

Thursday, October 29, 2020

Session 2: Aiming for Excellence

Moderator: Jacquelin Forsey

Time Limit: 10-min presentation followed by 5-min Q&A

https://events.myconferencesuite.com/Virtual_Research_Week/page/PodiumPresentations

Time	Pod #	Title	Authors	Presenter
10:00-10:15	2.1	Divergent experiences: Gender differences in perceptions of feedback in internal medicine	Maxime Billick, James Rassos, Shiphra Ginsburg	maxime.billick@mail.utoronto.ca
10:15-10:30	2.2	Aim for the peak: A scoping review of cognitive flow in clinical practice	Stephanie Jiang, Sydney McQueen, Aidan McParland, Melanie Hammond Mobilio, Carol-anne Moulton	15mj28@queensu.ca
10:30-10:45	2.3	Understanding surgeons' experience of flow	Sydney McQueen, Dr. Aidan McParland, Melanie Hammond Mobilio & Carol-anne Moulton	sydney.mcqueen@mail.utoronto.ca
10:45-11:00	2.4	Feedback delivery in an academic Cancer Centre: Longitudinal reflections on an R2C2-based microlearning course	Amir H. Safavi, Janet Papadakis, Tina Papadakis, Naa Kwarley Quartey, Karen Lawrie, Eden Klein, Sarah Storer, Jennifer Croke, Barbara-Ann Millar, Raymond Jang, Andrea Bezjak, Meredith E. Giuliani	Amir.Safavi@rmp.uhn.ca
11:00-11:15	2.5	Modelling and Minimizing the Impacts of Infection Control Routines on Nurse Workload in Acute Care Under Varying COVID-19 Outbreak Scenarios	Sadeem M. Qureshi, Helen Kelly, Anne vanDeursen, Nicole Woods, Nancy Purdy, Sue Bookey-Bassett, Michael A. Greig, Patrick Neumann	s1qureshi@ryerson.ca



PODIUM 2.1 -- 10:00-10:15 [10-min presentation followed by 5-min Q&A]

Divergent Experiences: Gender Differences in Perceptions of Feedback in Internal Medicine

Maxime Billick MD¹, James Rassos MD, MEd^{1,2}, Shiphra Ginsburg MD, MEd, PhD^{1,3,4}

1. Department of Medicine, University of Toronto, Toronto, Canada
2. Assistant Professor, St. Michael's Hospital, Toronto, Canada
3. Professor, Mount Sinai Hospital, Toronto, Canada
4. Scientist, Wilson Centre for Research in Education, Toronto, Canada

maxime.billick@mail.utoronto.ca

Introduction: Assessment of residents is reported to differ by gender, yet little is known about the effects of these variations. We sought to understand if and how male and female Internal Medicine (IM) residents perceive differences in their experiences of being assessed and receiving feedback.

Methods: We used constructivist grounded theory as an approach to data collection and interpretation. We conducted semi-structured focus groups and interviews with IM residents, divided by gender and by training level. Twenty-two residents participated (8 male, 14 female).

Results: We found a profound difference in the experience of receiving feedback between male and female residents, both within traditional “assessment moments” and outside of them. Themes of authority, power and clothing/appearance diverged. For example, in contrast to men, women relied on symbols such as a white coat, stethoscope, and demure clothing to establish and justify their physicianship. Women also encountered conflicting feedback from supervisors regarding confidence and assertiveness (e.g. told to be more or less assertive), often resulting in self-censorship, whereas men rarely received similar feedback.

Conclusions: Gendered differences in the experiences of working and being assessed on IM wards may not be easily captured by standard numeric assessments. Our study demonstrates that female IM residents integrate multiple forms of feedback – often outside of “assessment moments” – to create the persona of the “female physician”. We believe this research contributes a unique vantage point to the experience of female residents in IM, and the socialization and indoctrination that occurs to become a female physician.

PODIUM 2.2 -- 10:15-10:30 [10-min presentation followed by 5-min Q&A]

Aim for the Peak: A Scoping Review of Cognitive Flow in Clinical Practice

Stephanie Jiang^{1,2}, Sydney McQueen^{2,3}, Aidan McParland⁴, Melanie Hammond Mobilio², Carol-anne Moulton^{2,3}

1. Faculty of Medicine, Queen's University, Kingston
2. The Wilson Centre, Toronto
3. Faculty of Medicine, University of Toronto, Toronto
4. Department of Emergency Medicine, University of British Columbia, Vancouver

Stephanie Jiang 15mj28@queensu.ca

Background: Cognitive flow is a state in which individuals experience heightened focus, awareness, performance, and satisfaction in their work. Although this state has been deeply explored and applied in elite sport for optimal performance, little is known about the flow state in healthcare settings. This scoping review sought to summarize the current information on flow in healthcare and identify gaps in knowledge on this concept.

Methods: An initial search using keywords related to cognitive flow, positive psychology, clinical practice, and healthcare was conducted in MEDLINE, PsychINFO and EMBASE. All articles discussing flow in healthcare disciplines published between 1806 to July 9 2019 were considered. Two independent reviewers screened all articles, and extracted data pertaining to study location, population, measures, key findings, and manuscript type.

Results: 4824 unique abstracts were identified. After title and abstract screening, 207 articles were included for full-text review. In total, 15 articles were included. Overall, there was a paucity of literature on flow in healthcare. Publications described the experience of flow in healthcare workers, potential benefits of flow, and the relationship between flow and other positive states, namely work engagement.

Conclusions: Flow is an understudied concept in healthcare. Understanding flow states in healthcare may help combat burnout, enhance career satisfaction, and promote wellness among providers. Further research is needed to more deeply understand how flow is experienced in clinical settings, and how we can support flow in individuals and institutions.

PODIUM 2.3 -- 10:30-10:45 [10-min presentation followed by 5-min Q&A]

Understanding Surgeons' Experience of Flow

Sydney McQueen,¹ Dr. Aidan McParland,² Melanie Hammond Mobilio¹ & Dr. Carol-anne Moulton¹

¹The Wilson Centre, University of Toronto, Toronto, ON, Canada

²University of British Columbia, Vancouver, BC, Canada

sydney.mcqueen@mail.utoronto.ca

Background: The state of cognitive flow has been linked with enhanced performance, happiness, career satisfaction, and decreased burnout. However, while elite sport has long revered and trained athletes to enter flow states, the concept has not been adopted strongly in healthcare. Furthermore, flow has primarily been explored from a unidimensional (cognitive) perspective, without much attention to other aspects. The present study sought to understand the experience of flow among surgeons through a multidimensional lens.

Methods: Using a constructivist grounded theory methodology, semi-structured interviews were conducted with 19 staff surgeons at the University of Toronto, purposively sampled for experience levels and practices. Data were coded and analyzed iteratively by three researchers until theoretical saturation was achieved.

Results: Although many surgeons had not previously heard of cognitive flow, the phenomenon deeply resonated with most. Participants described different physical, cognitive, emotional, sociocultural, and environmental components that interacted to shape the subjective experience of flow:

"I think that there are many different facets of [flow] that don't always come together all at the same time, you may feel different parts of it at different times depending on what the kind of case is, who your help is, if you recently had a complication, all of those things play into your [flow] state." (P4)

Conclusions: Understanding flow in clinical practice may lead to new avenues for enhancing career satisfaction, combating burnout, and promoting physician wellness.

PODIUM 2.4 -- 10:45-11:00 [10-min presentation followed by 5-min Q&A]

Feedback Delivery in an Academic Cancer Centre: Longitudinal Reflections on an R2C2-based Microlearning Course

Amir H. Safavi, MD, MSc,^a Janet Papadakos, PhD, MEd,^b Tina Papadakos, MA(Ed),^b Naa Kwarley Quartey, MSc,^b Karen Lawrie, MSt,^b Eden Klein, MSc,^b Sarah Storer, MHSc,^b Jennifer Croke MD, MHPE,^{a,c} Barbara-Ann Millar, MBChB, FRCPC,^{a,c} Raymond Jang, MD, MSc,^d Andrea Bezjak, MD, MSc,^{a,c} Meredith E. Giuliani, MBBS, PhD^{a,b,c,e}

^a Department of Radiation Oncology, University of Toronto, Toronto, Ontario,

^b Cancer Education, Princess Margaret Cancer Centre, Toronto, Ontario,

^c Radiation Medicine Program, Princess Margaret Cancer Centre, Toronto, Ontario,

^d Department of Medical Oncology, University of Toronto, Toronto, Ontario,

^e The Wilson Centre for Research in Education, University of Toronto, Ontario,

Amir.Safavi@rmp.uhn.ca

Purpose: There is longstanding evidence of feedback competency deficiencies in supervisors in medical education. Enhancing feedback delivery skills is a critical aspect of competency-based medical education. R2C2 (relationship, reaction, content, coaching) is an increasingly adopted evidence-based model for feedback delivery. The purpose of this study was to assess the feasibility and utility of an R2C2-based microlearning course and to solicit multidisciplinary staff perspectives on current feedback delivery practice in an academic cancer centre.

Methods: A prospective longitudinal qualitative design was utilized. Five staff (three oncologists and two allied health professionals) with supervisory roles were selected by purposive sampling. Each staff participated in four semi-structured interviews conducted pre- and immediately post-course, and at one- and three-months post-course. Interviews were audiotaped and transcribed verbatim. Transcripts were coded using an abductive approach informed by the R2C2 model.

Results: All participants found the course to be time feasible and completed it in 10-20 minutes. The course was deemed to be useful and fulfill a perceived need for feedback training in the cancer centre. Relationship building and exploring reactions were the R2C2 domains most discussed during post-course interviews. Several relationship-oriented themes were generated: 1) hierarchical and interdisciplinary relationships modulate feedback delivery 2) interest in feedback delivery varies by duration of the supervisory relationship 3) the perceived transactionality of supervisor-trainee relationships influences feedback delivery.

Conclusions: An R2C2-based microlearning course is feasible and deemed useful by multidisciplinary cancer centre staff. Optimization of the course and further characterization of current feedback practices in the cancer centre are ongoing.

Modelling and Minimizing the Impacts of Infection Control Routines on Nurse Workload in Acute Care under Varying COVID-19 Outbreak Scenarios

Sadeem M. Qureshi^{1*}
Nancy Purdy²

Helen Kelly³
Sue Bookey-Bassett²

Anne vanDeursen⁴
Michael A. Greig¹

Nicole Woods⁵
Patrick Neumann^{1*}

¹ Human Factors Engineering Lab, Ryerson University

² Daphne Cockwell School of Nursing, Ryerson University

³ Collaborative Academic Practice, University Health Network

⁴ Toronto Western Hospital, University Health Network

⁵ The Wilson Centre, University Health Network

s1qureshi@ryerson.ca

COVID-19 is taking a significant toll on the front-line healthcare workers (HCW), with over 230,000 HCWs infected globally and 600 deaths to date. It is no surprise that nurses are questioning the safety of current SARS-CoV-2 infection control routines. These routines also pose extra work in a system where nurses are already working to capacity. If nurses are overworked, then fatigue develops, and errors start to occur. Anticipating the demands and required extra personnel for an unknown number of incoming coronavirus patients is difficult.

Our research program is focused on the development and testing of a simulation modelling tool that models the process of care delivery and manipulates variables such as patient, care tasks, nurse and other work environment characteristics. By modelling the care delivery process we are able to see the impact of varying severities of coronavirus outbreaks on the nursing team and, ultimately, how this extra workload affects their ability to deliver the care required to all patients in the unit. In addition to this simulation tool, we will also work with nurses and senior infection control professionals to refine their infection control routines so as to minimize the workload while simultaneously creating highly reliable safety routines.

These models provide next-generation decision making support for managers who have to anticipate the unknown impacts of COVID-19 and would like to be prepared to deliver the highest care quality in ways that are safe for both patients and nurses. In this study, we are creating simulation models of medical-surgical units and two emergency departments with front-line responsibility for coronavirus patient treatment. These models can be readily adapted to other similar units across Canada.

FUNDING: The project is currently in its launching phase and is funded by *Canadian Institutes of Health Research's (CIHR) Rapid Research Funding program for 2019 Novel Coronavirus (COVID-19)*.