

Karolina Zjadewicz is the Quality Improvement Lead for the Calgary Department of Critical Care of Medicine (DCCM) of Alberta Health Services. She has been a nurse for nearly 10 years with clinical leadership experience in both Burns/Plastic Surgery and Critical Care. She received both her Bachelor and Masters of Nursing through the University of Calgary. Her Masters' research concentrated on the role of middle managers in the implementation of mandated quality improvement projects. Her daily work and intents for future research are focused around Improvement Science, specifically around operationalizing QI projects at the frontline and the application of change models and models for knowledge transfer and translation. Recent accomplishments have included co-leading the successful implementation of a standardized OR to ICU handover at one hospital with work being led to spread across the Calgary zone, leading Calgary's ICU's to a successful Accreditation Cycle (94%) and successfully securing CMO funding for a QI project aimed at optimizing of ARDS (Acute Respiratory Distress Syndrome) Management.

A. Selected Recent Publications/Academic Presentations

Parhar, K., **Zjadewicz, K.**, Soo, A., Sutton, A., Zjadewicz, M., Doig, L., Lam, C., Ferland, A., Niven, D., Stelfox, T. & Doig, C.J. (2017). *Epidemiology and Predictors of Outcomes in Patients with Acute Respiratory Distress Syndrome Identified Using a Prospective Standardized Screening Protocol*. Manuscript in preparation for June 2017. Target Journal: JAMA IM

Zjadewicz, K., Coulthard, J., Davies, J., Boucher, P., Wolfe, K., Queen, D., Boiteau, P. (2017). *Implementing a Standardized OR-ICU Handover Procedure: Considerations for Implementation*. Manuscript in preparation for June 2017. Target Journal: Anaesthesia in Intensive Care

Zjadewicz, K. (2017) *Role of Middle Managers in Mandated Quality Improvement Projects*. Manuscript in preparation for August 2017. Target Journal: Journal of Advanced Nursing

Zjadewicz, K., Deemer, K., Coulthard, J., Doig, C., Boiteau, P. (2017). *Identifying what is known about Improving Operating Room to Intensive Care Handovers: A Scoping Review*. Currently in peer review.

Zjadewicz, K., Soo, A., Coulthard, J., Boucher, P., & Boiteau, P. (2016). 1210: CONSIDERATIONS FOR IMPLEMENTING A SUCCESSFUL OR-ICU HANDOVER PROCEDURE IN A LARGE TRAUMA CENTRE. *Critical Care Medicine*, 44(12), 378. Abstract presented at the 46th Annual Congress, Honolulu, Hawaii.

Zjadewicz, K., Deemer, K. (2016). 1279: IDENTIFYING WHAT IS KNOWN ABOUT OPERATING ROOM TO ICU HANDOVERS: A SCOPING REVIEW. *Critical Care Medicine*, 44(12), 395. Abstract presented at the 46th Annual Congress, Honolulu, Hawaii.

Zjadewicz, K., White, D., Raffin Bouchal, S., Reilly, S. (2016). *Middle Managers' Role in quality improvement project implementation, are we all on the same page?-A review of the current literature*. *Safety in Health*, 2 (1), 8.

Zjadewicz, K., White, D., Raffin, S., & Reilly, S. (2016, April). *Middle Managers' Role in Quality Improvement Implementation*. Abstract accepted for the 21st International Forum on Quality and Safety in Health Care, BMJ and IHI, Gothenburg, Sweden.

White, D., Norris, J.M., Jackson, K., & **Zjadewicz, K.** (2012, October). *The art of messaging: The missing link to creating culture and engagement*. Paper accepted for the 29th International Conference of the International Society for Quality in Health Care, Geneva, Switzerland (declined).

B. Other Outputs Relevant to Training Environment Activities

1. Impactful Improvement Project Lead

- Led all adult Calgary ICU's through a successful Accreditation 2015 cycle, with 94% of all criteria met
- Co-led the successful operationalization and implementation of the OR-ICU handover project at

the Foothills Hospital. Currently co-leading the implementation of such process at the Peter Lougheed Hospital and with future work planned at the South Health Campus.

- Led the development of the Calgary Zone clinical practice guidelines around delirium prevention and management, to further support existing protocols. This work included the contextualization of delirium bundle defined by the Society of Critical Care Medicine (SCCM) as the “ABCDEF” bundle to meet local needs and strategical direction. This work also included the development of relevant program measurement including process, outcome and balancing measures.
- Currently tasked with leading the development and implementation of a new Code 66 response model across all 4 adult hospitals in Calgary. This includes changes in staff models, processes, documentation and includes the construction of robust program evaluation.
- Led a multidisciplinary team to construct, test and implement a process for medication reconciliation on transition (currently under evaluation)

2. Effective Collaborator

- Operationalization of the OR-ICU handover required the coordination of efforts across three departments (Intensive Care Unit, Post-Anaesthetic Care Unit and the Operating Room). Currently responsible for co-leading the dissemination of project to the rest of the Calgary zone.
- Code 66 response model requiring the coordination of multiple disciplines and departments in order to operationalize a pilot of an RN/RT led, MD supported model from current MET model.
- Strong active relationships with database teams including E-critical, to help ensure departments are strategically aligned to support current QI priorities, research work, and ultimately clinical improvements.
- Representing DCCM QI priorities within a provincial and national forum. Exemplified with engagements including the SCN delirium-working group and the Canadian Collaborative-Pain, Agitation and Delirium (PAD) respectively.
- Maintaining close relationships with clinical staff and empowering local improvements. Examples include: aiding a frontline RN and multidisciplinary team to optimize the role of the health care aid (FMC), and assisting an NP in proposing a pilot NP-led initiative around midline catheters (SHC).
- Cross-departmental relationships with non-clinical departments such as volunteer services to help coordinate patient and family volunteers participating in the DCCM Patient and Family Centred care Committee.

3. Aligning Research and QI

- Supporting current departmental research efforts with predefined DCCM QI priorities. I.E. contributing operational and QI insight to projects including Technology Evaluation in the Elderly Network.
- Active member of the Department of Critical Care Medicine Research Advisory Board
- Consistent collaboration with relevant research projects, aligning them with the QI goals of the department. For example: The construction, implementation and evaluation of an electronic transfer form using research findings from Dr. Stelfox’s team and operationalizing recommendations, implementing and evaluating them using relevant QI methodology. Furthermore, Karolina is responsible with organizing relevant operational teams to the research team to meet project goals.

3. Current and future research initiatives:

- (Current) Evaluating the compliance of best practice for ARDS management
- (Current) scoping review: Improvement science and its application in implementing a standardized OR-ICU handover project.
- (Current) evaluating the successful implementation of a standardized OR-ICU handover process

- (Current) evaluating the need for a standardized OR-ICU handover process across multiple ICU's
- (Current) evaluating the successful implementation of MedRec on transition
- (Future) validating the role of the middle manager in QI project implementation
- (Future) evaluating family feedback and defining QI priorities

C. Active National/Provincial Peer-Reviewed Research Support

Period of Support	Amount	Funding Source	Role	Project Title
May 2017- May 2018	10,000	CC SCN Seed Grant Competition	Co-Investigator	Optimization of Acute Respiratory Distress Syndrome Management
April 2017- April 2018	19,750	Chief Medical Office, Calgary Zone, AHS	Co-Investigator	Optimization of Acute Respiratory Distress Syndrome Identification and Management
December 2015- December 2016	20,000	Chief Medical Office, Calgary Zone, Alberta Health Services	Co-Investigator	Optimization of Acute Respiratory Distress Syndrome Management
January 2016- present	748,790	Alberta Innovates Health Solutions, PRIHS	Expert Consultant	Reassessing practices in the daily care of critically ill patients: building capacity and methodology to identify & close evidence-care gaps.
January 2016	1,400,000	Canadian Institutes for Health Research	Contributor to grant application	Development and Evaluation of a Family-Partnered Care Pathway for Critically Ill Older Patients

D. Education

Masters of Nursing	University of Calgary	June 2015
Bachelor of Nursing	University of Calgary	June 2008

E. Relevant Honours & Awards

2010-2013	Learning and Development Fund , Calgary Health Trust, AHS
2012	Bursary for Advanced Education , Alberta Health Services
2011	Annual Academic Scholarship , Alberta Registered Nurse Educational Trust
2010-2011	Nursing Alumni Academic Scholarship , Faculty of Nursing, The University of Calgary
2010	Queen Elizabeth II Graduate Scholarship , Government of Alberta

F. Relevant Employment

Quality Improvement Lead Department of Critical Care Medicine, Adult, Calgary Zone	June 2014-Present
Registered Nurse Intensive Care Unit, Foothills Medical Centre	September 2010-Present
Registered Nurse Calgary Fire Fighters Burn Treatment Centre/Plastics/ENT	June 2007-January 2011
Research Assistant	June 2009-September 2010