

Message from the Department Head

Over the past decade we have expanded our faculty by more than 40%, completed six endowed research chairs and witnessed strong resurgence in several sections including Neurology, Cardiology and General Internal Medicine. We have developed fair and transparent evaluation processes for teaching and research and have been rewarded with improved performance in these areas.

On the service side, we have established capacity for improving care delivery models led by engineers and a new generation of young physicians with service design skills. We've taken a business approach to our support services and reduced costs and improved productivity. Most referring physicians get their consultation reports from us on time.



We have provided faculty leadership in areas of professionalism such as establishing transparency in our interactions with industry.

I credit these successes to strong sectional leaders, an outstanding business manager, ambitious and accomplished faculty, the open mindedness and support of WRHA and faculty leaders, and the dedication of our clinician teachers.

The reward of leadership is to provide opportunity to those who want to innovate, improve and discover.

I am grateful for the support I have enjoyed from faculty and staff and look forward to a third term.

Dan Roberts, MD

May 2011



UNIVERSITY
OF MANITOBA

Department of
Internal Medicine

GC 430
820 Sherbrook St.
Winnipeg, Manitoba
Canada R3A 1R9

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The Electronic Medical Record

The Calf-Path

by Sam Walter Foss (1858-1911)

For men are prone to go it blind
Along the calf-paths of the mind,
And work away from sun to sun
To do what other men have done.
They follow in the beaten track,
And out and in, and forth and back,
And still their devious course pursue,
To keep the path that others do.



The Electronic Medical Record Path

*by Linda Hathout, Quality Process Engineer, and
the Quality and Process Team members*

EMRs provide
physicians,
nurse practitioners,
and
allied health staff
with a more
comprehensive
picture of their
patient's overall
health, so that
better diagnoses
can be made

Background:

Three years ago a group of HSC Neurologists and management identified that their clinic was not operating efficiently: poor or non-existent information management, ad hoc processes, and other symptoms caused a major rethink on how the neurology clinic operated. As a starting point to address these concerns, they expressed interest in implementing an electronic medical record (EMR) in the HSC neurology clinic. There was a particular interest in using an EMR to help monitor complex medication regimes (e.g. chemotherapy drugs) and to help improve the overall efficiency of the clinic and, by extension, patient care. Support of research activities would be a secondary benefit of an EMR implementation. To help with this initiative the neurology clinic enlisted the services of the process and quality improvement team.

The Argument:

There are many reasons why an EMR was seen as potentially beneficial to the medicine program. Firstly, paper-based systems limit timely access to critical patient information. The physical chart requires significant handling by a variety of people, a recognized limitation of paper-based systems, and thus a major inhibitor to efficient processing. As well, the design of the paper charting system was not meant to support the current outpatient activity. Any delays in filing documentation led to information gaps during and between patient visits. The second big benefit of an EMR is that it provides a simpler means of extracting data to support both management and clinical decision-making as well as for research activities.

Canada Health Infoway cites "managing chronic conditions as a significant benefit of EMRs" obtained through improving the management of risk factors and treatment protocols. EMRs provide physicians, nurse practitioners, and allied health staff with a more comprehensive picture of their patients' overall health, so that better diagnoses can be made. An EMR also facilitates the recording of common and repetitive information by using forms and templates.

The Process:

Altogether the planning and implementation of the neurology EMR took over a year and tested the sanity of those involved.

The implementation team faced several challenges in moving forward with this project. The most significant challenge, and a critical success factor, was to get Manitoba eHealth onboard to satisfy the myriad of technical and infrastructure requirements imposed by the EMR implementation. Secondly, there was a need to interface with the legacy patient registry system. Finally, a significant effort was required to redesign clinic processes to accommodate the EMR. This latter activity is necessary whenever new technology is introduced in an environment where processes already exist and are well established, otherwise the desired efficiencies will not be realized.

Accuro® by Optimed was the EMR selected for this project. This software package is one of Canada's top EMR choices for general practice offices with over 3,000 physician customers. In 2010, Optimed contracted with the Winnipeg Regional Health Authority to supply Accuro® to 16 regionally operated clinics making the Optimed product the leading EMR solution in Manitoba.

Concurrent to addressing the various information technology needs, a clinic review was conducted. Clerical and clinical processes were analyzed and documented, effectively identifying current "calf path". Clinicians and staff came together to discuss what was needed in the EMR, in terms of both functionality and data, and how these attributes would be used to complement redesigned clinical and management processes. Many bends in the current path were bypassed in the quest for more efficient processes. Considering the activities of both the technology review and process redesign, upwards of 37 HSC clinicians and staff, and eHealth consultants were involved. Their diligence and perseverance in unraveling hospital processes, dealing with a multitude of procedural issues, and troubleshooting the many technical problems was a major factor in the success of this project.

Introducing the EMR:

The EMR was implemented in the neurology clinic on November 16th, 2010. The introduction of an EMR constituted a major transformation of operations in the clinic. While the information technology challenges were big, getting clinicians and staff to change well-ingrained habits was even harder. Anticipating this, the implementation process included the participation of five support staff to assist clinic staff in using the software and as a general resource to address problems. The team of five stayed for two weeks and then was reduced to two individuals part time with supplemental clerical support to scan charts until all required historical data had been digitized.

Outcomes to date:

The clerks were the first to realize the benefits of the EMR. Clerical and clinical information is now all in one place. Requisitions are easier to generate and to manage, and lab results are immediately filed and always accessible. The nurse's workload was significantly reduced; they are no longer ordering most charts to confirm prescriptions renewals, or to verify and chart lab results. They are better able to respond to patient questions regarding tests, lab work, etc., when the patient calls thereby reducing the need to order the chart and call the patient back. Historically clerks and nurses were handling 90+ charts per day; this has dropped to less than half that number.

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Nov. 16, 2010**

Physicians have developed templates that have reduced the need to dictate notes in the first place; some situations still require letters to be dictated that subsequently get added to the EMR by the clerical staff. For clerks, nurses, physicians, and other clinicians, the biggest change was getting them to use the EMR's Task feature to communicate clinic follow-up actions. The historic clinic practice was to communicate patient follow-up responsibilities verbally or using temporary notes on charts. These informal requests were subject to many misunderstandings and errors and they were untraceable. The new practice is to task staff through the EMR. While there was a small incremental workload associated with this practice, the significant improvement in the clarity of intraclinic communications was well worth the extra effort on the part of all clinic staff.

Recommendations:

We know that it is not the mere introduction of an electronic medical record that improves patient care. The EMR is a tool, and if used without reflection, without due consideration to operational objectives, gets us no future than having a paved calf's path. If implemented correctly, an EMR becomes a disruptive technology that helps us to rethink patient care and corresponding information needs, and the effectiveness of our communication methods. We need to use the inherent capability of an EMR to facilitate the collection of data that, in turn, will allow both management and clinicians to reflect on patient care and the quality of the services being delivered. We need to continually exploit the potential of the EMR as a source of raw data with a view to developing a tailored monitoring capability that will be the foundation of continuous quality improvement in service delivery. We need to be smart users of the tool to ensure the information collected is appropriate, precise, and accurate, while avoiding the trap that more data automatically means better patient care. To direct the implementation of an EMR or any other clinical tool requires the understanding and establishment of key performance indicators and best clinical practices against which to guide how tools should best be used. While we suspect the well-worn calf path may not be the best route to pave, defaulting to the straightest (and perhaps simplest) path may not be the best choice either. A clear and concise articulation of real needs should precede any other activity to help ensure a modicum of success.

Conclusion

The neurology clinic is still in the early days of this EMR implementation. We anticipate that it will take another 9 months to update the remainder of the electronic charts for the chronic care population, after which the clinic will be its most efficient. Work continues in reviewing processes and tweaking the system. At this point we are ready to call the initiative a success relative to other like-projects. The final cost benefits generated from the EMR will not be realized until the system has been in place for at least a year; however, early indications are that there are workload reductions owing to the simplification of many clinic processes and the aggregation of patient data in one location, i.e., the EMR. If these reductions are realized as projected, the savings should cover the annual software licensing costs and related eHealth support costs. The upfront investment from both the Medicine Department and HSC should be recuperated within 6 years. More importantly we have already seen that ready access to information has provided more timely patient service. The quality and process team believes that all chronic care multidisciplinary clinics could benefit from an EMR. We look forward to continuing this work and to keeping the conversation alive with other clinicians as we blaze a new path and introduce a new way of thinking that will benefit not only us but more importantly our patients.

An EMR can facilitate the collection of data that will allow both clinicians and management to reflect on patient care and the quality of the services being delivered

RESEARCH GRANT FUNDING

Kazem-Moussavi Z, **Ethans Karen**, “Plasticity of the Spinal Neural Circuitry after Injury” The Dr. Paul H.T. Thorlakson Foundation Fund. July 13, 2010.

Ethans Karen, Namaka M, **Casey Alan** “A comparative, randomized, double-blinded, crossover, placebo-controlled study to evaluate the efficacy of nabilone (Cesamet) as adjunctive therapy to Gabapentin (Neurontin) or pregabalin (Lyrica) in the management of neuropathic pain symptoms in subjects with spinal cord injury. Manitoba Spinal Cord Injury Research Committee, CPA Manitoba. June 24, 2010 (July 1-June 30, 2011). \$30,000 and Health Sciences Centre Foundation - \$24,993.

Johnston James B. Relevance of Telomeres in Chronic Lymphocytic Leukemia. 60,000/year. Cancer Care Manitoba. July 2010 to June 2012.

Gingerich Joel. Evaluating debilitating falls in the Manitoba ambulatory cancer patient. \$18,800. CancerCare Manitoba Foundation. July 2010 to August 2011.

Mishra Suresh (PI) Delineating the role of prohibitin in insulin signalling. \$200,000. (40,000/year for 5 years) NSERC-RGPIN Discovery Grant. 2011-2016.

Mishra Suresh. MMIF \$128,220. Signal Transduction Lab in Diabetes Research.

Mishra Suresh (PI) Role of O-GlcNAc modification (GlcNAcylation) of insulin receptor substrate 1 (IRS1) in insulin signalling and insulin resistance. \$111,000. Manitoba Health Research Council-Operating Grant. 2010-2012.

Pitz Marshall. Role of BNIP3 in Transcriptional Repression in Glioblastoma Multiforme. \$60,000. CCMF Operating Funding July 2010 to June 2012.

Pitz Marshall. CancerCare Manitoba Research Day for Basic and Clinical Science Trainees. \$10,000. CCMF Infrastructure Funding. July 2010 to June 2011.

Shen Garry, P.I. “Prevention of obesity in pregnant women and their children through activity and health diet”. \$212,300. Public Health Agency of Canada. Feb. 1 2011 to Jan. 31, 2012. Co-investigators: **Sora Ludwig**, Phillip Gardiner, Gustaaf Sevenhuysen, Heather Dean, Elizabeth Sellers, Sharon Bruce, Margaret Morris, Jon McGavock.

Zarychanski Ryan. RCT Mentorship Award (Principal applicant) \$160,000 CIHR 2 years.

Zarychanski Ryan. Epidemiology of Thromboembolism in Critical Care (EPITEC). \$63,899. CIHR - Operating Grant, 1 year.

Zarychanski Ryan. Weaning and Variability Evaluation (WAVE). \$544,134 CIHR Operating Grant, 3 years.



Contributions to MediScene

Grant Information,
Committee Reports,
Announcements,
News from the Sections,
Articles of Interest,
and
suggestions for
future content
are always welcome

Please forward submissions to:

kkiel@hsc.mb.ca

For further information
call 787-7882

Liam J. Murphy Young Investigator Award



Harminder Singh

recipient of the
2010

Liam J. Murphy
Young Investigator Award

The October 27, 2011 Internal Medicine Faculty Dinner provided Dan Roberts with the opportunity to promote, showcase and celebrate the stellar achievements of the Department's researchers and introduce the emerging research stars.

At the Faculty Dinner, **Dr. Harminder Singh** was presented the Department of Internal Medicine's Liam J. Murphy Young Investigator Award.



Dr. Harminder Singh and Dr. Leigh Murphy

Dr. Harminder Singh is a clinician scientist in the Section of Gastroenterology, and an Assistant Professor of Medicine in the Departments of Internal Medicine and Community Health Sciences at the University of Manitoba. In 2005 after completing his GI fellowship he joined the faculty and during his first year on faculty completed a Master of Public Health at the University of Manitoba. Dr. Singh's current research interests are in prevention and screening for colorectal cancer and health services research.



Dr. Liam Murphy

The Liam J. Murphy Young Investigator Award was established in November 2006 in honour of the memory of Dr. Liam Joseph Murphy. Liam Murphy was a renowned researcher in the field of endocrinology, Professor of Medicine and Physiology, Henry G. Friesen Research Chair, and Head-Section of Endocrinology and Metabolism at the University of Manitoba. The award is given every two years to a young investigator who shows evidence of developing a strong research program. The award consists of a commemorative engraved award and a monetary prize of \$20,000. for research support.



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APPOINTMENTS

Dr. Dan Roberts, Professor and Head, Department of Internal Medicine and Dr. Gregoiré Nyomba, Professor and Head, Section of Endocrinology and Metabolism, are pleased to introduce and welcome **Dr. Pamela Katz**, Assistant Professor of Medicine, as a full time faculty member to the **Section of Endocrinology and Metabolism**, in the Department of Internal Medicine at the University of Manitoba.

Dr. Pamela Katz recently returned home to Winnipeg after completing her training in Internal Medicine and Endocrinology at the University of Toronto.

Dr. Katz is now accepting outpatient endocrinology referrals at St. Boniface Hospital. Her clinical responsibilities will also include attending on the endocrinology consult service and clinical teaching units. Her areas of clinical interest include diabetes, lipid disorders and polycystic ovarian syndrome.

She has been an active teacher at both the undergraduate and postgraduate level and looks forward to participating in educational activities within the Faculty of Medicine in Manitoba. In 2010, she received the F.M Hill Humanitarian Award from Women's College Hospital in Toronto for compassionate patient care and excellence in communication with patients and all health care professionals.

Dr. Katz has completed training and research in patient safety and quality improvement. She was involved in a quality improvement research initiative, which developed a treatment optimization algorithm to aid in achievement of guideline-based lipid targets in patients at high cardiovascular risk. Other areas of research include iodine nutrition and thyroid dysfunction during pregnancy.

Telephone: Clinic Appointments: (204) 237-2908
 Fax Consults/Referrals to: (204) 233-7154
 St. Boniface General Hospital
 C5 - 409 Tache Avenue, Winnipeg, MB R2H 2A6

Section Head - PM&R

Dr. Dan Roberts is pleased to announce the appointment of **Dr. Ryan Skrabek** to the position of **Head, Section of Physical Medicine and Rehabilitation** at the University of Manitoba. Dr. Skrabek received his medical degree and post graduate resident training in Physical Medicine and Rehabilitation at the University of Manitoba. Ryan joined the Department of Internal Medicine in 2008 as a full time academic clinician based at the HSC and Pan Am Clinic. He has served as the Service Chief - Amputee Services, and participated in several program initiatives in a leadership role.

Dr. Skrabek has also been appointed to the Regional management team as the WRHA Medical Director, Rehabilitation Program.



Dr. Pamela Katz



Dr. Ryan Skrabek

R4 Medicine Match

The Department of Medicine successfully filled all of its available positions in the Medicine R4 Match last fall. We are pleased to announce that the following individuals will be contributing to our programs and patient care for the next two to three years:

David Allen	Cardiology	University of Manitoba
Alireza Bagherli	Cardiology	University of Manitoba
Anthony Wassef	Cardiology	University of Manitoba
Greg Peters	Clinical Allergy & Immunology	University of Saskatchewan
Ryan Cormier	Critical Care Medicine	University of Manitoba
Owen Mooney	Critical Care Medicine	University of Manitoba
Heather Smith	Critical Care Medicine	University of Alberta
Ulug Unligil	Critical Care Medicine	University of Toronto
Al Torshizi	Endocrinology & Metabolism	Memorial Univ. of Newfoundland
Ali Benzaglam	Gastroenterology	University of Manitoba
Mayur Brahmania	Gastroenterology	University of British Columbia
John David Ryan	Gastroenterology	University of Manitoba
Daljit Gill	General Internal Medicine	University of Manitoba
Roopesh Kansara	Haematology	University of Manitoba
Asim Al-Saedi	Infectious Diseases	King Khalid National Guard Hospital
Yahya Al-Fifi	Infectious Diseases	McMaster University
James Paul	Medical Oncology	University of Manitoba
Maclean Thiessen	Medical Oncology	University of Manitoba
Krista Ryz	Nephrology	University of Manitoba
Hamid Rehman	Respirology	Univ. of Connecticut Medical School

In recognition of his outstanding contributions to the Core Internal Medicine Residency Program demonstrating commitment, compassion, caring and integrity Mehرداد Golian was this year's recipient of the Dale Iwanoczko Award

R1 Match

On the heels of the subspecialty match followed the CaRMS R1 Match. All Medicine entry programs successfully matched in the first iteration. We look forward to welcoming the following individuals:

Esmail Abej	Internal Medicine	Al-Fateh University
Wafa Al-Tuwaijri	Internal Medicine	King Faisal University
Tyler Friesen	Internal Medicine	University of Manitoba
Xiaofeng Guo	Internal Medicine	McGill University
Stephen Ip	Internal Medicine	University of Manitoba
Amber Janower	Internal Medicine	University of Manitoba
Suhail Khojah	Internal Medicine	King Abdulaziz University
Anna Lam	Internal Medicine	University of Calgary
Shuangbo Liu	Internal Medicine	University of Manitoba
Andrea Mazurat	Internal Medicine	University of Manitoba
Anna Sanderson	Internal Medicine	Memorial University of Newfoundland
Aditya Sharma	Internal Medicine	University of Manitoba
Karan Sharma	Internal Medicine	University of Alberta
Davie Wong	Internal Medicine	University of Manitoba
Jennifer Yamamoto	Internal Medicine	University of Manitoba
Lin Yang	Internal Medicine	University of Manitoba
Neda Anssari	Neurology	Shiraz University of Medical Sciences
Marjan Dolatshahi	Neurology	Tehran University of Medical Sciences
Ion Leah	PM&R	State University of Medicine & Pharmacy, Chisinau, Republic of Moldova
Kshitij Chawla	PM&R	Kasturba Medical College, Manipal

GI Forum - GI Cancer

Friday, June 17, 2011

University of Manitoba

Theatre C - Basic Medical Sciences Building

**2011
GI FORUM
will be
held on
Friday
June 17th**

Scientific Organizer: **Charles Bernstein**, Professor of Medicine
Head, Section of Gastroenterology
Director, University of Manitoba
IBD Clinical and Research Centre

Sessions:

Endoscopic treatment of Barrett's esophagus **Nicholas Shaheen**

Gastric Cancer - is H pylori a scourge for North Americans in 2011? **Richard Hunt**

Management of biliary cancer **Dana Moffatt**

Diagnostic testing & management of pancreatic cancer **Joseph Romagnuolo**

Management of rectal cancer **Robin McLeod**

Treating colon cancer with chemotherapy - what works? **Piotr Czaykowski**

Colorectal cancer screening - the value of stool testing **Steven Itzkowitz**

Familial cancer screening **Randall Burt**

Colorectal cancer screening with lower endoscopy **Linda Rabeneck**

Surveillance after polyp and cancer diagnosis & resection **Robert Schoen**

The risks of colon cancer surveillance **Harminder Singh**

To register

contact

Jackie Cantin

(204) 789-3369

For a copy of the full program and to register please contact:

Ms. Jackie Cantin - Section of Gastroenterology, University of Manitoba

Phone: (204) **789-3369** E-mail: **cantinj@cc.umanitoba.ca**

The 2011 GI Forum is supported by an unrestricted education grant from

Axcan Pharma Inc.

In Memorium

Dr. John (Jack) A. Macdonell, Professor Emeritus, Department of Medicine, University of Manitoba and “Father of Geriatric Medicine in Winnipeg and Canada” died in Toronto on April 29, 2011. Dr. David Strang, CMO at Deer Lodge Centre said “Dr. Macdonell’s contribution to geriatric medicine was huge. He started much of what we have today, including the first Day Hospital in Canada which he started at Deer Lodge.” In Winnipeg, Dr. Macdonell was instrumental in establishing three geriatric units for the assessment and rehabilitation of the elderly, three Day hospitals for the elderly, readmission programs, community home care services, the Advanced Certificate Program in Gerontology and a Section of Geriatric Medicine at the University of Manitoba, and the first Geriatric Clinical Teaching Unit in Canada. Nationally, he was a founding and executive member of the Canadian Association of Gerontology, President of the Canadian Society of Geriatric Medicine and chaired the subcommittee of the Royal College of Physicians and Surgeons of Canada that led to the establishment of Geriatrics as a specialty in Canada. For his contributions to geriatrics, Dr. Macdonell was honoured with the Order of Canada in 1976. On retirement in 1984, his colleagues established a scholarship in his name at the University of Manitoba and in 1988 recognized him with the rank of Professor Emeritus in Medicine.



We are deeply saddened to announce the sudden and unexpected passing on May 2nd of **Dr. C. Peter W. Warren**. A graduate from Cambridge University and Guy’s Hospital in Britain, Dr. Warren came to Winnipeg in 1971. As a specialist in lung disease, Dr. Warren worked at both the Health Sciences Centre and St. Boniface Hospital. He was a Professor of Medicine, and Associate Dean, Undergraduate Education at the University of Manitoba. In June 2006, the Canadian Lung Association presented him with the 2006 Honourary Lifetime Membership Award. He was involved with The Lung Association as a member of the Board of the Sanatorium Board of Manitoba and the Lung Association of Manitoba for over 25 years, and was past President of both the Canadian Thoracic Society and the Manitoba Thoracic Society. Peter Warren retired from the Section of Respiratory Medicine in 2006 after 32 years of dedicated service to the Department of Internal Medicine and the Faculty of Medicine. Dr. Warren was also a world-class medical historian and at the time of his death was President of the Canadian Society for the History of Medicine.



An outstanding colleague, extraordinarily kind and generous, a dedicated professional, talented educator, gifted clinical researcher and author, and recipient of numerous awards for excellence, Dr. Peter Warren leaves behind a legacy of accomplishments, both personal and professional. We extend our sincere condolences to his family, friends and colleagues.

The Warren Family invites friends and colleagues to a reception in Dr. Warren’s honour on Tuesday, August 2, from 2 - 4 p.m. at The Fort Garry Hotel. Tributes will begin at 5:00 p.m.

CONGRATULATIONS

Congratulations to **Peter Nickerson** appointed Associate Dean, Research, Faculty of Medicine, University of Manitoba; and **John A. Wilkins** appointed Director of Research for the Health Sciences Centre.



Peter Nickerson, MD



John A. Wilkins, PhD



Ashley E. Thomson, MD



Dr. Ashley Thomson & Dr. Leroy Storsley
March 10, 2011

In November 2010, the Kidney Foundation of Canada - Manitoba Branch announced “the establishment of an endowment fund in honour and appreciation of **Dr. Ashley E. Thomson** and his tremendous accomplishments and advancements for people living with kidney disease.” The \$11,500 local research grant is designed to further renal replacement therapies. The first award is planned for 2011.

On March 10, 2011 at the World Kidney Day Breakfast - the Manitoba branch of the Kidney Foundation honoured their founder Dr. Ashley Thomson, who in 1971 along with a dedicated group of Manitobans formed the local branch of The Kidney Foundation of Canada. Ashley Thomson, often referred to as the Father of Nephrology in Manitoba, is renowned for building Manitoba’s first dialysis machine. Dr. Thomson, who retired in 1984, dedicated most of his career to improving the lives of patients suffering with kidney failure.

**DEADLINE FOR THE
NEXT ISSUE OF
MediScene**



September 2, 2011