

University of Calgary
Cumming School of Medicine

I. BIOGRAPHICAL DATA

NAME	Kerry A. McBrien
ADDRESS	3E35 Teaching, Research & Wellness (TRW) Building 3280 Hospital Drive NW Calgary, AB T2N 4Z6
TELEPHONE	(403) 210-8625
EMAIL	kamcbrie@ucalgary.ca
PRESENT RANK	Assistant Professor
DEPARTMENT	Family Medicine, Community Health Sciences
FACULTY	Cumming School of Medicine
INSTITUTION	University of Calgary

II. ACADEMIC RECORD

FINAL DEGREE	MD
DATE COMPLETED	2004
SPECIALTY	Doctor of Medicine
INSTITUTION/CITY/COUNTRY	University of Toronto, Toronto, Canada

i. UNDERGRADUATE

1994 – 1998	B.A.Sc. Mechanical Engineering, University of Toronto
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ii. GRADUATE AND POST-DOCTORAL

2010 – 2012	Post-Doctoral Clinical Research Fellowship, Applied Health Economics, University of Calgary, Calgary, Canada
2006 – 2007	Master of Public Health Quantitative Methods, Harvard School of Public Health, Boston, USA
2004 – 2006	Residency, Family Medicine, University of Toronto, Toronto, Canada

iii. LICENSURE, CERTIFICATION AND BOARDS

2010 – Present	Medical License, Alberta, CA
2006 – Present	Certificant, Canadian College of Family Physicians
2006 – 2011	Medical License, Ontario, CA
2007 – 2011	Medical License, Massachusetts, USA
2009	Medical License, Nova Scotia, CA
2007	United States Medical Licensing Exam, USMLE 1, 2, & 3
2005	Licentiate, Medical Council of Canada
2005	Medical Council of Canada Qualifying Examination, MCCQE Part I & II

III. AWARDS AND DISTINCTIONS

2011 – 2012	Clinical Fellowship Award, Alberta Innovates Health Solutions
2006	Tuition Scholarship, Harvard School of Public Health
2004	Alpha Omega Alpha Honor Medical Society
2004	Honours Distinction, Medicine, University of Toronto
2001 – 2004	Dr. C. S. Wainwright Memorial Scholarship, Medicine, University of Toronto
2001	Claire Adele Brown, M.D., Memorial Scholarship, Medicine, University of Toronto
1998	Honours Distinction, Faculty of Applied Science and Engineering, University of Toronto
1996	Distinction, Golden Key International Honour Society

1995 – 1998	Dean's Circle, Faculty of Applied Science, University of Toronto
1997	Wallberg Undergraduate Scholarship, University of Toronto
1997	James D. Todd Memorial Scholarship, University of Toronto
1997	Norman E. Byrne Award, University of Toronto
1996 – 1998	Women in Engineering and Science Program, National Research Council of Canada
1995	A.J.G. Leighton Scholarship, University of Toronto
1995	Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate student research grant, University of Toronto
1994 & 1996	University of Toronto Scholar
1994	Wallberg Admission Scholarship, University of Toronto
1994	Governor General's Academic Medal

IV. ACADEMIC APPOINTMENTS

2013 – Present	Assistant Professor, Family Medicine, University of Calgary
2013 – Present	Assistant Professor, Cross Appointment with the Department of Community Health Sciences, University of Calgary

V. EDUCATIONAL ACTIVITIES

i. UNDERGRADUATE SUPERVISION & TEACHING DELIVERED

Workplace Based Teaching

2013 – Present	Preceptor, Clinical Clerks, University of Calgary
2015	Preceptor, MDCN 440 – Applied Evidence Based Medicine, Family Medicine Research Development Stream, 3 students

Classroom Based Teaching

2014 – 2015	Course committee member, MDCN 440, Applied Evidence Based Medicine
2015	Team based learning facilitator, MDCN 440, Applied Evidence Based Medicine
2015	Lecture, "Therapy – critical appraisal of controlled trials", MDCN 440, Applied Evidence Based Medicine
2014	Small group instructor, Critical Appraisal Topic presentations, MDCN 440, Applied Evidence Based Medicine
2013	Small group instructor, "Systematic Reviews", MDCN 440, Applied Evidence Based Medicine
2011	Lecture, "How to Read and Appraise Health Economic Reports", MDCN 440, Applied Evidence Based Medicine

ii. GRADUATE SUPERVISION & TEACHING DELIVERED

Workplace Based Teaching

2014 – Present	Co-supervisor, Nathalie Saad, MSc, University of Calgary 'Association between income and barriers to care in diabetes'
2015 – Present	Thesis committee, Stephanie Garries, PhD, University of Calgary 'Use of linked EMR and administrative data'
2015 – Present	Thesis committee, Stephanie Coward, PhD, University of Calgary 'Cost and prevalence trends of inflammatory bowel disease'
2015 – Present	Thesis committee, Erik Venos, MSc, University of Calgary 'Cost-effectiveness of pressure offloading devices for diabetic foot ulcers'

Classroom Based Teaching

2014	Lecture, "Cost data and cost estimation", MDCH 662, Introduction to Economic Evaluation, University of Calgary
2014	Course mentor, Student project supervision, MDCH 663, Decision Analysis in Economic Evaluation, University of Calgary
2013	Lecture, "Costs in an Economic Evaluation", MDCH 662, Introduction to Economic

2012 Evaluation, University of Calgary
Lecture, "Analytic Methods for the Estimation of Mean Costs", MDCH 663, Decision Analysis in Economic Evaluation, University of Calgary

iii. POSTGRADUATE SUPERVISION & TEACHING DELIVERED

Workplace Based Teaching

2013 – Present Preceptor, Family Medicine Residents, Teaching Clinic, University of Calgary
2014 – 2016 Preceptor, Cheng Zeng, Family Medicine research project, 'Barriers to care in patients with diabetes', University of Calgary
2013 – 2015 Preceptor, Elizabeth Kelly, Family Medicine research project, 'Systematic review of patient navigators in chronic disease', University of Calgary

Classroom Based Teaching

2013 Preceptor, "Mixed Methods Research", Academic Half Day, Department of Family Medicine, University of Calgary

iv. CONTINUING MEDICAL EDUCATION SUPERVISION & TEACHING DELIVERED

Classroom Based Teaching

2014 – 2015 Course mentor, Project supervision and methods advisor to two groups, Introduction to Health Economics, AHS Strategic Clinical Networks with the University of Calgary
2015 Presenter, "Online clinical pathway for CKD in primary care", Alberta Scientific Assembly, Banff, Canada
2014 Presenter, "Costs of hypertension in Alberta", ICDC Research Rounds, University of Calgary
2013 Presenter, "Patient navigators in chronic disease: an overview and proposal for systematic review", ICDC Research Rounds, University of Calgary
2013 Presenter, "Describing patients with A1C \geq 10%: sociodemographic characteristics, health care service use, and barriers to care", ICDC Research Rounds, University of Calgary
2013 Presenter, "A1C \geq 10%: patient characteristics, physician attachment, and barriers to care", Scholarship Interest Group meeting,
2012 Presenter, "Health Care Costs in People with Diabetes and their Association with Glycemic Control and Kidney Function", Interdisciplinary Chronic Disease Collaboration (ICDC) Research Rounds,
2012 Presenter, "Intensive Blood Pressure Targets in Type 2 Diabetes – Systematic Review and Meta-Analysis", Department of Family Medicine, University of Calgary
2011 Presenter, "Intensive Blood Pressure Targets in Type 2 Diabetes – Project Update", Interdisciplinary Chronic Disease Collaboration (ICDC) Research Rounds, University of Calgary
2011 Presenter, "Health Technology Assessment of Intensive Blood Pressure Targets in Type 2 Diabetes", Interdisciplinary Chronic Disease Collaboration (ICDC) Research Rounds, University of Calgary

v. SUMMATIVE ASSESSMENT ACTIVITIES

2013 – Present Interviewer, CaRMS file review and admission interviews, Department of Family Medicine, University of Calgary
2015 Exam facilitator, MDCN 440, Applied Evidence Based Medicine
2014 Evaluator, Student assignments, MDCN 440, Applied Evidence Based Medicine

VI. ADMINISTRATIVE RESPONSIBILITIES

i. DEPARTMENTAL

2013 – Present	Member, AARP Management Committee, Department of Family Medicine, University of Calgary
2013 – Present	Member, Scholarship Committee, Department of Family Medicine, University of Calgary
2013 – 2014	Interviewer and file reviewer, Search and selection, Faculty, Department of Family Medicine, University of Calgary
2013	Member, Disciplinary appeals committee, Residency probation hearing, Department of Family Medicine, University of Calgary

ii. FACULTY

2013 – Present	Member, Institute of Public Health, Faculty of Medicine, University of Calgary
2014	Member, Search and selection committee, Faculty, Department of Community Health Sciences, University of Calgary

iii. PROVINCIAL

2010 – Present	Member, Interdisciplinary Chronic Disease Collaboration – International research team focused on improving chronic disease outcomes
2013 – Present	Member, Obesity, Diabetes, Nutrition Strategic Clinical Network Innovation Committee
2013 – Present	Member, Primary Care Advisory Group for the Development of a CKD Clinical Pathway
2013 – Present	Member, PCN Measurement Capacity Initiative working group

VII. PROFESSIONAL ACTIVITIES

i. MEMBERSHIP IN PROFESSIONAL AND LEARNED SOCIETIES

2015 – Present	Member, Canadian Association for Health Services and Policy Research
2011 – Present	Member, Alberta Medical Association
2004 – Present	Member, Canadian Medical Association
2004 – Present	Member, Alpha Omega Alpha Honor Medical Society
2004 – 2011	Member, Ontario Medical Association
2009 – 2010	Member, Doctors Nova Scotia

ii. PROFESSIONAL SERVICE

2013 – Present	Internal Grant Peer Reviewer, Institute for Public Health
2015	Internal Studentship Peer Reviewer, Department of Community Health Sciences
2015	Peer Reviewer, Abstracts, Alberta Scientific Assembly
2015	Poster Judge, Alberta Scientific Assembly
Journal reviews	Peer Reviewer, Canadian Family Physician, 5 reviews
	Peer Reviewer, BMC Health Services Research
	Peer Reviewer, PLoS One
	Peer Reviewer, BMC, Family Medicine
	Peer Reviewer, Kidney International
	Peer Reviewer, American Heart Journal

VIII. RESEARCH SUPPORT

Dates	Source & Type	Total (\$)	Role	Other Investigator(s)	Subject/Title
	<i>(PR)</i> = Peer reviewed	<i>(P)</i> = Pending	<i>(PI)</i> = Primary		
	<i>(A)</i> = Alternate Support		<i>(CI)</i> = Co		

2015	URGC Faculty Conference Travel Grant	\$1800	PI		2015 CAHSPR conference
2014-2019	AI-HS CRIO Team Grants	\$5,000,000	CI	Hemmelgarn, B., Manns B., Tonelli, M.	Improving the efficient and equitable care of patients with chronic medical conditions: Interdisciplinary Chronic Disease Collaboration, Project Lead
2014	URGC Seed Grant	\$15,000	PI	Manns, B.	Survey on the barriers and facilitators to care in patients with diabetes
2013	Faculty CIHR Bridge Funding	\$20,000	PI	Manns, B., Tonelli, M., Hemmelgarn, B., Ivers, N., Edwards A.	Describing the characteristics and patterns of health care use in people with high risk diabetes
2012	CIHR Development Grant	\$24,995.00	CI	Manns, B. (PI), Allan, G., Braun, T., Grimshaw, J., Hemmelgarn, B., Ivers, N., Johnson, J., Long, S., Naugler, C., Straus, S., Tonelli, M., Tricco, A., Yu, C.	Translating Evidence to Improvements in Care and Outcomes for People with Diabetes
2011-2013	CIHR Operating Grant	\$256,226.00	CI	Manns, B., Tonelli, M., Hemmelgarn, B., Clement, F., Sargious, P., Johnson, J., Laupacis, A.	The Impact of Primary Care Networks on the Care and Outcomes of Patients with Diabetes
2011-2012	AIHS Clinical Research Fellowship Salary Support	\$127,000.00	PI	Manns, B.	Systematic review and economic evaluation of intensive blood pressure targets in type 2 diabetes
2010-2012	University of Calgary	\$50,000.00	PI	Manns, B.	Post-doctoral research salary support in Interdisciplinary Chronic Disease Collaboration
2007-2010	Harvard School of Public Health	\$10,000.00	PI	Prosser, L., Kleinman, K., Abrams, A.	Academic research project: Use of Outcomes-Weighted ROC Curves to Evaluate the Performance of Syndromic Surveillance Systems

2001	MIRU, University of Toronto	\$10,000.00	CI	Hannah, M., Hogle, K., Hutton, E., Barrett, J.	Research assistant: Systematic review and meta-analysis of twin pregnancy outcomes
1998-2000	University of Toronto	\$20,000.00	GI	Silverman, M.	Research assistant: Mathematical modelling of cellular transport proteins with applications in pharmacology
1996-1998	National Research Council of Canada (NRC)	\$30,000.00	PI		Women in Engineering and Science Program – 3 projects: Relationship between bone mineral composition and mechanical strength, Design of a preliminary living skin replacement spray application system, Installation of a jet engine test cell and data acquisition system
1995	NSERC Undergraduate Student Research Grant	\$15,000.00	PI	Wallace, J.	Development of teaching models of an internal combustion engine

IX. MENTORING

2012 – Present A. Wong, Family physician, Informal, Career advice and research supervision

X. INVITED ADDRESSES

- 2015 “Primary Care : Nephrologist Interface; Development, implementation and evaluation of clinical tools for chronic kidney disease (CKD) in primary care”, Canadian Society of Nephrology Annual Meeting 2015, Montreal (April 24)
- 2014 “Hypertension costs in Alberta”, Institute for Public Health Friday Seminar Series, University of Calgary (October 17)
- 2013 “Describing patients with A1C \geq 10%: sociodemographic characteristics, health care service use, and barriers to care”, Invited Speaker, Obesity Diabetes and Nutrition Strategic Clinical Network Core Committee, Calgary (June 6)
- 2013 Key Note Speaker, “Blood Pressure Targets and Health Care Costs in People with Diabetes”, Massive Impact Night, University of Calgary (February 19)

XI. PUBLICATIONS/PRESENTATIONS

i. PEER REVIEWED

Manuscripts

- 1 Weaver CG, Clement F, Campbell N, James MT, Klarenbach S, Hemmelgarn BR, Tonelli M, **McBrien KA**. Health care costs attributable to hypertension: a Canadian population-based cohort study. *Hypertension*. 2015 Sep 16.
- 2 Kelly E, Ivers N, Zawi R, Barnieh L, Manns B, Lorenzetti DL, Nicholas D, Tonelli M, Hemmelgarn B, Lewanczuk R, Edwards A, Braun T, **McBrien K**. Patient navigators for people with chronic disease: protocol for a systematic review and meta-analysis. *Syst Rev*. 2015 Mar 16;4(1):28.
- 3 Ronksley PE, Sanmartin C, Campbell DJ, Weaver RG, Allan GM, **McBrien KA**, Tonelli M, Manns BJ, Hennessy D, Hemmelgarn BR. Perceived barriers to primary care among western Canadians with chronic conditions. *Health Rep*. 2014 Apr 18;25(4):3-10.
- 4 Majumdar SR, Hemmelgarn BR, Lin M, **McBrien K**, Manns BJ, Tonelli M. Hypoglycemia associated with hospitalization and adverse events in older people: population-based cohort study. *Diabetes Care*. 2013 Nov 03;36(11):3585-90.
- 5 Manns B, Braun T, Edwards A, Grimshaw J, Hemmelgarn B, Husereau D, Ivers N, Johnson J, Long S, **McBrien K**, Naugler C, Sargious P, Straus S, Tonelli M, Tricco AC, Yu C; Alberta

Innovates-Health Solutions; Interdisciplinary Chronic Disease Collaboration. Identifying strategies to improve diabetes care in Alberta, Canada, using the knowledge-to-action cycle. *CMAJ Open*. 2013 Oct 03;1(4):E142-50.

- 6 **McBrien KA**, Manns BJ. Hemodiafiltration: not effective or cost-effective compared with hemodialysis. *Nephrology Dialysis Transplantation*. 2013 Jul 30;28(7):1630-1633.
- 7 **McBrien KA**, Manns, BJ. Approach to economic evaluation in primary care: a review of a useful tool for primary care reform. *Canadian Family Physician*. 2013 Jun 30;59(6):619-627.
- 8 **McBrien KA**, Manns BJ, Chui B, Klarenbach SW, Rabi D, Ravani P, Hemmelgarn B, Wiebe N, Au F, Clement F. Health care costs in people with diabetes and their association with glycemic control and kidney function. *Diabetes Care*. 2013 May 01;36(5):1172-1180.
- 9 Campbell DJ, Sargious P, Lewanczuk R, **McBrien K**, Tonelli M, Hemmelgarn B, Manns B. Use of chronic disease management programs for diabetes: in Alberta's Primary Care Networks. *Canadian Family Physician*. 2013 Feb 3;59(2):86-92.
- 10 Hemmelgarn BR, Manns BJ, Straus S, Naugler C, Holroyd-Leduc J, Braun TC, Levin A, Klarenbach S, Lee PF, Hafez K, Schwartz D, Jindal K, Ervin K, Bello A, Turin TC, **McBrien K**, Elliott M, Tonelli M; Interdisciplinary Chronic Disease Collaboration ICDC. Knowledge translation for nephrologists: strategies for improving the identification of patients with proteinuria. *J Nephrol*. 2012 Dec 1;25(6):933-43.
- 11 **McBrien KA**, Rabi D, Campbell N, Barnieh L, Clement F, Hemmelgarn B, Tonelli M, Leiter L, Klarenbach S, Manns B. Intensive and Standard Blood Pressure Targets in Patients With Type 2 Diabetes Mellitus: Systematic Review and Meta-analysis. *Archives of Internal Medicine*. 2012 Sep 24;172(17):1296-1303.
- 12 Manns BJ, Tonelli M, Zhang J, Campbell DJT, Sargious P, Avyalsomayajula B, Clement F, Johnson JA, Laupacis A, Lewanczuk R, **McBrien KA**, Hemmelgarn BR. Enrolment in primary care networks: impact on outcomes and processes of care in patients with diabetes. *CMAJ*. 2012 Feb 7;184(2):144-152.
- 13 **McBrien KA**, Abrams AM, Kleinman KP, Prosser L. Use of outcomes to evaluate surveillance systems for bioterrorist attacks. *BMC Medical Informatics and Decision Making*. 2010 May 7;10(25).
- 14 Hogle KL, Hutton EK, **McBrien KA**, Barrett JFR, Hannah ME. Cesarean delivery for twins: A systematic review and meta-analysis. *Am J Obstet Gynecol*. 2003 Jan 01;188(1):220-227.
- 15 **McBrien KA**. *Effect of Cortical Shell Geometry on the Vertebral Body Compressive Failure Load*. (Academic thesis). Department of Mechanical and Industrial Engineering, University of Toronto.

In press & submitted

McBrien KA, Manns BJ, Hemmelgarn BR, Weaver RG, Edwards AL, Ivers N, Rabi D, Lewanczuk R, Braun T, Naugler C, Campbell D, Saad N, Tonelli M. The association between sociodemographic and clinical characteristics and poor glycemic control: a longitudinal cohort study. *Diabetic Medicine*.

Abstracts & Presentations

- 1 **McBrien K**, Weaver C, Campbell N, Klarenbach S, Tonelli M, Hemmelgarn B, James M, Clement F. Total and attributable healthcare costs of hypertension: historic and projected costs in Alberta, Canada. Oral presentation. *Canadian Association for Health Services and Policy Research 2015 Conference*. Montreal, QC. 2015 May 28.
- 2 Donald M, **McBrien K**, Jackson W, Manns BJ, Tonelli M, Jindal K, Scott-Douglas N, Elliot M, Allu S, Gil S, Hemmelgarn BR. Multifaceted dissemination strategy for an on-line CKD clinical pathway in primary care. Poster. *Canadian Society of Nephrology 2015 Annual Meeting*. Montreal, QC. 2015 Apr 24.
- 3 **McBrien K**, Weaver C, Campbell N, Klarenbach S, Tonelli M, Hemmelgarn B, James M, Clement F. Healthcare costs attributable to hypertension: historic and projected costs in Alberta, Canada. Poster. *Canadian Society of Nephrology 2015 Annual Meeting*. Montreal, QC. 2015 Apr 24.

- 4 Majumdar, S.R., Hemmelgarn, B.H., Lin, M., **McBrien, K.**, Manns, B.J., & Tonelli, M. . Severe hypoglycemia and adverse events in older people with or without diabetes: population-based cohort study. Poster. *American Diabetes Association 73rd Annual Scientific Sessions*, Chicago, IL. Chosen for guided audio poster tour showcase entitled “Hypoglycemia – the Barrier.” 2013 Jun 22.
- 5 **McBrien KA.** Health care costs in people with diabetes and their association with kidney function and glycemic control. Poster. *Clinician Investigator Trainee Association of Canada (CITAC) Young Investigators Forum*, Ottawa, ON. 2012 Sep 19.