycemia? \*Not all babies show symptoms

What are some common symptoms of Neonatal Hypoglycemia? "Not all babies show symptoms
 Jitteriness, irritability, cold or pale skin, difficulty with feeding, fast breathing or "pauses" i

#### 1. You usually only need one dose

Of the 138 candidates recorded in this project we found that 51% met criteria for Dextrose Gel procedure. 44% required 1 dose of Dextrose Gel, while **less than 8% required a second dose** 

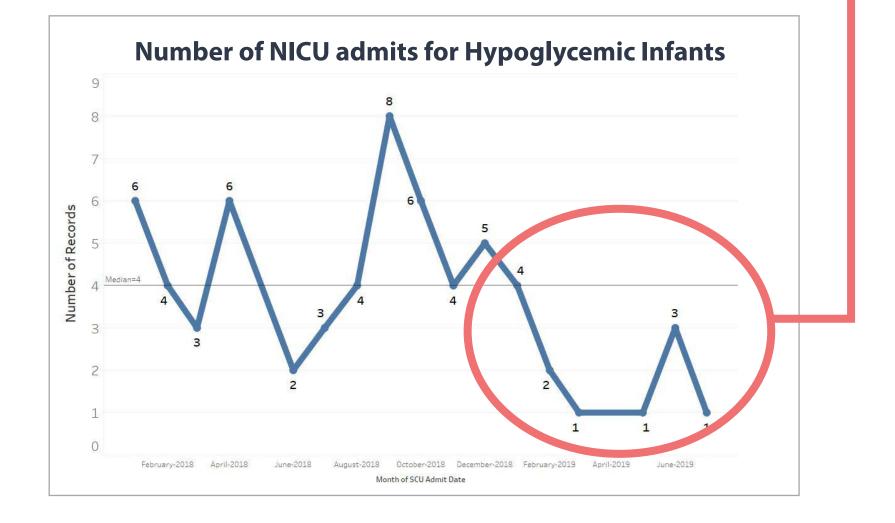


#### 2. Less admits to the NICU

Comparing the numbers from the same time frame from the past 2 years we see that admissions to NICU for babies with hypoglycemia has dropped

Year	2017	2018	2019
Time Frame	Jan - June	Jan - June	Jan - June
# of NICU admits for hypoglycemia	36	24	<b>only 13!</b> (46% decrease from prev year)

**3.** System improvement indicated The identification of 6 data points on or below the median line signals there has been non-random change in how the system is working



### Project Spread

"Sugar Sugar where art thou?" - Perinatal Rounds capturing:
 midwives

### Future Direction

The hope is to have the Dextrose Gel 40% available and incorporated island wide as part of the hypoglycemia protocol.

COMMITTEE

breathing, low temperature

#### Information about the Insta-Glucose® Gel

#### How does it work?

- Insta-Glucose<sup>®</sup> Gel contains Dextrose a sugar that will help increase your baby's sugars
- In what situations would the Insta-Glucose<sup>®</sup> Gel be used for your baby?
- Blood glucose levels 1.8 to 2.5 mmol/L around 2 hours of age
- Baby does <u>not</u> show symptoms of hypoglycemia
- 35 weeks gestational age or more, and less than 48 hours of age
- What if my baby's blood glucose levels are still less than 2.6 mmol/L in 1 hour after the 1<sup>st</sup> dose?
- A 2<sup>nd</sup> dose of Insta-Glucose<sup>®</sup> Gel + immediately followed by a measured feed
- If still less than 2.6 mmol/L, IV Dextrose may be administered
- What ingredients are in Insta-Glucose<sup>®</sup> Gel?
   Dextrose 40%
- Dextrose 40%
   Artificial Choroy Ela

island health

- Artificial Cherry Flavouring [less than 1%]
- Preservatives [Methylparaben, Propylparaben, Potassium Sorbate, Sodium Benzoate] [less than 1%]
   \*Preservatives pose a low risk to your baby as limited exposure
- How is Insta-Glucose<sup>®</sup> Gel administered?
- A health care professional will massage the gel into the inner lining of your baby's cheeks
  The dose is based on your baby's weight

#### Dextrose Gel has been shown to decrease the need for IV Dextrose administration and avoid separation of mother and baby.

Prepared By: Kurtis Leong, Pharmacy Student, Jan 2019 Reviewed By: Dr. Sannifer Hoi, Clinical Pharmacy Specialist – Perinatal, Dr. Nisha Pillay, Neonatologist, Feb 2019 family physicians

pediatricians

2. Regular education days with nursing staff.

3. Journal kept in resource room for anonymous

nursing feedback.

4. Parental Handout with information on the administration of

Dextrose Gel 40%.

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











### Faces of Motherhood: Supporting Women in Pregnancy Affected by Substance Use

### BACKGROUND

- Pregnancies can be difficult for any women, but can be especially difficult for those who are affected by substance use
- There are numerous gaps in care for this vulnerable population
- It is very difficult to identify and characterize the features of women who use substances during their pregnancy.
- Women often encounter numerous barriers to access services for addictions and maternity care at the same time
- Typically services for addiction care are not located in the same location of maternity services, leading patients to travel to numerous healthcare sites

### PROBLEM

At present, there is currently no mechanism in place to identify features of women who use substances during pregnancy nor is there a system in place to ensure they can access low barrier, co located services for addictions and maternity care.

### AIM STATEMENT We will improve identification by 100% for

### CHANGE IDEA

What changes can make that will result in improvements?

- To offer this patient population non-judgmental, womancentered, evidence based trauma informed care with a harm reduction lens
- To deliver education about this patient population to diverse care providers
- To develop a centralized referral process to Perinatal Addiction Services

- 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

**PDSA Cycle 1** 

#### **Baseline Survey Data**

Question: "On a scale from 1 to 10, how comfortable are you with managing your patients with addictions concerns?

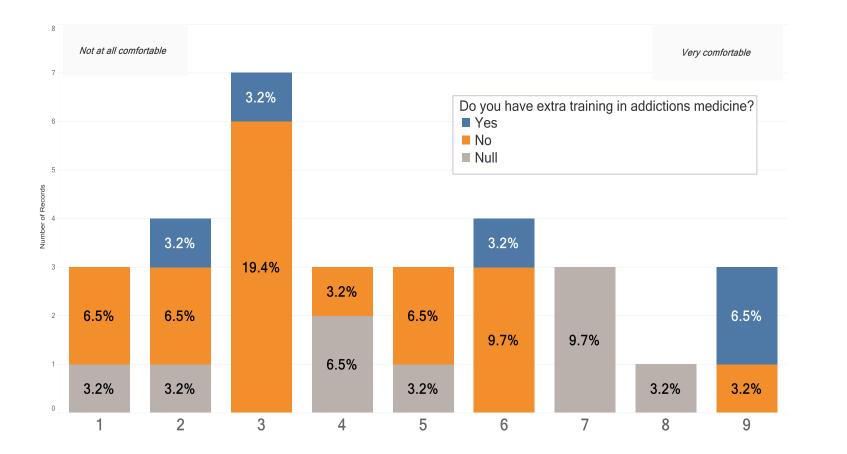


Table 1. In November 2018 a survey was given to healthcare staff. Results showed that:

- Only a small minority of respondents indicated they have extra addictions medicine training (16.1%)
- Majority of respondents (54.9%) did not feel comfortable managing patient addictions concerns (scored 4 or lower)
- Even respondents with extra addictions training (in blue) still did not feel comfortable managing patient addictions concerns (scored only 2 or 3 out of 10)

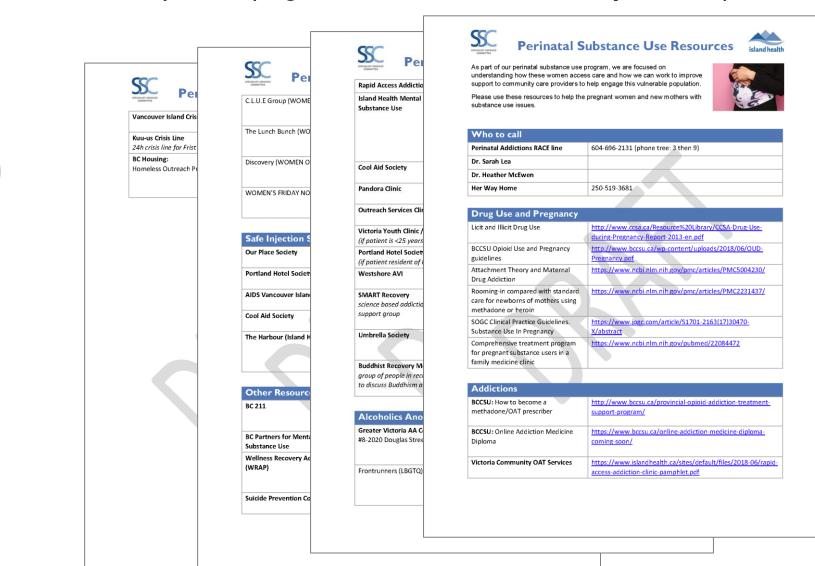
pregnant women who use substances and who wish to access maternity and addiction care at VGH, RJH and in the community by August 2019

To develop a Clinical Order Set for Antepartum/ Intrapartum and Postpartum patients affected by substance use

### PDSA Cycle 3

#### Staff Resource List

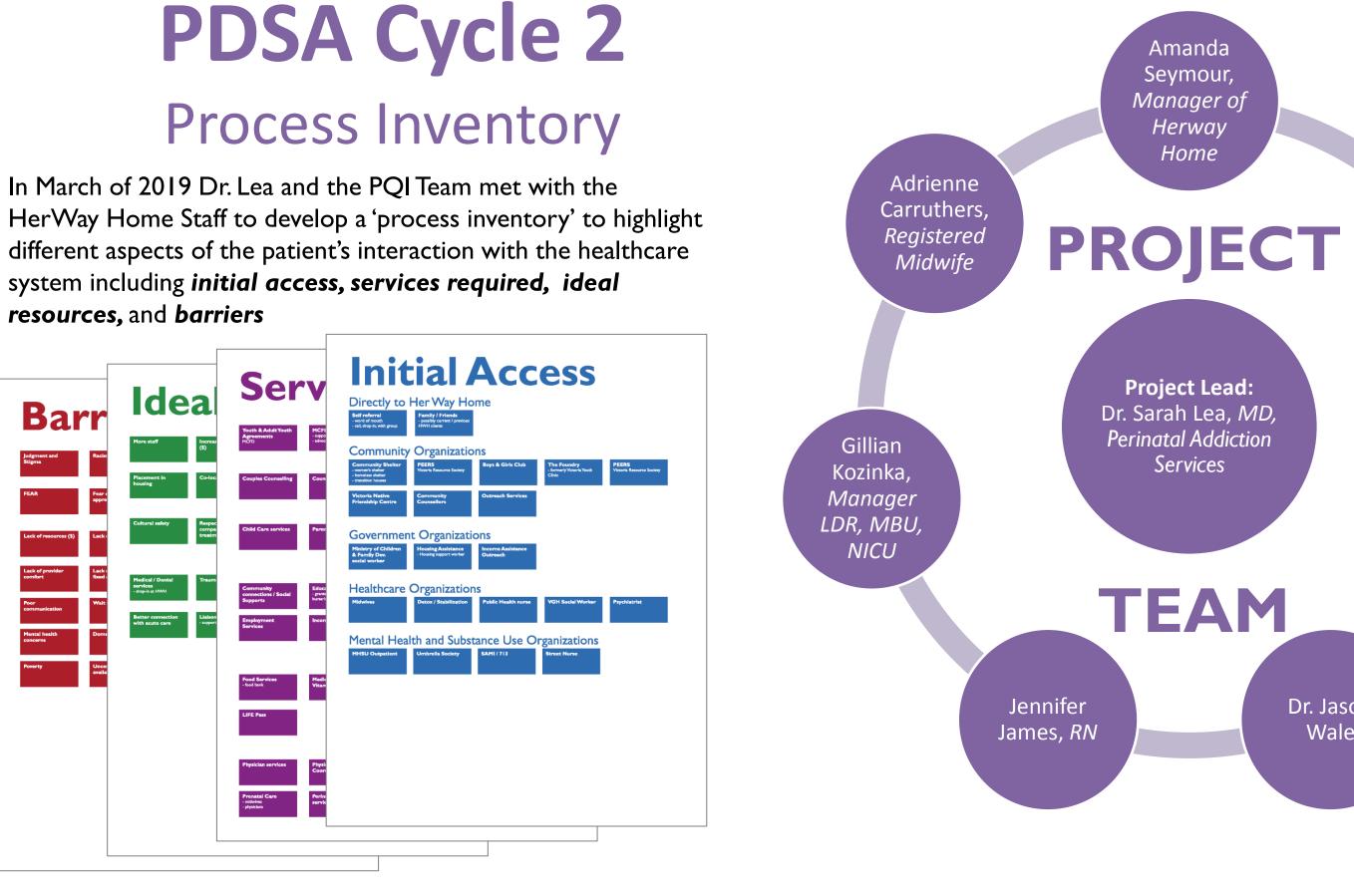
During the project a **Staff Resources List** was developed that outlined resources and related organizations to contact regarding drug use & pregnancy, addictions resources, alcoholics anonymous groups, safe injections sites as well as other important resources. We are currently developing a similar Information Pamphlet for patients.



### **PDSA Cycle 4 Developing COS**

With the assistance of a Medication Safety Consultant the team is currently developing a standardized Clinical Order Set (COS) that will outline many requirements for this patient population, and is expected to be deployed across the health authority.

	island health Clinical Order Set	
	Perinatal Acute Stabilization for (Rosie H, June 14 2019, v3	9
	Substance Use Disorder (Module)	
sland health Clinical Orde	Page 1 of 2 Key: Req – Requisition MAR – Medication Administration Record K – Kardex Dis – Discontinued	Key Pha
Perinatal Acute Stabilization Substance Use Disorder (Mc Key: Reg – Requisition MAR – Medication Ad	Instructions for completing this order set: Instructions for completing this order set: Must list the box for order to be implemented; Coders not ficked will not be implemented Must list the box for order to be implemented; Coders not ficked will not be implemented In blank space as needed/as appropriate Indicates an item for consideration by MRP; Is NOT an order Perinatal Acute Stabilization Substance Use Disorder (Module)	
ACTHADONE Abid II patient drowsy or not easily roused EGULAR ORDER MN ORDER MN ORDER MN ORDER MC Constraints of the second secon	Admit/Transfer/Discharge/Status tick boxes and drop down menu?         Patient Population - Diagnosis: Substance use during pregnancy, specify:	Perinatal Antepartum Substance Use Disorder (Module)
	PRN ORDER     Deprenorphine-naloxone (Suboxone),mg, Tab, SL, Q1H, PRN patient reported withdrawal symptoms     Nursing Alert: Dose indicated is in milligrams of buprenorphine. Hold if drowsy or not easily roused     Maximum Dose: 24 mg of buprenorphine in 24 hours, from all sources     Nicotine replacement     Signature, Designation     College License # Date Time Pa	ge 1/2
		e/MD/09-18/v1/se



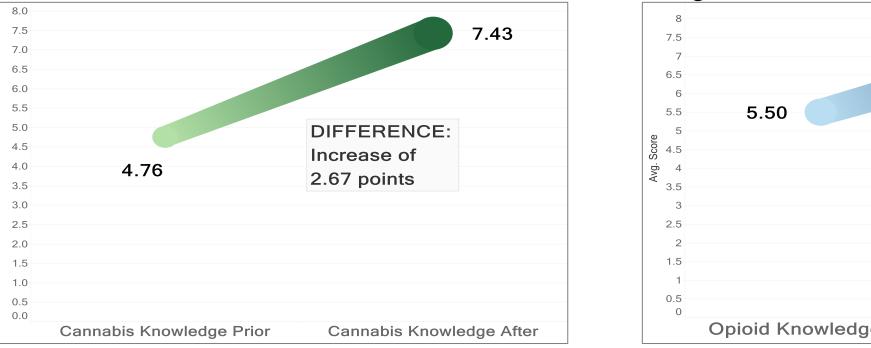


In May of 2019 Dr. Lea led an education dinner event to physicians, nurses, and allied medical staff. During the event Dr. Lea conducted a presentation on cannabis and opioid use, HerWay Home presented on their community services, and there was a interactive audience session focusing on how to better help this patient population.

resources, and barriers

Barr

Idea



DIFFERENCE

ncrease of

2.11 points

Average score of attendees pre/post event surveys: Those attending the dinner event were asked (on a scale of 1 to 10) their level of knowledge and their level of comfort before and after the presentations, for both cannabis and opioid information for patients:

- on average attendees knowledge of cannabis information increased 2.67 points from the event

- on average attendees knowledge of opioid information increased 2.11 points from the event

### PATIENTVOICE

"I was very happy with the care I received from Dr. Lea and her team. Dr. Lea is caring, I saw her as both a friend and as a doctor" – Mom to Baby S

Dr. Jason

Wale

HerWay

Home Staff

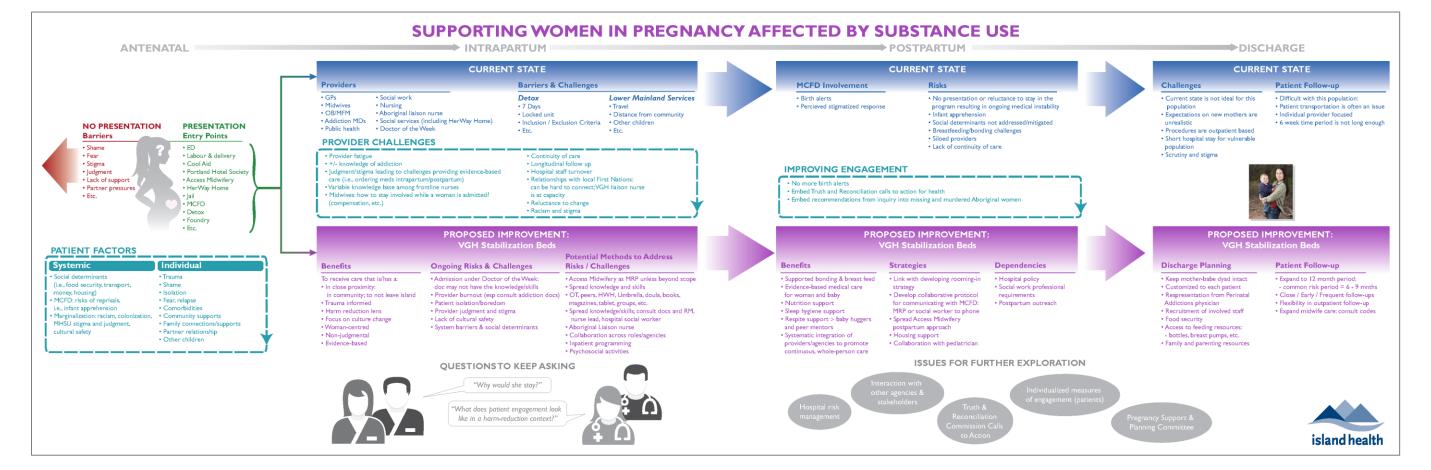
Dr. Heather

McEwen

Dr. Lea worked with Baby S's Mom throughout her pregnancy to help her achieve and maintain abstinence and they are happily thriving together in the community with the help of Herway Home and the Perinatal Addiction Physician Team

### PDSA Cycle 6 Patient Journey Map

In collaboration with the Shared Care Committee this project developed a **Patient Journey Map** that compared the current state of this patient's interaction with the healthcare system with the a purposed system improvement centered around dedicated stabilization beds



### CONCLUSION

Over the course of the year, through advocacy and education, we saw a shift in culture in the acute care setting. This has led to a qualitative improvement in women's experience in the inpatient department. Staff have expressed a desire and interest to learn more about caring for this population, and data from our educational event showed a significant gain in knowledge from our pre-and post event surveys. Through this culture shift and improved patient experience we are seeing more women present to care, and be willing to access services they may have otherwise avoided due to fear of judgment, child protection concerns etc. We are admitting more women for stabilization, and in turn they are reporting positive experiences of their stay in hospital.

### FUTURE DIRECTIONS

- Educational Rounds for local practitioners
- Development of Perinatal Addictions Referral Form
- Build strong interdisciplinary relationship with perinatal psychiatry to improve psychiatric care in pediatrics and offer prolonged post-partum stays for infants requiring treatment for 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 Meals Improving Seniors Care at CRH

### **PROJECTTEAM**

**PQI Physician Lead:** Dr. Kathleen McFadden

**Project Participants:** 

- Helen Goodwin
- CRH 3<sup>rd</sup> Floor Unit C/D staff
- Laura Hickey, Patient Partner







Let's Get up to Eat!

### PROBLEM

Frail elderly patients at CRH seem to be deteriorating clinically with prolonged hospital stays.

### **AIM STATEMENT**

To increase the number of patients who are 70 years and older with one complex medical problem at Campbell River Hospital (CRH) sitting up in a chair for meals by 50% by August, 2019.

**PDSA Cycle** Score cards & magnets Plan Act Study Do

'Healing is a matter of time, but it is sometimes also a metter of opportunity. Hippocranis (450 BC - 370 BC)

Island Health is committed to helping you reach your health geals? This you know that every day of hed rest makes it leader to recover from illuois or surgery? In fact, you less 1 - 5% of your massle strength every day you spend in helf-

Getting up in the chair in your room to take your needs is a grant place to start for almost everyone with the goal to achieve the bort health possible.

Use the back of this sheet to record every sime you are your meal-IN A CROOP







### **CHANGE IDEA**

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.



### **PROJECT SPREAD**

- Endorsement of operational leaders crucial.
- Changing hearts and minds: enlisting front-line champions.
- Consider "Upstream" process changes Look to established initiatives for help (e.g. 'PJ Paralysis' program.)

BACKGROUND

Evidence demonstrates that encouraging patients to sit up for their meals is associated with better health outcomes



of scorecards submitted.

Measure uptake via number

Distributed to patients

meeting project criteria.

Completed scorecards

provided to Unit Clerks.

#### and decreased lengths of stay.

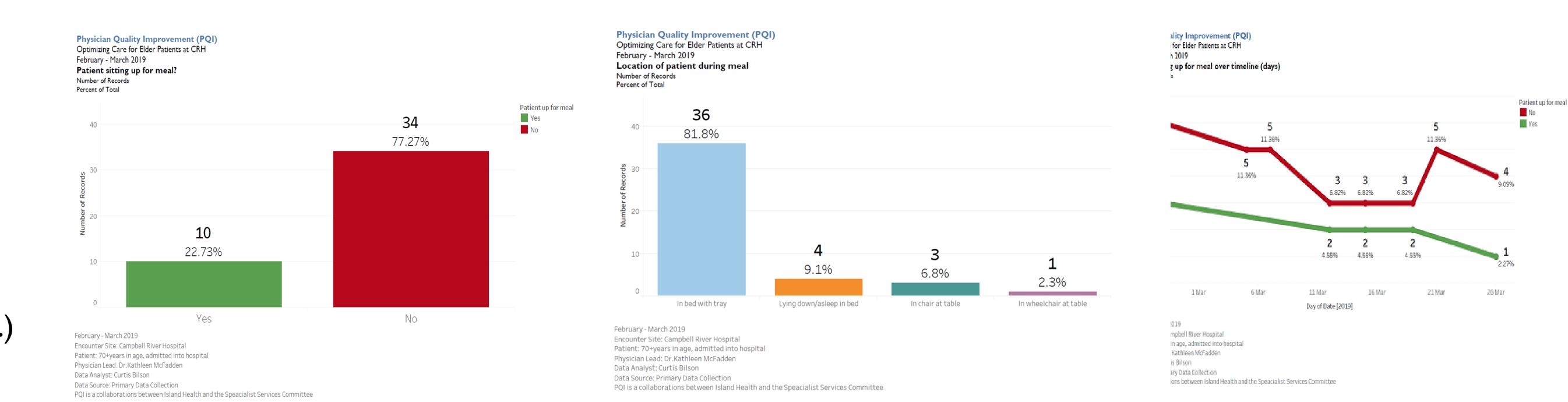
### **DATA ANALYSIS**

Baseline data included a manual count of patients who met project criteria at CRH to determine:

- Location where meal eaten (bed, chair, at table etc.
- Age (70 96 years)
- Unit
- Day of the week
- Reason for not sitting up (too tired, fasting etc.)

### FINDINGS

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%)



CONCLUSION

#### Discuss final thoughts surrounding the project

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### PHYSICIAN QUALITY IMPROVEMENT An SSC Initiative

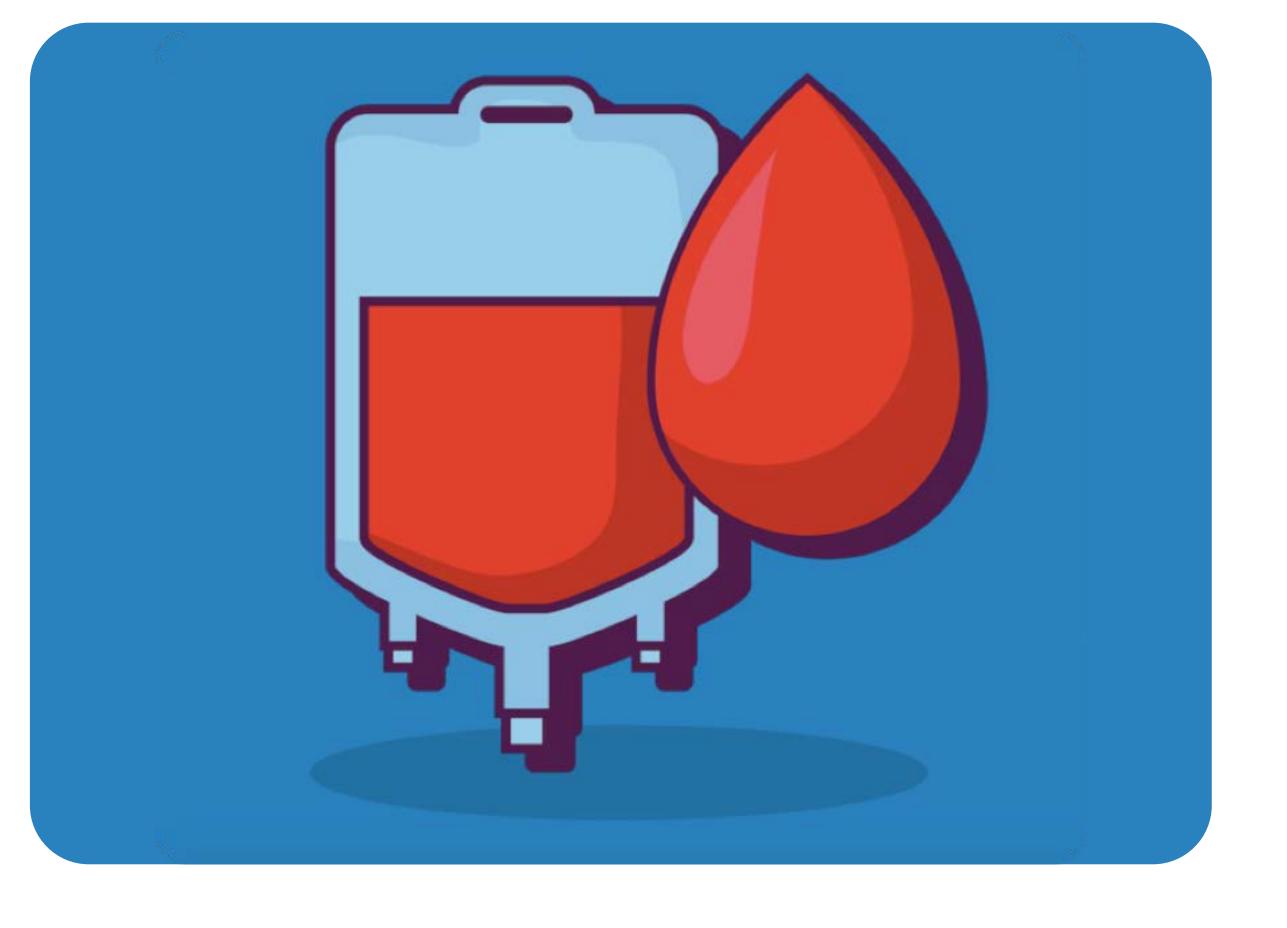
# Reducing Inappropriate Blood Prescribing

### PROJECT TEAM

Chaundra Willms NPCo-Division Head – Project Lead

- Chris Hall EMD Medical and Academic Affairs Sponsor
- Coleen Heenan NP Co-Division Head
- Koko Tokoro *NP Cardiac Services RH*
- Carolyn Carlson, Chelsea W akelyn, & Curtis Bilson Physician Quality Improvement

### BACKGROUND



### 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.

### CHANGE IDEAS

- Concerns about Nurse Practitioners prescribing blood in acute care.
- 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

### CHART AUDIT

- Chart review: 30 inpatients at RJH prescribed blood in September 2018
- Excluded: oncology, trauma, & ICU
- ♦ 23 patient charts remained
- All charts were physician orders

### AIM STATEMENT

To reduce unnecessary harm by improving appropriate red blood cell (RBC) transfusions by creating a process for privileging and mentoring NPs that will support appropriate blood prescribing. 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.

### DATA ANALYSIS

- Set 'NP Transfusion Boot Camp' as NP privileging requirement
- Implement mentorship program for NPs new to prescribing blood and blood products.

### PDSA CYCLES

PDSA #1 - Privileging requirements • Implement education requirement • Measure number of NPs who have completed process ♦ PDSA #2 – *Mentorship program* • Implement mentorship program • Measure number of NPs who have completed process • Measure appropriateness of NP prescribing through post mentorship prescribing practice assessment

#### Choosing Measures:

Most common measures used to evaluate appropriate Packed Red Blood Cell (RBC) transfusions

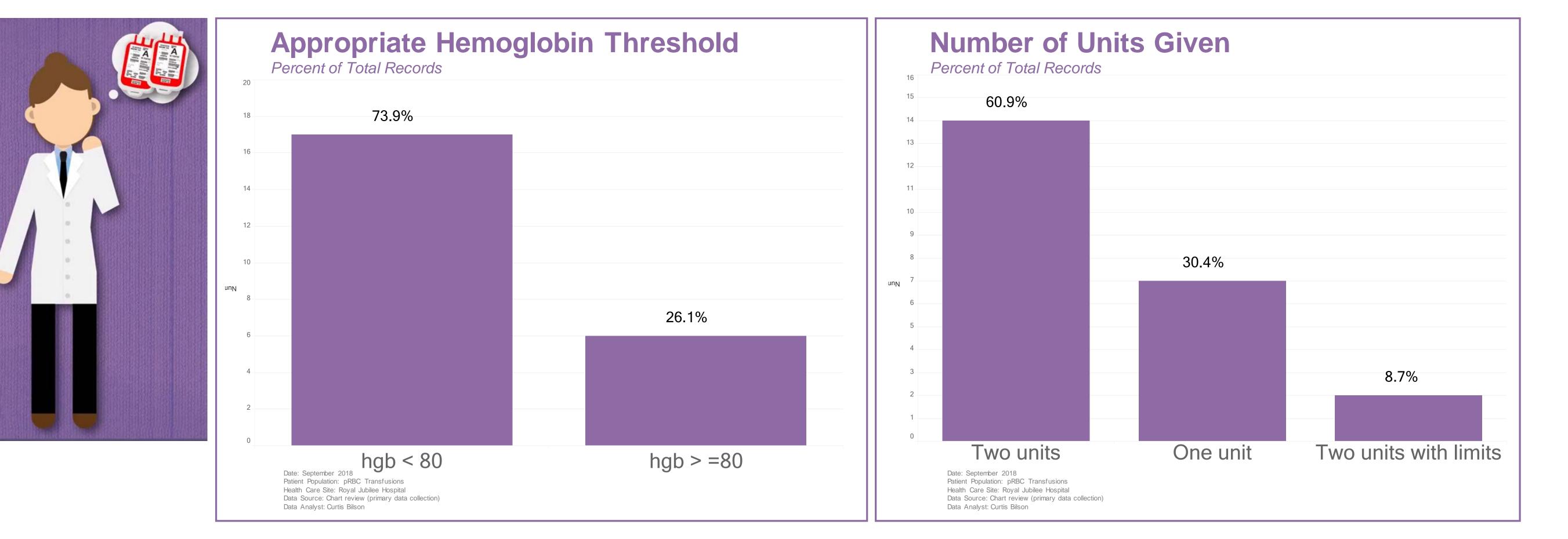
**\delta % of transfusions with a pre-**transfusion hem ogbbin  $\leq 0 \text{ g/l}$ ♦ % of single unit red blood cell transfusions.

Wisely

Canada

### FINDINGS

**73.9%** of transfusions patient HGB < 80 **39.1%** of transfusions 1 unit



#### **26.1%** of prescriptions met Choosing Choosing Wisely Canada Transfusion Recommendations

### CONCLUSION

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.



inappropriately prescribed.