



**2022**

**Department of Obstetrics and Gynecology**

# **Annual Report**



# WE ARE AHS

Our values connect and define us.  
They are the DNA of who we are at AHS.

Our competencies show us how  
to live those values, every day.

To learn more, search our values on Insite.

## OUR VALUES

what we believe in

compassion  
accountability  
respect  
excellence  
safety

## OUR COMPETENCIES

values in action



**know  
myself**

- take responsibility
- eager to learn
- recognize my emotions



**care  
together**

- show kindness
- communicate effectively
- work with others



**contribute  
daily**

- stand up for safety
- commit to quality service
- act with purpose

# DEPARTMENT OF OBSTETRICS & GYNACOLOGY

## STRATEGIC PLAN, 2023-2028

### UNDERSTANDING WOMEN'S HEALTH

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- Our definition of women's health will be broad, inclusive to anyone who self-identifies as a woman.
- We will care for women across the lifespan – not just limited to reproductive health.
- We will consider conditions that have significantly different outcomes for women.

### OUR VISION

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Our team is a leader in health care, training and research to support women's health across the life-span.

### OUR MISSION

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To provide accessible and coordinated care to women in Calgary and surrounding areas by prioritizing partnerships and collaboration, investing in provider wellness and education, and innovating health care services to be responsive to patients, their families and caregivers.

### OUR STRATEGIC DRIVERS

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Our work will be guided by four strategic drivers:

1. Optimize **coordination and continuity of care**
2. Target services for **equity-seeking** groups
3. Invest in **training and education** that reflects the complexity of care
4. Integrate **innovation** through **knowledge translation**

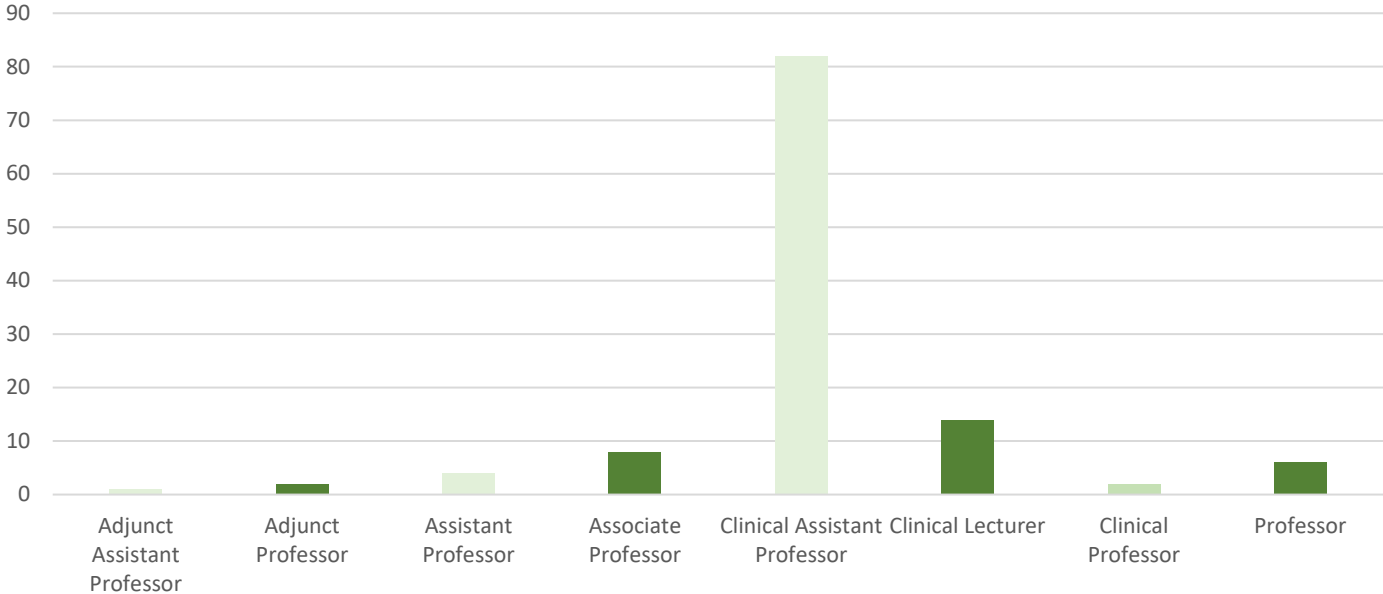
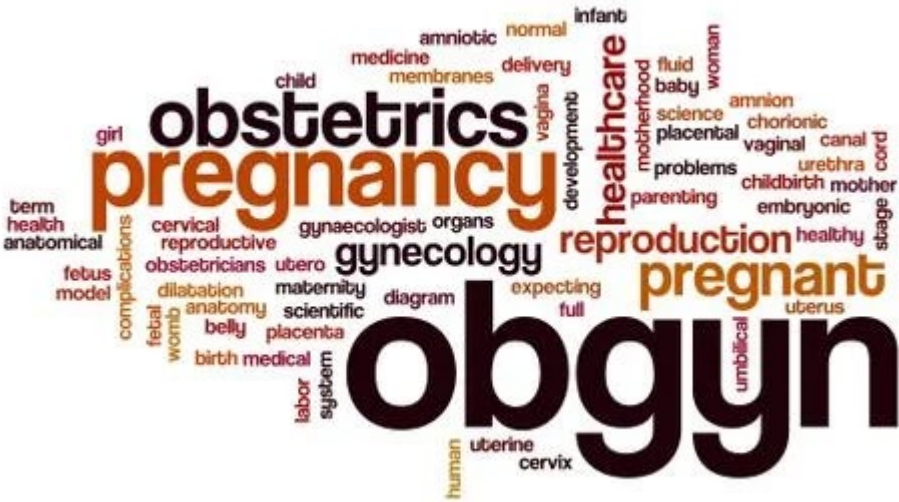
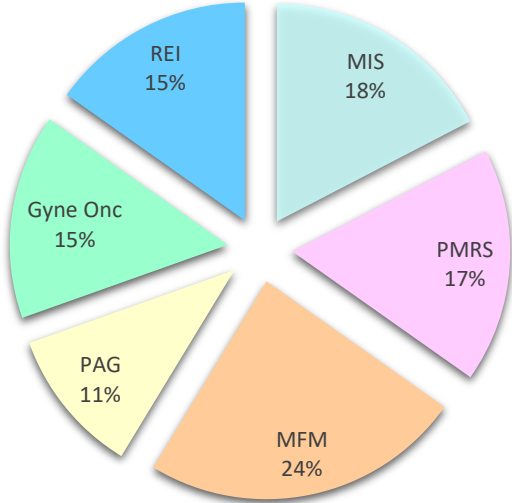
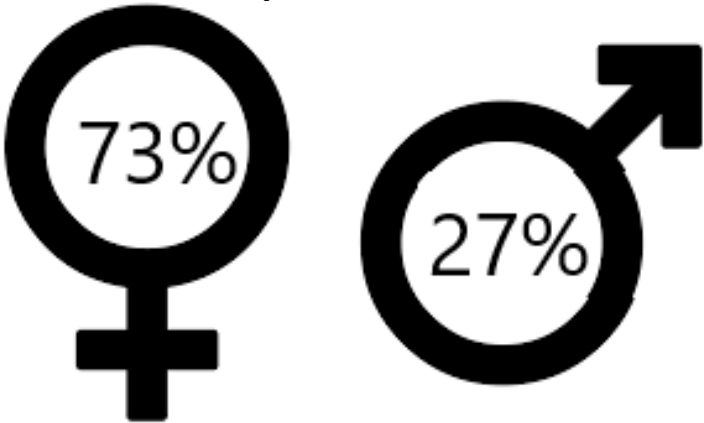
### MEASURING OUR SUCCESS

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We are successful when we commit to the impact we can measure. We will achieve this by monitoring and evaluating:

- Physician and provider wellness
- Patient experience and patient journey
- Impact on the health system
- Informing policy and funding decisions
- Sustained Department funding

Department Gender



# By the Numbers:

## Gynecologic Procedures

D&C with Endometrial  
Ablation: 2, 617

Tubal Ligation: 26

Hysterectomy: 1, 362

## Surgical Interventions

Female Genitalia: 2, 259

Vaginal Interventions: 494

**17, 258**

## Total Deliveries

SVD: 9, 451

Planned Cesarean: 2, 627

Emergent Cesarean: 3, 057

VBAC: 571

An abstract graphic featuring a series of overlapping, translucent, wavy bands in a rainbow color palette (red, orange, yellow, green, blue, purple, pink). The waves flow from the left side towards the right, creating a sense of movement and depth. The colors blend into each other, with some areas appearing more saturated than others.

From The Sites

# Foothills Medical Centre

## Accomplishments and Highlights

The past year saw major transitions at the Foothills Medical Centre (FMC) with the launch of Connect Care. This significant change was superimposed on the ongoing capacity issues and high levels of provider stress and burnout. Despite all of this, the Foothills Obstetrics & Gynecology team continues to provide exemplary patient centered care in very difficult times.

This year saw the launch of the Culture and Wellness Initiative at the FMC. This is a long awaited initiative where we look to improve group wellness and culture through the support of Medical Affairs. We are incredibly grateful for all of the support from members of group and Medical Affairs. This initiative is further enhanced by the gracious donation of Origami to members of our group to help support wellness and balance. A number of members are being supported by the Department to attend the Mindful Practice in Medicine Core Workshop in March 2023. This workshop was organized by the University of Calgary Centre for Mindfulness and comes direct from the renowned University of Rochester and will be led by Dr. Mick Krasner and Dr. Ronald Epstein.

OR allocation continues to be a significant issue with further delays from the launch of Connect Care. The team continues to work tirelessly to ensure that postponed cases are completed. We continue to utilize a first available surgeon waitlist which helps to ensure all open time is utilized and are preparing for the implementation of Surgical Central Triage for the Department. To ensure the best care for ectopic pregnancies, we were able to establish a consistent process for surgical management of ectopic pregnancies ensuring that all surgeries, if required, are completed in an appropriate time frame.

The Abnormally Invasive Placenta (AIP) working group continues to work diligently on their process and will be training more members to help provide this important service. The group has sought out feedback from providers in the service area and will work to further improve their process, if required, in the New Year.

We have formally established an escalation process and paging process to improve safety and communication for the Obstetrics team. There is ongoing work to better understand where the gaps may be occurring in following these processes and ensuring that all teams are supported. These processes help to support the new Maternal Early Warning System in Connect Care. Launching the education around these tools prior to Connect Care launch was helpful.

Obstetrics & Gynecology Ambulatory Central Triage in the North Tower is now being completed in Connect Care which allows for improved efficiency and assurance of referral receipt and process. All clinics continue to employ virtual modes of care where appropriate with standardized templates for consent and access.

## Challenges

Resident availability and ongoing concerns with staffing continue to impact the units. We are actively looking at alternate models of support including support from NPs/PAs/CAs. Though this will be a new process for Obstetrics & Gynecology at the FMC, many other services including Surgery have successfully utilized this model and we look forward to the opportunity to do the same.



The complex care management of pregnant patients is a process that we are continuously looking to improve. We are adjusting the process to be independently functioning and ensuring that all stakeholders are involved.

As we continue to struggle with OR access, we are actively looking at alternate ways to provide minor surgical procedures. All surgical specialties continue to struggle with resource allocation. These are very difficult times resulting in very difficult decisions. Along a similar spectrum, the reduction of Antepartum and Postpartum beds with the creation of a combined unit (to support the Alberta Surgical Initiative), has created a difficult situation for antenatal care at the FMC (the only tertiary care centre for Southern Alberta). We continue to try to think creatively to develop other safe avenues of care.

Both Medicine Hat and Lethbridge are struggling with a loss of obstetrical and gynecologic providers. As such, referrals to Calgary and FMC are increasing significantly. This has led to difficulty with referral management and strains on overall capacity.

### **Workforce Planning**

Dr. Kelly Albrecht left June 2021 to complete a 4 year Fellowship at Baylor University Texas; we look forward to her return.

Dr. Philippa Brain has returned from her sabbatical July 2022 and has obtained a Certificate in Patient Safety at Oxford, UK.

Dr. Joseph O'keane, a long time FMC member, retired in May of 2022.

Dr. Kimber Thornton and Dr. Kristin Ambacher both joined the generalist faculty this year. While Dr. Nancy Soliman increased her obstetrical role.

### **QA/QI**

The FMC WHAC QA/QI committee continues to do excellent work. A number of themes have emerged which are being addressed by the current processes.

Dr. Brain has initiated a QI project incorporating Total QBL and allowable blood loss and using transcutaneous HGB to help guide cost effective treatment of postpartum anemia.

As Connect Care continues to go live across the zone, we hope to better understand the metrics of NOEWS (Maternal Early Warning System) and the outcomes associated. In addition, we hope to continue to improve paging processes and adherence to escalation processes. We continue to work on improvements in handover processes.

As we start the year with a new Quality Improvement Analyst within the Department, we hope to continue doing more collaborative QI work with our low risk (family practice and midwifery) colleagues including access to IV iron in pregnancy, assisted delivery outcomes and examining views on shared or collaborative care.

As referral management and capacity continue to be an issue, we are initiating a QI project to better support individual providers in understanding amounts of referrals that can be accepted within the current templates which may allow for improved triage.

## **Future Directions and Initiatives**

Standardized process for both verbal and written handover and compliance with the same will be undertaken this year.

There will be ongoing exploration of alternative models of care to support the reduced Antepartum Unit and support the strained surgical system.

FMC will continue to further enhance strategies to support physician wellness and reduce burnout.

# South Health Campus

## Accomplishments and Highlights

There have been FOUR! SHC OBGYN baby births for our group (we only have 15 OBGYNs!):

Christine Osborne welcomed her baby boy Angus on February 3<sup>rd</sup>, 2022.

Alese Wagner welcomed her baby girl Scotty on December 27<sup>th</sup>, 2021.

Jackie Thurston welcomed her baby girl Tess on February 10, 2022.

Kayla Nelson welcomed her baby girl Raeyah on July 26, 2022.

## Challenges

Like all areas of medicine and women's health, in general, we continue to face challenges with limited resources to provide patient care despite ongoing and increasing demand.

Our NP, Anne-Marie Magny Dusablon, has resigned her position and returned to Quebec to be closer to family. We have been unable to find a suitable person to fill her position. As a result, we have limited our Early Pregnancy Assessment Clinic work to that which can be supported by our fantastic expanded-scope nurses and the on-call Gynecologist. A huge thanks to the team who continues to support this work and the tremendous need.

As with many sites, access to operating room time remains limited. It is hoped with ASI, that hospital OR time may be allocated to surgeons that require this time to meet aCATs guidelines, at a minimum.

We continue to work with our anesthesia team who have faced reduced staffing to have Procedure Room (outpatient procedures) available for those cases that meet criteria for IV sedation cases. We continue additional days to provide oral sedation under the Gynecologist supervision and are hopeful that we can continue to expand this programming as resources are freed up to support more procedural days. Efficiencies in this work have made for improvements in flow and capacity, despite the challenges presented during the pandemic with safe distancing and appropriate staffing.

Much of our surgical equipment is nearing its end of life, and we are awaiting approval on funding for replacement.

For many of the months of 2022, our Obstetrical unit has continued to share our limited 24 bed single-room maternity space with off-service (ie long term care) patients, to meet daily demands of hospital capacity at 140%. This has created challenges for maintaining maternity care; our amazing team from housekeeping, service aides, health care aides, nurses, clinicians, to midwives and physicians, continue to provide superb care despite daily challenges where our unit exceeds 100% capacity at times.

We will see the Launch of Wave 6 in May 2023, and no doubt this will be a challenge, but here it comes! A big thank you to the other sites for their support in preparing us and for the support through the launch.

## **Workforce planning**

### **Appointments**

Kyle Lafreniere started his position with our group at SHC in September 2022, having locumed for us prior to that for over a year. He has also assumed the role of interim SHC Clerkship Coordinator.

Chandrew Rajakumar was granted a supplementary appointment to the Department of Neurosurgery.

### **Education**

Kayla Nelson is due to finish her Master's in 2023, what a huge accomplishment on top of working full-time and having a baby!

### **Future Directions and Initiatives**

#### **Goals for the next year**

We will offer virtual hospital support for postpartum hypertensive patients through the support of Public Health. This will enable early departure of patients from hospital with intensive monitoring from home, which has been proven to have sustained improvements in blood pressure, maternal mental health, and neonatal outcomes.

We would like to return to full scope Early Pregnancy support 24/7, including care of complicated viable and non-viable pregnancies. Ideally, this care will extend to other sites, to manage zonal demands.

We hope to resume CME (journal club), simulations, and social events.

#### **Goals beyond the next year**

We would like to return to our usual programming, unhindered by a pandemic and the provincial medical record work, which has consumed an immense amount of energy over the last 3 years!

We look forward to a renovation of the OB triage area, which is now 10 years old, to enable early pregnancy care to be provided outside clinic hours (where it is currently positioned).

Ideally, we would have the Women's Pavillion (adjacent to the existing hospital) built to provide care without the limitation of 24-bed single room maternity footprint to provide care to additional patients, care that remains high in demand.

# Peter Loughheed Centre

## Accomplishments and Highlights

### Gyne Access OR room

We have started our Gyne Access room in 2022. Every Friday, we have an OR allocated to urgent gyne cases seen through clinic, emergency/ward consults. Cases include cesarean sections requiring main OR time, prophylactic/emergent cerclages, urgent hysteroscopy D&Cs, missed SA, emergent TOAs, infected stage 4 endometriosis, infected or ruptured endometriomas. This has helped alleviate some wait times and avoided booking these cases in the evenings and weekends.

### MFM at PLC

In 2021, the new Maternal Fetal Medicine unit opened at the PLC. Throughout 2022, we had increasing presence of an MFM nurse and Perinatologist on a near-daily basis. This has significantly improved our patients access to urgent obstetrical US and MFM consultations. Having more consistent MFM support at the PLC has been of great value.

### Connect Care

We have successfully launched Connect Care at the PLC in May 2022. The first few weeks of the launch were certainly a struggle, but we were able to reduce our workload with the aid of the other sites by transferring obstetrical patients and cutting back on OR time. We are thankful for the help and happy to have had a successful launch.

### Challenges

Our biggest challenges on L&D have been our nurse staffing issues. In 2022, most shifts on L&D had a significant shortage in nurses making workflow a challenge on a busy obstetrical unit. We compensated by transferring patients, when possible, to other sites. We have, however, hired 24 new nurses for 2023 and hope that this issue will be resolved in the new year.

The PLC OR initiated night time closures from 23:00 to 07:00 in 2021. With these closures, it has been difficult to complete urgent D&Cs or emergent cerclages in a timely manner. We are seeking to complete these procedures now in our L&D OR. This has been approved by administration and we have received funding to buy a D&C suction machine for our unit. We are currently awaiting supplies and further nursing training, but hopefully can start to implement these changes in the coming year.

With the announcement of Dr. Iwanicki retiring in July 2023, we will have a substantial decrease of urogyn services at the PLC.

### Workforce planning

#### Appointments:

We are pleased to announce Dr. Mruganka Kale who will be starting her position with the PLC group in July 2023. We are excited to have her join our group and to bring her expertise in addictions and vulvar health. There is no doubt, she will contribute greatly to our medical education in vulvar health and addictions.

**Retirements/resignations:** Dr. Iwanicki has announced he will be retiring on July 1, 2023. Over the years he has shown such dedication to our specialty and to his patients. He will be missed and we wish him all the best in his retirement

## Education

Our site provides excellent medical education for all levels of learners. We contribute to the following directly onsite at the PLC:

- Midwifery training (outpatient clinic, L&D)
- UME Clinical core (pre-clerkship) during Course 6
- UME pre-clerkship (shadowing, Med 440, electives)
- UME OBGYN clerkship
- PGME FM R3 (OB/women's health extra training)
- PGME EM residency (PGY 1 or PGY 3 OBGYN rotation)
- PGME FM residency (OBGYNE electives)
- PGME OBGYN residency (Mandatory rotations for PGY Jr Gyne, PGY 2 OB, PGY 3 Jr gyne, PGY 4 Sr gyne, PGY 4 MIS, PGY 5 Chief Resident)
- PGME OBGYN Women's Health Clinic elective (done with WHC staff)
- PGME OBGYN residency elective rotations

Members at our site also contribute to the following medical education opportunities off-site:

- UME Course 6 (small groups, lectures, physical exam session, anatomy)
- PGME EM residency Academic half day teaching
- PGME OBGYN residency Academic half day teaching
- PGME MFM fellowship teaching

Our members are nominated for teaching awards every year at the UME and PGME levels. Despite the ongoing pandemic, we still had learners actively involved in PLC inpatient care (OR, L&D). Recently, we invited clinical clerks back to our outpatient clinic

## Research

- **Publications:**
  1. Murji A, **Sanders AP**, Monteiro I, Haiderbhai S, Matelski J, Walsh C, Abbott JA, Munro MG, Maheux-Lacroix S. Cesarean scar defects and abnormal uterine bleeding: a systematic review and meta-analysis. Fertility and Sterility 2022; epub ahead of print.
  2. Warshafsky C, Kirubarajan A, Chaikof M, Stere A, Chudawala U, Li Q, Huszti E, Mohamed D, Abdalla M, Hartman A, **Sanders A**, Murji A, Sobel M. Preventing isthmocele after cesarean delivery (PICS): A pilot randomized controlled trial. Journal of Obstetrics and Gynaecology Canada 2022; epub ahead of print.
  3. Maxim M, Dason ES, Chan C, Luketic L, Li Q, Huszti E, **Sanders AP**, Sobel M. Current Diagnosis and Management of Adenomyosis in Canada: A Survey of Canadian Gynaecologists. Journal of Endometriosis and Pelvic Pain Disorders 2022;14(2):98-105.

4. Lin T, Ting P, **Sanders AP, Belland L**. A retrospective analysis of urinary retention after laparoscopic definitive surgery for stage III and IV endometriosis without explicit nerve-sparing techniques. Journal of Gynecologic Surgery 2022;38(4):309-13.

5. Ambacher K, Sector M, **Sanders AP**. The use of progestin subdermal implants in the management of endometriosis-related pain symptoms - a systematic review. Current Medical Research and Opinion 2022;38(3):479-86.

#### **Accepted for Publication:**

1. Dason ES, Maxim M, **Sanders AP**, Papillon-Smith J, Ng D, Chan C, Sobel M. SOGC Clinic Practice Guideline: Diagnosis and Management of Adenomyosis. (accepted to JOGC, awaiting publication).

2. Morton C, **Sanders AP**. Identification and Excision of a Fistulous Cesarean Scar Defect. (accepted to JOGC, awaiting publication).

- **Faculty research being done:**

Dr. Sanders has these following ongoing research projects:

1. Opioid use following benign hysterectomy (with Serena Wang and Jackie Thurston).
2. Voiding dysfunction following minimally invasive hysterectomy for large uteri (with Monique Marguerie, Liane Belland, Kathy Lo, Michael Sector).
3. Systematic Review of myomectomy in pregnancy (with Paxton Ting).

Dr. Cenaiko is working on an official audit of the Mini-slings for stress incontinence as opposed to retropubic slings. He is awaiting ethics approval.

#### **QI/QA:**

NSQIP- We are working with the PLC surgical initiative to reduce surgical site infections at our site.

#### **Future Directions and Initiatives**

##### **Goals for the next year:**

-To be able to complete D&Cs and cerclages in the L&D OR for urgent Eo/E1 D&Cs and emergency cerclages that present to triage or the emergency department.

-Improve our nursing staff on L&D.

-With Dr. Kale joining our PLC group, having a designate liaison with ARCH at the PLC.

##### **Goals beyond the next year:**

-Opening a new vulvar clinic with Dr. Kale in NE Calgary once she has completed her fellowship in vulvar health.

-We often encounter overcapacity issues on our L&D unit. Our L&D unit has labour rooms that are not being utilized due to lack of funding. It would be great to use our L&D unit to its full potential. -Having a stronger urogynae presence at the PLC to improve our urogynae services in NE Calgary.

# Rockyview General Hospital

## Accomplishments and Highlights

The Rockyview OBGYN group has had an active and busy year. Our group continues to provide excellence in clinical care while contributing to leadership and activism in the University of Calgary, AHS Calgary Zone and provincially, and across the globe.

We have successfully transitioned many major procedures such as hysterectomy and myomectomy to Minimally Invasive approaches and most patients are able to participate in the Same Day Discharge protocol.

Rockyview was the pilot site, and now continuing home, for the Midwife in House program. We have been developing our relationships with our midwifery colleagues and working to streamline consultation and management approaches for antepartum midwifery patients.

### Some personal highlights include:

Dr. Caitlin Jago is very active with educational activities, research and Minimally Invasive Surgery Fellowship education including the CanSAGE Fellows Bootcamp. She received a Bronze award for teaching from the Cumming School of Medicine this year and continues to care for patients at the Calgary Chronic Pain Centre.

Dr. Charlene Lyndon is the Calgary Area Medical Staff Society President-Elect.

Dr. Dhea Wallace-Chau is the co-leader of the OBGYN Peer Support program in Calgary and continues to provide ongoing training for new Peer Supporters.

Dr. Ingrid Kristensen continues her outstanding work with MOREOB and the work she has done with fetal scalp lactate will be adopted and spread through the province in the upcoming year. She Captained the Rockyview team for the Shopper's Love You Run for Women in support of Women's Mental Health. Our Labour of Love group raised over \$2000 for the Calgary Health Trust.

Dr. Weronika Harris-Thompson also placed 1<sup>st</sup> and Dr. Ingrid Kristensen placed 2<sup>nd</sup> in their categories for the 31 Km Canadian Birkebeiner cross country skiing race this year.

Dr. Jaelene Mannerfeldt is the Director, Office of Resident Affairs and Physician Wellness for PGME at the Cumming School of Medicine, a Council member for the College of Physicians and Surgeons of Alberta, and Technical Team Member for the 'HAY! Healthy Adolescent and Young People in Uganda'. She travelled to Mbarara, Uganda this year with the team and continues to be a primary ALARM course instructor/director for the Society of Obstetricians and Gynecologists of Canada.

Dr. Kovid Lee is a Connect Care Area Trainer and has facilitated 2 waves of Connect Care Launches. He continues to receive accolades from patients and learners, including a Cummings School of Medicine Clerkship Honour Roll Award.

Dr. Weronika Harris-Thompson is also the Clerkship Director for the University of Calgary Cummings School of Medicine Obstetrics and Gynecology Clerkship program.

Dr. Wynne Leung continues as the AHS Connect Care Provincial Physician Training lead and works with the Surgery Strategic Clinical Network as the South Sector Surgical Quality Improvement Lead. She also survived her 10<sup>th</sup> half marathon this year.



## Challenges

The Rockyview Hospital has endeavored to recover from the surgical service reductions of the past few years. This year there were service interruptions from construction on the site in preparation for Connect Care as well as continuing nursing and anesthesia staff shortages. We anticipate continuing challenges with these issues in the upcoming year. We will continue to advocate for our gynecologic patients at our site.

With Launch 4 and 5 of Connect Care we were able to support clinical volume from the PLC and FMC obstetrical units. Rockyview Hospital will transition to Connect Care with Launch 6 in May 2023. We are currently planning for the anticipated volume restrictions due to CC launch and hope to transition as smoothly as possible for our patients and staff.

## Education

Dr. Weronika Harris-Thompson received the 2022 Carl Nimrod Educator Award from the Society of Obstetricians and Gynecologists of Canada.

Dr. Gail Lam celebrates her 15<sup>th</sup> year preceptoring the Chief Resident rotation at RGH and has now mentored over 60 Senior Residents.

## Research

### Grants

**Project Title:** A Biomechanical Analysis of Physical Performance and Neuromuscular Function in Patients with Endometriosis Associated Pelvic Pain

**Funding Competition and Agency:** Research Development Grant, International Society of Pelvic Pain

**Funding Amount and Period:** \$10,000 USD, Oct 2021 – Oct 2023

**Research Team:**

Principal Investigator: TE Flaxman

Co-investigators: SS Singh, DL Benoit, J McDonald, L Sikora

Collaborators: CA Jago, DB Nguyen

**Project Title:** The Efficacy of 3D Motion Capture as a Reflective Aid during Self-Directed Practice for Laparoscopic Surgical Trainees

**Funding Competition and Agency:** Spencer Foundation – Small Research Grant

**Funding Amount and Period:** \$49,950 USD, April 1, 2021 – March 31, 2023

**Research Team:**

Principal Investigators: TE Flaxman and SS Singh

Co-investigators: CA Jago, DB Nguyen, DL Benoit, A Garber, J Watterson, F Balaa, S Gilbert

**Project Title:** Motion Capture for the Assessment of Laparoscopic Performance in Resident Education

**Funding Competition and Agency:** Department of Innovation in Medical Education (DIME) Health Professions Education Research Grant

**Funding Amount and Period:** \$7,500 CAD, May 1, 2021 – April 30, 2023

**Research Team:**

Principal Investigators: CA Jago and SS Singh

Co-investigators: TE Flaxman, DB Nguyen, DL Benoit

Collaborators: A Garber, J Watterson, F Balaa, S Gilbert

**Project Title:** The Efficacy of 3D Motion Capture as a Reflective Aid during Self-Directed Practice for Laparoscopic Surgical Trainees

**Funding Competition and Agency:** Strategic Initiative, Royal College of Physicians and Surgeons of Canada

**Funding Amount and Period:** \$30,000 CAD, March 1, 2021 – February 28, 2023

**Research Team:**

Nominated Principal Investigator: SS Singh

Co-Principal Investigator: TE Flaxman

Co-investigators: CA Jago, DB Nguyen, DL Benoit, A Garber, J Watterson, F Balaa, S Gilbert

Knowledge User: C Cooke

**Expectations and perceived diagnosis of women entering an interdisciplinary chronic pelvic pain program**

*May 2020 – present* (PI: Dr. M Robert; **Dr. C. Jago**)

- To identify expectations and perceived diagnosis of women prior to attending an interdisciplinary chronic pelvic pain program, and identify any correlations with demographic variables (quality of life, pain disability index, etc)
- Retrospective observational study; manuscript in preparation (primary author)

**Severe dysmenorrhea is the primary contributor to low physical quality of life in Canadian women with endometriosis**

*April 2020 – present* (PI: Dr. S Singh, Dr. T Flaxman, **Dr. C Jago**)

- To compare quality of life (QoL) in women presenting for endometriosis care at a Canadian tertiary care centre to the general population and other benign gynecologic conditions and identify significant factors associated with reduced physical and mental QoL
- Prospective cohort study; manuscript in preparation (second author)

**The Forgotten Questions: Prevalence of Abuse in Women with Endometriosis and Relationship to Mental Quality of Life**

*March 2020 – present* (PI: Dr. K Lortie, **Dr. C Jago**)

- Descriptive study to characterize a population of women with endometriosis, chronic pelvic pain, and history of sexual abuse
- Retrospective cohort study; manuscript in submission (second author), abstract accepted to SOGC 2021 and CanSAGE 2021 for poster presentation

**The Efficacy of 3D Motion Capture as a Reflective Aid during Self-Directed Practice for Laparoscopic Surgical Trainees (MoCap)**

*January 2020 – present* (PI: Dr. S Singh, Dr. T Flaxman, **Dr. C Jago**)

- Using motion capture technology to identify objective measures of laparoscopic performance that can differentiate surgical experience level and evaluate the usefulness of these measures in a surgical simulation-based education setting
- Two phase study; pilot data collection completed with abstract submission to multiple conferences; abstract presented at CanSAGE 2021 for poster presentation and AAGL 2021 for poster presentation (nomination for best research in education award)

**"It's not me, it's them" Weight related attitudes towards Obesity in pregnancy among maternal healthcare providers.**

Puhl, Rebecca. **Le Jour**, Caroline. Rudd Centre for Food Policy and Health.

## Publications (Accepted/In Press)

- B. Nguyen, K. Arendas, **C.A. Jago**, J. Warren, S.S. Singh. Stepwise Approach to the Laparoscopic Excision of Bladder Endometriosis (Video submission). *Fertility and Sterility*. 2022 Jan;117(1):225-227. DOI: 10.1016/j.fertnstert.2021.08.039
- Brar S, Kale M, Birch C, **Mattatall F**, Vaze M. Impact of birth tourism on health care systems in Calgary, Alberta. *BMC Health Serv Res*. 2022 Jan 28;22(1):120. doi: 10.1186/s12913-022-07522-4. PMID: 35090457; PMCID: PMC8798307.
- Deane A, **Mattatall F**, Brown A. Are Health Care Professionals Prepared to Provide Care for Patients Who Have Experienced Female Genital Cutting? A Cross-Sectional Survey of Canadian Health Care Providers. *J Obstet Gynaecol Can*. 2022 Apr;44(4):403-406. doi: 10.1016/j.jogc.2021.11.014. Epub 2021 Dec 24. PMID: 34958955.
- Ellaway RH, Thompson NL, Temple-Oberle C, Pacaud D, Frecker H, Jablonski TJ, Demers J, **Mattatall F**, Raiche J, Hull A, Jalil R. An undergraduate medical curriculum framework for providing care to transgender and gender diverse patients: A modified Delphi study. *Perspect Med Educ*. 2022 Jan;11(1):36-44. doi: 10.1007/s40037-021-00692-7. Epub 2021 Nov 18. PMID: 34792753; PMCID: PMC8600495.

## Future Directions and Initiatives

### Goals for the next year

Rockyview has recently been approved to use new technologies such as Myosure and Novasure on our site. We will be working to improve access for all gynecology patients to Surgical Services. We are also looking to expand the Early Pregnancy Loss Program in the Zone with a Rockyview site to expedite services for our patients.

We anticipate that the provincial Facilitated Access to Surgical Treatment pathways and central distribution of consultations will help our patients reach appropriate care in a more timely manner. Dr. Caroline Le Jour is passionate about this project and will be spearheading our efforts. We will also be working to ensure the T2 (consultation to Surgery) wait is also managed appropriately.

### Goals beyond the next year

The Rockyview Hospital physical site will be expanding with the planned construction of a new ICU/CCU unit. This will allow for an expansion of surgical services which will hopefully include increased access for the gynecology service. In the next capital plan, we hope to highlight Maternity care as both the Labour and Delivery unit as well as NICU are overdue for expansion and upgrade.



From The Sections

# Gyne Oncology

## Division Overview

The section of Gynecologic Oncology is composed of 7 members who are active in clinical gynecologic oncology, research, education and service. Dr. Gregg Nelson is Chief of Gynecologic Oncology. Dr. Prafull Ghatage is Gyn Tumour Group Lead, and also serves as Deputy Section Chief. Dr. Jill Nation is Medical Director of Colposcopy, Calgary Zone. Dr. Pamela Chu is Associate Dean, Office of Professionalism, Equity, and Diversity at the Cumming School of Medicine. Dr. Sarah Glaze is Program Director for the Department of Obstetrics & Gynecology Residency Program. Dr. Anna Cameron is Program Director for the Gynecologic Oncology fellowship program.

## Division Statistics

Number of Staff	7
Number of Publications	33
Number of Grants (Total Current)	11
Number of Grants (New in 2022)	4
Value of Grants for the Reporting Yrs	\$4,164,368
Number of Presentations	25
Number of Textbooks/Book Chapters	1

## Clinical Highlights

Our team provides comprehensive gynecologic cancer care to patients across Southern Alberta. We are recognized as national leaders in the areas of radical abdominal debulking for ovarian cancer and HIPEC (heated intraperitoneal chemotherapy). We have officially started our program in Sentinel Lymph Node mapping for endometrial, and cervical cancers. We are working with donors to fund a robotic gynecologic oncology program.

## Research Highlights

From a research standpoint, our division was very active over the last reporting period with 33 peer-reviewed manuscripts published, over \$4,000,000 in total grant funding held, and 25 presentations.

## Training Program

Our Royal College approved fellowship program attracts high quality applicants from Canada and abroad. We currently have 7 fellows in our program: Dr. Jennifer Mateshaytis, Dr. Lawrence Woo, Dr. Ali Bassi, Dr. Kristen Black, Dr. Sean Zhu, Dr. Hesham Sait, and Dr. Hanan Mal.

## Research Grants

### Dr. Gregg Nelson (\$3,804,368)

Enhanced Recovery After Surgery (ERAS) Guidelines for Cytoreductive Surgery (CRS) with Hyperthermic Intraperitoneal Chemotherapy (HIPEC): A Prospective Cohort Study, \$18,000, 2022  
Jennifer Gardiner Award in Surgical Oncology, Co-Applicant, Sept 15, 2022 – Sept 15, 2024

Optimizing surgical care: trends in Enhanced Recovery After Surgery (ERAS) guideline uptake and barriers to better evidence-based care, Canadian Institutes of Health Research – Project Grant Spring 2022, \$260,100, Principal Applicant, Apr 1, 2022 - Mar 31, 2025

Implementation of Enhanced Recovery After Surgery guidelines, Canadian Institutes of Health Research (CIHR) Project Grant - Priority Announcement: Health Services and Policy Research, \$100,000 (2022/2023), Principal Investigator

Postoperative venous thromboembolism in patients undergoing minimally invasive gynecologic oncology surgery: A Pan-Canadian initiative, Society of Gynecologic Oncology of Canada, \$25,000, Principal Investigator

A perioperative glycemic management pathway for reducing length of stay in Alberta surgical patients. Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$1,287,838 (Apr 1, 2021 - Mar 31, 2025), Co-Investigator

FORGE – Fe deficiency and Outcomes in the Recovery of Gynecologic oncology ERAS, Pharmacosmos (Denmark), \$175,000, Co-Principal Investigator, 2021-2023

Implementation of BE FIT (elder-friendly Bedside reconditioning for Functional Improvements) following Surgery Study, Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$947,735 (Apr 1, 2020 - Mar 31, 2024), Co-Lead

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

Alberta First Nations Cancer Strategy & Practice Change Implementation Initiative, Canadian Partnership Against Cancer (CPAC), \$805,000 (Apr 1, 2019 - Mar 31, 2022), Co-Lead

#### **Dr. Anna Cameron (\$1,287,838)**

A perioperative glycemic management pathway for reducing length of stay in Alberta surgical patients. Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$1,287,838 (Apr 1, 2021 - Mar 31, 2025), Co-Principal Investigator

#### **Dr. Prafull Ghatage (\$360,000)**

Cancer Surgery Alberta (breast, rectal and ovarian cancer), 2019-2022 (\$270,000)

Medical Cannabis in Gyn Oncology, Communities of Practice (CoP), Society of Gynecologic Oncology of Canada, 2019-2022 (\$90,000)

#### **Dr. Steven Bisch (\$175,000)**

FORGE – Fe deficiency and Outcomes in the Recovery of Gynecologic oncology ERAS, Pharmacosmos (Denmark), \$175,000, Co-Principal Investigator, 2021-2023

### **Publications**

#### **Peer Reviewed Manuscripts 2022 (33)**

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S, Jankovic V, Chen CI, Seebach F, Weinreich DM, Yancopoulos GD, Lowy I, Mathias M, Fury MG, Oaknin A; Investigators for GOG Protocol 3016 and ENGOT Protocol En-Cx9 (**Ghatage P**). Survival with Cemiplimab in Recurrent Cervical Cancer. *N Engl J Med*. 2022 Feb 10;386(6):544-555. doi: 10.1056/NEJMoa2112187. PMID: 35139273.

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## Textbook

**Nelson G**, Ramirez PT, Dowdy SC, Wilson RD, Scott M, eds. *The ERAS® Society Handbook for Obstetrics & Gynecology*, Elsevier, 2022

## Presentations/Invited Addresses

### Dr. Gregg Nelson (19)

ERAS guidelines in Gynecology and Obstetrics, state of the art, future, and the Alberta experience (Keynote speaker, Swedish ERAS Society Annual Meeting, Nov 18, 2022, Stockholm, Sweden)

ERAS update in Gynecology (ERAS USA 5th Annual Congress, November 11, 2022, Washington, DC)

ERAS – a way ahead to improve quality of life in cancer patients (29th Annual Meeting of the Association of Gynecologic Oncologists of India, Nov 5, 2022, Lucknow, India)

Patient reported outcome measurement in gynecologic oncology: I know it's important but where do I start? (Division of Gynecologic Oncology, Mayo Clinic, Oct 18, 2022, Rochester, MN)

ERAS for minimally invasive gynecologic surgery (Plenary session, 7th Annual CanSAGE Conference, September 23, 2022, Halifax, Nova Scotia)

Evaluation approach for a system wide implementation of ERAS pathways – Alberta Canada (West Metro Health Service Partnership, ERAS+ Clinical Council, Peter MacCallum Cancer Centre, September 9, 2022, Melbourne, Australia)

Enhanced Recovery After Surgery (ERAS) in Gynecologic Oncology (National Cancer Institute/Pan American Health Organization Project ECHO, September 16, 2022)

Enhanced Recovery After Surgery (ERAS): Key Concepts in Gynecologic Oncology (International Gynecologic Cancer Society Project ECHO, July 11, 2022, Colombia)

Enhanced Recovery After Surgery (ERAS) in Alberta, Canada: Achievements and Challenges of Implementation Across the Entire Health System (Argentinian Center for Research in Health Administration, June 30, 2022)

Enhanced Recovery After Surgery (ERAS): Key Concepts in Gynecologic Oncology (International Gynecologic Cancer Society Project ECHO, June 15, 2022, Kenya)

Mobile app post-operative home monitoring after oncologic surgery associated with improved quality of recovery: results of a randomized clinical trial (70<sup>th</sup> Annual Meeting of the Society of Pelvic Surgeons, June 11, 2022, New York, New York)

Contemporary challenges and opportunities in surgical education (Panelist, (70th Annual Meeting of the Society of Pelvic Surgeons, June 10, 2022, New York, New York)

When things go wrong with the ERAS patient (8th ERAS World Congress, June 2, 2022, Madrid, Spain)

ERAS Guidelines for cytoreduction +/- HIPEC: What's all the hype? (8th ERAS World Congress, Gynecology Symposium, June 1, 2022, Madrid, Spain)

Enhanced Recovery After Surgery (ERAS) – Standard of Care in Obstetrics & Gynecology Surgery (D. Nelson Henderson Lectureship in Obstetrics & Gynaecology, University of Toronto, May 6, 2022, Toronto, Ontario)

Enhanced Recovery After Surgery in Gynecologic Oncology – Improving Outcomes for Women with Cancer Globally (Calgary Women's Health Research Symposium, April 21, 2022, University of Calgary)

Enhanced Recovery After Surgery in Ovarian Cancer (Discussant, Charité-Mayo Conference Update on Women's Cancer, April 9, 2022, Berlin, Germany)

Maximizing ERAS Implementation - Resources and Results (Master Class: Enhancing Perioperative Quality, Safety, Experience, and Outcomes, SGO Annual Meeting on Women's Cancer, Mar 18, 2022, Phoenix, AZ)

Enhanced Recovery After Surgery (ERAS): Standard of Care in Cancer Surgery - Implications for Anesthesiologists (Anesthesiology Grand Rounds, Moffitt Cancer Center, February 11, 2022, Tampa, Florida)

### **Dr. Sarah Glaze (4)**

Maintenance PARPi in Advanced Ovarian Cancer: Practical Tips for Successful Utilization in Busy Clinical Practice (University of Saskatchewan, Jan 2022)

From Surviving to Thriving: Fatigue Risk Management in Residency (University of Calgary, Cumming School of Medicine, Apr 2022)

Program Administrator Pre-Con - Workshop: It's not just about sleep: Learning from leaders in Fatigue Risk Management in Canadian residency education (International Conference of Medical Education, Oct 2022)

Workshop: It's not just about sleep: Learning from leaders in Fatigue Risk Management in Canadian residency education (International Conference of Medical Education, Oct 2022)

**Dr. Anna Cameron (2)**

Intraoperative Glycemic Management (City-wide Anesthesia Grand Rounds, June 10, 2022)

Implementation of the perioperative glycemic management pathway (Surgery SCN Research Spotlight, Sept 2, 2022)

# Fetal Therapy

## Accomplishments and Highlights

All procedures done at FMC, as day cases. Dec 2021 to Nov 2022 inclusive reported.

RFA: 4 procedures. Since 2017: 13/16 live born or ongoing.

Shunts: 0 procedures on 0 patients. Since 2017: 10/12 live born or ongoing. Two not live born had been found to be incompatible with life following shunt insertion. One live born had care withdrawn at 2 months of life due to poor prognosis. One (LUTO) live born at 37 weeks died day 4 from pulmonary hypoplasia. One (T21) live born at 23+ wk's, NND 8 days.

IUT: 18 procedures / 10 patients. One pt with Bart's Hb terminated after 2 IUT since baby was hydropic and not improving. Two sets of MCDA twins developed TAPS in early T3 requiring IUT / exchange IUT delivered at 30-31 weeks. Rest live born in T3 or ongoing. Since 2014 38 pt's received 97 transfusions. 100% of non-hydropic fetuses survived. All cases of allo-immune hemolytic anemia survived.

## Challenges

1. Lack of a dedicated space for these procedures means we can only do them prior to 8am on Mon - Fri, after 5pm on weekdays, or weekends, and because of COVID are held hostage to staffing and workload on the Delivery Unit. This resulted in one demise of twins in 2019 when we could not do a procedure Friday am, and the fetuses had died before we could intervene in the evening.
2. Relative few cases means maintaining skills up and training others to join the team remains challenging. Dr Schachar is performing uncomplicated IUT now. Dr O'Quinn is performing uncomplicated RFA and IUT now.

Manufacturer issued recall for shunts in the fall 2020. In conjunction with colleagues internationally we have ordered a different, though slightly inferior, product. We are putting pressure on the manufacturer to restart production as it seems they were planning on stopping this product.

## Workforce planning

Continue to upskill Dr O'Quinn and Dr Schachar as work load allows.



# Pediatric and Adolescent Gynecology

## Division Members:

### **Dr. Philippa Brain**

Division Head Pediatric and Adolescent Gynecology

Co-Chair CANPAGO (Canadian Pediatric and Adolescent Gynecology Organization SOGC)

Chair FMC QAC OBGYN

Co-Chair Provincial PPOAC (Maternal and Perinatal Morbidity and Mortality Committee)

Member National Maternal Mortality Committee SOGC

Member Regional QI committee

### **Dr. Sarah McQuillan**

PAG fellowship director

Western Rep CANPAGO

Assistant Program Director Dept OBGYN

CBD lead for OBGYN/Surgical Foundations

### **Dr. Jaelene Mannerfeldt**

Director, Office of Resident Affairs and Physician Wellness for PGME at the Cumming School of Medicine. In this role I am also Chair, Accommodations Assessment Committee for PGME

CPSA (College of Physicians and Surgeons of Alberta)

Council Member – re-elected for an additional 3-year term, 2022 – 2025

Vice-President, Executive Committee, CPSA

Council 2022

### **Dr. Christine Osborne**

Coordinator and scheduler PAG

### **Dr. Kayla Nelson**

Preclerkship Evaluation Chair

Clerkship Evaluation Chair

RIME PCE position for new RIME curriculum

Member Residency Program Committee OBGYN

Marci Rosen RN

Dr. Tara Justice: Fellow

Dr. Nada Warreth: Fellow



## Accomplishments and Highlights

**PAG Retreat: Formal AHS sponsored QI QA process mapping of referrals (please see appendix 2) Oct 2022**

Lead by Shauna Langenberger RN MN

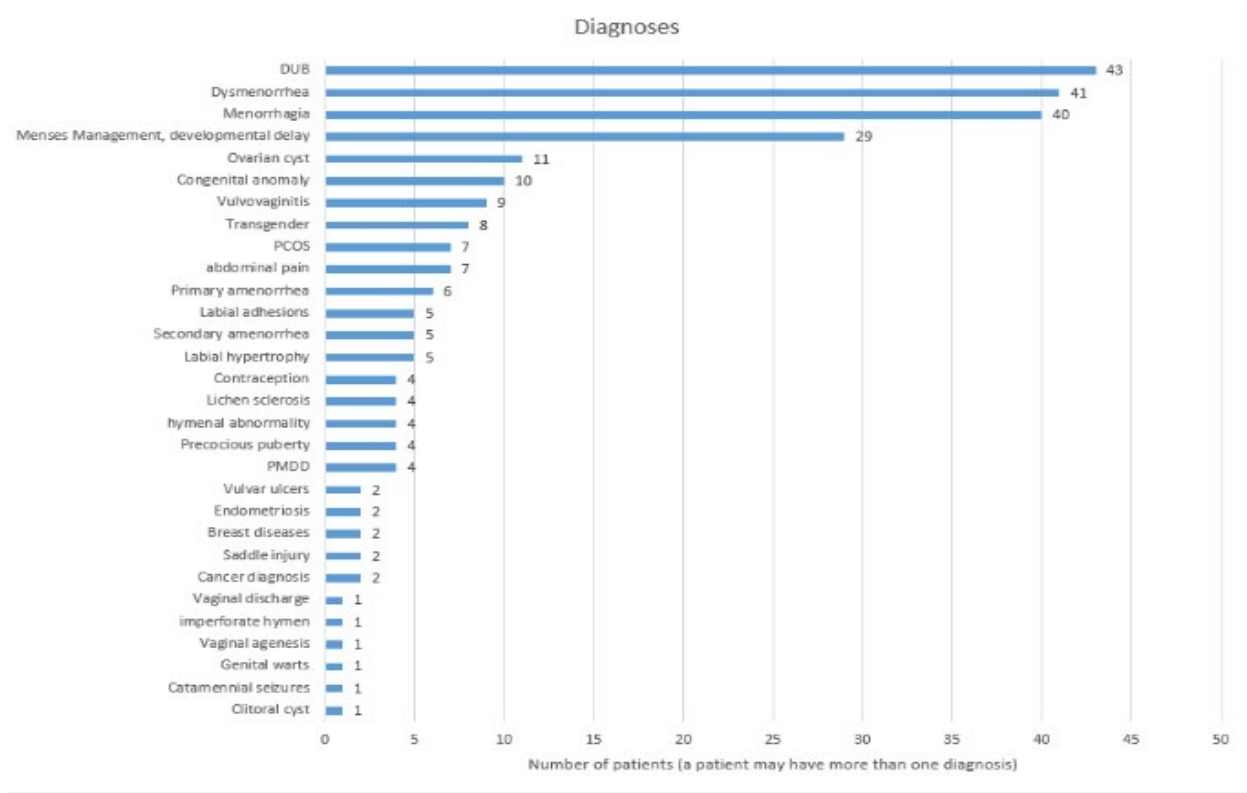
Calgary Zone Integrated Quality Management- Clinical Quality Improvement

Quality Consultant: Alberta Children's Hospital

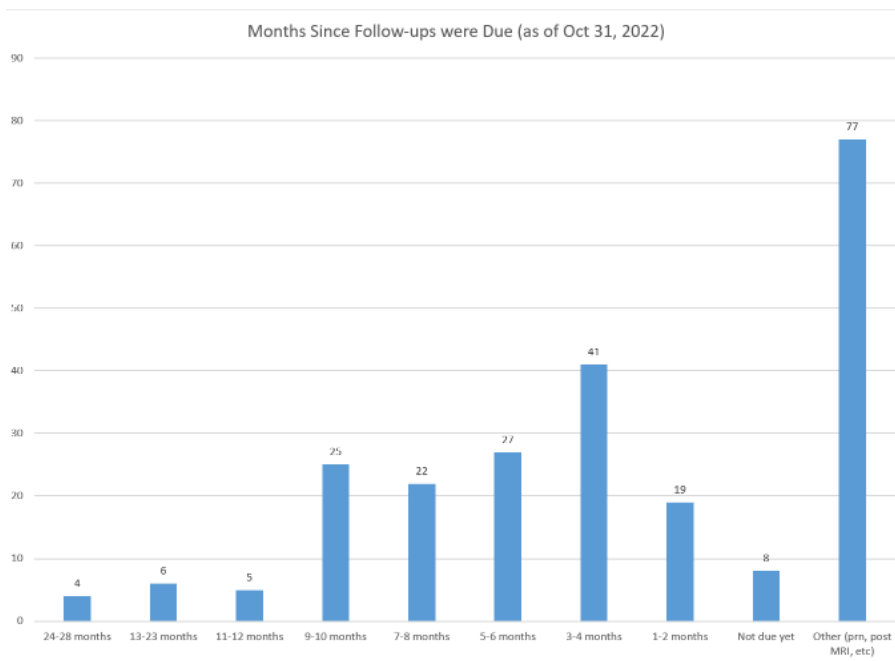
The PAG team, including operations, Clerical, Nursing and the Physician team met to have a referral process mapping session to develop ideas to improve the referral process and work through the backlog of referrals. The outcomes of this process were summarized and will be reviewed

Formal QI project: Analysis and Review of back log of consults and follow up appointments in PAG.

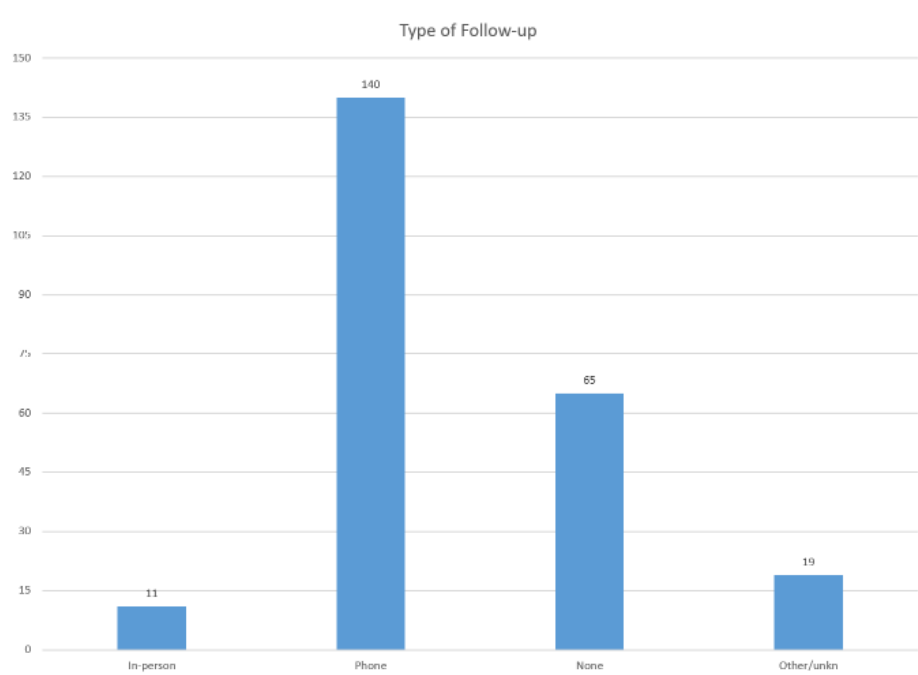
- 1) Review of outstanding follow ups (318)
- 2) Evaluation by diagnosis (235 charts reviewed at time of analysis)



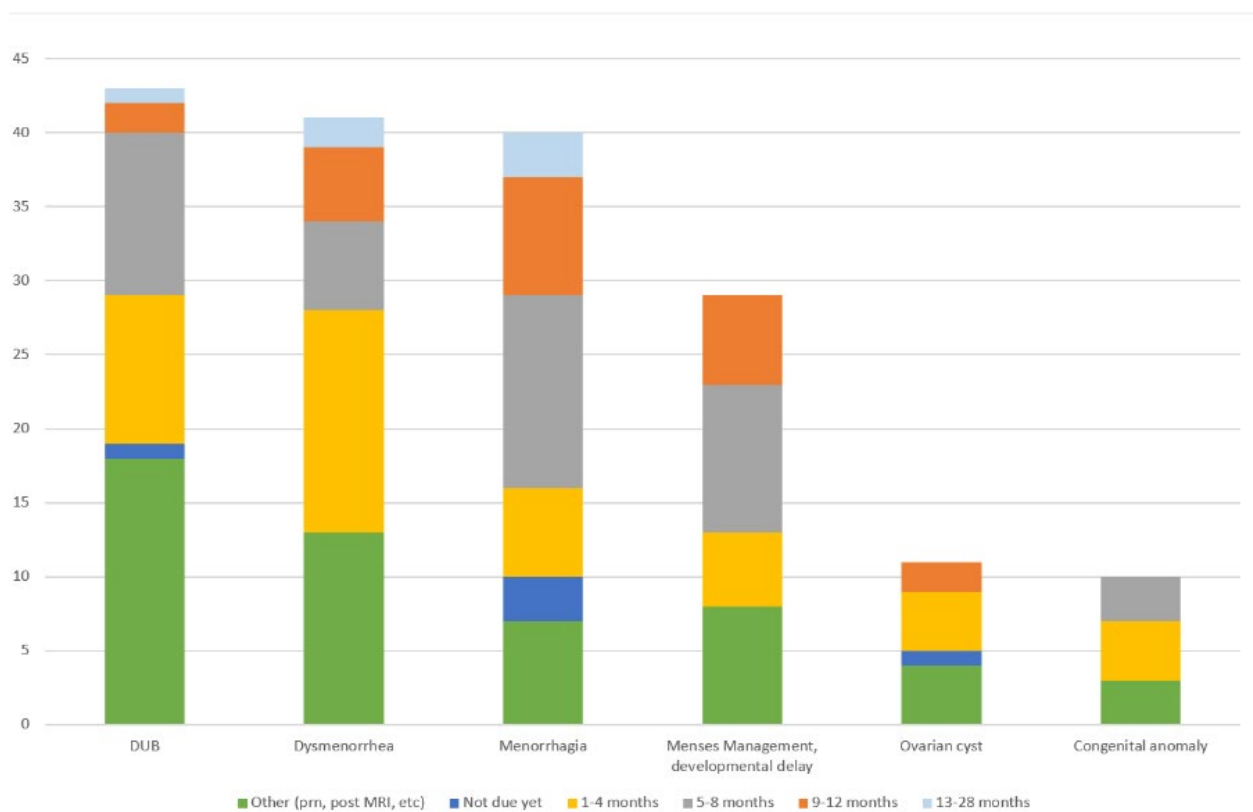
Months since follow up due



3) Extra clinics were booked to review as needed, a number of cases did not require follow up:



4) Months overdue by Diagnosis:



5) Initiatives going forward:

- Clinical pathways developed to decline referrals: Smart phrases in connect care
- Ovarian cysts
- Dysmenorrhea



- Menorrhagia/AUB
  - Labial adhesions
  - Menses management Dev Delay
  - PAG joined specialist link (appendix 3)
- 6) Developed handouts for follow up of IUD insertion. No longer booking routine follow up appointments
  - 7) Developed standard templates for clinic booking opened for realtime booking of consults and follow ups (greater than 2 years). Prevented backlog of appointment bookings.
  - 8) Review outstanding consults and book in templates.

### Other Administrative Highlights:

Despite a climate of fiscal restraints and a global pandemic we have successfully progressed our program by:

- Implementation of PAG program at SHC with addition of two half days of clinic per month. This is a late adolescent young adult clinic and will allow us to follow patients with complicated congenital and acquired abnormalities of the genitalia. Includes clerical and nursing support
- Access to out-patient procedural room SHC for simple procedures in the later adolescents (IUD insertion, hymenorrhaphy)
- Development of a morning clinic at ACH by moving the virtual and Fellow's clinic to the morning. Increasing patient exposure for the fellow and reducing congestion of the multiple clinics in the afternoon. Enhanced virtual capability.
- Increased clerical support specific to Peds gyne (0.2 FTE): Provides support for OR booking and follow up appointment bookings. Clerical on site at clinic on Thursdays
- Implementation of Connect Care at ACH: May 2022

### Transgender Care:

- Development of multidisciplinary transgender gyne clinic at SHC, ongoing

### Academic Highlights:

- **Postgraduate certificate in Patient Safety:** Philippa Brain, Oxford University, UK (Sabbatical, July 2021-July 2022) Completed with Distinction
- **Masters in Health Professions Education:** Dr. Kayla Nelson, "Residents as supervisors: How senior residents make ad hoc entrustment decisions", accepted for publication Med Educ 2023;1-9
- **Haskayne School of Business Certificate:** Dr. Jaelene Mannerfeldt 'Strategic Leadership Development Program' (December 2021 to July 2022).

### PAG Publications:

#### Accepted, in press in revision Peer-Reviewed Manuscripts:

- Osborne, C., Nelson, K., and S.K. McQuillan. Pediatric and Adolescent Gynecology in North America: Transfer of Care Practices. Accepted with Revision Aug 2021. JPAG.
- Nelson KL, McQuillan S, Regehr, G, Gringerich, A; "Residents as supervisors: How senior residents make ad hoc entrustment decisions", accepted for publication Med Educ 2023;1-9

#### For Publication

- Osborne, C, Litt, M., Reynolds, K., Foong, S. and S.K McQuillan. A Quality Improvement Study:

- Osborne, C., and S.K McQuillan. The Use of Gonadotropin Releasing Hormone Agonists with Add-Back in Adolescent Patients with a Vaginal Septum: A Systematic Literature Review
- Revision Gender Affirming Vaginoplasty Surgery for Female Transgender Patients Osborne, C., McQuillan, S., Millar, D. & Brain, P. Submitted Transgender Health (2020) for revision.

#### Ongoing Research Projects:

- The Calgary PCOS Algorithm: A Quality Improvement Study The protocol for all of the patients meeting the criteria of irregular bleeding, hirsutism, or query PCOS from the family MDs has been applied. All patients were sent back bloodwork to be entered into the study. Peggy and I then have gone through each patient chart and referred them to Gyne vs Endo. 49 patients currently enrolled in the study
- Nelson KL, McQuillan SK, Brain, PH, Osborne, CO; Preoperative Vaginal Dilation Prior to Surgical Management of Transverse Vaginal Septums". Ongoing
- Pediatric and Adolescent Gynecology Transfer of Care in North America RedCap survey went out to NSPAG 60 people have filled out a survey. *Current Status: Start of Data Collection from RedCap*
- Osborne, C McQuillan SK A Quality Improvement Study: Addressing Fertility Preservation in Female Pediatric Oncology Patients in Calgary, Canada.
- Osborne C The Role of Men in Family Planning: Rethinking Masculinity
- Nelson KL, McQuillan SK; "Pediatric and Adolescent Gynecology Virtual Appointments for Children with Developmental Delay- Family Perspectives". Ongoing
- Whitty, Robin, Osborne, Christine: Evaluation of referrals for cosmetic labial abnormalities.
- Surgical innovation: Philippa Brain: Development of novel vaginal stent: "Vagtek vaginal stent: A business case"
- Jaelene Mannerfeldt: Technical Team Member for the 'HAY! Healthy Adolescent and Young People in Uganda'. Travelled to Mbarara, Uganda and worked with the team for May 7 – 21, 2022. There are on-going meetings with the Project leadership at the University of Calgary and the Healthy Child Uganda team throughout the year.

**Working Group:** Disorders of Sexual Differentiation, UBC (Drs. Brain, Osborne)

Project Title: Creation of a Position Statement Against Early Cosmetic Surgical Correction for Atypical Genital Anatomy in the Setting of DSD

#### Teaching:

- Teaching Sessions given to OBGYN Residents:
  - Abnormal Vaginal Bleeding
  - Developmental Delay and Gyne issues
  - Normal physiology of puberty,
  - Precocious and Delayed Puberty,
  - How to be Strategic and Organized in CBME- Resident Teaching and Q+A, August 2020
  - Pediatric General Surgery,
  - Amenorrhea,
  - Adolescent sexuality and contraception,
  - Abnormalities of the Repro Tract,
  - Genital Trauma and Sexual Abuse
  - Pediatric Urology,
  - Disorders of Sexual Differentiation, Mullerian Anomalies

- Teaching Sessions given to Pediatric Residents:
  - Pediatric Chief teaching session on Pediatric and Adolescent Gynecology, Dr Kayla Nelson, Dr. Christine Osborne
  - Contraceptive Clinic for PGY-2 OB/GYNE residents, 4 hours each scattered throughout the year for 4 O&G residents, Jaelene Mannerfeldt



- Undergraduate Teaching: Jaelene Mannerfeldt:

Lecture: 1. Amenorrhea (1 hour)

2. Pediatric/Adolescent Gynecology (1 hour)

Small Groups: 1. Contraception (2 hours)

2. Menstrual Abnormalities (2 hours)

University of Alberta Medical School: November 18, 2022, Panel Member, Reproductive Health and Ethics, Reproductive Course, 2<sup>nd</sup> year medical students, Jaelene Mannerfeldt.

### Workforce planning

#### PAG Providers:

Dr. Christine Osborne: Returned from Mat leave Sept 2022

Dr. Brain returned from sabbatical July 2022

Dr. Sarah McQuillan full time staff

Dr. Kayla Nelson: On Mat leave as of July 2022 to return July 2023

Dr. Jaelene Mannerfeldt Full time staff

We have an adequate number of clinical providers given the restriction of clinic space. No further recruitment required.

Fellowship program is part of the North American match:

Successful candidates: Tara Justice July 2021- 2022

Nada Warreth Oct 2022 – Oct 2023

**Prolonged wait times:** Will continue to address this area with evaluation of program with adjustments as stated above and development of "urgent access to contraception" clinic SHC clinics.

**Transgender Program:** The formal request for a transgender program was halted with the UCP government. Drs McQuillan and Brain provide care for the postop trans females returning from Montreal and have requested a joint transgender clinic at SHC. The funding of gender reaffirming surgeries in Montreal is ad hoc and lacks coordination leading to last minute referrals and difficulty if postop complications arise. At the very least funding for a Transgender coordinator with timely

referral for postop care as well as knowledge of care providers would greatly enhance the care for this population.

## **Future Directions and Initiatives**

### **Application for an alternate funding Plan:**

An expression of interest for an AFP for Pediatric and Adolescent Gynecology is underway for full proposal in 2023. It is anticipated that this will enhance the recognition both financially and academically of the program at ACH and improve access to clinic space and funding.

### **Application for call stipend**

### **Ongoing development of PAG Networks:**

The Calgary program has developed a strong network of PAG providers in Western Canada. Monthly journal clubs include PAG providers in Vancouver, Victoria and Winnipeg. Joint research projects between Vancouver and Calgary PAG programs are already being developed, for example, fertility preservation in patients requiring chemotoxic agents as well as the DSD group developing a position statement on timing of gender corrective surgery in patients with DSD.

The Calgary PAG program is actively involved in the fellowship teaching sessions which include all PAG fellowship programs in North America.

All members of the PAG team are members of the North American Lit Serv connecting PAG experts in North America to discuss challenging clinical cases.

Canadian PAG providers are connected through CANPAGO with twice yearly national rounds. CANPAGO is reviewing access to these rounds through the SOGC website and local university websites providing PAG care.

## Appendix 1: PAG Data For clinic appointments

RE: 2006-2022 data for stats

YEAR	NEW	Fellow	Clean up clinic	TOTAL SEEN	NO SHOW/CANCELLATIONS	No show %	# of clinics	# of clinic days	Pending referrals
2006	34			64	1	0.76%			
2007	121			227	27	11.80%			
2008	135			253	28	11.00%			
2009	156			317	32	10.00%			
2010	179			347	45	15.60%			
2011	203			383	44	11.40%			
2012	207			424	21	4.95%			
2013	216			461	50	10.80%	43		
2014	280			616	50	8.11%	55		
2015	267			573			59		
2016	311			664			67		
2017	381			745			70		
2018	324			689			66		147 ( 55 semi urgent)
2019	354			692					
2020									
YEAR	NEW	Fellow	Clean up clinic	TOTAL SEEN	NO SHOW/CANCELLATIONS	No show %	# of clinics	# of clinic days	Pending referrals
2021	351	247	37	1100	145	13%		53	don't have this data
2022	380	101	100	1117	76	6.67%		62	end of 2022 410

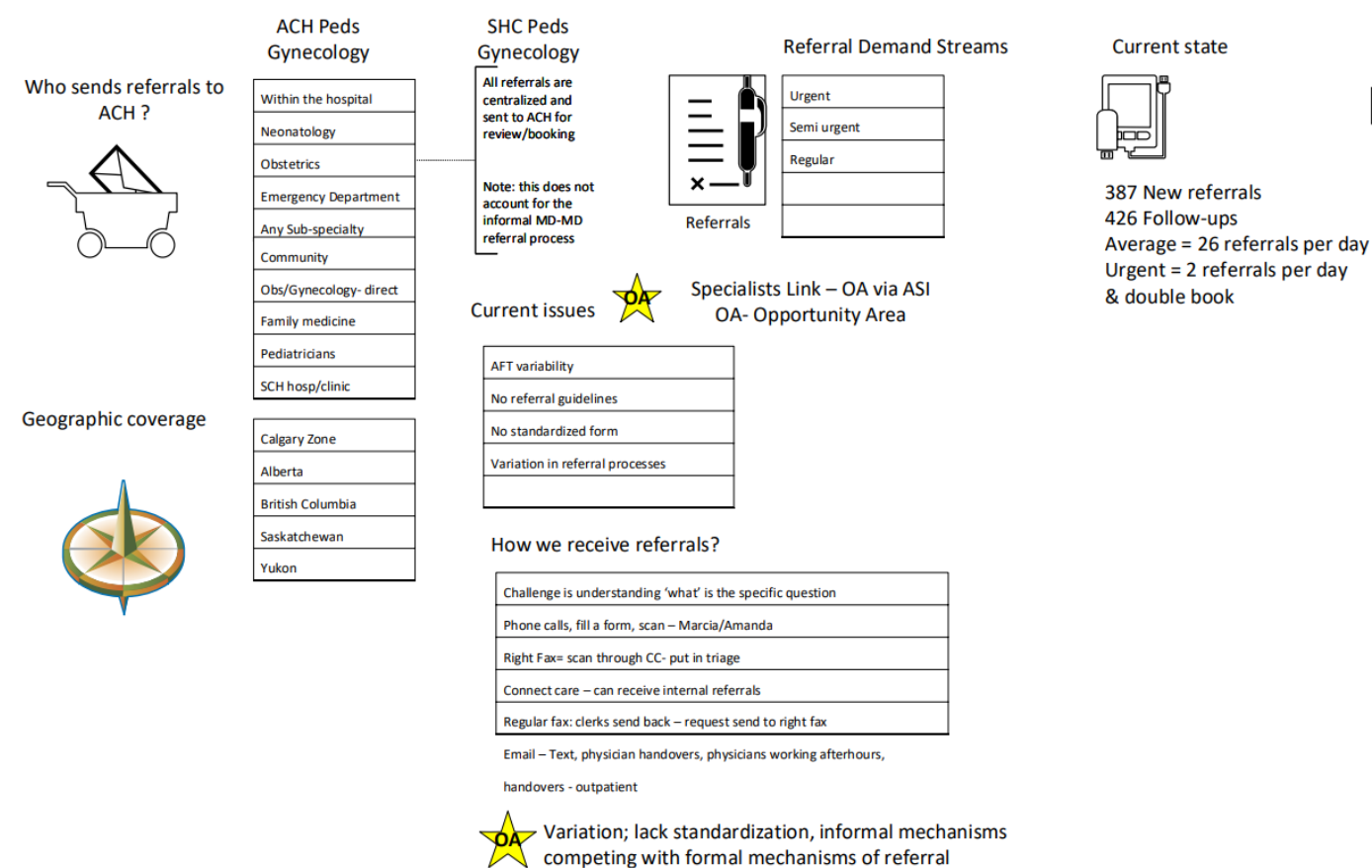
IUD inserted in clinic 9

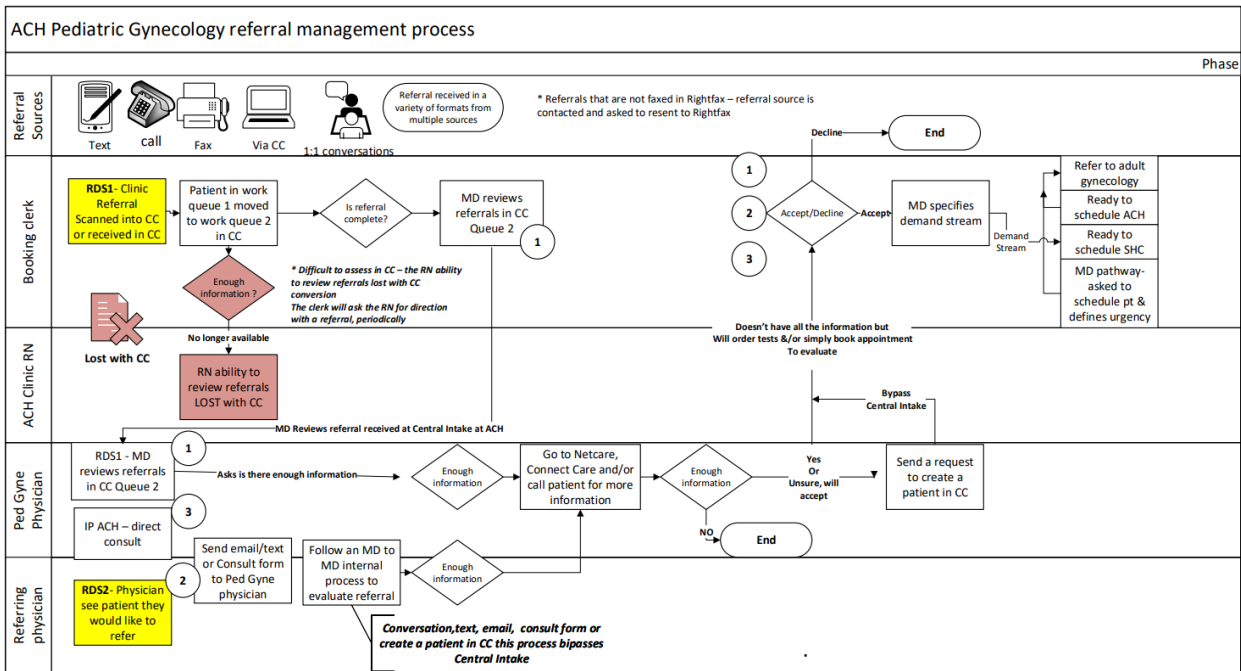
Nexplanon inserted in clinic 4

YEAR	NEW	Fellow	Clean up clinic	TOTAL SEEN	NO SHOW/CANCELLATIONS	No show %	# of clinic days	Pending referrals
2021	351	247	37	1100	145	13%	53	don't have this data
2022	380	101	100	1117	76	6.67%	62	end of 2022 410

Clinic days refer to the Thursdays and the extra phone clinics added for clean up.

Appendix 2 :QI/QA initiative:





Referrals take on many appearances and not all are received via Central Triage: currently, 2 Referral decisions streams :RDS1 & RDS2)



Wide variety of referral format & incidentally, incomplete referrals



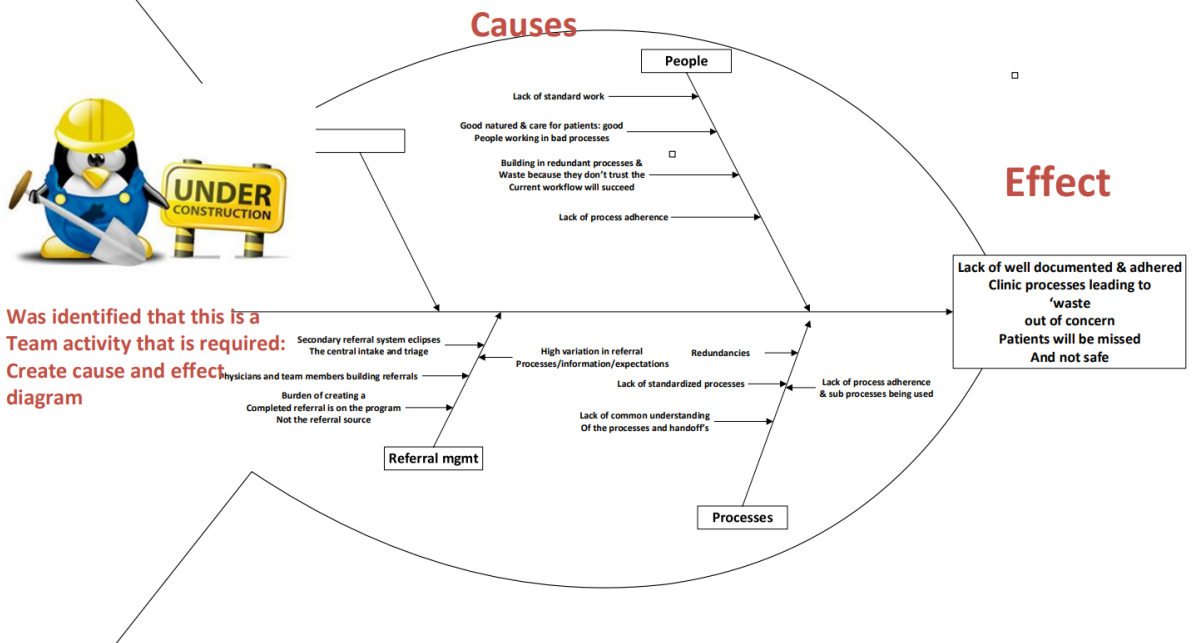
Queue 2 – RN/clerk can't easily evaluate the appropriateness & completeness of the referral



Integration of "Specialists link" support appropriate & complete referrals

## Peds Gyne – cause and effect

Retreat





## Parking Lot

- Standardized referral processes with providers
- Review physician to physician consult process – should move to a centralized process (creating a second unmanaged referral pathway)
- Need a standardized referral form
- CC smart phrase for referral declines
- What happens if we decline?
- Centralized referral pathway
- Increased knowledge – Gaming the system
- Review Connect Care Roles – Pathway (Role delineation)  
How do you communicate post referral? Adding smart phrase?
- Different resources between the sites
- Text Reminders
- ASI – how can they best support? Need to follow-up
- Infor back to referral pool

All current process need to be evaluated apply the 8 wastes

## Appendix 3: Specialist Link Data:

**Specialist LINK**  
*Connecting Doctors, Supporting Patients*

### Call Volume

Quarterly Report

Quarter 3

22-23

Department of Pediatrics				
Specialty	Oct-2022	Nov-2022	Dec-2022	Total
Community Pediatrician	81	120	98	299
<b>Total</b>	<b>81</b>	<b>120</b>	<b>98</b>	<b>299</b>

Obstetrics & Gynecology				
Specialty	Oct-2022	Nov-2022	Dec-2022	Total
Child & Adolescent Gynecology		4	8	12
Maternal Fetal Medicine	10	8	25	43
Obstetrics Gynecology	150	143	148	441
<b>Total</b>	<b>160</b>	<b>155</b>	<b>181</b>	<b>496</b>

Other Specialty Services				
Specialty	Oct-2022	Nov-2022	Dec-2022	Total
Chronic Pain	24	30	21	75
Palliative Care	14	10	9	33
<b>Total</b>	<b>38</b>	<b>40</b>	<b>30</b>	<b>108</b>

Surgery				
Specialty	Oct-2022	Nov-2022	Dec-2022	Total
Colorectal Surgery	4	2	2	8
Endocrine Surgery	1	1	2	4
General Surgery	19	19	17	55
Orthopaedic Surgery	154	109	118	381
Otolaryngology	60	77	48	185
Pediatric Otolaryngology	10	7	8	25
Pediatric Urology	5	12	3	20
Podiatric Surgery	18	11	15	44
Spinal Surgery	32	25	33	90
Surgical Oncology	8	9	8	25
Upper GI Bariatrics			1	1
Urology	67	61	51	179
Vascular Surgery	21	14	36	71
<b>Total</b>	<b>399</b>	<b>347</b>	<b>342</b>	<b>1,088</b>





# Minimally Invasive Gyne Surgery

## Accomplishments and Highlights

Peer-reviewed Publications in 2022:

### **Cesarean scar defects and abnormal uterine bleeding: a systematic review and meta-analysis.**

Murji A, **Sanders AP**, Monteiro I, Haiderbhai S, Matelski J, Walsh C, Abbott JA, Munro MG, Maheux-Lacroix S; International Federation of Gynecology and Obstetrics (FIGO) Committee on Menstrual Disorders and Related Health Impacts.

Fertil Steril. 2022 Oct;118(4):758-766. doi: 10.1016/j.fertnstert.2022.06.031. Epub 2022 Aug 17.

PMID: 35985862 Review.

### **Retained Products of Conception Sequestered in an Isthmocele.**

Moreira AV, **Wagner A**, **Thurston J**, Birch C, **Rajakumar C**.

J Obstet Gynaecol Can. 2022 Jun;44(6):635. doi: 10.1016/j.jogc.2020.06.018. Epub 2021 Jun 29.

PMID: 34465549

### **Use and misuse of opioid after gynecologic surgery.**

Bougie O, Blom J, Zhou G, Murji A, **Thurston J**.

Best Pract Res Clin Obstet Gynaecol. 2022 Dec;85(Pt B):23-34. doi: 10.1016/j.bpobgyn.2022.07.005.

Epub 2022 Jul 18.

PMID: 35973919 Review.

### **Laparoscopic Management of Innumerable Diaphragmatic Fenestrations.**

Arion K, **Rajakumar C**.

J Minim Invasive Gynecol. 2022 Oct;29(10):1125-1126. doi: 10.1016/j.jmig.2022.06.004. Epub 2022 Jun 10.

PMID: 35691545 No abstract available.

### **The use of progestin subdermal implants in the management of endometriosis-related pain symptoms and quality of life: a systematic review.**

Ambacher K, **Secter M**, **Sanders AP**.

Curr Med Res Opin. 2022 Mar;38(3):479-486. doi: 10.1080/03007995.2022.2031144. Epub 2022 Feb 1.

PMID: 35048754

### **Stepwise approach to the laparoscopic excision of bladder endometriosis.**

Nguyen DB, Arendas K, **Jago CA**, Warren J, Singh SS.

Fertil Steril. 2022 Jan;117(1):225-227. doi: 10.1016/j.fertnstert.2021.08.039. Epub 2021 Oct 16.

PMID: 34663509 Free article.

### **Preventing Isthmocele After Cesarean Section (PICS): A Pilot Randomized Controlled Trial.**

Warshafsky C, Kirubarajan A, Chaikof M, Stere A, Chudawala U, Li Q, Huszti E, Mohamed D, Abdalla MH, Hartman A, **Sanders A**, Murji A, Sobel M.

J Obstet Gynaecol Can. 2022 Nov;44(11):1134-1135. doi: 10.1016/j.jogc.2022.08.003. Epub 2022 Aug 12.

PMID: 35970439 Clinical Trial. No abstract available.

Fellow presentations at national and international conferences are included in the MIGS fellowship annual report.

This year Dr. Caitlin Jago has added her expertise to our cohort of fellowship educators. Including her in the fellowship rotation has increased case exposure and diversity to their educational experience.

Additionally given her appointment to the Pelvic Pain Clinic, fellows now are able to participate and learn from a holistic approach to chronic pelvic pain.

### **Special Achievements:**

Dr. Liane Belland is president of the Canadian Society for the Advancement of Gynecologic Excellence (CanSAGE). This national leadership role includes steering Canada's governing body for accredited fellowships in MIGS, ensuring quality education, providing a national forum to promote clinical and basic research, and promoting improved ways to deliver quality patient care.

Dr. Chandrew Rajakumar was re-elected as President of the Section of Obstetrics and Gynecologists for the Alberta Medical Association. Additionally, through his work in endoscopic management of peripheral nerve disorders and complex nerve tumors, he was granted supplemental appointment to the Department of Clinical Neurosciences.

In addition, to Dr. Ari Sanders' research contributions to local, national and international journals and conferences, he sits on two SOGC and one AAGL clinical practice guideline committees.

Our members have been very active with invited presentations, journal clubs, PGME and UME educational events.

### **Challenges**

Ongoing fallout from the COVID 19 pandemic continues to plague Albertans. This includes burnout and loss of operating room support staff. As a result of operating room closures, those suffering from disability and/or subfertility secondary to endometriosis, fibroids and abnormal uterine bleeding continue to do so and in some cases with preventable worsening of their disease states. Additionally, with the loss of providers in other communities there has been an increase in referrals from out of Calgary further increasing wait time till consultation and treatment.

Infrastructure change further compounds surgical delays rooted in a paucity of operating room availability. In general, our group's completed procedures out of aCATS window are 50-75%. Despite decanting less-complex cases to our General GYN colleagues waitlists for surgery remain extremely high.

### **Workforce planning**

Looking to the future, there is a strong need for a second MIGS practitioner to support Dr. Sector at the Foothills Medical Center. There is a gap identified through analysis of the technicity index at FMC that we aim to support through future recruitment.

The MIGS groups has grown sufficiently large to support a second fellowship trainee.

### **QA/QI and Innovation**

The MIGS group continues to demonstrate surgical excellence at our respective sites with each member demonstrating a technicity index (TI) of 97-100%, which are in far excess of each hospital's average TI.

Simulation and Virtual Surgery are innovative means of improving technical skills without risk of harm. These are employed at the ATSSL, University of Calgary and via Zoom sessions through CanSAGE.

Dr. Thurston continues to collaborate with the Department of Surgery and the Surgery SCN to develop a QI Dashboard which should improve the identification of areas for improvement as well as direction for knowledge translation.

### **Future Directions and Initiatives**

In the coming year the MIGS fellowship will support two fellowship trainees. This year Dr. Rajakumar, et al. introduced a competency-based national fellowship curriculum for MIGS. This has been implemented across Canada and with this, opportunities for the development of assessment and feedback tools emerge. This is an area we aim to develop further.

Advent of a digital QI dashboard would allow virtual sharing of metrics across all sites and allow for analysis and specific feedback to division members. Finally, our group aims to contribute as leaders and scholars with involvement in guideline development, scientific and educational publications, and assuming roles of governance and advocacy. We have been involved in outreach efforts to Alberta's communities currently suffering from physician shortages, such as Lethbridge.



# Reports

# 2021 Continuing Medical Education - Department Grand Rounds

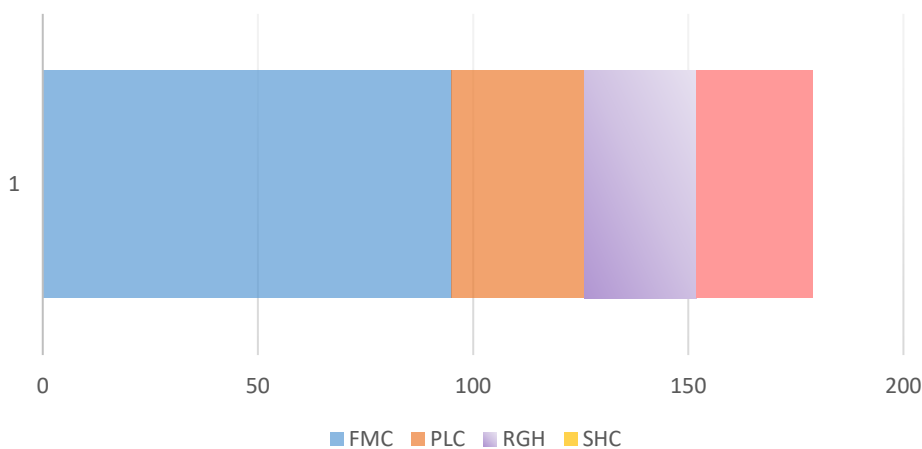
January 7, 2022	Quality Improvement in Action: Reducing delays to surgery in emergency room cases of adnexal torsion	Dr. Humara Edell
January 14, 2022	Nexplanon: The Next Frontier	Dr. Kristin Ambacher
January 21, 2022	Endometriosis-associated ascites: Strategies for diagnosis and management	Dr. Lauren Andrew
January 28, 2022		
February 4, 2022	Reducing postoperative Caesarean section infections in Calgary. Can we do better?	Dr. Aysah Amath
February 11, 2022	Updates on Fetal Surgery	Dr. Tim Van Mieghem
February 18, 2022	Best Beginning and Perinatal Education	Lisa Baker, Debby Corscadden
February 25, 2022	Joint - Surgery / Anesthesia: Balancing act: Improving Pain and Opioid prescribing for surgical patients in	Dr. Nivez Rasic, Dr. Hance Clarke, Kayla Denness
March 4, 2022	Umbilical Cord Blood Cellular Therapy for Brain Injury	Dr. Charles Cox Jr
March 11, 2022	Central Triage	Dr. Wynne Leung
March 18, 2022	Go team Canada: Launching SNACS: Single dose vs double dose antenatal corticosteroid Randomized control	Dr. Sarah McDonald
March 25, 2022	DOS: City Wide - Alberta Surgical Initiative: Addressing Surgical Backlog and Reducing wait times	Hon. Jason Copping, Dr. Sid Viner
April 1, 2022	Management of Tubo-Ovarian Abscess	Dr. Elizabeth Russell
April 8, 2022		
April 15, 2022	Psychological Safety in our learning environments: Implications for learning and patient outcomes	Dr. Jena Hall
April 22, 2022	Approach to complex benign vulvar disease	Dr. Danya Traboulsi, Dr. Matt Grossi
April 29, 2022	Central Triage	Dr. Christopher Cham
May 6, 2022	Clara Christie Research Day	No Rounds
May 13, 2022	At the heart of pregnancy	Dr. Patrick O'Farrell
May 20, 2022		
May 27, 2022	Surgical Ergonomics: The secret to Surgeon Longevity	Dr. Noor Dasouki Abu-Alnadi
June 3, 2022	Placenta Accreta Spectrum Disorder: Changes in epidemiology and management required our regional	Dr. Jennifer Soucie
June 10, 2022		
June 17, 2022	Perioperative anemia management in gynecologic	Dr. Steven Bisch
June 24, 2022		
July 1, 2022		
July 8, 2022		
July 15, 2022		
July 22, 2022		
July 29, 2022	No Rounds over the Summer	
August 5, 2022		
August 12, 2022		
August 19, 2022		
August 26, 2022		
September 2, 2022	Virtual Province Wide Surgery rounds: Research Spotlight	Surgical SCN
September 9, 2022	Infertility and LGBTQ+	Dr. Stephanie Rothenberg
September 16, 2022	Clinical Neurosciences: Managing Epilepsy in Women	Dr. Page PennellFeb
September 23, 2022	PMS and PMDD: Diagnosis and Management	Dr. Alison Shea
September 30, 2022		
October 7, 2022		

October 14, 2022	Pediatric Labiaplast: Just because you can, doesn't mean Trauma follong forcep and vacuum delivery in Canada:	Dr. Robin Whitty
October 21, 2022	time to change the narrative	Dr. Giulia Muraca
October 28, 2022	Pelvic Floor Physiotherapy in Obs/Gyne	Dr. Amanda Rolha Dr. Adrian Harvey, Dr. Kelly Millar, Dr. Christopher Armstrong, Dr. James
November 4, 2022	DOS: City Wide - Competency by Design	Christopher Armstrong, Dr. James
November 11, 2022		
November 18, 2022	Special ZCDH Search Rounds -	Dr. Erin Brennand
November 25, 2022	Put the V in D: Exploring skin of colour variation in vulvar	Dr. Mruganka Kale
December 2, 2022	New SOGC Update on late preterm antenatal	Dr. Jessica Laiuw
December 9, 2022		
December 16, 2022	Critical Incident Review in Obstetrics and Gynecology	Dr. Philippa Brain
December 23, 2022		
December 30, 2022		



# Perinatal Mortality Committee

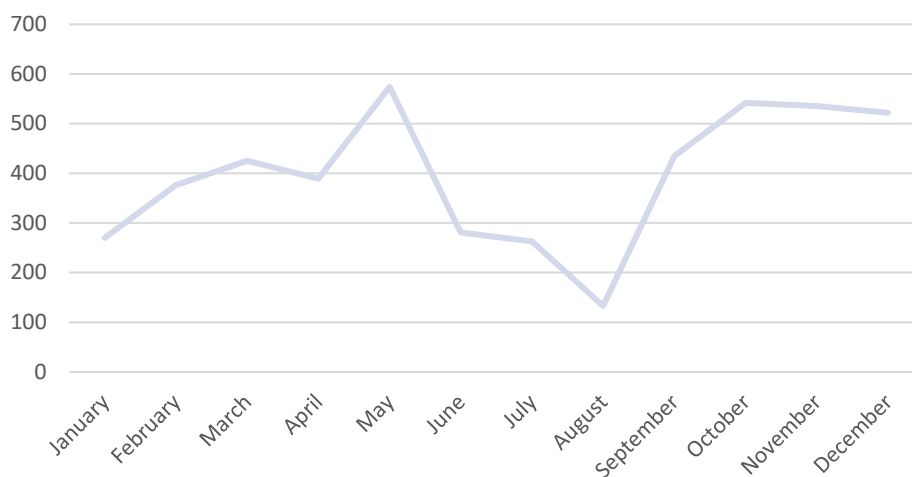
## PERINATAL MORTALITY BY SITE



The perinatal mortality committee reviews approximately 260 cases per year. The average age for the 2022 review year was 35.74. Each case is complex and following our review recommendations are made to the patients family physician for treatments should a pregnancy follow the loss.

QAR documents are completed and are tracked by Serena Mevel, Clinical safety leader for implementation of facility changes where applicable.

## Gestational Age





# Quality Improvement Quality Assurance

## Accomplishments and Highlights

### Same-day discharge after minimally invasive hysterectomy – Department-wide Initiative

#### Department of OBGYN Quality Improvement Council Project

Same-day discharge after minimally invasive hysterectomy has been identified as an important department-wide initiative with three main benefits: 1) to improve the overall experience of women undergoing hysterectomy; 2) reduce practice variation and utilization of hospital-based resource, and; 3) improve patient education concerning perioperative expectations.

#### Achievements

- Rate of same-day discharge averaged at all sites and subspecialties increased from 46% February 1, 2022 to 63% October, 2022
- FMC 49% to 56%
- RGH 28% to 58%
- SHC same at 84%
- PLC 37% to 44% (to May 2022, data unavailable in dashboard)
- Gynecology Oncology Department conducting QI project for same-day discharge

#### Sustainability

- Continue to follow outcomes
- Audit and feedback sessions to facilitate individual learning and self-improvement (section 3 credits)

#### Next steps

- Increase the rate of same-day discharge from 70% at all sites within Calgary by January 2024
- Evaluate barriers at each specific site and implement PDSA cycles to achieve 70%
- Start tracking patient reported outcomes
- Publish dashboard and link to Connect Care



## Process mapping of Pediatric and Adolescent Gynecology outpatient clinics to reduce clinic wait times.

Philippa Brain, Physician Lead

Formal QI review of referrals to Pediatric Gynecology (PAG). AHS QI team and ACH operations are involved to facilitate this project. PAG has over 300 outstanding follow up appointments and over 400 consults pending. We have reviewed all the outstanding follow ups and have determined the top 6 diagnoses. This has lead to clinical pathways that can guide management while the patient is waiting for their appointment. We have evaluated why we book follow up appointments and have joined Specialist Link. Central access triage will also allow streamlining of referrals.

## Postpartum Hemorrhage Project: Regional Implementation of Quantitative Blood Loss in Calgary Zone

Philippa Brain Physician Lead

The goal of this project is to recognize hemorrhage at the earliest stage and intervene with a standardized response to reduce the rates of stage 2 hemorrhage (>1000 mL blood loss) and stage 3 hemorrhage (>1500 mL blood loss).

### Achievements

- Maternal morbidity/PPH dashboard has been converted to outcomes from Connect Care which will allow the QAC to re-establish timely review of severe maternal morbidity with a link to patient safety.

### Sustainability

- Dissemination to other sites in Calgary (RGH, PLC, SHC) is underway.

### Challenges

- Expanding to other sites.

## Challenges

Two council members were on longer term leaves in 2022 and a new data analyst was hired and required to do training. With the transition between data analysts and ongoing Connect Care waves there was aa disruption in regular council meetings but will resume in 2023.

## Workforce planning

### QI Consultant

Pat Trudeau was hired as a QI consultant for the Department of Obstetrics & Gynecology, congratulations and welcome to her!

### Appointments

Philippa Brain

- Chair, Quality Assurance Aggregate Working Group, OBGYN, FMC
- Co-Chair, Provincial Peri-partum Quality Assurance Committee

Wynne Leung

- South Sector Alberta Surgical Quality Improvement Lead

Jackie Thurston

- Co-Chair, Women's Health and Perinatal Quality Assurance Committee

### Retirements/resignations

Pamela Nugent – retired

## Education

Maryam Nasr – MSc program, Health Services Research, University of Calgary

Pippa – Completed Postgraduate Certificate in Patient Safety, Oxford University (with distinction), UK, July 2022

#### Free Educational Resources

AHS Improvement Way (AIW) training by Calgary Zone Surgical Quality Improvement Committee – videos available (can provide link on request)

Institute for Healthcare Improvement (IHI) – free resources, tools, and training available online

<http://www.ihl.org/education/IHIOpenSchool/Pages/default.aspx>

#### Research

##### Publication / abstracts / submissions

Thurston J, Nasr-Esfahani M, Peterson, A. Using the Calgary audit and feedback framework to address operative vaginal delivery rates at four community hospitals. Video presentation at Society of Obstetrics & Gynaecology Annual Clinical and Scientific Conference, Quebec City, Quebec, June 6-9, 2023.

##### Faculty research being done / recruiting

##### Peri-partum Anemia Project (QI)

Philippa Brain, Physician Lead

This project is focused on implementation of screening for and treatment of antepartum anemia. It will incorporate use of quantitative blood loss and transcutaneous hemoglobin to predict postpartum anemia.

Will resume now that Connect Care has been implemented at FMC.

##### Opioid Dashboard for Cesarean Sections and Hysterectomy (QI)

Jackie Thurston, Physician Lead

The Calgary Zone Department of Surgery has developed a dashboard for monitoring opioid prescribing for specific surgical procedures, which is now integrated into Connect Care.

We will plan to add cesarean sections and gynecology procedures to track opioid prescriptions now that Connect Care has been implanted at FMC.

##### Optimization of post-operative opioid analgesia after benign hysterectomy:

##### A comprehensive survey of the current state of post-operative opioid prescribing after benign hysterectomies in Calgary, Alberta

Serena Wang, Ari Sanders, Jackie Thurston

Resident research project to describe current practices for opioid prescribing after hysterectomy.

Will use this data to identify gaps in the current system and plan projects focusing on opioid stewardship using QI methodology.

In progress.

##### Future Directions and Initiatives

##### Goals for the next year

- Resume regular council meetings with new hires, QI consultant and data analyst
- Decide on key performance indicators for Obstetrics and Gynecology and identify how outcomes can be tracked (?Connect Care)

- Publish same-day discharge after minimally invasive hysterectomy and integrate with Connect Care
- Implement PDSA cycles for postpartum anemia project
- Increase communication and dissemination of information between sites, within the department, and with other departments

#### Goals beyond the next year

- Create dashboards for OB and GYN key performance indicators – allow practitioners to view their own data
- Establish a system for department members to achieve MOC credits for QI related activities (e.g. review of individual data, outcomes)
- Increase publications and presentations for specific quality improvement work within the department

# Antenatal Community Care Program



## Accomplishments and Highlights

The Antenatal Community Care Program (ACCP) provides prenatal care and clinical observation in the community for pregnant women with fetal and maternal complications, who might 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 and we continue to collaborate with Edmonton to share efficiencies and client care strategies.

ACCP supports clients with high risk pregnancies with one of 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).

This report captures data from the annual year period, 2022.

ACCP Stats by Client Diagnosis - % of cases 2022	
PTL	6%
HDIP	40%
PROM	14%
IUGR	0%
Placenta Previa	6%
APH	5%
Fetal Surveillance	24%
Other	5%
Total admissions	437

the highest primary diagnosis for admissions this year continued to hypertensive disorders in pregnancy at 40% (though this is less than in 2021 - 51%). The next most frequent requests for follow-up include fetal surveillance, premature rupture of membranes, and preterm labour.

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
- unable to contact
- have moved out of the Calgary area
- decline services

## Highlights

1. **COVID-19 recovery phase:** During the COVID-19 recovery phase, ACCP continues to maintain appropriate PPE within our care, and continues to monitor any pregnant women for any respiratory O2 saturation concerns.
2. **Connect Care planning:** Our prenatal educator, managers, and ACCP instructor have been involved in informing ACCP content workflows and referral needs. Launch 8 (May 4, 2024) is the planned launch for Public Health zone operations. One of the key process pieces is receiving labs/results to the ACCP RN inbasket but then notifying physicians (by phone call and results forwarding) when there is need for review.

3. **Referral Process** All ACCP referrals are facilitated through the Alberta Referral Directory (ARD). The referral form and home visit order set have been revised provincially and are accessible through the Alberta Referral Directory and through the Connect Care referrals process.  
<https://albertareferraldirectory.ca/PublicSearchController?direct=displayViewServiceAtFacility&serviceAtFacilityId=1073569&pageNumberToDisplay=1&publicSearch=true>

#### Client Contacts and Provider Consults:

1. **Client Contacts:** ACCP Nurses had over **10,400 client care contacts with 437 clients** involving RNs and a part-time RD. Clients typically receive daily services – including home visits and/or telephone contacts. **2392** contacts were one to one RN home visits. There were **7733** RN telephone calls with clients which reflects a significant volume increase over last year. **284** phone appointments were completed with the ACCP Registered Dietitian.
2. **Provider consults:** The program completed **326** physician telephone consults and **621** calls to hospital triage.
3. **Average length of stay in the program:** 22 days
4. **Perinatal Education:** With AHS prenatal classes continuing to be accessible on Zoom, ACCP patients are now more readily able to participate in our 6 and 10 week groups on-line from home.

#### Referral Sources:

By Providers/Service	By acute care site
Obstetricians/physicians 190	FMC 148
Acute Care inpt: 152	PLC 94
Acute Care outpt: 82	RGH 63
MFM: 24	SHC 104

#### Challenges

1. **Capacity:** Program capacity, at times, exceeds client volume. This may occasionally result in a delay in admission to ACCP by one to two days. However, ACCP continues to welcome more referrals from obstetrical providers so that clients can be in their home environment receiving care.
2. **OBIX and Connect Care:** The new software system chosen to link fetal monitoring within Connect Care is determined as OBIX. We understand that the Calgary Health Foundation has supported associated costs with implementing this system, however this is to be confirmed for Public Health's Connect Care Launch (Launch 8, May 2024).
3. **Complex casework:** we continue to observe many clients struggling with social and economic challenges. We access social work support from prenatal teams and offer key referrals, but continue to review other ways to connect these families to support systems

## 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 our 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.

## Future Directions and Initiatives

- Use of Zoom for support to ACCP Clients along with phone calls and home visits.
- Updating of the prenatal manual for Public Health is in process.
- Public Health continues as a member in the MNCY Maternal Fetal Newborn Standing Committee and will support the prenatal pathway review and updates.
- Connect Care will enhance access by obstetrical providers to relevant ACCP patient information for their patients.



# Department Education And Research Fund

Total Amount Collected in  
2022

\$ 27,000

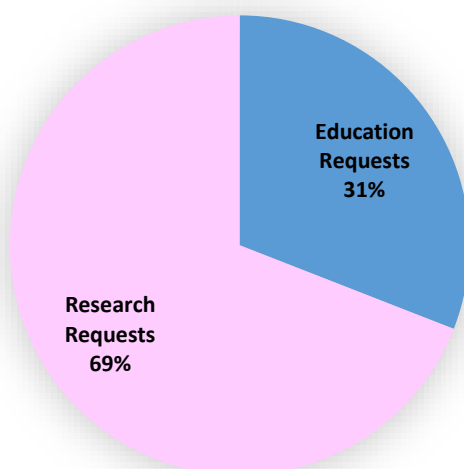
The DEAR Committee made some significant changes to the review process this year. Requiring applicants submit separate requests for travel and conferences above the initial request for research support.

New caps were placed on requests for travel, including \$2000 for national and \$4000 for international.

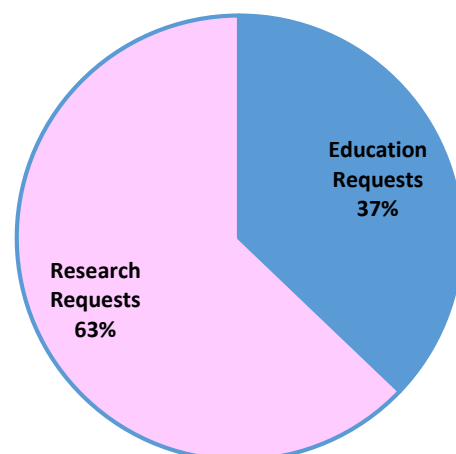
The committee to review open access requests separate to the research request also reached agreement. Approval amounts will depend on journals the articles are being submitted to.

Official ability to submit DEAR payments via e-transfer has been set up.


**Requested**



**APPROVED**







# Out of Country Maternity Central Triage

## Highlights

Out of Country Maternity Central triage has been transferred to Medi-Tech Consulting. This has reduced the volunteer burden on Department members.

The process continues to remain the same which will allow for distinction between clients that are birth tourists and those that are not. The ongoing management continues to remain the same.

## Challenges

There is still evasion of CT referral from the community. A significant concern is that there is still no formal process for undocumented uninsured patients. This is a vulnerable population that requires a different course of management.



# Connect Care

## Highlights

In the past year, Calgary Zone Obstetrics and Gynecology has joined Connect care with the PLC, High River, Canmore and FMC going live. This is one of the most significant changes to occur in Alberta Health Services. There is never an ideal time to undergo such a massive change; but, with Covid, resource depletion and provider burnout, this was a very difficult time. Despite this, the collaboration and level of dedication and support from all levels and disciplines was amazing. I have an immense gratitude for all of the hard work done by everyone. This is an electronic system widely used elsewhere in the world and is a game changer for patient care.

## Challenges

Continuous improvement work of the build is ongoing. This is difficult with the reduction in resources. We will look to improve workflows for end users by creating zonal processes where possible. Much of the smart documentation requires the use of the problem list feature. We hope to improve use of this tool within the zone as well as use of the Handoff tool.

## Workforce planning

Dr. Kristen Ambacher has started a two year fellowship in Medical Informatics.

An abstract graphic featuring a series of overlapping, translucent, wavy bands in a rainbow color palette (red, orange, yellow, green, blue, purple, pink). The waves flow from the bottom left towards the top right, creating a sense of movement and depth. The word "Education" is centered over the middle of these waves.

Education

# UME and Course Six

## Achievements and Highlights

Course 6 took place from October 3, 2022 to December 9, 2022 this year. Course 6 continues to have strong clinical teachers from the Department of OBGYN. This past year, 14 Department members provided lectures, and many more participated in small group teaching and clinical core. There are 20 Obstetrics lectures and 20 Gynecology lectures. 30 of the lectures were given by FFS members, 3 of these lectures were provided by GFT members, 1 was given by a current fellow from our Department. The remainder of the lectures were given by colleagues in anesthesia, pathology, internal medicine and family medicine. Our lecturers are chosen based on their strong teaching ability and their lectures have always been very highly rated.

This was the first year we returned to all in-person teaching for lectures and small groups. Lectures were still recorded to provide flexibility to the students to review on their own time. These students are also exposed to labour/delivery and obstetrics for the first time during their course 6 'clinical correlation'. This takes place at all 4 teaching hospitals in Calgary and is one of the best rated portions of the course.

At the time of submission for this report, the stats and student ratings from Course 6 have yet to be released. Our course has always been highly rated and the unofficial feedback from students have been very positive. Once these stats have been released, I will add to and amend this report. Many students discover their passion for OB/GYN based on the experience in this course, which changes the trajectory of their career path!

The Cumming School of Medicine just held their annual teaching award ceremony. Please help me in congratulating all the following members of our wonderful department for their UME teaching awards!

### Preclerkship:

- Gold star award: Dr Jadine Paw

### Clerkship:

- Gold star award: Dr Dorothy Igras, Dr Fiona Mattatall
- Honour roll award: Dr Stan Iwanicki, Dr Kathy Kenny, Dr Kovid Lee, Dr Maryam Nasr, Dr Aisling Mahalingham

## Challenges

Unfortunately, recruitment for small groups remains a challenge. We had to rely on more non-OBGYN small group preceptors this year than ever before in Course 6. Dr Paw had to recruit preceptors last minute to fill in gaps, and relied on some residents to fill these gaps. Many non-OBGYN preceptors are Master Teachers (from Dept of Psychiatry, Internal medicine, Family Medicine, Pediatrics).

Considerable time has been spent to update all small group guides so that any preceptor, regardless of specialty, can lead the small group.

Of the 184 total small group sessions offered this year, only 52 were taught by OBGYN attendings. 8 were covered by fellows in our Department, 12 covered by Sr OBGYN Residents, 7 taught by retired OBGYN staff, and the rest (97) covered by non-OBGYN teachers. Further breakdown of small group sessions contributions: 3 sessions taught by FMC staff, 11 sessions taught by PLC staff, 18 sessions taught by RGH staff, 10 sessions taught by SHC staff. In terms of subspecialty, 2 sessions were taught by Gyne Onc staff and 1 session were taught by MFM staff. If we look at GFT members, they contributed to 7 of the 184 small group sessions (5 from MIS, 2 from Gyne Onc).

## **Workforce planning**

The current undergraduate medical education (UME curriculum that course 6 belongs to) is in its final iteration in 2023. Course 6 will be delivered for its final time in October 2023. This means that the way that OBGYN is delivered in the UME pre-clerkship curriculum will be completely revamped. This new curriculum is called RIME (re-imagining medical education) and it will start July 2023, which means that in 2023, course 6 and RIME will run together. RIME is a 'spiral' curriculum based off the MCC objectives where the material will be seen multiple times and in progressive complexity during the 2 years the students spend in pre-clerkship. This curriculum is also based on the idea of generalism, to shift away from specialist level of teaching and emphasize the undifferentiated learner.

The current course 6 team (Dr Jadine Paw as course 6 chair, Dr Kayla Nelson as exam coordinator) will end December 2023. It is important that the department of OB/GYN members participate in the creation of the RIME curriculum to ensure that OBGYN is represented and taught in a way that reflects modern OB/GYN. The new OB/GYN RIME team (Preclerkship educators, or 'PCEs') has been selected and include the following department members: Dr Jadine Paw, Dr Fiona Mattatall, Dr Kayla Nelson, Dr Stephanie Cooper. There will be other non-OBGYN clinicians (family physicians, general surgery) who are responsible for some topics traditionally covered by OBGYN, and our team plans to work with them to ensure that this material is covered appropriately. The way that small groups are delivered will also be re-structured. Dr Kathy Kenny from our department has been recruited as a small group facilitator and will help the PCEs in their small group teaching. The UME will no longer be recruiting for small group preceptors once course 6 has come to an end.

In the new RIME structure, the PCEs report to the Block Directors (Dr Murray (FM), Dr Wu (Peds) and Dr Bass (IM). Currently, Dr Paw is the current chair and representative of the department of OBGYN at the UME pre-clerkship. With RIME, there is no 'chair' role, but Dr Paw will continue to represent the department of OB/GYN and the RIME PCEs (OB/GYN) at the UME (Preclerkship).

## **Future Directions and Initiatives**

Goals for the next year: Finish course 6! No big updates will be made this year for the last year of course 6. The OB/GYN RIME PCEs are currently working hard and attending an UME training program to develop the new curriculum. This will be a considerable amount of work for the PCEs, who are responsible for the entire OB/GYN curriculum re-design, including the creation of lectures, podcasts, small groups and other learning resources. Dr Paw plans to give an education update at one of the grand rounds in the spring of 2023 to update the department.

Goals beyond the next year: RIME block 1 starts July 2023, and will continue to roll out through 2024. We will be finessing the curriculum based on feedback from block 1.

# CLERKSHIP

## Achievements and Highlights

- Class of 2023 brought a new approach to the O&G Clerkship Rotation with 4+2 week longitudinal structure. We were able to successfully implement this with the 2 week focus on clinic and outpatient patient care and the 4 week block focused on inpatient care including L&D, OR, and inpatient consultation and emergency coverage
- Students have the option of pursuing a day with Gynecologic Oncology or at a TA Clinic
- One of our biggest strengths is up front immersive teaching through cases, with one half day at beginning of 2 week clinic block to review high yield topics including AUB/PMB and GDM/prenatal care as well as practice hands on skills with models including pelvic examination (pap, STI testing), IUD insertion, and cervical exam for Bishop score. This allows the students to start the rotation feeling less intimidated by the content.
- The 4 weeks block starts with 2 days of hands-on teaching including SVD, perineal tear repair, simulation case using Noelle for hypertension and eclampsia management, expanded physical exam practice including ARM and PROM model, and review of high yield topics such as PPH, shoulder dystocia, postpartum complications and preterm labour.
- Strong appreciation for O&G Faculty including staff and residents with Honour roll and Gold star awards from the students.
- **Thank you to the Core teaching team** including: Dr Ingrid Kristensen, Dr Dhea Wallace-Chau, Dr Jaelene Mannerfeldt, Dr Aisling Mahalingham, Dr Kathryn Kenny, Dr. Kayla, Dr Kyle Lafreniere, and Dr Kimber Thornton. Their ongoing dedication to teaching is much appreciated.
- **Thank you also to the clerkship committee** : Dr. Weronika Harris-Thompson (Clerkship Director), Dr. Kayla Nelson and Kathryn Kenny (Evaluator Coordinators this year), Dr. Kimber Thornton (FMC rep), Dr. Paul Henning (RGH rep), Dr. D Igras (PLC rep), Dr. Kyle Lafreniere (SHC rep), Dr. D McCubbin (Medicine Hat rep), as well as our resident reps Dr Mruganka Kale, Dr Paxton Ting, Dr Shannon Fitzpatrick and student reps Bronwyn Burghardt and Julia Chai.
- We could not make the rotation run without the administrative help of Katiane Ummels in our department and Tania Pander at UME, so a big thank you for their support!

## Challenges

- One of our challenges is accommodating a large number of learners in a relatively small faculty; while it is amazing to see our team continuously step up to the challenge, the clerkship team also recognizes this places additional burden on individuals that may already be struggling with clinical burnout. We have attempted to disperse students as evenly as possible across the sites while accounting for the level and amount of other learners at each site.
- Additional time commitment and administrative burden of split 4+2 week rotation (with rotations that are generally at different sites and can be in either order) creates more

challenges in planning teaching sessions and assuring minimum rotation requirements are met.

- Large amount of students on core rotation results in quite limited space for pre-clerkship and clerkship electives. We would love to be able to accommodate more elective students to give them additional exposure to our specialty and have more opportunity for preceptor based learning. Dr Jadine Paw as our education lead has taken initiatives to look for as many options as we can within the subspecialties, but this remains an ongoing challenge.
- Decreasing budget through UME results in less funds allocated for faculty stipends for their teaching contributions, with a focus on directing funds towards reimbursing core teaching and to those assigned as evaluators.
- Transition to Connect Care poses some challenges in terms of how to involve our clerks with practicing physician skills such as placing orders, and documentation (eg traditional OR notes no longer applicable).

### **Workforce planning**

- Dr Kayla Nelson returning from maternity leave will resume full evaluation coordinator role (has been supported by Dr Kathryn Kenny this year and we thank you again for your 12+ years of contribution!)
- Further interest for core teaching group will be taken into account with candidates who demonstrate additional interest in teaching (eg through CME program such as TEP)

### **Education**

- Ongoing encouragement for faculty to attend educational teaching courses; this year Dr Kimber Thornton is completing the Teaching Excellence Program through the UME and will be joining our core clerkship teaching group.
- Goals for the next year include ongoing updates of our curriculum, and completion of transition to more gender inclusive language throughout our teaching material. Ongoing efforts to optimize EDI appreciation within our exam will also be completed, but will require regular review in the future.
- Our curriculum changes are focused on increased case-based self-directed learning (as opposed to didactic), with a transition towards clinical encounters tested through the online CARDS format to reinforce material.

### **Future Directions and Initiatives**

We look forward to our collated feedback this year for the first 4+2 year and using this to streamline future initiatives.

# Minimally Invasive Gynecology Fellowship

## Achievements and Highlights

The MIGS Fellowship underwent some flux in 2022. Following re-alignment of Fellowship expectations and professional goals, Dr. Elizabeth Russell left the MIGS Fellowship in May 2022 to pursue ongoing opportunities in general Gynecology.

We welcomed our first focused 1-year Fellowship aimed at practicing Gynecologists within 5 years of graduation (or residents completing the FRCSC exams successfully with a position in gynecology secured) in Dr. Craig Morton who returned to University of Calgary having completed residency in Calgary, but holds a staff position in St. John, New Brunswick. His Fellowship completion date is on April 31, 2022.

We have also welcomed another University of Calgary OB/GYN graduate for the 2 -year academic MIGS Fellowship position, Dr. Lauren Andrew, who started her Fellowship on September 1, 2022. She is doing a Master's in Public Health at Harvard and still heavily involved in prior research projects started in her residency.

The MIGS Fellowship in Calgary joined 13 other Canadian programs (11 through CanSAGE, 3 through AAGL) to offer positions for Fellowships in MIGS through a joint application process through CanSAGE which was very smooth and much more applicant-focused. Calgary had 13 applicants in total which is exciting as MIGS becomes a popular Fellowship choice.

The MIGS Fellow has been the lead along with the senior Gynecology rotation resident for the "BAG" rounds (Better At Gynecology) which take place virtually on a monthly basis at the PLC with attendance by all residents at that site in addition to PLC MIGS staff. Through the direction of the MIGS Division Lead, the MIGS Fellow participates in all aspects of simulation half days for the residents. The MIGS Fellow has provided independent Gynecology call for departmental support as needed.

Fellows have started to attend the Chronic Pain Clinic under the supervision of Dr. Caitlin Jago and Dr. Magali Robert on a limited basis and based on career goals. This has proven to be very valuable and integrates principles relevant to endometriosis care.

University of Calgary Fellows continue to shine at national and international conferences with the following presentations:

O'Leary M, Senter MB, Sander AP. Laparoscopic -assisted myomectomy during the second trimester of pregnancy. AAGL Annual Congress, Denver, Colorado, November 2022.

Russell E, O'Leary M, Belland L. Minimally Invasive Surgical Management of Tubo-Ovarian Abscess. CanSAGE Annual Conference Top PET (Practical Everyday Techniques) and People's Choice Award video. Halifax, Nova Scotia. September 2022.

Also presented at AAGL Annual Congress, Denver, Colorado, November 2022. for both the Practical Everyday Techniques (PET) and People's Choice at the annual CanSAGE conference in Halifax in September 2022 and was presented at AAGL in December 2022.



## **Challenges**

The readjustment of Fellowship positions provided a challenge to ensure continuity in the Fellowship Clinic and coverage of high volumes of surgical opportunities. Given the timing of the changeover in early June 2022, there was no disruption to either delivery given the typical slow down over summer months. Although anticipated, there are no significant issues with having 2 Fellows training concurrently given our high surgical load, ample MIGS consults on the wards and significant numbers of cases with high complexity. Ensuring protected research time has been proving more difficult with several strategies in place to address this in the future.

### **Workforce planning**

Fellowship positions will be held at 2 Fellows for the foreseeable future with only one academic Fellow in training at one time to allow for ample time to meet all curriculum objectives. Strict adherence to the eligibility criteria for the 1-year clinical Fellowship will be followed.

### **QA/QI and Innovation**

Focusing the 1-year Fellow on QA/QI initiatives is the objective as this position becomes more solidified. This would involve Dr. Jackie Thurston who has expertise in the area. Dr. Craig Morton is overseeing a QI project on Factors contributing to surgical site infections post Total Laparoscopic Hysterectomy for benign disease at all sites in Calgary. This has been approved by REB and data is being collected for analysis.

### **Future Directions and Initiatives**

Ongoing involvement of Dr. Caitlin Jago at the Pain Clinic and in her private clinic has proven beneficial.

Given the restraint on protecting time for research and limited time for faculty to provide support, ensuring that we hire a future MIGS with a dedicated focus on creating a research program for the MIGS Fellows will be essential as the Fellowship grows. This can be incorporated into succession planning for MIGS overall.

# Gynecology Oncology Fellowship

## Achievements and Highlights

Change in Program Director as of Dec 1, 2021, Dr. Prafull Ghatage stepped away from the role after 19 years as Program Director. Dr. Anna Cameron took over the Program's leadership heading into an accreditation year.

The program has moved to a continuous quality improvement process to ensure iterative enhancements for the educational program for the Gynecologic Oncology residents.

The following major changes have been implemented with an ongoing PDSA (Plan-Do-Study-Act) cycle to ensure the changes are meeting the needs of the program.

- 1) No safe call room for the residents. A PGME infrastructure grant obtained for construction of a call room, this is being built in a secure area of TBCC offices. There have been delays due to back ordered material.
- 2) Academic half day is now from 11 to 1 pm on Wednesday and is protected from clinical duties.
- 3) There is a 2-year rotating curriculum for AHD, the first year is tumor site based, the second year is discipline-based (surgical techniques, palliative care, chemotherapy, radiation etc). The curriculum has been designed by the program director to address the Royal College objectives of training for gynecologic oncology.
- 4) The roll of Connect Care has pushed the program to adapt to the new demands of the system. We have had to re-evaluate the chemo ordering process to ensure both patient safety and proper resident support to learn how to order chemotherapy.
- 5) The first CBD resident started in October of 2022. In anticipation, a soft launch of some EPAs was done in the Spring of 2022 to help the faculty adjust to giving this sort of feedback to the residents. This also allows time-based residents to benefit from more frequent lower stakes evaluations.

## Challenges

The Gynecologic Oncology program went through external accreditation in the Fall of 2022. The Preliminary Accreditation Review Report recommended that the Gynecologic Oncology Program is an Accredited program on notice of intent to withdraw accreditation with a follow-up by external reviewers in 2 years. The final report is to be issued in February of 2023 and is still pending.

There have been 2 retreats with faculty and fellows (Dec 2, 2022 and Feb 8, 2023) to start to address the areas for improvement (AFIs) noted in the accreditation documentation. In addition, RPC meetings are now occurring on a monthly basis to address the implementation of new initiatives and to re-evaluate all new procedures.

## **Workforce planning**

There have been no new faculty appointments in the last year and there are no anticipated retirements.

The following residents have completed their training in 2022: Drs. Joni Kooy, Christina Ince, Tamara Kuzma, Saida Bowe and Hanan Mal. Dr. Jonathan Cluett started his research fellowship year in July of 2022 but subsequently realized that he didn't want to pursue a career in academic gyne oncology and has resigned from the program. Dr. Hesham Sait from Saudi started his residency in October of 2022.

The Program did match a 3-year Gyne Oncology resident in September of 2022. Dr. Rachel Grant from the University of Calgary O&G residency program will be starting her research fellowship in September of 2023 and her clinical Gyne Oncology residency in September of 2024.

Due to pandemic and a decrease in applicants to Gyne Oncology programs in the last 2 years, our residency program has shrunk in size considerably. Our division is meeting in February of 2023 to determine how best to address our smaller program.

## **Education**

Please see the section on highlights for the changes that are ongoing with the Gynecologic Oncology Program.

### **Future Directions and Initiatives**

Goals for the next year

The goals for the next year are to ensure that the program is meeting the educational requirements of the residents. This will ensure that the Areas for Improvement noted in the Accreditation report will be addressed and remediated.

In the process of building a more robust educational program for the residents, we will be restructuring our program to ensure that educational opportunities are retained and strengthened.

Goals beyond the next year

The Royal College 2-year external review will be in the Spring of 2025. By this time, it is anticipated that all AFIs will be addressed through an iterative change management plan to ensure continuous quality improvement. This will confirm that we will retain our accredited Gynecologic Oncology training program.

# Pelvic Medicine and Reconstructive Surgery Fellowship

## Achievements and Highlights

In 2022, the FPMRS/Urogynecology Fellowship Program bid farewell to Dr. Allison Edwards, who completed her fellowship and began a staff position at Sturgeon Community Hospital in St. Albert. Although the group misses her, they are excited that she will bring the skills and techniques developed locally to patients in northern Alberta.

Dr. Alison Carter Ramirez also completed her fellowship and joined the group as staff upon finishing her training. Dr. Carter Ramirez is now the resident coordinator for the Urogynecology rotation and is innovating the patient education process by through work supported by a research and education-related grant from AHS.



Dr. Jena Hall started her second year of Urogynecology fellowship and is working on an original research project called "The LAPRO Study: Learning and Acquisition of Laparoscopic Procedural Skills in the OR" with collaborators Dr. Allison Brown and Dr. Kayla Nelson. She also peer-reviewed funding from the University of Calgary for the "Video Recording in Gynecologic Vaginal Surgery: Use of Video Playback and Creation of a Surgical Video Bank (Use of the VITOM Device)," which the group hopes to launch in 2023. Dr. Hall is an accomplished innovator in medical education, and in 2022 was invited to speak at the International Conference on Residency Education and the Kuwait Institute for Medical Specializations.

In late 2022, Dr. Christina Yang joined the group as the junior fellow in Urogynecology. Dr. Yang is originally from Calgary and completed her Obstetrics & Gynecology residency at the University of Alberta. Both Dr. Yang and Dr. Hall were accepted to the American Urogynecology Society's Fellow



Course, a prestigious hands-on cadaver course and advanced case discussion series. It is unusual to have two fellows accepted in the same year, but the Calgary program is delighted that both will have the opportunity to participate and return their learnings to the group.

The Fellowship Program at the University of Calgary remains one of the largest and most competitive in Canada, leading in fellowship research and surgical training for pelvic floor conditions. After spending nearly a decade growing and innovating the program, 2022 was



my last year as Program Director. However, I am confident that the energy and enthusiasm the entire team shares for fellowship education will ensure that the program continues on a similar trajectory of excellence and innovation under its new leadership.



# Maternal-Fetal Medicine Residency Program

## 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 grow, and to see our graduates become MFM colleagues across Canada. Our residents continue to have a 100% success rate on the Royal College MFM exam.

Our excellent residents are the highlight of our program:

- 1) **Dr. Patrick O'Farrell.** Dr. O'Farrell (from McGill University) began his MFM residency in Calgary on July 1, 2021. With Drs. Kuret, Castillo, and Metcalfe, his scholarly project is investigating "Does the timing of COVID-19 infection in pregnancy impact rates of fetal distress during labour?" He received a DEAR fund award for this project in January 2022. Dr. O'Farrell will be completing his residency in June 2023 and has accepted a position as a MFM subspecialist at the Jewish General Hospital and with McGill University in Montreal.
- 2) **Dr. Genevieve Quesnel.** Dr. Quesnel (from University of Saskatchewan) began her MFM residency in Calgary on September 27, 2021. She received a DEAR fund award in January 2022. Her ongoing scholarly project with Drs. Kuret and Labrecque is investigating the effects of SARS-CoV2 on placental pathology and rate of small for gestational age birthweight. Dr. Quesnel was selected to be the Resident Representative for both the SOGC Maternal-Fetal Medicine and Diagnostic Imaging Committees. Dr. Quesnel will be completing her residency in September 2023.
- 3) **Dr. Gabrielle Bonneville.** Dr. Bonneville (from our own University of Calgary) began her MFM residency on August 1, 2022. With Drs. O'Quinn and Abou Mehrem, her scholarly project is "Predictors for timing of birth after antenatal corticosteroid administration in patients with placenta previa and antepartum hemorrhage: a retrospective cohort study." She just recently received a DEAR fund award for this project. During her MFM residency, she is continuing her work towards a master's degree in Precision Health: Quality and Safety Leadership

Specialization at the University of Calgary.

While our final report from the September 2022 Royal College Accreditation Review is still pending, our preliminary report recommended our status be an accredited program with follow-up by next regular accreditation review. This is the top recommendation they can make for a program (previously described as "full accreditation"). The reviewers found that the program is "very strong" and identified strengths of



the program including:

- Program Director. Dr. Anne Roggensack “is a dedicated educator who is committed to the program and very supportive of resident learning and wellness” and “is very engaged and accessible,” bringing a “high degree of methodological rigor to residency training.”
- MFM faculty. There is a “strong and engaged faculty” who are “seen to be excellent clinical role models by virtue of their high-quality teaching, clinical expertise, and overall approach to practice.”
- Innovative curriculum. The reviewers noted that Dr. Roggensack’s “solid grounding in curriculum design and measurement / assessment has helped to drive innovative change to the MFM residency curriculum with the support of the RPC, MFM section, and department head.”
- Focus on learning and individual learning objectives. They noted that “residents participate in clinical care for the sake of their learning; they are not depended on for any level of service [allowing] them to focus on the complex / unusual cases” and that “residents are encouraged to develop individual learning objectives, and their clinical experiences can be adapted to meet these personalized objectives.”
- Robust assessment strategy. The reviewers noted our multifaceted approach to resident assessment and progress, noting our “overall robust evaluation system” and that “considerable rigor has been applied to the development and implementation of processes related to resident progress.”
- Dedication to resident wellness. The reviewers found that “resident safety and wellness are promoted in all aspects of the learning environment” They also noted that the program director is “a champion of resident wellness and ensures that residents have the protected time needed to support their academic growth.” The residents were “uniformly positive in their assessment of the learning environment.”

The MFM residency officially transitioned to Competence By Design this year, with our first CBD resident Dr. Gabrielle Bonneville starting in August 2022. As we as a program had already embraced the principles of competency-based medical education, enacting a transformational change in our curriculum years ago, we were well prepared for this transition, with



minimal changes to our program needed for the transition. The most significant change for our program involved transition to the ePortfolio platform and utilizing EPA assessments in lieu of objective-based assessments. While embracing the new system, we are continuing with some of our unique / specialized feedback tools, in addition to EPA assessments and narrative observations. We have utilized a Competency Committee approach to assessing resident progress for 6 years already, having found this method superior for tracking resident progress and for providing valuable and more



specific feedback to residents. Our previous mentor program has also transitioned to a more formal Academic Advisor program, with Dr. Candace O'Quinn as our first Academic Advisor.

Dr. Anne Roggensack was recognized with the CSM PGME Award of Excellence Outstanding Commitment to Residency Education for all subspecialty programs This award recognizes the outstanding contributions made by an individual to residency education through teaching, administration, program development and/or contributions to educational research that benefit residency education.

## Challenges



As is very typical, a few areas for improvement (AFIs) were identified that will be followed up at the next regular review. The only challenging AFI for us will be resolving the inadequacy of the FMC MFM clinical space and lack of a dedicated resident space at FMC, as the Royal College will expect this to be addressed by the time of the next regular review (in 8 years). The reviewers noted that “the clinical workspace at the [FMC] MFM unit is quite small and does not allow for a resident to concurrently work

alongside the staff physician. This negatively impacts work efficiency and detracts from the educational experience.” This finding will provide additional support / urgency for infrastructure improvements at FMC that will benefit residents, patient care, and our healthcare team.

Plans for expansion of AHS MFM services have been challenging. Government-led changes to the physician funding framework, alternate relationship plans, and diagnostic imaging contracts contribute to an uncertainty that is outside our residency's locus of control. It is a challenging time to lead a residency program with a diverse academic and clinical faculty



who participate in both alternate payment and fee-for-service streams. While as a section we are committed to education and know there will remain a high volume of high-risk Albertan patients who need our care, there remains unknowns regarding





the future of healthcare and funding in Alberta. If there are challenges to be faced by our faculty, there is the risk that there will also be challenges for our residents and their learning experiences. The process of MFM physician recruitment to the AHS cARP MFM program continues.

## Workforce planning

The MFM Residency Program Committee and MFM Competence Committees were active in the last year, and continued with faculty membership including Dr. Stephanie Cooper, Dr. Candace O'Quinn, Dr. Nancy Soliman, and Dr. David Somerset.

We are pleased to have welcomed Dr. Nancy Soliman as Chair of the MFM Competence Committee and appreciate her leadership and thoughtful guidance of the committee.

There continues to be open physician educational leadership opportunities within the MFM residency program, and we would welcome additional physician engagement in moving the program forward.

We are very grateful to our Program Administrator Ms. Katiane Ummels for her support throughout the (nearly simultaneous) Royal College accreditation and transition to Competency By Design.



## Education

Our academic program continues to evolve in response to resident feedback. Half-days include a



variety of experiences, including preceptor-led sessions and case-based discussions, to webinars and self-study, to simulation. 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 lead MFM Journal Club.

Residents have been active in teaching pre-clerkship, clerkship, O&G residency, and CME.

For the first time since the pandemic, our senior residents attended the University of Toronto Fetal Therapy Simulation Course, taught by the fetal therapy group in Toronto. This excellent course included hands-on workshops in cord occlusion (bipolar forceps, RFA, and interstitial laser), fetoscopic

tracheal occlusion, fetal shunts (chest and bladder), laser ablation of placental vascular anastomoses (anterior and posterior placental approaches), and intrauterine transfusion

## **Research**

Our MFM residents continue to be successful in their scholarly endeavors (noted above). All 3 MFM residents were successful in obtaining support for their research in the DEAR fund award competitions.

## **Future Directions and Initiatives**

The MFM residency is presently funded for up to 2 positions per year. In recent years, given the volume of learners in our department, we have elected to offer either 1 or 2 positions annually, to optimize the learning experiences of our current MFM residents. The national need for MFM physicians is unknown, and it is hoped that planned research may better inform our need for training MFMs at the University of Calgary.

While we are awaiting the final report from the Royal College, a priority issue for our MFM residency program and section will be advocacy for an expanded inpatient MFM unit with dedicated space for our resident learners.



Research

# RESEARCH OVERVIEW

## Achievements and Highlights

The 2022 Clara Christie Research Day was held at the Red and White Club. Dr. Andrea Simpson was the invited keynote speaker from the University of Toronto. Dr. Simpson gave the annual Dr. John Jarrell Lectureship on Gender and Motherhood in Medicine. Dr. Katie Chaput was the invited Departmental Lecturer who gave a talk on Antenatal Cannabis Use in Alberta: Recent Studies and Future Directions



## Challenges

Resident research productivity has been poor in recent years. In 2022 we have added Research in Progress sessions to the academic half day calendar for residents to provide them time in their program to work on their research projects. Dr Amy Metcalfe is available during these sessions to provide feedback and advice as residents work on their projects. We have also started a central intake form for residents and faculty to access departmental research resources to help track the extent to which existing resources are utilized.

## Workforce planning

We'd like to thank Dr Stephen Wood for many years as the Lead of the Research Section. In 2022, Drs. Amy Metcalfe and Gregg Nelson took over as co-leads of the research section.

Ms Selphee Tang has assisted department members with 12 ongoing research projects – half of which were led by a resident/fellow and half of which were led by departmental faculty.

## Education

Drs Erin Brennand and Amy Metcalfe (along with Drs. Jennifer Gordon (University of Regina) and Ryan Van Lieshout (McMaster)) were successful in obtaining CIHR funding to develop and implement a national training program in girls' and women's health entitled GROWW (Guiding interdisciplinary

Research on Women's and girls health and Wellbeing). The GROWW program is a national interdisciplinary training program that brings together clinical and graduate trainees, post-doctoral fellows, early career researchers (ECRs), established researchers, and professionals from within and outside of academia with a shared passion and interest in girls' and women's health and wellbeing across the lifespan. More information can be found at [growwprogram.com](http://growwprogram.com)

### **Future Directions and Initiatives**

Goals for the next year: In 2023 we will continue to monitor and track productivity of residents and faculty and will work closely with the Cumming School of Medicine to identify a sustainable mechanism to track grants and publications. We will also continue to monitor use of departmental research resources and assess if allocating additional time in the academic half day schedule has resulted in more residents publishing their work in peer-reviewed journals.



# Grants

\$6,201,005  
CIHR Grants

Dr. Gregg Nelson

Optimizing surgical care: trends in Enhanced Recovery After Surgery (ERAS) guideline uptake and barriers to better evidence-based care, Canadian Institutes of Health Research – Project Grant Spring 2022- Principal Investigator - \$260,100 - 2025/03

Implementation of Enhanced Recovery After Surgery guidelines, Canadian Institutes of Health Research (CIHR) Project Grant - Priority Announcement: Health Services and Policy Research, Principal Investigator - \$100,000 - 2022/2023

Dr. Jennifer Soucie

The REDUCED Trial: REDucing the Utilization of Cesarean sections for Dystocia- Co-investigator  
\$733,920

Dr. Stephen L Wood

The REDUCED Trial: REDucing the Utilization of Cesarean sections for Dystocia- Principal-investigator  
\$733,920

Maternal-child dyad health outcomes: neurodevelopment at three years in the context of maternal cannabis use - an extension of a prospective cohort study – Co-investigator - \$500,000 2022/01

Dr. Amy Metcalfe

Optimizing the Management of Chronic Disease during Pregnancy – Principal Investigator \$125,000

The REDUCED Trial: REDucing the Utilization of Cesarean sections for Dystocia- Principal investigator  
-\$733,920

Survival, recurrence and subsequent obstetrical outcomes following pregnancy-associated and postpartum cancer- Principal investigator - \$45,000

Impact of Maternal Cancer and In-Utero Exposure to Chemotherapy on Long-Term Child Health – principal investigator - \$306,001

GROWW (Guiding interdisciplinary Research On cis- and trans-gendered Women's and girls health and Wellbeing) – Principal Investigator - \$1,040,000

Impact of COVID-related restrictions on maternal and infant health- Principal Investigator - \$150,000

GROWW (Guiding interdisciplinary Research On cis- and trans-gendered Women's and girls health and Wellbeing) - SPOR Supplement – Principal Investigator - \$150,000

Dr. Chaput

A multidisciplinary prospective exploration of prenatal exposure to cannabis and associations with infant and child neurodevelopment to age 3- Principal Investigator - \$100,000

Examining child neurodevelopment, brain and mental health outcomes associated with prenatal cannabis use in the prospective All Our Families pregnancy cohort- Principal investigators - \$499,956

Identification of biomarkers 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 – Principal Investigator- \$62,812

Dr. Brennand

GROWW (Guiding interdisciplinary Research On cis- and trans-gendered Women's and girls health and Wellbeing)- principal investigator - \$1,040,000

Understanding the Epidemiology of Polycystic Ovary Syndrome in Alberta- Principal investigator- \$100,000

Impact of pregnancy and lactation duration on the female menopausal transition- principal investigator- \$100,000

Impact of Physician Sex and Patient Gender on Patient Outcomes in Obstetrics & Gynecology- Principal investigator - \$447,526

Pelvic Health and Public Health in Twentieth Century Canada – Co-investigator- \$577,575

Uterine preservation versus hysterectomy for pelvic organ prolapse surgery: A mixed methods prospective cohort study exploring health outcomes and patient beliefs – Principal Investigator- \$50,000

Sex, Drugs & Chronic Pain after Pelvic Organ Prolapse Surgery: investigating patient and clinician priorities related to pelvic floor surgery in Canada- Principal Investigator- \$99,244

Five years after the Mid-Urethral Sling Tensioning (MUST) trial: cure of stress urinary incontinence symptoms, health care utilization and cost-effectiveness associated with two techniques for MUS incontinence surgery- Principal investigator - \$150,000

Dr. Scime

Breastfeeding and medically high-risk pregnancy: A mixed methods approach to examining feeding intentions, experiences, support, and outcomes – Principal Investigator - \$105,000

Dr. Slater

Molecular mechanisms underlying the onset of human labour: Steps towards improving the treatment of preterm labour- Principal Investigator- \$100,000

Towards an improved understanding of myometrial quiescence and contraction: Differential regulation via G-protein coupled receptors (GPCRs) and control by regulator of G-protein signaling 2 (RGS2)- Principal investigator - \$546,976

Dr. Skeith

A prospective study evaluating complement activation among pregnant patients with obstetrical antiphospholipid syndrome- Principal Investigator - \$104,996

Dr. Robert

Surgical Management of Stress Urinary Incontinence in Women: Safety, Effectiveness and Cost-Utility of Trans-Obturator Tape (TOT) versus Tension-free Vaginal Tape (TVT) Five Years after a Randomized Surgical Trial- Principal Investigator- \$246,899





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