

Ambulatory Gynaecology NEWS

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The Future of Healthcare is not in the Hospital

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Objectives

At the end of this session, participants were able to:

- Stimulate a discussion regarding alternatives to the acute-care hospital sector for women's health interventions.
- Acknowledge and understand the barriers to such alternatives within the healthcare system.

Dr. Leyland began by noting that healthcare delivery is one of the most complex human endeavours. "Indeed, the principles guiding the future evolution of quality healthcare delivery include patient safety, patient-centredness, timeliness, efficiency, effectiveness and equitability," he said. Dr. Leyland quoted the theoretical physicist Albert Einstein: "We cannot solve our problems with the same thinking we used when we created them." He suggested that this logic also applies to finding alternatives within the context of the changing face of healthcare delivery.

In Canada, noted Dr. Leyland, "The future of healthcare is **not** hospital-based!" A number of factors are responsible for the shift from hospital- to community-based care:

- Healthcare spending for hospitals is shrinking, and new healthcare monies will flow to community-based initiatives.
- Healthcare providers must streamline the efficiency and effectiveness of their services, and promote integration of services within the community. Indeed, healthcare funding reform rewards quality and efficiency.
- Providing the best care requires careful planning: patient care improves when acute-care hospital services are focused and well-aligned with community and home-care services.

Planning for effective and efficient healthcare delivery in the future requires careful consideration of the organization of community and regional care, and the establishment of clear priorities for the location of clinical services. Creation of a foundation for a master facilities plan that is designed to optimize appropriate patient care is also necessary. As well, the provision of exceptional patient care is crucial. Dr. Leyland added, "Practitioners must provide the best care possible for

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A Message from the President and Chief Executive Officer, Canadian Association of Ambulatory Care

It is clear that many gynaecological procedures currently performed in the operating room are well-suited to be performed in an ambulatory clinic setting. Indeed, the advantages of an ambulatory setting include decreased anaesthetic risks, speedier patient recovery, improved postoperative pain control and reduced cost. The tremendous interest – both globally and in Canada – to develop and establish ambulatory gynaecologic clinics bodes well for women's health. Ambulatory care clinicians have been compelled to develop opportunities to improve operational performances and cost, while enhancing the quality of care delivered to patients. Much is expected of us, and we deliver!

– Denyse Henry, RN BHA(Hons) MHM

patients, with the resources provided, to steward effectively.”

In addressing the challenges facing healthcare providers, Dr. Leyland stressed that healthcare professionals must be committed to sustainability, and challenge traditional beliefs about their roles in healthcare. Indeed, he added, healthcare providers are the key to success of the future evolution of healthcare: “We must ensure that all healthcare workers are valued and respected, and that they have the tools they need to do their job as a team.”

The planning process for developing an ambulatory care clinic requires the development of a clinical services plan that takes into account:

- Rigorous analytics, i.e. flexible and clinically detailed forecasting.
- Robust stakeholder consultation and engagement.
- Leveraging the experience and knowledge of healthcare leaders in the region.
- Incorporation of leading clinical practices, from both local and international sources.

Abnormal uterine bleeding is a common problem in women: 20% of women of reproductive age consult their family physicians regarding this issue, noting that it interferes significantly with their quality of life. In fact, recent Canadian Institute for Health Information data indicate that 41,000 hysterectomies are performed in Canada each year, 25% of which are for the diagnosis of abnormal uterine bleeding. However, there are a number of less invasive interventions for abnormal uterine bleeding, including ablation; when these interventions are utilized, patient recovery time is briefer, and women return to their activities of daily living more quickly. Unfortunately, said Dr. Leyland, “Many of these interventions are not available to Canadian women, simply because hospitals cannot afford them.” However, when less invasive interventions are utilized, a significant reduction in hysterectomy rates (up to 40%) results.¹

The provision of outpatient gynaecological procedures has been recommended for many years. In 2002, the Ontario Women’s Health Council recommended the development of specific ambulatory sites around the province for investigation of abnormal uterine bleeding.² The Council further recommended that minimally invasive surgical options (e.g. hysteroscopic endometrial ablation or global endometrial ablation) – which can be performed under local anaesthetic in an outpatient clinic setting and completed in a matter of minutes – were the recommended therapies for abnormal uterine bleeding. Unfortunately, noted Dr. Leyland, “This is not currently standard practice in Ontario.”

In 2006, the Endometrial Ablation Guideline Expert Panel was developed, under the auspices of the Ontario Ministry of Health and Long-Term Care and the Ontario Health Technology Advisory Committee, to develop utilization guidelines for outpatient endometrial ablation.³ The Panel recommended that specific ambulatory sites for the investigation and treatment of dysfunctional uterine bleeding should be developed, utilizing the protocol of endometrial ablation. They further recommended that the Society of Obstetricians and Gynaecologists of Canada should be asked to develop new guidelines for the treatment of dysfunctional uterine bleeding.

In 2013, the Society of Obstetricians and Gynaecologists of Canada published guidelines entitled *Abnormal Bleeding in Pre-Menopausal Women*.⁴ A key recommendation regarding abnormal uterine bleeding is as follows: “Non-hysteroscopic ablation techniques offer similar patient satisfaction results, with fewer risks of complications and less anaesthetic requirement than traditional hysteroscopic ablation.”

In 2015, the Society of Obstetricians and Gynaecologists of Canada published guidelines entitled *Endometrial Ablation in the Management of Abnormal Uterine Bleeding*.⁵ The guidelines included the following summary statement: “The use of local anaesthetic and blocks, oral analgesia, and conscious sedation allows for the provision of non-resectoscopic endometrial ablation in lower resource-intense environments including regulated non-hospital settings.”

The 2015 guidelines further noted, “Endometrial ablation performed in a hospital-based procedure room or a free-standing surgical centre, rather than an operating room, offers the advantages of a patient-centred environment, easier scheduling and reduced costs per case.”⁵

Dr. Leyland introduced the ‘focused factory’ concept of healthcare delivery, which involves a concept of care that is organized around a specific, limited set of resources, to provide a narrow range of services at low cost and high throughput.⁶ In the healthcare setting, noted Dr. Leyland, “Such a healthcare delivery system would result in reduced costs, improved access to care and increased patient satisfaction.”

Ambulatory care centres usually provide uncomplicated clinical interventions, e.g. gynaecology, orthopaedics. While they are not strictly regulated in the U.S., Dr. Leyland noted that in Ontario, “The standards of practice are equivalent to – or better than – hospital regulations.” Indeed, he added, “I believe we need to take ‘uncomplicated’ care out of the hospital and into a centre where providers can deliver the best care.”

The future of healthcare delivery is clear, concluded Dr. Leyland: “We must provide care that is reliably safe, effective, patient-centred, timely, efficient and equitable.”

Changing Culture: Creating an Ambulatory Gynaecological Clinic

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Objectives

At the end of this session, participants were able to:

- Understand the types of gynaecological procedures that can be performed in an ambulatory care setting.
- Appreciate the strategy and logistics of outpatient gynaecological procedures performed in an ambulatory care setting.
- Recognize the benefits of moving gynaecologic procedures to the ambulatory care setting.

Gynaecological Procedures in an Ambulatory Care Setting

Dr. Thiel began by stating that the Women's Health Centre in Regina General Hospital is well-appointed and efficiently run: "It is truly a great place to work."

"My role is more technical in the women's health clinic, because it is really nurse-driven," he added. "Without the nurses, and their tremendous understanding of and care for our patients, we wouldn't be able to do the work we do."

Dr. Thiel noted that many gynaecological procedures can be performed efficiently and safely in an outpatient setting (e.g. endometrial ablation, permanent birth control, fibroid removal), rather than in an OR. "With these procedures, I provide my patients with the best care, the fastest recovery time and the

most optimal long-term outcomes," he said. "These procedures are also justifiable in the outpatient setting from a cost-efficiency perspective."

Endometrial Ablation

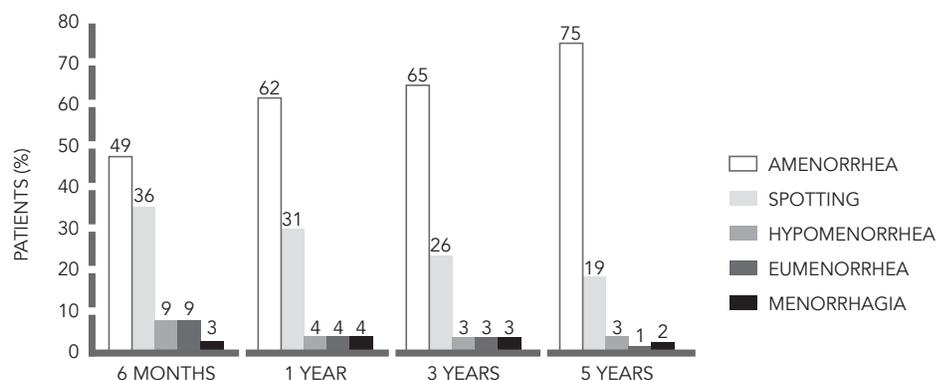
Dr. Thiel noted that global endometrial ablation is a surgical procedure that was developed to lighten or discontinue menstrual periods; it offers a speedier, safer and simpler alternative to hysterectomy. Endometrial ablation is performed vaginally – with no external excisions – and causes no hormonal changes or side effects. The NovaSure® endometrial ablation system uses radiofrequency energy to disrupt or remove the endometrium of the uterus; ablation takes only 90–120 seconds to complete, and is well-tolerated in the ambulatory setting.⁷ Indeed, at the Regina General Hospital Women's Health Centre, at 6- and 9-month follow-up, >90% of women report that they are pleased with the outcome, and fully two-thirds report that they are no longer menstruating.

Gallinat assessed the safety, efficacy and durability of the NovaSure® endometrial ablation system 5 years after the procedure had been performed in women with severe menorrhagia secondary to dysfunctional uterine bleeding.⁸ In this study of 107 patients, no intra- or postoperative complications were observed. At 5-year follow-up, amenorrhea was reported and successful reduction of bleeding was achieved in 75% and 98% of patients, respectively; hysterectomy and retreatment rates were 2.9% and 3.8%, respectively (Figure 1). The author concluded that the NovaSure® system is safe and effective in this population.

Permanent Birth Control

The Essure® permanent birth control procedure involves the insertion of a soft flexible coil into the fallopian tubes using a hysteroscope. Scar tissue then grows

FIGURE 1. 5-year follow-up of patients who underwent the NovaSure® procedure⁸



over the coil and permanently blocks off the tube, thereby preventing sperm from reaching an egg. This procedure offers a speedier and easier alternative to tubal ligation. With respect to cost, Thiel and colleagues demonstrated that moving tubal ligations from the OR to an ambulatory setting using hysteroscopy saved \$111 per case.⁹

Fibroid Removal

The clinic's preferred method for fibroid removal is the MyoSure[®] hysteroscopic tissue removal system. The system features a single-use, sterile blade with enhanced cutting efficiency due to simultaneous rotation and reciprocation of the blade (i.e. 1.5 g/min for fibroids). Dr. Thiel noted that the procedure is speedy: "To remove a 1.5- or 2-cm submucous fibroid takes only about 3 minutes." Due to its short duration, patient comfort and compliance are enhanced.

"The Women's Health Centre is a great environment in which to work," Dr. Thiel noted. "When patients return to the centre, they invariably talk about the positive experience they had previously." He added, "I also can't emphasize enough the importance of the clinic nurses' influence and care over patients. It makes such a difference, and it makes our work as physicians so much easier." Dr. Thiel concluded that it was his hope that more gynaecological procedures be moved out of the OR and into the ambulatory clinic setting, thereby improving the delivery of gynaecological care in Canada.

Clinical Experience in an Ambulatory Gynaecological Clinic Setting

Ms. Meyer and Ms. Thomson began by noting that the Women's Health Centre in Regina General Hospital

has been operating since 1992, offering pregnancy termination, and hysteroscopy and colposcopy services. From the start, the clinic was firm in its goal not to be anaesthesia-dependent; indeed, hyperstereoscopies were performed with nurse-administered moderate intravenous (IV) sedation, with a great deal of success. Over the following 10 years, nurse-administered IV sedation was refined, and the full potential of the Women's Health Centre was realized. The centre now offers NovaSure[®] endometrial ablation, Thermachoice[®] balloon therapy[®], Myosure[®] tissue removal and Essure[®] tubal insertion.

In 2012, further procedures were relocated from the hospital's OR to the Women's Health Centre. These included trigger-point injections and tension-free vaginal tape procedures. This expansion of services helped to reduce gynaecological surgical wait times in the Regina Qu'Appelle Health Region to an average of only 3 months.

A Typical Clinic Day

Ms. Meyer and Ms. Thomson outlined typical procedures and practices during regular clinic days at the Regina Hospital Women's Health Centre. Clinic days are carefully scheduled, and patients are assessed for appropriateness for their elective procedure and are booked through their gynaecologist's offices. The roster of patients – and the procedures they are undergoing – are established 1 week prior to the clinic day, to ensure that the appropriate equipment is available. Only patients with American Society of Anesthesiologists physical status classification status of Level I or II – and well-managed Level III patients with limited comorbidities – are treated.¹⁰

FIGURE 2. The Regina General Hospital Women's Health Centre is well-appointed, with state-of-the-art procedure (left) and recovery equipment (right).



“Patient safety is always top of mind,” the speakers noted. “Procedures are done using nurse-led, moderate IV sedation, so it’s important that there are no obvious contraindications to sedation.” Moreover, “Because we are selective we rarely have negative outcomes, or end up with situations where patient rescue is needed.”

The centre operates 5 days per week, from 8:00 AM to 4:30 PM. There is capacity to treat 10–12 patients each day, and the average patient stay in the clinic is between 2.5 and 4 hours. The first procedure starts at 8:30 AM, and the last procedure is completed at approximately 3:30 PM.

Compared with an OR setup, clinic staffing requirements are very efficient: for gynaecological procedures in the OR, total staffing requirements generally include 3 doctors, 5 nurses and 2 service aids. Conversely, for similar procedures performed in the outpatient clinic setting, staffing requirements include 1 doctor, 3 nurses and 1 service aid. Moreover, the patient’s journey through the procedure is more comfortable and familiar than in an OR: the nurse who admits her may be the same one she sees in the procedure room, while the physician offers more “hands-on” care throughout the procedure.

Many patients have indicated that they found their clinic visit to be a more comfortable and less intimidating experience than an OR visit. Figure 2 depicts the sterile, yet comfortable, ambience of the procedure and recovery room areas. “We are proud of our multidisciplinary environment! Nurses and doctors work side by side,” the speakers noted. “Our patients like meeting and chatting with both nurses and doctors before the procedure, which is comforting to them.”

The Nursing Team

The clinic employs a team of 3 nurses per clinic. At the start of the clinic day, each nurse organizes her own workspace, after which all 3 nurses help with admissions until the surgery start time. After all procedures have been completed, the nurse advocate assists in the recovery area. The speakers noted, “Our clinic exemplifies a true team approach.”

The **recovery room nurse** has a maximum patient load of 5 patients. However, there are rarely 5 medicated patients at a given time; rather, the norm is 2–4 patients. The clinic standard is for patients to remain supervised for 1 hour following moderate IV sedation; hence, they are usually in recovery for approximately 45 minutes. Patients are generally discharged within 1 hour post-op. Complications are rare, but those that might cause patients to stay longer include uncontrolled pain, extreme nausea and vomiting. Discharge is performed according to an adapted Post-Anesthetic Discharge Scoring System (PADSS), based on pain, nausea, bleeding and ambulation, in conjunction with nurse assessments.¹¹

The **circulating nurse** prepares the room and gathers the necessary equipment required. She assists the physician in non-sterile techniques, and manages the appropriate collection and labelling of pathology specimens. The circulating nurse also provides support to the nurse advocate and patients, as needed.

The **nurse advocate** administers moderate IV sedation: the clinic protocol is fentanyl 1 µg/kg and midazolam 1–3 mg (as well as pre-op NSAID, or nitrous oxide PRN).

TABLE 1. Benefits of an ambulatory gynaecological clinic

Patient benefits	<ul style="list-style-type: none"> • Improved access to care • Relaxed and patient-centred approach to surgical and postoperative care • Less invasive procedures • Faster recovery and return to normal function
Nurse benefits	<ul style="list-style-type: none"> • Ability to develop expertise in specific areas • Less pressured work environment • Well-defined goals • Good working relationship with physicians, which facilitates understanding and good morale for all • Dedicated to well-being of women
Physician benefits	<ul style="list-style-type: none"> • Procedures are all done on time, with a short turnover time • Daily caseload is well-managed: 5 procedures with moderate sedation, and 1 oral analgesia procedure • The total completion time for 6 procedures is 2–2.5 hours
Healthcare system benefits	<ul style="list-style-type: none"> • Delivery of excellent service • Reduction in procedure wait times • Efficiency and cost-effectiveness • High-quality specialized care

Her sole responsibility is to monitor and support the patient throughout the procedure.

The Ramsay Sedation Scale (RSS) is used to assess the level of sedation, to a level of RSS 2 (patient is cooperative, oriented and tranquil) or RSS 3 (patient responds to commands only).¹² Thus, patients are either generally awake or are easily roused. The clinic follows the Canadian Anesthesiologists' Society guidelines,¹³ as well as employing the art of the 'vocal local.' "The key elements of this approach are distraction, encouragement and developing a rapport that helps carry a conversation," the speakers noted. "We create a therapeutic and trusting relationship with our patients."

The speakers outlined the benefits of the ambulatory gynaecological clinic for patients, nurses, physicians and the

healthcare system (Table 1), and noted, "Providing patients with this type of support is hard work, but shows off our best professional selves!"

Conclusions

Dr. Thiel, Ms. Thomson and Ms. Meyer offered the following insights:

- Moving gynaecological procedures to an ambulatory clinic is safe and cost-effective, with optimal clinical outcomes.
- An ambulatory clinic provides a quality work environment for all employees.
- This type of clinic also augments work volume, without affecting patient safety.

References

1. Fergusson RJ, Lethaby A, Shepperd S, et al. Endometrial resection and ablation versus hysterectomy for heavy menstrual bleeding. *Cochrane Database Syst Rev.* 2013;11:CD000329.
2. Stewart D, Evans M, Henderson G, et al. *Achieving Best Practices in the Use of Hysterectomy.* Toronto, ON: Ontario Women's Health Council; 2002.
3. Health Quality Ontario. Thermal balloon endometrial ablation for dysfunctional uterine bleeding: an evidence-based analysis. *Ont Health Technol Assess Ser.* 2004;4:1–89.
4. Singh S, Best C, Dunn S, et al; Society of Obstetricians and Gynaecologists of Canada. Abnormal uterine bleeding in pre-menopausal women. *J Obstet Gynaecol Can.* 2013;35:473–479.
5. Laberge P, Leyland N, Murji A, et al; Society of Obstetricians and Gynaecologists of Canada. Endometrial ablation in the management of abnormal uterine bleeding. *J Obstet Gynaecol Can.* 2015;37:362–376.
6. Herzlinger RE, Ghorawat A, Krishnan M, et al. *Hub and Spoke, Healthcare Global, and Additional Focused Factory Models for Cancer Care.* Boston, MA: Harvard Business School; 2002. Case 313–030.
7. Hologic Inc. website. *NovaSure® Endometrial Ablation.* Available at: <http://www.hologic.com/products/intervention-and-treatment/gynecologic-surgery/novasure-endometrial-ablation>. Accessed September 13, 2015.
8. Gallinat A. An impedance-controlled system for endometrial ablation: five-year follow-up of 107 patients. *J Reprod Med.* 2007;52:467–472.
9. Thiel JA, Carson GD. Cost-effectiveness analysis comparing the Essure tubal sterilization procedure and laparoscopic tubal sterilization. *J Obstet Gynaecol Can.* 2008;30:581–585.
10. American Society of Anesthesiologists website. *ASA Physical Status Classification System.* Available at: <https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system>. Accessed September 13, 2015.
11. Chung F, Chan VW, Ong D. A post-anesthetic discharge scoring system for home readiness after ambulatory surgery. *J Clin Anesth.* 1995;7:500–506.
12. Ramsay MA, Savege TM, Simpson BR, et al. Controlled sedation with alphaxalone-alphadolone. *Br Med J.* 1974;2:656–659.
13. Merchant R, Chartrand D, Dain S, et al. Guidelines to the practice of anesthesia – revised edition 2015. *Can J Anesth.* 2015;62:54–79.

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