
2019 Department of Obstetrics and Gynecology Annual Report



Alberta Health Services

Our Vision

Healthy Albertans.
Healthy Communities.
Together.

Our Mission

To provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.

Our Values

To provide a patient- focused quality health system that is accessible and sustainable for all Albertans.

compassion

We show kindness and empathy for all in our care, and for each other.

accountability

We are honest, principled and transparent.

respect

We treat others with respect and dignity.

excellence

We strive to be our best and give our best.

safety

We place safety and quality improvement at the centre of all our decisions.



VISION

We partner with University leaders to support the "Eyes High" vision.

"Eyes High" is the University of Calgary's bold and ambitious vision to become one of Canada's top five research universities, grounded in innovative learning and teaching and fully integrated with the community of Calgary, by the university's 50th anniversary in 2016.

MISSION

By creating and delivering exemplary human resources services, processes, and outcomes

we contribute to and share in the University's mission and goals to:

- Sharpen focus on research and scholarship;
- Enrich the quality and breadth of learning;
- Fully integrate the university with the community.

VALUES

The strategy also articulates eight core values shared by the university community; curiosity; support; collaboration; communication; sustainability; globalization; balance and excellence.

DEAN'S OFFICE

CUMMING SCHOOL OF MEDICINE STRATEGIC PLAN 2015 – 2020

VISION

Creating the future of health

MISSION

We must fulfill our social responsibility to be a school in which the common goal of improved health guides service, education and research. We must foster the collective pursuit of knowledge and its translation, through education and application, to better the human condition.

VALUES

Excellence | Collaboration | Engagement | Respect

STRATEGIC GOALS

We are committed to maintaining the public's trust and respect as a premier academic health science centre by meeting the following goals:

- Serve our diverse communities by understanding and responding to their health needs and by effectively stewarding the resources entrusted to us by Albertans.
- Generate knowledge that has both local and global impact by fostering novel collaborative alignments among basic and clinical scientists, physicians and educators.
- Train the next generation of health-care pioneers and providers by rejuvenating the education and career development of biomedical innovators.

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Message from the Department Head

Dr. Colin Birch



Once again 2019 has been a challenging year and looking into 2020 there are signs that the 'headwinds' will gather strength. The governmental edict of 'do more with less' will certainly play into the activities of the department for the foreseeable future. It remains a privilege to lead a diverse and innovative group in the department of Obstetrics and Gynecology and this report is submitted on behalf of my colleagues and highlights the many accomplishments of this physician group dedicated to the promotion of excellence in Women's Health Care. I highlight but a few achievements below, the remainder to be found in the body of this report.

In Obstetrics although we are seeing a decrease in numbers of deliveries, a bell-weather for the health of the Alberta economy, we are managing much more complicated patients. The pause has allowed the department to review many of our clinical activities and it has been our focus to improve our detection (IMPRESS study), prevention and management of severe maternal morbidity. We have been successful in developing protocols for AIP (Abnormally Invasive Placenta), IGAS (Invasive Group A Streptococcus) and PPH (Post-Partum Haemorrhage) each conditions with significant clinical risk to patients. These have/will become provincial and ultimately national edicts.

As one response to the increasing scrutiny of bed utilization the Gynecology section has been also successful in developing a same day discharge pathway for hysterectomy without increasing complication. We have been on the forefront of the ERAS project with one of our department members in the role of the International Gynecology chair with several Calgary led publications on this process.

We have a young and dynamic group of educators who have revolutionized the undergraduate teaching program using simulation to better prepare the students for their placement. The resulting improvements in student experience has been reflected in the overall course ratings and the interest nationally in replicating this model. Our residency program continues to have over 20 applicants for each available position.

Research has remained a growing part of the department. We have been fortunate to identify a resident who has the skills to become a bench researcher/clinician. We will continue to augment our clinical staff with physicians with extra skills to diversify and maintain our status as a clinical and 'thought' leader in our specialty. We now have two members with Masters level qualification in Quality Management and one with MBA qualification (focus on cost analysis) who will promote our Quality work.

We have been on the forefront of the media storm concerning 'Birth Tourism' and have implemented a process to bring order to a previously chaotic environment. Our data collection and process should provide the basis for a provincial and national approach.

The importance of people and collaboration is paramount if we are to meet the challenges ahead. I must acknowledge my co- department heads who have collectively inspired me to do 'better' in the 'dark times' that we all experience.

Challenge is an opportunity for improvement. Efficiencies will be sought remaining cognizant that these are not at the expense of Quality and Safety.

The annual report is a collaborative effort of the department as a whole, and compiled by Crystal Ryszewski.

Department of Obstetrics and Gynecology

Executive Members



Scott Banks - Department Manager

Scott is the Calgary Zone Department Manager for Emergency Medicine, Critical Care Medicine & Obstetrics & Gynecology. Scott assumed the Critical Care portfolio in Sept 2017, Obstetrics & Gynecology in July 2018 and has continued to serve as the Zone Manager in Emergency Medicine since 2008. Scott completed his Master of Business Administration degree (MBA) at the University of Calgary in 1993 specializing in Human Resources and International Management, and his Bachelor of Arts Honors degree in 1989 from the University of Regina. Scott is a 24 year Chartered Professional in Human Resources (CPHR) in Alberta, and holds a Certified International Trade Professional

Designation (CITP) in Canada. Previously Scott served as the Vice President of Operations & Human Resources at The Brenda Strafford Foundation, and as Senior Vice President & Chief Operating Officer at a for profit healthcare college in Oahu, Hawaii. He has also served as an International Development Consultant with the Canadian International Development Agency in Guyana, Manager of the Mount Royal University Small Business Training Centre, and as a Market Intelligence Research Officer for the Canadian Federal Government at the Canadian High Commission in Trinidad. In addition, he served as the Manager of Business Training & Commercial Accounts with the Business Development Bank of Canada. Scott has lived and worked in Hawaii, Canada, Trinidad, Guyana, Haiti, and Dominica. Scott is married and has very active six and nine year old boys. He enjoys spending quality time with his family, his French Bulldog, jogging, travelling, and volunteering with World Vision.

Dr. Quynh Tran – Site Lead, Peter Lougheed Centre

Dr Tran is an obstetrician/ gynaecologist practicing in Calgary since 2005. She completed her undergraduate medical degree at the University of Alberta and residency at the University of Calgary. She loves her work providing care for the ethnic minority communities of northeast Calgary.



Dr. Viviana Chang – Site Lead, Rockyview General Hospital

Dr. Viviana Chang has been in practice in Calgary since 2003. She completed medical undergraduate training at UBC and residency training at MacMaster University. She currently is a staff physician and site lead for Obstetrics and Gynecology at the Rockyview General Hospital. She runs a practice at Chrysalis Obstetrics and Gynaecology and is a clinical assistant professor in the Faculty of Medicine at the University of Calgary. Having been born in Brazil, one will often hear Dr. Chang conversing in Portuguese with her patients from Brazil. Outside of medicine she enjoys the opera and playing the piano.

Dr. Philippa Brain – Site Lead, Foothills Medical Centre

Dr. Brain is an Associate Professor in the Dept of OBGYN.

She is also the division head of Pediatric and Adolescent Gynecology and co-chair of CANPAGO, SOGC and the site lead for the dept of OBGYN at Foothills Medical center. Dr.

Brain is also the physician lead for the regional Early Pregnancy Loss Program. She has a strong interest in medical education and is the director of the chief resident rotation and clinic at FMC. Through her work in PAG she has developed an expertise in reconstructive vaginal surgery in all ages, including the transgender population. She enjoys

biking, wilderness canoeing and a developing passion for cross country skiing.



Dr. Bruce Allan – Site Lead, South Health Campus

Dr. Bruce Allan is an obstetrician/gynecologist who has practiced in Calgary since 1998. Prior to medicine he was involved in agricultural research after obtaining his PhD in genetics at the University of Alberta. He did both his undergraduate medical training and residency training at the University of Calgary and is currently a staff physician and Site Lead for Obstetrics & Gynecology at the South Health Campus and an assistant clinical professor in the Faculty of Medicine at the University of Calgary.



Dr. Gregg Nelson – Chair, Gyne-Oncology

Dr. Nelson's principal research interests are the development and study of enhanced recovery protocols in cancer surgery and interventions to improve HPV vaccination in First Nations populations. He holds the position of Surgical Lead, ERAS Alberta and he also leads the international group that published the ERAS® Guidelines for Gynecologic/Oncology Surgery. Recently he has been appointed the Secretary of the ERAS® Society Executive Committee based in Sweden. Dr.

Nelson has over 100 peer-reviewed publications and has presented numerous times internationally. He currently serves on the Editorial Board of the International Journal of Gynecological Cancer.



Dr. Sarah Glaze – Program Director, O&G Residency Program

Dr. Sarah Glaze joined the division of Gynecologic Oncology at the Tom Baker Cancer Centre in 2013 where she has a busy clinical practice and a rewarding academic portfolio. Her clinical research interests are wide-ranging and include novel chemotherapy treatments for ovarian cancer, HPV-related cancers, and survivorship in cancer patients. She is also passionate about medical education and is the Program Director for the Obstetrics and Gynecology residency program at the University of Calgary. Within medical education, her research focus is physician wellness, fatigue risk management and gender-based discrimination in surgery.



Dr. Amy Metcalfe – Research

Dr. Amy Metcalfe, PhD is an Associate Professor in the Departments of Obstetrics and Gynecology, Medicine and Community Health Sciences at the University of Calgary. Her research focuses on optimizing the management of chronic disease during pregnancy by: 1) examining the impact of medical management of chronic disease in pregnancy on maternal and fetal health; 2) evaluating the ability of alternative models of prenatal care to improve disease control and obstetrical outcomes; and 3) assessing the risk of long-term disease complications following pregnancy. Underlying this program of research is a focus on validation of existing data sources for use in research and application of novel statistical methods to answer clinically relevant questions.

Dr. Katie Chaput – Perinatal Epidemiologist

Dr. Chaput formerly held the position of Senior Research Methodologist in the Alberta Children's Hospital Research Institute for 5 years, where she provided consultation and direction on over 300 clinical research projects. She runs an active maternal and infant health research program with a focus on mental health and substance use in pregnancy and the postpartum. Her research includes exploration of the role of inflammatory biomarkers in antenatal mental illness and their relationships with infant development as well as the measurement of, and patterns and outcomes associated with Cannabis use in pregnancy. She has advanced training in epidemiology, biostatistics and mixed-methods research.



Pamela Nugent – QI/QA

As Quality Improvement Consultant with the Department of Obstetrics and Gynecology for the Calgary Zone with AHS, my primary responsibility is to advise and assist physicians and staff with their clinical improvement initiatives to promote and improve health care outcomes.

The early part of my 35 year career was spent in Nursing Management in a variety of clinical settings from Medical/Surgical to Forensic Psychiatry. The next chapter included ten years as an independent Management Consultant and volunteer on boards, including the position of Board Chair at West Island College, Calgary. Regular employment with AHS began again in 2011 as a Quality Improvement Consultant at South Health Campus and Peter Lougheed Centre. My educational

background consists of a Bachelor of Nursing and an MBA with a focus on strategic planning and management. Married with two grown children, my leisure pursuits include cooking, bridge and physical activity, especially biking.





Dr. Pam Chu – Education Lead

Pamela Chu took on the role of Associate Dean, Professionalism, Equity and Diversity in March 2019. Pam is working with other Faculties and the Provost Office to advance initiatives in Equity, Diversity and Inclusion (EDI) across the campus (Dimensions EDI Canada Pilot award; an ii'taa'poh'to'p Grant award) and advocating for a CSM Gender Equity pay study in 2020. Provincially, she is working with AHS and the University of Alberta to develop consistent recruitment and hiring practice guidelines, and nationally collaborating with CMA and other EDI leaders in the development of the Equity and Diversity in Medicine guidelines and network. Within CSM, she has created working groups focused on streamlining professionalism guidelines and reporting processes; raising EDI awareness and education delivery) (Symposium, Lunch and Learns;

Lab2Fulfillment workshop tailored for CSM); and initiatives to create healthier work environments across the school (lactation spaces, best practices for work transitions, cross-departmental/institute champions for EDI, AHS Surgical Attire policy). Through the Office of Professionalism, Equity, and Diversity, Pam is launching an EDI cultural series for the Medical School with the first event being the screening of the award-winning film: *The Gender Lady: the Fabulous May Cohen*. She sits on the Faculty Promotion and Tenure as well as the Faculty Merit Review Committee, Strategic Education Council, as well as the CSM Leadership Forum.

Pam continues to participate in clinical trials within the Gynecologic Oncology group, ERAS initiatives and other QI/QA projects (PLP Hysterectomy Practices in Calgary, VTE Rates in Ovarian Cancer Patients Receiving NACT, Surgical Wait Times of Patients with Ovarian Cancer and Overall Survival, Ovarian Cancer Patients with De-bulking Surgery Requiring ICU Assessment). She also led a national CIHR CCS Cancer Survivorship Team Grant Application entitled “A Mindfulness App for Survivors of Gynecologic cancers Experiencing Sexual Health Changes: A Pan-Canadian Partnership for Survivorship Care” and sits on the Health Research Ethics Board of Alberta (HREBA) – Cancer Committee.

She continues to teach at the UME level (Course 6 lecture and small group sessions) as well as providing teaching in the Clerkship Block Weeks; PGME Academic Half Day Sessions, Chief OSCE prep sessions, and participated as a CaRMS interviewer in 2019. Pam provides Resident formative feedback at the end of each Gynecologic Oncology rotation and acts as a formal mentor for O&G Residents, in addition to collaborating on the RCPSC Fatigue Risk Management Grant award. Pam continues to take on AEBM/MED 440 students (3 this past year) and informally mentors students interested in O&G as a career. Pam took on two students through the UME Career Exploration Program this past year, and continues to help organize the annual Discovery Day O&G workshops for provincial high school students interested in a career in Health Sciences.

<https://news.ucalgary.ca/news/ucalgary-selected-federal-pilot-program-enhance-research-excellence-through-increased-equity>

<https://www.ucalgary.ca/live-uc-ucalgary-site/sites/default/files/teams/136/19-UNV-106752-Indigenous%20Strategy%20progress%20event%20booklet-8.5x5.5-low%20res.pdf>



Libby Goodliff – Department Head Admin

Jolanta Contraras- Surgical Booking



Karen McKeon – Program Administrator



Val McNeil – Administrative



Crystal Ryszewski - Administrative



Accomplishments and Highlights

Safety and Quality improvement was the focus of FMC this year:

- **Implementation of phase one and two of the PPH project:** (please see attached outline) with this project we have developed a framework for the implementation of other safety and quality improvement measures for maternal morbidity. We have secured access to a data analysis for regular dashboards of maternal outcomes and with the intent of evaluation through a safety and quality council. Evaluating this process will pave the way for functional quality and safety rounds previously maternal mortality and morbidity rounds. A MNCY grant was secured for this project for \$105,000. This grant has allowed funding of equipment and ongoing data analysis. Phase 2, is underway with the implementation of qualitative blood loss (QBL) in our elective section ORs and the development of the assessment of ongoing blood loss by QBL on the postpartum unit. Future work in this area will include the reduction in anemia by planned antepartum measures, incorporating allowable blood loss as a means of tailored patient care and the implementation of new technologies such as transcutaneous HGB on the postpartum unit with planned postpartum follow up.
- **Implementation of mifepristone** and misoprostol for the induction of labor in second trimester failed pregnancies
- **Development of Abnormal Invasive Placentation program:** This is a quality and safety initiative promoting the accurate diagnosis of invasive placentation with a standardized approach to surgical management including the development of a dedicated surgical team and call schedule. A robust process of booking complex cesarean sections cases including the appropriate use of the trauma room and interventional radiology has been developed and implemented
- **Out of Country patient process**
- **Algorithm for assessment of PTL in non-obstetrical surgery:** This process recognizes the risk of preterm labor in patients having non obstetrical surgery and is a liaison with the antepartum unit and postop units in the collaborative management of these patients
- **Cardiac monitoring of patients:** FMC has now two cardiac monitored rooms on Labor and Delivery: A collaboration between cardiology, anesthesia and obstetrics to determine how to best provide intrapartum care for patients with underlying cardiac risk. Simulation and Collaboration between these specialties has developed an algorithm for the data management of these patients
- **Transition from 1cm/min to 3cm/min** including workshops and simulation specific to FMC
- **IGAS prevention:** Physician lead: Dr J Soucie, A quality improvement project by ID and OB to determine the best prevention and management of these patients. A formal research project is underway as well as a QI project looking at outcomes serious infectious risk.
- **ARP triage:**
- **Assessment of antepartum patients for anxiety and Depression,** Implementation of the GAD screening tool: This is a collaboration with psychiatry, psychology and OB spearheaded by Dr.s Brain, Baranowski to improve screening of antepartum patients admitted to hospital for greater than 48 hours.
- **Antepartum day Unit:** This is an ongoing project funded with a \$15000.00 dollar grant to improve the antepartum care of longer term admission at FMC. This will enhance MFM presence on the

antepartum unit with enhanced safety for these patients. Improved care with enhanced cost containment with alternative to inpatient admissions and improved access to community resources recognizing the significant anxiety and family strain associated with prolonged antepartum hospital admission

- **Greater than 12 weeks access to triage** and improved liaison with FMC in the management of obstetrical patients with co morbidities.
- **Specialist link**

Retreats:

1. Antepartum retreat; timing of delivery (Jan 2019),
2. Quality and Safety retreat:
3. FMC obstetrical call group (Nov 2019)

Challenges

Quality and safety committee: A vision and plan for a designated quality and safety committee for the ongoing review of outcomes produced by the dashboard/data analysis of maternal outcomes has been put together. This will incorporate gynecology outcomes as well as representation of MORE OB. The formalization of committee members and reporting is underway as well as the enhanced use of the RLS process. This requires buy in from all members of the health care team including management physician, nursing representation. Formalizing this process has huge potential to incorporate robust QI methods in the ongoing evaluation of outcomes in OBGYN at FMC and the region.

Workforce Planning

- In 2018 FMC recruited Dr. Michael Sector who started Aug 2018 and Dr. Laura Coughlan to start Jan 2020. Dr. Sector has a fellowship in MIGS and Dr. Coughlan is completing a masters in health leadership. There is anticipation of retirements and staff taking extended time for further training and volunteering in Medicine sans Frontier.
- There is a recognition for future advanced skillsets in quality improvement and obstetrical care of women with severe medical comorbidities. Both which are likely to be filled by extra training of present staff at FMC.

QA/QI and Innovation

Improved access to triage with greater than 12 week assessment on L and D: FMC has developed and initiated a process of care of obstetrical patients with comorbidities requiring emergency assessment. This has been a culture change in the recognition of Obstetrical care regardless of gestational age, where previously patients had to have a gestational age of 20 weeks to be assessed in triage on L and D. Patients are now seen in the most appropriate department depending on clinical presentation and has resulted in more timely care of obstetrical patients by the most appropriate physicians and services. This has reduced the burden on ER and reduced wait times for these patients. There is enhanced communication with ER and an improved understanding by ER as to the scope of care provided for outpatient obstetrical patients on L and D.

Future Directions and Initiatives

1. **Ongoing development of formal quality improvement and safety committee** with review of dashboard outcomes including maternal death, ICU admissions, Postpartum hysterectomy and massive transfusion greater than 4 units. Enhanced use of RLS system by physicians.
2. **Development of triage ARP.**
3. **Improved care of out of town stable antepartum patients** and coordination of MFM in antepartum care through the antepartum day unit
4. **Ongoing implementation of QI** in the care of complicated maternal comorbidities.

Accomplishments and Highlights

- MFM is currently providing coverage for 2-3days per week but the demand exists for more coverage. We are limited by the ability of the DI department to perform the requested number of scans. Our goal would be to have a MFM unit up on the 3rd Floor of the PLC with MFM coverage at least 5 days per week and 24/7 call coverage.
- **C-section Days on Fridays** – As of Oct 1, 2019 we have completed a full year's worth of C-sections in the main OR on Fridays, alleviating pressures on L&D. This initiative has been highly successful – providing more timely surgeries for patients, and allowing for easier booking of complicated C-sections in the main OR on a weekly basis. Challenges have been 1) funding for extra L&D nursing staff to run the C-section OR's 2) periodic nursing shortages in the main OR causing closure of the C-section OR and reallocating the patients back to the L&D OR. The plan is to expand the C/S OR days to 2-3days per week but currently we do not have the OR time for this.

Challenges

- **The PLC Women's Health clinic** had to be relocated this year due to demands for their existing space from the Emergency department. They are currently operating out of the main OR 3 days per week. This is not a permanent solution. We will need to find better solution over the next year whether it be in another location.
- As of Jan 6, 2020, there will be **overnight main OR closures at the PLC**. It will be a challenge to adapt to this new system while continuing to provide quality patient care. We are adjusting our call/ OR bumping system in response. There is also a concern that we may have a more difficult time adjusting as we seem to have the most ectopic pregnancies in the city. We will need to regularly collect data and assess our performance over the next year.

Workforce Planning

We currently have 13 generalists, 1 MFM, and 1 gynecologist on staff at the PLC. We have 2 senior staff who are in the final stage of their careers. These 2 staff members provide urogynecologic care for women in NE Calgary. We will be looking to recruit 1-2 new individuals over the next 2 years. We are hoping for generalists with extra training in vaginal surgery or urogynecologic procedures. The challenge will be finding the extra OR time needed to attract these people to the PLC.

QA/QI and Innovation

- **"Same Day Discharges"** for our Total Laparoscopic Hysterectomies. Dr Sanders has created a protocol for our group to proceed, and he will be working closely with nursing staff and anesthesia to support our initiative. This project will start in Jan 2020.
- **NSQIP**. Gyne at the PLC has been identified as having a higher rate of surgical site infections. Dr Liane Belland is looking at implementing new measures to help reduce our rate of SSI. We are hoping to get our OB data in NSQIP in the next year.
- The PLC Site has been identified as having a higher rate of operative vaginal deliveries. This data was collected for a **random** 3month period. Dr Maryam Nasr is looking to analyze the data for a longer period of time. She has presented strategies to our group to help reduce our rates. The L&D nurses have implemented strategies such as repositioning and encouraging patients to push in multiple different positions. They have requested for anesthesia to perform more "walking epidurals" in which there is less motor blockade so that patients can ambulate for longer during the first stage,

and also have more effective pushing during the second stage. The anesthesia department has yet to officially respond to this request. There is no data currently to suggest that walking epidurals are associated with a greater likelihood of spontaneous vaginal deliveries. Dr Nasr is hoping to look at the data again in 2020 to see if there has been any decrease in the rate after these strategies have been implemented.

Future Directions and Initiatives

1. **Early Pregnancy Loss** clinic in NE Calgary.
2. Movement of small procedures (ablations, hysteroscopies and D&C's), to NHSFs. This has potential to free up significant OR time at the PLC. OR time for facilitating 1-2 extra C/S days per week. Also, a NHSF could be also a more permanent solution for the Women's Health clinic. Thus, we will need to stay abreast of the most current political developments and lobby to ensure that Women's Health is not forgotten.
3. **RESEARCH** – Dr Nasr is currently involved in 4 research projects. Dr Belland and Dr Sanders are also currently involved in 3 projects. Dr Ekwalinga is hopefully starting a research project in the new year to evaluate C-section infection rates at the PLC after initiating azithromycin post-partum for laboring patients. We hope to be doing more research at the PLC over the next few years.
4. **The ARCH program for maternity patients is highly successful.** This program assists with the initiation and maintenance of opioid agonist therapy for pregnant women. This program is currently only offered at the PLC and we are constantly getting requests for transfers from other hospitals to the PLC for admission into this program for which we do not have the capacity. Hopefully, there will be future funding to expand this program to other sites as well. Also there is a new initiative for a Post-Partum Rooming in Program for women recovering from addictions to stay with their babies. This has been shown to increase the likelihood of these women being able to keep their babies in their custody after discharge. Currently, this project is looking for funding, and if successful, implementation in 2020.
5. **The creation of a “clitoral reconstruction/ deinfibulation clinic”** for sufferers of Female Genital Mutilation? **This would depend solely on our ability to hire Dr Angela Deane** to work at the PLC.

Accomplishments and Highlights

- **Successful funding for the scalp lactate fetal intrapartum assessment project** to be led by Dr. Ingrid Kristensen in 2020
- **RGH being the REDUCED trial's urban site** with the greatest reduction in CS rates in first time pregnant patients
- **Ongoing positive patient experience/feedback** to all obstetrical team members from residents, family physicians, obstetricians and nurses.
- As we await for improvements in **MFM access**, we continue to enhance multidisciplinary interactions with the DI department through our quarterly joint rounds. Our sessions have led to improvements in standardization of reporting of fibroids using FIGO grading criteria.

Workforce Planning

- Dr. Heather Edwards has moved to Ontario.
- **Dr. Matthew Grossi** started earlier in year after Dr. Sheila Watson's retirement.
- We've also welcomed **Dr. Kovid Lee** (MBA) in the later part of the year. There are currently no further plans for further recruitment.

QA/QI and Innovation

1. There is ongoing participation with MORE OB simulations which have helped to improve communications and preparedness for uncommon events between team members.
2. Our group looks forward to using scalp lactate to improve fetal intrapartum assessment in the coming year.
3. We have also been actively discussing participation in the Pink for Packing QI initiative at the RGH which hopes to minimize the incidence of retained packing.
4. NSQIP data collection on cesarean sections done at the RGH hospital. We hope that this information will help us to identify further initiatives and areas that can be improved for cesarean sections.

Accomplishments and Highlights

- **The EGA clinic** (early gestational assessment) transitioned to an EPA clinic (early pregnancy assessment) and now manages missed abortions as well as threatened abortions and bleeding in early pregnancy
- **Maternity triage** is now assessing patients earlier than 20 weeks
- **Physician sedation days** were initiated in the Procedure Rooms (i.e. no involvement of an anaesthesiologist)

Challenges

1. **Procedure Rooms:**
 - Selection of appropriate cases
 - Improved interaction between gyne and anaesthesia
 - Increased utilization of the procedure room time and ongoing decanting of appropriate cases out of the main OR
2. **EPA Clinic**
 - Development of standardized zonal protocols
3. **OR access**
 - The gyne service is now utilizing more than 130% of its allotted OR time
 - Gyne OR allocation requires further discussion and consideration

Workforce Planning

- **The Site Lead** will transition in June 2020. Dr. Allan is stepping down from this role after nine years and a replacement will be identified in January 2020 allowing a six month transition if required. This will not affect workforce needs.
- **SHC utilizes locum and fellow coverage** for a large proportion of the call requirements. Consideration needs to be given as to whether this indicates a need for increased staffing levels. OR access however is a significant consideration.

QA/QI and Innovation

- **Increased midwife presence** at SHC to improve patient experience and collaboration between OB and midwifery.
- **The EPA clinic** utilizes a Nurse Practitioner which is very advantageous. The NP is currently the clinical lead of EPA.

Future Directions and Initiatives

- Increased collaboration with midwifery in the zone and consideration of a midwife-lead unit
- Consideration of splitting the obstetrical and gynecologic services
- Consideration of adoption of ARPs in MIG and obstetrics.

Accomplishments and Highlights

Education continues to be a pillar of excellence in our department and lead by talented and dedicated members:

- UME - Course 6: Dr. Jadine Paw
- UME – Clerkship: Dr. Kelly Albrecht
- PGME – Dr. Sarah Glaze (and Dr. Sarah McQuillan CBD)
- Fellowships – Gyne Onc: Dr. Prafull Ghatage; MIGS: Dr. Liane Belland (for Dr. Katherine Lo); Urogynecology: Drs. Shunaha Kim-Fine and Magali Robert (for Dr. Erin Brennand); PAG: Dr. Sarah McQuillan
- MFM Residency program (PGY 6-7): Dr. Anne Roggensack
- CME – Dr. Michael Sexter
- Simulation – Drs. Chandrew Rajakumar and Michelle Suri

Highlights of the year include:

- PGME Program CaRMS match March 2019
- UME Clerkship Block Week Model and OSCE implementation April 2019
- PGME program Awarded Fatigue Risk Management Grant (RCPSC) May 2019
- CME Departmental MIGS course June 2019, Physician Learning Program: Hysterectomy Practices and Trends (Calgary) Report June 2019
- Pediatric and Adolescent Fellowship Program (PAG) launch July 2019
- PGME program CBD launch July 2019 with high early rates of EPA assessment completions by Faculty
- UME Course 6 alignment and integration of objectives with LMCC and Clerkship – 7 Core faculty “Master Teachers”
- PGME program Internal Review November 2019
- Fellowship Programs: most successful matches, program completion, and subsequent job placements by Fellows ever with positive impact on educational environments for PGME and UME learners
- Departmental involvement in Faculty Development Collaborative and Departmental Education Chairs Group
- Leaders in successful development, implementation and advancement of simulation based training into UME, PGME, and CME O&G based curriculums, as well as joint CSM initiatives such as: University of Calgary ii' taa'poh'to'p Strategic Grant for educating Residents on Indigenous Health and Discrimination, or inter-professional Zonal/Site based initiatives such as: FMC Effective Surgical Team Environments, focused on improving civility and professionalism in the OR and subsequent patient safety and quality outcomes

Challenges

- Disadvantaged Department (no AMHSP or other AFP Department) providing core (UME) teaching without an equitable funding/support (administrative, protected time) model for educators and education leads who are private clinicians – resulting in burnout and an unsustainable education delivery model
- Provincial funding cutbacks decreasing CSM (UME) and AHS budgets that impeded their ability to provide equitable funding/support to private clinicians who provide high quality education delivery
- Increased educational delivery demands/expectations (e.g. CBD launch) with minimal increase in resources (if any; and in some cases, with fewer resources)
- Balancing high clinical volume and service/administrative requirements with educational and academic needs of learners
- Gender based discrimination faced by trainees (internal and external to the Department)

Workforce Planning

- Working with CSM/AHS on developing a model of funding disadvantaged Departments that would allow a more sustainable educational delivery model
- Continue to recruit with the understanding of the growing educational needs demands (along with clinical and administrative needs) on the Department

Future Directions and Initiatives

- Continue to advocate for funding/support for clinician educators
- Continue to advocate for cultural changes and increased awareness and inter-professional education around gender based discrimination in surgical specialties such as O&G

Accomplishments and Highlights

- **Competency by Design (CBD)** was implemented nation-wide in July 2019. Thanks to our CBD lead, Dr. McQuillan, this has been a real success. We have had two competency committee meetings to date; all PGY 1 residents are progressing as expected. Staff and residents are adapting to this new change.
- **Internal review for accreditation in November 2019.** Feedback about our program was positive and many staff members attended the sessions, showcasing our program and helping to highlight our successes.
- **Grant for Fatigue Risk Management (FRM)** consisting of a financial grant to implement a program and conduct research as well as education sessions with Dr. Drew Dawson (aviation expert and FRM specialist). We have just started these sessions.

Challenges

- Workplace planning for residents – very few jobs in Calgary. This will have to be addressed with PGME, UME.
- Continuing to work with residents to ensure call coverage and yet protect resident wellness.

Future Directions and Initiatives

- **CBD** continues to be a significant challenge as we re-work all objectives and schedules to reflect the new curriculum.
- We are in the early stages of the **FRM implementation**; preparing to launch in spring 2020.



**DEPARTMENT OF OBSTETRICS
and GYNECOLOGY RESIDENTS**
2019-2020



Lindsay Benoit
PGY5



Chantalle Brace
PGY5



Angela Deane
PGY5



Kayla Nelson
PGY5



Nicholas Papalia
PGY5



Ariela Rozenek
PGY5



Erin Sloan
PGY5



Kimberley Thornton
PGY5



Oluronke Babatunde
PGY4



Gabrielle Bonneville
PGY4



Vanessa Di Palma
PGY4



Kyle Lafreniere
PGY4



Tinya Lin
PGY4



Fang Yuan
(Violet) Luo
PGY4



Aysah Amath
PGY3



Kristin Ambacher
PGY3



Lauren Andrew
PGY3



Megan Blades
PGY3

Evan Genge
PGY3



Rebecca
Herrera-Gonzalez
PGY3



Amanda Rohla
PGY3



Rachel Grant
PGY2



Mruganka Kale
PGY2



Courtney Manuel
PGY2



Monique
Marguerie
PGY2

Larissa
Padayachee
PGY2



Robin Whitty
PGY2



Shaleeza Kaderali
PGY1



Carmen Petrick
PGY1



Cody (Rope) Smith
PGY1



Paxton Ting
PGY1



Xinye (Serena)
Wang
PGY1

Kathryn
Wilfrong-Pritchard
PGY1



Undergraduate Medical Education & Midwifery

Dr. Kelly Albrecht

Accomplishments and Highlights

- The O+G clerkship received its highest rating of 4.5 /5 from the class of 2019. In April of 2019 for the 2020 class the O+G clerkship core teachers (Dr. Dhea Wallace-Chau, Dr. Jaelene Mannerfeldt, Dr. Ingrid Kristensen, Dr. Kathryn Kenny, Dr. Weronika Harris-Thompson, Dr. Aisling Mahalingham and Dr. Kelly Albrecht) successfully began the block week curriculum.
- Student performance of OSCE examinations and student rating of confidences have dramatically improved with this teaching. We thank Dr. Colin Birch for his support in lobbying the Dean and Simulation Lab (ATSSL) in support to allow for our budget, organization and supplies to continue to be provided for this fantastic curriculum. Preceptors and residents have noted the students to be safer and more effective team members with their new skill acquisition and knowledge review at the beginning of clerkship. Class of 2020 midpoint feedback is very positive in support of these changes. Great job core teachers!
- Outside of the addition of block week teaching the main structure of the clerkship rotations did not change significantly this year. Our clerks enjoyed the addition of early pregnancy assessment clinic at the South Health Campus. The time our students spend in inter-professional learning with the sub-specialties and with our labor and delivery nurses is invaluable. Osce occur annually with department staff and resident participation continues.
- Thank you to clerkship committee: Dr. K Albrecht (Clerkship Director), Dr. Kathryn Kenny (Evaluator Coordinator/SHC rep), Dr. S Baranowski/Dr. Aisling Mahalingham (FMC reps), Dr. Paul Henning/Dr. Weronika Harris-Thompson (RGH reps), Dr. D Igras (PLC rep), Dr. D McCubbin (Medicine Hat rep), as well as our resident reps (Dr. Ariela Rosznek, Dr. Violet Luo/Dr. Vanessa DiPalma/Dr. Ayesha Amath/Dr. Kristin Armbacher). We had two student representatives, and we thank them for their contributions, Laura and Kristin. Also thank you to Crystal and Gillian for their support.
- Midwifery education: 7 students placed in units in 2019. Deepa Upadhyaya has taken over from Mary Landseidel as the program coordinator.

Challenges

Preparation for the class of 2021 is mostly complete. The clerkship rotation will change in April 2020 to be two separate rotations including a 4- week inpatient experience and a 2- week outpatient experience. These changes were required by the medical school to allow for more exposure to family medicine prior to CARMS matching for all students. We appreciate everyone's patience as we go through this change, and we hope it will benefit the students long term. Detailed information will be brought to March site meetings at each site to ensure this change is understood, but as always myself and the other members of the clerkship committee welcome your questions or feedback anytime.

Workforce Planning

Dr. Kelly Albrecht and Dr. Kathryn Kenny are planning to step down from these roles in 2020 (likely July). The department will need to recruit replacements.

Undergraduate Medical Education Course 6

Dr. Jadine Paw

Accomplishments and Highlights

- Obstetrics and Gynecology is taught at the pre-clerkship undergraduate medical education level through Course 6 (MDCN 460). This year, the course ran from September 23, 2019 to November 22, 2019. This course covers Obstetrics, Gynecology, Pediatrics, Genetics, Ethics and Breast health, with teaching contributions from the Departments of OBGYN, Pediatrics, Surgery, Family Medicine, Anesthesia, Genetics, Ethics, Pathology and Anatomy.
- The Course 6 Women's health course chairs organize a total of 38 Obstetrics and Gynecology lectures. 30 of these lectures are taught by FFS members of the OBGYN Department (generalist, MFM, Gyne Onc, REI, Urogyne), 2 are taught by GFTs in our Department, and 3 are taught by faculty from Anesthesia and Family Medicine. In addition, small group sessions are important components to UME teaching. They work as adjuncts to the lectures, where students can apply their knowledge in case-based learning. Over the course, 126 small group preceptors are necessary to run the 9 different OB and GYN small group sessions. 9/126 of these sessions were taught by GFTs in our Department, which was an increase from previous years. 45 of these are taught by GPs/Master teachers, 9/126 are taught by residents/fellows of our Department, and the remaining 63 are taught by FFS OBGYN. As well, this is the 2nd year that Course 6 has been responsible for the Gyne physical exam teaching. For most medical students, this is their first exposure to the pelvic examination. In order to offer adequate learning opportunities, 16 preceptors are needed to order to run the pelvic exam session (8/10 were FFS OBGYN, 2/16 were GFTs in our Department).
- One of the greatest accomplishments of our course is the ability to cover such large volumes of teaching in a short amount of time. This year was particularly challenging given the rumours surrounding financial compensation, and we were able to maintain high teaching commitment despite this. Furthermore, we are very proud that the incorporation of the Gyne Physical Exam session into Course 6 has continued to be successful, and has proven to be an important foundation for the medical students, as they progress into clerkship and beyond.
- Course 6 has been a highly rated course (by the students) in the past few years, partly due to the strength of our teachers. At the time of this report, the most recent (2019) ratings are still pending.

Challenges

1. Despite the heavy involvement of our Department members as demonstrated above, the teaching responsibilities usually fall to a very select group, and not as widely distributed across members from all sites and areas of the Department of OBGYN. The greatest challenge is finding enough preceptors for the 126 small group sessions, many of which are recruited after the course chairs personally ask colleagues for help.
2. Another challenge is uncertainty around the UME budget, and the ability to compensate FFS teachers. At this time, the UME has been compensating our FFS teachers.
3. Lastly, there is a mismatch between the innovation of the UME and the faculty's more traditional expectations/beliefs for teaching. For example, the shift towards podcasting instead of attending lectures, which is an adjustment that has been challenging for some of our faculty. Jaime and Jadine plan on doing grand rounds on this.

Workforce Planning

Further recruitment of GFTs to help teach our lectures, and continued appropriate utilization of GFTs where appropriate in small groups. Currently we have 2 Gyne Onc GFTs who lecture for us and we would like to encourage the GFTs from other subspecialties to provide some lectures for us. Although we were happy to report that there was an increase in small group sessions taught by GFTs this year, we did not meet the 10 hour/GFT quota that was offered in previous Departmental discussions.

QA/QI and Innovation

The UME has developed an educational program to reinforce important learning concepts called 'Cards'. Course 6 OBGYN has been slow to adopt this because of the time commitment required to develop cases for this. It is our goal to make this a priority for the next 1-2 years. We are also planning on implementing more 'flipped classroom' into our lectures, which have been proven in studies to improve student learning and retention of concepts.

Maternal Fetal Medicine Residency Program

Dr. Anne Roggensack

Accomplishments and Highlights

The University of Calgary Maternal-Fetal Medicine residency program has continued to develop and grow this last year. It has been exciting to see our program continue to expand, and to see our graduates become colleagues. We continue to be very successful in the annual Royal College MFM Sub-Specialty Committee annual “match” for MFM residencies in September.

2019 Calgary MFM residents:

1. **Dr. Jaime Schachar.** Dr. Schachar has pursued an educational focus and undertook an educational research project with Drs. Roggensack and Cooper developing and assessing a new curriculum for a junior rotation in MFM ultrasound for the O&G Residency (analysis currently in progress) Dr. Schachar completed her MFM residency in January, joined our Calgary MFM group
2. **Dr. Mélodie Bourdages.** Dr. Bourdages (from Université Laval) began her residency in Calgary in October 2018. Dr. Bourdages is focusing on clinical research in her residency and is working with Drs. JoAnn Johnson, Jennifer Walsh, Amy Metcalfe, and Julie Lauzon studying patient perceptions of the first trimester fetal anatomical survey (sub-study of the Enhanced First Trimester Screen Study. Dr. Bourdages will be presenting her research at the upcoming Canadian National Perinatal Research Meeting in Banff, AB in February 2020.
3. **Dr. Cindy Kao.** Dr. Kao (from the University of Alberta) began her residency in Calgary in January 2019. Dr. Kao is interested in fetal medicine and preeclampsia. She is focusing on clinical research in her residency and is working with Drs. Somerset and Lauzon studying the outcome fetal megacystis diagnosed at 11-14 weeks gestation. This project is in progress.
4. **Dr. Audrey Labrecque.** Dr. Labrecque (from Université de Montréal) began her residency in Calgary in September 2019. Dr. Labrecque has a clinical interest in Obstetric Hematology and is focusing on clinical research in this area in her residency. Dr. Labrecque is working with hematologist Dr. Leslie Skeith on a metanalysis on the complications of ASA in pregnancy and is currently also exploring other projects. We are proud that Dr. Labrecque has been selected as the National MFM Resident Representative to participate in the MFM Competence By Design Curriculum Workshops.
5. **Dr. Navi Bal.** We look forward to Dr. Bal (from Dalhousie University) beginning her MFM residency program in September 2020.

We continued to refine our approach to delivering our curriculum, in response to feedback from residents, the residency training committee, and the section of MFM. While as a specialty, Maternal-Fetal Medicine will be a late adopter of the RCPSC Competency By Design (expected in 2022), we have already embraced the principles of competency-based medical education, and become a leader in the transition. Our curriculum has undergone a transformational change, demonstrating good fit with principles for CBD, while remaining adaptable, as individualization of training is part of our philosophy. As such, residents proceed through stages of training in a specific order of clinical experiences. The stages of training and clinical experiences are as follows:

Discipline	Competence Continuum	Rotation	Blocks
MFM	Transition to Discipline; Foundations of Discipline	MFM: Ultrasound Burst	1.5
MFM		MFM: Inpatients / L&D	1.5
MFM		MFM: Introduction to Fetal Medicine	1
MFM	Core of Discipline	MFM: Core Outpatients 1	3
MFM		MFM: Core Outpatients 2	3
MFM		MFM: Inpatients**	1
MFM		MFM: Core Fetal Heart & Advanced Fetal Imaging*	2
NPM		Neonatal Antenatal Consultations**	1
OB-IM		Obstetric Internal Medicine	1
GENET		Prenatal Genetics / Pathology	1
MFM		Transition to Practice	MFM: Transition to Practice Inpatients
MFM	MFM: Transition to Practice Outpatients		4
Elective		Elective (local or away)	2
Research		Research	3***
TOTAL			26

* Clinical MFM integrated with fetal echocardiography, cardiology, and 3D/4D ultrasound experiences.

** Clinical MFM integrated with neonatology, pediatric sub-specialty, imaging, and pathology experiences.

*** Resident research course optional (opt out); includes 3 blocks of undiluted research. Additionally, up to 12 weeks (or equivalent) of research may be integrated into MFM rotations (4-6 in 1st year, 6-8 in 2nd year).

We have continued to innovate and improve our process for resident assessment and feedback. We have continued to innovate and improve our process for resident assessment and feedback, transitioning to much more frequent low-stakes assessment, including direct observation of procedures and clinical skills. We have provided leadership in developing (or adapting) low-stakes assessments, as well as a global assessment plan for the residency. The Competence Committee and generated report has transformed how we assess and communicate resident performance. We were proud to found and operate the inaugural Competence Committee for the Department of Obstetrics and Gynecology. We have continued to refine the process this year.

Our academic program continues to evolve, in response to resident feedback. Half-days include a variety of experiences, from preceptor-led sessions and case-based discussions, to webinars and self-study. Residents frequently participate in presenting sectional rounds including Fetal Diagnosis and Therapy Rounds, Fetal Pathology Rounds, and Obstetric Internal Medicine / MFM Rounds. Residents continue participate in collaborative learning with the Diagnostic Imaging residents. Residents also present Department of Obstetrics and Gynecology Grand Rounds during their residency. Residents attend Department of Obstetrics and Gynecology Journal Club, as well as lead MFM Journal Club. Residents have been active in teaching pre-clerkship, clerkship, O&G residency, and CME. Dr. Roggensack was successful in her application for a "PGME 2018-2019 Infrastructure and Simulation Teaching Proposal" for \$13,200 to develop a novel simulation curriculum for our MFM Residency, and this program launched in 2019, lead by Dr. Candace O'Quinn.

Challenges

Delivering feedback from trainees to faculty had continued to be a challenge for us, given the small size of our program (and was our sole area noted for improvement at the last accreditation). An instrument for Multisource Feedback has been developed, and distributed on a secure IT platform. In late 2018 and early 2019, we searched out feedback for all MFM faculty from ultrasound technicians, nurses, MFM residents,

O&G residents, and referring / consulting physicians. These results were anonymized, and reports were compiled and circulated to MFM faculty in March 2020. We plan to continue this process annually.

Future Directions and Initiatives

- The MFM Residency is presently funded for up to 2 positions per year. In most recent years, given the volume of learners in our department, we have elected to only offer 1 position to optimize the experience for our MFM residents. The current and upcoming national need for MFM physicians is unknown, and it is hoped that planned research may better inform our need for training MFMs.
- With upcoming national meetings for RCPSC Competency By Design, we will begin to take the last steps for transitioning our program fully. We are well-prepared for this with our current curriculum and approach to assessment; but there will be considerable work to be done on curriculum mapping once MFM EPAs are developed.

Pelvic Medicine & Reconstructive Surgery Fellowship

Dr. Erin Brennand

Accomplishments and Highlights

- Dr. Hanan AlShankiti graduated from the Urogynecology/PMRS fellowship. She will spend an additional year of fellowship blending Female Pelvic Medicine & Reconstructive Surgery with a 1 year Pediatric Gynecology fellowship in Hong Kong.
- Dr. Emily Sandwith is now our senior fellow. 2019 saw Dr. Sandwith travelling to Nepal for an international elective under the supervision of Dr. Magali Robert and her continued productivity on fellowship research projects.

Future Directions and Initiatives

Planning in 2019 included the acceptance of two fellows for staggered start dates in 2020, and the decision to hire a research scientist to assist with the Epidemiological training and research conducted by Urogynecology fellows.

- Dr. Allison Edwards with a planned start date of Spring 2020
- Dr. Allison Carter-Ramirez with a planned start day of Fall 2020

Pediatric and Adolescent Gynecology Fellowship

Dr. Philppa Brain

Accomplishments and Highlights

This is the first year of the Western Fellowship which is one of three in Canada and unique as although it is a Calgary based and organized fellowship it is a joint fellowship coordinated with UBC in Vancouver (Dr.s Debra Millar and Nicole Todd). First Fellow: Dr. Christine Osborne.

We have already confirmed our second fellow (Start date Dr. Kayla Nelson) and are now part of the North American PAG fellowship match.

Accomplishments and Highlights

HIGHLIGHTS:

➤ **Dr. Anna Cameron.**

MSc in Epidemiology from the Harvard T.H. Chan School of Public Health. She is now pursuing a part time Post Doc through the O'Brien Institute and University of Calgary in Health Economics. She has also joined the Gynecologic Oncology group on a part time basis. Hopefully, she will be joining the group full time in July 2020. Interests – Frailty Index in Surgery; SSI Bundles; Lynch syndrome and endometrial cancer

➤ **Dr. Vanessa Carlson**

Completed her Master's in Health Economics from the London School of Economics and her training in Gynecologic Oncology in June 2019. She was successful in passing the Royal College examination. She has been recruited by pCODR (pan Canadian Oncology Review – Health Canada) to carry out economic analysis on new oncology drugs. At present doing a locum in Vancouver with hopes of settling in British Columbia. Interests – BRCA mutations in ovarian cancer

➤ **Dr. Eve-Lyne Langlais**

Completed her training in August 2019. She then spent an additional 4 months with Surgical and Gynecologic Oncology focusing on HIPEC (Heated Intraperitoneal Chemotherapy). Joins faculty at Laval University on 2nd January 2020. She was successful in passing the Royal College examination. Interests- HIPEC in Ovarian cancer; Translator for the Cannabis modules for the Gynecologic Oncology Society of Canada;

Fertility Preservation, Contraception and Menopausal Hormone Therapy in Less Common Ovarian Histotypes- Chapter to be published in 'Recent Advances in Obstetrics and Gynecology', Authors Singh N, Langlais E and Ghatage P

➤ **Dr. Brent Jim**

Completed 2 years of training in gynecologic Oncology recently. He was successful in passing the Royal College exam. He will start working as a Gynecologic Oncologist at the Allan Blair Cancer Centre in Regina in February 2020. Interests- SSI bundles in Surgery. Presented at the Annual General GOC meeting in 2019

Presented at the annual Gynecologic Oncology Retreat in 2019, Alberta on Clinical trials.

➤ **Dr Mohammed AlRuwaian**

Successful in passing the Royal College examination this year. At present in his 2nd year of training which he completes in March 2020. He will be spending an extra year in Gynecologic Oncology focusing on research and HIPEC. Collecting data at present of Sarcomas of the uterus.

Residents in training:

1. **Dr. Steve Bisch** joined the training program in July 2017. He will be completing his training in July 2020. He is pursuing a Master's in Public Health from the Harvard T.H. Chan School of Public Health at the moment. He was recently awarded the Allen-Carey Scholarship. He has been prolific in his publications.
2. **Dr. Daniyah Badrun.** Joined the program in October 2018. She will be returning to Saudi at the end of training in 2020.
3. **Dr. Rachelle Findley** joined the training program in July 2019. She will complete her training in June 2021. She graduated from Dalhousie University in June 2018 and worked as a locum in Edmonton prior to joining us.

Interests-Part of the group developing Modules on Cannabis for GOC; Management of Malignant bowel obstruction – plan to submit this to GOC.

4. **Dr Christa Aubrey** joined the training program in July 2019. She will complete her training in June 2021. She graduated from University of Alberta in June 2019. She will join the faculty in Edmonton at the end of training. She has an MSc in global Health. Interests- Obesity and surgery
5. **Dr Joni Kooy**. Completes her training in March 2022. One year fellowship pursuing a MSc in Health Care Quality and Patient Safety (University of Western Ontario, London) Interests - ERAS
6. **Dr Christina Ince**. Joined in July 2019. Enrolled in the MSc program in Gender, Policy and Inequalities at LSE. It provides advanced study in the application of gender theory to social policy, planning and practice, with an interdisciplinary approach.
7. **Dr Nilanchali Singh** joined the training program in December 2019. She has a one year fellowship sponsored by the Tom Baker Cancer Centre. She is an Assistant Professor in Obstetrics and Gynecology at the All India Institute of Medicine in Delhi. Interests - Fertility Preservation, Contraception and Menopausal Hormone Therapy in Less Common Ovarian Histiotypes- Chapter to be published in 'Recent Advances in Obstetrics and Gynecology' , Authors Singh N, Langlais E and Ghatage P Review on Vulvar Lichen Sclerosus Part 1 and 2 - with Ghatage P – submitted for publication. Review on Anti-angiogenesis therapy in Ovarian Cancer. Invited review with Ghatage P Submitted for Publication Title: Equivalent survival of p53 mutated endometrial endometrioid carcinoma grade 3 and endometrial serous carcinoma.
Corresponding Author: Martin Köbel Co-Authors: Mary Anne Brett, MD; Eshetu G Atenafu, PhD; Nilanchali Singh, MD; Prafull Ghatage, MD; Blaise A Clarke, MD; Gregg S Nelson, MD PhD; Marcus Q Bernardini, MD Ongoing Project with Dr Pam Chu – 'Venous thromboembolism in ovarian cancer patients at the TBCC receiving neoadjuvant chemotherapy .
 - a. Ongoing Project with Dr Koebel and Ghatage – ' The Three Pathways of Vulvar Squamous
 - b. Cell Carcinoma: A Review'

AWARDS AND ACHIEVEMENTS:

- The residency program received full Royal College approval in June Of 2016. The next external review will be in 2022.
- Dr. Ghatage will be the chair of the Royal College examination committee in gynecologic oncology.
- Dr. Nelson will be the new Chair of the Specialty Committee in Gynecologic Oncology, Royal College, effective July 2020.

Future Directions and Initiatives

- The Gynecologic Oncology training program has been in discussions with the Province of Saskatchewan to train a gynecologic oncologist in 2021.
- There is ongoing significant interest to train international graduates. Unfortunately due to funding constraints this is only possible if funding is available from the sponsoring university or government.

Minimally Invasive Gynecology Surgery Fellowship

Dr. Liane Belland

Accomplishments and Highlights

- We have officially transitioned to a 2 year fellowship and currently have two fellows, Drs. Rupinder Dhaliwal (F2) and Meghan O'Leary (F1). The aim is to augment the time spent at all sites to reap the benefits of what each site has to offer in addition to promoting and supporting research.
- With currently 7 MIGS staff at all sites, we have divided rotations and have found that there is ample surgical/clinical workloads for both fellows. Feedback has been extremely positive as fellows benefit from the variety of training from MIGS staff owing to fellowships in different places (New Zealand, Toronto, Ottawa, Hamilton) in addition to site specific areas of interest (laparoscopic bowel resections for endometriosis, ambulatory/procedure room gynecology, quality improvement, urogynecology).
- Fellows continue to increase their presence and collaboration with residents and are a resource for teaching and guiding through complex cases. They have cemented their role with regards to ward and intraoperative consultations as they arise. Finally, our fellows have definitely elevated the University of Calgary with regards to our standing in MIGS fellowship programs. They have presented high quality research at national and international conferences and are well regarded.

Challenges

1. The financial status of the MIGS fellowship continued to plague us this year, but was thankfully sorted out by December 2019. Thanks to significant Departmental effort, MIGS has now extricated itself financially from PGME and has set up an independent, department based bank account which will serve to collect overage money from the fellows to be dedicated to research and support for conferences/presentations for fellows in the future.
2. No further challenges are anticipated although the current government and its imposition of billing restrictions may prove to affect the fellowship's ability to procure PRACID numbers and hence limit billing in the future. This is yet to be determined.

Workforce Planning

Dr. Ari Sanders joined the PLC as a MIGS staff and has been an excellent addition to the Fellowship. He will provide great support as we head to a full 2 year program with two fellows simultaneously active

Future Directions and Initiatives

The MIGS Fellowship is just gaining its stride. We will require 2-3 years to adjust to the 2 fellow, 2 year model. Our aim is to make this an academically focused fellowship with ample research for those seeking that training. It will remain a strong, clinically based program striving for surgical excellence in gynecology.

Accomplishments and Highlights

The 2019 academic year brought several changes to our Continuing Medical education program. We had several excellent visiting lecturers and brought Quality Improvement and patient safety back into our quarterly rounds rotation. CME, in conjunction with the division of MIGS initiated our first annual cadaveric simulation lab which was a major success.

- Our Grand Rounds program hosted several guest speakers from outside our department. We enjoyed guest speakers from Neonatology, Anaesthesia, Hematology, Infectious diseases, Nephrology, Women's Mental Health.
- We also hosted Dr. Marci Bowers to present on gender confirming surgery.
- Dr. Brain and Dr. Mannerfelt have taken the lead on quality improvement rounds and have so far hosted three quarterly rounds presentations including PPH, invasive group A streptococcus infection, and use of the RLS system to improve safety and reduce systemic error. Further to this, the department also hosted its annual retreat, with a focus on Advocacy, connect care updates, city-wide hysterectomy technicity and the development of a team to manage regional abnormally invasive placenta cases.

The first formal cadaveric simulation in laparoscopic gynecologic surgery was hosted in June of 2019. This brought 16 surgeons from across the city to an all-day event at ATSSL at the University of Calgary. Four surgeons from each Foothills, Peter Lougheed, South Health and Rockyview were in attendance. The event had representation from Core OB/GYN, Urogynecology and Reproductive Endocrinology and Infertility. Surgeons were divided into groups of similar skillsets and mentored 2:1 by a division member of MIGS. The goals of the lab were primarily focused on retroperitoneal dissection, large specimen removal, laparoscopic suturing and cuff closure. Division specific updates and didactic components were also included in the eight-hour cadaveric workshop. The event was well attended, well received and had exceptionally positive reviews by participants.

For the 2020 academic year, CME will host another workshop for the city. The date final date has yet to be determined but will likely be late spring. The goals of this year's lab will include task/divisional focused dissection as well as pelvic neuroanatomy. Furthermore, CME and MIGS are also preparing to host an event for provincial OB/GYN in basic Total Laparoscopic Hysterectomy with the goal of increasing access to minimally invasive surgery and improving technicity across the province.

Accomplishments and Highlights

Successful MSc Epidemiology Students: Jennifer Yamamoto and Manal Sheikh. Continued challenge in maintaining funding for research projects.

Research Report of Activity J Jarrell 2019

Invited Presentation

- Jarrell, J. Did Chronic Pelvic Pain Influence Psychiatric Somatic Therapy? Lecture to Calgary History of Medicine Society

Oral Presentations

- Jarrell, J. Analysis of the Battey Operation: Indications, Outcomes and Chronic Pelvic Pain. Christie Research Day, May, 2019 Department of Obstetrics and Gynecology, University of Calgary, Calgary, Alberta
- Jarrell, J. Contextualizing Pelvic Pain in the Understanding of Hystero-epilepsy 1877-1910. Presentation accepted for May 2020 History of Medicine Annual Meeting, University of Calgary, Calgary, Alberta

Poster Presentation

- Jarrell, J. and Stahnisch, F. Analysis of the Battey Operation: Indications, Outcomes and Chronic Pelvic Pain European Federation of IASP Chapters, Valencia, Spain, September, 2019
- Jarrell, J. Analysis of the Battey Operation: Indications, Outcomes and Chronic Pelvic Pain Poster presentation CanSage Meeting Ottawa, September, 2019
- Jarrell, J. and Stahnisch, F. The Battey Operation of 1872 – A Cautionary Tale in the Age of MIS Innovation. International Pelvic Pain Society, Toronto, October, 2019.
- **Sabbatical- related Travel**
- Stuart A. Rose Manuscript, Archives and Rare Book Library at Emory University, Atlanta GA
- Troutman and Battey Family Papers, Kenan Research Center at the Atlanta History Center, Atlanta GA.
- University of Western Ontario Rare Book Library, London, ON

Collaboration

- Member The Calgary History of Medicine and Health Care Program, History of Medicine, Community Health Sciences, University of Calgary, Calgary, Canada.

Workforce Planning

1. Resident Research Coordinator position to be advertised in 2020.
2. New Clinical Investigator (Dr Seirin Goldade MD FRCS(C) MSc Epidemiol will be starting a locum period for a year in July with the intention of starting a full time academic position at FMC in July 2021.
3. Dr Megan Blades will start a PhD with Dr Donna Slater in July 2022 with plan for her to have full time academic position at FMC July 2024.

Accomplishments and Highlights

Postpartum Hemorrhage (PPH)

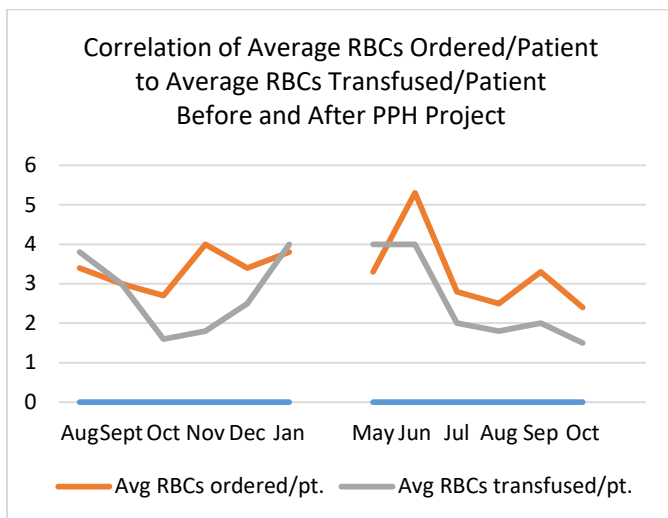
The PPH project launched on February 4, 2019 at Foothills Medical Centre with the aim to promptly recognize and respond to this maternal emergency in a coordinated and efficient way. Sustained success with the improvement strategies continues to be seen and the project is now considered a standard of care at FMC. A new AHS policy resulting from the project is currently in the draft stage. The process of spreading to other sites within the Calgary Zone has begun.

Conclusive evidence of improved maternal/fetal morbidity or mortality outcomes and cost savings from the PPH project will not be available for many more months or years.

Preliminary findings include:

- Increased staff and physician satisfaction related to quantified blood loss during and after delivery. This is in contrast to estimated blood loss that was formerly relied upon.
- Average blood loss for vaginal deliveries at FMC is ~ 576 mls. This is higher than the recognized definition for PPH which is > 500 mls. A research project has resulted from this finding.
- A increased positive correlation between RBCs ordered and RBCs administered after the PPH project began. This suggests improved efficiency for Transfusion Medicine and, potentially, decreased costs. See figure A
- Patients at higher risk for PPH are recognized earlier and their course of action may be changed accordingly.
- Processes for clinical management of PPH patients are more standardized.

Figure A



Operative Vaginal Delivery (OVD)

The OVD project set out to better understand the reasons behind the high rate of OVD by obstetricians at the Peter Lougheed Centre, i.e. ~ 33%, and to reduce this rate to a level in-keeping with other sites in the Calgary Zone, which are ~ 12%. The chosen strategy is individualized data reports that summarize each physician's own OVD practice compared with aggregate data of all other physicians. The reports will be

sent on a quarterly basis and are intended to help practitioners recognize and address any learning needs. These data reports launched in September, 2019 and will be sent on a quarterly basis.

Outcome data is not yet available but early anecdotal reports are the following:

- All obstetricians are keenly interested to see the data and reflect on it.
- The MoreOB team at Peter Lougheed Centre have noted more discussion with nurses, learners and patients regarding the risks and benefits of OVD.
- Family Medicine physicians have asked to receive this data report for their own practice.

Induction of Labour (IOL)

This project undertook a review of all processes involved with IOL at Foothills Medical Centre. This multi-faceted problem was divided into phases. The first problem chosen was to address the imbalance in the ratio of demand for service to capacity of clinicians and space. A change in both location and time began on November 4, 2019 and will be evaluated in early January 2020. Early reports indicate that some minor changes are still needed.

Future phases required to complete this project will be addressed in 2020.

Grant Funding

1. The following quality improvement grants were received by the Department of Obstetrics and Gynecology, Foothills Medical Centre.
2. HOIF II - \$103,277 in support of the PPH project for the purchase of equipment and to backfill staff members attending simulation exercises. Additional support for a data analyst for a one year term has been provided for this project.
3. CMO/MA - \$17,369 to support improved care for high risk intrapartum patients requiring close, but not constant tertiary level obstetric and/or neonatology care. This project is in progress.

Challenges

- The Department of OBGYN has demonstrated a commitment to quality improvement with a surge of activity in the past year. Strategies are often site-specific, unrelated and do not fully reflect how different approaches and initiatives impact one another. The overall effect is somewhat unfocused and confusing. In order to capitalize on these efforts, a more supportive quality management framework is needed.
- A future Quality Management Framework will change how the Department approaches quality improvement by establishing a vision, strategy and key recommendations. Long term outcomes will be a more supportive culture and a balanced portfolio of improvement projects that promote system-level quality and safety goals.
- The absence of the patient's voice for quality improvement decision making is presently lacking. An initiative for the future is to enhance our partnership with patients by securing one or more patient representatives to provide advice and direction.

Workforce Planning

A permanent 0.5 FTE Quality Improvement Consultant position is currently pending final approval.

Consultant Last Name	Initiative / Project Name	Service Area	Location	Service Area / Location Description	Goals	Progress Update	Sponsors / Leads	Start Date (mm-yy)	Status	Support Level	Comments
Nugent	Quality Management Framework	Site-Wide	FMC	OBGYN	Develop a framework for Quality Improvement in the Department that is focused and priority driven.	Business Case in development. Survey of current projects pending.	Colin Birch/Philippa Brain	Oct-19	Define	3 - Help it Happen	Working with Jackie Thurston.
Nugent	Induction of Labour	Women's Health	FMC	OBGYN FMC	Full review of induction of birth practices. PDSA 1 = improve demand : capacity ratio.	Launched PDSA#1 on Nov. 4/19.	Philippa Brain/Tara Renkas	Feb-19	Act	3 - Help it Happen	PDSA #1 = change of times and location for balloon insertion. Preliminary feedback to be reviewed on Dec. 4/2019. Baseline data analyzed.
Nugent	QI Basics Focused Workshop	Women's Health	FMC	CQI Consultant Collaboration	Development of a QI Basics workshop that is focused for the department of OBGYN.	Part three of four done	Philippa Brain	Jun-19	Act	4 - Make it Happen	Sessions 1: Sept. 16 2: Oct 21 3: November 18 4: ?
Nugent	Intrapartum Family Centered Care	Women's Health	FMC	OBGYN FMC	CMO funded - develop an alternative to inpatient admission for out of town, high risk pregnant pts who need close monitoring (daily) but do not need inpatient care.	First planning meeting held.	Philippa Brian	Mar-19	Understand	3 - Help it Happen	No progress this month.
Nugent	Depression in Pregnancy	Women's Health	FMC	OBGYN	Pending	Lit search / environmental scan done.	Philippa Brain	Jul-19	On Hold	2 - Let it Happen	
Nugent	Postpartum Hemorrhage	Women's Health	Calgary Zone	OBGYN (FMC)	Improve the safety and satisfaction of patients admitted for childbirth at Foothills Medical Centre by promptly recognizing postpartum hemorrhage (PPH) and standardizing the management of care in 95% of all occurrences of PPH.	Staff/Physician post implementation survey pending. Continued audits and training to increase documentation of Risk and QBL	Philippa Brain Stephanie Cooper Anita Cisecki	Sep-18	Sustain	2 - Let it Happen	Risk assessment forms replaced with reusable form on a clipboard. This is to reinforce for nursing that they must transcribe data into the electronic chart.
Nugent	Quality Council Meeting	Women's Health	FMC	Quality Management Council FMC (Cmte)	Strengthen a quality culture at FMC	Unable to attend monthly meetings due to part time schedule.	Michael Suddes	Nov-18	On Hold	2 - Let it Happen	
Nugent	Operative Vaginal Delivery Rate at PLC	Women's Health	PLC	OBGYN (PLC)	Reduce the rate of OVD done at PLC (33%) versus comparable national and local rate of 11 - 13%.	Dashboard of individual physician practices is now sent to all Obs in the Zone. PCPs have requested same.	Maryam Nasr-Esfahani	Jan-19	Closed	1 - Let it Go	Report from physician lead: Its too early to reflect on Data as it has been only introduced to physician groups in Aug and they started having access in Sept. Data collected every 3 months. All obs are excited to see the data and reflect on that. More Ob team have noted more discussion with nurses , learners and patients re risks and benefits of OVD.

Department Education and Research Fund

Dr. Bruce Allan

Accomplishments and Highlights

- Annual membership fees have changed from elective to mandatory for department members
- Improved vetting of research grants and improving funding access from annual review of applications to q four months

Challenges

- Justify to department members that there is value in their contributions
- Increase the utilization of research grant availability

QA/QI and Innovation

- Expansion of scope of funding to include QI and QA initiatives

Future Directions and Initiatives

Examination of the mandate of DEAR to ensure that it plays an important role in supplementing access to funding but does not replicate existing funding sources or become a “make work project”. Dollars spent but be seen as adding value to the department and its members rather than just spending money because it is available

	Allocated	Spent	Balance
2016-2017 Funding	\$38,017.20	\$38,017.20	\$0.00
2017-2018 Funding	\$26,251.16	\$14,583.60	\$11,668.00
2018-2019 Funding	\$46,200.00	\$20,447.00	\$25,753.00
2019-2020 Funding	\$28,075.93	\$1,000	\$47,075.93
Totals	\$138,544.29	\$74,047.80	\$64,496.93

Section Updates

Women's Health Ambulatory Clinic

Mandy Hammer & Bryan Peffers

Accomplishments and Highlights

In preparation for Epic/Connect care, significant amount of committee work done in the past year to align care throughout the province.

OBGYNE 2nd Floor Clinic

- 4th year of influenza program in OB clinic with 166 total patients vaccinated to date for the 2019/2020 flu season
- OB Gyne – Worked with Physician group as well as AHS clinic staff to come up with efficiencies in the clinics, ongoing process to continue over the coming months. Examples include:
- Increase use of electronic record/Netcare – making laptops available for physicians
- Moving to appropriate number of staff supporting clinics (decreasing to 1 nurse in appropriate OB clinics)
- Making adjustments to clinic support in gyne clinics
- Reviewing incoming patient phone call system to increase safety and efficiency
- OBIM clinic moved to location at Richmond Road
- In preparation for provincial Connect Care system, Fetal Health Surveillance education (3cm/min tracing) provided to all Nursing staff – collaboration with Labour & Delivery Educators

Pelvic Floor Clinic

- Developed and hosted Pessary Education Courses for NP's and physicians in order to enhance options for patients to be seen closer to home and reduce amount of follow up done in clinic
- Telephone Triage initiative ongoing – aims to ensure patients are seeing the most appropriate practitioner as well as assessing appropriateness of referral itself
- Completion of Vaginal Erosion Study & CNS Grace presented at Urology conference in Quebec
- CNS Grace & Dr. M Robert submitted an abstract and did a 4 hour workshop on managing Pessaries in Nashville at the IUGA conference
- PFC research presented at John Jarrell research day
- 1st Annual (?) Pelvic Floor-it Fun Run in September initiated by PFC staff – raise funds for education

Colposcopy

- 1st Staff education day in November supported by physician lead and well received by staff
- Patient Education video produced in clinic made available on Cervical Cancer screening website to provide additional education prior to appointment
- Overall decrease in the number of patients seen in colposcopy: Total # decreased by 10%, New patients decreased by 3%, Follow up patients decreased by 17%
- A few factors could be contributors to this including change in algorithms as well as HPV Vaccines
- Early Pregnancy Assessment
- Continue to collaborate with South Health Campus with Central triage process
- Collaboration with SHC for staff education
- Presentation by Family counsellor at COMS (Current Obstetrical Management Seminar) education day
- Implemented a Physician's order set to adhere to documentation standards

Challenges

- Pelvic Floor Clinic - Waitlist to see an RN remains lengthy at ~13-15 months, waitlist for Urogynae physician 8-12 months
- Strategies initiated to target this include:
- Pessary course to train community practitioners in follow up care
- Telephone triage to ensure patient is seen by most appropriate practitioner
- Adjustment of nursing template to start 15 mins earlier
- Discussion of recruitment of PFC Urogynae physician
- Increasing scope of Nurse Practitioner to include Pessary Care

Workforce Planning

OBGYNE 2nd Floor Clinic

- Welcoming new Obstetrician to the NT clinic team in January 2020

Colposcopy

- 3 new colposcopists joined the team this year – January 2019

Future Directions and Initiatives

Efficiency initiatives include working towards meeting Operational Best Practice targets for staff hours worked and supplies

OB GYNE

Provider/visit type	New		Follow/Up		Total		Total
	2018	2019	2018	2019	2018	2019	% Change
OB	1108	1003	5815	5662	6923	6665	3% decrease
Gyne	1988	1937	2503	2430	4491	4367	2.8% decrease
OBIM	434	283 (Jan-Aug)	508	350 (Jan-Aug)	942	633 (Jan-Aug)	N/A
RN – Nurse only			156	124	156	124	20.5% decrease
Total	3530	3223	8982	8566	12,512	11,789	5.7% decrease

Colposcopy

Provider/Visit type	New		Follow/Up		Total	Total	
	2018	2019	2018	2019	2018	2019	% Change
Physician	2518	2440	3935	3272	6453	5712	11.4% decrease
Procedure: LEEP	773	756			773	756	2.2% decrease
Total	3291	3196	3935	3272	7226	6468	10.4 % decrease

OBGyne Clinic

- Working to solidify onsite contracts with all contract physicians in the New Year
- Plans to investigate the option of providing DTap Vaccine to OB patients
- Move to utilize paper less and Netcare more in preparation for Connect Care in Spring 2021

Pelvic Floor Clinic

- Pessary Courses planned for 2020
- Urodynamics course planned for February 2020

Pelvic Floor Clinic

Provider/visit type	New		Follow/Up		Total		Total
	2018	2019	2018	2019	2018	2019	% Change
Physician	1726	1430	3008	2494	4734	3924	17.1 % decrease
Nursing	2109	2351	3055	2916	5164	5267	2.0 % increase
Nurse Practitioner	41	459	5	167	46	626	1260% increase
Physical Therapy	194	255	497	659	691	914	32.3 % increase
Telephone Calls			1085	1090	1085	1090	.5% increase
PFC Workshops	74	129			74	129	74.3% increase
PT Group Visit	205	236			205	236	15.1 % increase
Procedure: UD's	343	208			343	208	39.4 % decrease

Early Pregnancy Assessment Clinic

EPL	New		Follow/Up		Total		Total
	2018	2019	2018	2019	2018	2019	% Change
Nursing	620	581	60	45	680	626	7.9% decrease
Phone Calls (N&F/U)	Total recorded in F/U section		809	629	809	629	22.2% decrease
Total	620	581	869	674	1489	1255	15.7% decrease
PILP	New		Follow/Up		Total		
	2018	2019	2018	2019	2018	2019	
Counsellor	189	215	569	355	758	570	24.8% decrease
Phone Calls			191	253	191	253	32.5 % increase
Total					949	823	13.3 % decrease
Procedure: Cysto's	474	270			474	270	43 % decrease
Totals	5166	5338	7650	7326	12,816	12,664	1.2 % decrease

*significant increase in NP visits due to previous NP off for significant portion of the year

Accomplishments and Highlights

Members: Philippa Brain (Division Head, co-chair CANPAGO), Sarah McQuillan (Fellowship Program Director, Western rep CANPAGO), Jaelene Mannerfeldt

Fellowship Pediatric Gynecology: This is the first year of the Western Fellowship which is one of three in Canada and unique as although it is a Calgary based and organized fellowship it is a joint fellowship coordinated with UBC in Vancouver (Dr.s Debra Millar and Nicole Todd). First Fellow: Dr. Christine Osborne. We have already confirmed our second fellow (Start date Dr. Kayla Nelson) and are now part of the North American PAG fellowship match.

Pediatric Gynecology cheat sheet: A synopsis of emergent pediatric gynecological care for ER docs and generalist gynecologists to facilitate appropriate care of pediatric gynecological patients while timely consults are being arranged. Distributed to ACH ER physicians and the department of OBGYN

Presentations:

April 2019, NSPAG Meeting, New Orleans

Poster:

Christine Osborne, Sarah McQuillan, Shu Ching Foong, Kathleen Reynolds, Mandy Litt
Addressing Fertility Preservation in Female Pediatric Oncology Patients: A Quality Improvement Study in Calgary AB Canada

Nov 2019, WCPAG Meeting Melbourne

Poster:

Christine Osborne, Kyle Lafreniere, Philippa Brain, Sarah McQuillan, Jaelene Mannerfeldt
The Use of Intrauterine Devices (IUDs) for Menstrual Management in Low-Middle Income Countries

Poster:

Christine Osborne, Jaelene Mannerfeldt, Philippa Brain, Sarah McQuillan
Difficulties in Transition of Care from Pediatric to Adult Gynecology Providers. Should we Maintain Care into Adulthood?

Oral Presentation:

Social considerations in Peds Gyne

Difficulties in Transition of Care from Pediatric to Adult Gynecology Providers. Should we Maintain Care into Adulthood?

NASPAG Luncheon Session Presenter - April 2019 - Fertility Preservation in Transgender Care

Accepted 2020:

1. **Revision Gender Affirming Surgery for Trans Women:** Poster Presentation at the 34th NASPAG Annual Clinical and Research Meeting, Philippa Brain, Sarah McQuillan, Christine Osborne, Debra Millar
2. **Transgender care:** The pediatric gynecology team is dedicated to the postop care of neovaginas and active in the surgical repair of postop complications including correction of vaginal stenosis using unique grafting techniques with flap grafts and buccal grafting. Pediatric urology (Dr.s Weber and Fermin) and plastics (Dr. Rob Harrop) have been working in collaboration in these cases. Dr. Brain lead and wrote the proposal for a transgender program at SHC representing gynecology and pediatric trans care. (See poster acceptance above, full proposal available through Dept Surgery)

3. **Routine Preoperative pregnancy testing:** The division of pediatric gynecology is promoting routine and universal pregnancy testing in biological females having surgery over the age of 12y. This initiative is at ACH and being transferred to all hospitals in the region.

Challenges

- **Unacceptable wait times for consultation:** We are actively working with administration to make a case for increased funding for increased clinic time. A proposal is being put forward to develop an older adolescent clinic at SHC with improved access to the gyne procedural room there. We have developed QI initiatives to triage referrals to appropriate specialty as well as giving frameworks for referring physicians to start clinical therapy prior to consultation (see below). We are working with administration to review referrals to make a formal presentation to the ACH board to address both wait times and administrative framework (see below)
- **Lack of formal administrative framework and designated funding:** The division of pediatric gynecology falls between three departments, OBGYN, Pediatrics and Pediatric General Surgery. Division members hold appointments to the department of OBGYN, the clinics are administrated through the division of endocrinology, and the division reports to the department of Pediatric general Surgery through the surgical executive committee regarding OR time and surgical concerns, ad hoc. Transgender care does not formally fall under any department. Meetings are underway to confirm cross appointments to Pediatrics and to formalize the administrative stream to be a recognized division to pediatric surgery for clinical concerns and to the department of OBGYN and Pediatrics for physician concerns.
- **Recruitment: Practice of PAG is linked with generalist positions.** A quorum of 5 Pediatric gynecologists is required to provide 24 hour call. At present we are 2(3) (Dr. McQuillan presently on Maternity leave until July 2020). All members provide full call complement at main site (Dr. Brain FMC, Dr. McQuillan SHC, Dr. Mannerfeldt RVH) All hold considerable administrative positions in the department of OBGYN (Dr. Brain, site lead FMC, physician lead Early pregnancy loss clinic, Dr. McQuillan CBD program director Dept OBGYN, Dr. Mannerfeldt, QI lead OBGYN, Ombudsman for PGME, U of C)

Workforce Planning

Pediatric gynecology needs a quorum of 5 staff to provide 24 hour call. (at present the division provides consultative call M to F 8-5 and supports FMC after hours on an ad hoc basis) Representation at all four sites would be preferable. At present we are three members representing three sites. The recruitment of pediatric gynecologists is linked to generalist recruitment and so competes with other departmental recruitment demands.

The division of pediatric gynecology will continue to represent Calgary and U of C nationally and internationally through the national CANPAGO committee which is the divisional committee through the Society of Obstetricians Gynecologists of Canada. We have a strong research presence at our national and international meetings. The fellowship program through U of C is part of the international match and unique in its collaboration with UBC and has been successful in enhancing the academic output of the division. We anticipate this continuing to promote our work and recognition going forward.

The division of pediatric gynecology is ground breaking in its work with the transgender population and is promoting this care nationally and internationally with talks planned national in 2020 (Poster accepted NASPAG Apr 2020, Dr. Brain and McQuillan giving half day and rounds in Saskatoon and Regina Feb 2020, Dr. Brain CANPAGO national videoconference Jan 2020) The division supports a coordinated clinic specific to this population at SHC which is in line with the proposal previously put forth to AHS.

The division is proposing an older adolescent clinic at SHC as an option for increased clinic time that does not rely on clinic space at ACH. We are also seeking access to the gyne procedural room at SHC for small procedures under sedation (IUD insertion and hymenal correction). This clinic addresses the long

consultative wait times. We have physician support for this clinic but require nursing and clerical support. Access to the outpatient gynecological procedural room will reduce demands on the ACH OR.

QA/QI and Innovation

- PCOS: Referral allocation process to Peds Gyne or Peds endo based on referral framework
- Referral assessment and review
- Labial adhesions: Framework for clinical therapy faxed to referral physician to initiate therapy prior to consultation.

Future Directions and Initiatives

- Enhanced PAG program with increased clinic space, ongoing and improved academic production, and a formalized administrative stream with dedicated funding.
- Enhanced coordinated transgender program.
- Development of a clinical ARP specific to Pediatric and Adolescent Gynecology.

Pelvic Medicine and Reconstructive Surgery

Dr. Shunaha Kim-fine

Accomplishments and Highlights

Erin Brennand finishing MSc in Comm Health Epidemiology

Challenges

- Budget cuts and various leaves of absences among NP, RN and MD staff have led to longer wait list for MD and RN pessary new appointments.
- Introduction of Telephone Triage to allow patients to self-direct care (i.e. pessary vs. surgical consult vs. nursing appointment).
- Hiring of temporary NP to fill leave of the permanent NP position
- C. Birch appointed as Department Head
- M. Robert appointed as Head of Chronic Pain

Workforce Planning

- E. Brennand returned from maternity leave and completing Master's
- E. Sandwith graduating in June 2020
 - A. Edwards starting in May 2020
 - A. Carter Ramirez starting in Sept 2020
- S. Kim-Fine starting as Area Trainer with Connect Care
- Recruitment has started for new PMRS Consultant staff at Foothills

QA/QI and Innovation

1. Pessary certification course has now run twice in 2019, targeting family physicians and NPs in the community, with goal of reducing rural patient visits to Calgary for pessary follow-up.
2. Standardization of Discharge documentation, resulting in decreased telephone calls to clinic postoperatively.
3. Embracing of ERAS: Urogynae section had highest compliance rate in 2019
4. Air charged catheters introduced for UDS
5. UDS course planned for Feb 2020

Future Directions and Initiatives

- Dr. Kevin Carlson formally received cross appointment to Dept OBGYN as faculty
- Joint Journal Club and Rounds with GI/motility
- Joint journal club with Female Urology

Accomplishments and Highlights

- Dr. Prafull Ghatage: Society of Gynecologic Oncology of Canada's Lead on Medical Cannabis for Pain
- Dr. Gregg Nelson: i) IJGC Most Downloaded Article of 2019, "Guideline for Perioperative Care in Gynecologic/Oncology: Enhanced Recovery After Surgery (ERAS®) Society Recommendations – 2019 Update", International Journal of Gynecological Cancer, European Society of Gynecologic Oncology (ESGO) November 4, 2019, Athens, Greece, ii) 7th Annual Dr. E. James Aiman Endowed Lectureship "Acknowledges national leader in innovative teaching and patient care", Medical College of Wisconsin, Milwaukee, WI September 25, 2019, iii) promotion to Professor, Departments of Obstetrics & Gynecology and Oncology,
- iv) Deputy Head, Department of Obstetrics & Gynecology, v) Chair-Elect, Gynecologic Oncology Specialty Committee, Royal College of Physicians & Surgeons of Canada, vi) Co-Chair, Provincial Surgical Quality & Safety Committee, Surgery Strategic Clinical Network, Alberta Health Services, vii) inducted into Society of Pelvic Surgeons (USA)
- Dr. Pam Chu: Appointed Associate Dean, Professionalism, Equity and Diversity
- Dr. Sarah Glaze: PI, Grant for Fatigue Risk Management (FRM), Royal College of Physicians & Surgeons of Canada (\$20,000)
- Dr. Anna Cameron: i) Golden Speculum Award (Best Subspecialty Teacher), ii) Chair, TBCC Cost-Effectiveness/Health Economics Research Group

Challenges

We continue to advocate for our patients to obtain Indocyanine Green (ICG) – a necessary component to perform sentinel lymph node mapping for vulvar/cervical/endometrial cancers. This technique has become standard of care internationally as it decreases the morbidity of traditional lymphadenectomy. The infrastructure, expertise and protocol are in place to perform this technique but cannot be executed without ICG.

Workforce Planning

- Recruitment planning for Clinical Gynecologic Oncologist – 1 year timeline.
- Recruitment planning for Academic (GFT) Gynecologic Oncologist – 2 year timeline.

QA/QI and Innovation

- **Enhanced Recovery after Surgery (ERAS)** has now been implemented in our division for 3 years. The TBCC Gynecologic Oncology group is leading this initiative internationally as Dr. Nelson is the Chair of the Gynecology Section at ERAS International which is based in Sweden. This has shown decreased LOS, complications for our patients.
- **Dr. Prafull Ghatage is the Principal Investigator for a HIPEC pilot**, an innovative intraoperative chemotherapy approach for ovarian cancer.
- **Dr. Anna Cameron:** i) Development of a Surgical site infection prevention bundle to reduce rates and improve patient care through iterative changes and improvements; ii) Partnership with General Internal Medicine Peri-operative Group to improve perioperative glycemic control in gynecology patients.

Accomplishments and Highlights

Clinical

- **IMPRESS Study:** The Implementation of Preeclampsia Screening and Prevention Study is underway due to the efforts of Dr Jo-Ann Johnson, with an objective to validate an inverted pyramid approach to pre-eclampsia prevention and the use of PLGF. These studies have CIHR funding and are part of an international research effort to find ways to improve maternal morbidity/mortality and reduce preterm birth.
- **PLC Outpatient Post-Loss Clinic:** This new clinic runs twice monthly and provides short and long term follow up for women and families who have experienced a loss.
- **Reproductive ID Clinic:** A multidisciplinary collaboration between OBIM, MFM and OB/Gyne ID to provide consultation for maternal or fetal infections affecting pregnancy. Occurs once monthly at the PLC. The same team plans to expand with a Penicillin Desensitization Clinic at SHC, in partnership with the ReproID Group from BC Women's Hospital.
- **MAC NE:** The MFM Antenatal Clinic expanded to a satellite clinic in the NE, providing MFM antenatal care for women with delivery planned at the PLC.
- **Abnormally Invasive Placenta (AIP):** A multidisciplinary collaboration between Obstetrics, MFM, Advanced Gyne Surgery, Radiology, and Anesthesia. A streamlined clinical pathway has been established for women at risk of abnormally invasive placenta, including enhanced imaging and dedicated surgical management at FMC for those deemed high risk of AIP.
- **First fetal intrauterine exchange transfusion:** The first fetal exchange transfusion was performed in Calgary for an MCDA twin pair with TAPS. The pregnancy was successfully brought to near term following 2 exchange transfusions and 2 live infants were born.

Administrative

- **New MFM Section Chief:** Dr Vreni Kuret was selected as MFM Section Chief in February 2019.
- **New MFM cARP Authorized Representative:** Dr Colin Birch was appointed MFM cARP Authorized Representative, taking over from Dr Wilson who held the position since inception of the MFM cARP.
- **MFM Leadership Group:** A 4-member leadership group was established as part of the MFM cARP administrative restructuring. This temporary board was appointed, with equal representation from AHS only and AHS / EFW dually appointed physicians and will be in place for 1 year. A new board will be elected and in place by October 2020.

Challenges

1. **Clinical Service:** An external review was commissioned by AHS Leadership and Dr Birch. This was completed by Dr Armson (MFM Halifax) in March 2019. Several recommendations were put forth, but overall the MFM Service was found to be robust and providing a high standard of care for patients in Southern Alberta. The Leadership Group will undertake a needs assessment of key stakeholders in 2020, as one of the key recommendations.
2. **ARP Renewal:** At the request of the Ministry of Health, the MFM Team will be submitting a new application for the Calgary MFM cARP. The prior Ministerial Order was outdated and not reflective of the current service program. As well, structure is being added to the MFM cARP such as governance documents, code of conduct and roles & responsibility documents. The team has struggled to be aligned on issues arising from this process and employed a consultant, Susan Black, to assist with completion.

Workforce Planning

- **Team Changes 2019:** Dr Jaime Schachar joined our team in February 2019, after successfully completing a 2-year MFM fellowship in Calgary. Jaime is leading the integration of MFM services at the PLC. Dr Doug Wilson retired in November 2019 and Dr Becky Simrose will be retiring on Dec 31, 2019.
- **Anticipated Team Changes 2020:** We anticipate both a retirement of a 0.5 FTE within the ARP and a year-long sabbatical of another member with a 0.1 FTE.
- **Workforce planning:** The MFM team continues to look for increased clinical opportunities for ARP MFM physicians, as changes to the structure of our service in 2019 meant a reduction in work opportunities for the entire team. Planning will be undertaken in early 2020 to plan ahead for possible hiring to replace those retiring and also to allow for program expansion. There may be opportunities to obtain locum coverage, as we have a Canadian trained MFM graduate who recently moved to Calgary. This would be a new initiative as MFM historically has not used locum physicians for ARP coverage.

QA/QI and Innovation

- **Quality Assurance Committee:** Dr Candace O'Quinn is the Alberta Health Services Calgary Zone Women's Health Maternal Fetal Medicine Quality Assurance Aggregate Working Group Chair. The goal of the Alberta Health Services Calgary Zone Women's Health Maternal Fetal Medicine Quality Assurance Aggregate Working group is a formalized Zone-wide approach to bring together the required stakeholders to review adverse and potentially adverse events identified by the Section of Maternal Fetal Medicine. This committee reports and is a resource for the Women's Health Quality Assurance committee. The focus of this committee is quality assurance regarding fetal imaging rather than maternal morbidity and mortality or perinatal mortality (such committees are already established). The Maternal Fetal Medicine QA working group will produce a quarterly report for the parent committee (Women's Health Quality Assurance Committee).
- **Quality Assurance External Review:** AHS Leadership and Dr Birch have requested an external review of MFM Quality Assurance due to ongoing concerns raised from within the MFM team. This review will be conducted by an independent person/group in early 2020.

Future Directions and Initiatives

- **MFM Service at PLC:** The MFM team currently has a pilot project at the PLC with MFM coverage 3 days per week, working in DI together with Radiology colleagues. Plans are underway to expand the MFM service to a dedicated MFM unit co-located with Maternity Triage/L&D at the PLC. Once in place, service will be expanded to 5 days per week, with onsite weekend support.
- **Program Performance Evaluation:** The Calgary MFM program reports on patient volumes but has few other outcome metrics by which to evaluate the clinical service. This is important area will be a focus in 2020, to ensure we evaluate our service and the clinical needs of the community we serve.
- **Equipment Replacement:** There is a need to replace the aging ultrasound machine at the SHC. Funding sources will be explored as funding for replacement of capital equipment is not included in the MFM budget.
- **North Tower:** A new clinic will open in the FMC North Tower in January 2020, managed primarily by Dr Cooper. The clinic will focus on women experiencing pregnancy after a previous loss and complex maternal issues.
- **MFM Service at RGH:** The MFM Team will start preliminary planning on expanding MFM services on site at RGH. A needs assessment is underway to develop a site-specific MFM program with the RGH Obstetrics providers and other key stakeholders.

Accomplishments and Highlights

- All procedures done at Foothills Medical Centre, as day cases; January to November 2019 reported.
- RFA: 2 procedures. Since 2017, 5/7 live born or ongoing.
- Shunts: 4 procedures (one bilateral insertions) on 4 patients. Since 2017: 6/8 live born. Two not live born had been found to be incompatible with life following shunt insertion. One live-born had care withdrawn at 2months of life due to poor prognosis.
- IUT: 16 procedures/7 patients. All live born in T2. Since 2014, 22 patients received 55 transfusions. 100% of non-hydronic fetuses survived. All cases of all-immune hemolytic anemia survived. The only losses were 2 of 3 fetuses with parvovirus presenting before 20 weeks.
- Dr. O'Quinn performing IUT under supervision now (3rd operator).

Challenges

1. Lack of dedicated space for these procedures means we can only do them prior to 8am on Tuesdays and Thursdays, after 5pm on week days or weekends.
2. Relative few cases means maintaining skills up and training others to join the team is challenging.

Workforce Planning

- Dr. O'Quinn is expected to become independent at uncomplicated IUT in 2020.
- Dr. O'Quinn is ready to start performing shunts and RFA under supervision when suitable cases present. Once Dr. O'Quinn is independent at IUT's, Dr. Greg Connors intends to stop. We will then begin training a 3rd colleague.

QA/QI and Innovation

- All cases are followed up through to delivery and the neonatal period, with annual audit and reporting of outcomes to stakeholders to ensure the program results are acceptable.
- IUT: Provincial program successfully launched in 2014
- FRA: Program successfully launched in 2017
- Shunts: Program successfully launched in 2017.
- Working well with colleagues in Edmonton to care for their patients.
- Working well with OB/Anesthesia to provide conscious sedation where indicated.

Future Directions and Initiatives

We would like to offer services to Saskatchewan patients – need to establish appropriate agreements between health authorities.

Consider introduction of laser for TTTS (has been recommended by external reviewer).

Accomplishments and Highlights

Clinic Visits

- The total number of new consultations seen at the clinic including male and female was 6,256. This is increased from 5,893 in 2018. There were 17,475 repeat visits over this interval, again contrasting with 2018 of 13,456. This was a significant increase in the number of new consults and repeat visits. In 2019, 2,377 hysterosalpingograms and 1,655 sonohysterograms were performed.
- The average wait list from initiation of referral to consultation is approximately four to six weeks. Urgent referrals such as patients requiring chemotherapy or extirpative surgery are generally seen on the day of referral. All patients receive a phone call from a booking clerk within one week of receiving the referral and a confirmatory fax is sent to the referring physician within a week of receipt of the referral. Essentially, currently there is a minimal wait if a couple needs IVF or other infertility treatments, save a general 2-3 month wait for surgical treatments.

Clinical Services

In Vitro Fertilization

- There is essentially no wait list for IVF as patients can have their cycle initiated almost immediately after investigations are completed. The total number of IVF cycles in 2019 was 1,008. This is a 2.7% drop from 2018. The overall average age of patients was 35.4. The average number of oocytes collected was 14. Conventional insemination was used to fertilize the oocytes in 28% and ICSI in 67%. The antagonist stimulatory protocol was used in 77% with conventional long agonist protocol used in 3%. This contrasts significantly with antagonist protocol being used in 67% and agonist protocol in 10% in 2018. The antagonist protocol has resulted in a dramatic decrease in the incidence of ovarian hyperstimulation with this now being a rare event. The flare protocol was used for poor responders in 20% of cycles. Eighty-three (83) cycles (7%) were cancelled prior to oocyte retrieval due to poor stimulatory response.
- The overall clinical pregnancy rate per fresh embryo transfer was 43.5% in 356 patients up to the age of 35; a pregnancy rate of 33.3% in 239 patients between the ages of 36 to 39; 22.8% pregnancy rate in 149 patients 40 years of age or older.
- There were 103 day two transfers completed, with an average number of embryos of 1.7 being transferred. Overall clinical pregnancy rate per embryo transfer was 23.3%; ongoing twin rate of 4.2% and triplet rate of 4.2%.
- One hundred and eighteen (118) embryo transfers were performed on day 3 cleavage stage with an average number replaced of 2.2 and a clinical pregnancy rate of 25%; ongoing twin rate is 25%.
- Five hundred and twenty-one (521) embryos were transferred at the day 5 blastocyst stage. The average number transferred was 1.3 with an overall clinical pregnancy rate of 41.2%; ongoing twin rate of 6.3%.
- In our high-prognosis single embryo transfer patients (defined as one day 5 embryo transfer, aged less than 36, with at least one cryopreserved embryo), the clinical pregnancy rate was 45.5%. There were 214 transfers performed in this category with an average age of 32 and ongoing twin rate of 2.2%.
- Seventy-seven percent (77%) of IVF cycles were antagonist protocol cycles. Eighty-five (85) cycles that had agonist trigger instead of HCG and 94% of these had a subsequent freeze-all to minimize the risk of ovarian hyperstimulation. This protocol has essentially eliminated ovarian hyper stimulation syndrome at RFP.

- Seventy-four (74) anonymous oocyte donor cycles were performed with a clinical pregnancy rate of 42.2%.
- There were 15 fresh donor oocyte cycles and 25 cycles for fertility preservation with oocyte vitrification.

Frozen Embryo Transfer

- We completed 1,045 frozen embryo transfers with an average number of embryos transferred of 1.4 and an overall clinical pregnancy rate of 41.6%. More specifically, the pregnancy rate was 43.4% in 733 patients at or under the age of 35; 37.6% of 245 patients aged 36 to 39; 36.4% of 67 patients 40 or older.
- One thousand and twelve (1012) vitrified blast cycles underwent embryo transfer with a clinical pregnancy rate of 41.9%; ongoing twin rate of 8.9% and triplet 0.5%.
- We obtained a clinical pregnancy rate of 40% in 20 cycles with extended culture from two pronuclei to blast. The clinical pregnancy rate was 27.3% in 11 cycles with extended culture from day 3 to blast.
- Overall, the number of babies born through the Regional Fertility Program now exceeds 16,600.
- In summary, there was approximately 3% decline in the number of IVF cycles; however, there was an increase in the number of frozen embryo transfer cycles. Overall, the clinical pregnancy rate for all programs was stable with increased emphasis using antagonist protocols and further attempts to minimize multiples utilizing culture to blastocyst and increasing number of single embryo transfers.

Diagnostic Semen Laboratory

- Five thousand and nineteen (5,019) semen analyses were performed over 2019. Of these, 2,385 were from family physician referrals. Two thousand seven hundred and ninety-seven (2,797) post-vasectomy semen analyses were completed. Of the semen analyses, 2,427 had immunobeads testing for anti-sperm antibodies.
- There were 1,800 semen preps for intrauterine insemination with partner sperm performed, with an overall pregnancy rate of 11.7%. Clomiphene citrate and letrozole were medications most commonly used for augmentation of ovulation with IUI. Letrozole is currently our drug of first choice for induction of ovulation with PCO. There were 471 cycles of donor insemination with a pregnancy rate of 18%.
- Nine hundred and twenty-three (923) semen preps were completed in conjunction with IVF cycles. Twenty-one (26) ICSI preps were performed to evaluate suitability of sperm with IVF and ICSI. Our current Urologist, Dr. Dushinski, performed 14 percutaneous epididymal sperm aspirations (PESA) and 12 testicular sperm aspirations (TESA). There were 14 preparations for retrograde ejaculation and 33 evaluations for sperm DNA fragmentation.
- Two hundred and ten (210) males elected to freeze sperm ahead of IVF in view of potential problems with sperm production on day of oocyte retrieval. In total, there were 10,888 semen evaluations at DSL in 2019.

Other Services Provided

- Known donor oocyte
- Gestational surrogacy
- Embryo donation
- Preimplantation genetic testing for aneuploidy (PGT-A): this program has dramatically increased as now all 23 sets of chromosomes can be evaluated and this may be helpful in couples with recurrent IVF implantation failure.
- Preimplantation genetic testing for specific genetic abnormalities (PGT-M)
- Tubal, uterine, and endometriosis surgery
- Recurrent pregnancy loss
- Oncofertility (male and female)

- Oocyte and sperm preservation in transgender fertility preservation: Dr. Tom Gotz is currently leading this program and has attended an international symposium on this topic. There have been a number of instances in clinic where female to male transgendered individuals have undergone ovarian stimulation, oocyte retrieval and vitrification.

Challenges

The Calgary and Alberta economy continues to decline, thus resulting in significant challenges for patients. The Generations of Hope Fertility Assistance Fund continues to help many individuals who are financially challenged.

Workforce Planning

- At present, there is no immediate plan to hire future REI physicians. Every four to six weeks, Dr. Phil Bach, a urologist based in Edmonton, will come to Calgary for regular clinics evaluating our more complex male factor patients such as Klinefelter syndrome, post-chemo patients, or complex medical male patients.
- Physicians at the Regional Fertility Program have been intimately involved with both undergraduate and postgraduate teaching. All medical students rotate through the Regional Fertility Program clinics in order to gain exposure in this area. Residents have a minimum of an eight-week rotation on REI during their residency. Dr. Wong supervises them over this interval.

QA/QI and Innovation

1. The clinic was inspected by the College of Physicians and Surgeons and was given an exemplary grade and will be used as a model for evaluating further IVF clinics in the province. The IVF lab was recently inspected and was given an excellent grade with a score of 94%. This inspection was from Accreditation Canada.
2. There are currently new regulations from Health Canada with regard to safety of donor sperm and ova. This will involve significant and extensive revision regarding implementation of standard operating procedures for fresh sperm and egg donation. Unfortunately, this will most likely result in significant increase in cost for the services to patients.

Future Directions and Initiatives

Health Canada has a new guideline on sperm and ova donation. This will facilitate greater flexibility with regard to known donor sperm and oocyte procurement. The addition of Dr. Phil Bach will expand the range of services for male factor at RFP.

Antenatal Community Care Program

Dr. Rati Chadha

Accomplishments and Highlights

Overview of Accomplishments

ACCP provides prenatal care and clinical observation in the community for pregnant women with fetal and maternal complications, who would otherwise need to be admitted to an antepartum unit at any of the four Calgary hospitals. While maintaining a similar level of patient care, ACCP over the years has saved the health system significant costs. The program operates in Calgary Zone including various rural areas (Airdrie, Strathmore, Okotoks, Cochrane). Referrals are accepted from obstetricians, perinatologists, obstetricians and family physicians. A similar ACCP program operates in Edmonton Zone.

ACCP supports clients with high risk pregnancies with the following diagnoses: hypertensive disorders in Pregnancy (HDIP); pre term Labour (PTL); premature rupture of membranes (PROM); placenta previa; antepartum hemorrhage (APH); fetal Surveillance; and intrauterine growth restriction (IUGR).

ACCP Stats by diagnosis 2019	
PTL	53
GH	232
PROM	52
IUGR	5
Placenta Previa	35
APH	18
Fetal Surveillance	65
Other	5
Total admissions	465

The highest primary diagnosis for admissions this year was gestational hypertension at 50% (up from 45% last year). The next most frequent diagnoses at 11% are PROM and preterm labor. The number of women with placenta previa were lower this year at 7% - vs 11% in 2018. This past year, the program has observed increased acuity and has also supported clients at 24-26 weeks or less.

Clients are discharged from the program once they are at a safe gestational age, the physician deems the client to be medically safe for discharge, or if the client goes into early labour. There are very few non-accepted clients – only those who do not fit the above diagnostic categories (5) or who have moved out of the Calgary Zone (7) or decline services (4).

Highlights

1. MEDITECH – Electronic Patient Care Clinical Information System implementation

- Public health in Calgary Zone joined the provincial MEDITECH clinical information system in November of 2018. Any patient (mom or infant) accessing public health services within the province has a centralized public health record promoting continuity of care. For the Antenatal Community Care Program, the change to the electronic chart has enhanced its workflow efficiency, continuity of care, comprehensive data collection, targeted patient education, and improved communication among providers for client care. Currently for Connect Care, ACCP is not scheduled to join EPIC until either Wave 8 or 9.
- ACCP RNs and the Dietitian conduct remote home visits using laptops connected to AHS server (utilizing iPhone tethering).
- The Assistant Head Nurse at East Calgary Health Centre can view nursing documentation simultaneously and support staff remotely while at the home visit.
- Staff are demonstrating appropriate educational websites to support client education and resourcing during the visit and make appropriate referrals to other services (ie Food Bank).
- The printable Transfer of Care summary in Meditech provides highlights for both physical and social concerns, and is shared with providers caring for clients in both the antenatal and postnatal periods.

2. Fetal Health Surveillance Update to 3 cm

- Education and training completed for all staff for go live date – implemented Dec 1, 2019.
- In addition we had a full-team review session with Medical Director, Dr. Chadha to look closely at fetal monitoring strips and what is deemed normal vs atypical and why. This support was very validating and helpful for the team.

3. Social Work support

- Increase in financial, mental health and addictions concerns with clients. Able to utilize Partner program, Best Beginning, to access Social Work support and resourcing.
- Transfer of Care documentation shared with Labour and Delivery/postpartum units has increased communication of high risk clients, allowing for quicker identification of clients needing to be seen in acute care by a Social Worker.

4. Clinibase extract

- Used by both postpartum community services, and ACCP, we worked with acute care Clinibase to access a new Clinibase Extract where the ACCP charge RN can see which clients from our caseload have been admitted to hospital.

5. Client Contacts and Provider Consults:

- Client Contacts: ACCP Nurses had over 9400 client care contacts. Clients each receive daily services - home visits and/or telephone contacts. Depending on their gestational age at admission and date of discharge, there is a wide range of contacts per client from 1-74 contacts. 2911 contacts were one to one visits (primarily home visits) which is a 6.7% increase over last year. There were 6520 telephone calls with clients.
- Provider consults: The program completed 424 physician telephone consults and over 400 calls to hospital triage.

Challenges

1. **Program Capacity at times exceeds client volume:** we observe that in various prenatal and postpartum services, there has been a slight decrease in patients this year related to a local decrease in births. However, we are concerned that not all obstetrical providers are consistently referring to the ACCP program. To mitigate this challenge, we attend COMS annually with a booth to reach providers and share information. In addition, we have circulated information packages to physicians and ACCP is on the Alberta Referral Directory. We may consider future surveys to assess provider/patient need.
2. **The new software system chosen to link fetal monitoring within Connect Care** is determined as OBIX. The cost to the ACCP program alone is estimated at \$200,000 which is not feasible. As a first step, ACCP is working with Val Marsden, ED Women's Health and acute care partners to develop a joint proposal for funding. The opportunity for ACCP to have our remote fetal monitoring connect with Connect Care would eliminate significant workload and duplication while also support physician review and confidence in their patient's medical status.
3. **Communication re NST tracings:** our aim is to reach physicians in a timely manner should concerns arise regarding a tracing while at a home visit. Use of technology has allowed us the option to send information remotely. Currently reviewing and finalizing privacy details and process to do this via AHS email (internal email only) and RightFax.
4. **Complex casework:** we continue to observe many clients struggling with social and economic challenges. We access social work support from prenatal teams, but may need to review other ways to connect these families to support systems.
5. **EMS and ACCP client transfers:** We have had an ongoing connection with EMS for quick transfer (and avoiding full reassessment of the patient) of our clients. We continue to refresh and address the policy to ensure that the process is being followed and to recognize the ACCP client letter that each client has been given.

Workforce Planning

ACCP has only 6.62 RN FTEs (full time equivalent) which has been consistent for a number of years. We work continuously to review capacity, workload and geographic coverage for clients. Our program RN FTE remains consistent at this time.

From a physician workforce perspective, we have benefitted from the Medical Director support; Dr. Chadha has supported the raising of awareness of the Program and helping with problem-solving and clinical consultation as well as staff education.

QA/QI and Innovation

ACCP is involved in the Path to Care work and demonstrates strong continuity of patient care as well as effective patient flow. Currently the informal ways the program completes QA/QI are through client surveys, physician surveys, staff surveys, and connections and dialogue with our acute care partners. This year, we submitted an application to the Zone QI Committee to assist us with an upload of fetal monitoring strips to Netcare however the application was not supported for funding this year.

Future Directions and Initiatives

- Explore a pilot for Skype access to prenatal classes for ACCP clients.
- Updating of practice guidelines and evidence based approaches.
- Additional physician partnerships and connections to support referrals and avoid duplication.
- Continually raise awareness of the populations we see – including clients from other zones, who are able to stay within the Calgary Area for monitoring.

Accomplishments and Highlights

- Committee Member: University of Calgary Global Surgery Committee (May 2019-ongoing)
- Laos Project in collaboration with University of Calgary. Nov 15-17, CME in Vientiane on Point of Care third trimester ultrasound.
- teaching in Khammouane Province (Nov 2019)
- Bleeding after Birth course
- Pre-eclampsia – Eclampsia
- Active management of 2nd stage of Labour
- Point of Care ultrasound in 3rd Trimester
- Biophysical Profile by ultrasound
- Delirium Post partum haemorrhage
- Canadians Global Care Society, Board of Directors Nov 2018-ongoing
- Nepal Advisory Council for FIUGA fellowship program Jan 2019-ongoing
- Global Health for the Urogynecologist: Adapting our experience and knowledge to the world environment. Oct 9, 2018 Chair: Cathy Flood, presenter Magali Robert Workshop American Urogynecology Society Meeting, Chicago IL.
- Medicos en Accion in Guatemala - Mission provides Gyne surgical options in a part of Guatemala where these services are not available to local people. Mission provides ENT, Gen SURG and Gyne

Future Directions and Initiatives

- April 14, 2019 Public forum on prolapse, KTM, Nepal

<https://www.youtube.com/watch?v=VgmasiJhRHY>
- April 8-13: teaching surgical prolapse surgery and lectures cystoscopy, anatomy, physiology of micturition, apical prolapse and complications of surgery April 13-20- research project: longterm outcomes of pessary use in the community this involved completion of the research and community health camps

Accomplishments and Highlights

This year we were able to establish a process for Obstetrical Tourists. A collaborative committee was formed comprised of representatives from Low Risk Family Medicine, Midwifery, hospital Pediatrics, and Anesthesia across all sites. The committee recommended the creation of a 'Central Triage' which was formed in the Spring/Summer of 2019.

Central triage now operates under the Department of Obstetrics and Gynecology and reviews all referrals for obstetrical patients without Canadian health care. A screening questionnaire is used to determine if the patient is a 'birth tourist' e.g. no connection to Canada and purely visiting for the purposes of having their baby in Canada. A standard fee is collected and used to pay all providers involved. The governing law and jurisdiction forms are reviewed and signed for both AHS and all obstetrical care providers. The primary goal was to standardize the process and fees for obstetrical birth tourists and provide consistent communication.

Challenges

- As of **Dec 1, there have been ~95 patients** that have come through Central Triage. There are a few that try to evade payment and a few providers that are still continuing to provide care outside the parameters set by Central Triage.
- We are working to establish a process for those patients who are not 'birth tourists'. We have found that providing a medical note has helped expedite AHC for some of these patients.

Future Directions and Initiatives

Continue to educate providers about the Central Triage process and ensure that there is a standard process that doesn't allow for misuse of the system or queue jumping.

Establish a consistent process for patients without health care that are not 'birth tourists' that involves the aid of the Ministry of Health.

Involve AHS to review hospital fee collection and payment.

Ethics approval is being requested for a research paper that will allow for the qualitative analysis of the information being collected, a cost analysis of the cost to the system (3 babies born to date have required prolonged NICU admission) as well as a review of any discrepancies between out of country obstetrical

patients presenting to Calgary AHS sites and those captured by Central Triage (including the providers involved to better delineate why those patients were not directed to Central Triage).

OUT OF COUNTRY



Accomplishments and Highlights

- Wave 2 launch is anticipated to be late spring 2020 and will include rural Calgary zone (High River and Canmore) as well as Red Deer which is a major transfer point into the city. The Department has been very well represented in the provincial efforts. Particularly:
- Dr. Wynne Leung (Area Council co-chair, Provincial Trainer, Area Trainer for Wave 1 and 2)
- Dr. Shunaha Kim-Fine (Area Trainer Wave 2)
- Dr. Charlene Lyndon (CKCM Lead Gynecology, Area Trainer Wave 1 and 2)
- Dr. Stephanie Cooper (CKCM Lead Obstetrics)
- Lorna Spitzke (former nurse educator RGH and now Area Council Core Lead)
- Super user recruitment for wave two was successful with the recruitment of 3 super-users representing the city of Calgary, High River, and Canmore.
- We have been working closely with the CKCM team to ensure that order sets and policies reflect workflows that are standard of care. In addition, there has been some early work with ZWOC to develop pathways specifically with postpartum hypertension to utilize clinical decision support and help with early triage and assessment. There has been discussion about the creation of other workflows through specialist link and e-consult as well to utilize a similar design model.
- An RFP was held to review electronic fetal heart rate monitoring systems that would interface with EPIC and the successful system was OBIX. Work is now underway to secure funding for the zone including ambulatory clinics as well ACCP.
- To support this change, a decision was made from the Area Council, APHP and MNCY to recommend fetal heart rate paper speed change from 1 cm/min to 3 cm/min. A core provincial committee was created with both Dr. Birch and me on the committee. This committee was also instrumental in the creation of an online FHR interpretation/teamwork teaching tool to aid in the transition for those members who would be unable to attend an in person workshop. This online module will be adjusted in the New Year to include a module for AHS outpatient obstetrical clinics.
- There has been a good amount of interest in the programs available for physicians within EPIC. I was able to complete the Physician Builder program and am a Certified EPIC Physician Builder. Dr. Stephen Wood and Selphee Tang will also be attending the Basic Builder program and then move on to the Analytics program. Dr. Shunaha Kim-Fine has also expressed interest in the builder program.
- Work in SCM has tapered down with the attention directed to Connect Care. However, there is still ongoing adjustment and modification of order sets to reflect clinical practice.

Challenges

Connect care faces the usual challenges of being the largest scale change ever to undertaken in the province. This is being done independently without a third party to help strategize the change whilst trying to integrate a number of third party vendors.

Perinatal Mortality Committee

Dr. Pauline Ekwelanga

Accomplishments and Highlights

The Perinatal Mortality Committee is only about 5 months behind. We have reviewed 211 cases from March 2018-March 2019 and another 34 cases since then.

Challenges

- We are sometimes challenged by not having charts available at each site when we have asked for them to be pulled. We sometimes have to put charts forward if pathology or genetics are not ready.
- Workforce Planning
- We continually have 2 representatives from each site – one family doctor and one obstetrician. We have reps from MFM, Pathology, Peds/Neo and Genetics. Patient care managers are also invited to attend.

QA/QI and Innovation

We send copies of all our recommendations to the family doctors and to all other physicians involved in the care of the patient at the time of the loss. We sometimes call to family doctors or specialists if the patient is already pregnant again.

Future Directions and Initiatives

- We would like to ensure that all responses are protected under Section 9. We also need to decide what to do about the reporting of demised fetuses that are born after 20 weeks with their live siblings.
- We are still challenged with how to report fetal demises that occur at less than 20 weeks, but are delivered with live siblings after 20 weeks.

Policy Update

- Management of Antepartum Vaginal Bleeding
- Assessment and Prevention of Early Onset Sepsis in the Newborn outside of the NICU
- Fetal Scalp Electrodes
- Prevention of Peripartum Acquired Invasive Group A Streptococcus
- Induction of Labour and Postpartum Hemorrhage Prophylaxis and Management during Times of Oxytocin Shortage
- Midwives and Nurses Working Together in Maternity Care: A Guide for Collaboration and Teamwork
- Newborn Admission, Assessment and Management in the First Two Hours of Life
- Management of Obstetrical Anal Sphincter Injuries
- Medical Management of Intrauterine Fetal Demise on Maternity Units
- Transfer of Maternity Patients
- Supplementation Volumes for the Well Newborn
- Testing for Gestational Diabetes after 35 Weeks Gestation” was posted by the DIP program, and the Postpartum Maternal and Newborn Pathways (MNCY) were adopted

Measure Names	Moc Grp	Quarter	Site	Measure Values
Deliveries	TOTAL DELIVERIES	YTD Total	Region	9028
Deliveries	TOTAL DELIVERIES	YTD Total	SHC	1532
Deliveries	TOTAL DELIVERIES	YTD Total	RGH	2224
Deliveries	TOTAL DELIVERIES	YTD Total	PLC	2772
Deliveries	TOTAL DELIVERIES	YTD Total	FMC	2500
% of Total MOC Deliveries	TOTAL DELIVERIES	YTD Total	SHC	0.17
% of Total MOC Deliveries	TOTAL DELIVERIES	YTD Total	RGH	0.246
% of Total MOC Deliveries	TOTAL DELIVERIES	YTD Total	PLC	0.307
% of Total MOC Deliveries	TOTAL DELIVERIES	YTD Total	FMC	0.277
Avg LOS (in Days)	TOTAL DELIVERIES	YTD Total	Region	2.041426673
Avg LOS (in Days)	TOTAL DELIVERIES	YTD Total	SHC	1.837467363
Avg LOS (in Days)	TOTAL DELIVERIES	YTD Total	RGH	2.013938849
Avg LOS (in Days)	TOTAL DELIVERIES	YTD Total	PLC	2.003968254
Avg LOS (in Days)	TOTAL DELIVERIES	YTD Total	FMC	2.2324
# C-Section Deliveries	TOTAL DELIVERIES	YTD Total	Region	2801
# C-Section Deliveries	TOTAL DELIVERIES	YTD Total	SHC	443
# C-Section Deliveries	TOTAL DELIVERIES	YTD Total	RGH	666
# C-Section Deliveries	TOTAL DELIVERIES	YTD Total	PLC	856
# C-Section Deliveries	TOTAL DELIVERIES	YTD Total	FMC	836
C-Section Rate (% of deliveries)	TOTAL DELIVERIES	YTD Total	Region	0.31
C-Section Rate (% of deliveries)	TOTAL DELIVERIES	YTD Total	SHC	0.289
C-Section Rate (% of deliveries)	TOTAL DELIVERIES	YTD Total	RGH	0.299
C-Section Rate (% of deliveries)	TOTAL DELIVERIES	YTD Total	PLC	0.309
C-Section Rate (% of deliveries)	TOTAL DELIVERIES	YTD Total	FMC	0.334
# Spontaneous Vaginal Deliveries (exclude forcep/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	Region	5002
# Spontaneous Vaginal Deliveries (exclude forcep/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	SHC	958
# Spontaneous Vaginal Deliveries (exclude forcep/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	RGH	1237
# Spontaneous Vaginal Deliveries (exclude forcep/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	PLC	1402
# Spontaneous Vaginal Deliveries (exclude forcep/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	FMC	1405
% Spontaneous Vaginal Deliveries excludes forceps/vacuum (% of deliveries)	TOTAL DELIVERIES	YTD Total	Region	0.554
% Spontaneous Vaginal Deliveries excludes forceps/vacuum (% of deliveries)	TOTAL DELIVERIES	YTD Total	SHC	0.625
% Spontaneous Vaginal Deliveries excludes forceps/vacuum (% of deliveries)	TOTAL DELIVERIES	YTD Total	RGH	0.556
% Spontaneous Vaginal Deliveries excludes forceps/vacuum (% of deliveries)	TOTAL DELIVERIES	YTD Total	PLC	0.506
% Spontaneous Vaginal Deliveries excludes forceps/vacuum (% of deliveries)	TOTAL DELIVERIES	YTD Total	FMC	0.562
# Vaginal Deliveries by Forceps or Vacuum extraction	TOTAL DELIVERIES	YTD Total	Region	1225
# Vaginal Deliveries by Forceps or Vacuum extraction	TOTAL DELIVERIES	YTD Total	SHC	131
# Vaginal Deliveries by Forceps or Vacuum extraction	TOTAL DELIVERIES	YTD Total	RGH	321
# Vaginal Deliveries by Forceps or Vacuum extraction	TOTAL DELIVERIES	YTD Total	PLC	514
# Vaginal Deliveries by Forceps or Vacuum extraction	TOTAL DELIVERIES	YTD Total	FMC	259
% Vaginal Deliveries by Forceps or Vacuum extract (% of total deliveries)	TOTAL DELIVERIES	YTD Total	Region	0.136
% Vaginal Deliveries by Forceps or Vacuum extract (% of total deliveries)	TOTAL DELIVERIES	YTD Total	SHC	0.086
% Vaginal Deliveries by Forceps or Vacuum extract (% of total deliveries)	TOTAL DELIVERIES	YTD Total	RGH	0.144
% Vaginal Deliveries by Forceps or Vacuum extract (% of total deliveries)	TOTAL DELIVERIES	YTD Total	PLC	0.185
% Vaginal Deliveries by Forceps or Vacuum extract (% of total deliveries)	TOTAL DELIVERIES	YTD Total	FMC	0.104
Inductions (Includes those done before admit)	TOTAL DELIVERIES	YTD Total	Region	3611
Inductions (Includes those done before admit)	TOTAL DELIVERIES	YTD Total	SHC	555
Inductions (Includes those done before admit)	TOTAL DELIVERIES	YTD Total	RGH	824
Inductions (Includes those done before admit)	TOTAL DELIVERIES	YTD Total	PLC	1274
Inductions (Includes those done before admit)	TOTAL DELIVERIES	YTD Total	FMC	958
Induction Rate (% of total deliveries)	TOTAL DELIVERIES	YTD Total	Region	0.4
Induction Rate (% of total deliveries)	TOTAL DELIVERIES	YTD Total	SHC	0.362
Induction Rate (% of total deliveries)	TOTAL DELIVERIES	YTD Total	RGH	0.371
Induction Rate (% of total deliveries)	TOTAL DELIVERIES	YTD Total	PLC	0.46
Induction Rate (% of total deliveries)	TOTAL DELIVERIES	YTD Total	FMC	0.383

Measure Names	Moc Grp	Quarter	Site	Measure Values
# Pts with Prev C-Section	TOTAL DELIVERIES	YTD Total	Region	1570
# Pts with Prev C-Section	TOTAL DELIVERIES	YTD Total	SHC	249
# Pts with Prev C-Section	TOTAL DELIVERIES	YTD Total	RGH	386
# Pts with Prev C-Section	TOTAL DELIVERIES	YTD Total	PLC	532
# Pts with Prev C-Section	TOTAL DELIVERIES	YTD Total	FMC	403
# Vaginal Birth After C-Section (VBAC)	TOTAL DELIVERIES	YTD Total	Region	308
# Vaginal Birth After C-Section (VBAC)	TOTAL DELIVERIES	YTD Total	SHC	54
# Vaginal Birth After C-Section (VBAC)	TOTAL DELIVERIES	YTD Total	RGH	82
# Vaginal Birth After C-Section (VBAC)	TOTAL DELIVERIES	YTD Total	PLC	109
# Vaginal Birth After C-Section (VBAC)	TOTAL DELIVERIES	YTD Total	FMC	63
VBAC Rate (% successful vag deliveries/trail of labor)	TOTAL DELIVERIES	YTD Total	Region	0.754901961
VBAC Rate (% successful vag deliveries/trail of labor)	TOTAL DELIVERIES	YTD Total	SHC	0.771428571
VBAC Rate (% successful vag deliveries/trail of labor)	TOTAL DELIVERIES	YTD Total	RGH	0.759259259
VBAC Rate (% successful vag deliveries/trail of labor)	TOTAL DELIVERIES	YTD Total	PLC	0.741496599
VBAC Rate (% successful vag deliveries/trail of labor)	TOTAL DELIVERIES	YTD Total	FMC	0.759036145
# of Episiotomies Spontaneous Vaginal Deliveries	TOTAL DELIVERIES	YTD Total	Region	243
# of Episiotomies Spontaneous Vaginal Deliveries	TOTAL DELIVERIES	YTD Total	SHC	35
# of Episiotomies Spontaneous Vaginal Deliveries	TOTAL DELIVERIES	YTD Total	RGH	34
# of Episiotomies Spontaneous Vaginal Deliveries	TOTAL DELIVERIES	YTD Total	PLC	114
# of Episiotomies Spontaneous Vaginal Deliveries	TOTAL DELIVERIES	YTD Total	FMC	60
# of Episiotomies Assisted Forceps/Vacuum	TOTAL DELIVERIES	YTD Total	Region	338
# of Episiotomies Assisted Forceps/Vacuum	TOTAL DELIVERIES	YTD Total	SHC	36
# of Episiotomies Assisted Forceps/Vacuum	TOTAL DELIVERIES	YTD Total	RGH	78
# of Episiotomies Assisted Forceps/Vacuum	TOTAL DELIVERIES	YTD Total	PLC	160
# of Episiotomies Assisted Forceps/Vacuum	TOTAL DELIVERIES	YTD Total	FMC	64
# of Episiotomies Total	TOTAL DELIVERIES	YTD Total	Region	581
# of Episiotomies Total	TOTAL DELIVERIES	YTD Total	SHC	71
# of Episiotomies Total	TOTAL DELIVERIES	YTD Total	RGH	112
# of Episiotomies Total	TOTAL DELIVERIES	YTD Total	PLC	274
# of Episiotomies Total	TOTAL DELIVERIES	YTD Total	FMC	124
% of Episiotomies Spontaneous Vaginal Deliveries (% of Vag Del)	TOTAL DELIVERIES	YTD Total	Region	0.049
% of Episiotomies Spontaneous Vaginal Deliveries (% of Vag Del)	TOTAL DELIVERIES	YTD Total	SHC	0.037
% of Episiotomies Spontaneous Vaginal Deliveries (% of Vag Del)	TOTAL DELIVERIES	YTD Total	RGH	0.027
% of Episiotomies Spontaneous Vaginal Deliveries (% of Vag Del)	TOTAL DELIVERIES	YTD Total	PLC	0.081
% of Episiotomies Spontaneous Vaginal Deliveries (% of Vag Del)	TOTAL DELIVERIES	YTD Total	FMC	0.043
% of Episiotomies Assisted Forceps/Vacuum (% of Vag Del)	TOTAL DELIVERIES	YTD Total	Region	0.276
% of Episiotomies Assisted Forceps/Vacuum (% of Vag Del)	TOTAL DELIVERIES	YTD Total	SHC	0.275
% of Episiotomies Assisted Forceps/Vacuum (% of Vag Del)	TOTAL DELIVERIES	YTD Total	RGH	0.243
% of Episiotomies Assisted Forceps/Vacuum (% of Vag Del)	TOTAL DELIVERIES	YTD Total	PLC	0.311
% of Episiotomies Assisted Forceps/Vacuum (% of Vag Del)	TOTAL DELIVERIES	YTD Total	FMC	0.247
% of Episiotomies Total (% Vag Del)	TOTAL DELIVERIES	YTD Total	Region	0.093303356
% of Episiotomies Total (% Vag Del)	TOTAL DELIVERIES	YTD Total	SHC	0.065197429
% of Episiotomies Total (% Vag Del)	TOTAL DELIVERIES	YTD Total	RGH	0.071887035
% of Episiotomies Total (% Vag Del)	TOTAL DELIVERIES	YTD Total	PLC	0.143006263
% of Episiotomies Total (% Vag Del)	TOTAL DELIVERIES	YTD Total	FMC	0.074519231
# of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	Region	3217
# of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	SHC	592
# of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	RGH	831
# of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	PLC	1014
# of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	FMC	780
# of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	Region	1555
# of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	SHC	252
# of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	RGH	396
# of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	PLC	481
# of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	FMC	426
# of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	Region	312
# of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	SHC	50
# of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	RGH	69
# of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	PLC	81
# of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	FMC	112
% of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	Region	0.625
% of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	SHC	0.633
% of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	RGH	0.649
% of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	PLC	0.619
% of Epidural In Labor by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	FMC	0.601
% of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	Region	0.501
% of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	SHC	0.514
% of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	RGH	0.519
% of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	PLC	0.506
% of Epidural In Labor by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	FMC	0.473

Measure Names	Moc Grp	Quarter	Site	Measure Values
% of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	Region	0.403
% of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	SHC	0.467
% of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	RGH	0.381
% of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	PLC	0.443
% of Epidural In Labor by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	FMC	0.37
# of Second Stage Of Labor > 180 mins	TOTAL DELIVERIES	YTD Total	Region	789
# of Second Stage Of Labor > 180 mins	TOTAL DELIVERIES	YTD Total	SHC	202
# of Second Stage Of Labor > 180 mins	TOTAL DELIVERIES	YTD Total	RGH	249
# of Second Stage Of Labor > 180 mins	TOTAL DELIVERIES	YTD Total	PLC	165
# of Second Stage Of Labor > 180 mins	TOTAL DELIVERIES	YTD Total	FMC	173
% of Laboring Women with Long Second Stage Of Labor	TOTAL DELIVERIES	YTD Total	Region	0.101964332
% of Laboring Women with Long Second Stage Of Labor	TOTAL DELIVERIES	YTD Total	SHC	0.153262519
% of Laboring Women with Long Second Stage Of Labor	TOTAL DELIVERIES	YTD Total	RGH	0.132517296
% of Laboring Women with Long Second Stage Of Labor	TOTAL DELIVERIES	YTD Total	PLC	0.069356873
% of Laboring Women with Long Second Stage Of Labor	TOTAL DELIVERIES	YTD Total	FMC	0.080018501
# of Unsuccessful VBAC (failed trial of labor)	TOTAL DELIVERIES	YTD Total	Region	100
# of Unsuccessful VBAC (failed trial of labor)	TOTAL DELIVERIES	YTD Total	SHC	16
# of Unsuccessful VBAC (failed trial of labor)	TOTAL DELIVERIES	YTD Total	RGH	26
# of Unsuccessful VBAC (failed trial of labor)	TOTAL DELIVERIES	YTD Total	PLC	38
# of Unsuccessful VBAC (failed trial of labor)	TOTAL DELIVERIES	YTD Total	FMC	20
% of Failed VBAC attempts (failed TOL / trial of labor)	TOTAL DELIVERIES	YTD Total	Region	0.245098039
% of Failed VBAC attempts (failed TOL / trial of labor)	TOTAL DELIVERIES	YTD Total	SHC	0.228571429
% of Failed VBAC attempts (failed TOL / trial of labor)	TOTAL DELIVERIES	YTD Total	RGH	0.240740741
% of Failed VBAC attempts (failed TOL / trial of labor)	TOTAL DELIVERIES	YTD Total	PLC	0.258503401
% of Failed VBAC attempts (failed TOL / trial of labor)	TOTAL DELIVERIES	YTD Total	FMC	0.240963855
# Spontaneous Vag Deliveries (excl foceps/vacuum) Discharged <= 24 Hrs PP	TOTAL DELIVERIES	YTD Total	Region	1326
# Spontaneous Vag Deliveries (excl foceps/vacuum) Discharged <= 24 Hrs PP	TOTAL DELIVERIES	YTD Total	SHC	345
# Spontaneous Vag Deliveries (excl foceps/vacuum) Discharged <= 24 Hrs PP	TOTAL DELIVERIES	YTD Total	RGH	385
# Spontaneous Vag Deliveries (excl foceps/vacuum) Discharged <= 24 Hrs PP	TOTAL DELIVERIES	YTD Total	PLC	248
# Spontaneous Vag Deliveries (excl foceps/vacuum) Discharged <= 24 Hrs PP	TOTAL DELIVERIES	YTD Total	FMC	348
% Spontaneous Vag Deliveries Disch <= 24 hrs PP(excl forceps/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	Region	0.265
% Spontaneous Vag Deliveries Disch <= 24 hrs PP(excl forceps/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	SHC	0.36
% Spontaneous Vag Deliveries Disch <= 24 hrs PP(excl forceps/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	RGH	0.311
% Spontaneous Vag Deliveries Disch <= 24 hrs PP(excl forceps/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	PLC	0.177
% Spontaneous Vag Deliveries Disch <= 24 hrs PP(excl forceps/vacuum deliveries)	TOTAL DELIVERIES	YTD Total	FMC	0.248
# All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	Region	1464
# All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	SHC	368
# All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	RGH	434
# All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	PLC	293
# All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	FMC	369
% All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	Region	0.162162162
% All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	SHC	0.240208877
% All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	RGH	0.195143885
% All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	PLC	0.105699856
% All Deliveries Discharged <= 24 hrs Postpartum	TOTAL DELIVERIES	YTD Total	FMC	0.1476
Postpartum Average LOS (Hrs)	TOTAL DELIVERIES	YTD Total	Region	40.40754652
Postpartum Average LOS (Hrs)	TOTAL DELIVERIES	YTD Total	SHC	34.48593995
Postpartum Average LOS (Hrs)	TOTAL DELIVERIES	YTD Total	RGH	39.51957284
Postpartum Average LOS (Hrs)	TOTAL DELIVERIES	YTD Total	PLC	41.57641053
Postpartum Average LOS (Hrs)	TOTAL DELIVERIES	YTD Total	FMC	43.530212

Measure Names	Moc Grp	Quarter	Site	Measure Values
# of Deliveries by Risk Score "LOW" 0-2	TOTAL DELIVERIES	YTD Total	Region	5151
# of Deliveries by Risk Score "LOW" 0-2	TOTAL DELIVERIES	YTD Total	SHC	935
# of Deliveries by Risk Score "LOW" 0-2	TOTAL DELIVERIES	YTD Total	RGH	1280
# of Deliveries by Risk Score "LOW" 0-2	TOTAL DELIVERIES	YTD Total	PLC	1639
# of Deliveries by Risk Score "LOW" 0-2	TOTAL DELIVERIES	YTD Total	FMC	1297
# of Deliveries by Risk Score "MODERATE 3-6"	TOTAL DELIVERIES	YTD Total	Region	3103
# of Deliveries by Risk Score "MODERATE 3-6"	TOTAL DELIVERIES	YTD Total	SHC	490
# of Deliveries by Risk Score "MODERATE 3-6"	TOTAL DELIVERIES	YTD Total	RGH	763
# of Deliveries by Risk Score "MODERATE 3-6"	TOTAL DELIVERIES	YTD Total	PLC	950
# of Deliveries by Risk Score "MODERATE 3-6"	TOTAL DELIVERIES	YTD Total	FMC	900
# of Deliveries by Risk Score "HIGH" >6	TOTAL DELIVERIES	YTD Total	Region	774
# of Deliveries by Risk Score "HIGH" >6	TOTAL DELIVERIES	YTD Total	SHC	107
# of Deliveries by Risk Score "HIGH" >6	TOTAL DELIVERIES	YTD Total	RGH	181
# of Deliveries by Risk Score "HIGH" >6	TOTAL DELIVERIES	YTD Total	PLC	183
# of Deliveries by Risk Score "HIGH" >6	TOTAL DELIVERIES	YTD Total	FMC	303
% of Deliveries by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	Region	0.571
% of Deliveries by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	SHC	0.61
% of Deliveries by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	RGH	0.576
% of Deliveries by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	PLC	0.591
% of Deliveries by Risk Score LOW 0-2	TOTAL DELIVERIES	YTD Total	FMC	0.519
% of Deliveries by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	Region	0.344
% of Deliveries by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	SHC	0.32
% of Deliveries by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	RGH	0.343
% of Deliveries by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	PLC	0.343
% of Deliveries by Risk Score MODERATE 3-6	TOTAL DELIVERIES	YTD Total	FMC	0.36
% of Deliveries by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	Region	0.086
% of Deliveries by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	SHC	0.07
% of Deliveries by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	RGH	0.081
% of Deliveries by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	PLC	0.066
% of Deliveries by Risk Score HIGH >6	TOTAL DELIVERIES	YTD Total	FMC	0.121



Specialist LINK Monthly Call Volume December 2019

Total Calls November 2019

833

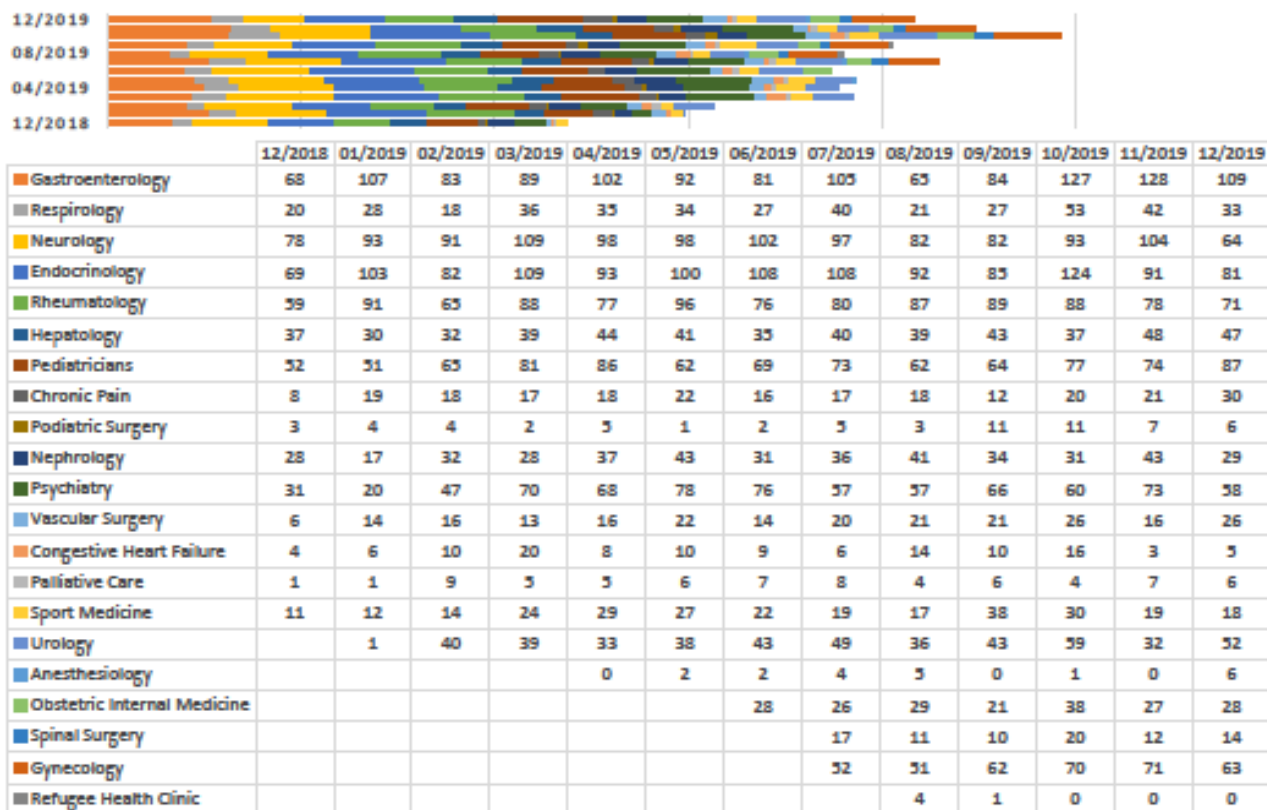
Total Calls Previous Month

896

Total Calls since service start

19,192

SPECIALIST LINK CALL VOLUME REPORTING



Survey collection status update

Specialty	Start date	Nr Survey received in Dec	Total of surveys received	Total of calls	Target Nr of surveys*
Vascular surgery	March, 2018	4	50	303	73
Congestive Heart Failure	March, 2018	0	14	169	61
Sport Medicine	October, 2018	2	25	284	72
Urology	January, 2019	0	3	465	80
Anesthesiology	April, 2019	0	0	20	17
Gynecology	July, 2019	0	0	369	76
Refugee Health Clinic	August, 2019	0	0	5	5

* 90% confidence and 10% margin of error

Specialist LINK monthly call volume report December 2019

Publications

- Christine Osborne, Jaelene Mannerfeldt, Philippa Brain, Sarah McQuillan. Difficulties in Transition of Care from Pediatric to Adult Gynecology Providers. Should we Maintain Care into Adulthood? Journal of Pediatric and Adolescent Gynecology, Available online 22 November 2019.
- Christine Osborne, Sarah McQuillan, Philippa Brain. Who Should be Following the Trans-Female Patient Pre and Post Vaginoplasty? An Argument for the Pediatric Gynecologist. Journal of Obstetrics and Gynaecology Canada. Accepted for publication. In prepublication.
- [Uterosacral vault suspension \(USLS\) at the time of hysterectomy: laparoscopic versus vaginal approach.](#) Houlihan S, Kim-Fine S, Birch C, Tang S, Brennand EA. Int Urogynecol J. 2019 Apr;30(4):611-621. doi: 10.1007/s00192-018-3801-5. Epub 2018 Nov 5.
- [Evaluation of the Effect of Surgeon's Operative Volume and Specialty on Likelihood of Revision After Mesh Midurethral Sling Placement.](#) Brennand EA, Quan H. Obstet Gynecol. 2019 Jun;133(6):1099-1108. doi: 10.1097/AOG.0000000000003275.
- [Prevalence of Pelvic Floor Disorders in the Fibromyalgia Population: A Systematic Review.](#) Thornton KGS, Robert M. J Obstet Gynaecol Can. 2019 Jul 16. pii: S1701-2163(19)30088-X. doi: 10.1016/j.jogc.2019.02.013. [Epub ahead of print] Review.
- [Second-Degree Burn Sustained After Vaginal Steaming.](#) Robert M. J Obstet Gynaecol Can. 2019 Jun;41(6):838-839. doi: 10.1016/j.jogc.2018.07.013. Epub 2018 Oct 23.
- [Initial clinical experience with selective bladder denervation for refractory overactive bladder.](#) Tu LM, De Wachter S, Robert M, Dmochowski RR, Miller LE, Everaert K. Neurourol Urodyn. 2019 Feb;38(2):644-652. doi: 10.1002/nau.23881. Epub 2018 Nov 29.
- [Incidence and contributing factors of perioperative complications in surgical procedures for pelvic organ prolapse.](#) Alshankiti H, Houlihan S, Robert M; Calgary Women's Pelvic Health Research Group. Int Urogynecol J. 2019 Nov;30(11):1945-1953. doi: 10.1007/s00192-019-03873-5. Epub 2019 Jan 21.
- [A prospective study investigating the diagnostic agreement between urodynamics and dynamic cystoscopy in women presenting with mixed urinary incontinence.](#) Globerman D, Gagnon LH, Tang S, Brennand E, Kim-Fine S, Robert M. Int Urogynecol J. 2019 May;30(5):823-829. doi: 10.1007/s00192-018-3671-x. Epub 2018 May 29.
- [Uterine-preserving surgeries for the repair of pelvic organ prolapse: a systematic review with meta-analysis and clinical practice guidelines.](#) Meriwether KV, Balk EM, Antosh DD, Olivera CK, Kim-Fine S, Murphy M, Grimes CL, Sleemi A, Singh R, Dieter AA, Crisp CC, Rahn DD. Int Urogynecol J. 2019 Apr;30(4):505-522. doi: 10.1007/s00192-019-03876-2. Epub 2019 Feb 11. Review.
- [Correlation of Electronic \(Web-Based and Smartphone\) Administration of Measures of Pelvic Floor Dysfunction: A Randomized Controlled Trial.](#) Grimes CL, Antosh DD, Oliphant S, Yurteri-Kaplan L, Kim-Fine S, Melamud G, Heisler C, Chung DE; Collaborative Research in Pelvic Surgery Consortium (CoRPS). Female Pelvic Med Reconstr Surg. 2019 Mar 15.
- [Randomized controlled trial of silver-alloy-impregnated suprapubic catheters versus standard suprapubic catheters in assessing urinary tract infection rates in urogynecology patients.](#) Singh R, Hokenstad ED, Wiest SR, Kim-Fine S, Weaver AL, McGree ME, Klingele CJ, Trabuco EC, Gebhart JB. Int Urogynecol J. 2019 May;30(5):779-787. doi: 10.1007/s00192-018-3726-z. Epub 2018 Aug 25.
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- Mahajan A, Kemp A, Metcalfe A, Hawkins TLA, Dowling S, Nerenberg K. 2019. Postpartum hypertensive disorders in the emergency department – a retrospective review of local practice in Calgary, Alberta. In press *Pregnancy Hypertension*
- Pirwany I, Wood S, Skiffington J, Metcalfe A. 2019. Impact of provider payment structure on obstetrical interventions and outcomes: a difference-in-differences analysis. In press *JOGC*
- Salmon C, Sauve R, LeJour C, Fenton T, Metcalfe A. 2019. A single gestational weight gain recommendation is possible for all classes of obese pregnant women. In press *Obesity Research and Clinical Practice*
- Papalia N, Metcalfe A. 2019. Can we estimate the prevalence of comorbidities during the delivery hospitalization alone? Submitted to *Paediatric and Perinatal Epidemiology*
- Sheikh M, Nelson G, Wood S, Metcalfe A. 2019. Surgical errors and complications following caesarean section in the United States. In press *American Journal of Obstetrics and Gynecology*
- Scime NV, Chaput KH, Faris PE, Quan H, Tough SC, Metcalfe A. 2019. Pregnancy complications and risk of preterm birth according to maternal age: a population-based study of delivery hospitalizations in Alberta. In press *Acta Obstetrica et Gynecologica Scandinavica*
- Lee S, Seow C, Adhikari K, Metcalfe A. 2019. Pregnant women with inflammatory bowel disease are more likely to be adherent to biologic therapies than other medications. In press *Alimentary Pharmacology and Therapeutics*
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- Skiffington J, Metcalfe A, Tang S, Wood SL. 2019. Potential impact of guidelines for the prevention of caesarean deliveries in a contemporary Alberta population. In press *Journal of Obstetricians and Gynecologists of Canada*
- Wen C, Metcalfe A, Anderson T, Johnson JA, Sigal RJ, Nerenberg K. 2019. Lipid screening the early postpartum period after hypertensive disorders of pregnancy. In press *Journal of Clinical Lipidology*
- Otero Varela L, Le Pogam MA, Metcalfe A, Kjaer Kristensen P, Hider P, Patel A, Kim H, Carlini E, Perego R, Gini R. 2019. Empowering knowledge generation through an international data network: the IMeCCHI-DATANETWORK. In press *International Journal of Population Data Science*
- Adhikari K, Patten SB, Lee S, Metcalfe A. 2019. Risk of adverse perinatal outcomes among women with pharmacologically treated and untreated depression during pregnancy. *Pediatric and Perinatal Epidemiology* 33:323-331
- Lee S, Crowe M, Seow CH, Kotze P, Kaplan GG, Metcalfe A, Ricciuto A, Benchimol EI, Kuenzig ME. 2019. The impact of surgical therapies for inflammatory bowel disease on female fertility. *Cochrane Database of Systematic Reviews* 7:CD012711
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- Premji S, McDonald SW, Metcalfe A, Faris P, Quan H, Tough S, McNeil DA. 2019. Examining postpartum depression screening, diagnosis, and treatment patterns in Alberta, Canada using the All Our Babies cohort and administrative data. *Preventative Medicine Reports* 14: 1000888

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List of Current Studies

<p>Study name: The REDUCED Trial REDUCED Trial (multicenter Clustered RCT to reduce primary Cesarean Section completed first of two analysis periods. Ethics: REB16-1576 Update: Phase 1 ongoing.</p>
<p>Study name: Early Void Dysfunction (Sling Mobilization) PI: Brennand Ethics: REB14-0061 (Mar 26) Update: submitted to IUGA for presentation and has been accepted to IUJ for publication</p>
<p>Study name: FACT4 PI: Wood Ethics: E24130 (Oct 14) Update: Following participants to age 4. Gathering consent at present. Follow ups starting soon.</p>
<p>Study name: Optimal GA PI: Wood Ethics: E23978 (Sept 13) Update: On going</p>
<p>Study name: MUST (Midurethral Sling Tensioning) PI: Brennand Ethics: REB15-0455 Update: Data analysis underway</p>
<p>Study name: Healthy Controls PI: Metcalfe Ethics: Update: Study closed recruitment reached. Data being compiled.</p>
<p>Study name: Physician compensation PI: Metcalfe Ethics: REB18-0123 Update: Manuscript drafted. Will be submitted for publication shortly.</p>
<p>Study name: ERAS C-Section experience and opinion survey PI Ethics: Update: Data being complied</p>
<p>Study name: CNN Epic Babies PI: Dr. Candace O'Quinn/Dr.Ayman Ethics: Update: Chart review on going. Dr.O'Quinn/Dr.Aymann taking over forDr. Wilson and Dr. Yee</p>
<p>Study name: Residential proximity to hydraulic fracturing sites and child health PI: Amy Metcalfe Ethics: REB19-0631 Update: Ethics approval obtained, GIS analysis completed, waiting for data from AHS.</p>

Study name: Opioid use during pregnancy and neonatal abstinence syndrome PI: Amy Metcalfe Ethics: REB19-0635 (Awaiting Review) Update:
Study name: Validation of cancer recurrence coding in the Alberta Cancer Registry PI: Amy Metcalfe Ethics: HREBA.CC-18-0591 Update: Manuscript submitted for publication
Study name: Impact of clinical subtypes of preterm birth on long-term child health PI: Amy Metcalfe Ethics: REB17-0080 Update: Manuscript submitted for publication
Study name: Maternal and child outcomes after pregnancy-associated and postpartum cancer PI: Amy Metcalfe Ethics: HREBA.CC-17-0588 Update: Data analysis ongoing
Study name: Infertility as an early marker for cardiovascular disease PI: Amy Metcalfe Ethics: Not required, secondary use of data made available for use by investigators Update: Drafting manuscript
Study name: Developing a novel intervention for parents in recovery from addiction PI: Katie Chaput Ethics: REB16-0928 Update: Qualitative data gathered and summarized, intervention to be developed
Study name: Paraprofessional telephone support for preventing PPD PI: Katie Chaput Ethics: REB18-1656 Update: Part II of data collection
Study name: Development of the Cannabis exposure in pregnancy tool PI: Katie Chaput Ethics: REB19-0670 Update: Tool validation in progress, funding to be confirmed
Study name: Inflammatory Biomarkers in antenatal depression and associations with child development at 12 and 24 months PI: Katie Chaput Ethics: REB19-0270 Update: Funding in place, analysis beginning May 2019
Study name: Hypertensive Disorders of pregnancy and breastfeeding outcomes PI: Katie Chaput Ethics: REB19-0270 Update: Analysis ongoing

<p>Study name: Hypertensive Disorders of Pregnancy and Child development outcomes a 12 and 24 months</p> <p>PI: Katie Chaput</p> <p>Ethics: REB18-1779</p> <p>Update: Data cleaning in progress</p>
<p>Study name: High Risk Pregnancy and breastfeeding initiation and duration in a Calgary Cohort</p> <p>PI: Katie Chaput</p> <p>Ethics: REB18-0853</p> <p>Update: Analysis ongoing</p>
<p>Study name: Breastfeeding intentions, outcomes, and perceptions of support in women with pre-existing conditions: the Motherhood and Chronic Illness (MaCI) mixed methods cohort study</p> <p>PI: Katie Chaput</p> <p>Ethics: REB19-0443</p> <p>Update: Recruitment in progress</p>
<p>Study name: Previous pregnancy complication and risk of subsequent adverse outcome: Is a previous stillbirth associated with recurrent stillbirth?</p> <p>PI: Wood</p> <p>Ethics: REB15-2773</p> <p>Update: Manuscript in progress</p>
<p>Study name: Enhanced First Trimester Scan – An Implementation Study</p> <p>PI: Jo-Ann Johnson</p> <p>Ethics:</p> <p>Update: Data collection in progress</p>
<p>Study name: Surgical site infection rates in Gynecology Oncology patients and the implementation of a SSI prevention bundle</p> <p>PI: Anna Cameron</p> <p>Ethics:</p> <p>Update: Analysis in progress</p>
<p>Study name: Outcome for fetal megacystis diagnosed at 11-14 weeks gestation</p> <p>PI: David Somerset</p> <p>Ethics: REB17-0244</p> <p>Update: Data collection in progress</p>
<p>Study name: Improving fetal surveillance in labour with scalp blood lactate</p> <p>PI: Ingrid Kristensen</p> <p>Ethics: to be submitted for approval</p> <p>Update: Started as a QI project but have added a research goal to the project</p>

Research Grants

Perioperative Care in Neonatal Abdominal Surgery: Implementation of an Enhanced Recovery After Surgery (ERAS®) Guideline

MNCY SCN Health Outcomes Improvement Fund II (HOIFII) Grant Competition

\$185,695 (Apr 1, 2019 – Mar 31, 2022)

Co-Principal Investigator- Gregg Nelson

Assessing cancer screening and outcomes among First Nations people in Alberta

CIHR Operating Grant: Data Analysis Using Existing Databases and Cohorts

\$99,864 (Mar 1, 2019 – Feb 28, 2020)

Co-Applicant- Gregg Nelson

Alberta First Nations Cancer Strategy & Practice Change Implementation Initiative

Canadian Partnership Against Cancer (CPAC)

\$700,000 (Dec 1, 2018 – Nov 30, 2022)

Co-Lead- Gregg Nelson

Comprehensive perioperative care program in Minimally Invasive Gynecologic Oncology Surgery: MIGOS project

AHSC AFP Innovation Fund – University Health Network (Toronto, Ontario)

\$185,000 (Dec 1, 2018 – Nov 30, 2020)

Co-Applicant (ERAS Expert) - Gregg Nelson

Functional and Molecular Characterization of a Novel Variant of Ovarian Cancer

Cancer Research Society Operating Grant

\$120,000 (Sept 1, 2018 – Aug 31, 2020)

Co-Applicant- Gregg Nelson

Impact of Maternal Cancer and In-Utero Exposure to Chemotherapy on Long-Term Child Health

CIHR Project Grant

\$306,000 (Mar 1, 2018 – Mar 1, 2021)

Co-Applicant- Gregg Nelson

Survival, recurrence and subsequent obstetrical outcomes following pregnancy-associated and postpartum cancer

CIHR New Investigator Operating Grant: Maternal, Reproductive, Child & Youth Health competition

\$45,000 (May 1, 2017 – May 1, 2020)

Co-Applicant- Gregg Nelson

Patient Centred Innovation in Surgery: An Application to support access to patient information and provider continuity in the implementation of Enhanced Recovery After Surgery pathways in Alberta Health Services

Alberta Innovates – Accelerating Innovations into Care (AICE)

\$150,000 (Oct 1, 2017 – Oct 1, 2019)

Principal Investigator- Gregg Nelson

A Protocol for Mobile App Postoperative Home Monitoring after Enhanced Recovery Oncologic Surgery
Alberta Cancer Clinical Trials - Investigator-Initiated Trial Competition
\$150,000 (Sep 1, 2017 – Sep 1, 2019)
Co-Principal Investigator- Gregg Nelson

The 5-minute surgeon - How Ob/Gyn residents learn from videos
Taylor Institute for Teaching and Learning - Scholarship of Teaching and Learning Grant
\$28,700 (June 2017 – June 2019)
Principal Applicant- Gregg Nelson

Development of an Enhanced Recovery After Surgery Caesarean Section Guideline
Calgary Centre for Clinical Research (CCCR) Fund Seed Grant
\$23,000 (June 1, 2017 – May 31, 2019)
Principal Applicant- Gregg Nelson

First Nations Views on Human Papilloma Virus (HPV) Vaccination: A Community-Based Dialogue about Preventing Cervical and Other Cancers
CIHR Sponsored Indigenous Gathering (non-peer reviewed)
\$20,000 (June 9, 2017)
Lead- Gregg Nelson

Patients as partners in an Enhanced Recovery After Surgery program
CIHR Strategy for Patient-Oriented Research (SPOR) - Patient Oriented Research Collaboration Grants
\$25,000 (April 2017 – March 2018)
Principal Applicant- Gregg Nelson

Childhood Immunization in Alberta First Nations People: Measurement of Coverage and Identification of Barriers and Supports
CIHR Operating Grant: Improved Immunization Coverage Initiative - First Nations/Inuit/Métis
\$199,701 (April 2017-March 2019)
Co-Principal Investigator- Gregg Nelson

Enhancing HPV Vaccination In First Nations Populations in Alberta (EHVINA Study): Towards a Sustainable, Community-Driven, Knowledge Translation Strategy
AIHS-CPRO Grant Competition
\$1,248,400 (Mar 31 2016 – Mar 30 2021)
Collaborative Lead- Gregg Nelson

Enhancing Patients' Recovery After Surgery (ERAS): Strategy to Transform Care and Maximize the Expected Value
AIHS-PRIHS Grant
\$750,000 (Apr 2014 – Mar 2018)
Co-Principal Applicant- Gregg Nelson

Economic Evaluation of ERAS Implementation
Institute of Health Economics (University of Alberta)
\$150,000 (Dec 2015 – Dec 2017)
Co-Principal Applicant- Gregg Nelson

Surgical site infection rates in Gynecologic Oncology patients and the implementation of a SSI prevention bundle

Department of Obstetrics & Gynecology, DEAR/Leadership Circle Grant

\$2000 (April 2018 – April 2019)

Co-Principal Investigator- Gregg Nelson

Is there added benefit of a second follow-up visit for women with complete excision of high-grade dysplasia?

Department of Obstetrics & Gynecology, DEAR/Leadership Circle Grant

\$3500 (April 2016 – April 2017)

Principle Investigator – Gregg Nelson

The Motherhood and Chronic Illness Project (MaCI)

Alva Foundation

\$35,000

Principle Investigator -Katie Chaput

Campus Alberta Health Outcomes & Public Health Meeting Grant

Campus Alberta

\$4000

Co-Principle Investigator- Erin Brennand

Impact of residential proximity to hydraulic fracturing on human reproduction and child development

New Frontiers in Research Fund

\$250,000

Principle Investigator- Amy Metcalfe

Breastfeeding intentions, outcomes and perceptions of support in women with pre-existing conditions: the MaCI mixed methods cohort study.

University of Calgary, Department of Pediatrics Innovation Award

\$25,000

Co-Principle Investigator(s) - Katie Chaput and Amy Metcalfe

Promoting appropriate utilization of thyroid laboratory tests in pregnancy

Alberta Children's Hospital Research Institute Healthy Outcomes

\$24,971

Co-Principle Investigator- Amy Metcalfe

Sleeping for Two: A randomized controlled trial of cognitive behaviour therapy for insomnia experienced during pregnancy

Canadian Institutes of Health Research

\$209,950

Co-Principle Investigator- Amy Metcalfe

High-risk pregnancy and breastfeeding initiation and duration among a community-based cohort of women in Calgary, Alberta

PolicyWise for Children & Families

\$5,000

Principle Investigator- Katie Chaput

Impact of maternal cancer and in-utero exposure to chemotherapy on long-term child health
Canadian Institutes of Health Research
\$306,001
Principle Investigator- Amy Metcalfe

Addressing the maternal and newborn health of vulnerable women accessing prenatal care at a multidisciplinary inner city clinic in Calgary, Alberta
O'Brien Institute for Public Health Research
\$19,000
Co-Principle Investigator- Amy Metcalfe

Postpartum women's heart health clinical research collaboration
Canadian Institutes of Health Research
\$14, 965
Principle Investigator: Kara Nerenberg

Survival, recurrence, and subsequent obstetrical outcomes following pregnancy – associated and postpartum cancer
Canadian Institutes of Health Research
\$135,000
Principle Investigator- Amy Metcalfe

Identification of bio-markers for antenatal depression in early pregnancy and associations with child developmental milestone achievement at 12 and 24 months of age in the All Our Families prospective cohort
Canadian Institutes of Health Research
\$140,000
Principle Investigator- Katie Chaput