CORRESPONDENCE

Research priorities of the Saskatchewan Provincial Department of Anesthesiology: a cross-sectional survey

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To the Editor,

Within the provincial jurisdiction of the singular Saskatchewan Health Authority (SHA), the Department of Anesthesiology's provincial head and research director are responsible for catalyzing provincial anesthesiology research endeavors. There is a need to encourage research in the geographically disperse communities of Saskatchewan, discover research interests and needs, and establish a strategic plan to achieve meaningful research outputs.

Inspired by priority setting partnerships (PSP) that enable patients, caregivers, and clinicians to agree on the top ten priorities for future research in anesthesiology,^{1,2} our aim was to understand the research priorities of Saskatchewan anesthesiologists, their geographical distribution, and their willingness to conduct and participate in research.

Following a University of Saskatchewan research ethics board exemption (14 May 2019), we invited 128 Saskatchewan anesthesiologists and 22 family practice anesthesia (FPA) providers to participate in a confidential online survey (Survey Monkey) using personal email addresses where a preference had been expressed to departmental administrative staff, and SHA email

addresses when personal addresses were not available to the investigators. Survey questions (eAppendix, available as Electronic Supplementary Material) included the 25 highest ranked questions from the prioritization survey of a National Institute of Academic Anesthesia-sponsored (NIAA) PSP workshop in the United Kingdom,¹ presented in the NIAA order of priority. Additional questions were developed and refined through focused discussion with the survey team. Reminders were sent to non-responders after one week. Potential participants were informed that survey results would be used for research purposes and that participation implied consent. Participants ranked the NIAA top ten priorities for research that would have the largest impact on their practice. Demographic data were summarized with descriptive statistics, and any communities with fewer than five responses were aggregated according to SHA areas. Average rankings were calculated to determine the top ten priorities for research in Saskatchewan.

Forty-six of the 150 (31%) participants surveyed responded. The primary practice locations of respondents included: Saskatoon (28/46, 61%), Regina (12/46, 26%), and regional hospitals (6/46, 13%). Most respondents (41/46, 89%) were fellows of the Royal College of Physicians of Canada (FRCPC). Other respondents included FPAs or FRCPC-eligible anesthesiologists (5/46, 11%). Most respondents had prior research experience (39/46, 85%). In addition, most were interested in being involved in research (32/46, 70%), including research design (24/32, 75%), recruitment (10/32, 31%), data collection (14/32, 44%), local site coordinating activities (18/32, 56%), presenting results (13/32, 41%), and manuscript authorship (20/32, 63%). Thirteen respondents (13/46, 28%) wanted to be contacted for future involvement in research, quality improvement, or quality assurance work.

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Table Research priorities of the Saskatchewan Provincial Department of Anesthesiology

Average ranking	Priority
1	What outcomes should we use to measure the “success” of anesthesia and perioperative care?
2	How can we reduce complications (adverse events) after surgery?
3	For which patients does regional (local) anesthesia give better outcomes than general anesthesia?
4	How can preoperative assessment for adults be improved?
5	How can the anesthesiologist help reduce the risk of complications after surgery?
6	How can we most effectively deliver training to improve quality and safety in anesthesia and perioperative care?
7	What can we do to stop patients developing chronic pain after surgery?
8	How can we improve patient recovery from surgery?
9	How can we improve communication between the teams looking after patients throughout their surgical journey?
10	What long-term harm may result from anesthesia, particularly following repeated anesthetics?

The top ten research priorities for Saskatchewan anesthesiologists are reported in the Table.

When provided the opportunity to leave additional comments, participants stated perspectives such as:

“I believe this is a good way to involve the regional hospital sites”.

“More non-physician research coordinators and researchers are needed in each area of the SHA to facilitate and optimize physician engagement with research”.

“We have many strengths. One of the greatest opportunities is the ability to measure and improve across urban and regional settings”.

“Contribution to quality/safety/research should be an expectation of all physicians in Saskatchewan”.

In conclusion, our survey assessed the research priorities and experience of Saskatchewan anesthesiologists and FPAs. While it likely would have been preferable to use the Canadian PSP shortlist, which accounted for the importance of patient satisfaction, experience, and the impacts of shared decision-making, this shortlist was not available at the time of survey design in February 2019. Similar to the Canadian top ten,² our results identified a need to define the factors and outcomes related to the success of anesthesia care. Further research could explore

the priorities of Saskatchewan patients and be used to educate clinicians on the importance of patient-oriented research. The information gathered from our survey will be used to determine future research directions, potential for multicentre collaborations, and allocation of resources.

Conflicts of interest None.

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