LETTERS

Physician leadership and system redesign needed to scale same-day discharge hip and knee arthroplasty

We share Bodrogi and colleagues' vision that same-day discharge will become common following total hip and knee arthroplasty. Three keys for success are physician leadership, system redesign (integration) and adoption of best perioperative practices.

First, physician support will be critical in leading the design, implementation and evaluation of same-day discharge programs. Some physicians, including those in primary care, will need to evolve traditional patterns of referral, triaging, assessing and caring for same-day arthroplasty patients. Regionally centralized patient intake, nurse practitioner-led assessment clinics, anesthesiologist-led preoperative optimization and virtual care to monitor patients discharged home are examples of where evolution of care is needed.

Second, system redesign in Ontario will be supported by the new Ontario Health Teams (OHTs), which will be responsible for providing a continuum of care. The integration of primary and specialty orthopedic care with outpatient rehabilitation centres and home and community care will evolve in the context of same-day discharge. The integrated

OHT will need to plan for preoperative optimization and postoperative home visits including physical therapy. This need could be minimized by adopting best practices such as the provision of exercise programs started well in advance of surgery (prehabilitation).

Third, enhanced recovery after surgery (ERAS) is an "evidence-based multidisciplinary perioperative care pathway" that includes the use of customized anesthetic techniques and pain management strategies to promote early patient mobilization while reducing complication rates of surgery. It is a leading best practice and requires the creation of multidisciplinary perioperative teams in the pre-, intra- and postoperative phases of care. The benefits are myriad.

As many as 55% of current patients hospitalized postoperatively may be eligible for same-day discharge.² Patients endorsed same-day discharge 87% of the time,³ and complication rates were comparable between patients who were discharged the same day and those who remained in hospital.^{4,5} Finally, system cost saving was estimated at 32.7%.⁶

As Paul Batalden has said, "Every system is perfectly designed to get the outcomes it gets." Physician leadership needs to redesign our system to ensure success for same-day discharge following hip and knee arthroplasty.

Bert Lauwers MD

Executive vice president medical and clinical, Scarborough Health Network, Scarborough, Ont.

Jon Hummel MD

Chief of surgery and orthopedic consultant, Scarborough Health Network, Scarborough, Ont.

Mark Glube MD

Interim chief of anesthesia, Scarborough Health Network, Scarborough, Ont.

Fred Go MN MBA

Director of surgery, Scarborough Health Network, Scarborough, Ont.

■ Cite as: *CMAJ* 2020 April 14;192:E408. doi: 10.1503/cmaj.74921

References

- Bodrogi A, Dervin GF, Beaulé PE. Management of patients undergoing same-day discharge primary total hip and knee arthroplasty. CMAJ 2020; 192:E34-9.
- Gillis ME, Dobransky J, Dervin GF. Defining growth potential and barriers to same day discharge total knee arthroplasty. Int Orthop 2019;43:1387-93.
- 3. Dorr LD, Thomas DJ, Zhu J, et al. Outpatient total hip arthroplasty. *J Arthroplasty* 2010;25:501-6.
- Aynardi M, Post Z, Ong A, et al. Outpatient surgery as a means of cost reduction in total hip arthroplasty: a case-control study. HSS J 2014;10:252-5.
- Gauthier-Kwan OY, Dobransky JS, Dervin GF. Quality of recovery, postdischarge hospital utilization, and 2-year functional outcomes after an outpatient total knee arthroplasty program. J Arthroplasty 2018;33:2159-64.e1
- Huang A, Ryu JJ, Dervin G. Cost savings of outpatient versus standard inpatient total knee arthroplasty. Can J Surg 2017;60:57-62.

Competing interests: None declared.