

ANNUAL REPORT

2008 - 2009



"A network without walls, without professional boundaries without limits on quality patient care, research and education"

DEPARTMENT OF MEDICINE

Alberta Health Services
Calgary Zone
and University of Calgary

VISION, MISSION & CORE PRINCIPLES DEPARTMENT OF MEDICINE



**“To prevent disease, to relieve suffering and to heal the sick - this is our work”
Sir William Osler**

OUR VISION

Creating the medical network of the 21st Century. A network, without walls, without professional boundaries, and without limits on quality patient care, research and education.

OUR MISSION

To be widely recognized for advancing health and wellness, leading innovation, creating technologies and disseminating knowledge

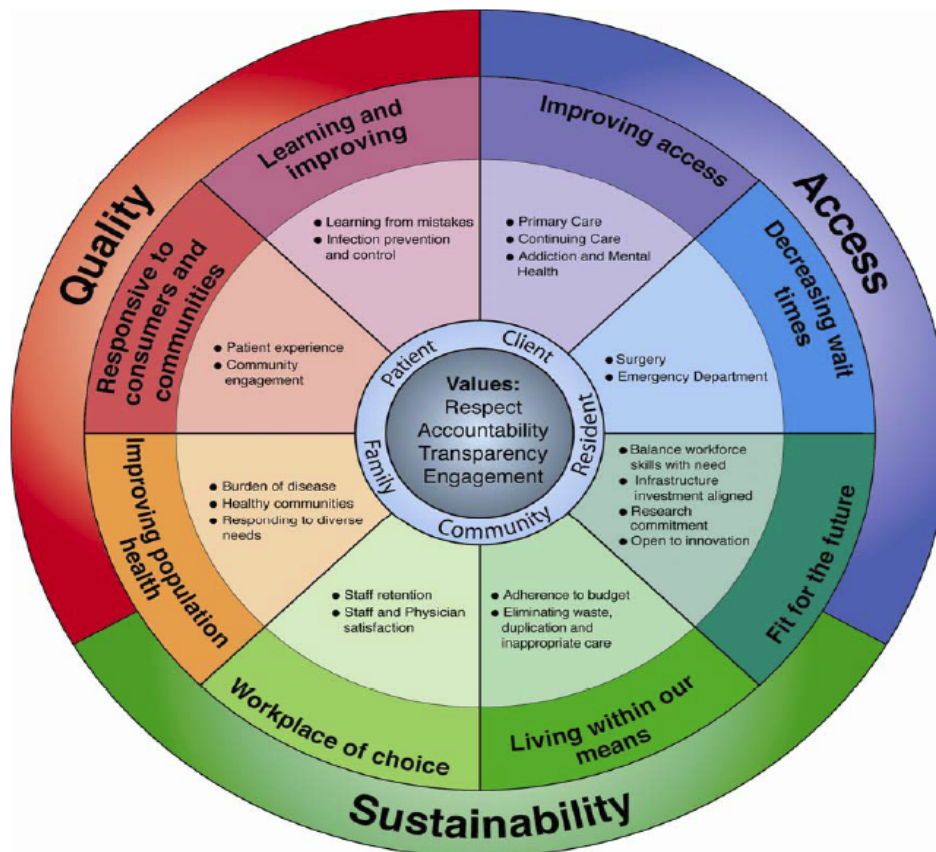
OUR CORE PRINCIPLES

Innovation – Excellence – Patient Care -
Scholarship –
Education – Technology

ALBERTA HEALTH SERVICES STRATEGIC PLAN

The Strategic Plan

Mission: To provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.



3 Goals
8 Areas of focus
20 Strategic priorities
4 Values
3.5 million people

Values

Our values drive and sustain all activities of Alberta Health Services. They create a shared understanding about how we relate to each other as well as to our patients and the public. The four values will guide the way we deliver services, define our organization and are part of our strategic foundation. They are core to what we do and therefore occupy the central place in the Strategic Plan.

WE VALUE	AS SHOWN BY
Respect	<p>Valuing each other and each patient/family/client we interact with as individuals</p> <p>Being compassionate</p> <p>As staff, treating people with dignity, fairness and respecting confidentiality</p> <p>As patients, treating staff with dignity, fairness and respect</p> <p>Being sensitive to diversity</p> <p>Being inclusive and recognizing contributions</p>
Accountability	<p>Displaying integrity and ethical behavior</p> <p>Being honest</p> <p>Doing what we say we are going to do</p> <p>Taking responsibility for our own decisions and actions, and holding each other responsible for theirs</p> <p>Building trust and being trustworthy</p> <p>Evaluating and improving the quality, safety and effectiveness of our services and the outcome of our decisions</p> <p>Promoting excellence, innovation and continuous improvement through using best evidence/best practice</p>
Transparency	<p>Being open, honest and having timely communication</p> <p>Disclosing information to help learn from mistakes</p> <p>Providing accessible, understandable information about system and financial performance</p> <p>Providing clearly defined expectations</p> <p>Being clear about what and how decisions are made</p>
Engagement	<p>Collaborating with patients and their families, health care providers, research and education institutions, government and the community</p> <p>Involving community, clinicians and colleagues in meaningful ways</p> <p>Listening to and considering ideas and concerns of others in the decision making process</p> <p>Facilitating people to understand choices and take responsibility for their own health</p>

Mission

To provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.

Goals

Our Strategic Direction is structured around three key goals. Our future success will be measured by the health and satisfaction levels of Albertans, their ability to access the system and our ability to meet these goals within sustainable budgets.

Quality: health care services are safe, effective and patient-focused

Access: appropriate health care services are available

Sustainability: health care services are provided within available resources both now and into the future

Areas of Focus

The health system is complex. To make improvements, actions are required on many fronts. Alberta Health Services has eight areas of focus supporting the three goals described above. A focus area is where the organization will invest its time, energy and resources. For each focus area, we have defined key priorities and highlighted some specific strategies. We have also indicated one or two performance measures that will be used to monitor our progress. These measures will be monitored on a quarterly basis and may evolve over time. It should be noted that these measures are high level indicators of our overall performance and a number of other performance measures will also be monitored and acted upon throughout the organization.

It should be noted that the targets are indicative and are subject to finalization in the budget context.

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This report is respectfully submitted by:
**John Conly, MD, FRCPC, FACP, Professor and Head University of Calgary,
 Alberta Health Services, Calgary Zone**

On behalf of the Department of Medicine, November, 2009

EXECUTIVE SUMMARY

During the fiscal 2008-2009 year, The Department of Medicine has continued to focus on its vision and mission through recruitment and retention, enhancing its training program, facilitating the quality of care provided utilizing alternate care providers in its care delivery models, providing leadership in evolving systems of healthcare, enhancing chronic disease management, further embracing medical outreach services for rural Albertans through direct care delivery and telehealth and enhancing the research infrastructure of the Department.

Recruitment and Retention

Recruitment 23 new members occurred in the Department (3 Clinical, 8 Major Clinical, 6 GFT, 6 Clinical Scholars).

A new multi-module project entitled “WELL DOC” was completed, the goals of which are to promote and facilitate physician wellness and to educate physicians health care administrators and the public about its importance.

Clinical and Administration

Recruitment of new external Division Chiefs occurred in Geriatric Medicine, September 2008 (Dr. K. Fruetel, London, ON), Gastroenterology, March, 2009 (Dr. Subrata Ghosh, London UK) and Rheumatology, pending for August, 2009 (Dr. Dianne Mosher, Halifax, NS).

Continued deployment of multidisciplinary teams – the Department of Medicine in conjunction with Medical Services continues to embrace team based care including Nurse Practitioners, Nurse Clinicians, pharmacists, therapists and clerks with 53 FTEs continuing the innovation initiatives.

Continuation of improved patient outcomes in selected populations, including improved access and improved outcomes, through its innovation initiatives

Evaluations of Central Intake Systems across most specialized medical services was initiated. The Department of Medicine and Medical Services, Department of Family Medicine, Calgary Health Region, Primary Care Networks, Department of Rural Medicine, Department of Cardiac Sciences, the Chronic Disease Management Program, Western Canada Waiting List (WCWL) and the Alberta Medical Association (AMA) sponsored this project through a \$4.2 million grant from the Provincial Wait Times Management Steering Committee. The key changes were the introduction of a single, standard, flexible referral form, replacing a number of existing separate forms and standardized processes and target times, including acknowledging receipt of referrals within two days, triaging referrals within seven days of receipt and clarifying responsibilities for arranging tests for triage and consultation.

Two Alberta AIM collaboratives (Access Improvement Measures) were implemented to improve access and efficiency in both primary care and specialized medical ambulatory care settings.

Deployment of a service model for patients with chronic complex needs was introduced to the PLC in early 2008.

Additional telehealth clinics in Dermatology focused on First Nations populations (Siksika), were introduced. Telehealth continues to exceed targets.

Quality improvements focused on GRIDLOCC, SCM, Patient Safety and Patient Advocacy. Admission of admission guidelines were developed for internal medicine services and safety action teams.

Continued deployment of the ambulatory EMR (EMIS).
ARP renewal was successfully in August 2008.

Planning and development of a novel pilot "Medicine Psychiatry Unit" at the PLC, was completed with a projected opening in Spring 2009.

Education

The number of positions in the Core Internal Medicine Residency Program increased to 67 including PGY4 positions, (from historic level of 47 in 2005-06 fiscal year), inclusive of 16 IMG positions.

The number of positions within the Subspecialty Residency Programs within the Department of Medicine increased to 37 residents and fellows, previously 33 in fiscal year 07-08.

Active engagement in AIMG Program has continued, including 16 Alberta International Graduates entering the core program.

Planning for simulation has been initiated as a Departmental priority.

Research

Planning for a new CRC Chair – Nephrology was completed.

A Departmental Research Development Fund was launched and planning continues for 2 new Endowments - Apheresis and Health Promotion.

574 articles, editorials and invited reviews published in peer reviewed journals (unedited)

73 articles published in non-peer reviewed journals

136 abstracts published

13 book chapters published

434 presentations (invited)

\$29.4 million in research grants, (significant increase of \$9.8 Million) clinical trials and industry sponsorship was initiated.

Planning for combined Department of Medicine with Department of Surgery Research Development Fund was initiated.

Large AHFMR Interdisciplinary Team Grant successes involving members of the Divisions of Nephrology, Gastroenterology, and Infectious Diseases.

Challenges and Priorities for next Fiscal Year

Determine optimal delivery of services and administrative capacities across the continuum of care within the new Alberta Health Services framework.

Meeting recruitment targets to meet clinical service requirements for population growth and the new South Health Campus.

Developing innovative short term space solutions – shared office space and the virtual office.

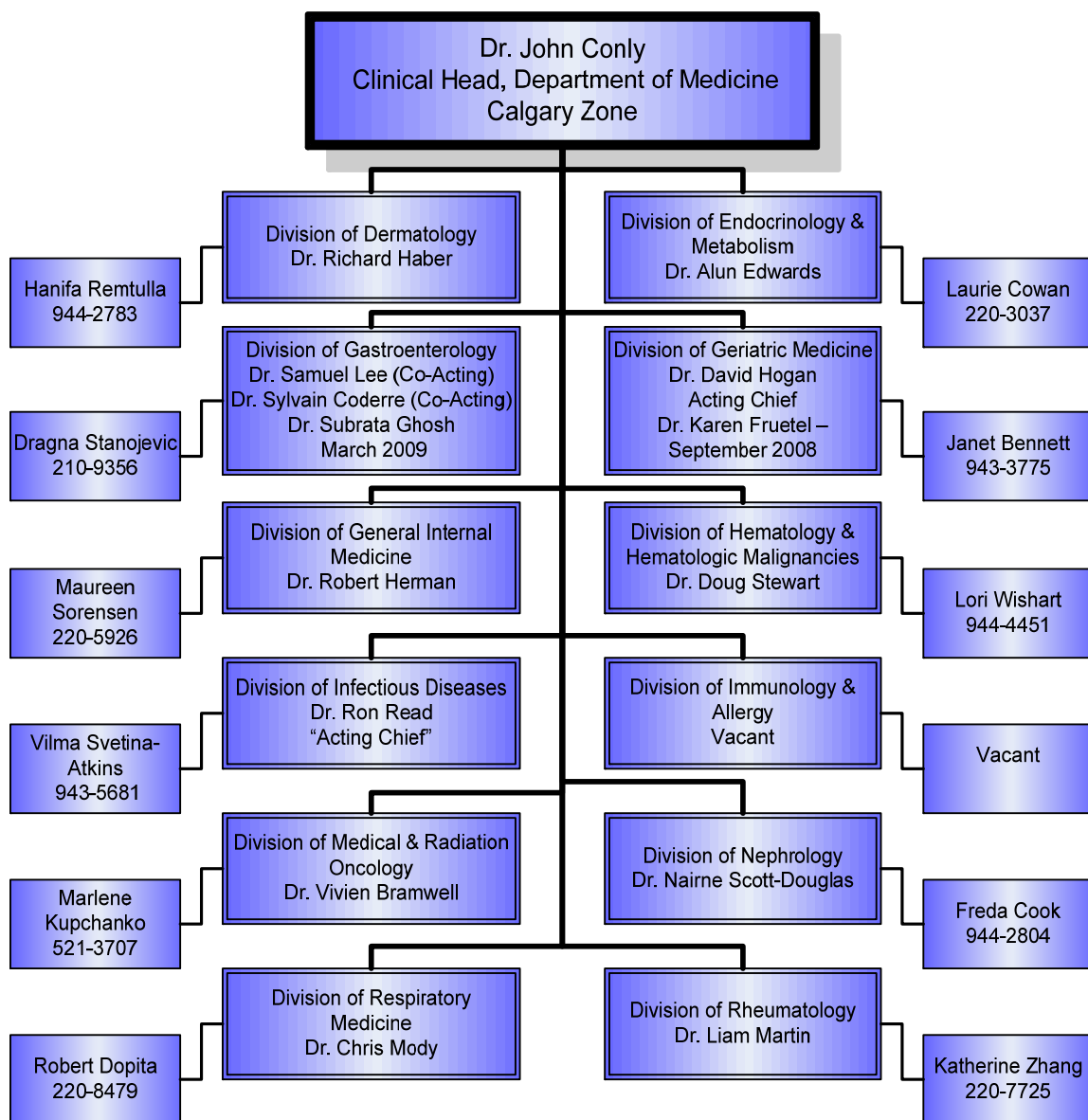
Renewal of funding for Central Access and Triage for all Divisions for fiscal 2009-2010.

Planning for E-simulation.

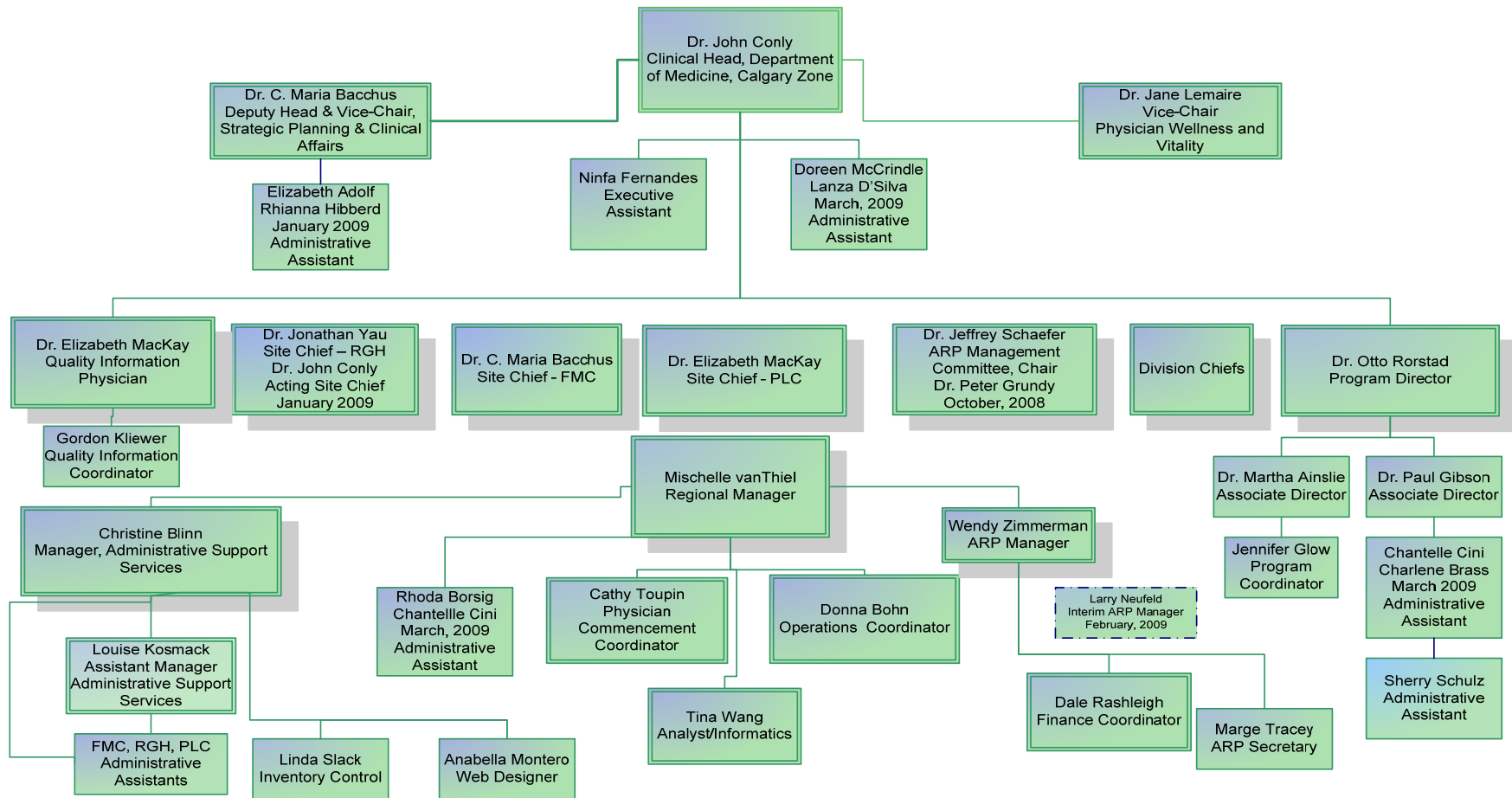
Supporting the development of an electronic scheduling system in outpatient clinics.

Planning for Outreach Services – First Nations, inner city populations.

Department Structure and Organization



**DEPARTMENT OF MEDICINE
Administration**



Department of Medicine Administrative Assistants

RGH SITE

DANA DUFFY
DEB GEHLEN
SHIRLEY GLASGOW
CAROL HOLTZMAN
RUBY LEACHMAN
JANET OSS
PAT TALLMAN
AMY MAHON

FMC SITE

BONNIE McCARDLE
HANIFA REMTULLA
AMANDA SINCLAIR

TYSH DeCOSTE
MISCHELLE HUBBS-FELDER
JENNA LUCAS
KIMBERLY NEAL
JEANNE SHELTON
IVANA SVARICEK
KELLY RENAUD
LINDA SLACK
MELISA THELE
KAYE HOLT
FREDA COOK
BRENDA GREEN
LYNETTE LIPINSKI
WENDY NACHUK
TARA SCHREYER
BRENDA SIMPSON
RHONDA STOUT
ANNE-MARIE WOLFE

SUNRDIGE LANDING

LINDSAY ALLAN
TANIA BANZET
JULIET DAWSON
AMANDA FULLER
LORRAINE
CHABOYER
SIMRAT MINHAS
ANNE MERZETTI
ILEISA ROBERTS
TAMI OSOJNIK
ALYSHA
SUNDERJI
VILMA SVETINA-
ATKINS
JACQUELYN
TOBIN
PATRICIA
MCALLISTER
BREANN
KAKOWCHYK

CASUAL

KAYE HOLT
AMAN ADATIA
LAUREN CLAYDEN
TAMMY COLBRAN
KYLIE DECOSTE
SUE GAFFAR
RHONDA KENNEDEE
ALYSHA SUNDERJI
ANNIE MICKLEBERRY
CARLY WHITESELL
ANNA YU
ALARA HOUGHTON

SUZANNE BUFFEL
CHANTELLE CINI
SUNJDAYE GAFFAR
DANNA HARTLEY
RHIANNA HIBBERD
DOREEN MCMULLEN
ANABELLA MONTERO
TRACEY MOONEY
MARGE TRACEY
CHARLENE BRASS
TANA MCPHEE
LANZA D'SILVA

BILLING CLERKS

HELEN ANDREWS
LESLIE COOPER
MICHELE DAL PRA
RAHEMAT FAZAL
GAIL FLETCHER
JOANNE NITYCHONUK
LUCIANA RASMUSSEN
KERRI VIAAR
ROBBIE WATERS
CHRISTIANE SLEN

DEMOGRAPHICS OF THE DEPARTMENT OF MEDICINE

(Primary Appointment Regional Dept. Medicine)

Division	Male	FTE	Female	FTE	Average Age	Left Dept	Recruits	Total
Dermatology	13	13.0	09	9.0	51.4		1	22
Endocrinology	10	10.0	07	5.7	48.0			17
Gastroenterology	40	40.0	11	10.4	42.1	2	5	51
General Internal Medicine	41	40.0	19	16.1	43.0	2	6	60
Geriatrics	07	6.6	06	3.2	43.0		1	13
Hematology	17	13.8	05	4.8	46.4	1	2	22
Infectious Diseases	11	10.6	04	3.0	48.6		1	15
Medical & Radiation Oncology	23	23.0	10	7.8	44.7		1	33
Nephrology	17	17.0	06	6.0	49.2		2	23
Respirology	23	23.0	07	6.8	44.1		3	30
Rheumatology	8	8.0	10	8.3	51.1		1	18
TOTAL	210 (69.1)	205	94 (30.9)	81.1	46.5	5	23	304

DEMOGRAPHICS OF THE DEPARTMENT OF MEDICINE

(Academic and Clinical Scholar Appointments)

Division	Clinical Scholar	Research Assistant Professor	Clinical Lecturer	Clinical Assistant Professor	Clinical Associate Professor	Clinical Professor	Assistant Professor	Associate Professor	Professor	No University Appointment	Total	ARP Members
Dermatology			6	6	7		1	1		1	22	4
Endocrinology				7	1		1	3	5		17	17
Gastroenterology	4	1*	1	15	6	4	8	5, 1*	3	5	53	34
General Internal Medicine	4	1*	8	29	10	1*	2	2,1*	4	0	62	33
Geriatric Medicine				7	1	1	1	2	1		13	13
Hematology	3		6	3	1		1	3	5,1*		23	18
Infectious Diseases	1			3	2			4	4	1	15	11
Nephrology	3		6	4	1*		5	2	3		24	13
Respirology	1	1*		10	6	2	2		7	2	31	25
Rheumatology	1		1	4	3		1	2	5	1	18	16
TOTALS	17	3	28	89	38	9	22	26	36	43	278	184
Excluding the Division of Medical & Radiation Oncology												

*Adjunct Research Assistant/Associate Professors: Dr. Jean Wallace, GIM; Dr. Hongquin Liu, Gastroenterology

*Adjunct Clinical Professor: Dr. Don Bakal, GIM

*Adjunct Professor: Dr. Allan Jones, Hematology

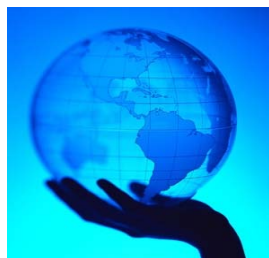
*Adjunct Clinical Associate Professor: Dr. Bruce Culleton, Nephrology

*Adjunct Associate Professor: Dr. Sharon Straus, GIM

RELOCATION AND RETIREMENT

The following indicates physicians and the reason for their departure

SURNAME	GIVEN NAME	DIVISION	ARP	LEFT	GENDER	REASON	PLACE
STRAUS	SHARON	GIM/ GERIATRICS	YES	2008	Female	Relocation – Toronto, ON	
JONES	ALLAN	HEM	YES	2008	Male	Relocation - Kelowna, BC	
JONES	JENNIFER	GI	YES	2008	Female	Relocation - Saskatoon, SK	
SANSOE	GIOVANNI	GI	YES	2008	Male	Relocation - Turin, Italy	
TEICHROB	DEANNA	GIM	NO	2008	Female	Relocation - Victoria, BC	



WORKFORCE PLANNING – RECRUITMENT FOR 2008-2009

DIVISION	SURNAME	FIRST NAME	START DATE d/m/y	ARP	UNIVERSITY APPOINTMENT	GENDER	FTE	ARRIVED FROM
DERMATOLOGY	KURWA	HABIB	09-09-08	Yes	Clinical Associate Professor	Male	1.0	London UK
GASTROENTEROLOGY	HEITMAN	STEVE	07-01-08	Yes	Assistant Professor	Male	1.0	Calgary
	SEOW	CYNTHIA	09-02-09	Yes	Assistant Professor	Female	1.0	Toronto
	SANSOE	GIOVANNI	01-07-08	Yes	Clinical Assistant Professor	Male	1.0	Turin, Italy
	GHOSH	SUBRATA	01-03-09	Yes	Professor	Male	1.0	London, UK
	KRONGOLD	PENINA	01-03-09	No	Clinical Assistant Professor	Male	1.0	Calgary
GENERAL INTERNAL MEDICINE	BHARWANI	ALEEM	07-01-08	Yes	Clinical Scholar	Male	0.3	Calgary
	FISHER	MICHAEL	01-07-08	No	Clinical Assistant Professor	Male	1.0	Calgary
	HAW FOR CHIN	OLIVER	01-07-08	No	Clinical Scholar	Male	1.0	Calgary
	WILLIAMS	JENNIFER	01-07-08	No	Clinical Assistant Professor	Female	1.0	Calgary
	HAWKINS	LEE ANN	01-01-09	Yes	Clinical Assistant Professor	Female	1.0	Calgary
	LI	PIN	01-10-08	Yes	Clinical Scholar	Male	0.6	Calgary
GERIATRICS	FRUETEL	KAREN	07-09-08	Yes	Associate Professor	Female	1.00	London
HEMATOLOGY	WONG SHAFETY	MICHAEL	01-07-08	Yes	Clinical Assistant Professor	Male	1.0	Calgary
		MONA	01-07-08	Yes	Clinical Professor	Female	0.4	Ottawa
INFECTIOUS DISEASES	PARKINS	MICHAEL	01-07-08	Yes	Clinical Scholar	Male	0.5	Calgary
NEPHROLOGY	RAVANI THOMAS	PIETRO CHANDRA	01-09-08	Yes	Associate Professor	Male	1.0	Cremona, Italy
			01-10-08	Yes	Clinical Scholar	Female	1.0	Penticton, BC
RESPIROLOGY	PENDHARKAR MACEACHERN JARAND	SACHIN	01-07-08	Yes	Clinical Scholar	Male	0.3	Calgary
		PAUL	01-08-08	Yes	Clinical Assistant Professor	Male	1.0	Calgary
		JULIE	21-04-08	Yes	Professor	Yes	1.0	Calgary
RHEUMATOLOGY	BARNABE	CHERYL	01-07-08	Yes	Clinical Scholar	Female	0.3	Calgary

Medical Access to Service

**Prepared by Gail V. Barrington, PHD, CMC President and Principal Evaluator
Barrington Research Group. Inc
Project Manager: Jodie Glasford**

The Department of Medicine & Medical Services, Department of Family Medicine, Calgary Health Region (CHR) Primary Care Networks, Department of Rural Medicine, Department of Cardiac Sciences, the Chronic Disease Management Program, Western Canada Waiting List (WCWL), and the Alberta Medical Association (AMA) collaboratively sponsored the **Medical Access to Service (MAS) Project**. The Provincial Wait Time Steering Committee provided \$4.2M to the Calgary Health Region to conduct the Project between June 2007 and March 2009. Alberta Health Services supplemented this budget in March 2009 with an additional \$1.3M and the Project was extended until March 2010.

The purpose of the MAS Project was as follows:

To broadly engage participants in the health system to collectively improve patient access to primary care and specialized medical services and to improve service integration and communication between medical specialists, primary care physicians and the healthcare team.

The Medical Access to Service Outcome Assessment was completed and submitted to the Alberta Health and Wellness Wait Times Management Committee September 1, 2009. The main research questions and evidence obtained through the evaluation are presented below.

To what extent was a Central Intake system implemented in participating departments?

CAT was fully implemented in Endocrinology, GIM and Hematology—it is now considered routine practice. The lack of an electronic scheduling system was seen as the greatest barrier to developing further efficiencies and was the reason cited as to why Respiratory Medicine did not fully implement CAT.

- 8,630 referrals were received by the four Divisions during the study period;
- Over 90% were from Primary Care (except in GIM where 28% of referrals were either an ED or an Urgent Care Clinic—this was seen as a good way to decant patients to more appropriate health services);
- The most referrals was received by Endocrinology (n=2,765), the least by Hematology (n=1,450);
- Over 90% of the referrals received were new referrals; over 80% were accepted as appropriate (GIM redirected 15% and Endocrinology did not accept 13%);
- More than half of referrals did not have a triage category attached (highest in Hematology at 76%, lowest in Endocrinology at 53%); and
- Incoming referrals with a triage category were often re-categorized (especially in GIM where referrals were frequently upgraded to Urgent status—20% of incoming referrals were identified as Urgent but 44% of triaged referrals were deemed Urgent although not necessarily the same cases).

What changes were made to access, triage prioritization and waitlist management?

- The process of setting up a CAT system has caused the specialties to clarify their processes. Through collaboration they achieved agreement on the following:
 - The definition of triage categories;
 - The types of symptoms, medical conditions, or issues that were included in each triage category along with related co-morbidities;
 - Acceptable approximate wait times for each triage category;
 - The tests, investigations, and documentation required to enable triage to occur;

This information was then made available in the CAT Booklet (also on line on the Department of Medicine website), codified in the CAT Referral Form, used by CAT staff, and tracked in the CAT Access Database;

- Referring physicians sent their referral information to CAT where it was triaged and appointments were booked with available specialists; and
- Some physicians continued to refer directly to the specialist of their choice.

What impact did Project changes have on communications and information flow between/ among health professionals, care teams & patients & families?

- Less time is wasted in communications regarding referrals;
- Referring physicians very much like receiving a faxed confirmation that their referral had been received and, generally, that an appointment had been booked,
- Having a triage or on-call specialist to contact if the GP has concerns about a referral further increases their comfort level; and
- Receiving appointment confirmation has facilitated communications between GPs' office staff and patients resulting in less frustration on both sides.

What impact did Project changes have on business processes such as triage prioritization, scheduling and waitlist management?

- Specialists' clinics are more often booked to capacity as a result of CAT;
- The paper trail required for accountability is much clearer and more apparent as a result of CAT making the system more accountable from a legal perspective;
- Patients are less likely to "fall between the cracks" due to inaction or missing information;
- The Access Database, designed for the evaluation, enabled CAT staff to track referral status and wait time information from month to month, and enhanced their ability to manage referral demand;
- The WCWL Priority Referral Scores (PRS) tools, while not yet finalized, developed criteria to assess the urgency of referrals to Rheumatology, Geriatrics, GI and Nephrology through a rigorous research process;
- A high-level IT plan was developed for an automated referral process that is based on processes responding to physicians' referral needs and CAT field experience;
- 2 AIM collaborative were held during the study; one was evaluated through interaction with 3 PCN and 3 specialty clinics (50% of those participating); and
- 5 of the 6 AIM clinics mentioned the value they had gained from using measurement to understand and solve problems.

What impact have these changes had on provider and patient satisfaction?

- Referring physicians were very satisfied receiving faxed confirmation that the referral had been received; those who received confirmation of booked appointment were also satisfied;
- They thought the process was faster and less time consuming although it did depend on the complexity of the individual case; and
- Limited feedback on patient satisfaction was obtained although referring physicians indicated that faster turnaround supported patient satisfaction.

What lessons were learned?

Lessons from the re-design process included:

- The triage team is essential to this process and will need on-going support;
- Division management support is critical to the implementation process;
- The clerical staff at the GP's office plays an important role in communications;

- The triage process is beneficial for new specialists coming into the system; and
- Specialists who are part of an ARP appear to integrate into CAT more easily.
- The PRS tool development process was time consuming and costly but some lessons can be applied in future;
- The CCDMC model was costly to operate and patient enrolment was slow but the multi-disciplinary approach to care was well received by patients, family physicians and staff;
- AIM teams provided a number of suggestions to improve the AIM training process including shorter training sessions, simplified tools and more Alberta-based context;
- Key factors supporting successful AIM projects included the fact that clinic personnel must share an identified need or predisposition towards solving an efficiency problem; both management and clerical/administrative staff buy-in are critical; and there must be commitment to the learning process by a core group; and
- Key identified barriers to implementation included staff turnover; and a preponderance of part-time physicians.

What impact has the Project had on the completeness and appropriate of referrals overall?

- Approximately 60% of currently referrals include complete information;
- Referral completeness increased significantly in Hematology;
- 80% or more of referrals across participating Divisions are accepted as appropriate;
- Each of the three editions of the CAT Booklet to date have described the required tests and documentation in more detail, facilitating referral completeness; and
- Both CAT staff and the GPs confirmed that referral completeness and appropriateness is increasing as physicians become aware of requirements.

What changes in patient access/transition/flow to specialized medical care occurred as a result of Project activities?

- CAT supports the physician who needs to make a referral but may not have a contact, including new physicians, relocated physicians, rural or out-of-province physicians, and GPs who are unaware of specialists' availability and interest areas;
- CAT also supports existing networks as physicians can refer directly if they choose;
- Referral volume has continued to grow due to increased efficiencies in CAT processes, increased physician awareness, and increased demand;
- Referral demand and appointment supply have tended converge but it is an ongoing balancing act appointment slots could decline if physicians left their practice, went on maternity leave, or retired. As a result, the management of supply and demand was an ongoing balancing act;
- The CCDMC was designed to provide multi-disciplinary comprehensive care and proactive follow up to complex chronic individuals with a recurring requirement for acute care services but only 47 patients were available for statistical analysis. Total bed days were reduced by 51%, total admissions decreased by 24%, and ED visits were reduced by 19%. Early indications suggest that ED visits were continuing to decline.

What impact did Project activities have on optimizing or reducing wait times?

Statistical analysis of median wait times was conducted:

- Median Urgent wait times were 6 days in Endocrinology, 5 days in GIM, and 15.5 days in Hematology (all within CAT guidelines);
- Median Semi-urgent wait times were 37 days in Endocrinology (significantly longer than CAT guidelines) and 46 days in Hematology (well within CAT guidelines); GIM did not use this category;

- Median Routine wait times were 107 days in Endocrinology (within CAT guidelines), 21 days in GIM (significantly shorter than CAT guidelines), and 62 days in Hematology (well within CAT guidelines).
- 5 AIM clinics reported decreases in wait times (measured as third next available appointment) of between 6—140 days
- 3 AIM clinics reported an average decrease in in-clinic wait time of 22 minutes per patient.

Overall it was concluded that the MAS Project has been very successful in achieving its goals and has effected significant positive changes which must be maintained and expanded.

Based on the findings of this evaluation, the following recommendations are advanced for consideration:

Central Access & Triage

Central Access and Triage should be continued and should be expanded to other health services as staff and management demonstrate interest, support, and readiness for its process changes.

Some further development is required in the following areas:

1. The lack of an electronic scheduler was a major barrier to more efficient implementation of CAT and needs to be addressed as soon as possible;
2. Coverage and sustainability of CAT staffing now needs to move beyond Project status and should be incorporated in operational budgets;
3. Some GPs indicated that they had not received confirmation of appointment times but they were anxious that this should occur;
4. Some CAT documentation requirements are very broad (e.g., GIM) and may benefit from regular review;
5. Many suggested that better use could be made of patients' time while they are waiting for an appointment; several suggestions were made and this topic warrants further exploration;
6. Documentation issues for unattached patients and linkages with EDs, walk-in clinics and PCNs are ongoing issues that have been highlighted by this Project; creative solutions need to be explored;

AIM

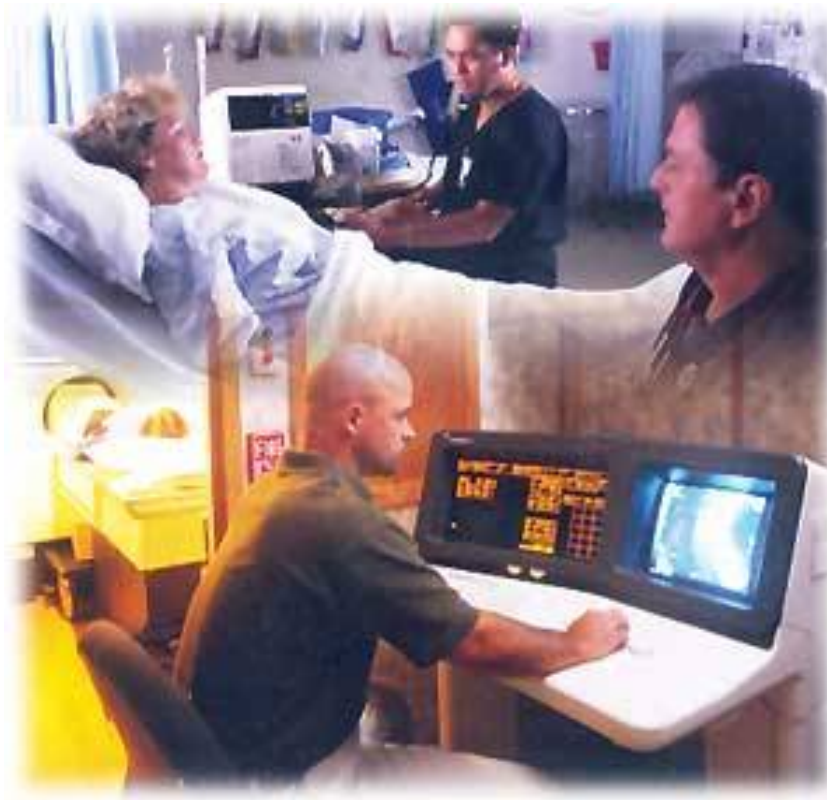
1. **AIM collaborative should continue to be offered.**
2. **Due to the evaluation results, consider some training process changes to improve the training process.**
 - a. Consider teaming up with an Alberta university with a web-based interface such as Blackboard, Web CT or Model to support asynchronous distance learning for at least half the learning sessions. These could be supported by seminars, Eliminate sessions, on-line reporting, email communication and a document repository;
 - b. Retain the sense of a collaborative through fewer, smaller and shorter in-person sessions and continue the personal support of the facilitators; and
 - c. Consider clustering participating clinics through some commonality such as size (e.g., number of physicians/lead staff), clientele (e.g., seniors), health issue (e.g., cardiac), management structure (e.g., ARP), or location (e.g., rural versus urban). This would enhance the exchange of lessons learned.
3. **Consider Standardizing Measures Further**
 - a. With some adjustments and clearer parameters, the measures could be even more powerful than they currently are at the individual clinic level.

The WCWL Priority Referral Scores (PRS) tool for Rheumatology should be completed. Draft referral criteria for Geriatrics, Gastroenterology and Nephrology should be fed into CAT requirements as appropriate. While this rigorous research process can stand as a proof of concept, it is too resource-intensive for further development, apart from the Rheumatology PRS. This pilot tool is very close to completion and only needs a field test prior to its full implementation. This should be generating activity conducted before the MAS Project is completed. The important knowledge gained

through this tool-should be integrated with the practice-based referral criteria currently published in the CAT Booklet.

The high level IT referral requirements recommended as part of the MAS Project should be fed into future provincial considerations about automated referral processes. Because the need for an automated referral process that includes an electronic scheduling component is severe, and because the Access Database that was developed for this evaluation has identified and tested the performance measures required to successfully track a CAT system, this plan provides an important piece of the automation puzzle.

Lessons from the Complex Chronic Disease Management Clinic should continue to be used in ambulatory settings for complex chronic patients. The CCDMC showed that a multi-disciplinary approach which engages complex chronic patients while not in the throes of an acute incident, and which provides regular support, rationalizes their care plans and medications, and links them to community resources, has merit and shows early signs of positive outcomes in terms of decreased demand on acute care. In particular, it will be important to investigate how to further reduce ED visits. While this particular model was too costly, it should be possible to integrate these principles into more routine ambulatory settings.



Annual Report – Telehealth/E-health

April 1, 2008 to March 31, 2009

Prepared by Roberta Corea, RN, BN and Dr. Richard Haber, MD, FRCPC

This was another eventful year for Telehealth within the Department of Medicine. During the 2008-2009 fiscal year, 24 providing specialists were able to deliver 300 clinical telehealth sessions that reached out to 30 different communities. Current clinical telehealth activities continue to grow even though the clinical hours have slightly decreased. One initiative that was funded through a Project grant from Alberta Health and Wellness proved to be very successful. Other successful initiatives continue following previous projects and increased interest generated through other avenues.

A. Alberta Health and Wellness

The Wound Centre Project proved to be successful in providing clinical telehealth to remote sites. Raju Walia, the Clinical Project Coordinator was able to exceed his project deliverables and provide a process that establishes clinical telehealth for wound care to be a sustainable service. The project was completed in December 2008.

B. Existing programs

There are several divisions that support clinical telehealth. Although the amount of clinical hours for the department as a whole has decreased, there continues to be interest by all divisions for incorporating telehealth into their clinical practice.

Several programs that originated in the Innovations project are ongoing and successful. Dermatology received fewer referrals in the beginning of the fiscal year from three rural sites. This has given Dr. Richard Haber the opportunity to reach out to Siksika, a First Nation community. Currently Dr. Haber runs a monthly telehealth clinic to Siksika and there has been great success in this.

Endocrinology continues to provide their specialty services via telehealth to numerous rural communities. Endocrinology has the most providing specialists and serves the most rural communities within DOM at 8 and 15 respectively. Most of these telehealth sessions include case conferencing with a health care professional on the receiving end as well as meeting with the patient directly. Currently most clinicians engage in a telehealth session at least once a month and have proven telehealth to be a sustainable and appropriate way in meeting their client's needs from a distance.

Geriatrics is currently the top user of telehealth for clinical purposes. 3 geriatricians reach out to 11 communities on a consistent basis. Their model of practice in engaging in telehealth has been a standard when developing any future telehealth sessions for clinical purposes.

Although Infectious Diseases do not currently have any recorded clinical telehealth hours, their division's seminar and rounds occurs on a weekly basis. The last hour of this is dedicated to clinical case conferencing which accounts for clinical telehealth hours. These weekly rounds accounts for 36 clinical telehealth hours.

The Vascular Risk Reduction Clinic led by Nurse Practitioner, Noreen Antonishyn continues to be a sustainable service via telehealth. This program provides ad hoc consults to patients on a

consistent basis. Although the overall clinical telehealth hours decreased from the previous fiscal year, there are clinical areas that will be generating new referrals to this clinic.

The Thoracic Oncology Telehealth Program continues to provide this service to numerous rural and out of region communities. 3 providing specialists provide ad hoc and urgent consults to patients and health care professionals via telehealth. This program continues to integrate the telehealth sessions within their current clinical practice which has attributes to its sustainability.

Rheumatology continues to see patients through videoconferencing on a monthly basis. 5 rheumatologists reach out to Pincher Creek and Rocky Mountain House, and have been supported by general practitioners on the receiving end to conduct a thorough musculoskeletal exam. There continues to be great success in this initiative but can be limited if no general practitioner wish to engage in performing musculoskeletal exams on the receiving end.

C. Future Directions

The Department of Medicine continues to make great strides in implementing telehealth within their current clinical practices. Dermatology currently is reaching out to Claresholm and High Level. Once these clinics are fully operational, Dr. Richard Haber will reach out to both communities once a month. This will increase Dr. Haber's clinical telehealth clinics from one clinic a month to 3 clinics a month. The Wound Centre continues to reach out to a number of communities via telehealth. Planning to provide Wound Rounds to a number of sites is well underway.

Even though Endocrinology reaches out to the most communities, they continue to look at other communities that would need their specialized services. Dr. Alun Edwards will be reaching out to First Nation community, Siksika, to support the large diabetic population. There are future plans for Endocrinology to reach out to other First Nation communities.

Gastroenterology continues to express interest in adopting telehealth for clinical purposes. Dr. Chris Andrews continues to express interest in adopting telehealth for a Functional Gut program. There continues to be network connectivity issues which have delayed this initiative.

Planning and process development for clinical telehealth is well underway in Hematology. Dr. Russell Hull will be developing a Thrombosis clinic. A new desktop will support this initiative and should be installed in the near future. The Rare Blood and Bleeding Disorder clinic plans to provide outreach education to remote areas. A new boardroom telehealth system will be installed to support this initiative.

Alberta Health and Wellness has provided a grant to support Infectious Diseases. The Southern Alberta Clinic will adopt telehealth to reach out to their patients with HIV. Dr. Andrew Pattullo has expressed interest in learning the opportunities to use telehealth to facilitate information and advice sharing remotely.

The adoption, continued growth, sustainability and integration of e-health and telehealth technologies within the Department of Medicine (DOM) has been greatly enhanced through the continued support of the 1.0 FTE DOM Telehealth Coordinator. The Telehealth Coordinator helps to support ongoing partnership with Regional Telehealth which is vital to the success of any DOM Telehealth initiative. The decrease in overall clinical telehealth hours could be attributed to the decrease in Alberta Health and Wellness Project grants as well as the department being without a Telehealth Coordinator for almost half of the fiscal year to support current initiatives.

Sustaining the interest and advances made in previous years continues to be a challenge for Telehealth. Resources, both human and fiscal, must be carefully considered and planned, in developing future services or programs using Telehealth.

DOM Clinical Telehealth

*This includes Case Conferencing

	Sessions/Clinics*	# Clinical Sites Involved	# Providing Specialists/Clinicians
Dermatology	14	4	1
Endocrinology	51	15	8
Geriatrics	99	11	3
Respirology (Thoracic Oncology)	24	12	3
Rheumatology	12	3	5
Vascular Risk (Internal Medicine)	27	11	1
Wound Care	73	12	3



Dr. Sharon LeClercq– Rheumatology Telehealth Conference

Physician Wellness and Vitality

Dr. Jane Lemaire, Vice Chair

As I look back over the last five years during my collaboration with Dr Jean Wallace from sociology and my position as Vice Chair, Physician Wellness and Vitality, I feel hopeful that things may be changing.

In the beginning, I spoke softly and gingerly about the concept that if physicians are enabled to care for themselves, both the individual physician and the health care system could benefit. Perhaps I wasn't too certain myself. Many barriers stood in our way, most notably, the culture of medicine whereby we, as physicians, are expected to press on no matter what, because of the importance of our work. That expectation comes from the general public, the health care systems and the physicians themselves. I am encouraged now, because I sense a heightened awareness of the importance of physician wellness, supported by a logarithmic increase in published studies documenting not only physician stress, but its consequences on individual physicians and their ability to deliver quality health care.

On a personal level, I was most honored to receive two awards, the Department of Medicine Professionalism Award, and the Internal Medicine Residency Program Lifestyle Balance Award. There is a touch of irony here. As physicians, trying to keep ourselves well at times seems both at odds with and concordant with professionalism. For example, if I always put my patients first, then I am most professional. Yet, if I suffer burnout, I will not function in any of my professional roles. Striving for balance is the key and our Department of Medicine should be commended for formally acknowledging the importance of physician wellness.

How have we, as a Department of Medicine, contributed positively to physician wellness over this past year?

Representation and dissemination

The portfolio of Vice Chair, Physician Wellness and Vitality, allows official representation. For example, as a member of the ARP management committee, the Vice Chair has the opportunity to bring to the table the wellness issues identified as important by our members. In this position, representing the University of Calgary, I was also recently appointed to the Alberta Medical Association Physician and Family Support Group Advisory Committee and to the Association of Faculties of Medicine of Canada Resource Group on Physician Health and Well-Being.

Over this past year, Dr Wallace and I had the privilege of speaking to the Medical Advisory Board, to the Chief Medical Officer (CMO) and the Associate CMOs about physician wellness. We were invited to present rounds to many other departments (Psychiatry, Obstetrics and Gynecology, Anesthesiology, Pediatric Medicine,) who expressed interest in our program of research, and what we have learned about physician wellness in the former Calgary Health Region.

Internationally, research from our program of research was accepted for presentation at the 2008 British Medical Association-American Medical Association-Canadian Medical Association Joint International Conference on Doctors Health: Doctors' Health Matters-Finding the Balance, in London, England.

We presented the following:

- Physicians' Perceptions about Personal Well-Being: Concordant or at Odds with Professionalism;
- Patient Load for Physicians: What Does it Mean and How Can We Measure It?;
- Physician Personality Traits: Sound Familiar?; and
- Exploring Wellness for Internal Medicine Physicians Across Two Different Payment Schemes.

At the conference, I was invited by the CMA to contribute to their Healthy Practices Podcast Series entitled Checks and Balances by summarizing the key lessons from our program of research. At the 14th European Congress of Work and Organizational Psychology, in Santiago de Compostela, Spain we presented three talks:

- Not all Physicians' Coping Strategies are Created Equal; Developing Effective Wellness Programs for Physicians Through Participatory Action Research;
- A Different Picture of Workplace Stress for Professionals: A Multi-Stage Approach to Physician Burnout.
- And most recently, Dr Wallace and I spoke on the impact of the generational and gender shifts upon the physician workforce at the 2nd Annual University of Calgary Medical Student Health Policy Symposium, Is There a Doctor Shortage in Canada?

Program of Research and Program Implementation

In collaboration with Dr Jeffrey Schaefer, we were fortunate enough during these difficult financial times to secure funding to develop the second module of our Well Doc? Initiative. Alberta Health Services, the Department of Medicine and the Faculty of Kinesiology supported the project entitled: Does a portable biofeedback device reduce physician stress? We are reporting on the findings from our mixed methods AHFMR funded 2006 study Determinants of Physician Well Being to disseminate these important research findings.

The Well Doc? Module 1 Nutrition study results showed that physicians who ate and drank during their work day performed better on cognitive testing than physicians who followed their usual nutritional habits. Knowledge from this study has been used in a nutrition chapter in the newly released Royal College of Physicians and Surgeon's CanMEDS Physician Health Guide, and as an adjunct to the Alberta Medical Association's Physician and Family Support Program healthy nutrition promotional campaign. Dr Jean Wallace, Dr William Ghali and I have just completed a narrative review of physician wellness (in press, Lancet), proposing that physician wellness could be the missing quality indicator for health care systems.

Which brings us back full circle. I feel hopeful that things are changing and I am certain that the Department of Medicine's vision of supporting well physicians, and the department members' willingness to contribute to this program of research has made a difference.



Internal Medicine Core Residency Program

The Internal Medicine Residency Program has been very active in educating Specialists and Clinical Teachers to meet the present and future health care needs of society. As of July 1, 2009 our Internal Medicine Residency Program has 62 residents in the “core” PGY 1 to 3 years and five residents in the General Internal Medicine PGY 4 to 5 years. The Subspecialty Residency Programs within the Department of Medicine contribute an additional 37 residents soon to join the medical workforce as independent specialists. In total, the Department of Medicine educates 104 residents in its own programs. Our rotations also provide clinical education to a large number of residents from other programs.

In 2009 the Department's Residency Programs include 16 Alberta International Medical Graduates (AIMG) whose residency level ranges from their first to fifth year of residency. All but one of the AIMG residents had been previously employed by the Calgary Health Region Clinical Assistant Program. The model of International Medical Graduates entering the Clinical Assistant Program and then subsequently Residency education funded by the Provincial Government AIMG Program has been very successful. These AIMG residents represent a substantial incorporation of International Medical Graduates into our health care system. Nine of the AIMG residents will likely be entering specialty practice in the next one to three years.

In February 2009 the Internal Medicine Residency Program underwent its regular on-Site full Accreditation Survey by the Royal College of Physicians and Surgeons of Canada. The outcome was Approval of Accreditation extending to the next regular survey in 2015.

Parallel to the increasing number of graduating medical students, the number of Government-funded Internal Medicine Residency positions will increase substantially over the next few years. For July 2010 we will be able to offer 23 regular ministry funded PGY 1 positions. Infrastructure support for the increase in number of medical students and residents will include recruitment of new faculty through the very successful Departmental Alternative Relationship Plan, the additional clinical space at the Richmond Road Center, the additions to the three Calgary Adult Hospitals of about 450 beds, and the new Calgary South Health Campus in 2011/2012.

The 22nd Annual Resident Research Days were held on May 11 and 12, 2009 with Dr. Anita Palepu, Department of Medicine, UBC, being the guest speaker and judge. She presented Medical Grand Rounds on “Housing, Homelessness, and Health”.

Drs. Olga Tourin, PGY 3 resident in Internal Medicine, and Vicky Parkins, PGY 5 resident in Endocrinology, were co-recipients of the 2009 FMC Medical Staff Resident Leadership Awards.

Dr. O. Rorstad completes his five year term as Core Program Director at the end of September 2009. Dr. Jeff Schaefer, Division of General Internal Medicine, will be the incoming new Program Director. Dr. Schaefer brings a record of excellence in teaching, (represented in being one of the Faculty of Medicine Master Teachers) and medical administration to this role.



Dr. Otto Rorstad, Core Program Director

INNOVATION INITIATIVE “Leading the Way”

The Department of Medicine's Innovation Initiatives continue to experience exceptional results since the inception of these strategic objectives. With the Academic Alternate Relationship Plan funding introduced in September 2005 and running through to June, 2007, we continue to grow project by project.

This has affected a broad number of health services across the continuum of care in both urban and rural settings providing the initiation of community outreach. Several of the 18 Innovation Initiatives involved aspects of community outreach, including the introduction of a nephrology vascular disease risk reduction clinic at the Siksika Nation, the hiring of additional technical and coordinator support of rural Telehealth consultations throughout southern and central Alberta, and support for a set of Clinical Practice Guidelines for commonly encountered infectious diseases for primary care physicians handling predominantly marginalized populations. The introduction of Central Access and Triage established a streamlined and uniform referral policy to improve access to medical specialist care and aided the referral process with the broader community.

Several additional opportunities are being actively explored including aboriginal outreach to the Stoney Nation and outreach to urban marginalized populations through the Alex Community Health Centre and the Calgary Urban Project Society (CUPS). A recently signed Band Council Resolution with the Stoney Nation will pave the way for on-site consultations in Morely at the Stoney Health Centre. For over three decades the Alex Community Health Centre had focused its health care delivery on vulnerable, low income, homeless and immigrant populations with Calgary. CUPS is devoted to helping impoverished individuals and families.

Providing on-site, case conference style, educational and/or telephone consultation for patients within their respective communities offers many advantages. Barriers to subspecialist care, including travel, language difficulties, clinic navigation difficulties, and multidisciplinary care coordination are reduced. The opportunity to provide enhanced care for patients with multiple co-morbidities and difficult to manage problems is significant. Enhanced care for these patients may lead to improved outcomes, less complications and thus reduce the potential for Emergency Room encounters and acute care hospitalizations.

The Kidney Disease Prevention Clinic at Siksika First Nation Health and Wellness Centre is an excellent example of a program which strengthens our links for the first Nations community. The Clinic is under the direction of Dr. Brenda Hemmelgarn, a Nephrologist. The purpose of this program is to facilitate management of Aboriginal patients at risk of developing kidney disease in their home communities. The goal is to increase awareness and bring services that are available in the city, to the community. While working with this high risk population can be complicated by a number of barriers, having an impact on the health of community members makes the effort worthwhile.

Patients with hypertension and/or diabetes are at risk of developing kidney disease are referred to the Clinic by General Practitioners (GPs) in the community and those working at the Centre. They are seen and followed regularly by a Nurse Practitioner with a focus on management of diabetes and reduction in cardiovascular risk by targeting blood pressure, blood glucose and lipid control, as well as encouraging life style modification as required. The multidisciplinary team available at Siksika also includes a Community Health Resource Nurse who holds a diabetes support group, a Dietician and a Podiatrist.

Siksika is also the first of all First Nations to make use of telehealth technology. With support from Canada Health Infoway Inc., provincial and territorial electronic health records telehealth networks are being designed and implemented. Through collaboration between Health Canada, the provinces, territories and First Nations, Siksika Health Services is in the process of changing all health files to electronic files.

Serving clients in remote areas and ensuring they have equitable access to effective, efficient and timely health services is one of the Department of Medicine's strategic priorities. Telehealth ensures the Department can deliver this level of service. Each division within the Department of Medicine currently utilizes videoconferencing for educational, administrative or clinical purposes with room to grow. Seven divisions are actively using telehealth with their clinical practice. Since the beginning of the fiscal year, the Department accounts for approximately 21.3% of the clinical telehealth hours within Alberta Health Services, Calgary Zone and area. Dr. Richard Haber is the Medical Advisor leading the Department of Medicine's Clinical telehealth and sees exciting potential for expanded services in the future including Claresholm and High Level. The need for remote access to medical care is growing, particularly as the population ages.

The Division of Geriatrics continues to develop innovative consultative models of care to meet the complex needs of older hospitalized patients through the Geriatric Assessment and Rehabilitation (GARP) units at the Rockyview General Hospital. Consultation services at the three urban acute care hospitals, and frail community-dwelling seniors through rural telehealth, ambulatory clinics and home visits provide additional care to our older hospitalized patients.

The ambulatory capacity of the Seniors Health Clinic at Rockyview Hospital has increased and anticipation of the opening of Bridgeland Seniors Clinic is slated for the fall of 2009. Clinical teams at both sites will include dietitians, nurses, Occupational Therapists, Pharmacists, Physiotherapists and Social Workers as well as consultant physicians.

The Calgary Falls prevention Clinic provides evaluation of older patients who have fallen. A recent review of outcomes showed a 73% reduction in both falls and fall related injuries.

In May, 2008, the Departments of Medicine, Family Medicine, rural Medicine and Cardiac Sciences introduced a single standard referral form for most medical specialties, replacing several clinic-specific referral forms that had been used to date.

The aim of the Medical Access to Service project is to ensure access to quality care that can be sustained. This involves reducing the complexity around making referrals for family physicians, while ensuring the specialties consistently receive the information they require to ensure that patients receive quality care by the most appropriate provider in the right time. The focus is in implementing changes that improve access, safety, quality and effectiveness. This work of this initiative builds upon the successes of the ARP Innovation Initiatives project, which will ultimately include: the implementation of central intake systems and pooling across most specialized medical services; the development and pilot of a multidisciplinary service model for patients with chronic complex needs; and the implementation of AIM (Access Improvement Measures) access and efficiency collaboratives.



**Department of Medicine/Medical Services
Quality Improvement, Patient Safety, Patient Advocate,
Clinical Decision Support and Health Informatics
Annual Report for 2008-2009**

Elizabeth MacKay, Judy Pederson, Gordon Kliwer, Munira Jessa, David Chakravorty,
Jayna Holroyd-Leduc

1. Gridlocc: In the last year there was a significant transition away from the larger GRIDLOCC projects with the majority of the project work being completed by the fall of 2008. The admission guidelines were completed and communicated including expanded guidelines for pulmonary medicine, gastroenterology and nephrology. The focus shifted more to the consultation process in the ED with further identification of the process steps, barriers and communication strategies. Further work in the area will require the transition to use of SCM in the ED. The Clinical Decision Support and Evaluation group was also involved with the flow coordinator, bed huddle and time project evaluations.

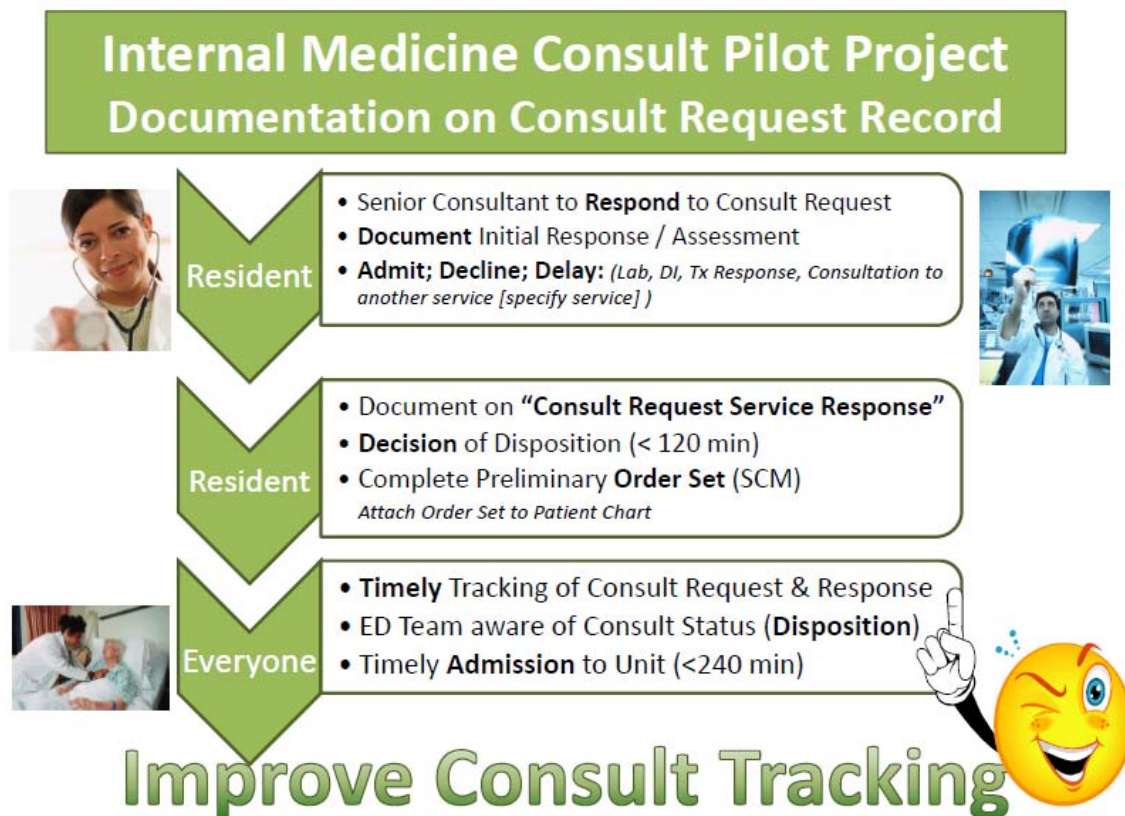
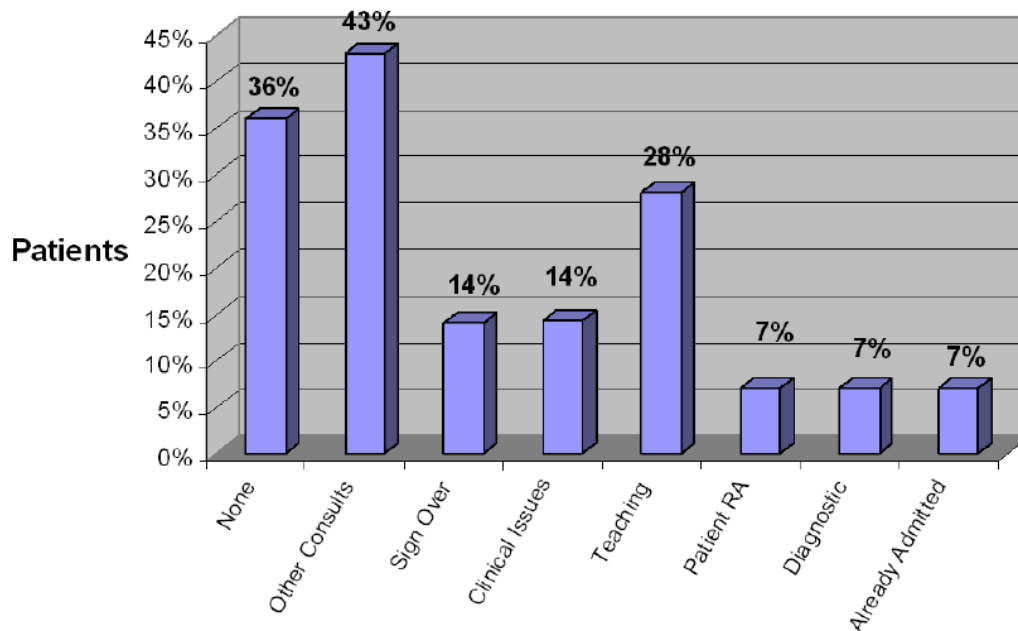


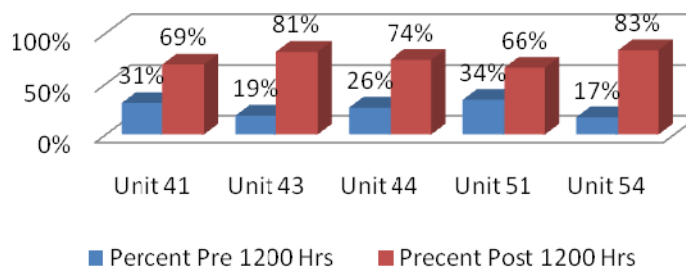
Figure 1. GRIDLOCC ED Consult Project Poster

Reasons for Consult to Admit Delays



Medical Units (%) - PLC Discharges Sept 12-28

Pre/Post 1200 HR



- Living Well Program: The QI team was asked to get involved in helping the Living Well program to help with its increasing wait times for exercise and other classes. Through process mapping, measurement and use of some stream-lining, Lean process improvements we were able to reduce the wait times from 6 weeks to less than one week for enrollment into exercise classes and a significant increase in the use of self-referrals and phone referrals. Further work to simplify the education classes was being developed.

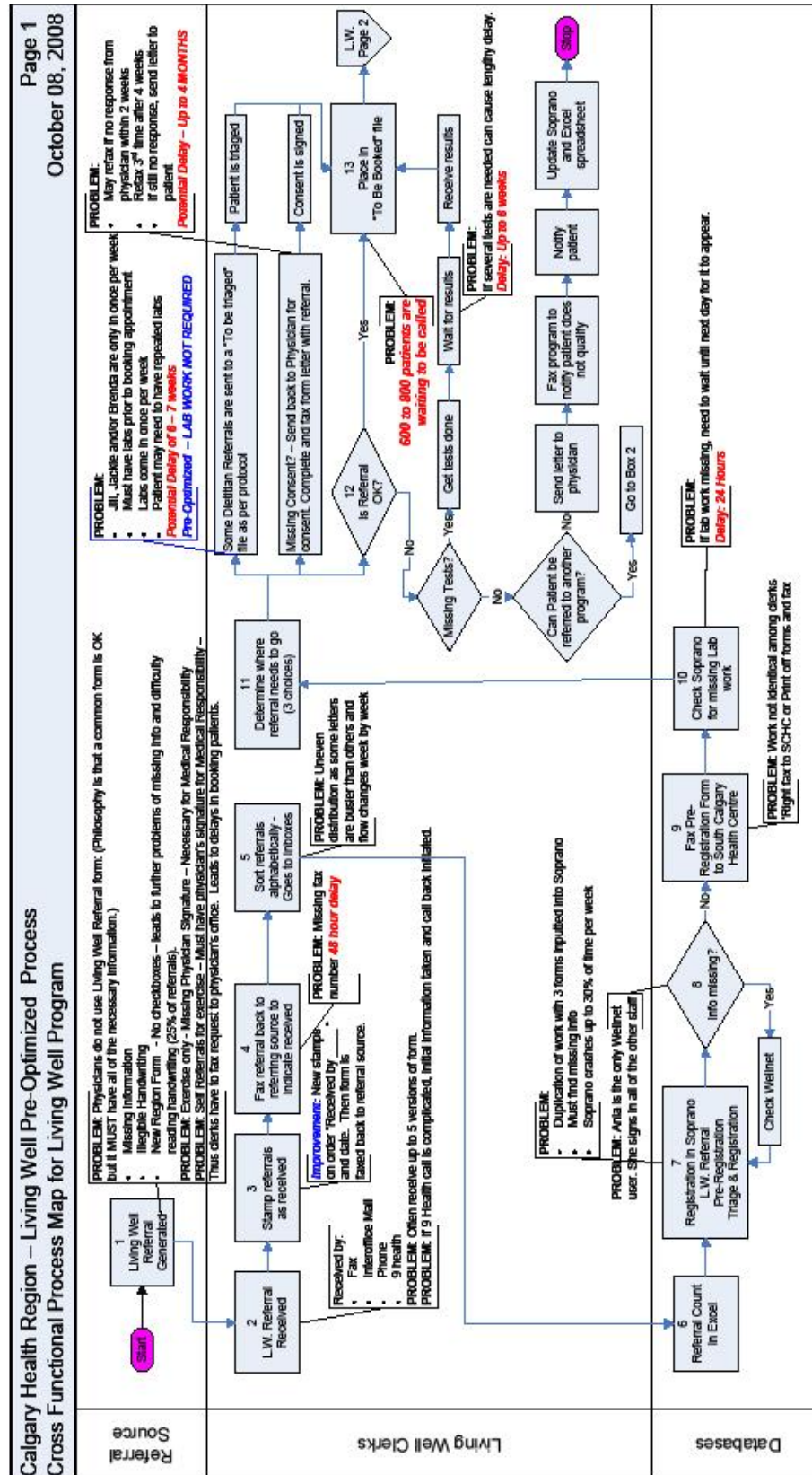


Figure 3. Process map for Living Well Exercise Referral

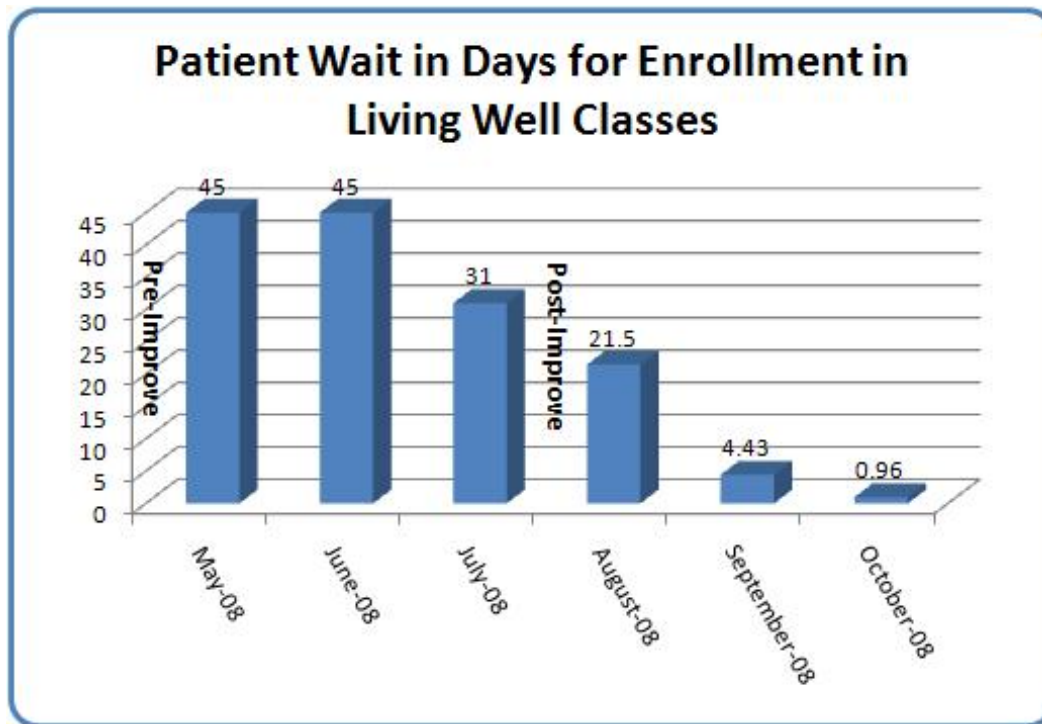


Figure 4. Wait time for enrollment in Living Well Exercise Classes: Pre and Post Intervention

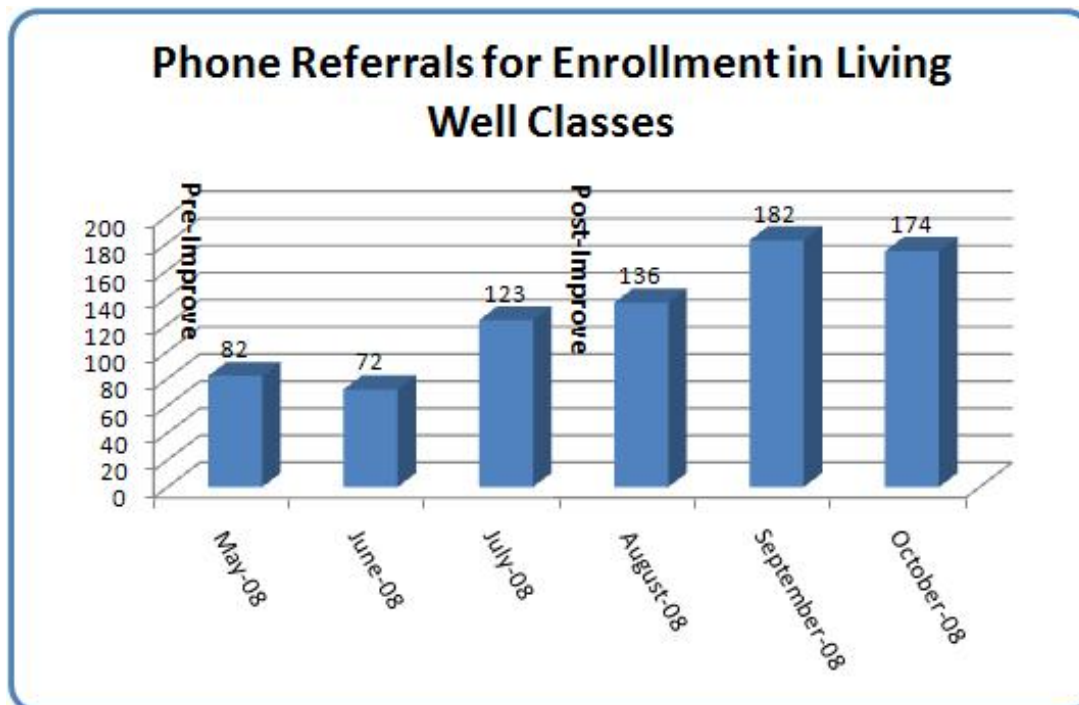


Figure 5. Increase in Self-referrals/phone referrals for Living Well Classes: Pre and Post intervention

3. **TIME Project:** The General Internists at the RGH developed an intervention to improve consult efficiencies in the ED with the use of a dedicated internist in the ED during the daytime hours. The goals were to increase the number of consults and to reduce the time to consult and admission. The Evaluation team assisted with measures and were able to demonstrate a significant increase in consultations including a 30% rate of patients able to be discharged from ED to other outpatient resources rather than admission. There were perceived improvements in time to consultation and communication with the internists but unfortunately no measureable reduction in the time to admission likely secondary to flow issues in the ED.
4. **HCAPHS:** AS part of the performance measures being developed for the Medical Services portfolio, the HCAPHS survey information was used to identify two areas of focus: management of pain and quiet and physician communication with patients. There was significant variability in patient's perceptions around noise experienced on the units with a goal and some pilot work activity to develop some interventions to measure and reduce noise on the units at night at the RGH. There was also significant variability noted in the rates that patients were invited to questions about their care and to be involved in decision-making around about their treatment. In particular there are lower rates of some physician communications noted on the medical teaching units where multiple team members may make it difficult to patients to identify their primary caregivers. Interventions have been developed to improve understanding of the team structure and roles and names of team members to improve these communications.

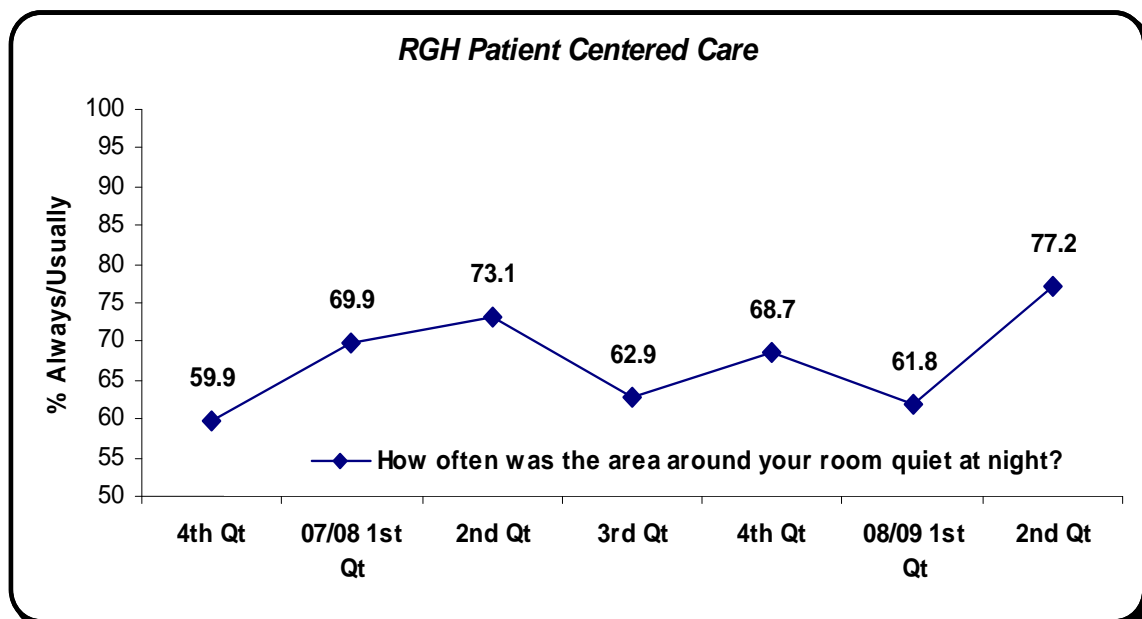
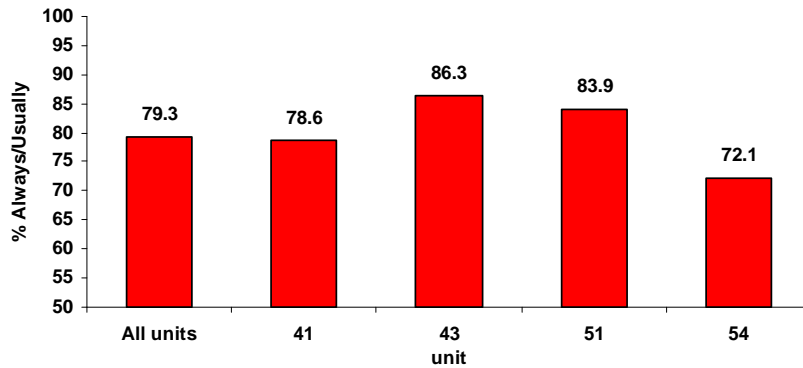
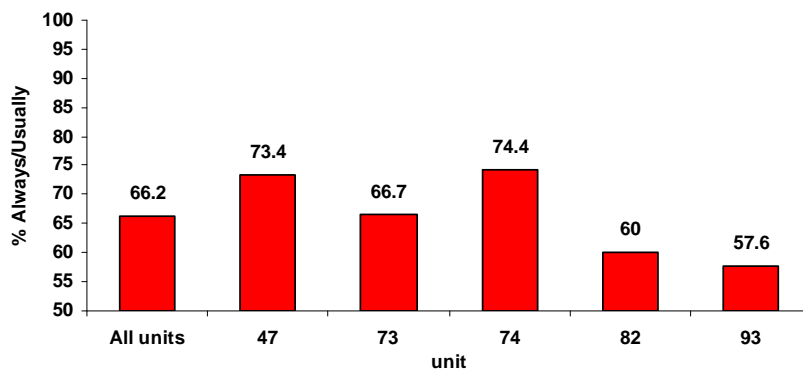


Figure 6. HCAPHS results for 2008-2009: Perception of Quiet.

PLC - How often did doctors invite you to ask questions about your care?



RGH - How often did doctors invite you to ask questions about your care?



FMC - How often did doctors invite you to ask questions about your care?

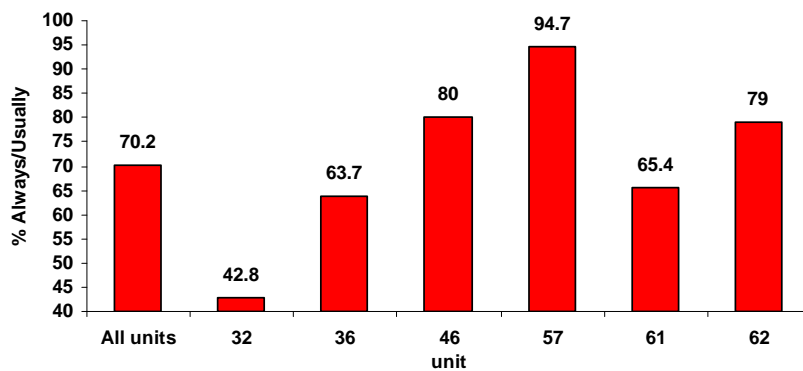


Figure 7. HCAPHs 2008-2009 patient perceptions of being invited by physicians to ask questions.

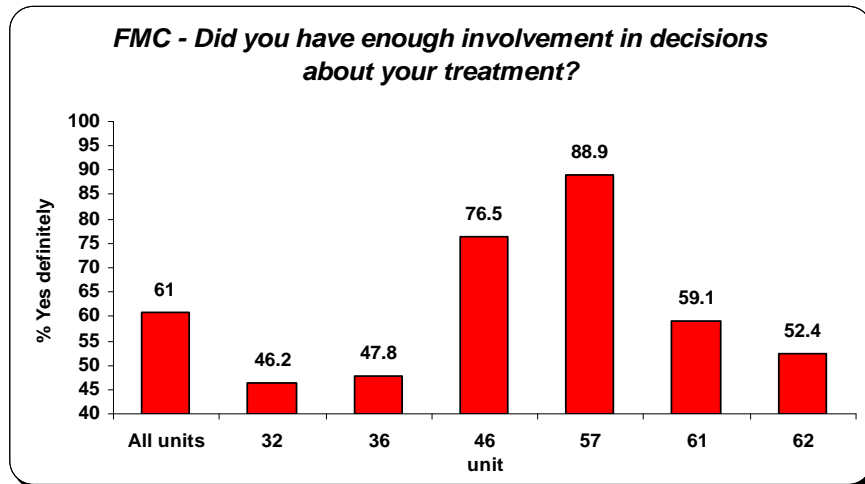


Figure 8. HCAPHs 2008-2009: Perceived involvement in treatment decisions across the medical units at the FMC

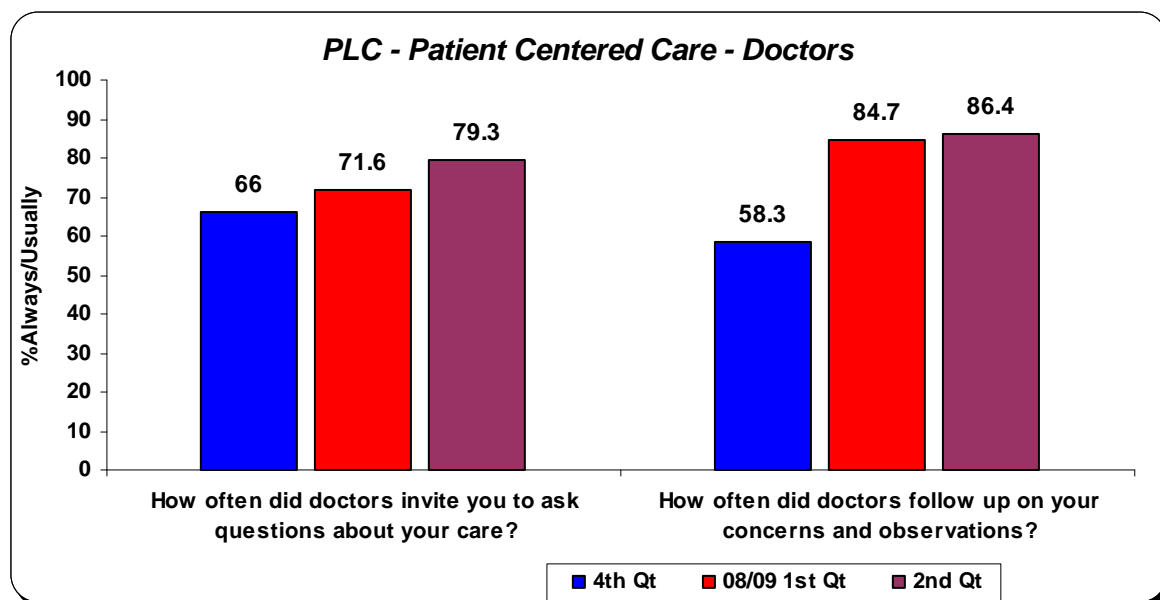


Figure 9. HCAPHs 2008-2009: Followup up patient Concerns and Questions by physicians at PLC

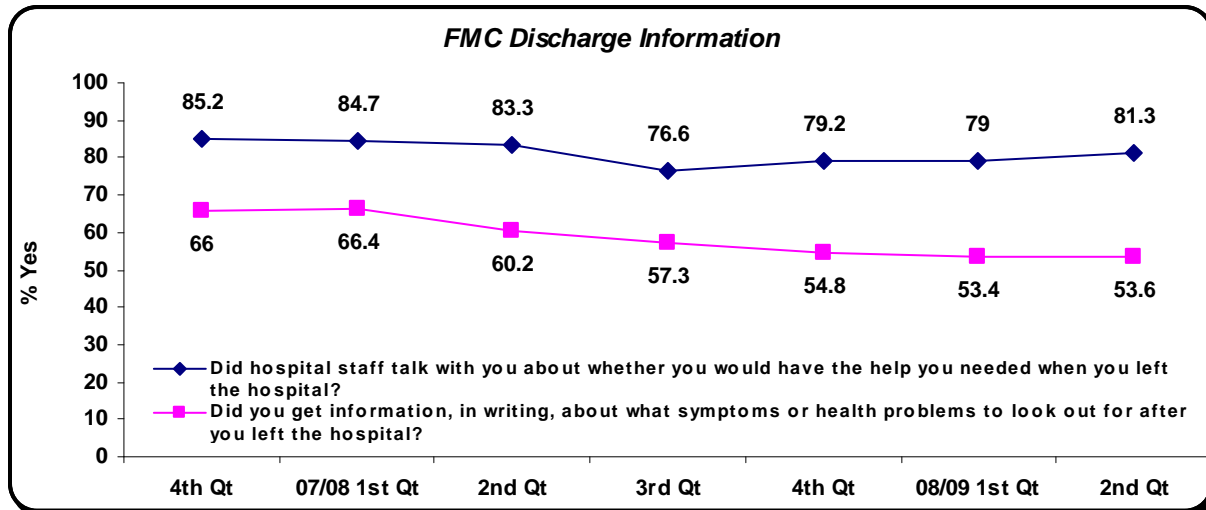


Figure 10. HCAPHS 2008-2009: Communication of Discharge Information.

5. Patient Safety: Ongoing involvement with the Medication Management Reading group continued with work to review safety reports involving medications to identify themes and areas of concern. Key areas identified included the confusion between long and short-acting narcotics. Strategies were developed to ensure that labeling, scm orders and medication administration records shared consistent information about whether a narcotic is long or short-acting version. A safety learning report was issued in this area, in addition to changes made in SCM. TRansdermal patches were also identified as an area of concern with multiple incidents reported where patches were left on or missed including high hazard medications such as fentanyl narcotics and nitroglycerin patches. Several strategies were identified and piloted to better document the location and timing of patches and to include specific orders to discontinue the patches to allow for better tracking and triggering.



Safer Practice Notice

Requirements or solutions for enhanced patient safety in clinical practice for AHS – Calgary Health Region



04 March 2009

Equipment	<input type="checkbox"/>
Medication	<input checked="" type="checkbox"/>
Professional Practice	<input type="checkbox"/>
Technology	<input type="checkbox"/>
Update	<input type="checkbox"/>

For action by:

- All Medication administrators
- Nursing staff
- Physicians

For the information of:
Patient Care Managers
Site Managers
Clinical Nurse Educators
Pharmacy Staff

Contact:
Lisa Stroscher
Medication Safety Specialist
Health Outcomes, AHS – CHR
(403) 944-1822
lisa.stroscher@albertahealthservices.ca

Differentiating SHORT and LONG acting Narcotics

The Issue

A variety of abbreviations are used to denote various SHORT and LONG acting medications. Common abbreviations include CR (Controlled Release), SR (Sustained Release), ER (Extended Release), and IR (Immediate Release). Medication administration errors involving mix-ups with short and long acting narcotic medications are frequently reported in the Safety Learning Reporting system, and the Medication Reading Group has identified this issue as a significant trend across the Region.

Action

- To help differentiate these narcotics, "SHORT acting" or "LONG acting" is being added to the electronic and paper MARs, pharmacy product labels, and storage locations, for narcotic products that are available in both release formulations, in an effort to reduce the potential for inadvertent mix-ups.
- Staff should verify the release rate formulation as part of the 7 rights of medication administration.

Task Description	Task Start
Medications: Pathfinder, Test 1015536392/100031767469	
• oxycodone CR tab 30 mg PO q12h LONG acting narcotic Do Not Crush or Chew	2009-Jan-09 10:42
• oxycodone tab 10 mg PO q4h-SHORT acting narcotic	2009-Jan-09 10:42



Scheduled Medications	
Order # 2	Oxycodone TAB 10 mg
Start: 05Jan12 07:15	
Stop: 06Jan17 15:59	(Oxycodone CR) (10mg) PO BID SHORT acting narcotic
05	20
PRN Medications	
Order # 1	Oxycodone CR TAB 10 mg
Start: 06Jan12 07:15	
Stop: 06Jan17 15:59	(Oxycodone CR) (10mg) PO BID LONG acting narcotic



Figure 11. Safer Practice Notice around use of long and short-acting narcotics.



Safer Practice Notice

Requirements or solutions for enhanced patient safety in clinical practice.



June 25, 2008

Equipment	<input type="checkbox"/>
Medication	<input checked="" type="checkbox"/>
Professional Practice	<input checked="" type="checkbox"/>
Technology	<input type="checkbox"/>
Update	<input type="checkbox"/>

For action by:

Nurses
Licensed Practical Nurses

For the information of:
Patient Care Managers
Assistant Patient Care
Managers
Clinical Nurse Educators

Medicated Transdermal Patches:

Changes to eMAR Documentation

The Issue

The failure to remove medicated transdermal patches (e.g. nitroglycerin, fentanyl, nicotine, etc.) from patients has been identified by the Medication Reading Group (MRG) as a common safety concern across the Region. Adverse outcomes for patients can range from reduced effectiveness of the patch, blood pressure impacts to respiratory depression. The MRG identified this trend while reviewing medication related safety learning opportunities reported in the new Safety Learning Reporting System.

Following a review of the issue and discussions with front line nursing staff and Professional Practice & Development, the MRG has recommended solutions to enhance patient safety. One of the recommendations involves changes to the electronic Medication Administration Record (eMAR) in SCM, effective June 26, 2008. The MRG will evaluate the effectiveness of this change as well as seeking further solutions.

Action

Changes involve mandatory documentation in the eMAR for patch application and removal orders:

1. The location of the patch on patient must be documented
2. The number of patches applied to patient must be documented
3. For patches without removal orders, documenting removal of previous patches will be mandatory



Contact:

Information about the Medication Reading Group & eMAR changes:

Lisa Stroscher, MRG chair
Medication Safety Specialist, Health Outcomes
lisa.stroscher@calgaryhealthregion.ca (403) 944-1822

Information about SCM and the eMAR:

Marina Barre
PCIS Clinical Documentation Team Lead, ITTS
marina.barre@calgaryhealthregion.ca (403) 943-0394

Figure 12: Safer Practice Notice around use of transdermal patches.

Further work is to continue on the safer use of insulin and heparins, other high hazard medications and development of better defined medication management policies.

6. Clinical Informatics: SCM: Continued involvement with the Clinical Core Design Team and the Clinical Decision Support Teams for SCM including further development of ordersets, the process for accessing data from SCM and the appropriate research process required as well as development of the electronic discharge summary and identified health issues and problem/work-lists. The DVT prophylaxis ordersets were revised to include more definitive decision support and the area was identified as a demonstration project to develop the process for extracting data from SCM to evaluate quality and safety outcomes.

HI/DVT Prophy - Medical Conditions [3 orders of 13 are selected] - DEVOrderSet, Jody

Major Risk Factors	
1. Major surgery	5. Previous VTE
2. Trauma	6. Congenital and/or Acquired Thrombophilia States
3. Ischemic Stroke or Paralysis	7. Mechanical Ventilation
4. Spinal Cord Injury	8. Active Cancer and its treatment

Minor Risk Factors	
1. Age > 40 years	8. Collagen Vascular Disease
2. Estrogen Therapy	9. Inflammatory Bowel Disease
3. Nephrotic Syndrome	10. Congestive Heart Failure
4. Pregnancy / Post-Partum	11. Obesity
5. Prolonged Immobility > 24 hours	12. Sepsis
6. General Anesthesia > 1 hour	13. Varicose Veins
7. Severe Respiratory Disease	

LOW RISK: No Risk Factors - No medical prophylaxis required, early ambulation only.

MODERATE RISK: 1 or 2 MINOR risk factors.

Order	Dose	Unit	Route	Frequency	Additional Information
MODERATE RISK: Choose One - 2 item(s)					
<input type="checkbox"/> heparin inj	5,000	unit(s)	SUBCUTANEOUSLY	q8h	Continue until discharge and/or fully ambulant
<input type="checkbox"/> heparin inj	5,000	unit(s)	SUBCUTANEOUSLY	q12h	Continue until discharge and/or fully ambulant

HIGH RISK: 1 Major Risk Factor or 3 to 4 MINOR Risk factors

Order	Dose	Unit	Route	Frequency	Additional Information
HIGH RISK: Choose One - 3 item(s)					
<input type="checkbox"/> heparin inj	5,000	unit(s)	SUBCUTANEOUSLY	q8h	Continue until discharge and/or fully ambulant
<input type="checkbox"/> enoxaparin inj	40	mg	SUBCUTANEOUSLY	daily	Continue until discharge and/or fully ambulant
<input type="checkbox"/> dalteparin inj	5,000	unit(s)	SUBCUTANEOUSLY	daily	Continue until discharge and/or fully ambulant

HIGHEST RISK: Trauma, > 1 MAJOR Risk Factor +/- Multiple MINOR Risk Factors

Order	Dose	Unit	Route	Frequency	Additional Information
HIGHEST RISK: Choose One - 2 item(s)					
<input type="checkbox"/> enoxaparin inj	30	mg	SUBCUTANEOUSLY	q12h	Continue until discharge and/or fully ambulant
<input type="checkbox"/> dalteparin inj	5,000	unit(s)	SUBCUTANEOUSLY	daily	Continue until discharge and/or fully ambulant

For patients with high risk for VTE who have contraindications to anticoagulation prophylaxis should receive:

Order	Action	Frequency	Length	Additional Information
Other Orders - 2 item(s)				
<input type="checkbox"/> Sequential Compression Device	Apply	<Continuous>		For patients with contraindications to anticoagulants and/or at highest risk.
<input type="checkbox"/> Graduated Compression Stockings	Apply			Recommended for highest risk patients as additional therapy.

Added the table of risks and the associated medications for each group. See below for the inside of the forms

Figure 13. DVT prophylaxis orderset for Medical Patients: SCM Clinical Decision Support

*3587 IP Discharges from FMC, PLC, RGH, age>18 yrs, LOS>=72 hrs,
from July 1 2008 to July 31 2008*

Order name	No. of orders
heparin orders	1091 (57% were ordered within orderset)
enoxaparin orders	336 (67% were ordered within orderset)
dalteparin orders	519 (55% = = =)
warfarin orders	347 (90% = = =)
tinzaparin orders	137 (none ordered within an orderset)
TOTAL pharmacologic orders (ordered and administered)	2430
sequential compression device	829 (66% were ordered within orderset)
graduated compression stockings	30 (80% = = =)
antiembolism stockings	91 (9% = = =)
TOTAL devices	950
TOTAL ORDERS	3380 → in 94% of d/c a DVT order was ordered

Figure 14. Preliminary DVT prophylaxis evaluation. Significant use of some form of prophylaxis in 94% of discharges.

6. Performance Measures Development: The group continued work on the development and communication of the Medical Services performance indicators using the Alberta HealthQuality Matrix as a guide. Priority areas identified for interventions included readmissions for CHF and COPD as well as the HCAPHs survey measures, dvt prophylaxis and the GRIDLOCC measures. Validated measures to be placed on the website and disseminated to medical services leaders.

MEDICAL SERVICES: INTERNAL MEDICINE AND FAMILY MEDICINE

DIMENSIONS OF QUALITY PERFORMANCE MEASURES

ACCEPTABILITY

Physician Rating
Responsiveness of Hospital Staff

ACCESSIBILITY

Time from Consult Request to Decision to Admit From ED - Hospitalist
Time from Consult Request to Decision to Admit From Ed – Medicine
Department of Medicine/Family Medicine Bed Wait Time in ED from Decision to Admit

APPROPRIATENESS

EFFICIENCY

Department of Medicine/Family Medicine Inpatient Acute Length of Stay
Percent of Department of Medicine/Family Medicine Inpatients Admitted to Medical Unit
ALC Activity.

EFFECTIVENESS

Mortality.

Unplanned Readmissions.

SAFETY

Percent of VTE Occurrence...

Percent of Health Care Related VTE

MRSA – Rate within Medicine Units.

UTILIZATION

Department of Medicine/Family Medicine Total Inpatient Activity by Most Responsible Physician

7. QI/Safety Education: Medicine residents educational workshops continued in the areas of GRIDLOCC, SCM/Clinical decision support and patient safety. Involvement in courses/workshops in Disclosure/HealthSystems Safety Analysis, LEAN process improvement/Six Sigma, the QI Forum

8. Med/Psych Unit Evaluation: The evaluation team has been involved with development and implementation of the evaluation for the Med-Psych Project at the PLC. Preliminary work identified an appropriate baseline population with admissions for acute medical disorders which were associated with significant and active mental health issues that might benefit from a co-management model between IM and psychiatry. The primary focus for the outcomes will include length of stay, readmissions and outpatient utilization.

INTERNATIONAL AND NATIONAL LEADERSHIP

INTERNATIONAL and NATIONAL LEADERSHIP

Member/Faculty	Division	Impact/Position
Regine P. Mydlarski	Dermatology	Medical Advisor, International Pemphigus and Pemphigoid Foundation
Laurie Parsons	Dermatology	Chair, National Dermatology Professors of Dermatology
Richard Haber	Dermatology	Co-Chair Dermatology Examination Board , RCPS
David Hanley	Endocrinology	Chair, Osteoporosis Canada Scientific Advisory Council President, Canadian Society of Endocrinology and Metabolism
David Lau	Endocrinology	Chair, ADAPT Steering Committee Vice-Chair, Canadian Obesity Network
Ronald Sigal	Endocrinology	Chair, Subcommittee on Exercise Guidelines, Canadian Association Subcommittee on Exercise Guidelines
Paul Gibson	General Internal Medicine	Member, North American Society of Obstetric Medicine (NASOM)
Maria Bacchus	General Internal Medicine	Vice President, Education CSIM Chair, CSIM Education Committee Chair, RCPSC – Oral Board of Examiners
Robert Herman	General Internal Medicine	Chair, Canadian Hypertension Society
Jayna Holroyd-Leduc	Geriatrics	Co-Chair, Aging Geriatrics, Society of General Internal Medicine
Samuel Lee	Gastroenterology	Chair, International Ascites Club
Kelly Burak	Gastroenterology	Chair, Canadian Liver Transplant Group
Alaa Rostom	Gastroenterology	Chair, Gastroenterology Examination Board, RCPS
Catherine Dube	Gastroenterology	Co-Chair, Alberta Colorectal Cancer Screening Program
Jonathan Love	Gastroenterology	Chair, Endoscopy, Alberta Society of Gastroenterology

INTERNATIONAL and NATIONAL LEADERSHIP

Page 2

Member/Faculty	Division	Impact/Position
Russell Hull	Hematology	Chair, Steering Committee Overall Principal Investigator EXCLAIM Trial
Man-Chiu Poon	Hematology	Chair, Expert Panel for Prospective Observational Registry
Jan Storek	Hematology	Co-Chair, Center for International Blood and Marrow Transplant Research
Robert Card	Hematology	Chair, Association of Hemophilia Clinic Directors of Canada
John Conly	ID	Board of Directors Member Canadian Committee on Antimicrobial Resistance
Andrew Pattullo	ID	President, Infectious Disease Society of Alberta IDSA Calgary Area Physician Association
Lee Anne Tibbles	Nephrology	Director of the Corporation 2010 Transplant Congress Organizing Committee Chair, The Transplantation Society
Braden Manns	Nephrology	Chair, Canadian Society of Nephrology Scientific Committee Chair, Canadian Society of Nephrology Anemia Guidelines Committee
Douglas Helmersen	Respirology	Chair, 2009 Canadian Pulmonary Hypertension Forum
Christopher Mody	Respirology	Co-Chair, Post Graduate course in host defence, American Thoracic Society
Stephen Field	Respirology	Chair, Membership Committee Canadian Thoracic Society
Sharon LeClercq	Rheumatology	Member, 3e multinational working group
Gary Morris	Rheumatology	Examiner, Graduate Medical Council of Canada

MEDICAL LEADERSHIP AND ADMINISTRATION



Dr. Maria Bacchus
Deputy Head, Vice Chair
Strategic Planning and
Clinical Affairs,
Site Leader,
Foothills Medical Centre



Dr. John Conly
“Acting” Site Leader
Rockyview General



Dr. Jane Lemaire
Vice Chair
Physician Wellness
& Vitality



Dr. Elizabeth MacKay
Site Leader
Peter Lougheed Centre

RESEARCH HIGHLIGHTS

RESEARCH HIGHLIGHTS

- **574 ARTICLES** editorials and invited reviews published in peer reviewed journals (unedited)
- **73 ARTICLES** published in non-peer reviewed journals
- **136 ABSTRACTS** published
- **13 Book Chapters** and Book Chapters non-peer reviewed published
- **434 PRESENTATIONS** (invited)
- **\$29.4 Million** in research grants, (significant increase of \$9.8 Million) clinical trials and industry sponsorship



A W A R D S



ENDOCRINOLOGY

Dr. Hanan Bassyouni
Dr. Shelly Bhayana
Dr. Gregory Kline
Dr. Gregory Kline
Dr. Otto Rorstad

Golden Bull Award
Excellence in Teaching Award
Goldstar Teaching Award
Faculty of Medicine Award for Clinical Research
Certificate of Merit – Canadian Association for Medical Education

GASTROENTEROLOGY

Dr. Sydney Bass
Dr. Paul Beck
Dr. Kelly Burak
Dr. Sylvain Coderre
Dr. Sylvain Coderre
Dr. Sylvain Coderre
Dr. Sylvain Coderre

Dr. Jose Ferraz
Dr. Remo Panaccione
Dr. Martin Storr

Dr. Howard McEwen Award for Clinical Excellence
Watanable Distinguished Achievement Award
Gold Star Award
McLeod Award
ARP Merit Award
UME Gold Star Award
Young Educator Award

Faculty of Medicine, Research Award
Gold Star Teaching Award
International Foundation for functional Gastrointestinal Disorders (IFFGD) Award

GENERAL INTERNAL MEDICINE

Dr. Don Cook
Dr. Robert Herman
Dr. Aleem Bharwani
Dr. Brian Forzley
Dr. Brian Forzley
Dr. Jane Lemaire
Dr. Jane Lemaire
Dr. Elizabeth MacKay

FOCUS Trial Investigators Award (2008 National)
Osler Award, Canadian Society for Internal Medicine
University of Calgary, Excellence in Teaching Award
University of Calgary, Excellence in Teaching Award
Rookie of the Year Award – Residency Training Award
Department of Medicine, Professionalism Award
Department of Medicine, Lifestyle Balance Award
Department of Medicine, Quality Improvement and Patient
Safety Award (shared with the Division of Hematology and the
Bone Marrow Transplant Service)

Dr. Hanan Bassyouni
Dr. William Ghali
Dr. William Ghali

Golden Bull, IM Residency Program Teaching Award
Repeat Offender, IM Residency Program Teaching Award
Outstanding Clerkship Teaching Award

GERIATRICS

Dr. Jim Silvius

Dr. John Dawson Award for Clinical Excellence (FMC)

HEMATOLOGY

Dr. Shannon Jackson
Dr. Deidre Jenkins
Dr. Man-Chiu Poon

Bayer International Hemophilia Awards Program
Gold Star Teaching Award
Guenter Distinguished Achievement Award
International Healthcare Volunteer Award – World Federation
of Hematology (2008)

INFECTIOUS DISEASES

Dr. Donna Holton

Dr. Lindsay E Nicole Award

NEPHROLOGY

Dr. John Klassen
Dr. Kevin McLaughlin
Dr. Kevin McLaughlin
Dr. Sophia Ahmed

Endowed Chair in Apheresis (FMC)
Silver Tongue Award – Residency Training Program
Outstanding Clerkship Teaching Award
Research Preceptor – Residency Training Program

RESPIROLOGY

Dr. John Chan
Dr. Stephen Field
Dr. Ward Flemons
Dr. Gordon Ford
Dr. Kristen Fraser
Dr. Julie Jarand
Dr. Richard Leigh
Dr. Richard Leigh
Dr. Paul MacEachern
Dr. Alain Tremblay

Gold Star Teaching Award
Dr. John Dawson Award for Critical Excellence
People First Award (CHR)
CTS Presidents Award
Gold Star Teaching Award
International Travelling Fellowship AWARD (RCPS)
Clinical Scientist Award (CIHR)
Clinical Investigator Award and Research Prize (AHFHR)
Gold Star Teach Award
ARP Merit Award – Department of Medicine

RHEUMATOLOGY

Dr. Martin Atkinson

Division of Rheumatology
Dr. Gary Morris

RAC 1 Prix d'excellence (2008 recipient)

Department of Medicine Innovation Award
Silver Finger Award – Residency Training Program



DEPARTMENT OF MEDICINE

DIVISION HIGHLIGHTS

Locations

Foothills Medical Centre

Peter Lougheed Centre

Rockyview General Hospital

Sheldon Chumar Health Centre

Site Chief

Dr. C. Maria Bacchus

Dr. Elizabeth MacKay

Dr. John Conly (Acting)

Sean McIntyre, Site Director



Division

Division of Dermatology

Division of Endocrinology & Metabolism

Division of Gastroenterology

Division of General Internal Medicine

Division of Geriatric Medicine

Division of Hematology &
Hematologic Malignancies

Division of Infectious Diseases

Division of Nephrology

Division of Respiriology

Division of Rheumatology

Division Chief

Dr. Richard Haber

Dr. Alun Edwards

Dr. Samuel Lee & Dr.
S. Coderre (Co-Acting)
Dr. Subrata Ghosh,
March, 2009

Dr. Robert Herman

Dr. David Hogan
(Acting Division Chief)
Dr. Karen Fruetel
September, 2008

Dr. Doug Stewart

Dr. Ron Read (Acting)

Dr. Nairne Scott-Douglas

Dr. Chris Mody

Dr. Liam Martin

**Division of Dermatology
Division Chief – Dr. Richard Haber**

Administration

The Division of Dermatology consists of 4 full-time ARP members and 19 community based dermatologists. Currently, 19 members of the division hold a University of Calgary academic appointment.

The Division has been well represented by several members in various positions.

- Dr. Richard Haber English Co-Chair of the Dermatology Examination Committee of the Royal College of Physicians and Surgeons.
- Representative of the Dermatology Specialty Committee of the Royal College as Chair of the Examinations Committee.
- Medical Telehealth Advisor for the Department of Medicine and serves on the Medical Services Executive Council, ARP Management Committee
- Reviewer for the ARP Application Review Committee.
- Successful contributions in the Division included organization of the Division's Patient viewing Rounds and chairing the accompanying Divisional business meetings.

The Division's organization of the Dermatology Journal Club by Dr. Laurie Parsons was an outstanding success along with the continuation of the Wound Care Clinics. In conjunction with the Department of Medicine, Dr. Parsons became a representative of the Wound Advisory Committee and a representative of the Best Practice Committee. Dr. Parsons also remains involved with wound care telehealth sessions.

The Dermatology Division recognizes Dr. Regine Mydlarski as the Medical Co-Director of the Medical Advisory Council of the Canadian Pemphigus and Pemphigoid Foundation. Dr. Mydlarski also participated as a member of the Advisory Board of the Skin Malignancy Working Group in transplantation. She also continues as Director of Immunodermatology for the Division and was the Director of Transplant Dermatology for the Southern Alberta Transplant Program.

The Division welcomed Dr. Habib Kurwa in September, 2008 after being recruited from the St. John's Institute of Dermatology, St. Thomas' Hospital, London England, bringing with him a wealth of knowledge and experience in Mohs Micrographically Surgery.

Clinical

Specialty clinics in immunobullous disease and immunodermatology were continued by Dr. Mydlarski. These are tertiary referral clinics with complex patients receiving referrals from other dermatologists, rheumatologists and other allied specialists in the Calgary area, Western Canada, Central Canada and parts of the United States. As well, Dr. Mydlarski continues with the dermatology solid organ transplant clinic in conjunction with the Southern Alberta Transplant Program, providing dermatologic assessment of high risk patients.

Three subspecialty patch tests clinics per week with referrals from dermatologists throughout Calgary are conducted by Dr. Laurie Parsons. The Division provides for Dr. Parsons to participate in three multidisciplinary wound care clinics and one general dermatology clinic per week with continuation in providing active participation in wound care telehealth sessions.

Specialist on Call coverage that took part in city wide community dermatology included: Drs. Stewart Adams, Kirk Barber, Allan Behm, Adrian Gilli, Sharon Hackett, Barbara Kellner, Todd Remington, Lynn Robertson, Gregory Storwick, Derek Woolner and Catherine Zip.

With the addition of Dr. Habib Kurwa, the Division has established a Mohs Micrographically Controlled Surgical Clinic to treat complex skin malignancies at the Richmond Road Diagnostic and Treatment Centre. Currently four Mohs surgical clinics per week are conducted, in addition to two surgical consultation clinics per week. Dr. Kurwa practices in the Cutaneous Tumor clinic in the Tom Baker Cancer Centre and participates in the Cutaneous Tumor Group meetings on a weekly basis.

Community dermatologists who offer medical laser services in their offices include: Drs. Stewart Adams, Sharon Hackett, Todd Remington, Gregory Storwick and Derek Woolner. Phototherapy services are also provided in the dermatology community by Drs. Stewart Adams, Kirk Barber, Allan Behm, Sharon Hackett, Barbara Kellner, Derek Woolner and Catherine Zip.

Dermatologists who acted as preceptors for Internal Medicine residents included Drs. Adrian, Catherine Zip, Gregory Storwick, Todd Remington and Lynn Robertson.

The Division Head of Dermatology, Dr. Richard Haber, was instrumental in providing two general dermatology clinics per week, one pediatric dermatology clinic at the Alberta Children's Hospital and one dermatology telehealth clinic. A telehealth dermatology consultation clinic to the Siksika First Nation Medical Centre has been established for monthly clinics.



Dr. Richard Haber, MD, FRCPC
Division Head, Dermatology

Education

The Division ran a dermatology elective program for Internal Medicine residents with a resident in every block. Supervision of elective undergraduate medical students, clerks, family medicine residents and other medical residents (including medical genetics and pediatrics) were continued. The Division sponsored the third Annual Day in Dermatology in CME in October, 2008 and was attended by over 60 family physicians. For the first time approximately 10 final year family practice residents were included. Highlights of the Division's educational participation include the following:

- Drs. Gili, Haber, Mydlarski, Parsons, Remington, Robertson, Woolner and Zip lectured to the Undergraduate Medical Students in MDCN-360. Dr. Parsons also lectured during the undergraduate Woman and Child Health Teaching.
- Drs. Haber, Parsons, Mydlarski, Remington, Woolner and Zip facilitated small group dermatology teaching sessions for students in MDCN-360.
- Dr. Habib Kurwa Presented Medical Grand Rounds in April 2008 on "Mohs Micrographic Surgery for Skin Scancer – An Overview".
- Dr. Gilles Lauzon presented Medical Grand Rounds in September, 2008 on Dermatology for Internists.
- Dr. Regine Mydlarski presented Medical Grand Rounds in December, 2008 on Skin Disease in Solid Organ Transplantation.
- Drs. Haber, Parsons and Mydlarski, presented oral and poster presentations at the 83rd Canadian Dermatology Association Annual Meeting in Montréal, PQ in June of 2008.
- Dr. Mydlarski gave an invited presentation to the Toronto Dermatology Society in November, 2008, entitled "Skin Disease in Solid Organ Transplantation".



Future Directions and Challenges

With the recruitment of Dr. Habib Kurwa to a full-time ARP position the Division has been and will continue to be instrumental with the establishment of the Mohs Surgical Clinic for patients with skin cancer in Alberta.

The Division has also been fortunate to recruit Dr. Lynne Roberston to a full-time ARP position during this reporting year. Dr. Roberston will begin September 2009 and will be able to provide much needed clinical expertise in treating patients with medical dermatology problems. Involvement in teaching medical students and residents rotating through the Division will be a great asset.

Dermatology telehealth consultations have been expanded to the Siksika Reservation Health and Wellness Centre. This has been of great benefit to diagnosing and treating members of the Siksika First Nations. This allows the ease for the population of the Siksika Reservation to be seen in their own community and avoiding the time and expense of traveling to Calgary for dermatology consultation. The Division is hopeful of expanding dermatology telehealth to other sites of need including Claresholm and High Level.



The Dermatology Division has long desired to establish a new Dermatology Residency Program at the University of Calgary. Discussions with the Ministry of Health of Alberta commenced in November, 2008. This has culminated in receiving Ministerial approval for this program. Currently, the Division is proceeding to obtain accreditation from the Royal College and hopes to be included in the CaRMs 2010 match. This will be the first new Dermatology Residency Training Program in Canada since 1988. The Division is excited with the opportunities of involvement and participation in this anticipated program.

**Division of Endocrinology and Metabolism
Division Chief – Dr. Alun Edwards**

Administration

Our Division members have a broad spectrum of administrative roles that range from Divisional to International in scope. Contributions are also prevalent at provincial and national levels in scientific-clinical committees of national societies involving obesity, diabetes and osteoporosis.

Dr. David Hanley and Dr. Ron Sigal contribute to international committees on bone densitometry and exercise diabetes respectively.

Significant contributions are made by division members to education administration. Dr. Chris Symonds efforts as Program Director in Endocrinology and Dr. Gregory Kline, Dr. Julie McKeen and Dr. Bassyouni are heavily involved in undergraduate educational administration. Diabetes services demands considerable administrative time from Dr. Alun Edwards and Dr. Lois Donovan. New recruitment to assist in this area is vital.

Noteworthy positions and changes:

- Dr. Otto Rorstad has been Program Director for the Medicine Education program
- Dr. Peter Grundy has assumed the Chair of the Departmental ARP Management Committee
- Dr. David Hanley is President of CSEM

Clinical

The development and implementation of the Central Access and Triage program for Endocrinology has been a “stand-out” achievement for the reporting period. This complex process had several requirements:

- Specialists’ agreement on referred conditions and appropriate wait times
- Reorganization of booking processes for all endocrinologists’ offices
- Training of a triage nurse and clerical staff to centralize the process



The process has been remarkably successful in terms of acceptance by referring physicians and by endocrinologists who have been forced to abandon previous practice patterns. Approximately 5000 referrals will have been handled in the first year, with evidence of progressively increasing monthly statistics.

Of greatest importance has been the ability to meet all pre-determined targets for wait times according to urgency of referral. Triage endocrinologists now communicate with physicians directly to address management issues of redirect referrals in an expeditious fashion. The success is greatly attributable to the patience and dedication of the nurse and clerical staff.

Division members remain active in providing Telehealth clinics to communities surrounding Calgary as part of chronic disease care.

Endocrinology continues to work innovatively with support of allied health professionals in diabetes, hypertension, lipids, osteoporosis and endocrine testing. Preliminary work is underway to attempt to document the number of patients assisted in this matter.

Research

The Division is proud to report that Dr. Ron Sigal (Senior Scholar) and Dr. Doreen Rabi (Population Health Investigator) were successful in AHFMR career award competitions despite tough competition and reduced award numbers. These two investigators provide a nucleus for a new focus of research excellence (Diabetes and Community Health Sciences) within the Division. They will be joined by Dr. Sonia Butalia as a Clinical Scholar whose training will be supported by a CIHR award.

Progress in research endeavors were made in 2008 by members of the Division.

- 8 members authored 33 peer reviewed articles, 18 peer reviewed abstracts and 21 non peer reviewed publications, book chapters or abstracts.
- Several members are participants in research studies or team grant projects totaling \$4.5 million
-



Education

Undergraduate education (course 4 U of C – UME) now covers approximately 3 calendar months and increased class size requires greater numbers of teachers to act as small group facilitators. Despite the increased demand, the Division provides most of the required teachers and has relied little on supplementation from the Master Teachers Program. There are 40 hours of small group teaching each requiring 14 teachers. There are regular annual commitments to Med 440 courses and to continuous clerkship teaching.

The Endocrinology Training Program underwent the RCPC review in February 2009 and impressed sufficiently to be declared as having no weaknesses and to be both innovative and successful. Three training residents were in place during the reporting period and are due to graduate in June 2009.

Contributions to the Core IM Training program remain as a commitment of the Division both for clinical exposure and also for didactic teaching sessions and contributions to resident evaluations. At the Graduate student level members participated as supervisors or on supervisory and examination committees for 14 graduate students.



Contributions to CME are numerous and reflect the internal commitment to continuous professional learning within the Division. Drs. Corenblum and Lau represent the Department on the Faculty CME committee.

Work with the education of allied health professional is also innovative and extensive. Dr. McKeen's work with educational processes for diabetes educators is noteworthy. Dr. Edwards worked as an educator and supervisor to Academic Detailers (pharmacists) who subsequently delivered programs to family physicians and other community professionals.

Every Division member has serviced as a trainer to the Triage nurse who required the acquisition of skills to assess patient referrals. This amounted to 15-20 hours of contact for each Division member over the course of the year.

Challenges and Future Directions

Previous reports have outlined the role of increasing prevalence of chronic diseases (diabetes, osteoporosis, hypertension and lipids) in the workload of all physicians in the province. Chronic disease delivery offered through PCNs in future offers hope that endocrinologists can take on truly specialist roles in patient care and physician education with better control of clinical workload.

Diabetes as a health problem in the Aboriginal community is well recognised. There have been efforts to address this in the past but progress has been slow and gains hard to sustain. It is hoped that dedicated effort in this area might be achieved with some new initiatives in 2009-10.

Central triage has been a tremendous success in ensuring appropriate and efficient handling of referrals and markedly enhanced communication with primary care physicians. Significant uncertainty about the continuation of Central Triage program and lack of clarity about budgets have threatened the endocrinology efforts. The triage staff has been major contributors to the success of endocrinology's efforts but have been demoralized by administrative neglect of their job security.



The Division has embraced change and innovation, despite the need to alter longstanding practices and discomfort in doing so. Clinical targets have been met (wait times for conditions according to triage priorities have been met). We now face resource restriction that will hamper further progress. Lack of administrative decision and direction about the opening of integrated endocrine – metabolic – chronic disease space at RRDTC will seriously compromise the ability to meet clinical targets for space rather than manpower reasons. Currently endocrinologists working in UCMC can only offer clinics on 5 half days per week (as space is shared by Rheumatologists). Two divisions heavily orientated towards ambulatory care delivery are therefore severely hampered in their ability to offer accessible service that can be integrated with chronic disease care delivery by Acute Care Physicians.

**Division of Gastroenterology
Division Chief – Dr. Subrata Ghosh**

Administration

The Division of Gastroenterology has had an outstanding year with growth and development in many areas, significant accomplishments and many changes. Innovative program development and outstanding physician recruitment to improve quality of care, patient access and research and development have benefited all areas of patient care.

Administrative Structure

The gastrointestinal executive committee was re-structured to strengthen both clinical and research leaderships. In addition, the pivotal role of endoscopic services were recognized in the administrative structure. A new website has been created. The Executive Committee membership is constituted as follows:

➤ Dr. Subrata Ghosh	Division Chief
➤ Dr. Alaa Rostom	Deputy Head Division and Director, CCSC
➤ Dr. Jonathan Love	Site Chief, FMC and Director of Endoscopy
➤ Dr. Tarun Misra	Site Chief, PLC
➤ Dr. Tara Chalmers-Nixon	Site Chief, RGH
➤ Dr. Shane Devlin	Program Director
➤ Dr. Remo Panaccione	Director of Research
➤ Dr. Paul Beck	Co-Director of Research (Basic Science)
➤ Dr. Mani Kareemi	ASG President
➤ Dr. Eldon Shaffer	External Liaison and Mentoring
➤ Dr. Kelly Burak	Director of Hepatology and Education
➤ Dr. Carla Nash	Central Triage
➤ Dr. Michael Ma	City Wide Clinical Services

Recruitment:

These include Dr. Subrata Ghosh as the new Division Chief, Dr. Cynthea Seow, Dr. Yvette Leung, Dr. Penina Krongold and Dr. Kerri Novak. Dr. Ghosh joined the Division in March, 2009 from Imperial College London, where he was the Chair and Chief of Gastroenterology Division since 2002. Dr. Seow and Dr. Leung have significant interest in management of IBD and strengthen the internationally reputed IBD program led by Dr. Panaccione. Dr. Novak has significant novel interest in trans-abdominal ultrasonography for assessment of inflammation of the intestine. Dr. Krongold strengthens the endoscopic ultrasonography service as this represents her special expertise area. A mentorship program for new faculty has been introduced.

Dr. Jon Meddings will be returning to Calgary to take up the position of Vice Dean of the Faculty of Medicine. He will be involved in divisional clinical service and in research.

An ambitious plan of recruitment has been formulated for 2009-2010, including the advertisement of the N.B. Hershfield Professorship in Therapeutic Endoscopy after the terms of reference were finalized by the Search and Selection Committee chaired by Dr. Subrata Ghosh and co-chaired by Dr. P Kubes. Fund raising for the Hepatology Chair is at its final stages and fund raising for the Sutherland Chair in IBD is continuing. It is highly likely that recruitment of Dr. Bertus Eksteen, a highly talented clinician scientist from Birmingham, UK will be successful.

Leadership positions

- | | |
|-----------------------|---|
| ➤ Dr. Ron Bridges | President, Canadian Association of Gastroenterology |
| ➤ Dr. Alaa Rostom | Chair, CAG Education Committee |
| ➤ Dr. Alex Aspinall | Member CAG Research Committee |
| ➤ Dr. Remo Panaccione | Education Committee |
| ➤ Dr. Carla Coffin | CAG Membership Committee |
| ➤ Dr. Subrata Ghosh | Member, International Organization for the study of IBD (IOIBD) |
| ➤ Dr. Jon Meddings | Vice Dean of the Faculty of Medicine |

Awards

- | | |
|---|---|
| ➤ Dr. Gil Kaplan | CIHR New Investigator Award |
| ➤ Dr. Kelly Burak | CAG Young Educator Award |
| ➤ Dr. Martin Storr | Young Investigator Basic Sciences, presented by IFFGD |
| ➤ Dr. Paul Beck | Nominated for Outstanding Clinician of the Year, FMC site |
| ➤ Dr. Sam Asfaha | CIHR Clinician Scientist Phase 1 Award |
| ➤ Dr. Bob Hilsden,
Dr. Alaa Rostom and
Dr. Catherine Dube | Department of Medicine Quality Assurance Award |
| ➤ Dr. Paul Beck | Outstanding research education for residents |
| ➤ Dr. Hughie Fraser | Shaffer Award in the Clinical Fellow Category |
| ➤ Dr. Hughie Fraser | Nominated for CAG Young Investigator Award |
| ➤ Dr. Eldon Shaffer | Nominated for the CAG Education Excellence Award |
| ➤ Dr. Mani Kareemi | Nominated for the Department of Medicine,
Dr. Terry Groves Award |
| ➤ Dr. Remo Panaccione | Nominated for the Department of Medicine,
Dr. John Dawson Award |

Divisional Retreat

A well attended GI Divisional retreat was held to discuss opportunities and challenges facing the division. Excellence in clinical care, research and education depends on innovation and a number of innovative strategies were proposed. A committee to oversee divisional research was proposed and this has been implemented with Dr. Remo Panaccione and Dr. Paul Beck, co-chairing the clinical science and basic science committees. Similarly, leadership roles in clinical services innovation and education innovation were proposed and have been implemented. Retreats were also held for the GI fellows and for the administrative staff. These retreats underpin a comprehensive strategy of innovation proposed for the GI Division to improve patient access, quality of care and safety and translational research. The three areas of strength to build upon were identified as IBD, therapeutic endoscopy and hepatology.

Clinical

This was a very successful year with improvement in patient access and in endoscopy utilization. A number of innovations were introduced including central triage directly to endoscopy procedures and a city-wide approach to utilization of endoscopy slots. In addition a flexible sigmoidoscopy clinic was organized in the UCMC area and launched further improving patient access to investigations. A number of streamlined guidelines for central triage for conditions such as iron deficiency anemia were introduced to further reduce wait times. Overall, wait times have reduced on an average by about 3 months. This is commendable as referrals are up by nearly 20%. Endoscopy utilization is now over 90% at each of the three sites. The IBD program and hepatology program have well developed alternative care providers.

The Colon Cancer Screening Centre (CCSC) has taken a lead role locally and nationally to improve the quality of colonoscopy and provide better detection of early cancers and polyps. A comprehensive quality assurance program has been launched based on the Global Rating Scale (GRS). Dr Rostom, Dr Coderre and Dr Dube visited several UK centres for direct experience of the operational aspects of GRS. The CCSC has also led in introducing FOBT based screening and colonoscopy. The divisional members are intimately involved in the Canadian Association of Gastroenterology Quality Initiative. New innovative procedures such as double balloon endoscopy and esophageal impedance have been introduced.

Education

The last fiscal year has been a very successful year with a wide range of educational programs hosted by the division. These included an IBD symposium and an Endoscopic Ultrasonography Symposium and Pancreatic Update, each with international and national faculty. Over 30 national and international faculty visited the division. A notable innovation was the hosting of Colonoscopy Train the Trainers Course with international faculty. This is expected to improve the colonoscopy training standards in the city and in the province. The city-wide CME program has been revamped and now provide at least 14 city-wide CME events during the course of the year held at FMC in the evenings. An innovation has been the introduction of the city-wide CPC in a multidisciplinary format. In addition, there are IBD rounds and hepatology educational program. The division members are integral to providing the weekly GIRG educational meeting. In addition the Wednesday Fellows half-day and Friday State-of-the Art lectures provide a strong program of continuing education. Dr Kelly Burak continues to provide strong leadership in undergraduate education and Dr Paul Beck in the MD-PhD program. Strong links have been formed with the primary care networks to provide small group visits and education as well as two CME events meant for family physicians. This is expected to improve referral standards and access. The fellows training program has undergone a number of modifications including better formalized feedback and career counseling. The IBD Program, Hepatology Program and Therapeutic Endoscopy Program continue to provide advanced training fellowships which are very popular. Dr Alaa Rostom chairs the CAG Education Committee and Dr Remo Panaccione is a member.

Research

A significant achievement was the Alberta IBD Consortium being awarded with a \$5M AHFMR Team Grant. Dr Subrata Ghosh is an executive committee member, Dr Gil Kaplan one of the Tier 1 leaders, and the investigators include Dr Remo Panaccione, Dr Paul Beck, Dr Kevin Rioux and Dr Martin Storr. The team grant will explore gene-environment-microbe interactions in the pathogenesis of IBD. The team grant will permit significant strengthening of basic science and translational/epidemiological studies of IBD. Dr Bob Hilsden renewed his AHFMR award, a significant achievement in a very competitive environment. Dr Gil Kaplan obtained the prestigious CIHR New Investigator Award. Dr Paul Beck, Dr Carla Coffin and Dr Kevin Rioux obtained CIHR and CFI Grants. Dr Martin Storr obtained an URG Research Grant Award. Clinical research infrastructure improved with the opening of the dedicated Clinical Trials Unit on the 5th floor of the TRW building and both the IBD program and hepatology program have a very strong international clinical trials involvement. Several graduate students are supervised by the faculty.

Challenges and Future Directions

The current financial climate poses challenges to the operation of a resource intensive, procedure based gastroenterology divisions though there may also be some opportunities to improve efficiency. Work is underway to develop integrated care pathways with the PCNS in 12 clinical presentation scenarios. These may provide improved access as well as resource efficiency. Challenges face clinician-scientists with significant laboratory based research because of the uncertainties around the future of AHFMR. The tightening of resources may impact on future recruitment and retention. The pressure on endoscopy services and slots and CCSC colonoscopic screening are immense. Innovative service delivery is no longer a luxury but an imperative.

**Division of General Internal Medicine
Division Chief – Dr. Robert Herman**

Administration

General

The 2008 – 2009 fiscal year has seen growth, achievement and change, for the Division of General Internal Medicine. Led by its Division Chief, Robert Herman, MD., FRCPC, Professor of Medicine, the Division continues to sponsor a wide array of educational patient care and research activities. The Division includes 55 full and part-time members, of which 26 are assigned at FMC, 17 at Rockyview General, 12 at the Peter Lougheed Centre.

Recruitment for the 2008 year included the following physicians:

Amber Fripp	University of Calgary, Major Clinical, Clinical Lecturer
Mike Fisher	University of Calgary, Major Clinical, Clinical Lecturer
Aleem Bharwani	University of Calgary, Clinical Scholar attending the Kennedy Institute of Health Policy, Harvard University in Boston from 2008 – 2010.
Pin Li	Shanghai, China, Clinical Scholar (research under Dr. William Ghali)
Lee-Ann Hawkins	University of Calgary, Clinical Scholar. (supervision by Dr. Laura Macgee in Vancouver and Dr. Mark Brown, Australia, for high-risk pregnancy)

The summer of 2009 will also see two expected recruits:

Irene Ma	University of British Columbia, GFT, Assistant Professor
Michaela Jordan	University of Calgary, Major Clinical, Clinical Lecturer

The division maintains thriving clinical practices and serves as administrators, dedicated educators and successful researchers at the University Calgary. Contributions throughout the Division include national scientific committees relating to research, education, publication and professional specialty societies



Robert Herman, MD, FRCPC
Division Head
General Internal Medicine

Accomplishments

Three years ago, we established links with Community General Internists in Lethbridge, Medicine Hat, Red Deer and Yellow Knife. A community medicine rotation was also successfully launched at the Rockyview Hospital in Calgary. Since that time, RGH has greatly enhanced their position through the recruitment of a number of highly talented physicians with strong educational backgrounds and interest. They have organized their clinical services and call schedules to accommodate MTU needs and, staff has prioritized excellence in healthcare and teaching of residents in their daily practice.



Awards

International

Dr. Don Cook FOCUS Trial Investigators Award, 2008, National

National

Dr. Norm Campbell	Distinguished Speaker in Cardiovascular Medicine, Division of Cardiology, UBC 2008
Dr. Norm Campbell	55 th Annual Sourirajan Lecturer, Department of Medicine, University of Ottawa 2008
Dr. Robert Herman	Osler Award, Canadian Society for Internal Medicine

University

Dr. Aleem Bharwani	University of Calgary Excellence in Teaching Award
Dr. Brian Forzley	University Calgary, Excellence in Teaching Award

Departmental

Dr. Jane Lemaire	Department of Medicine, Professionalism Award
Dr. Jane Lemaire	Department of Medicine, Lifestyle Balance Award
Dr. Elizabeth MacKay	Department of Medicine, Quality Improvement and Patient Safety Award (shared with the Division of Hematology and the Bone Marrow Transplant Service)

DOM Residency Training Program Awards

Dr. Hanan Bassyouni	Golden Bull, IM Residency Program Teaching Award
Dr. William Ghali	Repeat Offender, IM Residency Program Teaching Award

DOM Clerkship Awards

Dr. William Ghali	Outstanding Clerkship Teaching Award Faculty Development
Dr. Fiona Dunn	Masters Thesis in Medical Education (in progress)
Dr. David Sam	Masters in Clinical Epidemiology and Public Health (in progress)
Dr. Ghazwan Altabbaa	Masters Medical Education (in progress)
Dr. Jeff Schaefer	Masters Medical Education – completed.

Noteworthy mention:

Dr. Robert Herman, is the Chair organizer of one of the largest and longest running annual Internal Medicine conferences in Canada and sits on the Annual Meeting Committee of the CSIM

Projects

The 2008 year saw expansion in the following clinical areas:

Access Project	<p>Clinical Space in Area 1b is now linked to Rockyview General Hospital. This expansion occurred over the course of one year and is precedent-setting for other Divisions in Medicine. GIM now triages patients to clinical care groups (i.e. Hypertension, Undifferentiated GIM, Vascular Risk, Diabetes, IM Problems in Pregnancy, Mind and Body Medicine, etc) rather than to individual physicians, that allows patients to be seen and managed sooner, which has made it possible for our GIM Doctors to have over 1,500 clinics with 10,000 patient visits in the past year, for a 90% of clinic operation efficiency.</p>
Time Project	<p>January 2008, a General Internist triage service was implemented in the Emergency Department at Rockyview Hospital. This innovation provided:</p> <ul style="list-style-type: none"> a) faster triage of all Internal Medicine patients b) more efficiency and consistency filling of GIM inpatient bed census; c) increased patient flow, communication and cooperation between triaging and admitting services; d) successful discharge of 30% of patients referred to GIM for admission to RGH, resulted without increases in death or re-admissions to the Emergency Department. <p>With no funding available for this project, it has been a cost saving to the Calgary area, made possible due to the concomitant expansion of our ambulatory services. In an area where it has been difficult to incur meaningful progress, this project has been viewed as an enormous success.</p>
Chronic Complex Care Clinic (CCC)	<p>The Chronic Disease Management portfolio and the Chronic Complex Care opened at the PLC in March, 2008. A collaboration between the Department of Medicine and Family Medicine, resulted in the following:</p> <ul style="list-style-type: none"> a) proposal designed to assist patients with chronic complex medical problems that require frequent admissions and or multidisciplinary care in our communities and out of hospital. b) Opening of the CCC clinic at the PLC Site and resulted in significant reductions in patient hospitalization patterns, and Emergency Department visits that did not lead to admissions.

Programs and Service

The General Medicine Admitting Unit at the Peter Lougheed Centre is a non resident supported admitting service in each adult acute care site. This service provides for patients that are in need of expert GIM care outside of the MTU environment. Finding ways to effectively move patients to other levels of care, when a patient's care changes, creates capacity on the intake side of the Medical Teams.

This General Medicine Admitting Unit innovation has ushered in a remarkable change in attitude and cooperation between physician admitting groups. Traditional barriers have been overcome and patient flow has been successfully established between the various services and specialty admitting units.

With significant progress in service delivery we were able to accomplish increased contributions.

- Supporting 6.25 in-hospital service lines at the FMC (3 of which are 24/7)
- Outpatient clinics, as well as administration, education, research and external contributions.
- Supporting 7 in-hospital service lines (2 are 24/7) at RGH and 6.25 (2 are 24/7) at PLC.
- Currently support 19.5 service lines.

IMG Program

International Medical Graduates provide essential in hospital services and call to patients.

Our commitment is to train these people for possible entry into the Canadian healthcare system. On that note, 2 IMGs moved on to our IM residency Program and 1 to Calgary Family Medicine. Three additional candidates were accepted into IM Residency Programs in Edmonton, Winnipeg and Ottawa. This speaks highly to the quality of our program; however, the turnover rate is currently causing instability and will need to be reviewed.

Research

- 61 peer reviewed scientific journals publications
- 6 invited reviews or papers in non-peer reviewed publications
- 15 abstracts and over 12 research communications
- 80 invited presentations at conferences and scientific meetings, which included abstracts and conference proceeding
- \$5 million in research projects in new funding as principle investigator or co-investigator
- \$1.4 million in annual Career Awards, Endowed chairs and other funding
- \$9 million in ongoing research support from competitive peer-reviewed bodies.

Education

Internal Medicine Residency Training Program

One of the most important events of the past year was the RCPSC accreditation of the Internal Medicine Residency Training program and our R4 Fellowship program. Following months of preparation, this was formally completed in February 2009 under the able leadership of Drs. Otto Rorstad, Paul Gibson, Martha Ainslie and Troy Pederson. This was an overwhelming success, surpassed only this spring by the 100% success rate of Calgary graduates on the 2009 qualifying examinations in Internal Medicine.

- The PGY-4 GIM Fellowship has been very successful in Calgary and we have been fortunate to attract some of the very best IM graduates locally and across Canada.
- Expected growth in our Medical School, IM and residency programs, the University of Calgary and Rockyview General need the students and residents to secure a full fledged academic training centre similar to those at FMC and PLC.
- The Clinical Scholar Program works well to shelter young academic faculty beyond the GIM Fellowship as an alternate to a PGY-5 year.

In 2008, our Division contributed the following

- Over 4200 hours of lecturers, small group seminars, evaluation and care counseling sessions in the University of Calgary undergraduate and post graduate medicine programs
- Curriculum development and innovation in teaching at all levels (1.8 FTE)
- 3200 hours graduate-level supervisory and mentorship support to 120 students
- 4000 hours of structured bedside teaching in clinical sciences
- 25,000 hours supervisory clinical support on medical Teams and consult services
- 224 hours CME

Challenges and Future Directions

In 2011 General Internal Medicine will be required to launch an IM admitting service and consulting service at SCC on the day of opening. GIM will need an additional 10-12 General Internists. Future planning for service delivery must take into account the needs of both ARP and FFP physicians. We will continue to recruit new GIM faculty in order to support the opening.

Plans at this time for PLC and RGH sites are to recruit Clinical Scholars or GFT with strong clinical/academic potential, requiring low numbers of weeks of service to fulfill the clinical component of their FTE. At FMC, plans would be to link one of our consultative services with a Fellowship level training program in medical disorders of pregnancy. This would require recruitment of one FTE over the short term and upon success, one or two new recruits could be added to the group by 2011-2012.

Four new Ministry-funded positions will be added in Calgary in July 2009, plus an additional 5 each year equaling 19 positions over the next 3 years. With the success of the Alberta International Medical Graduate Program, we must expand the IM Residency Program into other venues.

Finally, General Internal Medicine, the largest division in the Department of Medicine is pleased and very proud to report on continued progression and pursuit of our goals for excellence in education, clinical care, and research.

Division of Geriatrics
Division Chief Dr. David Hogan (Acting)
Dr. Karen Fruetel – Division Chief
September, 2008

Administration

The Division of Geriatrics includes 10 members of the Department of Medicine. We have 3 members who are jointly appointed with the Division of General Medicine as well as 3 cross-appointed members from the Departments of Community Health Sciences, Family Medicine and Psychiatry.

Members of the Division provide the following leadership:

- | | |
|------------------------|---|
| ➤ Dr. K. Fruetel | Medical Leader, Seniors Health |
| ➤ Dr. J. Holroyd Leduc | Medical Co-coordinator, Clinical Informatics,
Department of Medicine |
| ➤ Dr. J. Silvius | Vice-President, Physician Leadership Portfolio |
| ➤ Dr. H. Schmaltz | Telehealth Lead and participation in Provincial Telehealth
programs (Alberta Clinical Telehealth Forum) and Western
Canadian Waiting List |
| ➤ Dr. C. Powell | SPI (Seniors Physicians Initiative) |
| ➤ Dr. A. Cohen | Divisional Representative, ARP Management Committee |

Dr. Karen Fruetel assumed her duties as Division Head in September of 2008 which has resulted in a successful accomplishment to the Division.

Clinical

The clinical activities of the Division are closely intertwined with those of the Seniors Health Program. Clinical activities that are responsibility of the Division of Geriatric medicine include Consultation Services at all the acute care sites and Seniors Health Clinic. The Division members also support programs of Seniors health including Day Hospital, GARP unit as well as providing support to Geriatric Mental Health.

We have been at the forefront in the Department for a number of years in developing interdisciplinary and trans disciplinary approaches to service delivery. Our working relationships with the other disciplines in the Seniors Health Program are both collegial and effective.

Ambulatory Services

Ambulatory Services shows significant gains have been made.

- Seniors Health Clinic at RGH was experiencing difficulty due to separation of Geriatric Mental Health and Geriatric Medicine. A full complement of allied health professionals has been hired and staff turnover has dramatically decreased. The clinic has experienced less turnover amongst physicians and allied health professionals resulting in increased staff moral. The new Division Chief has provided additional leadership by Seniors Health and there has been

- significant work done to redesign this clinic while addressing issues of professional work and satisfaction. Two additional half day clinics have been added due to the hiring of a new geriatrician and existing clinics have increased the number of patients seen. It is anticipated that with ongoing changes, the clinic will soon be working at full capacity.
- Crossbow clinic has also gone through changes as a result of the Nurse Practitioner leaving the clinic. This has resulted in a decreased number of patients being seen. Work is in progress along with the work at RGH Seniors health to re-design work and processes. New physicians will be added to the clinic (Dr. C Sivakumar, July 2009 and Dr. V. Ewa, September, 2009). It is anticipated that ambulatory services at PLC will relocate to the Crossbow Site.

Teleconsultation:

Geriatric Medicine continues their active teleconsultation program that supports six rural communities: Banff, Canmore, Cardston, Didsbury, Drumheller, Strathmore. As well, the Falls Prevention Program is building linkages with remote communities such as the City of Canmore.

Hospital Consultation

The Division offers in-patient consultation services at the three adult hospitals in Calgary. Seniors Health is active in promoting the NICHE program, and members of the Division provide educational support to this initiative.

Key Linkages

The Division of Geriatric Medicine works closely with the Seniors Health Program. Geriatricians have had input into the key strategic initiatives of Dementia and Falls Prevention including implementation and education.



Leadership in Research

- Dr. D. Hogan is the Chair of the C5R Research Committee and Associate Editor of Current Gerontology and Geriatrics Research. He is also the Brenda Stafford Chair in Geriatrics, University of Calgary.
- Dr. J. Holroyd-Leduc serves on the Appraisal Report of Resident Research Grant Application and the Physician Services Incorporated Foundation.
- Dr. H. Schmaltz is an External reviewer for the Heart and Stroke Foundation of Canada
- Dr. J. Silvius serves as a member of the CIHR Knowledge to Action Grant Review Committee.

Scholarly Productivity

- 18 Peer Reviewed Publications and 4 peer reviewed abstracts
- 7 Non peer reviewed publications and 1 abstract
- 3 book chapters/reviews

External Reviews:

- Internal Medicine Program, University of Alberta – Dr. K. Fruetel
- External Review for Promotion – University of British Columbia, University of Western Ontario (Dr. K. Fruetel and Dr. C Powell)

Major Funding:

- Successful grants allocated to members totaled \$1,846,254.

Research Focus of Division Members

- Knowledge Translation – Prevention of Delirium in Hip Fracture Patients, Urinary Incontinence
- Health Services – Telehealth, Dementia care, Community care, Models of Geriatric Care and Clinical Informatics



Education

The Division is active in education across all levels of medical education and also in multidisciplinary education. Due to variability in how activity was recorded, these are approximate estimates of the number of hours spent in teaching.

Undergraduate	<p>Members teach in many courses in the UGE curriculum (Course 1, Course V, Physicianship, Communication, Procedural Skills, Physical exam skills) and supervise medical students in course 440 during their selectives in clerkship. The estimated house of UGE course teaching is approximately 90 hours of direct time.</p> <p>Dr. Burbank is taking a leadership role as Co-Chair of Course V.</p> <ul style="list-style-type: none"> - Clinical Rotation supervision: - First year student summer electives: 3 - 11 clinical Clerks doing a selective - 9 Clinical Clerks did an elective <p>Supervision of UGE summer students – 2 Participation in OSCE Participation in CaRMs interviews</p>
Postgraduate	<p>27 residents rotated in Geriatric Medicine (Internal Medicine, Family Medicine, PMR, Neurology). Each had a 4 week rotation in Geriatrics – total of 108 weeks.</p> <p>Geriatrics participates in noon teaching rounds and Academic half day of various PGE programs -- estimated at 60 hours</p> <p>Supervision of Resident Research Projects – 2</p> <p>Members of the RCPSC Internal Medicine Examination Committee – 2</p> <p>Participation in PGY 1-3 OSCE</p>
Graduate	Supervision by Division members - 7
CME	Presentations: National, Provincial, National - 34
Thesis	Graduate student - 1
Multidisciplinary Educators	NICHE Education

Challenges and Future Directions

Challenges:

- The ability of the Division to manage its current work load is precarious. Currently we are meeting needs, but are anticipating gaps in coverage due to retirement, sabbatical leaves and parental leaves.
- Increasing demands for Geriatric Medicine input in certain clinical populations is stretching the resources of the Division. The ability to continue to provide support to Day Hospital and GARP is tenuous. Requests for more formal clinical relationships such as Orthopedics Surgery, Home Care, Primary Care Network, have had to be put on hold.
- The ability to recruit, is somewhat hampered by the limited number of residents training in Geriatric Medicine and restricting the recruitment process is somewhat uncertain.
- Lack of infrastructure to measure outcomes in Seniors Health. Change process requires information and data on numbers of patients seen, wait times, outcomes require infrastructure support.
- Effects of restructuring with uncertainty about reporting structures and relationships which has put implementation of strategic plans on hold.



Future Directions:

- It is difficult to indicate future direction given Alberta Health Services restructuring of the Seniors Health Program. The strategic arm of Seniors Health is now provincial and how the Division of Geriatric Medicine can provide input and advocate for Seniors is unknown.
- Further expansion of clinical services and building capacity in hospitals and communities is desired but dependent on recruitment.
- We anticipate increased ambulatory capacity to meet the demand and reduce wait times for ambulatory consultation, and look forward to the opening of the new Seniors Health campus at Bridgeland in 2010.

Division of Hematology and Hematologic Malignancies
Division Chief – Dr. Douglas Stewart

Administration

The Division of Hematology and Hematologic Malignancies continue to strive for excellence in patient care clinical research and education.

The Division includes 15 members within the Department of Medicine ARP (5 at the FMC and 2 at the PLC with major clinical appointments, 8 with GFT appointments who are based at FMC, including 2 clinician scientists. There are also 3 fee for service clinicians at the PLC.

The Division welcomed Dr. Michael Wong and Dr. Mona Shafey as our new recruits for the fiscal year.

The Division's website that was initiated last year is a resounding success and focuses on recruitment, referral process, education program rounds and CPGs. The BMT Database facilitates research and quality assessment and quality information reports for the Federation of the Accreditation of Cell Therapy (FACT). The clinical database involves the Hematology Tumor Bank with tissue biorepository information.

Clinical

The Division has continued with the development of the Rare Blood and Bleeding Disorders Comprehensive Care Program. Women with the Bleeding Disorders Program was established in 2008 in collaboration with Dr. Baranowski. During this time period patients with hereditary angioedema were included in the Program as well as thalassemia patients.

- There is a great deal of participation and collaboration in the leadership of the Apheresis Program.
- Hematology indications guidelines are being created and call schedules are to be implemented.
- The creation of an Advanced Nurse Practitioner role for the inpatient hematology and BMT is to be filled in the fall of 2009.
- Development of a new TBCC "Lumps and Bumps" clinic for early assessment and diagnosis in collaboration with surgery.
- Successful FACT re-accreditation of the Calgary BMT Program.
- Initiation of discussion around the creation of an outpatient Thrombosis Program in Calgary which would be in collaboration with other Divisions.

Partnerships, provincial, national and international include:

- Provincial Hematology Tumor Group – TBCC, CCI, Associate Cancer Centres
- Consultant, World Federation of Hemophilia Country Program for China (Dr. MC Poon)
- Ongoing monthly Hematology Clinics in Medicine Hat
- Ongoing monthly BMT clinics in Edmonton
- International Health Program Project (Laos) – Dr. C. Brown

Research

Malignant Hematology

- **Dr. N. Bahlis** Clinical Trials (novel monoclonal antibodies, lenalidomide, NCIC – CTG cooperative group and industry for Multiple Myeloma)
- **Dr. D. Stewart** Lymphoma
- **Dr. L. Savoie and** Leukemia/MDS
- **Dr. M. Geddes**
- **Dr. D. Stewart and** Translational: Provincial Hematology Tumor Bank (with
- **Dr. N. Bahlis** Alberta Cancer Research Institute Biorepository), Biomarkers for lymphoma and myeloma

Blood and Marrow Transplantation

- **Dr. J. Russell** Busulfan pharmacokinetics, adjusted dose therapy, TBI, ATG
- **Dr. A. Daly** Mesenchymal stem cell treatment of GVHD
- **Dr. D. Stewart** PET/CT-guided high dose therapy/ASCT for aggressive lymphoma
- **Dr. L. Savoie** Blood vs Marrow Stem Cell Source for unrelated Allogeneic SCT
- **Dr. J. Storek** Autologous SCT for autoimmune disorders

Hemostasis/Hemophilia

- **Dr. MC Poon** Clotting activity heterogeneity in severe hemophilia A
Canadian dose escalation prophylaxis study
Risk of ischemic heart disease in hemophilia patients and carriers
Treatment of Glanzmann's thrombasthenia:
prospective observational registry
international immune tolerance for eradication of inhibitors in hemophilia A.

Thrombosis:

- **Dr. R. Hull, and** Thrombosis Clinical Research Unit
- **Dr. G. Pineo** PIOPED III (Prospective Investigation of PE disease using MRI)
- **Dr. R. Hull**
- **Dr. MC Poon** Thrombophilia screening practices in the community

Leadership in Research

- **Dr. J. Storek** Canada Research Chair in Immunology
- **Dr. R. Hull** Chief Editor, Clinical and Applied Thrombosis and Hemostasis

Education

Teaching hours (approximate)

- Undergraduate MDCN 350 Blood Course 440,540, 320: 350 hours
- Postgraduate MDSC 731.02 MDSC 678 and Resident Seminars Journal club: 60 hours
- CME National/International: 47 presentations; local: 45
- Thesis Supervision 2 PhD, 1 BHSc, 3 MSc

Educational Leadership

➤ International:

- **Dr. MC Poon**
- **and Dr. R. Hull** Invited CME
- **Dr. N Bahlis** ASH Session Chair
- **Dr. C. Brown** CME International Health Program

➤ National

- **Dr. K Valentine**
- **and Dr. L Savoie** RCPSC Hematology and Internal Medicine Exam Boards

Local

- **Dr. K Valentine** Director Hematology Residency Program
- **Dr. D. Jenkins** Director Blood Course

Innovations

The Hematology Division Rounds, initiated and organized weekly and the Hematology academic division rounds based on Royal College learning objectives, for education of fellows and residents are under the direction of Dr. Michelle Geddes. There is also a pilot project mentorship, in the Division currently under the supervision of Dr. R Card.



Challenges and Future Directions

Challenges

- Transition from separate CHR/ACB administrations to the Alberta Health Services Board model. Objectives include bed capacity, functional planning for malignant hematology/BMT and the South campus, EMR, Patient Flow, Space Allocation and Clinical Research Staff
- Lack of office space and secretarial support for new recruits.
- Program development for benign Hematology addressing long waiting lists, triaging, QA/QI, comprehensive research program and CGPs.
- Desire to increase accrual to Clinical Trials, expand research in BMT/Cell Therapy and benign hematology, improve support for Translational Research (protected time, start-up money, tumor bank), and initiating Health Services Research



Future Directions

- Goals for the coming year include planning for new South Campus
- Working with CHR and ACB to transition to Alberta Health Services
- Expanding the Adult Rare Blood and Bleeding Disorders Clinic at the FMC to include hemoglobinopathy patients
- Develop the Benign Hematology Program
- Increase research productivity, including competitive peer-review grants for translational research, establishing hematology tumor bank, and establishing clinical trials for benign hematology studies at FMC and for benign and malignant hematology studies at PLC
- Recruitment of staff to meet demands of current workload, academic objectives, expanded medical school and the new SHC hospital
- Continuing establishment of mentorship program for diverse needs of young members and fellows.

**Division of Infectious Diseases
Division Chief – Dr. Ron Read (Acting)**

Administration

Leadership members of the Infectious Disease Division are involved in Medical Administration at a number of levels. Administration duties accounts for 5 FTEs. Our major roles include:

- **Dr. John Conly, Regional Clinical Department Head.**
 - Recruitment of 24 new members of the Department of Medicine. Developed a program to improve referral from primary care to specialists. New ARP positions of 25.95.
 - Provided ongoing support for Number of residency slots increased by 4.
 - EMIS system for EMR.
 - Co-Director, Synder Institute, and Chair of Snyder Institute Finance Committee
 - Chair, Infectious Diseases Research Group, University of Calgary and Health Region
 - Director, Centre for Antimicrobial Resistance, University of Calgary and Health Region
 - Member, Board of Directors, Canadian Committee on Antibiotic Resistance
- **Dr. John Gill**
 - Medical Director, Southern Alberta HIV Clinic (SAC)
 - Director, University of Calgary Retrovirology Laboratory
- **Dr. Marie Louie**
 - Associate Director, Provincial Laboratory for Southern Alberta
- **Dr. Tom Louie, Dr. Mannie Mah, Dr. Donna Holton**
 - Site Medical Leaders - Infection Prevention and Control Program
- **Dr. David Megran**, Chief, Medical Officer. Created 5 ARPs with \$25 million cost saving, \$8.5 million in annual cost savings and initiated the Dyan leadership model.
- **Dr. Ron Read, Division Head**
 - Medical Director, Home Parenteral Therapy Program (HPTP))
 - Medical Director, Calgary STD Clinic
- **Dr. Andy Pattullo**
 - Medical Director, Advance Technology Clinical Informatics
- **Dr. Harvey Rabin**
 - Medical Director, Adult Cystic Fibrosis Clinic, ID Resident training Program Director

Awards and Recognition

Dr. Andrew Johnson Letters of Excellence from the Royal College

Dr. Mike Parkins 2008-2009 Clinical Fellowship in Cystic Fibrosis

Clinical

Clinics (see below) are a large volume of clinical activities that provide next day service. These clinics have increased in patient volume by 5%-10% per year. A variety of changes and improvements in Infectious diseases clinics were achieved this year.

Clinical Service Consults are provided with full service consultative care at all adult hospitals. Almost all consults are written 24 hours after the consultation is requested.

Clinic	Access	Innovations	Case Load
Home Parental Therapy (HPTP)	Improved access via direct referral from the urgent Care Centre in Airdrie; fine tuning the referral process for SCC Urgent Care and SCHC patients and resolution of critical referral issue with Calgary Emergency Departments	Referral pathway clarified for patients from the wound clinic	15,000 MD visits – increase of 5%
Southern Alberta (HIV) Clinic	Commenced a study regarding treatment issues associated with First Nation patients	Referral pathway clarified for patients from the Wound Clinic	144 new patients, 1318 active patients
STD Clinic	Increased privacy for patient; “fast flow” nurses to reduce wait times.	Outreach – via satellite clinic in Banff, collaboration with SafeWorks program; NE Women’s Clinic; Drop-In Centre, CUPS and Margaret Chisholm Resettlement Centre. New Herpes Support Program developed with Sexual Health Access Calgary. Direct to teen STD education via Nexopia.com; all staff participated in a review of ensuring patient confidentiality	21,941 visits, 5,995 new patients
Cystic Fibrosis Clinic	Continued use of telehealth for rural patients		500 patients; 100 clinics
General ID Clinics		General infectious disease consults through ID Fellows clinics	
Hepatitis C Clinic (CUPS)	Expanded access to marginalized patients		
MRSA Decolonization Clinic	Space created at RRDTC for clinic		69 clinics per year

Other Infectious Diseases Programs include:

➤ **Infection Prevention and Control**

- Hand Hygiene social marketing initiatives throughout the Calgary Zone
- MRSA working group focusing on MRSA surveillance and control
- Completion of Design document for planning new building construction and implementation of Guidelines for conducting construction, maintenance and renovations in the Region.
- The central pharmacy and PLC pharmacy were renovated.
- Focus on C. difficile control in Acute Care
- Completion of an intensive review of equipment sterilization procedures

➤ **CHRAUC** (Calgary Health Region Antibiotic Utilization Committee)

- Implementation of Acute Bacterial meningitis – Initial Management Pathway
- Performed 7 drug reviews, 6 drugs added to formulary, 1 drug removed
- Initiated a social marketing project for the wise use of antibiotics

The current Medical Director for the CHR Clinical Informatics team is an ID division member. Projects include:

- Guiding the ongoing deployment of Sunrise Clinical Manager
- Collaborating in the development of e-Record initiatives locally and provincially. Data presented at international e-record meetings.
- Providing clinical decision support, measurement and reporting capabilities for physicians to answer their own clinical questions using PCIS

Research

The Division is active in research at several levels from bench to bedside. Division members spent 218 hours working as editors on journal boards and national committees that write national infectious diseases guidelines. Reported Division research activities include:

- 55 Papers in peer-reviewed journals
- 29 Papers in non-peer reviewed journals
- 41 Abstracts and conference presentations
- 1 Book Chapter
- 8 Invited keynote presentations/plenary sessions at major scientific meetings

Major Funding

Division members currently hold \$2,897,612 in research grants for the 2008 fiscal year from agencies ranging from CIHR and PHAC to local sources.

Research focus of members:

- **Dr. D. Church** Medical microbiology, new technology development
- **Dr. J. Conly** MRSA biology/epidemiology, infection control, medical innovation
- **Dr. J. Gill** HIV/AIDS, economic analysis
- **Dr. D. Gregson** Medical microbiology, new technology development
- **Dr. D. Holton** Infection Control, biofilm infections
- **Dr. A. Johnson** Transplant-related infections
- **Dr. K. Laupland** Population based infectious diseases epidemiology, leader of multi-national collaborative on blood stream infections
- **Dr. M. Louise** Medical microbiology, E. coli O157, environmental antibiotic resistance
- **Dr. T. Louie** C. Difficile, MRSA decolonization, infection control
- **Dr. M. Mah** Hand hygiene, social marketing
- **Dr. D. Megran** Determinants of physician well being
- **Dr. M. Parkins** Cystic Fibrosis
- **Dr. A. Patullo** Clinical informatics, clinical decision support
- **Dr. H. Rain** Cystic fibrosis, major collaboration project with Department of Microbiology
- **Dr. R. Read** Sexually transmitted infection, antibiotic resistance in agriculture

Education

The Division of Infectious Diseases is committed to education at all levels, including the following:

Type of Education	Number of hours for Division
Undergraduate	65 hours formal teaching medical students 10 hours formal teaching in other undergrad programs MDCN 504/514.17 (bedside clerkship teaching) 11,250 (0.25%/hr)
Postgraduate	130 hours of formal teaching 14,062 hours (0.25% hr at bedside) for IM/Family Practice Residents 5,760 hours (0.25% hr at bedside for ID Residents)
Graduate	11 hours of formal teaching
CME	39 hours
Thesis Supervision	277 hours



Teaching Activities:

- ID Resident Teaching Program. This program has undergone major revisions to improve the formal training and educational experience of our ID residents.

Educational Leadership

- Dr. Ron Read and Dr. John Conly are active members of the Undergraduate Medical Education Committee of UME

New Initiatives and Innovations:

- STD Education direct-to-teens via www.Nexopia.com

Challenges and Future Directions

The Infectious Diseases division has experienced an increasing clinical work load because of new organisms (MRSA, H1N1), complex antimicrobial resistance patterns and a growing patient population that has limited access to primary care which increases HPTP work load. A patient population base that is more immunocompromised because of disease and age.

Division members have heavy administration commitments (33% of the division's time) which must be performed in addition to the clinical work load. Due to other responsibilities (administration, laboratory and ICU), 6 Division members do 6 weeks of inpatient serve and 6 weeks of HPTP. Administration responsibilities frequently conflict with providing clinical service.

Manpower is the major ongoing challenge in Infectious Diseases. We are facing manpower shortages due to retirement (possibly 2 in 2010) population growth, expanded service expectations with the new South Health Campus and expanded roles for Infectious Diseases in the community. Canada has a shortage of infectious disease physicians. Several job advertisements have not resulted in any interested candidates. Alternatively, we have chosen a model of local training of ID specialists as a recruitment strategy.

In 2008, we had 3 fellows in the ID training program. The ID training program has been completely regenerated to ensure we have high quality applicants. The Division has also addressed the increasing clinical work load by forming collaborations with the community clinics and agencies to take ID expertise out into the community and into rural areas. We have shifted care responsibilities for the less complex infectious diseases patients by training nurse practitioners in the HPTP program. We use teleconferencing for patient care. We will be continuing to innovate in the delivery of ID specialty care with new service delivery models and outcome analysis of our programs.

Division of Nephrology
Division Chief – Dr. Nairne Scott-Douglas

Administration

The Division of Nephrology has seen excellent clinical growth and research endeavors during this past fiscal year.

With the addition of Dr. Chandra Thomas to our Division we have leadership and expansion of the previous pilot project relating to the Advanced Care Planning (ACP) initiative by the "Region". Dr. Thomas has developed a comprehensive program of ACP including partnering with Palliative Care. This consultative and intense management program initiates conversation with renal patients and supports them over many years. It also has strong components relating to End of Life decisions palliative care and pain control. The Southern Alberta Renal Program has supported this initiative.

The Division has also welcomed Dr. Pietro Ravani's has allowed for the start of a relationship with Italian researchers with similar interest in epidemiology and Health Services Research.

AWARDS

International/National

Dr. Sophia Ahmed	<ul style="list-style-type: none"> - AHFMR – Clinical Investigators Award - AHFMR – Medical Research Allowance - AHFMR - Medical Research Prize - Kidney Foundation of Canada – Biomedical Scholarship
Dr. Brenda Hemmelgarn	<ul style="list-style-type: none"> - AHFMR – Population Health Investigator Award - Renewal CIHR – New Investigator Award
Dr. Braden Manns	<ul style="list-style-type: none"> - CIHR New Investigator
Dr. Daniel Muruve	<ul style="list-style-type: none"> - Scholar, Alberta Heritage Foundation for Medical Research - Canada Research Chair, Tier II
Dr. Wenjie Wang	<ul style="list-style-type: none"> - Amgen Western Canadian Kidney Research Senior Fellowship University of Alberta Local
Dr. Sofia Ahmed	<ul style="list-style-type: none"> - University of Calgary – Resident Research Preceptor of the Year
Dr. Jennifer MacRae	<ul style="list-style-type: none"> - SARP Role Model Award

Educational Leadership Awards

Dr. Kevin McLaughlin	<ul style="list-style-type: none"> - Award for excellence in teaching from graduate class, 2008 - Letter of Excellence in teaching Course 1 (Hematology and Gastroenterology – 2008) - Letter of Excellence in teaching in Course 2 (Cardiology and Respiriology), 2008 - Gold Star teaching award in Renal, 2008 - Gold Star teaching award for Internal Medicine Clerkship,
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2009

- Silver Tongue Award (2008)

Dr. Stefan Mustata

- Gold Star Teaching Award - 2008

Dr. Sophia Chou

- Supervising nurse practitioners in nephrology outpatient clinic involving teaching on history taking, physician examination, management plan and dictation skills. 200 hours of educating CKD nurses, access nurses, dieticians, Pharmacists, social workers on CKD patient management and case based teaching

Clinical

Dimensions Of Quality	Clinic, Innovation, Initiative	Key Personnel / Leads	Outcome Measures (compared to pre-implementation.)
Access	Nephrology Central Referral Clinic	Braden Manns Nairne Scott-Douglas	Decreased wait times from up to 14 months down to less than 6 months for routine referrals. Urgent patients recognized by standardized measures and seen in less than 1-3 weeks.
Access and Effectiveness	Diabetic Nephropathy Prevention Clinic – Outreach to aboriginal population. Nurse practitioner managed protocol driven evidence based clinical practice guideline for management of diabetes, hypertension, dyslipidemia implementation	Brenda Hemmelgarn Ellen Novak NP	Being studied by Interdisciplinary Chronic Disease Collaboration (ICDC) in combination with similar clinics run by Northern Alberta Renal Program for effectiveness and cost-effectiveness.
Effectiveness and Safety	Glomerulonephritis Clinic – Clinical Nurse specialist adjunct to Physician Care of active immunosuppression patients	Braden Manns, Brenda Hemmelgarn, George Vitale, Nairne Scott-Douglas and Sandra Whelan RN	Standardize care with evidence based medical decisions. Improved safety using RN to help monitor side effects of immunosuppression including leucopenia, infections and other side effects. Freeing up of MD's time to deliver more urgent care assessments

Dr. Brenda Hemmelgarn and **Dr. Sophia Ahmed** continue to work with First Nations elders and populations (Siksika and Tsuu T'ina) to investigate the causes of high disease burden and implement treatments for these high risk patients. In the past year they have made presentations to the Aboriginal Health Council, University of Calgary Native Centre and the Elbow River Healing Lodge.

Dr. Hemmelgarn continues to work on access and delivery of care to disadvantaged and marginalized populations such as aboriginal, elderly and the poor.

Ongoing collaboration with researchers from Edmonton under the umbrella of the Alberta Kidney Disease Network (AKDN).



Research

Scholarly productivity included:

Involved in the publication of 86 different peer reviewed articles, 65 as 1st, 2nd or senior authors.
46 abstracts
7 non-peer reviewed articles
5 book chapters
2 technical reports – CADTH
Canadian Society of Nephrology and Canadian Hypertension Society – 2 Academic Report guidelines.

Major Funding and Focus of Divisional Members:

- Members of the Division, including Dr. Braden Manns, Dr. Brenda Hemmelgarn, Dr. Rob Quand Dr. Pietro Ravani, have active funding of over \$23 million dollars of which \$5,236,000 is payable in the current year of this annual report. The main funding agencies are AHFMR and CIHR with much smaller amounts attributable to the Kidney Foundation of Canada, Calgary Agency for Drugs and Technologies in Health (CADTH) and industry sponsors. They have set up partnerships with other researchers in chronic disease and are now setting up contacts with health services administrators at AHW. The goal is to see this work under the direction of a health administrator, which will include health services research relating to chronic diseases. This is an exciting opportunity for researchers to engage health resource decision makers and give them the evidence they need for their decisions.
- Dr. Braden Manns, Dr. Hemmelgarn, Dr. Pietro Ravani and Dr. Rob Quinn are working through the ICDC and ADKN with grants totally over \$5 million dollars in Health Services.
- Dr. Kevin MacLaughlin and Dr. Sophia Chou continue to investigate and publish in the areas of pedagogy. Specifically in the areas of how medical students and trainees learn and the medical trainee evaluation process of Medical Education.
- Dr. Jennifer MacRae and Dr. Davani Tai continue to investigate in Hemodialysis Adequacy and Vascular Access.
- Dr. Dan Muruve, Dr. Wenji Wang and Dr. Lee Anne Tibbles continue to work on basic science areas that include gene therapies, immunologic responses, fibrosis and immune tolerance.
- National leadership saw Dr. Lee Anne Tibbles as President of the Canadian Society of Transplantation, the Physician Manager Institute, Level and Level II of the Canadian Medical
- Dr. Braden Manns assumed the role of Chair Expert Committee of the Common Drug Review across Canada.

Journal Reviewers:

Dr. Braden Manns - 12 journals including NEJM, JAMA, CMAJ
 Dr. Sophia Ahmed - Am J Kid Dis, Kidney International
 Dr. B. Hemmelgarn - 7 journals
 Dr. L. Tibbles - 6 journals
 Dr. D. Muruve - 3 journals
 Dr. J. MacRae - 6 journals

Research Leadership:

Physician	Research Leadership Role
Dr. Dan Muruve	Chair of CRC Tier II; Member of CIHR Experimental Research Grants Committee, Member American Society of Gene therapy, Immunology of Gene Therapy Committee
Dr. Lee Anne Tibbles	President of the Canadian Society of Transplantation
Dr. Brenda Hemmelgarn	Editorial Boards: – Can Journal of Cardiology
Dr. Dan Muruve	Editorial Board: Can Journal - Gene Therapy
Dr. Sophia Ahmed	Kidney Foundation of Canada Grant Reviewer, AHFMR Program Advisory
Dr. Brenda Hemmelgarn	AHFMR Program Advisory Committee member, Canadian Organ replacement Registry Advisory Committee member, Heart and Stroke Foundation External Grant Reviewer
Dr. Braden Manns	Chair, Canadian Expert Drug Advisory Committee, Chair of Canadian Society of Nephrology (CSN) Scientific Committee, Chair, CSN Anemia Committee
Dr. Kevin McLaughlin	Chair, University of Calgary Clerkship Committee
Dr. Lee Anne Tibbles	Director, 2010 World Transplant Congress Organizing Committee; Executive Member of International Conference of the Transplantation Society; Member, Kidney Foundation of Canada Biomedical Research Grants Committee

Education:

Teaching Hours:	Number of hours
Undergraduate	775
Postgraduate	1313
Graduate	5608
CME	185
Thesis Supervision	1640



Innovations:

- Dr. Brenda Hemmelgarn, Chronic Kidney disease outreach clinic where a clinic has been set up with the Siksika nations for patients at high risk of developing kidney disease. Training of a nurse practitioner has resulted in supervising the clinic. The clinic is also supervised via phone or pager if required and meets weekly to 2 weeks to review patients.
- Dr. John Klassen is involved with the ABO Column Technology in relation to the Renal Transplant Service.
- Dr. Wenjie Wang's initiative represents desensitization protocols for renal transplant recipients.

Challenges and Future Directions

Challenges:

- Space for Physician offices and support staff
- Space for Research especially for the Roy and Vi Baay Chair in Kidney research funding for expanding home dialysis therapies
- Continued expansion of and alignment with the Northern Alberta Renal Program
- Cut in medical support staff numbers by Alberta Health Services

Future Directions:

- Recruitment of a renowned world research in epidemiology to fill the Baay Chair
- Expand evidence based indications and research in Therapeutic Apheresis
- Expansion of Basic Science research
- Complete reassessment and renewal of Undergraduate Teaching especially the Renal course (Undergraduate Course IV)

**Division of Respiriology
Division Chief – Dr. Chris Mody**

Administration

The Division of Respiriology is delighted to report on our accomplishments in 2008. We have had an exciting and productive year. While there have been a great many changes, and many successes, the division is facing a number of significant challenges, which we face with hope, optimism and determination.

The Division consists of 28 full members and 6 associate members based at three hospital sites and private clinics within Alberta Health Services, Calgary Zone. Eight members are University Geographic Full Time, while 20 are University Major Part Time or Private Practice.

The Division provides continuous consultative service and inpatient ward service at three acute care hospitals, while maintaining a very busy outpatient clinical service across the Calgary Zone. Additionally, members of the Division report all pulmonary function tests at the three hospital sites and provide TB services. The Division also has an outstanding record of academic productivity and provides important administrative functions within the department.

The Division's recruitment for the fiscal year welcomed Dr. Paul MacEachern (Interventional Pulmonology). Prior to joining our Division, Dr. MacEachern completed additional training in Interventional Pulmonary Medicine. While in Germany he developed a special expertise in Interventional Pulmonology. He brings great strength to the area of bronchoscopy, airway stenting and ultrasound guided bronchoscopy.

Dr. Julie Jarand has also joined the Division with additional training in mycobacterial diseases at the University of Colorado. She worked with Dr. Chuck Daley identifying *M.avium* antigens that might be used in diagnostic tests, as well as creating a database for patients with *Mycobacterium abscessus* pulmonary disease. Traveling to South Africa she gained experience managing patients with multi-drug resistant tuberculosis.

Also recruited was Dr. Paul MacEachern who will be studying Systems and Operations Management as it applies to Respiriology and in particular to patient flow in the Sleep Centre. This is an important new area of research that combines business principles and health economics.

Innovations

As we begin the new year in 2009, we anxiously await approval of the second round of innovation proposals submitted. These were approved by the Innovation Committee in November 2007, however approval by Alberta Health Services is pending.

The Division of Respiriology has been one of the leaders in the Department of Medicine in the area of innovation. Dr. Alain Tremblay served as the Co-Chair for Alternative Relationship Plan Innovation Sub-Committee. In addition, a number of highly successful and novel projects have been initiated and have met with early success. These projects have enhanced patient care and have increased the efficiency of our practice in respirology.

- Dr. Stephen Field is leading the **Cough Clinic initiative**. The Calgary Zone cough clinic is now well established and running smoothly. The primary objective is to shorten wait lists. Prior to the initiation of the cough clinic, more than 2/3rds of patients were waiting more than 6 weeks to be seen. Since the initiation of the cough clinic, 90% are seen within 3 weeks. This has shortened the wait lists for other patients with more urgent problems. Results demonstrate that patients feel better and show substantial improvements in quality of life.
- Dr. Helmersen and his colleagues at the PLC have developed a **"rapid follow up clinic"**, aimed at improving timely access to this clinic for patients with complex respiratory problems. This innovation helps prevent both inpatient hospitalization and emergency department visits by

- facilitating rapid intervention by the team of pulmonary physicians, nurses and respiratory therapists.
- Dr. Pat Hanly along with his team at the Calgary Zone/University of **Calgary Sleep Centre** has developed a role for an alternate care provider in the management of patients with sleep-disordered breathing. The objectives are to increase patient access to specialty services, improve patient outcomes and implement a quality assurance program for the administration of CPAP therapy. The program has been successful on all of these fronts.
- Dr. Leigh has introduced **induced sputum analysis for the assessment of asthma patients**. A dedicated cytotechnologist performs sputum induction tests. These tests have demonstrated that the majority of asthma patients test in the Calgary Zone have sputum eosinophilia, suggesting that therapy is suboptimal. In each case, results have led to reassessment of patient compliance, or to change in management.
- Dr. Alain Tremblay has developed a **Thoracic Oncology Program**. The innovation program funds have allowed him to hire a full time Nurse Practitioner and Clerk who are dedicated to the Thoracic Oncology Program (TOP). This has allowed us to increase the number of patients seen as part of the TOP program while maintaining a nearly non-existent waitlist, as well as to expand our reach to rural Calgary Zone and Southern Alberta in general by the inception of the TOP telehealth clinic.
- Dr. Ford and his colleagues at the Rockyview General Hospital have developed a **respiratory outpatient centered facility** with outcome research, PFT, DL, clinics, Doctors, trainees, administrative staff and allied health care providers all in an integrated setting with the goal of enhancing care for patients with chronic and acute respiratory disorders.

Members of the Division have also played a central role in the initiative to produce an Alberta strategy for respiratory diseases. This initiative was done in collaboration with the University of Alberta and other organizations in respiratory health. Further information on this initiative will be available at the Ghost River Retreat.

Additionally, other members of the Division have implemented considerable innovations. These programs are changing the face of the practice of Respiriology in the Calgary Zone to the benefit of all the patients we serve.

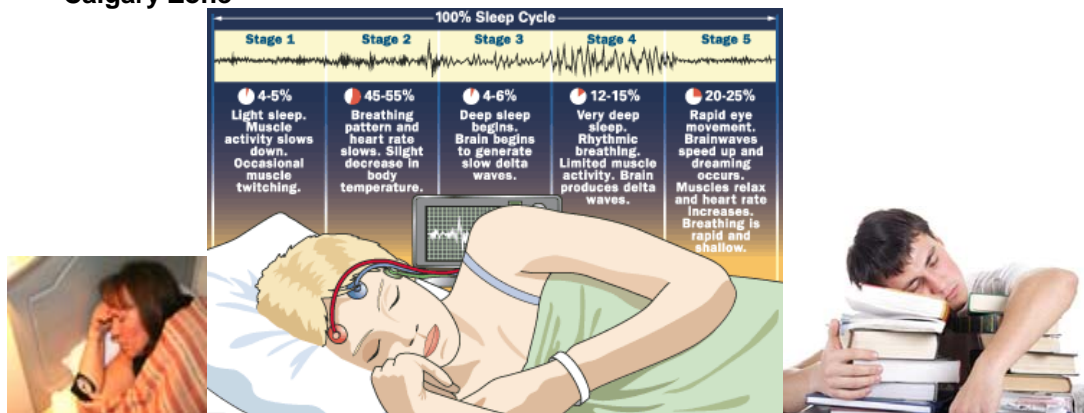
Awards

Members of the Division received 25 different awards recognizing their accomplishments. The Division was recently awarded the Department of Medicine quality improvement and safety award.

Dr. Gordon Ford	CTS Service Award Nominated for the Lung Association Lifetime Achievement Award.
Dr. Ward Flemons	People First Award of the Alberta Health Services
Dr. Stephen Field	Dr. John Dawson Award for Clinical Excellence
Dr. Richard Leigh	CIHR Clinical Scientist Award and Clinical Investigator Award of the Alberta heritage Foundation for Medical Research

Clinical

Members of the division are also one of Canada's leaders in Sleep Medicine. Under the direction of Dr. Pat Hanly, The Sleep Centre has developed a unique and successful working relationship in the assessment and management of sleep disordered breathing. This has improved patient access to diagnosis and treatment both for uncomplicated obstructive sleep apnea and more severe sleep disordered breathing and has reduced waiting lists. This is the first time that this public private partnership with homecare companies has been employed in Canada.



The Interventional Pulmonary Medicine Service is one of only two such services in the country. Dr. Alain Tremblay is the leader of this program and along with Dr. David Stather, is using a variety of innovative tools and techniques including endobronchial ultrasound, permanent and removable stents, and indwelling pleural catheters. Assisted by a \$1M private donation, this program has been able to purchase the equipment necessary to perform this highly technical and ground-breaking service. The service is also dedicated to training young respirologists. Dr. Paul MacEachern will begin his fellowship in Interventional Pulmonary Medicine, July, 2009.

The Calgary Asthma and COPD Program is nationally recognized for providing a cohesive service that links together family physicians offices, hospitals, and emergency departments. Dr. Bob Cowie leads this team of dedicated health care providers, including physicians, respiratory therapists, kinesiologists and nurses. Under the direction of Dr. Richard Leigh, with the help of Dr. Warren Davidson, including the assistance of Innovation Initiative Funding, a program for assessing sputum inflammation is now well established and rapidly being incorporated into the standard management of patients.

The Division of Respirology has also established a Pulmonary Hypertension Program. Dr. Doug Helmersen is the leader of this program and along with Dr. Sid Viner and Dr. Naushad Hirani, the Program provides day to day management as well as comprehensive diagnostic services including right heart catheterization and pharmacologic treatment. Aided by a private donation, Dr. Helmersen has purchased the equipment including a dedicated fluoroscopic system that is required for right heart catheterization studies. Together, this group is providing a world-class service for patients that would have died only a few years ago.

Research

In the most recent completed reporting period, members of the Division published 89 papers, abstracts and book chapters and gave 88 presentations. In addition, \$2.9M in research grant support was received.

While it is not possible to mention each report, it is worth highlighting some of these publications, which demonstrate the breadth of academic activity in the Division.

- Dr. Richard Leigh made an important contribution to our understanding of asthma and airway remodeling by studying airway epithelial cells and rhinovirus infection. This work was published in the Journal of Allergy and Clinical Immunology.
- Dr. Pat Hanly has made a contribution to the understanding of sleep disordered breathing following ICU admission that was published in Intensive Care Medicine. Dr. Hanly concludes that chronic sleep disorders, which originate during the acute illness, are present in some ARDS survivors several months after discharge from hospital.
- Drs. MacEachern, Stather and Tremblay made an important contribution to our interpretation of tumor invasion into pulmonary vessels viewed by endobronchial ultrasound, which he published in the Journal of Bronchology.

- Dr. Chris Mody established the importance of cholesterol rich membrane microdomains in signaling to *Pseudomonas* virulence factors. This observation, which paves the way for
- cholesterol-depleting therapies was published in the American Journal of Respiratory Cell and Molecular Biology.
- Dr. Gordon Ford, in collaboration with Drs. Neil Eves and Warren Davidson published a paper on strategies to improve exercise rehabilitation in the Canadian Journal of Respiratory Medicine.

Education (Advanced Fellowship and Training)

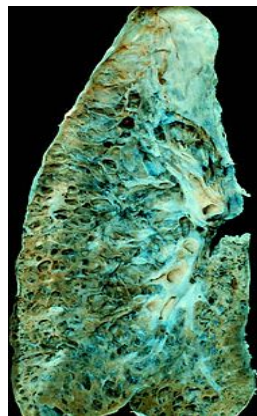
The Division wishes to announce the Boehringer Ingelheim and Pfizer Respiriology Academic training and Renewal Program (ATRP). The goal of the program is to provide funding for Major Clinical Faculty to pursue an area of academic or educational interest. Applications are requested for June 2009, with an anticipated funding announcement made by September, 2009.

The GlaxoSmithKline Advanced Fellowship Training program continues to be highly successful. As the field of respirology advances, it has become clear that the only way we can meet our goals is to recruit faculty that possess highly specialized training in focused areas. It is to this end that the Advanced Fellowship was established. While there are outstanding opportunities to fund predominately research experiences (such as the Clinical Scholar Program in the Department of Medicine, which partners with the AHFMR or CIHR), the opportunities to support a balanced, advanced clinical and academic experience are not available. With the goal of providing the highest quality of respiratory care, innovation and research in Canada, and the ability to fund balanced clinical and research-training experience we hope to develop true clinical and academic excellence in many areas. The participants of the program include:

- | | | |
|-----------------------|---------------------------|--------------------------------|
| ➤ Dr. Charlene Fell | Interstitial Lung Disease | University of Michigan |
| ➤ Dr. Naushad Hirani | Pulmonary Hypertension | University of Bologna |
| ➤ Dr. Julie Jarand | Mycobacterial diseases | University of Colorado and |
| ➤ | | University of Cape Town |
| ➤ Dr. Paul MacEachern | Interventional Pulmonary | University of British Columbia |
| | | and Germany |



Mycobacterial disease



Interstitial lung disease



Interventional pulmonology
(Tracheal Stenosis)

Challenges and Future Directions

The Division is currently actively recruiting. We need to increase the number of University Geographic Full Time members. Over the next 5 years, we hope to have 1/3 of our members with a GFT appointment. We will need to recruit 3 members to replace GFT retirements and an additional 1 GFT faculty to establish this balance. Moreover, to replace other retirements and provide a critical mass of respirologists at 4 sites (including the new South Campus), a total of 9 respirologists will need to be recruited over the next 5

years. Additionally, the Division needs to pursue selective recruitment in areas of clinical need. These include sleep medicine, lung transplantation, neuromuscular diseases, non-invasive ventilation, cystic fibrosis and pulmonary infections, occupational and environmental Medicine, and COPD and rehabilitation

Provision of outpatient services continues to be a pressing problem. Clinic space at all three sites (UCMG, RGH and PLC) is insufficient. More outpatient offices are needed. We hope that the clinics being developed in the Teaching Research and Wellness building at the FMC will result in improvements at the UCMC site; however, we anticipate that problems will continue at the other sites. The space needs to be used more efficiently.

We urgently need a coordinated system of booking patients, tests, and appointments across the region. Currently, each individual respirologists' secretary is performing these tasks. The system is cumbersome, complex and has great potential for misadventure. A streamlined, coordinated central system would increase the efficiency of providing services, in addition to being required to respond to sudden or emergency changes in provision of services (for example, a Flu outbreak or pandemic).

Dr. Charlene Fell is the Divisional representative to MDERA, which manages the Department of Medicine Electronic Medical Record (EMIS), which was implemented in 2007. Recently, the Division has accepted EMIS as the electronic medical record system for the Division and will join other Divisions in the Department of Medicine who have adopted EMIS. There is much work that needs to be done to make this a functional system.

Provision of community services needs to be improved. While great progress has been made, we are still only touching a tiny fraction of the patients with chronic respiratory illness. Medical staff barely manages their present load. We are not in a position to provide the community rehabilitation, spirometry, patient diagnostic and education program that have been identified as a priority for the Division in the Region. Additionally, with digitized electronic radiology imaging, there is the potential for Respirology to expand and provide telehealth services.

Finally, we anticipate changes at Alberta Health Services. We look forward to working with AHS to develop more efficient and effective care for our patients.

The Division of Respirology looks forward to the future with enthusiasm. We anticipate that we will be able to continue to provide the exemplary service and care, and improve upon the academic and investigative initiatives of the Division.

**Division of Rheumatology
Division Chief – Dr. Liam Martin**

Administration

The Division of Rheumatology had 15 clinically active members during this fiscal year. These members are divided into 4 categories as follows: 6 GFT, 2 major part-time, 1 clinical scholar and 6 clinical members. We also have 2 Nurse Practitioners who provide clinic service. These clinical services are provided at the Foothills Medical Centre, the Rockyview General Hospital and the Peter Lougheed Centre.

Our Division members are involved in several administrative activities at many different levels, including:

- Chair, Alberta Science and Research Authority,
- Chair, Course 2,
- Chair of the Evaluation committee Course 2
- Member of the Faculty PGME Committee
- President of the MDERA group
- President of the Foothills Medical Staff Association
- Member of Calgary and Area Physicians Association
- Member of the Medical Advisory Board
- Member of the Provincial POSP Committee
- Membership of the Canadian College of Academic Rheumatologists

The FMC site has 6 rheumatologists and 2 Nurse Practitioners who provide 20 half-day clinics per week with the support of 1 clinic nurse. Over 4000 patients had over 16000 clinic visits at our clinic in Area 5A at the FMC over the past 12 months. A further 3 or 4 half-day clinics provided by our biologic clinic nurses, who are funded through a research grant from Alberta Health and Wellness, provided over a 1000 patients who are being treated with biologic agents for rheumatoid arthritis with 1500 clinic visits.

At the RGH site we have 2 rheumatologists and 1 Nurse Practitioner (every second week) who provide 8.5 clinics per week with the support of 1.5 FTE clinic nurses. Over 1500 patients had over 6000 visits at the Rheumatology clinic over the past 12 months.

The PLC site has 1 rheumatologist who provides 350 patients with over 1400 visits per year in the outpatient clinic. A generic clinic nurse supports this clinic.

Our Central Triage continues to be the main driver for all our innovative activities in the division. We have received over 17,000 referrals since this program began 3 years ago. All referrals are traced in the Central Triage database. This data is utilized to help us plan our clinical services. The program is managed by a clinical nurse specialist, 2 unit clerks and 2 rheumatologists, Drs. Barr and Martin. The majority of referrals to rheumatology are sent to our central triage office with a small number sent directly to rheumatologists' offices. We request that these office referrals be sent directly to central triage for recording purposes. We receive an average 110 referrals per week. These are divided into priority groups depending on the information supplied to our clinical nurse specialist. Further information is requested as needed from referring doctors' offices. Our wait times continue to be reduced from the pre-ARP times. However we have reached saturation point in regards to referrals and will see an increase in our wait times over the coming years. We are also losing 2 community-based rheumatologists in June 2009 which will have a significant effect on our ability to maintain the type of patient access that we would like. We are addressing this issue by developing innovative approaches to reviewing certain new consults. We are developing a Multidisciplinary Assessment Clinic for non-inflammatory musculoskeletal conditions. This clinic is being led by our Nurse Practitioner with support from the division's specialist physiotherapist and supervised by Dr. Martin. We will assess the clinic's utility once it has been in place for 6 months it will be assessed to determine its usefulness in addressing some of our capacity problems.

Clinical

In our clinical practice we have 6 innovative clinics. These include the Young Adults with Rheumatic Diseases (YARD) clinic, the Early Inflammatory Arthritis Clinic (EIA), the Urgent Assessment Clinic, the Biologic Clinic, NP clinics, and the Multidisciplinary Assessment Clinic.

The YARD clinic is scheduled once per week at Area 5A at the FMC. There are 3 adult and 2 paediatric rheumatologists who provide service at the clinic. The clinic is supported by a clinical nurse specialist, 1 clinic nurse, a medical social worker and a physiotherapist. The young adults who attend this clinic are provided with medical, social and rehabilitation support. In the past year there were 235 clinic visits by 100 patients.

The EIA clinic takes place at 2 sites, the FMC and the RGH. The clinic is scheduled once per week at the RGH and twice at the FMC. There are 5 rheumatologists who provide service at this clinic. They are supported by 1 clinic nurse, a medical social worker and a physiotherapist at each clinic. In the past year 150 patients had 600 clinic visits.

The Urgent Assessment clinic is held on an ad hoc basis currently. The clinic is managed through our Central Triage system. It offers patients who would otherwise be waiting in the ER departments at various hospitals a more rapid access to care. Patients are reviewed at the clinic by the rheumatology resident and the rheumatologists who is on-call.

The NP clinics take place at 2 sites, FMC and RGH. We have 2 nurse practitioners who work in a collaborative manner with Dr. Martin and Penney. These clinics are supported through our Central Triage system at present. There are 4 half-day clinics at Area 5A at the FMC and 1 half-day clinic at the RGH every second week. There were 170 new patients and 325 follow-up visits provided to patients at the FMC site last year. The RGH clinic is just starting and data will be available for next year's report.

The Biologic Assessment Clinic is supported by 2 clinical nurses who are funded through a grant from Alberta Health and Wellness. This clinic provides both clinical and social support for patients being treated with biologic therapies for their rheumatoid arthritis (RA). Over the past year there have been 782 clinic visits by over 500 patients at the FMC site and a further 400 visits by over 300 patients at a Community Rheumatology clinic. This clinic is also responsible for managing the infusion of biologic therapies at Day Medicine at the FMC. Last year 580 infusions were managed. This clinic also serves as a source for the data that we utilise in our research into the effectiveness and safety of biologic agents in the treatment of RA.

The Multidisciplinary Assessment Clinic has been in place for 12 months. The clinic provides access to care for patients who are assessed through the information that we receive from their referrals to have non-inflammatory rheumatic disorders. The clinic service is provided by 1 nurse practitioner and a physiotherapist and is overseen by Dr. Martin. Patients are reviewed and discussed with Dr. Martin. If any significant problems are found in a patient the patient is referred to one of the rheumatologists for further assessment. We assessed the clinic after 6 months from a variety of perspectives with particular reference to the patients' perspective. The clinical service is deemed by the patients as having met their needs. We have also found that the patients who are reviewed at the clinic have indeed been triaged appropriately.

Research

- 42 peer reviewed publications
- \$13,925.08 grant allocation to members

Education

The Division of Rheumatology members provide teaching and learning opportunities for all levels of physicians in the Region. We are involved in teaching undergraduate medical students in Course 2 (formerly known as MSK and Dermatology course). We provide over 30 hours of lectures and 120 hours of small group teaching in this course. We also act as preceptors for Med 340, (an independent research course for 1st year students) and Med 440, (a 40 hour clinical shadowing course for second year students) courses. We provide preceptors for the horizontal course on Communications to the 1st and 2nd year medical students. We provide 30 hours per week of outpatient clinical experience to clinical clerks and 1 member, Dr. Lewkonja, provides bed side teaching once per week to clerks who are undertaking their 12 week rotation in Internal Medicine. We provide 30 hours per week of clinical teaching to both the medical residents who rotate through our service and to our Rheumatology trainees. Many members participate in Continuing Medical Education events both locally and nationally. We are also involved in the teaching of NP students and provide 6 hours per year of in-class teaching

Challenges and Future Directions

Currently the Division of Rheumatology has a very strong clinical presence with a number of innovative clinical activities. We will continue to assess our innovative activities to improve on any weakness and continue to look at innovative ways to improve our clinical services. We have recruited one of our recent trainees who will complete a Master's degree in Epidemiology. We have 3 fellows in the program, 2 of whom will complete their fellowship training this year. One of these individuals is planning to undertake post doctoral training in the area of Vasculitis in Paris starting in March 2010. A second trainee plans to do 6 months training in Psoriatic Arthritis in Toronto with Dr. Dafna Gladman, a national and international expert in this condition. Our current first year trainee is pursuing extra training in the use of ultrasound in joint assessment. This training will serve as a starting point for him in pursuing a 2 year post doctoral fellowship in studying outcomes in patients with early inflammatory arthritis. We will have a new trainee starting her 2 year specialty training in July 2009. This infusion of 'new blood' is desperately needed as we attempt to have adequate numbers of rheumatologists to replace the Division members who will be retiring over the next 6 or 7 years. We have 2 research chair positions that we had offered to 2 well qualified individuals. Unfortunately neither person will be assuming the position that was offered. Our search for suitable recipients continues. We need to fill these positions in order to allow us to be more productive in publishing the results of our clinical activities.

However, as the attached table shows, we continue to struggle to keep pace with the clinical and educational responsibilities that we have due to upcoming retirements. Our numbers will remain fairly stable over the next 8 years if we continue to recruit and train 3 fellows every 2 years. By 2016 more than half of the current 14 clinically active rheumatologists will be retired. We will need to recruit more rheumatologists to provide the same level of service to patients in the Southern half of the province.

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Nos	15	15	14	14	14	16	13	14	16
Add	1	1	1	1	2	1	1	2	1
Delete	1	2	1	1	?	4	?	?	4
Fellows In training	2	2	2	2	1	1	1	1	2
Total Staff	15	14	14	14	16	13	14	16	13