

Curriculum Vitae

Rory F McQuillan

A. Date Curriculum Vitae is Prepared: 2018 November 4

B. Biographical Information

Primary Office Ontario, Canada	200 Elizabeth Street M5G 2C4 Telephone 416 340 4289 Email	Room 8N-842 Toronto General Hospital 416 340 4800 ext. 5617 Cellphone Rory.McQuillan@uhn.ca	Toronto, 647-282-2448 Fax
-----------------------------------	---	---	------------------------------

1. EDUCATION

Degrees

2012 - 2014	MSc, Community Health, Public Health Sciences, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Professor Helen P. Batty
2011 Jul - 2013 Jun	Fellowship, Healthcare Quality Improvement, National Quality Scholars Fellowship Program, Veterans Health Administration, Dartmouth, New Hampshire, United States, Supervisor(s): Professor Chaim Bell
1996 - 2002	MB BCh BAO, University College, Dublin, Dublin, Ireland
1990 - 1996	Blackrock College, Dublin, Ireland

Postgraduate, Research and Specialty Training

2011 Jul - 2013 Jun	Veteran Affairs Quality Scholars Fellowship, Joint Commission Resources (JCR)
2009 Jul - 2011 Jun	Nephrology Fellow, University Health Network, Toronto, Ontario, Canada
2008 Jul - 2009 Jun	Cardiology/ General Internal Medicine Specialist Registrar, Our Lady of Lourdes, Drogheda, Ireland
2007 Jul - 2008 Jun	Nephrology Specialist Registrar, Adelaide and Meath Hospital, Ireland
2006 Jul - 2007 Jun	Nephrology Specialist Registrar, Beaumont Hospital, Ireland
2004 Oct - 2006 Jun	Nephrology Registrar, St. Vincent's University Hospital, Ireland
2003 Jul - 2004 Sep	Senior House Officer, St. Vincent's University Hospital, Ireland
2002 Jul - 2003 Jun	Internship, St. Vincent's University Hospital, Ireland

Qualifications, Certifications and Licenses

2011	Certificate of Completion of Specialist Training in Nephrology and General Internal Medicine, Royal College of Physicians of Ireland
2005	Member, Royal College of Physicians of Ireland

2. EMPLOYMENT

Current Appointments

2017 Jul - present	Core Member Centre for Quality Improvement and Patient Safety, Medicine, University of Toronto, Toronto, Ontario, Canada https://www.cquips.ca/staff/#1510765148230-28c52e85-b93e
2017 Apr - present	Canadian Society of Nephrology Guidelines Committee Member, Canadian Society of Nephrology, Ontario, Canada
2017 Jan - present	Undergraduate Medical Education -Nephrology Lead for TOPIC; new foundations curriculum <i>Design of a new nephrology curriculum and development of on-line content at</i>

University of Toronto

2016 Oct - present	Director of Veteran Affairs Quality Scholars Program at University of Toronto, University of Toronto & Veteran Affairs Quality Scholars Program, Toronto, Ontario, Canada
2014 Jul 1 - present	Clinical Leader, Choosing Wisely Canada http://www.choosingwiselycanada.org/about/clinical-leaders/
2014 Jul - present	Division of Nephrology Service Chief, University Health Network
2014 Jan - present	Undergraduate Medical Education - Resource Stewardship Lead & Transition to Clerkship Resource Stewardship Module Director <i>Development of a resource stewardship curriculum at University of Toronto</i>
2013 Nov - present	Canadian Society of Nephrology Lead for Choosing Wisely Campaign, Canadian Society of Nephrology and Choosing Wisely Canada, Canada
2013 Aug 1 - present	Quality Improvement Lead, Nephrology, Medicine, University Health Network
2013 Aug - present	Active Staff Nephrologist, University Health Network
2013 Aug - present	Associate Staff Nephrologist, Mount Sinai Hospital
2013 Aug - present	Assistant Professor, Nephrology, Medicine, University of Toronto

Previous Appointments

HOSPITAL

2011 Jul - 2013 Jul Nephrology Clinical Associate, University Health Network

UNIVERSITY

2014 Jan - 2016 Sep Deputy Director of Veteran Affairs Quality Scholars Program at University of Toronto, University of Toronto & Veteran Affairs Quality Scholars Program, Toronto, Ontario, Canada

NATIONAL SOCIETY

2014 Jul 1 - 2015 Jun 30 Canadian Society of Nephrology Education Committee Member, Canadian Society of Nephrology, Ontario, Canada

3. HONOURS AND CAREER AWARDS

Distinctions and Research Awards

LOCAL

Received

2017 Jul - 2018 Jun	Excellence in Quality Improvement , University Health Network & Mt. Sinai Hospital. (Quality Improvement Award) <i>Inaugural Award for Excellence in Quality Improvement.</i>
2013 Jul - 2018 Jul	Early Faculty Award for Quality Improvement , Toronto, Ontario, Canada. (Award for Quality Improvement and Innovation) <i>UHN and Mt. Sinai Dept. of Medicine Award.</i>
2011	Marc Goldstein Clinician of the Year Award , University of Toronto. (Distinction)
2010 - 2011	ASN travel scholarship , American Society of Nephrology. (Distinction)
2004 - 2005	Best Presentation at Grand Rounds (Nephrotic Syndrome) , St. Vincent's University Hospital. (Distinction)
2001	First Class Honours in Ophthalmology , University College, Dublin. (Distinction)
2001	Scholarship Elective , University College, Dublin, Wichita, United States. (Distinction)
1996	McQuaid gold medal for academic excellence , Blackrock College. (Distinction)

Nominated

2017 Jun	The Goldie Award for Quality Improvement and Innovation. (Award for Quality Improvement and Innovation)
2016 Jun	The Goldie Award for Quality Improvement and Innovation. (Award for Quality Improvement and Innovation)

Teaching and Education Awards

LOCAL

Received

2015 Jul - 2016 Jun

Helen P. Batty Award For Excellence And Achievement In Faculty Development, No Division, Dept of Medicine, Faculty of Medicine, Department of Medicine. (Multilevel Education)

2014 Jul - 2015 Jun

Excellence in Teaching Award New Faculty, No Division, Dept of Medicine, Faculty of Medicine, University Health Network and Mount Sinai Hospital. (Multilevel Education)

Nominated

2014 Jul - 2015 Jun

Helen P. Batty Award For Excellence And Achievement In Faculty Development, No Division, Dept of Medicine, Faculty of Medicine, Department of Medicine. (Multilevel Education)

Student/Trainee Awards

LOCAL

Received

2017 Jun

Mimi and Charles Hollenberg Research Competition, Nephrology/Medicine, Supervisor, Awardee Name: Taylor Petropoulos. University of Toronto - UHN and Mt.Sinai Hospital *Supervision of a medicine resident to write a case report in clinical medicine.*

4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Professional Associations

2013 Aug 1 - present

Member, Canadian Medical Society

2013 Aug 1 - present

Member, Ontario Medical Association

2013 Jul 1 - present

Member, American Society of Nephrology

2013 Jul 1 - present

Member, Canadian Society of Nephrology

2013 Jul 1 - present

Member, Institute for Healthcare Improvement

2006 Jul 1 - present

Member, Irish Nephrology Society

2005 Feb 15 - present

Member, Royal College of Physicians of Ireland

Administrative Activities

INTERNATIONAL

Veteran Affairs Quality Scholars Program

2015 Sep - present

Summer Institute Planning Committee, Houston, Texas, United States.

NATIONAL

Canadian Society of Nephrology

2013 Nov - present

Chair, Choosing Wisely Working Group (Canadian Society of Nephrology - Guidelines committee), Faculty of Medicine, Dept of Medicine, Nephrology, Patient and Public Education, Canada. *Committee struck to decide on the methodology of forming CSN's Choosing wisely list.*

2013 Nov - 2015 Jun 30

Member, Canadian Society of Nephrology - Education Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Multilevel Education, Canada. *Committee decides on content and presenters at CSN AGM, pre-course and CSN at ASN events.*

LOCAL

Other Organizations

2015 Jul - present

UHN and Mt.Sinai Hospital Department of Medicine Quality Committee, Toronto, Ontario, Canada.

University Health Network

2014 Jul - present

Member, Nephrology Divisional Business meeting

- 2014 Jul - present **Director**, Faculty of Medicine, Dept of Medicine, Nephrology, Multilevel Education *Service Chief for the Division of Nephrology at UHN. My responsibilities include: allocation of PGY 1-3 medicine residents, PGY 4-5 nephrology residents and clinical fellows to clinical rotations at UHN and Mt. Sinai hospital; devising the educational program for rotating PGY 1-3 residents; on-call scheduling; orientation and support of all trainees at the division of nephrology.*
- 2014 Jul - present **Member**, Divisional Executive, Faculty of Medicine, Dept of Medicine, Nephrology, Postgraduate MD, Canada. *Responsible for reporting on PGY 1-3 resident and fellow education and the operation of the in-patient clinical service.*
- 2014 Jul **Co-Chair**, Division of Nephrology Quality Improvement Committee *Identify new targets for quality improvement. Track progress of ongoing projects.*

University Health Network and Mount Sinai Hospital

- 2014 Jul **Member**, Education Coordinators Committee Meeting, Faculty of Medicine, Dept of Medicine, Nephrology, Graduate Education *Represent the Division of Nephrology at education coordinators meeting.*

University of Toronto

- 2015 Sep - present **Subsection Lead for Kidney and Urinary Tract**, Design Committee for TOPIC course for new undergraduate foundations curriculum, Faculty of Medicine, Dept of Medicine, No Division, Undergraduate MD, Ontario, Canada. *Committee to formulate new undergraduate curriculum. Responsible for design, content, deliver and assessment of nephrology component.*
- 2014 Jan - present **Member**, Co-learning Curriculum in QI Planning Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Multilevel Education *Planning the development and expansion of curriculum.*
- 2014 Jan - present **Chair**, Undergraduate Medical Education Resource Stewardship Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Undergraduate Education *Committee to guide development of resource stewardship education at UME level.*
- 2013 Jan - present **Member**, Nephrology Residency Program Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Postgraduate MD, Ontario, Canada. *Nephrology Residency Program Committee.*
- 2013 Jan - present **Member**, Continuing Education and Quality Improvement Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Continuing Education, Toronto, Ontario, Canada. *Committee to develop quality improvement awareness in continuing education at University, provincial and national level.*
- 2013 Jan - 2016 Jun 30 **Member**, Clinicians in Quality Improvement, Faculty of Medicine, Dept of Medicine, Nephrology, Faculty Development, Toronto, Ontario, Canada. *Committee to build capacity for quality improvement work and education at University of Toronto.*

OTHER

University of Toronto

- 2016 Feb 9 - 2017 Jun 30 **Co-Chair**, PGME Resource Stewardship Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Continuing Education
- 2015 Nov 19 **Coordinator**, PGME Resource Stewardship Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Continuing Education *Organized a faculty development day "Resource Stewardship: Why and How?"*
- 2014 Jan 1 - 2016 Feb 8 **Member**, PGME Resource Stewardship Committee, Faculty of Medicine, Dept of Medicine, Nephrology, Continuing Education *PGME committee to guide resource stewardship education across the university at CME level.*

Peer Review Activities

MANUSCRIPT REVIEWS

Reviewer

2018 Jan - present	PLOS one, Number of Reviews: 1
2017 Jan 1 - present	Clinical Kidney Journal, Number of Reviews: 2
2016 Oct - present	Canadian Society of Nephrology, Canadian Journal of Kidney Health and Disease, Number of Reviews: 1
2016 Sep - present	Quarterly Journal of Medicine, Number of Reviews: 1
2016 - present	Jacobs Journal of Anesthesiology and Research, Number of Reviews: 1
2016 - present	Journal of the European Academy of Dermatology and Venereology, Number of Reviews: 1
2014 Jan - present	Patient Education and Counselling, Number of Reviews: 1
2013 Jan - present	American Journal of Kidney Disease, Number of Reviews: 2
2013 Jan - present	Clinical Journal of American Society of Nephrology, Number of Reviews: 3
2013 Jan - present	American Society of Nephrology, Clinical Journal of American Society of Nephrology, Number of Reviews: 2
2013 Jan - present	BMJ, BMJ Quality and Safety, Number of Reviews: 3
2013 Jan - present	NKF, American Journal of Kidney Diseases, Number of Reviews: 2

PRESENTATION REVIEWS

Reviewer

2018 Apr 1 - 2018 Oct 30	American Society of Nephrology - Kidney Week 2018- Peritoneal Dialysis Abstract Reviewer, Number of Reviews: 100
--------------------------	--

C. Academic Profile

1. TEACHING PHILOSOPHY

Teaching is an integral part of everything I do. As a physician in a teaching hospital, I take the responsibility of teaching the next generation of internists and nephrologists very seriously. I was honored to have received the Department of Medicine Excellence in Teaching Award for New Faculty as recognition of this commitment. I also supervised a medicine resident, with whom I was on service, in writing a report of a case we saw together. The resident won the Mimi and Charles Hollenberg prize for her report, which was subsequently also published as a peer reviewed case report and review of literature. I am always honored to be asked back each year to the PGY 2 retreat. With regards to my teaching philosophy, I think the most important aspect of teaching adults is to understand what motivates them. I have a very good understanding, for example, of being a junior medicine resident. I find it easy to empathize with their concerns and I intuitively know what they want and need to know. I find these encounters extremely rewarding and this is clearly reflected in my teaching evaluations for internal medicine, which have been excellent over a five year period. The bulk of my clinical teaching and supervision is with internal medicine residents. In reflecting upon interactions with our nephrology trainees, I have realized that they are at a difficult point in their professional lives. It has been my experience that many still define themselves primarily as learners and often harbor significant anxiety about the daunting prospect of transitioning to independent practice. I believe that emphasis on efficiency and decisiveness and expectations for their clinical independence may compound this anxiety. Similarly, I am learning that mentorship and career advice should probably be initiated by the fellow rather than supervisor, as unsolicited advice may add to their sense of uncertainty. My current approach is to ask rather than presume what the individual fellow hopes to get from a given clinical experience and adapt my approach accordingly. I do feel that as a nephrology program we should initiate career advice far earlier in the course of the residents training, as I believe much of their anxiety stems from having no knowledge of the options open to them in terms of job opportunities and advanced training. In contrast, I find the teaching and mentorship of physicians who have recently completed their core specialist training to be the most rewarding aspect of my job. I have been lucky enough to work with several senior fellows and junior faculty, both in my clinical capacity and as the director of the Veterans' Health Administration National Quality Scholars Fellowship Program (VAQS). I have trained several nephrologists to insert peritoneal dialysis catheters at the bedside. They have in turn been able to bring this transformative skill to other centers in Canada and internationally. In my role as VAQS director I have been able to offer mentorship and guidance to several young physicians who have subsequently been appointed as Clinicians in Quality and Innovation at University of Toronto and elsewhere. I have been fortunate to collaborate with these trainees in publishing peer reviewed papers and national guidelines. I have also had the opportunity of mentoring a nephrologist during his training on the Eliot Phillipson Clinician Educator Program and enjoyed the satisfaction of seeing him join our division and faculty. In summary teaching is something which I enjoy and have an aptitude for. I believe that medical education is most effective in the workplace context where the teacher and learner share a common goal of delivering the best possible care and where the

expectations of both parties are clearly defined.

2. CREATIVE PROFESSIONAL ACTIVITIES STATEMENT

The following is an overview of my creative professional activity. I have twice been nominated for The Goldie Award in Quality and Innovation for this work. 1. Bedside Peritoneal Dialysis (PD) catheter insertion Program PD has many advantages over hemodialysis, allowing the patient with ESKD to receive treatment at home. PD is associated with improved quality of life and greatly reduced healthcare costs. PD is underutilized, often due to difficulty in securing timely access to a PD catheter. There is significant interest among the international nephrology community in addressing this underutilization. I built a bedside PD catheter insertion program at UHN in 2013 as a QI project to increase access to peritoneal dialysis for patients with ESKD. The project has been a success on a clinical, academic and educational level. Clinical Impact I have inserted more than 120 PD catheters over the last 5 years. As a result, the number of PD patients at UHN has grown by a sustained 35%. The program is successful because it allows patients, who would otherwise not have been PD candidates, either because they are too sick or have presented too late, to avail of the modality. An unforeseen impact of the bedside PD catheter insertion program has been its synergy with the Centre for Excellence in Heart Function at UHN. We are now in a position to offer PD to patients with severe symptomatic heart failure who are not deemed candidates for advanced heart failure therapies. Similarly, patients with ESKD following transplant and left ventricular assist device (LVAD) can now avail of PD. I have inserted PD catheters in 40 patients where the primary indication was for heart failure, in 2 patients who had received heart transplant and in 2 patients with LVAD.

In terms of real world impact, therefore, this initiative has allowed patients who otherwise would have died or been confined to in-hospital management to avail of life sustaining treatment in the comfort of their homes. Academic Impact I have been afforded significant opportunity to disseminate the success of my project beyond this institution. I have been invited to give several high profile international presentations on the design, delivery and impact of my program, including at The American Society of Nephrology meeting in New Orleans, November 2017, The Annual Dialysis Conference in Long Beach, March 2017 and The Controversies in Dialysis Access Conference in Austin, October 2016. I was also invited by The Division of Nephrology at The University of Ottawa to present my work at their grand-rounds in February 2017. At the request of the Canadian Society of Nephrology (CSN), I designed a simulation-based workshop on PD catheter insertion for the AGM in Montreal in May 2017. This workshop was extremely well reviewed and I have been asked to replicate it at the combined CSN & International Society of Peritoneal Dialysis (ISPD) meeting in Vancouver, May 2018. Furthermore, we have used this opportunity to convene a Delphi panel to describe best practices for percutaneous PD catheter insertion, something currently lacking in the literature. I was invited to run simulation workshops at The Simulation of Dialysis Access Conference in Austin, October 2016 and at The "Euro-PD" conference in Dublin, October 2017. I was invited to The Peritoneal Dialysis University for Interventional Nephrologists in Vienna, June 2016, where my role was to review and provide recommendations on the educational content and value of the event. I was invited to contribute a paper on "Peritoneal Dialysis in Urgent Start End Stage Kidney Disease" to Seminars in Dialysis, which has been accepted for publication. A QI report detailing the impact of the Percutaneous PD Catheter Insertion Program at UHN has been submitted to The Clinical Journal of The American Society of Nephrology (CJASN). The insertion of a PD catheter in an LVAD patient has unique challenges and our experience has been submitted for publication. Educational Impact I am proud to have trained 3 nephrologists to perform percutaneous PD catheter insertion. One has since been appointed to The University of Brussels and has established her own PD catheter insertion program.. The second will return to Thailand this year where she will also be establishing an access centre. The final nephrologist has been recruited to an Ontarian center where he has been asked to replicate our program. The availability of training in PD catheter insertion is perceived as a significant draw for our home dialysis fellowship and observership programs. I also created a video, entitled Peritoneal Dialysis Catheter Insertion Methods, at the invitation of The ISPD for its education website. 2. Simulation Based Mastery Learning (SBML) for Temporary Hemodialysis Catheter Insertion Upon my appointment I implemented mandatory Simulation Based Mastery Learning (SBML) for temporary hemodialysis catheter insertion for all nephrology trainees at UofT. The implementation of this program was based on best evidence that such training reduces catheter-related bacteremia and mechanical complications of central venous catheter insertion. I have run this highly rated program each year for the last five years. My work "Performance of Temporary Hemodialysis Catheter Insertion by Nephrology Fellows and Attending Nephrologists" was published in CJASN in 2015. This paper compared, for the first time in the literature, the performance of trainees to "expert" staff nephrologists. The findings have helped debunk the premise upon which apprenticeship learning is based. This report was considered especially noteworthy in the nephrology community and was highlighted with an editorial in the issue it appeared. I was subsequently invited to organize and run SBML workshops for the CSN AGM. These workshops have been highly rated and have been repeated annually. We described our experience with this activity in The Canadian Journal of Kidney Health and Disease. I was invited to lead a SBML workshop in McGill University for the nephrology trainees there. I wrote an invited review on procedural training during nephrology fellowship for CJASN. I created a video on hemodialysis line insertion (as collaboration between the University of Toronto and Ottawa) which is available on-line. 3. Creating capacity among physicians for quality improvement work at a local, national and international level through innovative educational initiatives Lack of expertise among clinicians remains a key barrier in preventing better healthcare outcomes for our

patients. As a leader in QI much of my time is spent trying to increase capacity among healthcare workers to successfully carry-out QI initiatives. I became director of the VAQS program at UofT in July 2017. I was the co-director for 1 year prior to that. Since becoming director I have strengthened the course-work requirements for our fellows and promoted stronger collaboration and integration within the VAQS network. I have created greater synergy between the VAQS program and other training options available at UofT and have sought to expand the inter-disciplinary nature of the program, with the appointment of nursing faculty and recruitment of new nurse fellows. My leadership role within the VAQS has given me the opportunity to act both as a member of the organizing committee and invited speaker at the annual VAQS conference in Houston. Our alumni continue to progress into leadership roles in academic medicine. This year 4 fellows will graduate. One has been recruited to an academic center in Quebec on the basis of her expertise in QI. The second, who is already a faculty member, has been offered a division director role. A third graduate has been accepted for advanced clinical training in Stanford University. Of our 4 2017 alumni, 3 are in leadership roles in QI at academic hospitals in Ontario. I have been invited to speak at The Veteran Affairs Geriatric Scholars Program in Boston in 2014, 2016 and 2018 and to act as a mentor for the participants of this program. I was invited to lead a QI workshop at The University of New York at Buffalo in May 2017. At the invitation of the CSN I designed a workshop for PGY4 and 5 trainees in nephrology which I delivered at the Annual General Meeting in Halifax in May 2016. I was invited to address the CSN AGM on the subject of Patient Safety in Nephrology in Montreal in 2017. I am invited by The Ontario Renal Network to speak at a provincial meeting on QI methodology in June 2018. In addition to my involvement with VAQS and CSN, locally I have acted as a mentor for the Certificate Course in Quality Improvement and a faculty lead and teacher for the co-learning curriculum in QI. In this capacity, I have supervised several trainee projects, which have been presented at national and international meetings. I received the Helen P. Batty Award for Excellence and Achievement in Faculty Development as part of the organizing committee for the co-learning curriculum in QI. I have contributed significantly to the literature aimed at educating clinicians on QI methodology. I authored a four-part "how-to" guide to QI for nephrologists in CJASN. I collaborated with one of my VQAS fellows to produce a similar guide for cardiologists, which was published in Heart Failure: Circulation. I have co-authored a QI guide for pediatric nephrologists with another of my VAQS fellows. I have co-authored a guide to the SQUIRE guidelines for academic clinician, which was published in The Journal of Medical Education and have written a book chapter on The Model for Improvement in Practice Based Learning and Improvement. I was invited by The Canadian Society for Nephrology to lead their Choosing Wisely Canada campaign. I led a subgroup of the CSN guidelines committee to formulate the society's list of 5 items which the patient or physician should question. I published a paper summarizing the process in The Canadian Journal of Kidney Health and Disease. Since that time, I have worked with one of my pharmacist colleagues to develop validated algorithms for deprescription of certain "low-value" medications in the hemodialysis population. Our work was published along with an editorial in The American Journal of Kidney Disease in 2017. We are currently working on a second wave of Choosing Wisely themed around drug safety in ESKD.

4. Division of Nephrology Teaching Website I developed an innovative nephrology teaching website <http://www.nephroed.com/>. This website was initially developed for PGY 1-3 use, but due to its success has been expanded to include general nephrology, interventional and transplant content also. The site is available and used by learners all over the world. To view the website please follow the link above. When prompted enter the username as: nephrotested@gmail.com and password as: test123. I was invited to lead the nephrology section of the new undergraduate curriculum at UofT which launched in 2017. The content for the nephrology was all delivered using our website. Additionally, using the website infrastructure we were able to conduct a randomized trial on preparation for future learning in hyponatremia.

5. Transition from Pediatric to Adult Care of Adolescent Kidney Transplant Recipients In collaboration with Dr. Jeffrey Schiff and Dr. Miriam Kaufman at the Hospital for Sick Children, I redefined the process by which adolescent recipients of kidney transplants transition to adult care at UHN. I demonstrated the impact of this work, showing an improvement in adherence and kidney function in patients transitioning through a dedicated clinic. The results of this work have recently been published in the Canadian Journal of Kidney Health and Disease.

6. Ultrasound Guided Kidney Transplant Biopsy Simulation At the time of my appointment, UHN faced losing accreditation with the American Society of Transplantation for its fellowship in renal transplantation. This was due to trainees not performing the requisite number of biopsies. In collaboration with Dr. Sangeet Ghai and Dr Jeffrey Schiff, I designed and established a curriculum to allow trainees progress from learning the basics of ultrasound through simulated kidney biopsy to performing this procedure on patients. This program has been running for four years. To date, twelve trainees have been trained and accredited. There have been no patient complications. The high fidelity simulator, which makes this program possible, is of my own design.

D. Research Funding

1. Grants, Contracts and Clinical Trials

PEER-REVIEWED GRANTS

FUNDED

2017 Aug - 2018 Aug

Principal Site Investigator. Inhibit Progression of coronary Artery Calcification with vitamin K in HemoDialysis patients. [Clinical Trials]

2015 Jul - 2020 Jun

Principal Site Investigator. North American Peritoneal Catheter Registry. International Society of Peritoneal Dialysis & The Ontario Renal Network & Baxter Healthcare. PI: Oliver. Matthew. 326,600 CAD. [Contracts] *Prospective Initiative to study the relationship between PD catheter insertion techniques and patient outcomes.*

2. Salary Support and Other Funding

Personal Salary Support

2017 Jul - present

University of Toronto Centre for Patient Safety and Department of Medicine. 10,000 CAD. Toronto, Ontario, Canada.

E. Publications

1. MOST SIGNIFICANT PUBLICATIONS

1. Caitlin McIntyre, **Rory McQuillan**, Chaim Bell and Marisa Battistella. Targeted Deprescribing in an Outpatient Hemodialysis Unit: A Study to Decrease Polypharmacy. American Journal of Kidney Disease. 2017 Apr 14. Impact Factor 6.27. **Coauthor or Collaborator.** *Provides, for the first time validated algorithms for deprescribing medications in the hemodialysis population. This paper was featured with an editorial. This work will form the basis of the upcoming Choosing Wisely Canada Nephrology focus on drug safety.*
2. Emilie Chan, Brenda Hemmelgarn, Scott Klarenbach, Braden Manns, Reem Mustafa, Gihad Nesrallah and **Rory McQuillan**. Choosing Wisely: the Canadian Society of Nephrology's List of 5 items Physicians and Patients should Question. Canadian Journal of Kidney Health and Disease. 2017 Feb 28 (Trainee publication, Emilie Chan - QI masters student 1st author). **Senior Responsible Author.** *I am the lead for Choosing Wisely Canada. I was invited by the Canadian Society of Nephrology to submit a paper explaining the rationale for the items included on the list and to describe the process whereby the list was generated.*
3. **Rory F McQuillan**, Samuel A Silver, Ziv Harel, Adam V. Weizman, Alison Thomas, Chaim M Bell, Glenn M Chertow, Christopher T Chan and Gihad Nesrallah. How to Measure and Interpret Quality Improvement Data. Clinical Journal of The American Society of Nephrology. 2016 May 6;6(11):908-14. Impact Factor 4.61. **Principal Author.** *I conceived of the idea to write a series of "how to" articles on quality improvement for nephrologists with my mentors Dr. Bell and Dr. Chan and Dr Silver, a Canadian nephrology trainee with Dr. Chertow in Stanford. We presented a four part series to the editor of CJASN who commissioned us to write a 4 part series. This is the first series of its type in the nephrology literature. Drs. Silver, Harel and McQuillan share principal authorship on four-part series.*
4. **McQuillan RF**, Clark E, Zahirieh A, Cohen ER, Paparello JJ, Wayne DB, Barsuk JH. Performance of Temporary Hemodialysis Catheter Insertion by Nephrology Fellows and Attending Nephrologists. Clinical Journal of American Society of Nephrology. 2015 Oct 7;10(10):1767-72. Available from: <http://cjasn.asnjournals.org/content/10/10/1767.long>. Impact Factor 4.63. **Principal Author.** *Publication based on culmination of several years' work running simulation based mastery learning for temporary hemodialysis catheters for nephrology trainees at University of Toronto. This was the first publication to compare the procedural skills of trainees to those of experts. The finding that they are no different was considered highly significant and was a featured presentation with accompanying editorial.*
5. **McQuillan RF**, Toulany A, Kaufman M, Schiff JR. Benefits of a transfer clinic in adolescent and young adult kidney transplant patients. Can J Kidney Health Dis. 2015 Jan 1;2:45. Available from: <http://www.cjkhd.org/content/2/1/45>. **Principal Author.** *Describes an improvement in adherence and patient outcome following a collaborative quality improvement initiative between UHN and The Hospital for Sick Children.*

2. PEER-REVIEWED PUBLICATIONS

Journal Articles

- Ward F, Faratro R, **McQuillan RF**. Self-Cannulation of the Vascular Access in Home Hemodialysis: Overcoming Patient-level Barriers. *Seminars in Dialysis*. 2018 Sep;31(5):449-454. Impact Factor 2.07 (Trainee publication, Frank Ward - Clinical Fellow). **Senior Responsible Author**.
- Rory McQuillan**, Charmaine Lok. Does Peritoneal Dialysis Have a Role in Urgent Start End-Stage Kidney Disease? *Seminars in Dialysis*. 2018 Aug 1;31(4):325-331. Impact Factor 1.7. **Principal Author**.
- Marie-Michèle Gaudreault-Tremblay, Rulan Parekh, **Rory McQuillan**, Damien Noone. Quality Improvement in Pediatric Nephrology: A practical guide. *Pediatric Nephrology*. 2018 Feb 28. In Press (Trainee publication, Quality improvement Fellow). **Coauthor or Collaborator**.
- Carina Iskander, **Rory F. McQuillan**, Gihad Nesrallah, Christian Rabbat, David C. Mendelssohn. Attitudes and Opinions of Canadian Nephrologists Towards Continuous Quality Improvement Options. *Canadian Journal of Kidney Health and Disease*. 2017 Aug 25. **Coauthor or Collaborator**.
- Ward F, Faratro R, **McQuillan RF**. Title: Cannulation of the Hemodialysis Arteriovenous Access using Ultrasound Guidance. *Seminars in Dialysis*. 2017 Jul;30(4):319-325. Impact Factor 2.07 (Trainee publication, Frank Ward - Clinical Fellow). **Senior Responsible Author**.
- Clare Jones, **Rory F. McQuillan**, Amir Igbariah, Carmen Avila-Casado. Diagnosing IgG4 Renal Disease; The Pitfalls of Current Diagnostic Criteria : A Renal Biopsy Teaching Case. *BMC Nephrology*. 2017 Jun. In Press (Trainee publication, Clinical Fellow). **Coauthor or Collaborator**.
- Yasbanoo Moayedi, Toni Schofield, Edward Etchells, Samuel Silver MD, Jeremy Kobulnik, **Rory McQuillan**, Chaim Bell, Meredith Linghorne, Heather J. Ross. Closing the care gap: A Primer on Quality Improvement for Heart Failure Clinicians. *Circulation: Heart Failure*. 2017 May 10;10(5). Impact Factor 6.82 (Trainee publication, VAQS Fellow). **Coauthor or Collaborator**.
- Caitlin McIntyre, **Rory McQuillan**, Chaim Bell and Marisa Battistella. Targeted Deprescribing in an Outpatient Hemodialysis Unit: A Study to Decrease Polypharmacy. *American Journal of Kidney Disease*. 2017 Apr 14. Impact Factor 6.27. **Coauthor or Collaborator**.
- Ward F, John R, Bargman JM, **McQuillan RF**. Renal tubular toxicity associated with rosuvastatin therapy. *American Journal of Kidney Disease*. 2017 Mar;69(3):473-476. *Am J Kidney Dis*. 2016 Nov 14. pii: S0272-6386(16)30555-8. doi: 10.1053/j.ajkd.2016.08.037. Impact Factor 6.27 (Trainee publication, Dr Francis Ward - Clinical Fellow). **Senior Responsible Author**.
- Emilie Chan, Brenda Hemmelgarn, Scott Klarenbach, Braden Manns, Reem Mustafa, Gihad Nesrallah and **Rory McQuillan**. Choosing Wisely: the Canadian Society of Nephrology's List of 5 items Physicians and Patients should Question. *Canadian Journal of Kidney Health and Disease*. 2017 Feb 28 (Trainee publication, Emilie Chan - QI masters student 1st author). **Senior Responsible Author**.
- Edward Clark, Jeffrey H. Barsuk, Jolanta Karpinski and **Rory McQuillan**. Achieving Procedural Competence During Nephrology Fellowship Training: Current Requirements and Educational Research. *Clinical Journal of The American Society of Nephrology*. 2016 Dec 7;11(12):2244-2249. Impact Factor 4.61. **Senior Responsible Author**.
- Rory F. McQuillan** and Brian M. Wong. The SQUIRE Guidelines: A Scholarly Approach to Quality Improvement. *Journal of Graduate Medical Education*. 2016 Dec;Vol. 8(No. 5):771-772. <http://dx.doi.org/10.4300/JGME-D-16-00558.1>. **Principal Author**.
- Rory F McQuillan**, Samuel A Silver, Ziv Harel, Adam V.Weizman, Alison Thomas, Chaim M Bell, Glenn M Chertow, Christopher T Chan and Gihad Nesrallah. How to Measure and Interpret Quality Improvement Data. *Clinical Journal of The American Society of Nephrology*. 2016 May 6;6(11):908-14. Impact Factor 4.61. **Principal Author**.
- Ziv Harel, Samuel A Silver, **Rory McQuillan**, Adam Weizman, Alison Thomas, Gihad Nesrallah, Glenn M. Chertow, Christopher T Chan, Chaim M Bell. How to Diagnose Solutions to a Quality of Care Problem. *Clinical Journal of The American Society of Nephrology*. 2016 May 6;6(11):901-7. Impact Factor 4.61. **Coauthor or Collaborator**.
- Samuel A Silver, Ziv Harel, **Rory F McQuillan**, Adam V.Weizman, Alison Thomas, Glenn M Chertow, Gihad

Nesrallah, Chaim M Bell and Christopher T Chan. How to Begin a Quality Improvement Project. *Clinical Journal of The American Society of Nephrology*. 2016 May 6;11(5):893-900. Impact Factor 4.61. **Coauthor or Collaborator**.

Samuel A Silver, Ziv Harel, **Rory F McQuillan**, Adam V. Weizman, Alison Thomas, Gihad Nesrallah, Chaim M Bell, Christopher T Chan and Glenn M Chertow. How to Sustain Change and Support Continuous Quality Improvement. *Clinical Journal of The American Society of Nephrology*. 2016 May 6;6(11):916-24. Impact Factor 4.61. **Coauthor or Collaborator**.

McQuillan RF, Clark E, Zahirieh A, Cohen ER, Paparello JJ, Wayne DB, Barsuk JH. Performance of Temporary Hemodialysis Catheter Insertion by Nephrology Fellows and Attending Nephrologists. *Clinical Journal of American Society of Nephrology*. 2015 Oct 7;10(10):1767-72. Available from: <http://cjasn.asnjournals.org/content/10/10/1767.long>. Impact Factor 4.63. **Principal Author**.

Kamar FB, **McQuillan RF**. Hyperchloremic Metabolic Acidosis due to Cholestyramine: A Case Report and Literature Review. *Case Rep Nephrol*. 2015 Sep 3;2015:309791. Available from: <http://www.hindawi.com/journals/crin/2015/309791/> (Trainee publication, Elective Medical Student). **Senior Responsible Author**.

McQuillan RF, Toulany A, Kaufman M, Schiff JR. Benefits of a transfer clinic in adolescent and young adult kidney transplant patients. *Can J Kidney Health Dis*. 2015 Jan 1;2:45. Available from: <http://www.cjkhd.org/content/2/1/45>. **Principal Author**.

Bromfield M, **McQuillan R**, John R, Avila-Casado C. The significance of tubuloreticular inclusions in the diagnosis of Focal and Segmental Glomerulosclerosis associated with CMV infection. *Clinical Kidney Journal*. 2014 Feb 6(0):1-5. **Coauthor or Collaborator**.

Edward G Clark, James J Paparello, Diane B Wayne, Cedric Edwards, Stephanie Hoar, **Rory McQuillan**, Michael E Schachter and Jeffrey H Barsuk. Use of a national continuing medical education meeting to provide simulation-based training in temporary hemodialysis catheter insertion skills: a pre-test post-test study. *Canadian Journal of Kidney Health and Disease*. 2014;1:25. **Coauthor or Collaborator**.

Toulany A, **McQuillan RF**, Thull-Freedman JD, Margolis PA. Quasi-Experimental designs for quality improvement research. *Implementation Science*. 2013;8(Suppl 1):S3.

McQuillan RF, Chiu E, Nessim S, Lok CE, Roscoe JM, Tam P and Jassal SV. A randomized controlled trial comparing mupirocin and polysporin triple ointments in peritoneal dialysis patients: the MP3 Study. *Clin J Am Soc Nephrol*. 2012 Feb;7(2):297-303. Epub 2011 Dec 1. **Principal Author**.

McQuillan RF and Chan CT. The intuitive case for beta-blockers in patients with ESRD. *Semin Dial*. 2012 Jan;25(1):15-21. **Principal Author**.

McQuillan R, Trpeski L, Fenton S and Lok CE. Modifiable risk factors for early mortality on hemodialysis. *Int J Nephrol*. 2012;435736. Epub 2012 Jul 24. **Principal Author**.

McQuillan R, Bharatha A, Simons M and Bargman J. Sudden loss of consciousness during hemodialysis. *Am J Kidney Dis*. 2011 May;57(5):xxiii-xxvi. **Principal Author**.

McQuillan RF, Bargman JM. Hyponatraemia caused by LGI1-associated limbic encephalitis. *NDT Plus*. 2011;4(6):424-426. **Principal Author**.

McQuillan R and Jassal SV. Neuropsychiatric complications of chronic kidney disease. *Nat Rev Nephrol*. 2010 Aug;6(8):471-9. Epub 2010 Jun 22. **Principal Author**.

O'Seaghda CM, **McQuillan R**, Moran AM, Lavin P, Dorman A, O'Kelly P, Mohan DM, Little P, Hickey DP and Conlon PJ. Higher tacrolimus trough levels on days 2-5 post-renal transplant are associated with reduced rates of acute rejection. *Clin Transplant*. 2009 Aug;23(4):462-8.

McQuillan RF, O'Seaghda CM, Bagatto A, Manusamy M, Errakiah N, Sinnott C, O'Kelly P, Murphy GM and Conlon PJ. The effect of switching from calcineurin inhibitor to sirolimus on the incidence of skin cancers in kidney transplant recipients. *J Eur Acad Dermatol Venereol*. 2009 Mar;23(3):330-1. Epub 2008 Jul 7. **Principal Author**.

O'Riordan A, Wong V, **McQuillan R**, McCormick PA, Hegarty JE and Watson AJ. Acute renal disease, as defined by the RIFLE criteria, post-liver transplantation. *Am J Transplant*. 2007 Jan;7(1):168-76. Epub 2006 Nov 15. **Coauthor**

or Collaborator.

Case Reports

Jaya Prakash Nath Ambinathan, Mohammed Elbokl, **Rory McQuillan**. Phenazopyridine abuse presenting with Acute Kidney Injury, Hemolytic Anaemia and Jaundice. (India); 2017 Aug 21 (Trainee publication, Clinical Fellows). **Senior Responsible Author.**

Taylor Petropoulos Maria Erika Ramirez, Chantal Morel, John Granton, Christoph Licht, Rohan John, Yasbanoo Moayed, **Rory McQuillan**. Renal thrombotic microangiopathy and pulmonary arterial hypertension in a patient with late-onset cobalamin C deficiency: Case Report and Literature Review. 11(3). (Belgium): ERA/EDTA; 2017 Jul 20. 4 p (Trainee publication, Medicine Resident and Nephrology Fellow). **Senior Responsible Author.**

Book Chapters

McQuillan R. Secondary Hypertension. In: National Kidney Foundation: Primer on Kidney Diseases. 6th ed. 2013. **Principal Author.**

McQuillan R. Improving Clinical Care a Clinical Improvement Worksheet. In: Practice-Based Learning and Improvement: A Clinical Improvement Action Guide. 3rd ed. 2012. **Co-Principal Author.**

McQuillan R. Secondary Hypertension. In: National Kidney Foundation: Primer on Kidney Diseases. 5th ed. 2009. **Principal Author.**

Letters to Editor

Maria Erika Ramirez and Rory Francis **McQuillan**. Acute Kidney Injury Secondary to Trauma-Induced Hemolysis: The Need for Increased Awareness and a Preventative Strategy. American Journal of Kidney Disease. 2017 Feb;69(2):320. Am J Kidney Dis. 2016 Oct 17. pii: S0272-6386(16)30484-X. doi: 10.1053/j.ajkd.2016.08.021. [Epub ahead of print. Impact Factor 6.27 (Trainee publication, Nephrology Fellow). **Senior Responsible Author.**

F. Presentations and Special Lectures

1. International

Invited Lectures and Presentations

- 2019 Feb 15 **Presenter.** Ultrasound guided insertion of a peritoneal dialysis catheter. American Society of Diagnostic and Interventional Nephrologists. Atlanta, Georgia, United States. Presenter(s): Dr McQuillan. Invited to present and run a simulation workshop on percutaneous ultrasound guided peritoneal dialysis catheter insertion.
- 2018 Oct 25 **Facilitator.** Diagnostic Ultrasound Workshop. American Society of Nephrology. San Diego, California, United States. Presenter(s): **Rory McQuillan**. Served as faculty for a workshop on diagnostic ultrasound for nephrologists.
- 2018 Mar 1 **Invited Speaker.** Quality Improvement: Analyze the Problem & Gather Baseline Data. Veteran Affairs Geriatric Scholars Program. Boston, Massachusetts, United States. Presenter(s): **Rory McQuillan**.
- 2017 Nov 3 **Invited Speaker.** Innovative PD, Rapid and Urgent Starts, and How to Do It. American Society of Nephrology - Kidney Week 2017. New Orleans, Louisiana, United States. Presenter(s): **Rory McQuillan**. Invited Lecture on Urgent Start PD program at Toronto General Hospital.
- 2017 Nov 2 **Chair.** Pediatric Hypertension. American Society of Nephrology - Kidney Week 2017. New Orleans, Louisiana, United States.
- 2017 Oct 6 **Invited Speaker.** Percutaneous PD catheter insertion (lecture and demonstration). International

- Society Peritoneal Dialysis - Euro PD meeting. Dublin, Dublin, Ireland. Presenter(s): **Rory McQuillan**.
- 2017 Oct 5 **Facilitator**. Percutaneous PD catheter insertion workshop. International Society Peritoneal Dialysis - Euro PD meeting. Dublin, Dublin, Ireland. Presenter(s): **Rory McQuillan**.
- 2017 Aug 17 **Visiting Professor**. Morning Report. Ben Taub Hospital. Houston, Texas, United States. Presenter(s): **Rory McQuillan**.
- 2017 Aug 15 **Facilitator**. Veterans Health Administration National Quality Scholars Fellowship - Summer Institute. Dept. of Veteran Affairs. Houston, Texas, United States. Organizing committee, facilitator, mentor.
- 2017 May 25 **Invited Speaker**. Quality Improvement Workshop. University of New York at Buffalo. Buffalo, New York, United States. Presenter(s): **Rory McQuillan**, Brian Wong. Quality Improvement Workshop.
- 2017 Mar 13 **Speaker**. Percutaneous Peritoneal Dialysis for The Nephrologist. University Of Missouri. Long Beach, California, United States. Presenter(s): **Rory McQuillan**. Podium Presentation on percutaneous PD catheter placement. (Continuing Education).
- 2016 Oct 20 **Speaker**. Acute Start Peritoneal Dialysis. Controversies in Dialysis Access. Austin, Texas, United States. Presenter(s): **Rory McQuillan**. Podium Presentation on bedside PD catheter placement in acute kidney injury requiring dialysis. (Continuing Education).
- 2016 Oct 19 **Presenter**. Simulation of Dialysis Access. Controversies in Dialysis Access. Austin, Texas, United States. Presenter(s): **Rory McQuillan**. Simulation workshop on bedside PD catheter insertion for interventional nephrologists. (Continuing Education).
- 2016 Sep 30 **Facilitator**. International Conference on Residency Education: International Residency Leadership Summit. Royal College of Physicians and Surgeons of Canada. Niagara Falls, Ontario, Canada. Presenter(s): Chris Hillis, **Rory McQuillan**, Susan Glover Takahashi (chair). Facilitated a small group discussion on resource stewardship in medicine and presented findings to attendees.
- 2015 Mar 4 **Invited Speaker**. The Foundations of Healthcare Quality Improvement. Department of Veteran Affairs Geriatric Scholars Program. Boston, Massachusetts, United States. Presenter(s): **Rory McQuillan**, Carol Callaway-Lane. Introduction to QI methodology at a geriatric medicine conference.
- 2014 Nov 8 **Invited Speaker**. Choosing Wisely Canada. American College of Physicians. Mississauga, Ontario, Canada. Presentation to inform the Ontarian Chapter of the American College of physicians on the Choosing wisely Canada campaign.
- 2014 Feb 27 **Invited Speaker**. The Foundations of Healthcare Quality Improvement. Department of Veteran Affairs Geriatric Scholars Program. Boston, Massachusetts, United States. Introduction to QI methodology at a geriatric medicine conference.

Presented Abstracts

- 2013 Nov Amputation-Free Survival In Dialysis Patients Undergoing Angioplasty Of The Lower Limbs: Is Vascular Intervention Futile? American Society of Nephrology. United States. (poster).
- 2012 Nov **Presenter**. The effect of a Transition Program on Adherence in Adolescent Kidney Transplant Recipients Moving from a Pediatric to an Adult Care Setting. American Society of Nephrology. San Diego, California, United States. (Poster).
- 2011 Dec **Presenter**. The effect of a Transition Program on Adherence in Adolescent Kidney Transplant Recipients Moving from a Pediatric to an Adult Care Setting. 23rd Annual National Forum Institute for Healthcare Improvement. Orlando, Florida, United States. (poster).
- 2010 Nov A Randomized Controlled Trial Comparing Mupirocin Versus Polysporin Triple® for The Prevention of Catheter-Related Infections in Peritoneal Dialysis Patients. American Society of Nephrology. (oral presentation).
- 2006 Oct Biochemical markers of bone turnover in a patient on haemodialysis receiving calcimimetic treatment. International Society of Nephrology. (poster).

Presented and Published Abstracts

- 2016 Nov 18 **Presenter.** Improving Identification and Documentation of Urinary Tract Infection. American Society of Nephrology - Kidney Week 2017. New Orleans, Louisiana, United States. Presenter(s): Marie-Michele Gaudreault-Tremblay, Damien G. Noone, **Rory F. McQuillan**, Diane Hebert, Rulan S. Parekh. (Trainee Presentation) *Publication Details:* Improving Identification and Documentation of Urinary Tract Infection. **Coauthor or Collaborator.**
- 2016 Nov 18 **Presenter.** Predictors of Outcome in Patients Commenced on Peritoneal Dialysis for Chronic Cardiorenal Syndrome. American Society of Nephrology - Kidney Week 2016. Chicago, Illinois, United States. Presenter(s): Naline Saiprasertkit, **Rory F. McQuillan**, Emilie Trinh, Joanne M. Bargman. (Trainee Presentation) *Publication Details:* Predictors of Outcome in Patients Commenced on Peritoneal Dialysis for Chronic Cardiorenal Syndrome.
- 2016 Nov 17 Attitudes and Opinions of Canadian Nephrologists Toward Continuous Quality Improvement Options. American Society of Nephrology - Kidney Week 2016. Illinois, United States. Presenter(s): Carina Iskander, Gihad E. Nesrallah, Christian G. Rabbat, **Rory F. McQuillan**, David C. Mendelssohn. (Trainee Presentation) *Publication Details:* Attitudes and Opinions of Canadian Nephrologists Toward Continuous Quality Improvement Options.
- 2016 Nov 17 **Presenter.** Targeted Deprescribing in an Outpatient Hemodialysis Unit: A Study to Decrease Polypharmacy. American Society of Nephrology - Kidney Week 2016. Chicago, Illinois, United States. Presenter(s): Marisa Battistella, Caitlin McIntyre, Chaim Bell, **Rory F. McQuillan**. (Trainee Presentation) *Publication Details:* Targeted Deprescribing in an Outpatient Hemodialysis Unit: A Study to Decrease Polypharmacy.
- 2014 Nov Simulation-Based-Mastery-Learning for Temporary Hemodialysis Catheter Insertion at the Canadian Society of Nephrology Annual Meeting: A Before After Study. American Society of Nephrology. Philadelphia, Pennsylvania, United States. Presenter(s): Edward Clark, **Rory McQuillan**. Poster. *Publication Details:* Simulation-Based-Mastery-Learning for Temporary Hemodialysis Catheter Insertion at the Canadian Society of Nephrology Annual Meeting: A Before After Study.
- 2013 May **Contributing author.** The impact of calcimimetic treatment on bone turnover in a renal patient with high turnover hyperparathyroid bone disease. European Calcified Tissue Society Congress 2013. Lisbon, Lisboa, Portugal. Presenter(s): Dr Sinead Kinsella. Available from: <http://www.bone-abstracts.org/ba/0001/ba0001PP4.htm>. *Publication Details:* The impact of calcimimetic treatment on bone turnover in a renal patient with high turnover hyperparathyroid bone disease. **Coauthor or Collaborator.**

Invited to oversee workshop for interventional nephrologists and prepare report on educational merit of the approach

- 2016 May 18 **Invited Special Education Consultant.** ISPD European PD University for Interventionalists. International Society Peritoneal Dialysis. Vienna, Wien, Austria. Presenter(s): Sean Armstrong, John Crabtree, Todd Penner. Invited to assess impact of workshop for interventional nephrologists and make recommendations for future events.

2. National

Invited Lectures and Presentations

- 2018 May 3 **Facilitator.** Simulation Based mastery Learning Workshop in Percutaneous Peritoneal Dialysis Catheter Insertion. Canadian Society of Nephrology/ International Society of Peritoneal Dialysis. Vancouver, British Columbia, Canada. Presenter(s): Dr **Rory McQuillan**. Invited to run a workshop on PD catheter insertion for Canadian nephrologists and trainees.
- 2017 May 6 **Invited Speaker.** Critical Incident Reporting and Root Cause Analysis. Canadian Society of Nephrology. Montreal, Quebec, Canada. Presenter(s): Dr **Rory McQuillan**. Invited to organize a series of talks for a QI symposium at CSN AGM.

- 2017 May 4 **Facilitator**. Simulation Based mastery Learning Workshop in Percutaneous Peritoneal Dialysis Catheter Insertion. Canadian Society of Nephrology. Montreal, Quebec, Canada. Presenter(s): Dr **Rory McQuillan**. Invited to run a workshop on PD catheter insertion for Canadian nephrologists and trainees.
- 2016 May 12 **Invited Speaker**. Quality Improvement Workshop. Canadian Society of Nephrology. Halifax, Nova Scotia, Canada. Presenter(s): **Rory McQuillan** Carol Calloway-Lane Sam Silver. Invited by the Canadian Society of Nephrology to run a course on quality improvement methodology for nephrologists and nephrology trainees. (Trainee Presentation).
- 2016 Mar 23 **Facilitator**. Simulation Based mastery Learning Workshop in Temporary Hemodialysis Catheter Insertion. Dr Catherine Weber. Montreal, Quebec, Canada. Presenter(s): Dr **Rory McQuillan** and Dr Ted Clark. Invited to run a simulation-based mastery learning workshop in central line insertion for adult and pediatric nephrology trainees at McGill University.
- 2015 Nov 13 **Invited Speaker**. Choosing Wisely Canada. Choosing Wisely Canada / Peterborough Health Centre. Peterborough, Ontario, Canada. Presenter(s): **Rory McQuillan**. Presentation at Medicine Grand Rounds at Peterborough Health Centre outlining the Choosing Wisely Canada campaign.
- 2014 Apr 26 **Invited Speaker**. Choosing Wisely Canada. Canadian Society of Nephrology. Vancouver, British Columbia, Canada. Presenter(s): **Rory McQuillan** Sam Shortt, CMA. Presentation to the CSN membership outlining the Choosing Wisely Canada campaign.
- 2014 Apr 25 **Chair**. Moderated session to determine best trainee research project. Canadian Society of Nephrology. Vancouver, British Columbia, Canada. Presenter(s): Nephrology Trainee Presentations.

Presented Abstracts

- 2007 May Higher whole-blood trough tacrolimus concentrations on days 2 to 5 post renal transplantation are associated with significantly reduced rates of acute cellular rejection. Irish Nephrology Society. (oral presentation).
- 2007 May The Effect of Charleston Co-Morbidity Score on Haemodialysis Patient Survival & Hospitalisation Rates. Irish Nephrology Society. (poster).
- 2007 May The Effect of Switching From Calcineurin Inhibitor to Sirolimus on the Incidence of Skin Cancers in Kidney Transplant Recipients. Irish Nephrology Society. (poster).
- 2007 May Nephrogenic Fibrosing Dermopathy, a case report. Irish Nephrology Society. (poster).
- 2007 May Relationship between Clinical Performance Targets and Outcomes in Haemodialysis Patients. Irish Nephrology Society. (oral presentation).

Media Appearances

- 2014 Oct 29 **Choosing Wisely Canada - Representative for Canadian Society of Nephrology**. Choosing Wisely Canada - Press Launch. Toronto, Ontario, Canada. End date: 2014 Oct 29.

3. Provincial / Regional

Invited Lectures and Presentations

- 2018 Jun 4 **Invited Speaker**. Ontario Renal Network - Kidney Talks. Ontario Renal Network. Ontario, Canada. Presenter(s): Dr **Rory McQuillan**. Quality Improvement Methodology.
- 2017 Sep 9 **Invited Speaker**. Filipino Renal Nurses Association of Ontario 11th Annual Gala. Filipino Renal Nurses Association of Ontario. Toronto, Ontario, Canada. Presenter(s): **Rory McQuillan**. Guest Speaker.
- 2017 Feb 16 **Visiting Professor**. Bedside Peritoneal Dialysis Catheter Insertion. University of Ottawa. Ottawa, Ontario, Canada. Presenter(s): **Rory McQuillan**. Visiting Professor. Invited to speak on the impact of bedside PD catheter insertion program.

2017 Feb 2 **Invited Speaker.** CQUIPS Workshop. Department of Medicine and Centre for Quality Improvement and Patient Safety. Toronto, Ontario, Canada. Presenter(s): Dr Kaveh Shojania, Dr Jerome Leis, Dr Alex Lo, Dr Rory McQuillan.

Presented Abstracts

2014 Oct 9 Integrating a standardized advance care planning tool into a multidisciplinary chronic kidney disease clinic: A quality improvement report. University of Toronto Center for Quality Improvement and Patient Safety Symposium. Toronto, Canada. Presenter(s): Silver SA, Al-Lawati A, Shahid K, Levitt Z, Lam D, Quittnat-Pelletier F, Verdirame M, Jassal V, **McQuillan R.** (Trainee Presentation).

4. Local

Invited Lectures and Presentations

- 2017 Nov 19 **Invited Speaker.** The Role of The Clinician in Quality and Innovation. Department of Medicine. Niagara on The Lake, Ontario, Canada. Presenter(s): Dr **Rory McQuillan**, Dr Ed Etchells. Panel Discussion for PGY 2 residents.
- 2016 Nov 19 **Invited Speaker.** The Role of The Clinician in Quality and Innovation. Department of Medicine. Niagara on The Lake, Ontario, Canada. Presenter(s): Dr Ilana Halperin, Dr Rory McQuillan. Panel Discussion for PGY 2 residents.
- 2016 Sep 7 **Invited Speaker.** Clinical Pathologic Case Conference. University of Toronto. Toronto, Ontario, Canada. Presenter(s): Dr Miranda Lambert, Dr Shereen Ezzat, Dr Rory McQuillan, Dr Sylvia Asa. City Wide Medicine Grand Rounds. (Trainee Presentation).
- 2015 Nov 27 **Invited Speaker.** Understanding Kidney Disease. University Health Network. Toronto, Ontario, Canada. Presenter(s): Dr **Rory McQuillan**. Talk to educate patients about kidney health.
- 2015 Nov 21 **Invited Speaker.** The Role of The Clinician in Quality and Innovation. Department of Medicine. Niagara on The Lake, Ontario, Canada. Presenter(s): Dr Michael Baker, Dr Matthew Morgan, Dr Chaim Bell, Dr Rory McQuillan. Panel Discussion for PGY 2 residents.
- 2015 Nov 19 **Facilitator.** Resource Stewardship: Why and How? PGME University of Toronto. Toronto, Ontario, Canada. Presenter(s): Keynote Address by Dr Wendy Levinson Breakout Session - Using Data to Encourage Reflection on Personal/Institutional Resource Use - Dr Rory McQuillan, Dr Chris Hillis and Dr Timothy Jackson.
- 2015 Nov **Invited Speaker.** The Clinician in Quality and Innovation- PGY 3 Retreat. Department of Medicine. Toronto, Ontario, Canada. Presenter(s): Dr **Rory McQuillan**.
- 2015 Oct 14 **Presenter.** Reclaiming Lost Ground: Challenges in Clinical Nephrology. City Wide Nephrology Rounds. Toronto, Ontario, Canada. Presenter(s): Dr **Rory McQuillan**. Discussed challenges facing the specialty of Nephrology and suggested how we can address these by taking charge of procedures integral to our practice.
- 2015 Sep 29 **Participant on panel for new faculty orientation.** What I know now that I wish I'd known then. The Department of Medicine. Ontario, Canada.
- 2014 Oct 14 **Invited Speaker.** Percussion Hemoglobinuria. City Wide Medicine Rounds. Toronto, Ontario, Canada. Presenter(s): **Rory McQuillan** Alon Vaisman Kevin Kuo Amara Kante.
- 2014 May 14 **Invited Speaker.** Choosing Wisely and Beyond. City Wide Medicine Rounds. Toronto, Ontario, Canada.
- 2013 Nov 13 **Invited Speaker.** Quality in Healthcare: Choosing Wisely. City Wide Nephrology Rounds. Toronto, Ontario, Canada. Presenter(s): Dr **Rory McQuillan**. Inform city-wide division regarding the choosing wisely campaign.

G. Teaching and Design

I teach at an undergraduate, post graduate and continuing medical education levels. At the undergraduate level I am the nephrology lead for the new 1st year curriculum at UofT which launched in 2017. I am also the theme lead for resource stewardship for the new curriculum. Additionally I teach renal physiology to the 2nd year students. At a post graduate level I spend approximately 4 months per year on consultation service and supervise internal medicine residents who rotate through nephrology at UHN. I supervise nephrology residents and clinical fellows. I also supervise and teach medicine and nephrology residents and fellows at my weekly nephrology clinic. I am the service chief for nephrology at UHN and responsible for scheduling and ensuring the educational experience of the rotation meets expected standards. I run an interventional nephrology service and train 1-2 nephrology trainees each year to insert peritoneal dialysis catheters. I implemented mandatory simulation based mastery learning for nephrology trainees at UofT and I run this course each year. I also teach kidney transplant biopsy and renal ultrasound to our senior nephrology trainees. At a CME level I teach locally, nationally and internationally. Locally I am the director of the Veterans' Health Administration National Quality Scholars Fellowship Program (VAQS) and am responsible for 8 fellows each year. These fellows are typically junior faculty members or senior trainees pursuing advanced training in QI. I also teach QI as part of the certificate course and the co-learning curriculum in QI. Nationally I teach both interventional nephrology and quality improvement at the CSN AGM pre-courses each year. Internationally I teach and coach QI through the Department of Veteran affairs in the United States and percutaneous PD catheter insertion as requested by the International Society of Peritoneal Dialysis. My innovations in education include: 1) The development of a nephrology teaching website 2) The design of an online nephrology curriculum for undergraduates and medicine residents 3) The implementation of simulation based mastery learning for temporary hemodialysis catheter insertion at UofT and nationally 4) Development of an undergraduate resource stewardship curriculum 5) The design of a high fidelity simulator for transplant kidney biopsy 6) Implementation of a renal ultrasound curriculum for nephrology trainees and faculty 7) Development of a training program for percutaneous PD catheter insertion 8) Launched Quality Improvement and Patient Safety Rounds at UHN, Division of Nephrology.

1. Innovations and Development in Teaching and Education

- | | |
|----------------------|--|
| 2017 May - present | Ultrasound for The Nephrologist, Postgraduate MD, Faculty of Medicine, Dept of Medicine, Nephrology, University of Toronto <i>Implemented ultrasound training for nephrology residents and fellows at UofT. Two didactic sessions and two "hands-on" workshops in May 2017.</i> |
| 2014 Sep 1 - present | Simulation based training program for ultrasound guided central venous catheter insertion for nephrology trainees and staff, Postgraduate MD, Faculty of Medicine, Dept of Medicine, Nephrology, University of Toronto <i>I have developed an evidence based curriculum for ultrasound guided central venous catheter insertion in collaboration with Dr Jeffrey H Barsuk from Northwestern University. This is offered to all trainee and staff nephrologists at University of Toronto. All nephrology fellows at University of Toronto trained and certified. Baseline competence of nephrology staff established. Publication CJASN 2015.</i> |
| 2014 Jul 1 - present | University Health Network Division of Nephrology Teaching Website, Postgraduate MD, Faculty of Medicine, Dept of Medicine, Nephrology <i>Designed and developed teaching website aimed at rotating PGY 1- 3 medicine residents. Based on Royal College nephrology curriculum. Allows for self-assessment and assessment by supervising staff. Can be accessed by learners longitudinally during their training. Has now been expanded to PGY 4 & 5 trainees as well as clinical fellows in nephrology and kidney transplant fellows. Subsequently used to deliver on-line content for new undergraduate curriculum at UofT.</i> |
| 2014 Jul 1 - present | Explore Home Dialysis Website, Continuing Education, Faculty of Medicine, Dept of Medicine, Nephrology <i>Designed a website to enable the UHN Center for Experiential Learning and Innovation in Home Dialysis. More than 50 observers have come to UHN to learn about home dialysis.</i> |
| 2014 Jan 1 - present | Transplant Nephrology kidney biopsy simulation, Postgraduate MD, Faculty of Medicine, Dept of Medicine, University of Toronto <i>Developed a high fidelity simulator for training in ultrasound guided kidney transplant biopsy and run a training program in collaboration with The Michener Institute. This initiative has enabled the UHN transplant fellowship meet American Society of Transplantation accreditation standards.</i> |
| 2014 Jan - present | Stewardship Curriculum Development, Undergraduate Education, Faculty of Medicine, Dept of Medicine <i>Undergraduate Medical Education Lead for Resource Stewardship and module director for stewardship in Transition to Clerkship (TTC) Collaborated with Wendy Levinson,</i> |

Martin Schreiber and Geoffrey Anderson to design and deliver resource stewardship education at University of Toronto medical school. This has consisted of: 1. Developing and filming a series of videos, now used by the University for the purpose of resource stewardship education. 2. Supervising a LEAD medical student to survey the attitudes and knowledge of 2nd and 4th year students in collaboration with colleagues at Harvard medical school. Manuscript submitted to Medical Education. 3. Adding resource stewardship content to new and existing educational material 4. Embedding resource stewardship in new foundations curriculum 5. Mentoring of Choosing Wisely STARS medical students. New Stewardship Module in TTC. Stewardship videos available on "Blackboard" Manuscript submitted for publication Stewardship embedded in new undergraduate curriculum.

- 2014 Jan - present Simulation based training program for ultrasound guided central venous catheter insertion for nephrology trainees and staff, Postgraduate MD, Faculty of Medicine, Dept of Medicine, Nephrology *In collaboration with colleagues from University of Ottawa and Northwestern University demonstrated feasibility of training, testing and certifying nephrology fellows at ultrasound guided central venous catheter insertion using an evidence based curriculum at the Canadian Society of Nephrology AGM. Work published in Canadian Journal of Kidney Health and Disease.*
- 2014 Jan - present Developed a curricular model to facilitate the Center for Experiential Learning and Innovation in Home Dialysis, Continuing Education, Faculty of Medicine, Dept of Medicine, Nephrology *Designed a curriculum to allow nephrologists from other centers receive training in home dialysis at UHN. Publication under revision.*
- 2014 Jan - present Quality Improvement and Patient Safety Rounds, Continuing Education, Faculty of Medicine, Dept of Medicine, Nephrology, University Health Network *Launched this quarterly initiative for the division of nephrology.*
- 2014 Jan - present Member of the Co-learning Curriculum in QI Planning Committee members, Multilevel Education, Faculty of Medicine, Dept of Medicine, Nephrology *QI teaching initiative Evidence based curriculum, which teaches faculty and residents together. Expanded the program to 15 sub-specialty programs in 2014-15 with each program completing a QI project over the course of the year. Awarded the 2015-16 Helen P. Batty Award for Excellence and Achievement in Faculty Development Award - Innovation in Program Development and Design category.*
- 2013 Dec - present Bedside PD catheter insertion training, Postgraduate MD, Faculty of Medicine, Dept of Medicine, Nephrology *With the commencement of bedside PD catheter insertion, we now formally offer this training opportunity as part of the home dialysis fellowship. To date three fellows have been trained, one of whom has started a bedside PD catheter insertion program at a Belgian University Hospital. Establishment of a Bedside PD catheter insertion program at Universitair Ziekenhuis Brussel, Vrije Universiteit Brussel.*
- 2013 Nov - present Canadian Society of Nephrology Lead for Choosing Wisely Canada, Patient and Public Education, Faculty of Medicine, Dept of Medicine, Nephrology, Canadian Society of Nephrology and Choosing Wisely Canada *Developed a list of 5 unnecessary tests, treatments and procedures in nephrology. Nationwide press release October 29 2014. <http://www.choosingwiselycanada.org/recommendations/nephrology/> http://www.youtube.com/watch?v=40NrWhaPxDo&index=1&list=UU_YD7ZvPL4VJUH9RnsAnWxg Publication in CJKHD.*
- 2016 Jun 27 - 2016 Jul 1 Renal Ultrasound Mini Fellowship, Faculty Development, Faculty of Medicine, Dept of Medicine, Nephrology, University of Toronto *Organized an intensive practical one-week exposure to renal ultrasound for attending nephrologists at University Health Network and Sunnybrook Health Sciences Centre.*
- 2014 Jul 1 - 2015 Jun 30 Member of the Continuing Education in Quality Improvement Committee, Continuing Education, Faculty of Medicine, Dept of Medicine, Nephrology *Planning and Implementation of quality improvement into existing CME activities. Successful Incorporation of QI into Medical Grand Rounds.*

H. Research Supervision

1. PRIMARY OR CO-SUPERVISION

Undergraduate MD

2014 Jul - 2016 Jun **Primary Supervisor.** Year 4. Marisa Leon. *Knowledge and attitudes of medical students towards resource stewardship, Non-thesis Project.*

Postgraduate MD

2017 Jul - present **Primary Supervisor.** Core Program. Lien, Karen. Supervisee Position: Nephrology Fellow, Supervisee Institution: University of Toronto. *Choosing Wisely: the Canadian Society of Nephrology's List of 5 items Physicians and Patients should Question, Non-thesis Project.* Collaborator(s): Brenda Hemmelgarn.

2013 Jul - 2014 Jun **Primary Supervisor.** Subspecialty. Chan, Emilie. Supervisee Position: Nephrology Fellow, Supervisee Institution: University of Toronto. *Choosing Wisely: the Canadian Society of Nephrology's List of 5 items Physicians and Patients should Question.* Collaborator(s): Brenda Hemmelgarn.

2013 Jul - 2014 Jun **Primary Supervisor.** Clinical Fellow. Oweis, Ashraf. Supervisee Position: Clinical Fellow, Supervisee Institution: University of Toronto. *Outcomes of percutaneous intervention for peripheral arterial disease in dialysis patients.* Collaborator(s): Bargman, Joanne; Roche-Nagle, Graham.

I. Creative Professional Activities

1. Professional Innovation and Creative Excellence

2014 Jan - present Division of Nephrology Teaching Websites. Development of a nephrology teaching website. I developed an innovative nephrology teaching website <http://www.nephroed.com/>. This website was initially developed for PGY 1-3 use, but due to its success has been expanded to include general nephrology, interventional and transplant content also. The site is available and used by learners all over the world. To view the website please follow the link above. When prompted enter the username as: nephrotested@gmail.com and password as: test123. I was invited to lead the nephrology section of the new undergraduate curriculum at UofT which launched in 2017. The content for the nephrology was all delivered using our website. Additionally, using the website infrastructure we were able to conduct a randomized trial on preparation for future learning in hyponatremia.

2014 Jan - present Simulation Based Training for Ultrasound Guided Kidney Biopsy. I designed a simulator and curriculum to ensure our transplantation trainees receive the best possible instruction and hand-on experience at performing kidney biopsies. The American Society of Transplantation have accredited our program. To date 12 transplant nephrologists have been trained and received this accreditation

2014 - present Simulation based mastery learning for ultrasound guided temporary hemodialysis catheter insertion. Upon my appointment I implemented mandatory Simulation Based Mastery Learning (SBML) for temporary hemodialysis catheter insertion for all nephrology trainees at UofT. The implementation of this program was based on best evidence that such training reduces catheter-related bacteremia and mechanical complications of central venous catheter insertion. I have run this highly rated program each year for the last five years. My work "Performance of Temporary Hemodialysis Catheter Insertion by Nephrology Fellows and Attending Nephrologists" was published in CJASN in 2015. This paper compared, for the first time in the literature, the performance of trainees to "expert" staff nephrologists. The findings have helped debunk the premise upon which apprenticeship learning is based. This report was considered especially noteworthy in the nephrology community and was highlighted with an editorial in the issue it appeared. I was subsequently invited to organize and run SBML workshops for the CSN AGM. These workshops have been highly rated and have been repeated annually. We described our experience with this activity in The Canadian Journal of Kidney Health and Disease. I was invited to lead a SBML workshop in McGill University for the nephrology trainees there. I wrote an invited review on procedural training during nephrology fellowship for CJASN. I created a video on hemodialysis line insertion (as a collaboration between the University of Toronto and Ottawa) which is available

on-line.

2013 Aug - present

Bedside Peritoneal Dialysis Catheter Insertion. Established a bedside peritoneal dialysis catheter insertion program at UHN. Clinical Impact I have inserted more than 120 PD catheters over the last 5 years. As a result, the number of PD patients at UHN has grown by a sustained 35%. The program is successful because it allows patients, who would otherwise not have been PD candidates, either because they are too sick or have presented too late, to avail of the modality. An unforeseen impact of the bedside PD catheter insertion program has been its synergy with the Centre for Excellence in Heart Function at UHN. We are now in a position to offer PD to patients with severe symptomatic heart failure who are not deemed candidates for advanced heart failure therapies. Similarly, patients with ESKD following transplant and left ventricular assist device (LVAD) can now avail of PD. I have inserted PD catheters in 40 patients where the primary indication was for heart failure, in 2 patients who had received heart transplant and in 2 patients with LVAD. In terms of real world impact, therefore, this initiative has allowed patients who otherwise would have died or been confined to in-hospital management to avail of life sustaining treatment in the comfort of their homes. Academic Impact I have been afforded significant opportunity to disseminate the success of my project beyond this institution. I have been invited to give several high profile international presentations on the design, delivery and impact of my program, including at The American Society of Nephrology meeting in New Orleans, November 2017, The Annual Dialysis Conference in Long Beach, March 2017 and The Controversies in Dialysis Access Conference in Austin, October 2016. I was also invited by The Division of Nephrology at The University of Ottawa to present my work at their grand-rounds in February 2017. At the request of the Canadian Society of Nephrology (CSN), I designed a simulation-based workshop on PD catheter insertion for the AGM in Montreal in May 2017. This workshop was extremely well reviewed and I have been asked to replicate it at the combined CSN & International Society of Peritoneal Dialysis (ISPD) meeting in Vancouver, May 2018. Furthermore, we have used this opportunity to convene a Delphi panel to describe best practices for percutaneous PD catheter insertion, something currently lacking in the literature. I was invited to run simulation workshops at The Simulation of Dialysis Access Conference in Austin, October 2016 and at The "Euro-PD" conference in Dublin, October 2017. I was invited to The Peritoneal Dialysis University for Interventional Nephrologists in Vienna, June 2016, where my role was to review and provide recommendations on the educational content and value of the event. I was invited to contribute a paper on "Peritoneal Dialysis in Urgent Start End Stage Kidney Disease" to Seminars in Dialysis, which has been accepted for publication. A QI report detailing the impact of the Percutaneous PD Catheter Insertion Program at UHN has been submitted to The Clinical Journal of The American Society of Nephrology (CJASN). The insertion of a PD catheter in an LVAD patient has unique challenges and our experience has been submitted for publication. Educational Impact I am proud to have trained 3 nephrologists to perform percutaneous PD catheter insertion. One has since been appointed to The University of Brussels and has established her own PD catheter insertion program. The second will return to Thailand this year where she will also be establishing an access centre. The final nephrologist has been recruited to an Ontarian center where he has been asked to replicate our program. The availability of training in PD catheter insertion is perceived as a significant draw for our home dialysis fellowship and observership programs. I also created a video, entitled Peritoneal Dialysis Catheter Insertion Methods, at the invitation of The ISPD for its education website.

2013 Aug 1 - present

Creating capacity among physicians for quality improvement work at a local, national and international level through innovative educational initiatives. Lack of expertise among clinicians remains a key barrier in preventing better healthcare outcomes for our patients. As a leader in QI much of my time is spent trying to increase capacity among healthcare workers to successfully carry-out QI initiatives. I became director of the VAQS program at UofT since July 2017. I was the co-director for 1 year prior to that. Since becoming director I have strengthened the course-work requirements for our fellows and promoted stronger collaboration and integration within the VAQS network. I have created greater synergy between the VAQS program and other training options available at UofT and have sought to expand the inter-disciplinary nature of the program, with the appointment of nursing faculty and recruitment of new nurse fellows. My leadership role within the VAQS has given me the opportunity to act both as a member of the organizing committee and invited speaker at the annual VAQS conference in Houston. Our alumni continue to progress into leadership roles in academic medicine. This year 4 fellows will graduate. One has been recruited to an

academic center in Quebec on the basis of her expertise in QI. The second, who is already a faculty member, has been offered a division director role. Our third graduate has been accepted for advanced clinical training in Stanford University, while the fourth has been identified for a nursing leadership role. Of our 4 2017 alumni, 3 are in leadership roles in QI at academic hospitals in Ontario. I have been invited to speak at The Veteran Affairs Geriatric Scholars Program in Boston in 2014, 2016 and 2018 and to act as a mentor for the participants of this program. I was invited to lead a QI workshop at The University of New York at Buffalo in May 2017. At the invitation of the CSN I designed a workshop for PGY4 and 5 trainees in nephrology which I delivered at the Annual General Meeting in Halifax in May 2016. I was invited to address the CSN AGM on the subject of Patient Safety in Nephrology in Montreal in 2017. I am invited by The Ontario Renal Network to speak at a provincial meeting on QI methodology in June 2018. In addition to my involvement with VAQS and CSN, locally I have acted as a mentor for the Certificate Course in Quality Improvement and a faculty lead and teacher for the co-learning curriculum in QI. I received the Helen P. Batty Award for Excellence and Achievement in Faculty Development as part of the organizing committee for the co-learning curriculum in QI. Under my leadership Quality Improvement and Resource Stewardship are now integrated into the undergraduate curriculum at University of Toronto. The ITERs I developed for Quality Improvement have been adopted by The Royal College of Physicians in their new iteration of the CANMED roles for the "leader" role. I have contributed significantly to the literature aimed at educating clinicians on QI methodology. I authored a four-part "how-to" guide to QI for nephrologists in CJASN. I collaborated with one of my VQAS fellows to produce a similar guide for cardiologists, which was published in Heart Failure: Circulation. I have co-authored a QI guide for pediatric nephrologists with another of my VAQS fellows. I have co-authored a guide to the SQUIRE guidelines for academic clinician, which was published in The Journal of Medical Education and have written a book chapter in Practice Based Learning and Improvement. I was invited by The Canadian Society for Nephrology to lead their Choosing Wisely Canada campaign. I led a subgroup of the CSN guidelines committee to formulate the society's list of 5 items which the patient or physician should question. I published a paper summarizing the process in The Canadian Journal of Kidney Health and Disease. Since that time, I have worked with one of my pharmacist colleagues to develop validated algorithms for deprescription of certain "low-value" medications in the hemodialysis population. Our work was published along with an editorial in The American Journal of Kidney Disease in 2017. We are currently working on a second wave of Choosing Wisely themed around drug safety in ESKD.