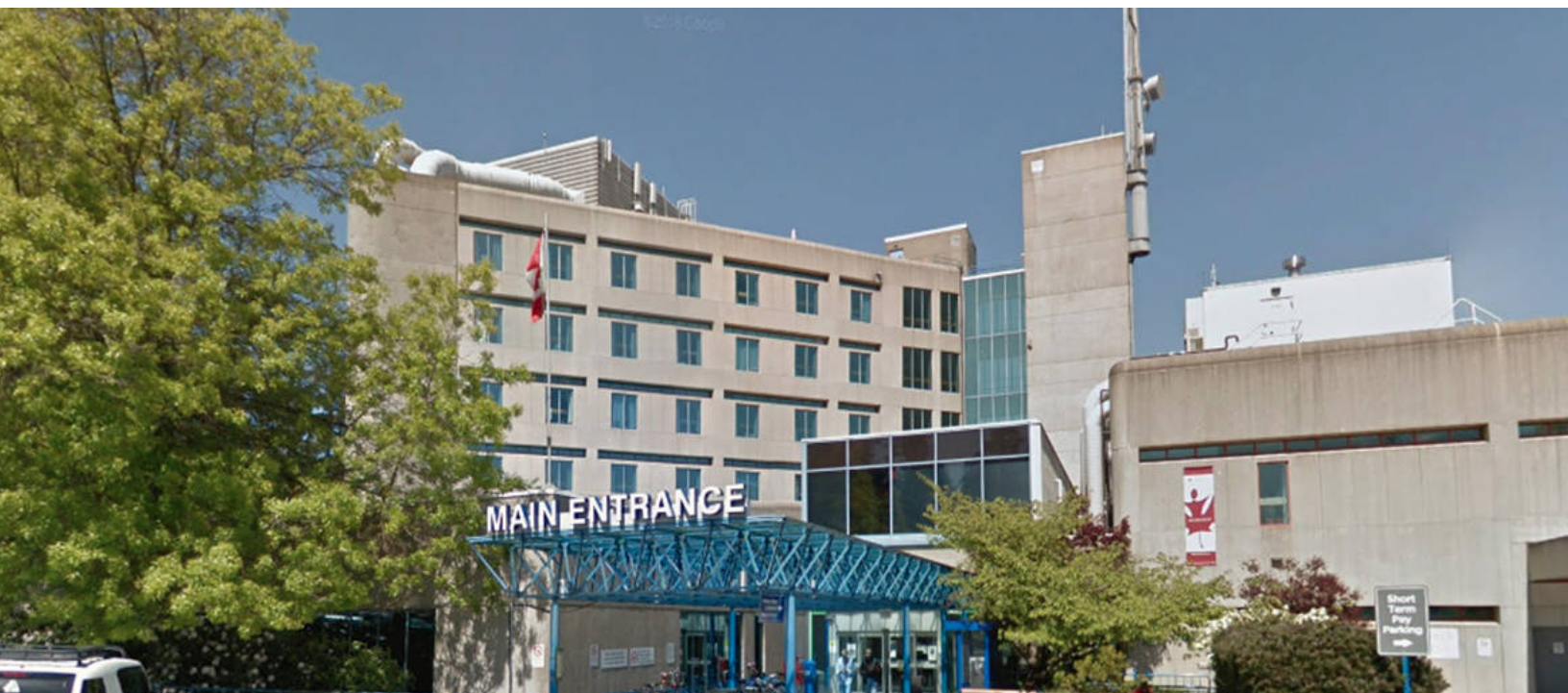


SOUTH ISLAND MEDICAL STAFF
ASSOCIATION

STORYBOOK 2020

A COLLECTION OF ENGAGEMENT AND QUALITY
IMPROVEMENT WORK LED BY SOUTH ISLAND PHYSICIANS



SOUTH ISLAND FACILITY
ENGAGEMENT INITIATIVE SOCIETY



CONTENTS

Introduction.....	3
A Note on these Projects.....	4
Chapter 1: Evidence into Practice Projects	
Victoria Enhanced Recovery Arthroplasty Project.....	6
Hospital at Home Project.....	7
Regional Anesthesia/Block Room Project	8
Serious Illness Conversation Workshop.....	9
Reducing Pharmaceutical Costs in the ER.....	10
Development of the MAiD Hospitalist Service.....	11
Designing a Smoking Cessation Program for Crohn's Patients.....	12
WorkSafe BC Reallocation in ER.....	13
A compassionate approach to detecting skin cancer among the institutionalized elderly.....	14
Rapid Delabelling of Antibiotic Allergy among Children.....	15
Comparison in surgical approaches to varicose veins.....	16
Conquering Complex Regional Pain Syndrome (CRPS).....	17
Medical Assistance in Dying (MAiD) Bereavement Support.....	18
Providing Wait Times for Patients in the Emergency Room.....	19
Chapter 2: System Level Changes	
Ophthalmology Access System Review.....	21
Vancouver Island Thoracic Surgery Oncology Program (VITOP).....	22
Eliciting Feedback on the Gastroenterology Central Access and Triage.....	23
Updating Pre-Printed Order Sets.....	24
Developing a Clinical Order Set for Chronic Obstruction Pulmonary Disease (COPD).....	25
Designing a Multi-disciplinary Clinic at the Vancouver Island BC Cancer Agency.....	26
Vested® Team Attendance.....	27
Early Psychosis Order Set.....	28
Urgent Pediatric Assessment Clinic (UPAC) Development	29
Pain Management and Opiate Safety Working Group.....	30
Establishing a COVID Ward.....	31
Planning for the High Complexity Care Team (HCCT).....	32
ERCP Service Improvement and Follow Up.....	33

CONTENTS

Chapter 3: Coordination of Care Projects

Improving Management of Recurrent Paracentesis Project.....	35
Vancouver Island Interdisciplinary Sexual Medicine Working Group.....	36
Vancouver Island IBD Forum.....	37
Rooming-In for Infants Exposed to Opiates Project.....	38
Interdisciplinary TEE Care Review.....	39
The Victoria Pregnancy Loss Working Group.....	40
Integrating General Internal Medicine with In-Patient Cardiology Service.....	41
Transitional Pediatric Care Clinic- Expansion into Victoria Schools.....	42
Mental Health Service Delivery for Marginalized and/or Elderly Populations.....	43
Coordinating Transgender Surgical Care on Vancouver Island.....	44
Engaging across Disciplines for the IBD Clinic Rounds.....	45
Development of a Complex Comorbidities Clinic.....	46
Cardiology and Palliative Care Collaboration.....	47

Chapter 4: Capacity Building Projects

Development of Point of Care Ultrasound Service (POCUS).....	49
Building Support for Women who use Substances	50
Thomas Splint Educational Video.....	51
Cardiovascular Allied Health Teaching Project.....	52
Building Capacity for Streamlining Perinatal Ultrasounds.....	53
Pediatric In-Situ Simulation.....	54
Formalizing the Mock Code Blue Program.....	55
Building Capacity for the Hospitalist Morbidity and Mortality Program.....	56
Interdisciplinary Emergency Department In Situ Simulations.....	57
Improving Echo Lab Efficiency.....	58
Specialist Presentations at Hospitalist Rounds.....	59
Acupressure Training for Labour and Delivery.....	60
Clinical Ethics Lunch and Learns.....	61
Hospitalist Trauma Ward Co-Planning.....	62

INTRODUCTION

Looking back over the past three years, there's a lot to celebrate.

Under the leadership of the Executive, the South Island MSA has not only represented and advocated for its members, but it has also generated physician engagement opportunities like never before.

Through Facility Engagement Funding from the Specialist Services Committee, micro-grants of \$10,000 for physician engagement projects have become a cornerstone of the South Island MSA's offerings.

Our physicians have been supported to define and lead important, impactful, and transformational work that makes tangible improvements to the workplace, to relationships, and to processes within the hospital.

By bringing physicians together in conversation with each other and with their health authority colleagues, these projects have helped to build greater familiarity in a large site such as Victoria where many of those who work in the hospitals may not meet face to face. Knowing each other better means knowing the face on the other end of the phone when making a patient referral, or knowing who to call when you have a great idea to improve care. All of this work ultimately leads to better health outcomes for our patients.

This is an anthology of those successes: A collection of stories that celebrates the positive changes to our health care system that have been led by South Island physicians over the past three years.

We hope you find inspiration in these stories – and thank you for celebrating with us.

Dr. A. Donald Milliken
President

Dr. John Galbraith
Director at Large - Projects

A NOTE ON THESE PROJECTS

These projects reflect the Facility Engagement mandate as interpreted and implemented by the South Island Facility Engagement Initiative Working Group. The guidelines governing this funding has evolved over the years in response to both the Working Group's experience in interpreting the guidelines, as well as refinements at the provincial level.

One notable change in the funding guidelines has been a recent exclusion on projects whose main focus is research. The Facility Engagement Initiative defines research focused project as those which aim primarily to generate new knowledge that is generalizable to the wider population; test a new practice, theory or intervention; and, its design is tightly controlled in order to limit the effect of confounding variables on the variables of interest.

Though some earlier South Island MSA projects had a research component, research is no longer able to be funded through facility engagement funding.

CHAPTER 1

EVIDENCE INTO PRACTICE PROJECTS

All those involved in health care want to act on the best available evidence when making decisions about patient care. At times, the evidence is compelling that a change in practice is needed, yet it can be hard to coordinate and operationalize these changes within and across departments in the hospital. The projects described in this chapter faced precisely this challenge. The project teams aimed to draw on existing research or develop their own data in order to make informed changes in practice or policy within the South Island site.

In some cases, these changes dramatically transform the practice of health care, as is the case with the development of the Hospital at Home program. Building on the success of home-based care in other locations, the Hospital at Home initiative is poised to alter the delivery of acute care for a sub-group of patients not only in Victoria, but across the province.

In other cases, the changes inspired by a realignment with empirical evidence are more subtle. When an Emergency Room physician initiated a process for correctly allocating WorkSafe BC patients during the registration and triage process, it seemed like a largely administrative exercise. Yet the cost saving implications for the health authority are enormous, and with these savings comes opportunities for further funding of departmental priorities.

We celebrate these projects for drawing on empirical evidence to make informed changes in practice and policy, and thank the project leads for their hard work in bringing them to life!

VICTORIA ENHANCED RECOVERY ARTHROPLASTY PROJECT (VERA)

Getting patients home on the same day as their surgery takes on new significance in the wake of COVID-19.

Project Lead: Dr. Duncan Jacks
Specialty: Orthopedic Surgery

When Dr. Duncan Jacks initiated Victoria Enhanced Recovery Arthroplasty (VERA), a local same-day arthroplasty program in 2019, he did so in recognition of the value of getting patients home safely on the same day as their surgery. Patients appreciated not having to spend the night in the unfamiliar setting of the hospital, and Island Health was able to free up hospital bed space for other patients.

What he could not have anticipated at the time was the advent of COVID-19 just a few months later. For several months in early 2020, all elective surgeries were put on hold. Patients who had been scheduled for a knee or hip arthroplasty had to wait until the immediate threat of a sudden surge of COVID-19 infected patients had subsided. Yet with the constant threat of a second wave, keeping hospital beds free is now doubly important. Suddenly, a same-day discharge arthroplasty program became part of the hospital's way of managing the limited resources of hospital beds.

Dr. Jacks' project received funding in its first phase to engage across multiple departments to establish the necessary protocols for the same day program and to design and implement a pilot of the same-day service. Following a meeting with Island Health CEOs in the fall of 2019 where Dr. Jacks presented the results of the pilot, he felt confident that all stakeholders were aligned in support of this initiative.

In Phase 2, Dr. Jacks and colleagues Dr. Jacques Smit and Dr. Tristan Camus completed the Clinical Order Set for Same Day Hip/Knee Arthroplasties by meeting with their Island Health counterparts, physiotherapists, Clinical Nurse Leads, and pharmacists.



Gathering the group together via teleconferences, they discussed and debated necessary modifications to make a same-day discharge program function safely, including multimodal pain management, and adjustments in the activity orders for patients post-surgery. They also drafted a health care provider user manual for VERA – a 'cookbook' for the initiative - that can be implemented by others in Victoria or at other sites without the direct involvement of Dr. Jacks or his other colleagues.

In an example of parallel initiatives benefitting each other, Dr. Jacks' project builds on another project initiated by a South Island physician, Dr. Gus Chan. While Dr. Jacks has been working to scale up the VERA project, Dr. Gus Chan and his colleagues in anesthesia have been working to build consensus and refine protocols around the creation of a block room, a designated space to administer regional anesthesia. The absence of a block room was one of the biggest obstacles identified to implementing a same-day discharge for arthroplasty, as patients would have to queue for their spot in the operating room before having anesthesia administered. In May 2020, the Victoria Block Room entered its pilot phase, a shift that will no doubt impact on the efficiency and functioning of the same-day arthroplasty program.

With the continuing imperative of keeping the hospital census to a minimum, the VERA initiative stands out as a leader in same-day discharge.

HOSPITAL AT HOME PROJECT

Providing hospital-level care in the comfort of a patient's home becomes possible in Victoria.

Project Lead: Dr. Shauna Tierney and Dr. Elisabeth Crisci

Specialty: Hospitalist

In October 2018, hospitalist Dr. Shauna Tierney was in the audience when Island Health's Geo 4 Executive Director Marko Peljhan presented a challenge to the South Island Hospitalists: By 2040, Victoria will need another 500 hospital beds to keep up with the demands of the population, but how they would begin to meet this need over the next 20 years was unknown.

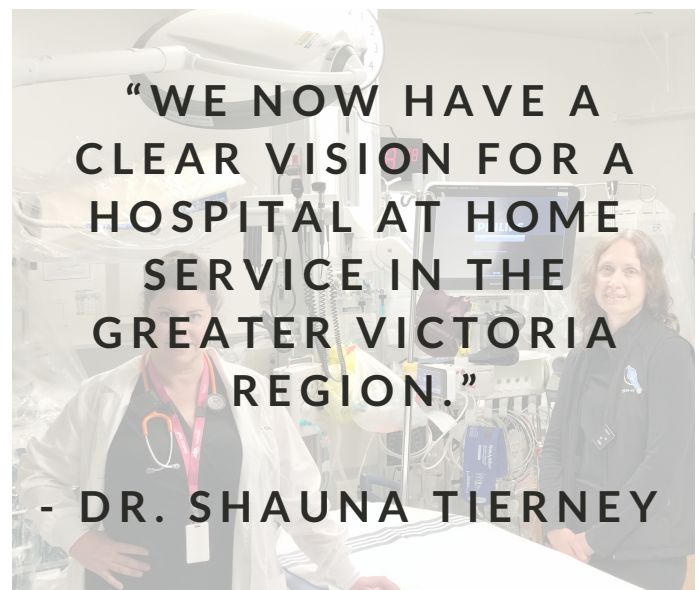
Shortly thereafter, Dr. Tierney came across mention of a model of hospital medicine called 'Hospital at Home', implemented primarily in Australia, the UK and Europe. It reported shorter hospital stays, increased patient satisfaction, and lower costs when low-risk COPD patients in need of hospital admission were cared for at home.

Dr. Tierney approached Marko with a suggestion: Let's explore Hospital at Home together to see if it could ease the pressure on Victoria's hospitals. What's more, it may also improve patient care and reduce costs. Marko was enthusiastic, and arranged for the Director of Royal Jubilee Hospital, Sarah Crawford-Bohl, to partner with Dr. Tierney. Not long after, Hospitalist colleague Dr. Elisabeth Crisci joined the team: Hospital at Home had made a lasting impression on her when she saw it in action in Australia ten years prior as a resident doctor. In May 2019, the vision for a Victoria Hospital at Home program was ready for wider discussion and engagement, so Drs. Tierney and Crisci presented the plan to the wider Hospitalist Department. After a productive discussion and vote, the Hospitalists agreed to support the creation of a Hospital at Home service. Since August 2019, a Working Group of 12 Hospitalists has been meeting monthly to design the clinical aspects of the program. They have since been joined by the Island Health Hospital at Home Advisory Committee, which brings together over 20 Island Health directors,

representing groups including Pharmacy, IMIT, Risk, Logistics, Professional Practice, and Home Oxygen. Project manager Kerry Morrison is keeping everyone on track. The project also received support from the Health System Redesign funding through the Specialist Services Committee to enable broader engagement with the health authority.

With formal endorsements from the Geo 4 Executive, the Divisions of Family Practice, and the Department of Emergency Medicine, the team and Marko Peljhan presented their vision to Deputy Minister of Health Steven Brown and his staff in February 2020. The Ministry committed to working with Island Health to clear the path for Hospital at Home in Victoria and province-wide.

The initial plan was to launch a prototype program out of the Victoria General Hospital in September 2020. While the launch may be delayed, the prototype will be rigorously monitored and evaluated by Dr. Sean Spina, Pharmacy Coordinator and Research Lead at RJH to look at the effect of the pilot on acute care flow, patient experience, clinical outcomes and cost.



**"WE NOW HAVE A
CLEAR VISION FOR A
HOSPITAL AT HOME
SERVICE IN THE
GREATER VICTORIA
REGION."**

- DR. SHAUNA TIERNEY

REGIONAL ANESTHESIA/BLOCK ROOM PROJECT

Creating a designated space for 'parallel processing' patients ready for surgery means better care for the patient and greater satisfaction for the physicians

Project Lead: Dr. Gus Chan

Specialty: Anesthesia

Usually, when anesthesia is administered in the operating room, only one patient can be treated at a time. With a block room, a designated space to administer regional anesthesia, parallel processing can be used. Multiple patients can receive regional anesthesia while other patients are having their operations. Prior to coming to Victoria, Dr. Gus Chan had worked at a Vancouver hospital that had a block room and had seen the efficiencies and improvements in patient care it could create. He sought to promote the creation of a block room in Victoria and used a grant from Physician Quality Improvement (PQI) to establish the efficiency of a block room in Victoria. Following this, he received support from the South Island MSA to build consensus among his colleagues, allied health care staff, and administrators.

Dr. Chan worked with colleagues including Anesthesiologist Dr. Jacques Smit, Orthopedic surgeon Dr. Duncan Jacks, PACU Nurses Karen Shute and Meghann Elliott, and Anesthesia Assistants Darren Chatten and David Richardson,

as well as with key stakeholders from Island Health including Jason Price, the SDC/PACU manager, Melanie Majore, the OR Manager, Alison Dormuth from Surgical Services, and Dr. Chris Hall, Executive Medical Director to develop the necessary infrastructure, staffing, documents, protocols and procedures for a block room trial at Royal Jubilee Hospital.

The 3-month block room trial began in May 2020.

During the trial, data will be collected to analyse efficiency savings in the PACU and OR, quality of analgesia, and patient and provider satisfaction.

Dr. Chan is thrilled that the project has reached the trial phase, saying that he and his colleagues appreciate the opportunity to administer more regional anesthesia and improve perioperative efficiency. He anticipates that the Victoria block room will enable them to recruit anesthesiologists to perform and promote regional anesthesia as a special interest in the future.



SERIOUS ILLNESS CONVERSATION WORKSHOP

Clinicians practice how to discuss a terminal diagnosis with patients so as to optimize their quality of life.

Project Lead: Dr. Leah MacDonald

Specialty: Palliative Care

Advance Care Planning (ACP) is a process by which individuals identify their wishes and consider their options for future health care decisions. “Goals of Care conversations” between patients and physicians help clarify diagnosis, prognosis, and risks and benefits of treatments; and they lead to decisions around medically appropriate options for medical care. Despite this, current research suggests that the Canadian medical system is inadequately addressing the advance care planning needs of seriously ill patients. Most patients want to know their prognosis and yet this information is frequently not shared, resulting in uninformed decision. Clinicians report being ill-equipped for end of life conversations and therefore avoid them.

²
Dr. Leah MacDonald wanted to help improve the Goals of Care conversations happening between clinicians and their patients in South Island. She sought funding for training in the Serious Illness Conversation Guide, a structured approach to end-of-life planning with patients.

Dr. MacDonald’s workshop was held to provide coaching in the “how to” approach conversations about goals of care with patients who have life-limiting illnesses.

Over 40 physicians and allied health personnel attended, including representation from nephrology, cardiology, emergency medicine, respirology and intensive care.

Facilitated by Nanaimo-based Nephrologist, Dr. Rachel Carson, the workshop provided participants with tangible opportunities to practice Goals of Care conversations with each other. She emphasized the importance of holding space for patients to take in difficult diagnoses, and for asking questions. Feedback from the workshop was enthusiastic. One physician remarked, “This enriched my skills at dealing with difficult topics in life limiting illnesses.” Another stated, “I won’t shy away from conversation. I’ve now been given a framework to help guide me.”



[1] Heyland DK, Allan DE, Rocker G, et al. Discussing prognosis with patients and their families near the end of life: Impact on satisfaction with end-of-life care. *Open Med* 2009;3:e101-10

[2] Bernacki, R, Hutchings M, Vick J, et al. Development of the Serious Illness Care Program: a randomized controlled trial of a palliative care communication intervention, *BMJ Open* 2015;5:e009032.doi:10.1136/bmjopen-2015-009032

REDUCING PHARMACEUTICAL COSTS IN THE ER

A careful review of medications used to treat nausea in the Emergency Room yields insights into better patient care and cost savings.

Project Lead: Dr. Jason Wale and Richard Wanbon

Specialty: Emergency Medicine and Pharmacy

When a sick patient arrives in the emergency room, are the medications prescribed effective and cost efficient? Pharmacist Richard Wanbon, ER Physician Jason Wale and their project group wondered if a deeper dive into the peer-reviewed literature would offer up any clear-cut opportunities for standardization of prescribing, particularly in relation to patients receiving opiates and being treated with antiemetics for nausea and vomiting. By comparing current prescribing patterns with available evidence and recommendations, the project group identified opportunities for reduction of health care costs, adverse effects and workload inefficiencies.

The project first started by reviewing drug usage reports for high cost medications and the most commonly used medications in an attempt to identify potential opportunities for cost savings with ED physician prescribing patterns. For instance, expensive thrombolytic medications are used less frequently in Victoria due to the Catheter Lab proximity, but are used more commonly up Island. These expensive stocked items can be sent to up island as their expiry date nears to ensure they are used rather than wasted by expiration. For commonly-used medications such as antiemetic medications, evidence-based optimization was sought. After sharing drug usage data with emergency physicians, the group decided to review antiemetic usage with a focus on patients receiving opiates in the ED. They first conducted a chart review to explore how frequently these medications are used with particular patients, and then reviewed the literature to assess the current empirical foundation for certain treatment decisions. After a thorough review, they determined that approximately one half of anti-emetic usage at RJH is for nausea prophylaxis

with opiate therapy. They concluded that use of antiemetics in this context is unnecessary and lack evidence for the prevention of opiate-related nausea and vomiting. They identified specific subtypes of nausea and vomiting that have evidence for and against certain antiemetic treatment options, and with a further look at current prescribing patterns, they also identified a potentially under-utilized option. Aside from cost savings, other potential benefits of these findings are a potential reduction in adverse effects secondary to ineffective or unnecessary antiemetic use (e.g. delirium in our elderly population) and improved, more efficient patient care (e.g. improving provision of analgesia and IV fluids).

The findings from this study have now been shared with the ED group, and feedback has been requested about how best to proceed with practice changes. Next steps for this project include a follow-up assessment with emergency physicians to determine if these findings have changed prescribing patterns. Jason and Richard are also considering looking at other high-cost and high-usage medications in the ED to continue to improve patient care, workload, and cost savings. For example, reducing the utilization of IV antibiotics where oral antibiotics are shown to be equally effective.

Speaking about the value of the funding, Wanbon said, "I love how these projects have great potential to improve patient care, identify health care efficiencies and support physicians with their prescribing. Unfortunately, it's difficult to complete projects of this scope in our normal daily work and so having the funding support to complete this outside of our normal hours has been very helpful and appreciated."

DEVELOPMENT OF THE MAiD HOSPITALIST SERVICE

A growing demand for MAiD in South Vancouver Island creates the impetus for an inpatient service at Victoria General and Royal Jubilee Hospitals

Project Lead: Dr. Milvi Tiislar and Dr. Chloé Lemire-Elmore

Specialty: Hospitalist

Vancouver Island is a leading center for the provision of MAiD in the country. However, while Victoria's older population has been becoming increasingly aware of the possibility of medically-assisted death at the end of life, the number of MAiD providers has remained static, with only a few local GPs maintaining MAiD privileges. This small group was becoming unable to keep up with the increasing number of requests for MAiD. To address this shortage, hospitalists Dr. Milvi Tiislar and Dr. Chloé Lemire-Elmore proposed developing a sustainable group of hospitalist MAiD prescribers who would eventually handle all of the inpatient MAiD provision at the Victoria General and Royal Jubilee Hospitals. To do this, Drs. Tiislar and Lemire-Elmore invited the 73 doctors in their group to join a steering committee to decide how they would go about providing this service and they identified those interested in receiving training in MAiD provision. Over the course of the first year, five hospitalists obtained privileges to provide MAiD. Many more became involved as MAiD assessors. During this year they focused on identifying internal and external issues related to providing MAiD within the hospitalist service, and generating data to inform a discussion about the hours and scope required to include provision in a future hospitalist contract. Using qualitative interviews to elicit the perspectives of nurses and doctors who have interacted with this referral process, they found that stakeholders thought the hospitalists were a suitable group of physicians to be providing MAiD services and that the program was a positive experience that improved patient comfort and care. They identified challenges around ensuring accurate knowledge of eligibility criteria and debriefing all team members involved in MAiD Provision.

"THERE ARE NO OTHER HOSPITALIST-BASED PHYSICIAN-LED MAiD PROGRAMS ANYWHERE. THIS IS A COMPLETELY UNIQUE PROGRAM TO ALL OF CANADA, AND ISLAND HEALTH CAN BE VERY PROUD OF BEING AT THE FOREFRONT OF THIS KIND OF INITIATIVE."

- DRS. TIISLAR & LEMIRE-ELMORE

This inquiry underscored their commitment to developing the service in a thoughtful and consultative manner, being sensitive to some colleagues' discomfort with providing MAiD. As a result of two phases of their project, the Hospitalist MAiD Consult Service has been approved by Island Health for a 13-month trial, involving eight hospitalists acting as the MAiD Consultant on rotation. It was also approved by members of South Island Hospitalists Incorporated, so that hospitalists are delivering the service through their collective agreement with the health authority. MAiD-trained hospitalists are also providing an invaluable bridge to outpatient services in the community, by assisting community-based GPs to field the increasing numbers of MAiD referrals.

The hope is that upon completion of their one-year trial, the Hospitalist MAiD Consult Service will be transformed into a permanent part of their scope and delivery of care. Speaking about the role of the South Island MSA grant, Drs. Tiislar and Lemire-Elmore stated, "This funding played such a facilitative role in this project. When you're remunerated for your time, you work harder and you resent it less. Because they support physician-led projects, the funding enabled us to design a service that was well-tailored to the clinical realities of MAiD."

SMOKING CESSATION PROGRAM FOR CROHN'S PATIENTS

A gastroenterologist gathers multidisciplinary input on a smoking cessation program for Crohn's disease patients Victoria.

Project Lead: Dr. Dustin Loomes

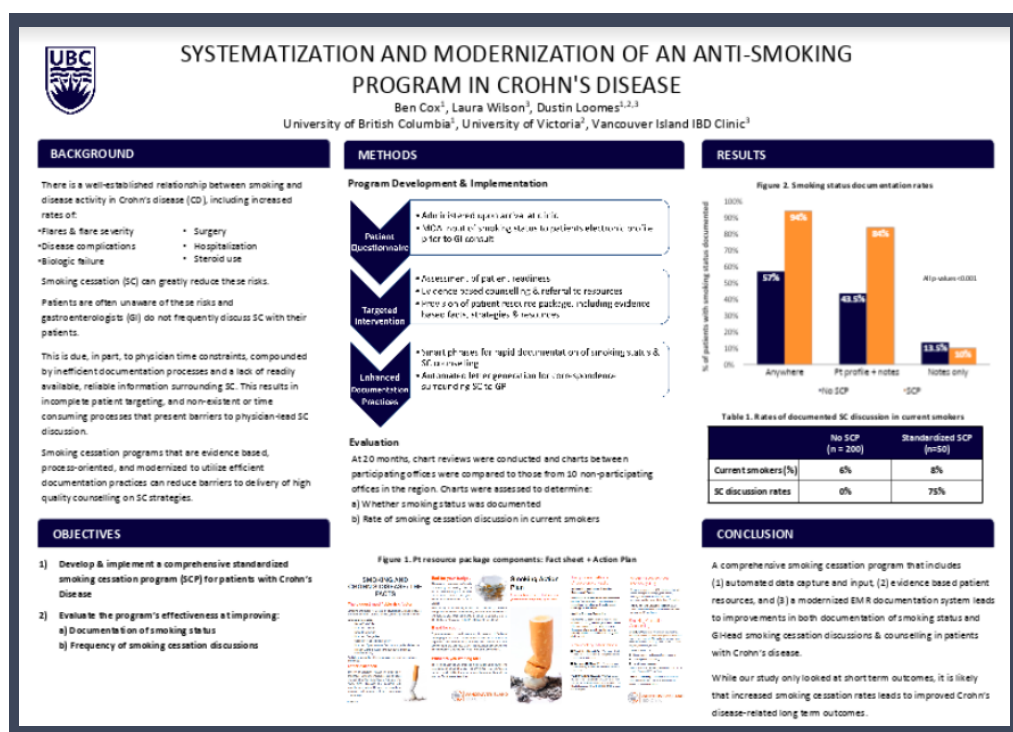
Specialty: Gastroenterology

Despite the well-established link between smoking and disease activity related to Crohn's Disease, smoking cessation is not often discussed with these patients. To support these conversations and provide patients with Crohn's Disease with a tangible resource, Dr. Dustin Loomes created an evidence-based package and program for those who are also smokers. Before launching the work, though, Dr. Loomes sought formal input from colleagues, Island Health, gastroenterologists, respirologists, IBD nurses, and research assistants, to ensure a robust, comprehensive patient resource.

The team reviewed the Vancouver Island IBD Clinic's work, and feedback was integrated prior to the program's launch.

Continuous quality improvement took place to evaluate and improve the program over time. After 20 months of implementation, the team analyzed comparisons between participating and non-participating clinics, finding that in clinics with smoking cessation programs, 75% of patients were having discussions with their clinicians about smoking cessation, as compared to 0% in clinics not participating.

Through the work of Dr. Loomes and the advisory team, the smoking cessation for Crohn's Disease program and package will be made more accessible for the intended target groups as the program continues to evolve.



WORKSAFE BC REALLOCATION IN THE EMERGENCY ROOM

Improving the classification of patients as they enter the ER yields significant cost savings for the health authority.

Project Lead: Dr. Jason Wale

Specialty: Emergency Medicine

When someone injures themselves on the job, they are eligible for health care like anyone else. However, unlike other types of patients, WorkSafe BC covers the costs of their treatment. Accurately identifying a patient presentation as WorkSafe-related ensures that the hospital receives these additional funds and optimizes the patient's access to care. ER Physician Dr. Jason Wale noted that some patients in the ER were classified at triage as MSP patients despite later revealing clear work-related injuries.

Dr. Wale received a grant from the South Island MSA to coordinate meetings with various Island Health departments including finance, iHealth, and ER triage nursing unit assistants to make the necessary changes. With the support of Executive Director Marko Peljhan, Health Information Management Director Bindy Bains and Senior Project Analyst David Greig, and Benjamin Kason, Regional Manager for Registration at Island Health, Dr. Wale spent the past year doggedly following up on small front-end changes to the triage process, and electronic record changes to enable better classification of cases as they arrive at the ER.

The latest results of these changes are impressive. A pre-intervention audit showed 250 Island Health cases per month used to be classified as 'work related injury' but had 'MSP' as the billing class; this number has dropped to 125, indicating an improvement in 50% of the WorkSafe cases. This reclassification means an added revenue of at least \$37,500 per month or \$450,000 per year for Island Health. This number may be much higher if downstream care costs are factored in including subsequent specialty clinic visits, for example. It is Dr. Wale's hope, supported by Marko Peljhan, to redistribute a portion of the captured funds to Island Health ERs to fund equipment purchases, nursing education or other initiatives. This model of directing a portion of saved revenue to the daily needs of the frontline physicians and staff responsible for the savings can provide motivation for future change initiative ideas from clinicians.

Dr. Wale and his Island Health colleagues are still focused on addressing the remaining 125 WorkSafe cases per month that are currently missed. They are encouraged by these results to date and heartened by the positive collaboration with key administration leaders and staff.



A COMPASSIONATE APPROACH TO DETECTING SKIN CANCER

Bringing skin cancer detection directly to nursing home residents improves care and reduces unnecessary transport costs.

Project Lead: Dr. Jan Lim

Specialty: Oncology

Suspecting that malignant and pre-malignant skin lesions occur commonly among nursing home residents, radiation oncologist Dr. Jan Lim set about to pilot an approach to improving the delivery of early cancer detection and treatment to these residents. Dr. Lim wanted to bring expertise in detecting cancerous skin lesions to residents in an efficient and compassionate manner given the special considerations required for patients who may have limited lifespans and/or challenges with mobility. He devised a plan to visit each residential care facility to provide an on-site assessment to identify and distinguish those cancers that can be watched from those that needed to be treated fairly quickly, as well as some situations where a biopsy was necessary.

After discussions with the Long-Term Care Medical Advisory Committee and the Medical Director of Residential Services for Island Health, in-house consultations commenced in February 2018. Over the course of 14 months, Dr. Lim performed 49 in-house consultations on 42 residents of long-term care facilities in Greater Victoria.

The results of his pilot study were impressive: of the 42 residents who were assessed, 26 of them did not require or were unsuitable for radiation therapy. Thus, in-house assessment by Dr. Lim reduced the amount of required travel for assessment and treatment by 79%, improving the level of care and convenience to the residents as well as reducing the resources expended for transfer and clinic space at the cancer center.

Fourteen of the residents who had early skin cancers detected could be treated with fewer visits to the cancer center.

In the process of doing this study, Dr. Lim realized that the prevalence of skin cancer in the nine residential homes in Victoria appears to be much lower than the 10-15% reported in Australian studies. Based on the referred cases, the prevalence appears to be around 1-3%.

Dr. Lim credits the funding from the South Island MSA with providing a platform for him to engage in this preliminary exploration. "Without the funding, I wouldn't have known that the numbers [of skin cancer cases] in local residential homes were so small that I didn't need a budget to hire a data collection person. Given the Australian projections, I would have expected many more cases. I would have thought that I needed a lot more help and I wouldn't have taken it on without a source of funding."

Dr. Lim hopes this study will lead to future initiatives to provide in-house services to residential patients. "There are lots of efficiencies to be gained," says Dr. Lim. "It's a question of how to better direct the resources for elderly patients."



RAPID DELABELLING OF ANTIBIOTIC ALLERGY

Getting children's allergies properly identified early on can yield better health care and lower costs down the road.

Project Lead: Dr. Jennifer Balfour

Specialty: Pediatrics

When children present to their family doctor or at the emergency room with a rash on the heels of antibiotic use, they are sometimes labelled as 'penicillin allergic'. This label, once imposed, is kept for life. Studies estimate that 80% of those labelled as 'penicillin allergic' are actually not, yet they are exposed to broader spectrum antibiotics for their entire lives as a result of this diagnosis. A recent position statement from the Canadian Pediatric Society urged physicians to identify and delabel children inaccurately deemed 'penicillin allergic' early on, averting unnecessary and over use of broad spectrum antibiotics, and preserving subspecialist pediatric allergists' time for difficult problems.

Dr. Jennifer Balfour wanted to bring this broader effort to delabel children to Victoria and initiated a project with pediatric allergy and immunology colleagues Dr. Scott Cameron and Dr. Victoria Cook. Together they sought to develop a pathway to rapidly delabel children with antibiotic allergy using a grant from the South Island MSA. Drawing together pediatricians, ER physicians, allergists, pharmacists, nursing staff and unit managers from Island Health, the group first identified the key issues to resolve, and designed an easily-accessible website for patients and practitioners outlining the process of rapid delabelling. They developed a protocol aligned with the new guidelines from the Canadian Pediatric Society on this topic and made it relevant to our local community. A brainstorming event outlined the background, clinical relevance, and potential impact, and explored barriers and solutions.

After a child is identified as likely not penicillin allergic, the next step sometimes requires an oral challenge under medical supervision. Ideally, this would take place in the newly constituted Urgent Pediatric Access Clinic (UPAC) at Victoria General Hospital. Though the group anticipated some challenges in ensuring uptake of the new protocol, they could not have planned for the emergence of COVID-19 at precisely the moment when oral challenges were set to begin. Many oral challenges can require the safety of medical supervision as well as the chance to clearly review the history and outcome of the challenge. As a result, the oral challenge portion of the project has been paused until it is deemed appropriate to restart.

Speaking about the value of the funding, Dr. Balfour noted that the project would not have moved forward without the South Island MSA's support. To bring together this number of practitioners from Allergy, ER, General Pediatrics as well as Pharmacy required funding to support people's time. The grant "kept us moving forward and allowed commitment to really important work that would have otherwise been 'side of our desk,'" she said. Next steps for this work include working with community primary care physicians to ensure children are being identified and referred appropriately for delabelling.

COMPARISON IN SURGICAL APPROACHES TO VARICOSE VEINS

A comparison between different methods of treatment varicose veins yields insights into a minimally invasive alternative.

Project Lead: Dr. Pierre Malo

Specialty: General Surgery/Family Practice

Dr. Pierre Malo wanted to improve the treatment and healing associated with varicose veins treatment. He identified a potential benefit from connecting Family Practice physicians and General surgeons in a study to assess the rate of reoccurrence of a common complication - venous reflux - following the use of a minimally invasive treatment termed Conservatrice et Hémodynamique de l'Insuffisance Veineuse en Ambulatoire (CHIVA).

As opposed to traditional treatment which involves stripping the veins, CHIVA is a vein sparing technique that is emerging as an alternative to ablative techniques for treating Varicose Vein Disease (VVD). During this project, the physicians evaluated 150 primary procedures with clinical and duplex ultrasound examinations both pre and post operatively.

Patients were then followed at <3 months and >1-year post-op. Dr. Malo defined recurrence as an identifiable reflux in the diseased vessel in the leg or groin.

The findings, published in the American Journal of Surgery with Island Health colleagues Dr. Allen Hayashi and Dr. Christine Hall, showed no documented recurrence occurring at the early follow up. Further, by the end of the project, 58 legs had completed and the late follow up and reflux was found in only 5 legs resulting in a recurrence rate of 8.6%; 95% CI (2.4%, 19%).

The project results indicate that CHIVA appears to offer a promising alternative for the treatment of VVD. Further to the results of this collaborative effort was that the "father" of CHIVA reached out to Dr. Malo and shared further advice on how to continue improving results of this procedure.



Contents lists available at [ScienceDirect](#)

The American Journal of Surgery

journal homepage: www.americanjournalofsurgery.com



CHIVA — A prospective study of a vein sparing technique for the management of varicose vein disease

Marta Zmudzinski, BSc ^a, Pierre Malo, M.D., FCSP ^b, Christine Hall, M.D., FRCPC ^{a, b}, Allen Hayashi, M.D., FRCSC ^{a, b, *}

^a University of British Columbia, Faculty of Medicine, Victoria, BC, Canada
^b Island Health Authority, Victoria, BC, Canada

CONQUERING COMPLEX REGIONAL PAIN SYNDROME (CRPS)

Research into a challenging pain condition yields insight into better treatment in a community setting.

Project Lead: Dr. Paul Winston & Dr. Emily Krauss

Specialty: Physiatry and Plastic Surgery

Dr. Paul Winston is part of a team working to improve treatment of Complex Regional Pain Syndrome (CRPS). The result of a fracture, injury or surgery, CRPS can cause severe pain, dysfunction and often permanent disability. Though there is growing evidence for treatment with corticosteroids, it has not been a widely offered treatment.

Drawing on a retrospective case analysis, Dr. Winston's team indicated the utility of using prednisone, a type of corticosteroid, for treatment of CRPS. They published their findings in *Pain Research and Management*, bolstering support for

for the idea that routine community clinic settings could be appropriate places for treatment of CRPS, rather than requiring specialty services or tests.

Having generated this finding and published their results, the project continued by engaging with orthopedic surgeons at Rebalance MD, plastic surgery, neurology, pediatrics and Island Health administrators to develop a rapid triage process for patients experiencing regional pain after an injury. The team has found that almost all patients meeting the criteria for rapid triage have returned the functional usage of their injured limb.

Hindawi
Pain Research and Management
Volume 2020, Article ID 8182569, 10 pages
<https://doi.org/10.1155/2020/8182569>



Research Article

Prednisone for Acute Complex Regional Pain Syndrome: A Retrospective Cohort Study

Andrew Jamroz ¹, Michael Berger,^{1,2,3,4} and Paul Winston ^{1,2}

¹University of British Columbia, Island Medical Program, Victoria, British Columbia, Canada

²Division of Physical Medicine & Rehabilitation, Department of Medicine, University of British Columbia, Vancouver, British Columbia, Canada

³International Collaboration on Repair Discoveries (ICORD), University of British Columbia, Vancouver, British Columbia, Canada

⁴School of Kinesiology, Faculty of Education, University of British Columbia, Vancouver, British Columbia, Canada

Correspondence should be addressed to Paul Winston; pauljwinston@gmail.com

Received 16 December 2019; Accepted 4 February 2020; Published 25 February 2020

Academic Editor: Jacob Ablin

MEDICAL ASSISTANCE IN DYING (MAID) BEREAVEMENT SUPPORT

A study provides insight into how clinicians feel about providing MAiD to patients.

Project Lead: Dr.Konia Trouton, Dr. Chloé Lemire-Elmore & Rosanne Beuthin

Specialty: General practice, Hospitalist & Island Health

Dr. Konia Trouton, Dr. Chloe Lemire-Elmore, and their colleagues Rosanne Beuthin and Helena Dault from Island Health wanted to explore bereavement support among providers offering Medical Assistance in Dying (MAiD) within Island Health. The physician offering MAiD is often not the primary care provider for the patient, as thus, may not have an ongoing relationship with the patient’s family.

Their study, supported by the Health System Redesign funding as well as the South Island MSA funding, sought to understand the extent to which MAiD providers felt able to offer bereavement support to families experiencing MAiD.

Using a survey to ask about physicians’ beliefs and attitudes that underpin their bereavement support for patients and their families as well as their own expectations for themselves for bereavement.

Their results suggest that MAiD providers see bereavement following a medically assisted death to be unique and that consequently, bereavement support tailored to these realities is essential. As a result of the findings of this study, a guide to support healthy grieving for patients and their families experiencing MAiD is now available.

Medical Assistance in Death (MAiD)

A Guide to Support Patients & Families

Thinking about the end of your life and about saying goodbye to those you love, you may feel a deep sense of grief and sadness. You may also feel relieved to have some control over when and how you will die, and in knowing that this plan is in place.

This brochure aims to answer any questions you may have, provide practical information, and ease your concerns on your Medical Assistance in Death (MAiD) journey.

CONTENTS

Before MAiD

Period of Reflection

When the date for MAiD is set

When someone close to you has requested MAiD

Preparing for the day of the MAiD

Questions to consider about the day itself

Preparing for when the medication is administered

After MAiD has Occurred:

Considerations for Family and Friends

Considerations

Bereavement information

Bereavement resources and supports

Before MAiD

You have likely put a great deal of thought into your decision to request MAiD. Faced with advanced, incurable disease and disability, you have determined that at some point your symptoms and decline will become intolerable and you wish to have an assisted death.

By this time, you have had a formal assessment with one or more physicians or nurse practitioners (NPs), are aware of the options available to you, and have also completed the Patient Request Record form.

Period of Reflection

Typically there is a 10-day minimum waiting period between your request date and the day you may receive MAiD. This time is formally referred to as the Period of Reflection and is meant to ensure that you have time to carefully consider your decision.

It may be reassuring to know that even though you have been approved, you may still have questions, fears, and worries to work through. Living with dying may be new to you and you may also experience anticipatory grief.¹ You may decide to hold off on setting the date for MAiD to wait and see how things progress. Or, you may have been thinking about this a long time and want to proceed.

During this period of reflection, you may want to focus on the people and activities that you enjoy most and consider:

What do I most want to do (practical tasks, outings, projects, bucket list activities)?

How would I like to spend this time (alone or with others or a combination)?

Who should I see and what is important for me to say to these people?

What memories or stories do I want to share (highlights, achievements, regrets)?

Share information and memories with your family and friends in a way that works for you, whether written or recorded.

Do not postpone difficult decisions or conversations; talking about hard things will resolve anxiety and contribute to your peace of mind.

What do I need and want help with, and who can help me?

Those close to you may experience anticipatory grief; talk with each other and/or a professional if needed.

If you have questions or concerns, talk with your family, friends, physician or NP.

This is naturally a time of reflection but also take the time to enjoy yourself.

¹ An exception may be made to the reflection period if both your first and second medical or nurse practitioner agree that:

- your death is fast approaching, or
- you might soon lose your capacity to provide informed consent.

² Anticipatory grief is defined as "a feeling of grief occurring before an impending loss."

© Island Health & Victoria Hospice 2020/02/25 - 2024

1

STORYBOOK | PAGE 18

PROVIDING WAIT TIMES FOR PATIENTS IN THE ER

A study measures whether providing patients with information about their emergency room experience improves satisfaction.

Project Lead: Dr. Bruce Wong

Specialty: Emergency Medicine

A well-documented reason for low satisfaction among emergency room patients is the uncertainty surrounding how long they will have to wait to receive care. Studies have shown that improved communication about wait times can decrease patients' perceived wait time and therefore increase patient satisfaction.¹⁻³ So what if patients could be told how long they could expect to wait? Would it improve their experience of the emergency room? And would ED staff and clinicians also report higher levels of satisfaction if they were faced with happier patients?

Dr. Bruce Wong's project aimed to study exactly these questions. Island Medical Program students Samuel Hogman, Max Moor-Smith, and Mackenzie Carnes contributed invaluable to the project, conducting a thorough literature review of existing studies, drafting the ethics submission documents, formatting the handouts for patients, and compiling results from patients and staff.

The first question was whether the algorithm developed by Dr. Wong could accurately predict patient wait times. They found that when applied to patients in the ambulatory section of the ED, it could accurately predict 90% of patients' wait times to within 45 minutes. Having established that the wait time algorithm was reasonably accurate, the team engaged with triage nurses, registration clerks, ED physicians and nurses, Island Health Decision Support to implement the multi-phase study to measure whether provision of information, including wait times, could improve patient satisfaction.

The results of the study are currently being written up for publication. The project has been a great learning opportunity for the Island Medical Students about the realities of the ED as well as the process of conducting research. For Dr. Wong, he is thrilled to be able to test a theory he has long wondered about while working in Emergency. The opportunity to engage across so many different departments to launch this study has been an unexpected bonus.

Enter to win a Tim Horton's Gift Card!	Survey	Patient Information and Estimated Wait Time
<p>On a scale of 1 to 5, can you please rate the following where...</p> <p>1=very poor, 2=poor, 3=fair, 4=good, 5=very good</p> <p>Your satisfaction with the time you had to wait to see a doctor?</p> <p>1 2 3 4 5</p> <p>Your overall satisfaction with the Emergency Room experience?</p> <p>1 2 3 4 5</p> <p>On a scale of 1 to 5, can you please rate the following where...</p> <p>1=not useful, 2=somewhat, 3=moderately, 4=very, 5=extremely</p> <p>How useful did you find this handout?</p> <p>1 2 3 4 5</p> <p>How accurate did you find the prediction time?</p> <p>1 2 3 4 5</p> <p>What information did you find most useful?</p> <p>What information did you feel was not useful?</p> <p>Any other information you would have liked?</p>	<p>Time you checked in</p> <p>Estimated wait to see a doctor (hours)</p> <p>This is an estimated waiting time after checking in to see a physician. Please be aware of the following:</p> <ol style="list-style-type: none">1. Unanticipated events can affect your wait time. Some patients can wait an hour or more longer than estimated. However, sometimes your wait is much shorter than estimated. For this reason, do not leave and come back as you may lose your place and need to check in and start again.2. Patients are not necessarily treated on a first come, first served basis. This may shorten or lengthen your wait time.3. Please advise a staff member if your condition changes.	

[1] Soremekun OA, Takayesu JK, Bohan SJ. Framework for analyzing wait times and other factors that impact patient satisfaction in the emergency department. J Emerg Med. 2011;41(6):686-92.

[2] Trout A, Magnusson AR, Hedges JR. Patient Satisfaction Investigations and the Emergency Department: What Does the Literature Say? Acad Emerg Med. 2000 Jun;7(6):695-709.

[3] Thompson DA, Yarnold PR, Williams DR, & Adams SL. Effects of Actual Waiting Time, Perceived Waiting Time, Information Delivery, and Expressive Quality on Patient Satisfaction in the Emergency Department. Ann Emerg Med. 1996 Dec 1;28(6):657-65

CHAPTER 2

SYSTEM LEVEL CHANGES

These projects enacted changes at the system level to make care more efficient, more compassionate, and/or better coordinated with Island Health. Making systems-level changes often requires a different perspective than changes for individual patient care. By looking at what is a root cause for a backlog of patient referrals, for instance, one can identify inefficiencies and communication gaps in the triage process, and in doing so, generate ideas for how to improve referral processes.

The projects outlined in this section highlight the value of stepping back and looking at the system as a whole, identifying a key component for change, and then taking action with allies in other departments and with Island Health colleagues.

PATIENT CARE

OPHTHALMOLOGY ACCESS SYSTEM REVIEW


Developing a standardized intake form for patients with vision problems helps to get people seen faster.

Project Lead: Dr. Malcolm Orr & Dr. Hamza Khan

Specialty: Ophthalmology

Any loss of vision or pain for a patient is concerning and their family physician or optometrist want them to be seen in a timely manner. They send a referral to an ophthalmologist, who will endeavor to triage the patient appropriately. However, challenges with this system, including a long wait time and inconsistent information about patient symptoms, prompted Ophthalmologists Malcolm Orr and Hamza Khan to gather their ophthalmology colleagues together with optometrists, Medical Office Assistants, and family physicians to build a better standardized form for patient referrals.

The group met to build a form that would give ophthalmologists sufficient information to triage patients appropriately without creating undue paperwork for the referring physician. They presented the form at a Partners in Care event to seek family physicians' detailed feedback on the form and the process of rolling it out. The result, a form that all stakeholders agree will succinctly and comprehensively capture a patient's condition and reason for referral, was presented to the Island Health forms committee and approved.

OPHTHALMOLOGY REFERRAL FORM		www.pathwaysbc.ca/specialties/15 for contact, subspecialty, & wait time	
Name:		Contact #:	Referring clinician:
Address:		Fax #:	
Date of birth:		PHN:	Phone #:
Alt contact:		Alt #:	Urgency <input type="checkbox"/> <1 week → contact ophtho on-call <input type="checkbox"/> Semi-urgent <input type="checkbox"/> Routine
<input type="checkbox"/> FU w/ alt contact <input type="checkbox"/> Translator needed <input type="checkbox"/> WorkSafe involved <input type="checkbox"/> ICBC involved		<input type="checkbox"/> Supplementary material sent <input type="checkbox"/> Re-referral <input type="checkbox"/> No charge re-referral	
Required	Allergies:		
	Medications:		
	Clinical warnings: <input type="checkbox"/> Comorbidities <input type="checkbox"/> Cognitive/psych <input type="checkbox"/> Communicable diseases <input type="checkbox"/> Oxygen <input type="checkbox"/> Mobility/wheelchair		
	Please explain:		
Required	Reason for referral:		
			
	Best visual acuity: Right _____ Left _____ <input type="checkbox"/> tested w/ glasses Change in vision: <input type="checkbox"/> No change <input type="checkbox"/> Acute <input type="checkbox"/> Gradual		
	Describe change:		
Ocular History:			
Ophthalmologist prev involved:			
Medical History:			
Optometrists — additional information		Please expect a response within 1 week	
Refraction		Pressures	
OD:		If you disagree with the assessment, if patient's status changes, or if the referral date does not meet the clinical condition, please contact us and we can re-evaluate.	
OS:			
Other info:			

VANCOUVER ISLAND THORACIC SURGERY ONCOLOGY PROGRAM

A Thoracic Surgeon creates a central pathway for streamlining the management of patients with an abnormal CT scan.

Project Lead: Dr. John Samphire

Specialty: Thoracic Surgery

Dr. John Samphire wanted to get lung cancer patients into the OR sooner. Inefficiencies in the transfer of patients between the initial abnormal CT scan, further diagnostics with specialists, and scheduling the surgery can create harmful delays in treatment. Using his grant from the South Island MSA, Dr. Samphire wanted to encourage family physicians to direct their patients through a central pathway, saying, “Let us deal with it, send it our way. I think most family doctors are happy with that, knowing these cases are being routed through the pathway and that their patients’ care is being taken care of.”

To streamline the management of patients with lung cancer, Dr. Samphire devised a Vancouver Island Thoracic Surgery Oncology Program (VITOP), involving thoracic surgeons, respirology, radiology, thoracic surgery office staff, medical and radiation oncology, ER doctors, and family practitioners.

The VITOP aims to see patients in as little as 10-14 days. Prior to the initiation of this pathway, patients sometimes waited as long as 6-8 weeks to be seen by a surgeon. Dr. Samphire and colleagues are now conducting an evaluation of the program, measuring wait times and capturing where delays arise in the referral process.

Speaking about the benefits of the funding, Dr. Samphire stated that having a fixed end date and a time-bound source of funding gave the project an urgency that might not have been there otherwise. “It would be too easy for this type of thing to fall off the list of things to do, but with the funding in place, it gave us all a sense of accountability.”

The next step of this project is to make it an island-wide process, bringing radiologists, respirologists, and GPs from up island on board.

Vancouver Island Thoracic Oncology Program		
Name of Patient		Date of Birth
PHN		MRN
A CT scan finding of a lung abnormality that may represent a lung cancer has been identified in the above patient.		
We would like to enroll this patient in our new multidisciplinary rapid access pathway that will ensure:		
<ul style="list-style-type: none">• Review of the CT scan by a respirologist and thoracic surgeon within 5 days• Office consultation with specialist(s) within 14 days of the CT scan• Proper evaluation, investigations and referrals to the BC Cancer Agency where appropriate.		
	Yes	No
Do you consent to have this patient enrolled in the lung cancer pathway?	<input type="checkbox"/>	<input type="checkbox"/>
Do you wish to have future patients enrolled in the lung cancer pathway?	<input type="checkbox"/>	<input type="checkbox"/>
Name of Physician	Signature of Physician	Date
Please sign and date completed form and fax to 250-598-2850 ASAP.		
The Ordering Physician is responsible for informing the patient of the abnormal CT scan results and the enrollment in the pathway.		
We greatly appreciate your participation.		
Sincerely,		
John Samphire, MD, FRCSC John Reid, MD, FRCPC		Tel: 250-595-2820 Tel: 250-995-0211

ELICITING FEEDBACK ON THE GI CENTRAL ACCESS AND TRIAGE

Following a change in referral processes, a gastroenterologist engages with referring physicians to gather feedback.

Project Lead: Dr. Kevin Rioux

Specialty: Gastroenterology

In 2018, the Division of Gastroenterology made major changes to their referral processes and implemented a Division wide Electronic Medical Record. These changes focused on improving speed and quality of triage as well as communication with referring physicians to make the referral process as smooth and efficient as possible for GPs, GIs, and patients. In the face of these important changes, Dr. Kevin Rioux felt there was a need for GIs to meet with their GP colleagues to showcase the improvements in GI Central Access and Triage (GICAT), gain feedback and insight, and discuss collaborative care of GI patients. To meet these goals, a South Island MSA grant and Health System Redesign funding was awarded to the Division to organize and host a Referring Physician Education Evening.

The event focused on improving referring physician's understanding of the GICAT process and how they can most effectively refer their patients. Referral resource packages and Enhanced Primary Care Pathways were distributed to participants, which included practicing Family Physicians and Family Practice Residents. A separate event or "open house" was hosted for the referring physician MOAs on the same evening.

During the Education Evening, eight GIs presented an overview of six Enhanced Primary Care Pathways. These EPC Pathways were developed by Dr. Rioux and his colleagues to address common GI disorders seen by primary care physicians - IBS, Constipation, GERD, Dyspepsia, H. pylori, and NAFLD - and provide advice to GPs for investigation and initial management of these conditions. A resource booklet was also given out, which included checklists to guide in-clinic patient review, links to additional patient and physician resources, clinical flow diagrams with

expanded detail providing explanation of further investigation and specific pharmacologic treatments including dose and costs.

A GP attending the event shared that, "the new referral process makes a lot of sense and I'm so relieved to receive information that the file has been received and reviewed within days." Additionally, another GP stated, "it's great to see the faces of the GI team and know that they're not just a name on a fax sheet." GPs and medical residents stated that the event provided adequate opportunities to interact with their peers and that the information learned will be used in their future practice.

Dr. Rioux stated that the evening event was the beginning of a strategy to improve GI CAT service and communication. "The evening helped improve relationships between Gastroenterology and our referring colleagues, who are mainly Primary Care Physicians." He went on to say that, "enhanced communication and understanding of process will lead to increased practice efficiency for both the referring offices and GIs, and foster cooperation and shared responsibility for patients with GI disorders. Ultimately, this will help improve access for patients to GI endoscopic and consultative services."

Following the event, the Division of Gastroenterology has noticed improved referral practice and more open and positive communication from referring physicians and their office staff. The sense is that enhanced communication and shared information has alleviated many of the frustrations and shortcomings of the previous GI referral systems. Review of referral data (patient volume, referral indication, timelines, and outcomes) will guide further refinement of GI care pathways and resource allocation.

UPDATING PRE-PRINTED ORDER SETS

An effort to align clinical order sets with current evidence is tested by the advent of COVID

Project Lead: Dr. David Cook and Dr. Jean Maskey
Specialty: Hospitalist

Dr. David Cook and Dr. Jean Maskey thought they were embarking upon a crucial updating of clinical order sets in preparation for iHealth. They began their project, funded jointly by the Health System Redesign and South Island MSA funding, with an aim to reach out to Hospitalists, community family physicians and various hospital specialists for their input on updating clinical order sets.

Their goal was to align order sets with current evidence and facilitate harmonization with future electronic order sets to support the future roll-out of iHealth. They didn't expect to have their processes and relationships tested by the outbreak of the novel SARS-CoV-2. With under a week to prepare a new COVID clinical order set, the Hospitalist group developed a draft based on the current state of knowledge about treating patients with this virus, and then engaged with multiple services and specialties to ensure widespread input in drafting this new tool. As of March 30, 2020 it was already in use, with much appreciation from front line staff.

Prior to the emergence of coronavirus, the focus was on a collaborative effort to update order sets such as the alcohol withdrawal order set. This clinical order set is used by many different physician groups and was aligned with current evidence to replace an out of date version. In this case, input was from the literature, hospitalists, family and ER physicians and those whose practice involves treating addictions locally and from the Nanaimo area. The group also developed an agitated intoxication order set and a methadone order set to standardize the management of these common presentations to hospital, and have been collaborating with Senior's Health regarding a Delirium Order set, which should soon be ready for use.

island health Clinical Order Set		Demographics	
COVID-19 Treatment Adult Suspected or Confirmed (Module)			
Page 1 of 4		Key	Phase
Key: Req – Requirement MAR – Medication Administration Record K – Kardex Dis – Discontinued Instructions for completing this order set: <input checked="" type="checkbox"/> Indicates a pre-selected order. To delete a pre-selected order, draw a line through it <input type="checkbox"/> Must tick the box for order to be implemented. Orders not checked will not be implemented Fill in blank spaces as needed/appropriate Indicates an item for consideration by Provider; is NOT an order			
COVID-19 Treatment Adult (Module)			
Admit/Transfer/Discharge/Status Refer to local site protocols for COVID-19 admitted patient Patient Population Adult patient with confirmed or pending investigation for COVID-19 infection Suggested criteria for admission to non-ICU area: See Page 4 for Clinical Decision Support for admission of COVID-19 patients Suggested criteria for admission to Critical Care/ICU area: See Island Health Guideline: Recommended actions for respiratory support of suspected/confirmed COVID-19 patients			
Alerts USE N95 mask and visor for any aerosol generating procedure (intubation, CPR, bronchoscopy, nebulizers, high flow oxygen, non-invasive ventilation, deep suction, BVM) <input checked="" type="checkbox"/> Patient Precautions, Droplet and Contact, COVID-19. Refer to 2ICNet 2019 Novel Coronavirus: Aerosol Generating Medical Procedures (AGMP) in Healthcare Settings . Medical Orders for Scope of Treatment Provider to review and update MOST status as indicated by patient's goals of care Patient Care <input checked="" type="checkbox"/> Patient Education, Patient to stay 2 metres away from others while in their room. Patient to wear surgical mask during Transportation. Refer to Island Health COVID-19 Inpatient resources <input checked="" type="checkbox"/> Notify MRP for: - Hypotension with MAP less than 65 - Oxygen requirement of 6 L/min or greater to maintain SpO ₂ greater than 92% - Frequent desaturations despite oxygen - Significant increase in work of breathing / fatigue - Decreased level of consciousness / Altered mental status - Respiratory rate greater than 24 <input checked="" type="checkbox"/> Respiratory Communication, Nurse or Respiratory Therapist must contact MRP before initiating nebulizers, non-invasive ventilation (NIV), or high flow nasal cannula (Optiflow) See Island Health guideline: Recommended actions for respiratory support of suspected/confirmed COVID-19 patients Non-invasive ventilation (NIV) is not currently recommended except in other non-COVID related indication <input checked="" type="checkbox"/> Oxygen Therapy, to improve oxygenation, PRN, Titrate to maintain oxygen saturation greater than 92% OR _____% Laboratory Provider goal is to minimize frequency of blood draws Order tests below only if not already done Utilize ADD-ON testing to previously collected biospecimens whenever possible <input type="checkbox"/> Complete Blood Count and Differential, Blood, ASAP <input type="checkbox"/> INR, Blood, ASAP			
Signature, Designation		College License #	Date Time Page 1/4

In working on these clinical order sets, the project leads realized the value of collaborating widely with practicing physicians to improve both acceptance of the order set by clinicians, as well as excellence in care, by incorporating current evidence-based practices. They also recognized the challenge of having a large group of physicians participate in these processes, and saw the ability to pay physicians through the South Island MSA funding as instrumental to the project's success. The team performed these updates so effectively that Dr. Cook was asked by the Clinical Order Set Harmonization Team to extend his work as a physician champion of order sets in an ongoing basis.

DEVELOPING A CLINICAL ORDER SET FOR COPD

A team of hospitalists works across departments to bring current evidence to bear on the Clinical Order Set for Chronic Obstruction Pulmonary Disease (COPD)


Project Lead: Dr. Megan Milliken, Dr. Anne McHale, Dr. Jean Maskey, Dr. Shauna Tierney
Specialty: Hospitalist

Recognizing the need to update and disseminate a Clinical Order Set used for treating patients with Chronic Obstructive Pulmonary Disease (COPD), a group of hospitalists, led by Drs. Megan Milliken, Anne McHale, Jean Maskey, and Shauna Tierney set out to work on the order set in consultation with Respiriology, Internal Medicine, Medical Microbiology, Emergency Room Physicians, Pharmacists, and several departments within Island Health, as well as the physiotherapy and respiratory therapists, and nursing on the respiratory ward. Updates to the order set included better linkages between departments and with community resources, updating the form to be compatible with iHealth, as well as flagging patients who might benefit from the home health monitoring.

Having consulted with the relevant departmental stakeholders, the physicians were piloting the form when they became aware of the need to work through the Medicine Quality Council and the Clinical Order Set Coordinator, Alison Steinbart at Island Health. The project might have stalled at this point if funding had not been available for physicians' dedicated time to continue with the necessary consultations and linkages. However, the availability of funding to compensate physicians for coming in for meetings on their days off meant that key discussions were completed. The final product was adopted by the Medicine Quality Council as the official COPD Clinical Order Set for the entire Health Authority. It was put into an i-Health compatible format and is now accessible regionally on the intranet.

As a final evaluation of the success of this initiative, a satisfaction survey was circulated among South Island Hospitalists to measure its efficacy, uptake, and accessibility. 71% of those who responded were satisfied with the new order set, and over one third (39%) reported that their confidence in caring for COPD patients has improved as a result of using the order set. Improvements to the form as well as to its distribution channels are being undertaken.

Other departments have been encouraged to use this process as a template for their own efforts to develop order sets.



COPD Exacerbation Clinical Order Set
Only for use at RJH & VGH

Diagnosis of COPD: Sustained increase of dyspnea, cough, sputum volume and/or purulence

Investigations:

- Blood work
 - Now: CBC ☐ Creatinine/GFR ☐ Electrolytes ☐ Troponin ☐ Blood cultures ☐ BNP ☐ Procalcitonin ☐ CRP ☐
 - Tomorrow AM: CBC ☐ Creatinine/GFR ☐ Electrolytes ☐ Other ☐
- Chest x-ray: Portable ☐ PA + Lateral ☐ Indication: _____
- 12 Lead ECG: ☐
- Nasopharyngeal Swab for Respiratory Viruses: ☐
- Arterial blood gas: ☐
- Sputum gram stain: only if failed anti-microbial treatment or Pseudomonas suspected ☐
- Alpha-1 anti-trypsin: <50 years old or <20 pack years and never before ordered ☐

Management:

- Vitals q _____
- Supplemental oxygen: maintain SPO2 to 88-92% ☐ or _____ % ☐
- Nicotine Replacement Therapy: (see form) ☐
- Bronchodilators:
 - Combivent nebulizer 2.5mL QID regular ☐ q _____ h PRN ☐
 - Salmeterol nebulizer 2.5mg q4h PRN ☐ 100mcg/puff - 2 puffs via MDI with spacer q4h PRN ☐
 - Ipratropium nebulizer 0.5mg QID regular ☐ 20mcg/puff MDI with spacer 1-2 puffs QID ☐ q4h PRN ☐
 - D/C Combivent and start home puffers _____ when patient able ☐
- Corticosteroids:
 - Prednisone 40 mg PO daily x 5 days ☐ or _____ mg PO daily x 5 days ☐
 - Methylprednisolone 40mg IV daily x 48h then MRP reassess ☐
- Anti-infectives:
 - Antiviral: viral etiology suspected (<48h)
 - eGFR >60: Oseltamivir 75mg PO BID x 5 days ☐
 - eGFR 30-60: Oseltamivir 30mg PO BID x 5 days ☐
 - Antibiotics: if indicated (≥2/3 of increased sputum purulence/volume/dyspnea), select from table below

Patient Risk	Antibiotic Options
Simple/Low Risk: <ul style="list-style-type: none">FEV1: >50%0-3 exacerbation/year<65 years of ageNo cardiac disease	<ul style="list-style-type: none">Amoxicillin 1g PO TID x 5 days <input type="checkbox"/>Doxycycline 100mg PO BID x 5 days <input type="checkbox"/>Clarithromycin 500mg PO BID x 5 days <input type="checkbox"/>Azithromycin 500 mg daily PO x 3 days <input type="checkbox"/>TMP/SMX 1DS tab BID PO x 5 days <input type="checkbox"/>
High Risk: <ul style="list-style-type: none">FEV1: <50%>3 exacerbation/year>65 years of ageCardiac disease	<ul style="list-style-type: none">Amoxicillin/clavulanate 875 mg PO BID x 7 days <input type="checkbox"/>Cefuroxime 500mg PO BID x 7 days <input type="checkbox"/>Ceftriaxone 1 gram IV daily x 5 days <input type="checkbox"/>Levofloxacin 500 mg PO <input type="checkbox"/> or 750 mg IV <input type="checkbox"/> daily x 7 daysMoxifloxacin 400mg PO <input type="checkbox"/> or IV <input type="checkbox"/> daily x 7 days
Pseudomonas Suspected: <ul style="list-style-type: none">Recent hospitalizationPrevious colonization> 4 antibiotic courses in last yearChronic systemic glucocorticoids	<ul style="list-style-type: none">Ciprofloxacin 500 mg PO BID <input type="checkbox"/> or 400mg IV q12h <input type="checkbox"/> x 7 daysPiperacillin-Tazobactam 3.375g IV q6h x 7 days <input type="checkbox"/>

Note: Ciprofloxacin will not cover Strep. Pneumoniae

DESIGNING A MULTI-DISCIPLINARY CLINIC AT THE BC CANCER AGENCY

Development of a multidisciplinary clinic at the Vancouver Island BC Cancer Agency for genitourinary cancer patients requires input from different specialties.

Project Lead: Dr. Jennifer Goulart

Specialty: Oncology

Dr. Jennifer Goulart wanted to develop a multidisciplinary clinic to support specific genitourinary cancer patient populations. She believed that care for those requiring advanced multimodality treatment would be improved when delivered through a single clinic consisting of a multidisciplinary team of Urologists, Radiation Oncologists, Medical Oncologists, and a Nurse Practitioner. This clinic would allow patients to see multiple specialists in one day and receive consistent goals of care. Using a grant from the South Island MSA, Dr. Goulart assembled and led a project team to design such a clinic.

The project team hosted consultation meetings, bringing together various disciplines to discuss the design and implementation plan for the multidisciplinary clinic.

They also held meetings with specific groups, such as nurse practitioners, research managers and patient partners, to ensure the input of all stakeholders. Using this information, the project team created and presented a formal clinic design and implementation plan to the Operations Management team at the BC Cancer Agency, as well as to the head of nursing, Manager of Clinical Services, Manager of Pharmacy and Manager of Volunteer Services. Valuable feedback was received and was incorporated into the final proposal.

Thanks to Dr. Goulart, the project team, and the BC Cancer Agency, a one-year pilot clinic will be trialed. The project team will make improvements to the clinic every 3 months and incorporate feedback received from patients themselves on an ongoing basis.



VESTED® TEAM ATTENDANCE

Island Health administrators and Hospitalists come together in a novel format for contract negotiations.

Project Lead: Dr. Ken Smith

Specialty: Hospitalist

Negotiating new contracts is often a complex endeavor, particularly when parties have had a challenging relationship in the past. This was particularly the case in the contract negotiations between the Victoria Hospitalist Service and Island Health, which had stalled during 2014 and 2015, reaching an all-time low in March 2015 when the interim contract had expired and nothing had been agreed upon to replace it.

It was at this time that Kim Kerrone, Island Health's Vice-President, Chief Financial Officer became familiar with Vested®, a novel methodology to guide contract discussions. Vested® is an approach that focuses on building relationships between parties rather than a more traditional focus on transactional negotiation.

The Victoria Hospitalists and Island Health agreed to use the Vested® methodology to rebuild trust and establish the groundwork for a new contract negotiation. This was not only the first time this methodology was used within Island Health, but also the first time it was used with a physician contract in BC and Canada.

Despite the use of this promising methodology, having hospitalist physicians attend the Vested Team Meetings on their days off was essential to its success. To address this challenge, Dr. Ken Smith sought South Island MSA funding, which was used to compensate numerous hospitalists to regularly attend these meetings.

This funding ensured regular Hospitalist attendance at each of the five different Vested Teams (Governance, Excellence, Best Value, Sustainability, and Relationship) between three and five times per month, leading to improved communication, relationship building, and idea sharing.



As hospitalists participated, others came to see the value of attending these meetings. “The word spread quickly which encouraged more Hospitalists to join the teams and to become part of the collaboration,” explained the team leads.

As a result of these collaborations, a new Hospitalist contract was signed and physician-administration relationships significantly improved. Dr. Smith reflected on the negotiations, saying “The Vested process allowed us to see each other’s needs and goals and how to blend the two into a positive working framework that could work going forward. The concept of working together as “we” was a unique experience.

In addition to cementing the new contract, the negotiations gave rise to several new quality improvement ideas which have been generated within the Hospitalist team.

EARLY PSYCHOSIS ORDER SET

Bringing current evidence to bear on a Clinical Order Set (COS) helps people experiencing psychosis for the first time.

Project Lead: Dr. Dan Boston

Specialty: Psychiatry

The first time a person experiences psychosis can be a challenging, frightening time. The care they receive during this episode can set the stage for all future engagements with the mental health care system. Until recently, however, there was no specific Clinical Order Set to guide the care of First Episode Psychosis in Victoria. Psychiatrist Dr. Dan Boston drew on support from the Physician Quality Improvement (PQI) initiative, Health System Redesign funding, and the South Island MSA to develop an evidence-based Clinical Order Set and assess its impact on the health status of patients as well as reduce their length of stay in hospital.

Dr. Boston coordinated a series of meetings to develop the clinical order set, drawing on insights and expertise from physicians, managers, nurses, occupational therapists, and administration. They worked to ensure the clinical order set was well-tailored to the realities of these patients; details included specifying which health indicators would be collected at baseline, determining which medications would go on the order set, and how to address the needs of specific patients, such as those diagnosed with schizophrenia or bipolar spectrum disorders, or substance-induced psychosis.

After four different iterations, the final clinical order set has been implemented and is showing positive results. Not only was use of the order set associated with an 11.4% decrease in total polypharmacy use, it was also associated with a 10.8% decrease in the length of stay, from 20.3 days to 18.1 days.

In doing this project, Dr. Boston recognized an essential component of any improvement is engagement: “Quality improvement can’t happen without a culture change. This funding allowed us to come together and all own the project, so it wasn’t just me imposing things on others.” Next steps include ensuring the clinical order set is used in 100% of First Episode Psychosis admissions, and getting it uploaded to facilitate Computerized Point of Entry.

island health Clinical Order Set		Demographics
Early Psychosis Intervention (EPI) Admission Initiation of Treatment for First Episode Psychosis – Pilot for use at RJH Psychiatric Emergency Services (PES), 1South, 1North, 2NorthEast, and 2NorthWest only <small>Physician Quality Initiative (PQI)</small>		*Fax copy of signed order set to Dr. D. Boston, RJH 1South, Fax: 250 519 1652
Page 1 of 3		
Key: Req – Requisition MAR – Medication Administration Record K – Kardex Dis – Discontinued P – Drug Profile		
Patient Population – 17 to 35 years old with first presentation of a psychotic disorder Or – Currently admitted to EPI program Admit to Psychiatry: MRP is _____ Diagnosis: _____		
Admitting Unit <input type="checkbox"/> Short Stay Unit <input type="checkbox"/> Controlled Access Unit (CAU) <input type="checkbox"/> Psychiatric Intensive Care (PIC) Unit		
Mental Health Act (MHA) Status <input type="checkbox"/> Voluntary <input type="checkbox"/> Involuntary (complete MHA Form 4 Or 6 AND Form 5)		
Activity <input type="checkbox"/> Fresh Air Breaks <input type="checkbox"/> Restrict to Unit <input type="checkbox"/> Other: _____		
Observation <input type="checkbox"/> q60minutes (General) <input type="checkbox"/> q30minutes (Frequent) <input type="checkbox"/> q15minutes (Close) <input type="checkbox"/> 1:1 (Constant)		
Consults <input checked="" type="checkbox"/> Consult to Psychology, where available, Reason: Assessment for first episode psychosis (if not already done) <input checked="" type="checkbox"/> Consult to Occupational Therapy, when on CAU, Reason: First Episode Psychosis Or Other: _____ <input checked="" type="checkbox"/> Referral to EPI Program on Pathways, if not already done AND notify EPI coordinator of admission <input type="checkbox"/> Consult to Addiction Medicine, where available, Reason: Substance(s) (specify): _____ <input type="checkbox"/> Consult to Social Work, Reason: <input type="checkbox"/> Collateral <input type="checkbox"/> Housing <input type="checkbox"/> Financial Or Other: _____		
Patient Care Orders <input checked="" type="checkbox"/> General Diet Or Other: _____ <input checked="" type="checkbox"/> May wear own clothes Or <input type="checkbox"/> Hospital Pajamas <input checked="" type="checkbox"/> Vital Signs Daily x 3 days then reassess Or <input type="checkbox"/> Daily Or Other: _____ <input checked="" type="checkbox"/> Height, Weight, Waist Circumference, Body Mass Index (BMI) within 48 hours of admission <input checked="" type="checkbox"/> Weight weekly AND within 48 hours of discharge <input checked="" type="checkbox"/> Nurse to ensure: <input type="checkbox"/> Collateral <input type="checkbox"/> Family Engagement <input type="checkbox"/> Education on psychosis		
Signature, Designation _____		College License # _____ Date _____ Time _____ Page 1/3

URGENT PEDIATRIC ASSESSMENT CLINIC (UPAC) DEVELOPMENT

A clinic to serve pediatric patients in need of speedy follow up comes to a pilot phase through collaboration.

Project Lead: Dr. Jennifer Balfour

Specialty: Pediatrics

Dr. Jennifer Balfour, Dr. Krystal Cullen, and colleagues wanted to find a better way to care for pediatric patients who came through the emergency room and required further follow up. They knew that trainees needed to see patients in an environment where they could learn how to assess and manage common pediatric problems to be ready for practice. Prior to their initiative, patients and their families would come to the ER and get referred either to the on-call pediatrician or the community-based pediatrician's office. Both could result in lengthy wait times and significant uncertainty for the family. Families would sometimes return to the ER multiple times rather than risk the wait, resulting in overuse of ER services.

Dr. Balfour wanted to create an Urgent Pediatric Access Clinic (UPAC), a designated facility and staff to address those patients who required follow-up within two weeks. The aim was to reduce wait times to see pediatric specialists, lower the strain on the pediatrician on-call, and facilitate an easier discharge from the ER as the patient and their family would anticipate a prompt and predictable follow up.

Drawing on expertise and input from ER physicians, pediatricians, ER nurse clinicians, pediatric nurse clinicians, and family practice physicians and teaching faculty, the group brainstormed what such a service would look like, and engaged with Island Health about logistics for the space and staff required for the clinic. Throughout, Island Health was a real partner in this effort, as all were trying to solve the problem of an overcrowded ER. "We really needed Island Health to share the vision for this clinic and they did," says Dr. Balfour.

So too was the staff of the Island Medical Program, who recognized the need to support learning in an authentic environment, with meaningful patient experiences, where skills in assessment and management could be developed. The support of IMP in advocating for space, and supporting administration and scheduling, was essential and invaluable.

The UPAC has been operating since January 2019, seeing an average of 10 - 12 patients a week. The staff have received encouraging feedback from ER and pediatric clinicians, families, and residents. One family practice trainee stated that after two afternoons in the UPAC, "it was the best two days of learning in pediatrics in my life." Dr. Balfour is very satisfied with the way the UPAC has enabled access to urgent patients: "In our job, we're just trying to see the right patient at the right time. Sometimes you see a patient and they've waited too long to see them because you didn't have the right information on the referral form to triage them appropriately, or the short notice office time with which to assess them. Sometimes our offices have so many chronic complex patients that the urgent cannot be seen in a timely fashion. With the UPAC clinic, the situation is changed for the better." It is also considerably more likely now that a learner can be involved in an appropriate teaching environment where important skills and experience can be gained and taken in to future practice.

Going forward, the group would like to guarantee the use of two rooms with greater capacity, allowing them to assist patients and their families without overcrowding in the exam rooms. They will also continue to engage with family practice physicians to ensure that this effort assists, rather than adds to, or competes with, their work.

PAIN MANAGEMENT AND OPIATE SAFETY WORKING GROUP

Bringing physicians into crucial clinical discussions about opiate safety means higher levels of engagement and better patient care.

Project Lead: Dr. Gus Chan

Specialty: Oncology

When Dr. Gus Chan was asked to join the Pain Management and Opiate Safety Working Group, he was excited to be able to provide input into promoting regional anesthesia as an alternative to opioids and better pain management procedures. He applied to the South Island MSA to cover his and his colleagues' time to attend these meetings, allowing them to participate in shaping various clinical order sets and procedures relating to pain management and opioid use reduction.

Over the past year, Dr. Chan has seen first-hand how much hard work goes into ensuring that clinical order sets are acceptable to all stakeholders.

The working group has now been elevated to a formal committee in recognition that the work is ongoing and valued. They are tasked with developing a Multi Modal Analgesia Order Set, not only for surgical patients, but for all Island Health patients in general, in recognition of the value of using a variety of complimentary pain management strategies including anti-inflammatories and regional anesthesia, to reduce the use of opioids.

"IT WAS GOOD TO BE A PART OF A GROUP THAT
WAS MAKING DECISIONS AT A HIGHER LEVEL."

- DR. CHAN

ESTABLISHING A COVID WARD

Creating capacity to treat suspected and confirmed COVID cases in Victoria takes teamwork.

Project Lead: Dr. Brian McArdle

Specialty: Internal Medicine

When Royal Jubilee Hospital was designated the site for suspected and confirmed COVID patients in southern Vancouver Island, teams of physicians and allied health personnel scrambled to decant the hospital, going from a census of 115% to 70% within weeks. The effort involved in this process is described as “herculean” by Dr. Brian McArdle, Site Director for Royal Jubilee Hospital and an internal medicine physician. Alongside this effort to transfer patients back home or into community facilities, teams worked within the hospital to facilitate necessary changes, such as supporting surgical colleagues to free up beds, and ER physicians and facilities staff to revamp the emergency room to change patient flow.

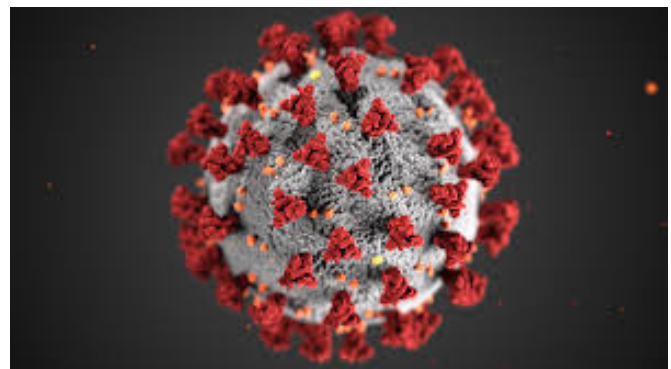
At the center of the COVID response was the creation of a ‘COVID ward’ on 5-North. Half the beds (18) were set aside for suspected COVID patients, while the other half (18) were for confirmed cases. A group of hospitalists and internists collectively applied to the South Island MSA for support in organizing and implementing this new ward. They needed to design a seamless workflow for transitioning patients in and out of the ward, ensure that the ward was fully staffed by the appropriate mix of staff, and prepare physicians for the conversations with patients and families about the morbidity and mortality of COVID-19.

These plans were developed in record speed, resulting in a dedicated internist working alongside a hospitalist colleague and a CTU nursing staff at all times to manage the ward. At the peak of this first wave of cases, there were four patients in the ward. The ward was never “slammed by a wave,” says Dr. McArdle, and quite frequently, “we spent more time managing fear than managing patients.”

As anticipated, patients and families who received a suspected or confirmed COVID-19 diagnosis often feared the worst and required extensive counselling about the disease. The group benefitted from their close links with the ICU physicians about Goals of Care conversations, despite rarely needing to have these with COVID patients in Victoria.

With the slowing down of cases in southern Vancouver Island, the COVID ward has been scaled back to a single side, with both confirmed and suspected cases. Dr. McArdle describes this unit as a nimble and flexible small unit, with the ability to flex up and down as needed.” The hope is that this unit will be able to scale back up quickly in the event of a second wave.

During this reprieve, it is also timely to focus on the opportunities that exist to do things differently in the hospital. Dr. McArdle reflected on the brief time when the hospital census was at 80%, saying “Things just worked better. Patients weren’t in hallways. Tests results were available swiftly. We all got a window into what happens when the hospital is functioning the way it should.” The challenge now is to harness the current openness to change and to do what we can to maximize our ability to care for patients outside of hospital.



PLANNING FOR THE HIGH COMPLEXITY CARE TEAM (HCCT)

A physician builds consensus for a specialized pathway for care of complex patients with multiple comorbidities.

Project Lead: Dr. Spencer Cleave

Specialty: Hospitalist

It is well acknowledged that a minority of patients experience a disproportionate amount of morbidity and, as a result, use a disproportionate amount of acute care resources. Dr. Spencer Cleave advanced an ambitious plan to generate a High Complexity Care Team (HCCT) in the South Island to care for these patients in ways that both reduced their suffering as well as reduced acute care expenditure. Yet putting this plan into action required countless hours advocating and networking with key stakeholders including the Victoria- and South Island Divisions of Family Practice, the Ministry of Health, local family physicians, Island Health administrators, hospital-based specialists, allied health providers, the General Practice Services Committee (GPSC), and Doctors of BC. Without intense engagement with these groups, even a well-designed and innovative idea may not achieve the traction it deserves.

He sought a grant from the South Island MSA and from Health System Redesign to cover the costs associated with these essential activities. Over the year of his project, he met face-to-face and over the phone with a diverse array of stakeholders to better understand their agendas and develop a plan for how to integrate these priorities with the HCCT. In his words, “I’ve been able to meet and engage with so many contacts in the health authority and ministry and other docs that I otherwise wouldn’t have been able to.”

One of the key outcomes from these activities was a series of formalized rounds with mental health providers, specialists, community providers, and the Enhanced Discharge Team from Island Health for high-needs patients.

Rather than wait for faxes to arrive about specific patients, the team’s weekly meetings allowed for timely communication and better patient care.

Through this funding, Dr. Cleave build the relationships and laid the groundwork for the HCCT to be recognized as part of the Specialized Community Service Program and receive funding from the Ministry of Health through the Primary Care Networks program to launch the clinical phase of the program.

As a result of doing the project, Dr. Cleave has become something of an informal resource for other physicians interested in innovation in the South Island. He has mentored colleagues with their own project ideas and helped them to both navigate the complex system of engagement and avoid duplication of services. He describes the value of the funding as allowing him “to build the network I need to make the project successful and to develop tools and contacts I can share with others who wish to do similar things.”



ERCP SERVICE IMPROVEMENT AND FOLLOW UP

A diverse team of physicians and administrators work to Improve wait times for endoscopic procedures at Victoria General Hospital .

Project Lead: Dr. Denis Petrunia & Dr. Alan Buckley

Specialty: Gastroenterology

Dr. Denis Petrunia, Dr. Alan Buckley and their gastroenterology colleagues wanted to improve access and availability of endoscopic (ERCP) procedures at Victoria General Hospital. This was a seemingly complicated task involving radiology, gastroenterology and the surgical day care staff, with implications for patient transfers between RJH and VGH, nursing overtime, physician call schedules, and surgical recovery room distribution. They used their grant from the South Island MSA and Health System Redesign to meet, discuss, and build support for the necessary changes with all key stakeholders.

The outcomes of the project are numerous: there are now three recovery beds allocated to ERCP patients, instead of the previous two. More efficient turnaround between cases has meant that up to three patients can be accommodated per day, which has reduced the costs associated with paying staff to stay overtime or work on weekends in order to meet patient demand. Better communication with physician colleagues up and down the island has also led to greater efficiency. “Physicians know who to call, when to call,” states Dr. Buckley.

The South Island MSA funding was instrumental in making these changes possible, “by making physicians feel as though their efforts are valued for these kinds of projects,” says Dr. Buckley. “Physicians have been working off the side of their desks for many years, and this funding enables them to allocate time to do this work properly.”

A recent shift in staffing, however, has created new challenges to the ERCP service. Whereas previously, the surgical day care nurses had been responsible for recovery of the ERCP patients, at present patients are cared for in a variety of departments, depending on bed availability. Dr. Petrunia feels that this does not result in the best patient care, as the nurses tasked with caring for these patients may not have specialized knowledge about ERCP-related complications.

“We are still trying to address this significant deterioration in care,” says Dr. Petrunia. “The funding provided for the quality improvement effort was very useful in development of the team required to address this complex but important issue.”

CHAPTER 3

COORDINATION OF CARE PROJECTS

The projects in this chapter revolve around bringing a team together to discuss a ‘common patient’, a type of patient who is cared for by many different specialties. These specialties rarely find the opportunity to gather together, away from the day to day challenges of providing care at a patient’s bedside, to discuss improvements to care. Yet it is precisely the occasion of coming together and outlining recurrent problems pertaining to a specific patient population, that lasting solutions to improve patient care can be implemented. Physician leads involved in these projects spoke of the collegiality that came about when they were able to get together to liaise with their colleagues outside of clinical care encounters.

MAIN ENTRANCE

IMPROVING MANAGEMENT OF RECURRENT PARACENTESIS

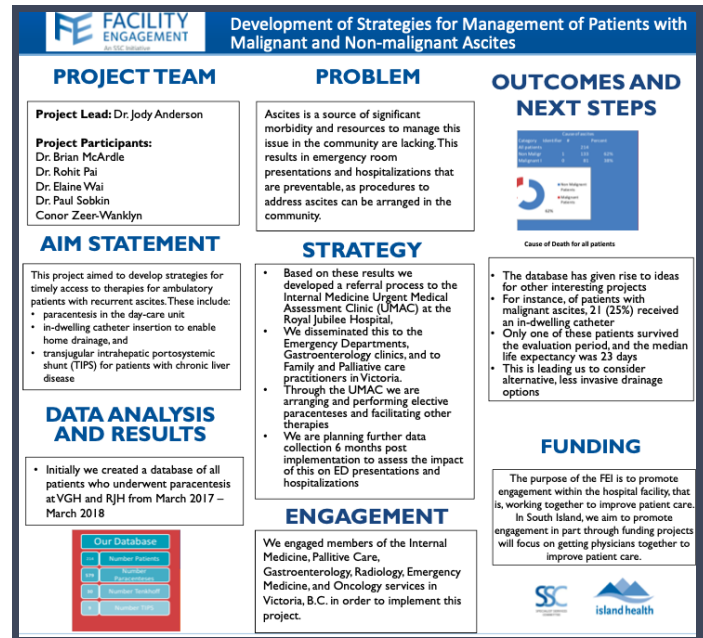
A group of clinicians and allied health care workers develop strategies to improve care for patients with recurrent need for care

Project Lead: Dr. Jody Anderson, Dr. Rohit Pai, Dr. Brian McArdle, Dr. Elaine Wai, Dr. Paul Sobkin

Specialty: Palliative Care, Gastroenterology, Internal Medicine, Oncology, Radiology,

Ascites – the accumulation of fluid within the abdomen – is a source of significant morbidity for certain patients with chronic liver disease. Resources to manage this issue in the community are lacking, resulting in preventable emergency department presentations. A group of physicians from Internal Medicine, Palliative Care, Gastroenterology, Radiology, Emergency Medicine and Oncology came together to develop strategies for timely access to therapies for ambulatory patients with recurrent ascites. These include paracentesis in the day-care unit, in-dwelling catheter insertion to enable home drainage, and transjugular intrahepatic portosystemic shunt (TIPS) insertion for patients with chronic liver disease.

Though each of these physician groups had experience working with this population of patients, they had rarely had the opportunity to get together with each other to discuss improvements for patients' care. The group met to share their perspectives on the problem, and to develop guidelines for the creation of a database of all patients who underwent paracentesis at Victoria hospitals. With assistance from an Island Medical Program student, Conor Zeer-Wanklyn, the database came to represent all paracentesis procedures from March 2017 - March 2018. In total 214 patients underwent 579 paracenteses. Of these 38% had underlying malignancy while 62% had chronic liver disease. Over this period 52% of patients in the database presented to the Emergency Department for paracentesis. There were 110 (51%) deaths. Patients underwent TIPS in 9 cases, and 28 received an in-dwelling catheter.



The results indicated a need to divert patients from the emergency room and give them a faster and more comfortable route to paracentesis.

The group then developed such a process, referring patients to the Urgent Medical Assessment Clinic (UMAC), and disseminating this new pathway to clinicians and staff in the Emergency department, Gastroenterology clinics, and Family and Palliative care practitioners in Victoria. Through the UMAC, patients can access elective paracenteses and receive assistance with other related therapies to manage their disease. The group planned further data collection 6-months post implementation to assess the impact of this intervention on ED presentations and hospitalizations.

VANCOUVER ISLAND INTERDISCIPLINARY SEXUAL MEDICINE WORKING GROUP

Designing and developing an interdisciplinary sexual medicine working group brings together diverse practitioners into conversation.

Project Lead: Dr. Nathan Hoag, Dr. Shauna Correia

Specialty: Urology, Psychiatry

Due to the fragmented nature of sexual medicine provision on Vancouver Island, an interdisciplinary working group was struck to create a framework for care, align team members, and streamline processes. Dr. Nathan Hoag received a South Island MSA grant to bring together South Island urologists, gynecologists, psychiatrists, general practitioners, and Island Health sexual health nurses. Although each of these practitioners provides care to sexual medicine patients, it was often unknown to other providers which services and expertise were available.

Dr. Nathan Hoag led the project through three stages:

- 1) At the initial Working Group meeting, the interdisciplinary team identified the needs of Victoria-based medical staff and their patients, and defined the key players in the provision of sexual medicine in the area.
- 2) The second meeting enabled key stakeholders to delve into issues surrounding sexual medicine care in Victoria.
- 3) The third and final meeting was surgical in nature, to resolve challenges that had been identified in the previous steps.

Dr. Hoag feels that the project has achieved its desired results:

- A sexual medicine working group has been created and is sustainable,
- The interdisciplinary framework has been set up,
- Lines of communication have been opened between the various disciplines, and
- All participants agree that this process has ultimately benefited their provision of medicine.

Dr. Hoag shared that the completion of this project has spawned future meetings and journal clubs and has “ultimately set about improving the delivery of sexual medicine in Victoria.”

VANCOUVER ISLAND IBD FORUM

A gathering of specialties involved with Inflammatory Bowel Disease (IBD) patient care builds familiarity and expertise .

Project Lead: Dr. Dustin Loomes

Specialty: Gastroenterology

Dr. Dustin Loomes and Dr. Vojislav Jovanovic believe that quality treatment of Irritable Bowel Disease (IBD) requires an integrated and cooperative approach among multiple specialties (Gastroenterology, General surgery, Internal medicine). However, developing the relationships and capacities for interdisciplinary cooperation can be difficult. The Vancouver Island IBD Forum, supported by a South Island MSA grant, aimed to build a foundation for these strong cross-specialty relationships and enhanced referral patterns. By engaging multiple specialties in dialogues relevant to their interconnected roles in IBD care, it was hoped that mutual appreciation and collegiality would be enhanced.

In May 2018, the first annual Vancouver Island IBD Forum brought together nearly 30 specialists and IBD nurses to network, learn, and discuss issues surround disease management on Vancouver Island. Lectures on IBD topics, breakout groups, discussion forms, and a review of the Clinic's IBD Care Model enabled specialties to exchange knowledge, ideas, and perspectives, and participants to network and foster relationships with other practitioners.

Thanks to the success of the Forum, IBD care team members report improved familiarity and working relationships among physicians, as well as increased referrals of IBD patients for this enhanced team care. The Vancouver Island IBD Forum is planned to occur annually, with topics and enhancements made based on participant feedback and the changing landscape of IBD care.



ROOMING-IN FOR INFANTS EXPOSED TO OPIATES PROJECT

Improving care for infants exposed in utero to opiates brings together a diverse group of physicians, allied care providers and Island Health administrators

Project Lead: Dr. Marie-Noelle Trottier-Boucher

Specialty: Pediatrics

Rooming-in is the standard of care for healthy babies born at Victoria General Hospital, meaning that they stay in the same room as their mother for the duration of their hospital stay. Babies born to mothers with opioid use disorder should have the same care. However, in a significant portion of cases, those babies end up being transferred to the Neonatal Intensive Care Unit (NICU) if they develop significant symptoms of withdrawal (called Neonatal Abstinence Syndrome), and therefore are separated from their mothers, sometimes for weeks until hospital discharge.

Studies have shown that ‘rooming-in’ for infants exposed to opioids during pregnancy has many significant positive advantages. It results in reduced need for pharmacotherapy, shorter hospital stays, higher rates of breastfeeding initiation, and decreased admissions to the NICU. Yet accommodating the needs of these infants in the same location as their mothers requires complex coordination between all members of the care team and support community. Victoria Pediatricians Drs. Marie-Noelle Trottier Boucher, Katrina Stockley and Lauren Kitney wanted to build consensus for a rooming-in model to support mothers with opioid disorders in Victoria. Drawing on funding from both the South Island MSA and the Physician Quality Improvement fund, they engaged key stakeholders and care providers in a multi-stage approach to improving care with this population.

They first organized a multidisciplinary meeting with physicians, nurses, social workers, Aboriginal liaisons, and other allied health personnel, as well as Island Health administrators, community organizations, Ministry of Children and Family Development staff, and parent representatives to review current inpatient care practices at Victoria General Hospital. Thirty-five people participated and provided insights into barriers and facilitators for rooming-in.

These insights were summarized and displayed in a graphic representation that was posted in multiple locations (Labor and Delivery Unit, Neonatal Intensive Care Unit and Mother and Baby Unit) to continue the process of eliciting feedback. A smaller group meeting followed a month later to review findings and determine how best to facilitate rooming-in. Earlier this year, the team drew on the insights from these previous meetings to design a draft pathway enabling mother and baby to stay together regardless of the need for NICU treatment. After this pathway receives input and support from Island Health administration and is reviewed and approved by each department, it will be finalized and implemented.

The funding received from the South Island MSA added value as it allowed patient’s voices to be heard. Parents who experienced the specific challenges of the limited rooming-in possibilities once their babies developed symptoms of withdrawal in our institution were able to contribute to all steps of our project. Dr. Trottier-Boucher noted that their participation in this project was invaluable, as it helped the group to have a better understanding the unique challenges these mothers face, to see things from a different perspective and to contribute different ideas for improvement.

The next steps for this work include engaging with Island Health to finalize the pathway and to work on the introduction of a new model of evaluation and care for these infants exposed to opioids during pregnancy called ‘Eat Sleep and Console’. Ongoing funding from both the South Island MSA and Physician Quality Improvement Program will help this dynamic team to continue their project.

INTERDISCIPLINARY TEE CARE REVIEW

An anesthesiologist brings together his colleagues to disseminate insights into interesting echocardiogram cases.

Project Lead: Dr. Kevin Yee

Specialty: Anesthesiology

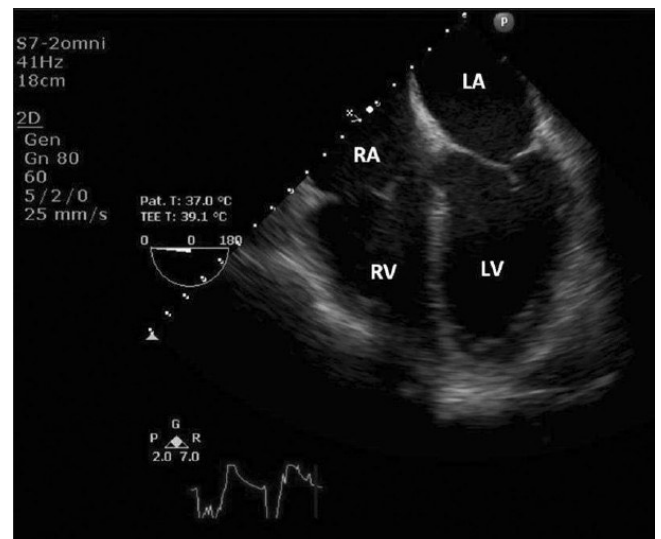
Approximately 800 cardiac surgery cases are done each year at Royal Jubilee Hospital and it is standard for the anesthesiologist to perform an intraoperative transesophageal echocardiogram (TEE). However, when the TEE shows an interesting finding which poses significant diagnostic challenges, there has been no formal mechanism to communicate this more broadly to the cardiovascular anesthesiologists, cardiovascular surgeons or cardiologists. Anesthesiologist Dr. Kevin Yee wanted to ensure that these opportunities for learning were not wasted.

Using a grant from the South Island MSA and from Physician Quality Improvement, he set about designing evening review sessions across the three departments to review these interesting cases. Over the course of five sessions, cardiologists, cardiovascular anesthesiologists, and cardiovascular surgeons gathered for dinner and discussion. The topic of discussion branched out sufficiently to engage other related specialties, with an interventional cardiologist joining the group.

Beyond the value of reviewing TEE findings, one of the key benefits that resulted from this initiative was a far greater degree of communication between these three departments than would previously have occurred. In several cases, cardiac anesthesiologists were comfortably able to request a second opinion from the cardiologists intraoperatively – something that might not have occurred previously had the relationships not been more familiar.

**“IT’S EASIER TO ASK
SOMEONE FOR ADVICE IF
YOU’VE HAD A PIZZA
WITH THEM.”**

-DR. KEVIN YEE



THE VICTORIA PREGNANCY LOSS WORKING GROUP

Improving the care of patients experiencing first trimester pregnancy loss draws on insights from obstetricians, family doctors, midwives, ER physicians, walk-in clinic physicians, and nurses.

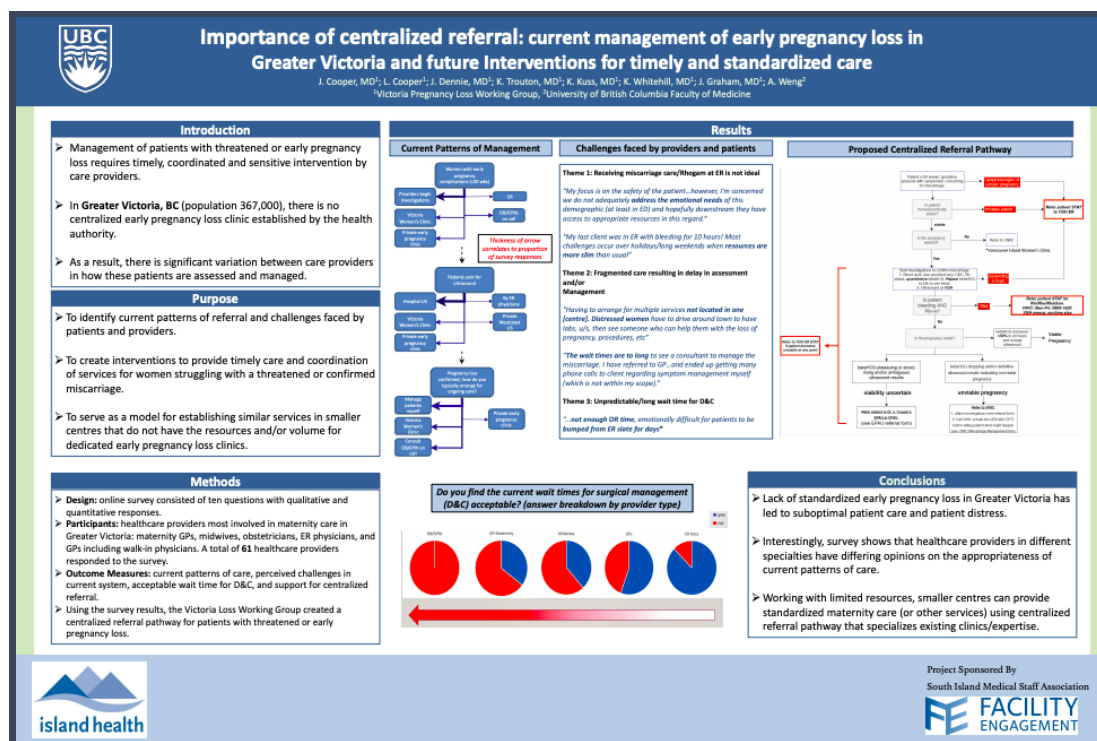
Project Lead: Dr. John Cooper and Leigh-Ann Cooper
Specialty: Obstetrics

Early pregnancy loss is the most common complication of pregnancy. Miscarriages occur in approximately three quarters of all women trying to conceive. Most of these pregnancy losses are never clinically recognized, occurring before or during the next expected menses. There remain, however, a significant number of recognized pregnancies that are lost during the first few weeks and months of early gestation.

Women struggling with early pregnancy complications deserve prompt, appropriate, and compassionate medical care. Dr. John Cooper and Leigh-Ann Cooper aimed to gather together key stakeholders involved in managing early pregnancy loss to form the Victoria Pregnancy Loss Working Group.

The first goal of this group was to identify current referral patterns and challenges faced by providers by launching a survey. A total of 61 health care providers responded, indicating common themes about the emergency room not being the most appropriate place for patients, delays in assessment and/or management, and the unpredictable wait time for a D&C procedure. In response to these findings, the group created a centralized referral pathway for patients with threatened or early pregnancy loss.

The findings of this project were disseminated by Island Medical Program student Anita Weng at the Family Medicine Summit of the Alberta College of Family Physicians.



INTEGRATING GENERAL INTERNAL MEDICINE WITH IN-PATIENT CARDIOLOGY SERVICE

Reviewing how cardiac patients are cared for yields improvements for both cardiologists and internal medicine physicians.

Project Lead: Dr. Brian McArdle

Specialty: General Internal Medicine

Aging cardiac patients often have multiple co-morbidities, the management of which may lie outside of the expertise of the cardiologist on service. Consultations from other specialties during a cardiac patient's time on the ward can lead to longer hospital stays, a high inpatient workload for cardiologists, and a limited availability of cardiologists to provide consultations to patients under the care of other specialties. Further, the high volume of inpatient work decreases a cardiologist's availability for outpatient consultations, resulting in increased wait times and a higher chance of adverse events or hospitalization.

Dr. Brian McArdle saw this challenge as an opportunity to bring together the Division of General Internal Medicine, the Division of Cardiology, and the Internal Medicine Clinical Teaching Unit.

When discussing his initial idea of integrating General Internal Medicine physicians in the care of cardiology patients admitted to hospital, alternate solutions presented themselves:

1) Internal Medicine/CTU took on admissions for patients presenting to the ED with acute cardiac problems that did not require admission to the coronary care unit.

2) That team also took over eight monitored beds on the cardiology ward for use by acutely unwell medical patients that require continuous cardiac monitoring.

These changes have allowed General Internal Medicine physicians the opportunity to provide better care to complex patients, leading to improved health outcomes. Additionally, cardiologists are now more available to provide in-house consultation services as well as more timely access in community for patients to EP, interventional, and ECHO services.

Thanks to Dr. McArdle and his team, cardiac patients with co-morbidities can now access a greater efficiency of care using effective treatment methods, by well-aligned specialist physicians.

TRANSITIONAL PEDIATRIC CARE CLINIC EXPANSION INTO VICTORIA ELEMENTARY AND MIDDLE SCHOOLS

A team comes together to improve care for children with acute mental health problems.

Project Lead: Dr. Adriana Condello

Specialty: Pediatrics

Dr. Adriana Condello identified a care gap for children and youth with acute mental health needs and who also had no family doctor in the community. By bringing together a group of pediatricians, pediatric psychiatrists, early intervention program team members, family physicians and nurse practitioners, Dr. Condello and her team agreed that early identification and intervention using a shared care approach could reduce long term health care costs in caring for this population.

Supported by the South Island MSA and the Health System Redesign funding, multiple engagement sessions with School District 61 (Victoria) were held to identify future methods of collaboration. It was agreed that a clinic located within a middle school located close to an elementary school would be an ideal location for this shared work. Children at risk of behavioural, developmental or mental health issues identified by school staff would be forwarded for further evaluation to the clinic with guardians' consent.

A team-based approach with wrap around services that included a family physician/nurse practitioner, family liaison/system navigator, social worker, school staff liaison, school based allied therapists, pediatricians and consulting child psychiatrist would be required to address the health and educational needs of the identified children.

This pilot project has found a home at Shoreline Middle School, which has undergone some renovations. For now, the clinic's physicians will be supported by sessionals and, if the pilot project is found to be successful, the team will be looking for a philanthropic donation to cover costs. Deborah Chaplain, Island Health's Director of Child, Youth, and Family Health, has been involved in the project, shares progress and information within the Health Authority, and provides insights towards supporting the next steps for the clinic's development. The collaboration between physicians, School District 61 and Island Health continues and the project leaders are optimistic about the potential impact of this clinic being created.

MENTAL HEALTH SERVICE DELIVERY FOR MARGINALIZED AND/OR ELDERLY POPULATIONS

A group of clinicians and allied health care workers brainstorm ways to improve care for patients who fall through the cracks.

Project Lead: Dr. Jeanine Marshall

Specialty: Geriatrics

Dr. Jeanine Marshall knew that elderly and frail populations with substance use and/or mental health issues were sometimes falling between the gaps of adult mental health services and geriatric psychiatry. As a result, these patients were being seen disproportionately by the Emergency Room teams and in the inpatient setting, rather than having a community-based service. Seeing these patients in the community would not only help prevent the need for hospitalization, it would also facilitate patients' discharge back into the community because it would draw together a support network for their ongoing care.

Drawing on a grant from the South Island MSA, Dr. Marshall and her colleagues organized a series of meetings between Adult Mental Health, Geriatric

Psychiatry, Consultation Liaison Psychiatry, and Seniors Outreach Team clinicians, to discuss the current pathways for care for this population and brainstorm more innovative ways of service delivery.

These meetings helped start a conversation around challenges to the current model of care and how to improve the collaboration across disciplines. They determined that before any changes to care pathways were made, they should have an accurate picture of the current situation. They established a series of data points and inclusion criteria that they will use to measure their patient population's experience of care both prospectively and retrospectively.

“WE ARE A TOUGH CROWD TO GATHER TOGETHER SO BRINGING US INTO THE SAME ROOM TO DISCUSS OUR COMMON PATIENTS WAS PRETTY GREAT.”

-DR. MARSHALL

COORDINATING TRANSGENDER SURGICAL CARE ON VANCOUVER ISLAND

A group of committed physicians come together to improve care for transgender patients on Vancouver Island.

Project Lead: Dr. Nathan Hoag, Mona Mazgani, Trevor Cohen, Chris Taylor, Jen Robinson, Gail Knudson, Chasta Bacsu

Specialty: Urology, Plastic Surgery, Obstetrics/Gynecology, Psychiatry, Family Medicine

Dr. Nathan Hoag saw a great opportunity for multi-disciplinary collaboration: Transgender surgical care has been available in this region, but in a limited and specialty-focused capacity. By bringing together a team of physicians from plastic surgery, gynecology, urology, psychiatry and family practice, Dr. Hoag hoped to increase both the multidisciplinary aspect of surgical care and the scope of surgical interventions offered on Vancouver Island.

The simple act of meeting enabled team members to better understand each others' individual capabilities and allowed the group to better define which surgeries could be offered to transgender patients on Vancouver Island.

Since the meeting, the physicians have collaborated actively around patient care: Transgender patients are getting the care they need locally, patients are more easily directed to the appropriate physicians, team members have been able to collaborate on difficult cases.

Better access, improved communication, and successful patient outcomes, all thanks to one meeting.

"WE HAVE BOOKED RECONSTRUCTIVE SURGERIES THAT WOULD OTHERWISE NOT HAVE HAPPENED, AS WE WERE ABLE TO ORGANIZE COMBINED TRANSGENDER CASES."

-DR. HOAG

ENGAGING ACROSS DISCIPLINES FOR THE IBD CLINIC ROUNDS

Multidisciplinary rounds focus on difficult cases, new treatments and emerging evidence for IBD patients.

Project Lead: Dr. Dustin Loomes

Specialty: Gastroenterology

The IBD Rounds, held monthly, were seen as a chance for all medical professionals involved in IBD care to engage with each other to discuss diagnosis, treatment, and the unique challenges of management on Vancouver Island. Dr. Dustin Loomes accessed South Island MSA funding to host a monthly meeting: A research paper was chosen for a facilitated discussion at the beginning of the meeting, after which the floor was opened for clinicians to bring up challenging cases to the group. Each meeting wrapped up with a discussion surrounding Vancouver Island specific initiatives, challenges, or concerns.

The most significant challenge for this project was an initial low attendance rate. However, by scheduling the meetings prior to the monthly

GI division meeting, and shortly after many people's workdays are over, turnout improved, allowing for rich and meaningful discussion.

These monthly meetings have improved engagement, collaboration, and learning by participating physicians and nurses, and have ultimately provided a scheduled forum for discussing difficult cases and other concerns surrounding IBD on Vancouver Island. Several challenging cases have been discussed, and concerns regarding IBD care have been highlighted. Greater structure and preparation by all attending has led to progressively richer discussions and Dr. Loomes intends to continue this practice into the future.

DEVELOPMENT OF A COMPLEX COMORBIDITIES CLINIC

Patients with multiple comorbidities become the focus of a new multidisciplinary group.

Project Lead: Dr. David Shanks, Dr. Brian McArdle, Dr. Alison Walzak

Specialty: Internal Medicine

When someone has a complex chronic disease, such as diabetes, cancer or chronic respiratory disease, it can be challenging to manage their health. This is doubly challenging when they lack a regular family physician and/or when multiple chronic conditions occur concurrently. When these patients need immediate medical advice, they often come to the emergency room, get referred to the internal medicine clinic, which may result in a wait time of several weeks to several months. Internal Medicine physicians David Shanks, Brian McArdle, and Alison Walzak felt there could be a better way to care for these patients with chronic multi-morbidities.

After receiving funding from the South Island MSA, their first step was to organize a day-long retreat with their internal medicine colleagues and a trained facilitator from Hone Consulting, to learn about other current care models for complex patients and brainstorm what care in Victoria could look like.

There were both expected and unexpected outcomes from this meeting. The group confirmed the need for a multi-faceted clinic focusing on complex disease care and clarified what kind of service they would like to provide. To this end, they are putting together a proposal for a pilot project to Island Health. Their discussion of their workload also yielded the unanticipated benefit of highlighting the need to address the wait times associated with the Urgent Medical Assessment Clinic (UMAC) clinic. As Dr. Walzak stated, "We all knew there was a problem, but we didn't have the time to fix it in the course of our regular working hours." With the assistance of a temporary loan of a booking clerk from Island Health, they subsequently revamped their scheduling and saw a drastic drop in wait times especially for urgent referrals.

"THE FUNDING SPEARHEADED THE PROCESS WE NEEDED TO UNDERTAKE - IT GAVE US THE ABILITY TO HAVE SOME FOCUSED MEETINGS AND BRING EVERYBODY TOGETHER. PEOPLE ARE PROTECTIVE OF THEIR TIME, WHETHER WEEKEND TIME OR EVENING TIME. TO HAVE A LITTLE BIT OF INCENTIVE FOR PEOPLE TO COME OUT, PEOPLE WERE REALLY EXCITED."

- DR. WALZAK

CARDIOLOGY AND PALLIATIVE CARE COLLABORATION

Building the connection between Cardiology and Palliative Care.

Project Lead: Dr. Jody Anderson, Dr. Daisy Dulay, Dr. Douglas McGregor

Specialty: Palliative Care, Cardiology

Good communication and relationships are key to effective medicine – between providers and patients as well as amongst providers. In order to strengthen the connections between palliative care and cardiology to assist patients living with end-stage cardiac disease, Dr. Jody Anderson from Palliative Care, and her cardiologist colleague, Dr. Daisy Dulay, wanted to enhance the relationship between Cardiology and Palliative Care to identify areas of potential collaboration. They hoped that doing so would provide a more seamless transition for these patients approaching end of life and as a result, reduce visits to the ER, the ICU, and the CCU.

In May 2019, a group of palliative care physicians and cardiologists met to brainstorm ways they could better support mutual patients. Calling it “a great start to a new relationship,” Dr. Anderson was very pleased with the quality of the conversation and the general spirit of cooperation that pervaded the event. One potential area of collaboration identified was to support high-risk patients awaiting cardiac interventions (e.g. aortic valve replacement) with a palliative care consult, given the burdensome symptoms they experience and their poor overall condition.

This meeting was a starting point to explore possible opportunities in which the two departments can work together.

“THIS FUNDING HELPED IMMEASURABLY TO SPARK AN ONGOING COLLABORATIVE RELATIONSHIP BETWEEN THESE TWO DEPARTMENTS. I HAD NO OTHER WAY OF FUNDING THIS TYPE OF EVENT. IT WASN'T AN EDUCATIONAL EVENT, THERE WAS NO CME, IT REALLY WAS ABOUT FACILITATING A CONVERSATION BETWEEN THESE TWO GROUPS OF PROVIDERS.”

- DR. ANDERSON



CHAPTER 4

CAPACITY BUILDING PROJECTS

These projects sought to build a more specialized capacity for care among physicians and allied care providers. Some projects involved training in a specific skill or technique, as is the case with a project focusing on developing greater capacity with point of care ultrasound techniques. Others focused on implementing regular simulation exercises for a particular department or patient population, such as pediatric emergencies, Code Blues, and multi-disciplinary emergency department simulations.

Those involved in these projects regularly reported a greater sense of engagement with colleagues and higher levels of satisfaction in their jobs, as they worked together to build new skills and refine existing ones.

DEVELOPMENT OF POINT OF CARE ULTRASOUND SERVICE (POCUS)

Building hospitalists' capacity to do bedside ultrasound benefits patients and improves clinician satisfaction.

Project Lead: Dr. Rikus de Lange

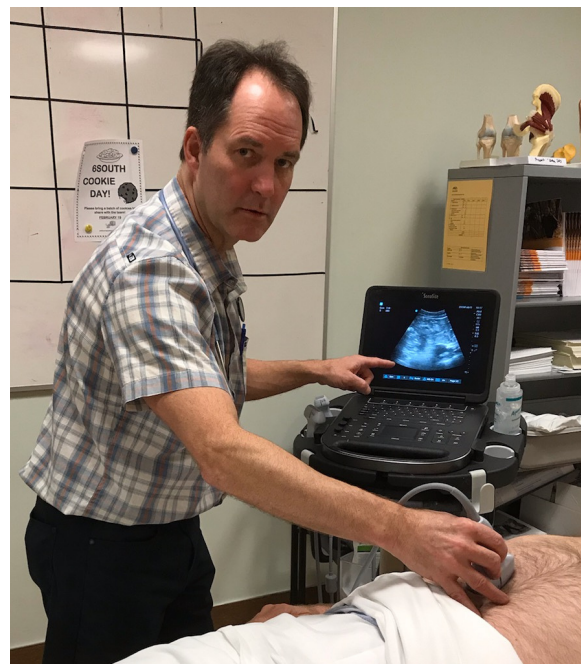
Specialty: Hospitalist

When a patient arrives in a hospital with a health issue, it can take hours to establish, through tests, where the problem lies. However, this can be expedited if hospitalists can perform ultrasounds at a patient's bedside. Using Point of Care Ultrasound (POCUS) as part of the clinical examination, much as they would use a stethoscope, further investigations could be better targeted. Though POCUS is part of the standard of care for hospitalists in some regions, particularly with emergency physicians, its use in hospitalist medicine in Victoria is still novel. Hospitalist Dr. Rikus de Lange was trained on POCUS during his career in emergency medicine in Regina and saw the value of being able to initiate treatment more rapidly once a diagnosis had been made. He received funding from the South Island MSA to engage the hospitalists in Victoria to be trained in using bedside ultrasound.

A group of hospitalists met to discuss integrating POCUS into the hospitalists' practices, a process that was essential for building consensus among the group for this service and training. Following this meeting, a survey was launched to assess the staff's existing comfort and familiarity with the technology, as well as their knowledge of existing training pathways. The survey also assessed hospitalist interest and availability in receiving POCUS training. After assessing existing availability of POCUS machines, the group quickly realized that more ultrasound machines were essential to learn, maintain skills and have access to POCUS on the wards. Hospitalists requested the purchase of more POCUS machines through Island Health. By engaging hospitalist physicians and setting up formal POCUS guidelines for the hospitalists, it facilitated discussions with Island Health that ultrasound machines should be purchased for hospitalist use at both Royal Jubilee and Victoria General Hospitals. The group is currently navigating challenges to ensure that the IMIT Security and Privacy assessments can be operationalized in relation to this new technology.

In addition to the progress on purchasing the ultrasound machines, the group has established a pathway for Hospitalists to obtain ultrasound experience and proficiency through supervision within the hospitalist group. Point of Care Ultrasound privileging guidelines are now ready for implementation.

Speaking about the value of the funding, Dr. de Lange explained that it enabled them to embark upon this novel training. Without it, the hospitalist group may not have been trained in POCUS for years. There are other groups on the Island who have since expressed interest in a POCUS program and the guidelines. Dr. de Lange says, "Formal POCUS training pathways and guidelines for hospitalists in Canada isn't something that exists yet. In order for this type of training to come through, it requires physician engagement – someone will have to undertake it. South Island Hospitalists can be proud to lead with this technology in delivering high quality care."



BUILDING SUPPORT FOR WOMEN WHO USE SUBSTANCES

Enhancing care for pregnant women who use substances draws on insights from diverse providers and allied health workers.

Project Lead: Dr. Heather McEwen and Dr. Sarah Lea

Specialty: General Practitioners

With a focus on supporting enhanced care for pregnant women who use substances, Drs. Sarah Lea and Heather McEwen hosted an evening event for family physicians, midwives, social workers, nurses, psychiatrists, pediatricians, obstetricians, and addiction medicine specialists. The goal of the session was to enhance education regarding substance use and its impact on pregnancy, connect and network primary maternity care providers with specialist addictions care providers, gain understanding of current resources and limitations in Victoria for women who use substances, and generate consensus on further development of future resources.

Supported by the Physician Quality Improvement initiative and South Island MSA funding, the session was designed with pre-event survey information in mind and the evening began with an initial networking session.

Didactic lectures were presented by a handful of physicians and the event concluded with an hour of case work and discussions. The loose structure of the event allowed for some time to be freed up for organic discussions that resulted in the propulsion and momentum into future planning.

The result of this engagement has been that there is now a core group of providers moving forward, with funding, to develop identified outreach programs that are not currently being provided. As a result of the enhanced awareness of Drs. Lea and McEwen's expertise level with this patient group both have received additional referrals from care providers who have substance-using patients. Patients are being supported by those who are best able to serve them and Drs. McEwen and Lea are committed to hosting future education sessions so that emerging knowledge continues to be shared.

THOMAS SPLINT EDUCATIONAL VIDEO

A short video helps with transfers for patients with a femur fracture.

Project Lead: Dr. Jason Wale, Dr. James Stone

Specialty: Emergency Medicine, Orthopedic Surgeons

Dr. Jason Wale saw an opportunity to improve the care of patients with femur fractures. To improve their transfer and transport, especially from other Island locations, a Thomas Splint can be used. In partnership with Dr. James Stone, Stephen Young (ER LPN), and a videographer from Island Health, Dr. Wale led the development of an educational video demonstrating how to properly apply a Thomas Splint, available at <https://vimeo.com/258849003>.

This video has been shared with orthopedic surgeons, ER physicians, ER nurses and cast techs up and down the Island. The result of the creation and sharing of the Thomas Splint video has meant a reduction to zero of femur fracture patients arriving at Victoria General Hospital with ineffective splints.



CARDIOVASCULAR ALLIED HEALTH TEACHING PROJECT

A diverse group comes together to discuss cardiovascular research and treatments.

Project Lead: Dr. Brian Gregson

Specialty: Cardiology

When a staff survey of nurses working in the Cardiovascular Unit (CVU) at Royal Jubilee Hospital revealed that many felt frustrated by the lack of opportunities to improve their skills and knowledge to improve patient care, Dr. Brian Gregson decided to do something about it. He knew that the group lacked opportunities to review newer initiatives and treatments as post-cardiac surgery care evolved, and that it could be difficult to ensure consistency of care across different providers. He applied to the South Island MSA for funding to support the development of a Cardiovascular Unit education working group to develop a curriculum for regular presentations. These presentations would bring together physicians, nurses, respiratory therapists, pharmacists, physiotherapists and dieticians to discuss new and evolving treatments, review philosophies of care, and share insights from different care providers.

The result? Over the course of a year, the group held monthly presentations on key topics and discovered both expected and unexpected results. Staff reported how some knowledge they gleaned from the presentations could be immediately applied to improve patient care. As members of the different healthcare disciplines interacted around these sessions, their appreciation for each other's roles improved. Specialists noted staff members asking more questions during rounds and following up on topics that had been discussed at a recent presentation.

Although the formal project has ended, the presentations that were developed will be offered in the future, along with updates about how the science and technology have evolved.

“[THE FUNDING] WAS CRITICAL TO MOTIVATE PEOPLE TO PUT THE TIME IN TO CREATE THE LECTURES INITIALLY. BECAUSE YOU’RE DOING IT BASICALLY ON FAITH, HOPING IT WILL BE WELL ATTENDED AND WELL RECEIVED. WHEN YOU HAVE THE POSITIVE FEEDBACK, THAT’S VERY ENCOURAGING IN AND OF ITSELF, BUT FOR THAT INITIAL PUSH, TO GET THE LECTURES OFF THE GROUND, WE NEEDED THE FUNDING.”

- DR. GREGSON

BUILDING CAPACITY FOR STREAMLINING PERINATAL ULTRASOUNDS

Physicians at Grow Health help streamline access to perinatal ultrasound.

Project Lead: Dr. Alicia Power and Dr. Jennifer Tranmer

Specialty: Family Medicine

The final few weeks of the first trimester of pregnancy can be a time filled with worry. Women can have symptoms such as bleeding or cramping that may suggest an early pregnancy loss, but cannot know for sure without an ultrasound. In the final few weeks of a pregnancy, questions can arise about baby's position, which necessitates an ultrasound to confirm the fetal position. Wait times for these ultrasounds can sometimes be several days at least, and in the interim, the family experiences tremendous anxiety and stress as they anticipate a diagnosis which may change their course of care.

Dr. Jennifer Tranmer and Dr. Alicia Power wanted to create the opportunity for outpatient ultrasounds during these two crucial periods at their clinic, Grow Health, which provides maternity care to 20% of Victoria's population, rather than have to funnel these patients through Island Health's busy ultrasound facilities. They sought a grant from the South Island MSA to bring together key stakeholders to discuss existing barriers, brainstorm solutions, and develop protocols for improved care. Drawing on expertise from Dr. Kim MacDonald, maternal fetal medicine specialist who works in the Antenatal Assessment Unit (AAU), the group convened a series of learning sessions on basic ultrasound techniques, both for assessing fetal heart rate at 10-12 weeks and for fetal position at 36-40 weeks.

They then formed smaller working groups to develop protocols for how to manage a suspected fetal demise, how to manage a breech position, how to document these issues in the patient's chart, and how to coordinate with the AAU to confirm diagnoses if necessary. They liaised closely with the Vancouver Island Woman's Clinic which has been funded through Island Health to provide management of unplanned pregnancies and miscarriages.

All of these initiatives make it easier for patients to resolve pregnancy loss without having to wait in the ED for a spot to free up on the surgical slate. Likewise, for patients needing to confirm a breech position, they can do so without having to attend multiple appointments with various specialists and Island Ultrasound. If Dr. Power, Dr. Tranmer or their colleagues are able to confirm a breech position or detect a fetal heartbeat, they are able to save Island Health an ultrasound spot, and an unnecessary specialist appointment. In streamlining the process of administering perinatal ultrasounds in their clinic, the group estimates they have saved Island Health the cost and time associated with 5-10 ultrasounds per month. This has not only freed up time slots for ultrasounds needed for other patients, it has improved immeasurably the management of first trimester losses and term trimester query breech management for patients. Speaking about the importance of providing this service for patients, Dr. Power stated, "By affording us the opportunity to train and provide this care for pregnant women in our clinic, not only are we improving their care and decreasing tremendous anxiety, but we are also decreasing unnecessary use of a valuable resource in our community. It also increases care providers skill and job satisfaction."

Though there is currently no additional funding for performing these procedures, Dr. Power believes that she and her colleagues do it because it results in significantly better patient care. In the future, they would like to offer the use of the ultrasound machine and their designated space to other GPs and midwives keen to access a more streamlined pathway for care. In the meantime, Dr. Power is liaising with Corilee Watters, Manager of Medical Imaging Quality and Operations for Geo 3 to provide insight into improving communication with patients experiencing first trimester pregnancy loss.

PEDIATRIC IN-SITU SIMULATION

Simulations of uncommon pediatric emergencies prepare pediatricians and allied care providers for the unexpected .

Project Lead: Dr. Katherine McCullough & Dr. Marie-Noelle Trottier-Boucher
Specialty: Pediatrics

How do you improve your management of critical medical emergencies if you don't face them often? This challenge faces most medical departments. Many have pointed to the value of simulation to enable staff and clinicians to practice their skills in a non-critical context. However, logistical and administrative barriers can present challenges, including finding time during busy clinical duties, creating new and relevant cases, ensuring adequate attendance and participant buy in, and having appropriate equipment and funding.

The Department of Pediatrics at VGH aimed to address these barriers and improve their management of pediatric emergencies by piloting a 6-month Pediatric Simulation In Situ Program with support from the South Island MSA. This was a collaborative effort between South Island pediatricians (Dr. Marie-Noelle Trottier-Boucher, Dr. Katherine MacCulloch, Dr. Amanda Barclay, Dr. Jeff Bishop), pediatric intensive care nurses (Melissa Holland, Jennifer Morgan) and Island Health administration (Trapper Edison, Kim Johnson). From October 2019 to March 2020, they ran simulations on the ward every two weeks,

Over this time, they averaged 75% attendance from staff and clinicians, as well as gathered useful feedback about the value of the process. One participant noted "It was very helpful to do Sims on the floor where we work together to really figure out logistics, timing, etc." Another remarked, "I think it would make me less nervous if it happens for real."

Just prior to the final simulation of the pilot project in March 2020, the coronavirus pandemic became an urgent issue for all medical staff. The pediatric team took the opportunity to adapt one of their cases to a coronavirus simulation, to ensure staff were well supported and more confident in developing safe protocols for managing these patients.

In addition to preparing 28 simulation case scenarios, the project leads also created and employed a scheduling system to improve attendance and prioritize this team building and learning opportunity. The team hopes to continue to run regular simulation cases and continue this valuable work in the long term.



FORMALIZING THE MOCK CODE BLUE PROGRAM

Establishing a formal program to simulate Code Blue emergencies prepares clinicians and staff for fast and effective responses.

Project Lead: Dr. Tina Webber

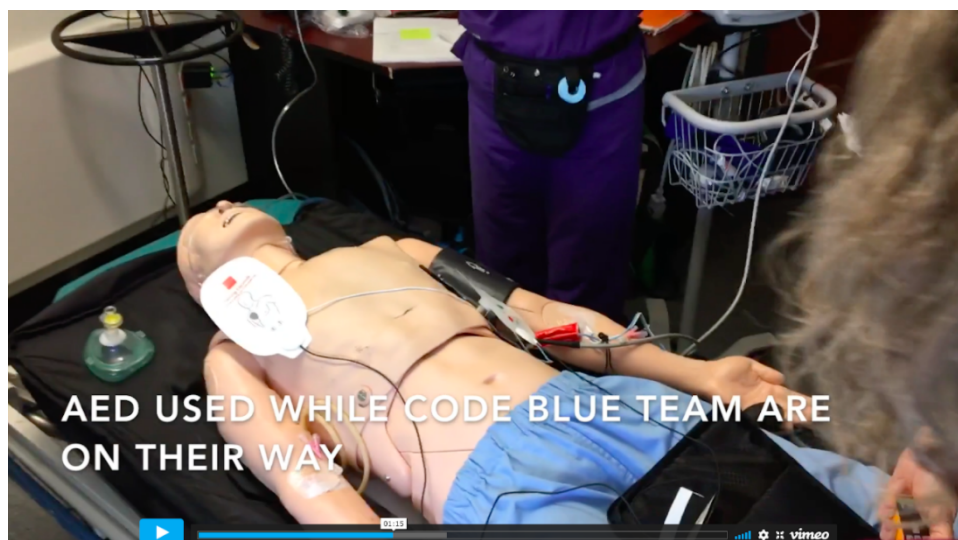
Specialty: Emergency Medicine

A Code Blue indicates a critical cardiac arrest is underway and requires immediate, expert responses from all involved in the patient's care. When staff do not have the chance to practice and participate in Code Blue Team responses, their level of comfort decreases and patient care may not be optimal. Ideally, staff would be able to respond to a Code Blue in a simulated environment, to hone their skills and have opportunities to troubleshoot when lives are not on the line.

Though informal Code Blue training has existed for years, Dr. Tina Webber and her colleagues applied to the South Island MSA for funding to support the establishment of a formal training program in Victoria. This involved training several senior Emergency and Internal Medicine physicians in ACLS and Mock Code instruction, ensuring an ongoing cadre of available physicians who can provide Mock Code oversight in future simulations. These initial resident leaders, along with nursing champions from critical care areas, established an annual roster of Mock Code locations throughout RJH.

Each of the monthly Mock Codes happened in a different ward, and involved nursing staff, an ACLS Instructor/Emergency physician, and family practice residents. Feedback was provided for the First Responder and Code Blue team on an immediate basis with a hot debrief structure. The responses of staff were evaluated by a pre-existing survey distributed at the end of the Mock Code. The project also involved developing a number of Code Blue scenarios in a repository to be used in future trainings, and which have been shared with other hospitals who wish to utilize them to establish their own Mock Code Blue program.

A well-functioning Code Blue team is one that has rapid assembly, high quality CPR, and effective code team leadership. Its efficacy rests on an immediate response provided by front line health care providers. The establishment of a formal Mock Code Blue training program has provided our South Island staff the means to do just that and positively affect our patient care and outcomes.



AED USED WHILE CODE BLUE TEAM ARE ON THEIR WAY

BUILDING CAPACITY FOR THE HOSPITALIST MORBIDITY AND MORTALITY PROGRAM

A hospitalist spearheads a M&M program that incorporates insights from allied care providers and publishes results for further learning.

Project Lead: Dr. Shauna Tierney

Specialty: Hospital Medicine

Wanting to create a sustainable, well-received and effective hospitalist morbidity and mortality rounds program, Dr. Shauna Tierney designed a project focused on improving communication and relationships, as well as prioritizing physician issues and patient care. The Hospitalist M&M Rounds Working Group hosted lunch time rounds at both Victoria General and Royal Jubilee Hospitals and then opened up specific cases for discussion. Non-hospitalists (pharmacist, specialist physicians) who had co-managed specific cases also participated in the discussions. After the Rounds, a smaller group met to determine key take-aways and points of interest, and ultimately identified future quality improvement initiatives. The group also published a quarterly newsletter, 'M&M Pearls,' and copies were placed in the lunchrooms.

Thanks to this project group's work, there is now an established program in the South Island Hospitalist Department. Hospitalists have embraced the rounds as a to share their learning and optimize patient care. Additionally, hospitalists report enhanced clinical management as a result of what they learned during their rounds. Meanwhile, Dr. Tierney states that, "the Working Group has matured into a high-functioning group of colleagues that truly enjoys the experience of collaborating together. The 'M&M Pearls' continues to be well read and appreciated for the value it brings to provisions of care."

Following the completion of this project the Hospitalist Department successfully applied for ongoing quality improvement funding and credits the South Island MSA project experience for this.



M&M Pearls

INTERDISCIPLINARY EMERGENCY DEPARTMENT IN SITU SIMULATIONS

Emergency department simulations engage across specialties to build expertise and familiarity.

Project Lead: Dr. Matthew Carere, Dr. Ross Hooker, Dr. Donovan MacDonald

Specialty: Emergency Medicine

When patients' lives are in the balance, there isn't time to step back and troubleshoot a particular procedure or protocol. Simulations provide an opportunity for this type of reflection and evaluation. Several physicians from the ED at VGH initiated a series of cross-departmental simulations to bring together not only the emergency department staff, but also the various specialties that interact around a patient's bedside.

Over the last year, 1-2 simulations were held each month, involving not only ED physicians, but also Pediatric Intensive Care docs, PICU and NICU nurses, pediatricians, hematopathologists, anesthesiologists, adult intensivists, respiratory therapists, ECG and lab technicians, as well as more than 40 different ED nurses. Each scenario was attended by a clinical nurse educator to summarize the scenario and lessons learned to ensure any insights or actionable items were disseminated to all emergency department staff. The group also filmed each simulation so that those not able to attend on the day could still learn from the experience.

Through these exercises, the group identified a number of actionable items that have changed the way they deliver care. One of the most significant was the trialing, troubleshooting and implementation of a Massive Transfusion Protocol that had been developed by the Hematopathology department and Trauma services. Previously, if a patient was seriously injured and bleeding critically, the emergency department staff did not have a way to get blood products into the trauma bay before the patient had arrived. This could mean crucial time spent waiting for blood. As a result of the simulation work, the team, including a nurse and technician from transfusion medicine and Dr. Brian Berry, Hematopathologist,

agreed that a protocol was needed so that blood products would be waiting for the patient upon arrival.

There were also insights into providing better care during a suspected or confirmed COVID-19 case. Previously, communication between the treatment room and the trauma bay was relatively open. However, with the need for greater precautions during COVID, the group realized that safe communication was challenging. Taking extra time to go in and out of the negative pressure room to order tests or bring in new medications or supplies negatively impacted efficient patient care. The group determined that a phone should be placed in the trauma bay. By simply speaking orders using ear bud earphones, the physician could then communicate all needs instantaneously to the group outside.

Another major benefit was improved communication between different departments and with allied health staff. "There are specialties that we see more often, but I've never really spoken to hematopathology about systems of care in the emergency room, or ICU, or anesthesia, so to have these specialties, both doctors and nurses, in these simulations and available to debrief afterwards, was great," said Dr. Carere.

Dr. Carere also underscored how critical it was to cover people's time: "Everyone is very conscious of their time and it's hard to get anyone to come in for two hours before or after a shift if there's no remuneration. The buy-in has drastically changed since the funding was announced."

The group plans to continue the simulations in the future as well as collect more specific evaluation data about how participation for emergency room staff can impact on job satisfaction and engagement with colleagues from other disciplines.

IMPROVING ECHO LAB EFFICIENCY

A Cardiologist engages with echo lab personnel on how to enhance workflow and productivity.

Project Lead: Dr. Jonathan Tang

Specialty: Cardiology

Echocardiograms are one of the most commonly ordered cardiac diagnostic investigations, yet there are not many opportunities for those involved in ordering, administering and interpreting them to get together and discuss how to improve efficiency and quality issues.

Cardiologist Dr. Jonathan Tang wanted to create these opportunities, and sought support from the South Island MSA. He used the funding to form the Echo Group, a group of five cardiologists who committed to meet with each other as well as members of the echocardiography team to ensure there were good mechanisms to providing sonographer feedback, providing continuing education for the sonographers and managerial staff, and eliciting feedback from the sonographers and managerial staff about workload and person-power issues.

Calling the funding the “the impetus to meet outside of the busy workplace,” Dr. Tang and the Echo Group committed to further enhance knowledge translation, continue quality improvement in echo reporting, and continue meetings in order to regularly check in with all stakeholders involved in echocardiology processes.

As a result of these meetings, the group has a better understanding of the factors influencing job satisfaction for the echo technicians, which may in turn affect performance and quality. There is also a plan to engage those involved in echo services up and down the Island, in recognition of the fact that all are under the same administrative umbrella. Though funding from the South Island MSA was limited to one year, the project was so successful in connecting those involved in echocardiograms that the group plans to continue meeting for regular discussions.

“IT HAS DEMONSTRATED THE IMPORTANCE OF CONTINUED INVESTMENT IN ENGAGEMENT AND DISCUSSIONS IN HOW TO IMPROVE ECHO LAB PERFORMANCE AND QUALITY, INCLUDING MECHANISMS FOR RECRUITMENT, IMPROVING WORKFLOW, AND CONTINUING EDUCATION.”

-DR. TANG

SPECIALIST PRESENTATIONS AT HOSPITALIST ROUNDS

A Hospitalist invites specialists into his department's rounds to promote communication and learning between specialties.

Project Lead: Dr. Matthew Billinghurst

Specialty: Hospitalist

How do physicians create opportunities to learn from each other when everyone's schedules are busy with patient care? Occasions to 'bump into' one another are fewer now than in the past, when different groups of physicians would more regularly gather in the Doctors' Lounge between cases. Dr. Matthew Billinghurst, a Victoria-based hospitalist, wanted to bring specialists into the Hospitalist Department Rounds to create opportunities to build knowledge and improve communication between these groups.

The aims of the project were three-fold:

- 1) To improve communication and increase collegiality between hospitalists and specialists
- 2) To improve engagement of hospitalists in continuing medical education, leading to better attendance at the rounds
- 3) To improve the clinical acumen of hospitalists in relation to certain specialized areas of patient care, potentially leading to a more judicious use of investigations (laboratory, diagnostic) and consultation requests.

With funding from the South Island MSA, Dr. Billinghurst worked with Julia Porter, Administrative Assistant for the Hospitalist Department, to invite select specialists to present at the rounds once a month. Over the course of the project, 11 specialists from fields as diverse as Geriatric Psychiatry "Antipsychotic Choices for the Elderly," Emergency Medicine "Physician Burnout," and Cardiology "Cardiology Potpourri," presented to the group. As the specialist presentations became a familiar feature of the rounds, hospitalists began proposing topics that they would like to have presented, and would seek out particular specialists to present.

Bringing specialists into the Hospitalist Rounds has led to more robust relationships between hospitalists and specialists. By providing specialists an opportunity to engage with hospitalists in an informal setting, they often put a face to a voice that they had previously only heard on the telephone. This familiarity will hopefully translate to greater ongoing knowledge sharing between the groups. In the future, the group would like to circulate a short survey to department members to formally evaluate the longer-term benefits of the rounds.

ACUPRESSURE TRAINING FOR LABOUR AND DELIVERY

A training workshop build skills and familiarity between maternity care clinicians and staff.

Project Lead: Dr. Telen Harper

Specialty: Family Medicine

Like many Family Physicians who do antenatal care and deliveries, Dr. Telen Harper knows that the safe and effective management of labour and delivery requires seamless collaboration among primary care providers, midwives, obstetricians, pediatricians, anesthetists, and nursing staff. With growing evidence to support alternative practices in the management of labour and delivery, Dr. Harper offered a hands-on acupressure workshop to the multi-disciplinary care providers she works with.

This three-hour educational opportunity offered skills in acupressure techniques in an environment where participants shared ideas about how to apply these in the clinical setting.

Dr. Telen Harper and Stephanie Curran led the workshop and were supported by three local acupuncturists.

All participants agreed that the workshop resulted in better collegiality and teamwork, noting the benefits of interdisciplinary design and delivery. One Labour and Delivery nurse noted, “The topic is so applicable to my work and that working together as a team through the workshop was appreciated.” Another Family Physician who does obstetrics shared that, “feedback from teaching assistants in point locations was very helpful.” All respondents strongly agreed that they would be interested in a similar workshop in the future to further develop their skills.

**“THE TOPIC IS SO APPLICABLE TO MY WORK AND THAT
WORKING TOGETHER AS A TEAM THROUGH THE
WORKSHOP WAS APPRECIATED.”**

- LABOUR & DELIVERY NURSE

CLINICAL ETHICS LUNCH AND LEARNS

Island Health's Clinical Ethicist and Ethics Manager bring clinicians and allied care providers together to discuss challenging ethical dilemmas.

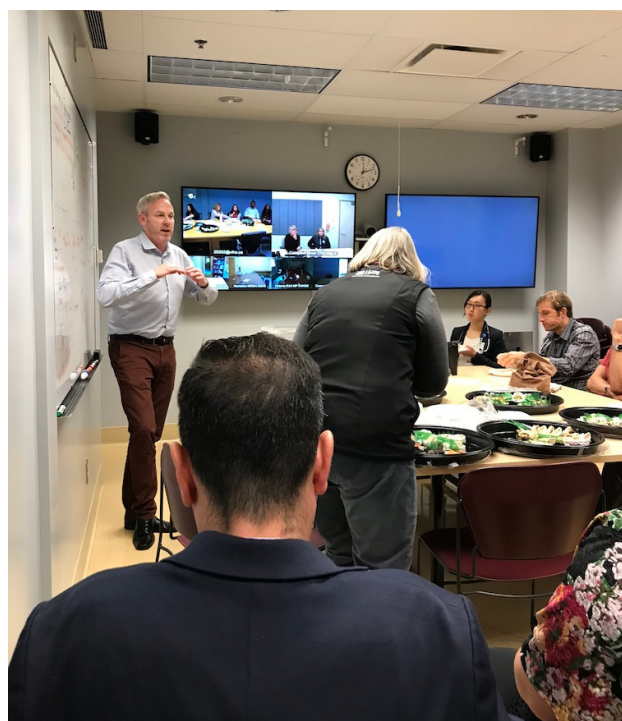
Project Lead: Dr. Jeff Kerrie and Karen Burton

Specialty: Internal Medicine

Physicians are often challenged by ethical issues while providing care for patients. Should a patient's care plan be respected over and above the wishes of their family members? Should a patient's actions be interpreted as a more accurate reflection of their wishes regarding care than their words?

Internist Dr. Jeff Kerrie and Nurse Karen Burton are the Clinical Ethics Team with Island Health and are tasked with providing guidance on these topics in real time to physicians and staff at Island Health. Wanting to provide a space for others to bring active ethical issues for discussion and reflection, they applied to the South Island MSA for a grant to support monthly Lunch and Learn events.

The first event involved physicians from Royal Jubilee, Victoria General, Campbell River, and Nanaimo hospitals connected through web conferencing. Dr. Kerrie facilitated the discussion, which was based on a hospitalist's case of a frail elderly woman with dementia who insisted, along with her husband, on medical intervention that the physicians deemed potentially 'medically inappropriate'. Touching on issues of consent and agency, and involving practical tips shared from the attendees about how to initiate conversations sensitively with patients about their wishes regarding resuscitation, the discussion was lively, engaged, and – from comments made after the conclusion of the meeting – extremely informative for people's practices.



HOSPITALIST TRAUMA WARD CO-PLANNING

Hospitalists and Trauma Specialists come together to formalize care for trauma patients.

Project Lead: Dr. Vivian Ming, Dr. Matthew Moher, Dr. Chloé Lemire-Elmore
Specialty: Hospitalist

There are times when a trauma patient is brought to hospital but not admitted to ICU or other surgical specialties. For over 20 years the VGH has been mandated to design and run a proper trauma MRP (Most Responsible Physician) service, but so far nothing has transpired. In the absence of a dedicated service at VGH, care of trauma patients has defaulted to the hospitalists. But this group of GPs who specialize in complex inpatient medicine have no formal training in trauma care, putting both the patients and the hospitalist physicians at risk. Hospitalists Drs. Matthew Moher and Viv Ming, and their Medical Lead Dr. Chloe Lemire-Elmore recognized that the status quo is unsafe, and decide to look into ways of mitigating the risk.

To begin, they surveyed their hospitalist colleagues to determine their general comfort and qualifications in caring for moderate to high-risk trauma patients. This was followed by a series of lunchtime events where hospitalists first attended live presentations, and then viewed the video screenings by various specialties discussing management of different trauma patients. General Surgeon Dr. Alex Mihailovic presented on management of trauma patients with a focus on the tertiary survey, Dr. James Stone spoke about pelvic fractures, and Dr. John Samphire gave a presentation on management of rib fractures.

These sessions prompted discussions among the hospitalists regarding their preferred scope of care. It became clear that there was significant diversity among hospitalists' comfort and experience in treating trauma patients, and thus, that an overarching collaborative interdepartmental plan to manage intake and care of this cohort of patients was needed.

The group initiated discussions with General Surgery and came to a new agreement. Calling it a "Bridging MRP" policy, the agreement is that General Surgery (who study major trauma as part of their training) will accept initial care as MRP for at least the first 48 hours of admission for high-risk trauma patients. Hospitalists will remain available for early consult to manage other medical issues, and after 48 hours if the patient is stable, the General Surgeons can ask the hospitalists for an MRP transfer of care.

Next steps include a final presentation from Dr. Richard Reid to review non-operative management of traumatic brain bleeds. The group plans to continue these lunchtime events to boost skills and confidence. They also hope that the new agreement will enhance collaboration with General Surgery, facilitate flow through the Emergency room and lead to improved trauma patient care.

[illegible]