ANNUAL REPORT
2004 – 2005

"Creating the medical network of the 21st Century"

DEPARTMENT OF MEDICINE
Calgary Health Region
and
University of Calgary

TABLE OF CONTENTS

This report is respectfully submitted by: Dr. John Conly MD, FRCPC, FACP, Professor and Head, University of Calgary and Calgary Health Region, on behalf of the Department of Medicine – October 2005.

VISION, MISSION & CORE PRINCIPLES OF THE DEPARTMENT OF MEDICINE

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 the best Department of Medicine in the country

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 Leadership – Technology

EXECUTIVE SUMMARY

During the last fiscal year, The Department of Medicine has continued to evolve towards its vision of **"creating the medical network of the 21st century":** improving its overall manpower capacity; enhancing the quality and quantity of care provided; providing additional training positions for the sub specialists of the future; employing alternate care providers in its care delivery models; providing leadership in evolving systems of health care related to chronic disease management; enhancing medical services for rural Albertans; and enhancing the support for the research infrastructure of its members.

Significant Departmental Achievements

- Initiating an "Alternate Relationship Plan" with its stakeholders in August 2004 with 114 FTE members joining the plan
- Recruiting 23 new members to the Department
- Opening "The Ward of the 21st Century" Foothills Medical Centre May 2004
- Increasing the medical inpatient bed capacity in the Region by opening new Pulmonary and General Medical Units
- Implementing a "Telehealth" initiative which provided 125 consults to 100 patients in 7 rural communities, with Geriatric Medicine leading the way followed by Nephrology and Endocrinology
- Planning for innovation : 43 concepts developed in the autumn of 2004 with submissions from all divisions were distilled into17 projects submitted through the Regional and AHW budget process
- Planning for an electronic Physician Office System Initiative (AMA) began
- Actively engaging members in considering their "work-life balance" with the assistance of the Sociology Department at U of C

Noteworthy Divisional Accomplishments

- Initiating a full-time Infectious Diseases service at RGH
- Enhancing Rheumatology Services by adding an experienced rheumatologist at RGH and launching a Pharmacovigilance Program for expensive biologics
- Initiating the use of Webcams linking geriatricians with Seniors' Health Clinic sites across Calgary
- Opening a new Urgent Assessment clinic at RGH and integrating IMG's into professional practice in a Canadian context, both led by the Division of General Internal Medicine
- Expanding GI recruitment allowing additional services in therapeutic endoscopy, nutrition and inflammatory bowel diseases
- The new Clinic for Mind-Body Medicine restores function to patients with unresolved medical syndromes
- Creating a focus on chronic kidney disease among the elderly in Alberta and utilizing electronic decision support for improving the care of hemodialysis patients in Alberta
- Planning for Aboriginal health research on diabetes jointly between Nephrology and Endocrinology Divisions
- Recruiting new personnel to provide "cutting edge" core technology in the BMT program

Major Quality Improvement Initiatives

- Discharge Planning Process Improvement: estimated date of discharge, discharge planning sticker, 0605 lab draws
- Development and implementation of order sets for diabetes care and DVT prophylaxis
- Medication Order Error Reduction Project at PLC incorporated standardization of abbreviations and the unit clerk transcription process
- "Good Catch" feedback to clinicians from caregivers
- Formation of frontline safety action teams

Planning for Innovation in Care Delivery

- Planning for additional alternate care providers to improve access to care in Diabetes, Chronic Disease, Rheumatology, ID, and Sleep Medicine
- Planning for centralized referral processes to shape demand and improve access in GI, Rheumatology and Nephrology
- Enhancing access to Medical Specialists for Primary Care Providers through telephone, email, videoconferencing, and facilitating communities of practice
- Applying best evidence through development of clinical practice guidelines, e.g. DVT prevention
- Supporting target populations through development of specialty clinics, e.g. Centre for Musculoskeletal Health; Cough Clinic; Rare Blood Disorders

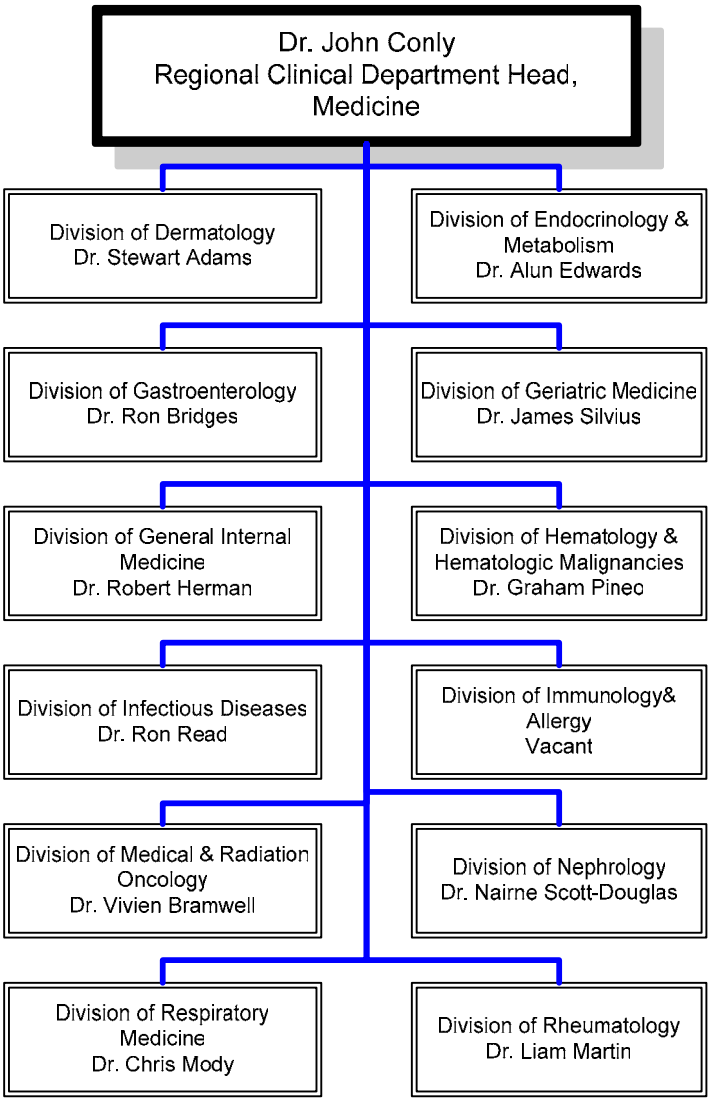
Education and Research Highlights

- Actively involved in the Nurse Practitioner Program
- Reorganizing the Residency Education Program to a Program Management model
- Increasing the number of positions in the Core Internal Medicine Residency Program to 40 (from historic level of 30)
- Estimate of 50 FTEs/annum for each of the Undergraduate Education and Postgraduate Education programs, based on 100 undergraduate students
- Recruiting to a new Canada Research Chair in Molecular Medicine
- Research: 334 peer reviewed publications (includes editorials and letters),137 peer reviewed publications submitted; 47 non-peer reviewed publications; 52 books and book chapters

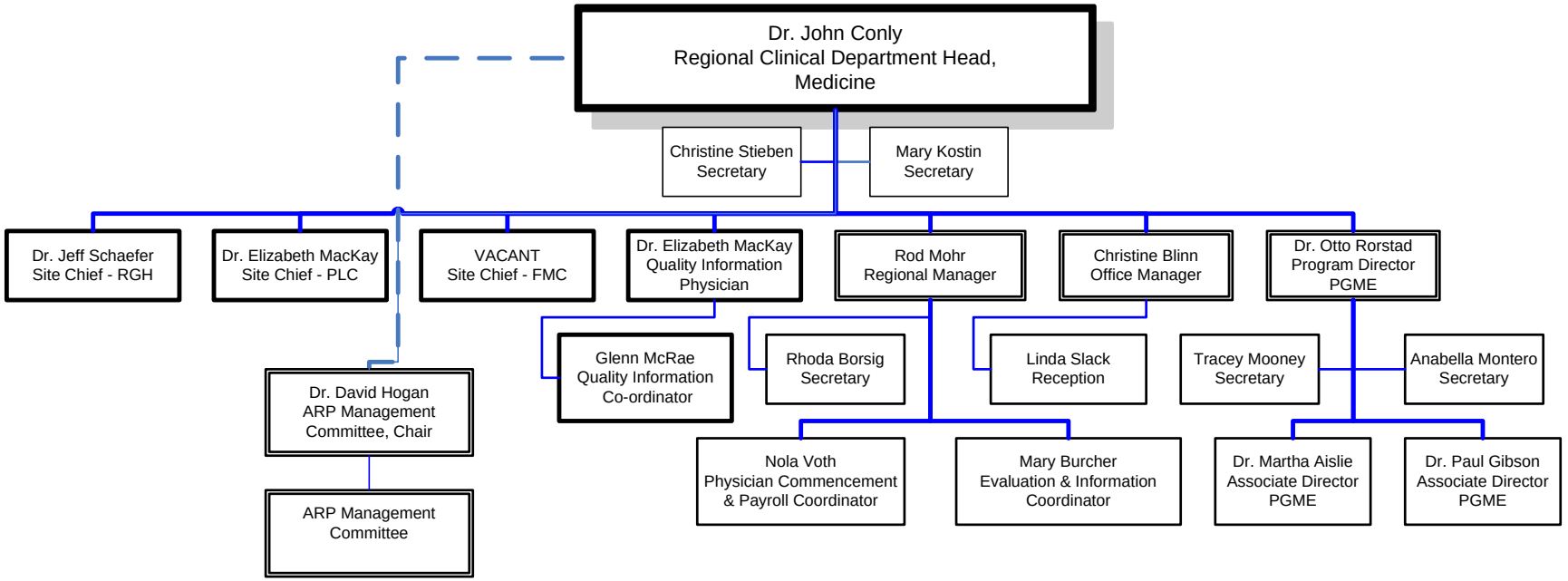
Challenges and Priorities for Next Fiscal Year

- Meeting recruitment targets of 15-20 FTEs / per year to meet clinical service requirements and train future IM specialists
- Accommodating current and short term space requirements
- Supporting the deployment of an EMR solution in outpatient clinics as part of the overall Outpatient Clinical Care Integration Strategy
- Planning for ARP renewal with strategic and tactical issues in a complex political environment
- Employing the Ward of the 21st Century as a template for South Hospital planning
- Finding operational funding for current and future innovation initiatives

DEPARTMENTAL STRUCTURE AND ORGANIZATION



Administrative Staff



Demographics of the Department of Medicine

	MALES	FEMALES	Ave Age	C	MC	GFT	Left Dept	Final	ARP	Recruits
Dermatology	12	7	47.15	16	1	2	1	20	1	2
Endocrine	6	9	46.23	5	4	6	1	16	15	1
Gastroenterology	25	5	47.29	10	8	11	1	30	16	4
Geriatrics	5	3	47.71	1	6	1	0	8	7	1
General Internal Medicine	28	15	42.77	29	8	6	0	43	30	6
Hematology	10	3	44.45	1	5	7	0	13	10	1
Infectious Disease	10	3	50.80	2	1	10	0	13	13	1
Immunology	2	0	51.00	2	0	0	0	2	0	0
Medical & Radiation Oncology	13	10	44.27	15	1	7	0	23	0	3
Nephrology	18	3	45.78	6	5	10	0	21	8	1
Respirology	16	5	45.33	3	11	7	0	21	16	1
Rheumatology	7	8	51.00	7	2	7	0	16	15	1
TOTALS	152	71	46.25	97	52	74	3	226	131	22

Noteworthy Departmental Accomplishments and Highlights

The Department of Medicine has forged ahead with developing and implementing solutions to some of the biggest challenges it faces as an Academic Medicine enterprise. The following examples demonstrate the ingenuity and dedication of the Department members who lead the way, living the vision of the Department, *"Creating the medical network of the 21st Century,"* based on its core principles:

innovation technology scholarship health and wellness
patient care disseminate knowledge

- **Telehealth**: The inaugural year of service succeeded far beyond expectations, we provided specialist consultation to patients and their primary care providers in rural communities of Southern Alberta who accessed services conveniently located in their own communities. The teleconferencing *technology* is a tool now applied to improve both the quality of *patient care* and patient satisfaction with care, through intervening earlier in a disease process to preserve levels of *wellness*. At the same time, primary care physicians enhance their knowledge through timely and specific learning about the care of their patients, while the specialists (clinician-researchers) can evaluate the experience and *share knowledge* founded on rigorous research protocol.

- **W21C** – We are creating a multi-disciplinary, patient centered, medical ward focusing on the evaluation and treatment of patients with complex, multi-system clinical problems and, at the same time, bridge this to innovations in education and technology and to outcomes research

- **Chronic Disease Management Program**: Enabled by the Department's ARP and support for innovations from Alberta Health and Wellness and the Region, planning for innovations in the Region's system for providing appropriate *patient care* to those living with a chronic disease will increase capacity, foster the maintenance of patient *wellness* through better integration of multidisciplinary care and build capacity among primary care physicians. Innovative use of alternate care providers; Telehealth for academic detailing and interdisciplinary team conferences with outreach patients; earlier intervention in disease processes through more timely care, more efficient use of resources through centralized booking systems and EMR; and dissemination of knowledge among all care providers all contribute to quality care of patients.

- **IMG Program**: To help address the critical shortage of trained physicians in the Region, Department members have designed, implemented, improved and expanded their program to harness the medical knowledge and skills of International Medical Graduates (IMG's) by hiring IMG's for service support, and preferentially recruiting applicants suitable for transfer into the so-called 'second-entry' pathway into residency. This path recruits and prepares IMG's for practice in Alberta; their training and subsequent qualification is the responsibility of the Internal Medicine Residency Training Program.

Clinical

In addition to those clinical accomplishments and highlights noted in the Department's Executive Summary, more details can be found in the unabridged versions of the annual reports submitted by division chiefs (Appendix #2**).**

Education

The Department delivers an estimated equivalent of 50 FTEs education to the Undergraduate Program per annum, based on an annual intake of 100 undergraduate students. An estimated 50 FTEs education per annum (Dr. O. Rorstad) is also provided to postgraduate residents, primarily in clinics, on wards, and in the medical teaching units. In addition, as the changing model of health care delivery continues to engage multiple disciplines, the Department has engaged with the Nurse Practitioner Program at the University of Calgary as well as students in the Faculty of Kinesiology.

The number of positions in the Core Internal Medicine Residency Program increased from a historic 30 positions to the current 40 positions, enabled by using International Medical Graduates as well as funding from Alberta Health and Wellness for post-graduate medical education. To accommodate this program expansion, the Residency Training Program reorganized into a Program Management model.

Members of the Department also provide education to the wider community through a variety of means, such as invited presentations to health care professionals, media interviews and presentations to disease-specific interest groups.

Research

During the 2004 calendar year, based on submitted reports, Department members (excluding the Division of Cardiology) disseminated their knowledge in the following venues:

- 344 articles, editorials and letters
- 137 additional articles submitted to peer reviewed publications
- 47 articles published in non-peer reviewed publications
- 321 abstracts published
- 52 books and book chapters published
- 233 invited presentations

They also contributed to the development of future medical researchers by mentoring and supervising the work of 264 learners at undergraduate, graduate and post-graduate levels.

Medical Leadership and Administration

Members of the Department continue to contribute both leadership and participation to the complex network of medical administration locally (including faculty, department, division and Calgary Health Region positions) as well as at provincial, national and international levels. Collectively, they occupied over 900 positions on medical and health-related committees and boards in 2004.

Challenges and Priorities for Next Fiscal Year

- Meeting recruitment targets of 15-20 FTEs / per year to meet clinical service requirements and train future IM specialists
- Accommodating current and short term space requirements
- Supporting the deployment of an EMR solution in outpatient clinics as part of the overall Outpatient Clinical Care Integration Strategy
- Planning for ARP renewal with strategic and tactical issues in a complex political environment
- Employing the Ward of the 21st Century as a template for South Hospital planning
- Finding operational funding for current and future innovation initiatives

The Department of Medicine has recruited 23 members to the specific divisions as evidenced in the Recruitment to Department 2004 – 2005. We are actively recruiting 20 to 25 additional physicians primarily through the funding of the ARP. The impact of this manpower growth on the clinical and other costs to the Region is in the order of 1.2 million per year. We have addressed this by an annual growth request through the PBMA.

Recruitment for 2004 – 2005

	Surname	***Given Name***	***ARP?***	***Entry Date***	***Sex***	***Age***	***Academic***
Cardiology *	Friedrich	Matthias G.	Yes	01-Jul-04	M	43	GFT
Dermatology	Mydlarski	P. Regine	Yes	01-Sep-04	F	32	GFT
Dermatology	Parsons	Laurie	No	01-Aug-04	F	44	MC
Endocrine	Bassyouni	Hanan	Yes	26-May-04	F	30	MC
Gastroenterology	Chalmers-Nixon	Tara	No	10-Jan-05	F	34	C
Gastroenterology	Devlin	Shane	Yes	01-Jul-04	M	32	MC
Gastroenterology	Love	Jonathan	Yes	01-Oct-04	M	43	MC
Gastroenterology	Stapleton	Melanie	Yes	01-Jul-04	F	30	MC
G I M	Agarwala	Ravi	Yes	24-Sep-04	M	35	MC
G I M	Banage	Christine L.	Yes	01-Feb-05	F	40	C
G I M	Dunne	Fiona M.	Yes	01-Sep-04	F	38	MC
G I M	Pollak	P. Timothy	Yes	10-Dec-04	M	48	GFT
G I M	Purdy	Anna Carolyn	No	12-Jul-04	F	34	C
G I M	Yau	Jonathan	No	25-Oct-04	M	50	C
Geriatric Medicine	Schmaltz	Heidi	Yes	01-Sep-04	F	31	MC
Infectious Diseases	Pattullo	Andrew L. S.	Yes	01-Aug-04	M		MC
Med Rad Oncology	Bebb	D. Gwyn	No	14-Sep-04	M	43	GFT
Med Rad Oncology	Eigl	Bernard	No	03-Feb-05	M	34	C
Med Rad Oncology	Yan	Elizabeth	No		F	36	MC
Nephrology	Mustata	Stefan	Yes	01-Sep-04	M	42	GFT
Respirology	Hanly	Patrick J	Yes	01-Sep-04	M	50	GFT
Rheumatology	Le Clercq	Sharon Anne	Yes	01-Aug-04	F	52	MC

*** Dr. Matthias Friedrich was recruited through the DOM ARP in the Division of Cardiology. Cardiology became recognized as a Department early in the fiscal year.**

Attrition to Department – 2004 - 2005

ATTRITION				
Medicine	Retired	Enta	Thomas	M
Medicine	Retired	Sutherland	Lloyd	M
Medicine	Retired	Watanabe	Mamoru	M

Following the internal and external safety reviews of the Region, it became clear that the Region needed to change its structure and function to increase awareness and accountability for patient safety issues; as a result, a new patient safety division and supporting VP positions were created. In the Department of Medicine, the existing quality improvement teams and councils evolved to integrate patient safety measurement, tools and activities into their mandates. As well, the collaborative projects developed a clear patient safety focus around medication safety. As another departmental safety initiative, the concept of safety action teams was introduced in an attempt to integrate patient safety into regular practice. Unit, service, or program based front-line teams explore and resolve local safety risks and issues and report findings to co-workers and leadership, (see Appendix # 1).

The Region has taken a leadership role in the development of a national patient safety campaign – Safer Health Care Now! This campaign focuses on six evidence based strategies to reduce morbidity and mortality in the following areas: acute MI, surgical site infection, central line infections, ventilator acquired pneumonia, medication reconciliation, and development of rapid response teams. The Medicine Quality and Safety Improvement Council is supporting teams in medication reconciliation and central line infection reduction.

A guideline development, implementation strategy and infrastructure will evolve over the next year. This will provide support for evidence based practice initiatives in the Department and wider Region. Presently we are working with: Pulmonary Medicine to develop a BiPAP guideline; Hematology/ Oncology on a febrile neutropenia guideline; and Critical Care/ Emergency Department on a sepsis protocol.

Health care quality indicators are used to stimulate and support improvement in the quality of care delivered by the Region. Currently we receive some information on mortality and incident reporting data presented in a sub-optimal format. We are working with the Department and QIHI to develop better indicators of quality of care that are reported in a more useful format and in a timely fashion. This would include data on readmission rates, nosocomial infection rates and medication errors by unit and service.

Quality Improvement and Safety Program

The Medicine Clinical Enhancement Team (QI Consultant and QI Physician) and the Medicine Quality and Safety Improvement Council are charged with the responsibility to lead in the development and maintenance of a Quality Improvement and Patient Safety Program for the Department of Medicine and the Calgary Health Region's Medicine Portfolio. The Council will prioritize, plan, and implement solutions to clinical and system issues that impact patient care. The Council will utilize the services of the Medicine Quality and Safety Improvement Team to evaluate processes and make decisions based on the evidence and information available to them. The Medicine Quality Council shall serve in an advisory capacity to the Department of Medicine Executive Committee, and to the Regional Quality Council of the Calgary Health Region.

Key Functions of the Quality and Safety Improvement Council:

1. To review and prioritize issues regarding quality in the Calgary Health Region's Medicine Program and to develop a Quality and Safety Agenda that is in alignment with the Region's Business Plan and Strategic Directions.

2. To integrate clinicians and support service departments to address clinical and system issues and improve patient care through the establishment of multidisciplinary Quality Improvement Teams.

3. To ensure implementation of solutions to problems identified by the Quality Improvement Teams.

4. To communicate with the clinical staff at large about efficient bed and resource utilization and to liaise with other departmental and regional committees in the development of QI and safety strategies.

5. To develop and provide clearly defined indicators of quality of care within the Calgary Health Region's Department of Medicine and Medicine Program and to collaborate in the collection of this information in a timely manner to be merged with the Region's data warehouse..

6. To promote, foster, and initiate health care delivery research.

7. To participate in and support the integrated educational program regarding quality improvement and patient safety.

8. To access, support, and add to the critically appraised library of clinical practice guidelines developed within the Calgary Health Region as well as those developed by external organizations .

9. To investigate and promote alternate modes of patient care delivery that could appropriately or efficiently meet the needs of patients/clients, both in acute care or in the community.

Key components of the Medicine Quality Improvement and Patient Safety program include:

1. **Communication**: Continued communication to the multidisciplinary Quality and Safety Improvement Council to allow spread of QI and Safety changes to all groups represented. Developed formal relationship with Family Medicine Quality Council. Redesign of website. Developing method of collating and communicating safety issues from Safety Action Teams. Ongoing presentations and agenda items at Medical Services Executive Council. Presentation of key findings at Learning Sessions of Collaboratives, Grand Rounds, Regional Quality Council, Site Councils.

2. **Education**: Ongoing involvement with Postgraduate Medicine Program with QI and Safety Teaching, and support of resident projects. Education of Council members around QI and Safety Tools and methodology, team-based education. Developing an education agenda for frontline staff, including site-based initiatives, orientations and newsletters.

3. **Committees**: Membership on MSEC, Regional Steering Committees for Flow and Medication Reconciliation, Family Medicine Quality Council, Regional Quality Council, Acute Care Clinical Safety Committee.

4. **Indicator Development** : Involved with development of the ARP evaluation. Working with DOM and QIHI to have customized reporting of certain indicators and working with division chiefs in the development of divisional indicators.

5. **Evidence Based Practice**: Development of a more defined process for the review and implementation of practices guidelines within the department of medicine.

6. **QI and Safety Projects**: Support at various levels and stages of multiple projects throughout the department (See Appendix 1)

Challenges and Future Directions for Quality and Safety Improvement in Medicine

We are challenged with encouraging a culture change in the areas of patient safety and flow, and to maintain gains achieved through quality improvement work. It is difficult to measure this change when it does occur. Despite this, the support for safety and flow activities in the Region continues to grow. The development of a VP of Safety and a division within QIHI to support safety work speaks to the commitment of leadership. The uptake of activities such as the safety action teams by multiple units and programs speaks to the frontline support for improving health care quality and safety. We have set additional goals to improve processes around the development and implementation of evidence-based practices and guidelines and to further our work in the area of quality indicators. We remain dedicated to improving communications with the multiple stakeholders involved with quality and safety, and to developing a balanced scorecard for quality within the portfolio.

Innovation in the Department

With innovation planning, supported by shared funding between Alberta Health and Wellness and the Calgary Health Region, our goals are:

- Facilitating better access to medical specialist services for both patients and their primary care providers
- Enhancing system quality, safety and effectiveness
- Improving service integration
- Enhancing care delivery to rural and First Nations peoples

In the autumn of 2004, members from all divisions of the Department of Medicine with 43 innovation proposals to address issues of access, safety and quality. Representatives from all divisions collaborated on decision-making to package and put forward the most “do-able” ideas that would have the greatest chance of success and the most impact on addressing the stated goals. A Project Manager hired in March 2005 immediately leapt to the challenge of implementing the final seventeen innovation proposals. In summary, they include:

- Planning for additional alternate care providers to improve access to care in Diabetes, Chronic Disease, Rheumatology, ID, and Sleep Medicine
- Planning for centralized referral processes to shape demand and improve access in GI, Rheumatology and Nephrology
- Enhancing access to Medical Specialists for Primary Care Providers through telephone, email, videoconferencing, and communities of practice
- Applying best evidence through development of clinical practice guidelines, e.g. DVT prevention
- Supporting target populations through development of specialty clinics, e.g. Centre for Musculoskeletal Health; Cough Clinic; Rare Blood Disorders

By the end of the next fiscal year, it is anticipated that all services will be functioning, a first round of evaluations will be completed and operational funding will be assured.

FUTURE DIRECTIONS AND INITIATIVES

In addition to the challenges and priorities for the next fiscal year that are identified in the Executive Summary, participants at the October 2004 Department of Medicine Retreat, identified the following future directions and goals:

- Develop clear department goals and deliverables, including clear goals for patient outcomes
- Plan and organize a coordinated and strategic recruitment process to ensure that our efforts are effective and efficient
- Shift acute based services to either new buildings or community based settings
- Create departmental research initiatives and coordination (horizontal research group)
- Provide incentives to trainees to pursue a career in medical research
- Use multi-disciplinary training environments
- Provide training in non-acute settings
- Use new technologies and delivery mechanisms, including leverage of EMR's, Telehealth and other electronic resources, to improve training, and support improved access to specialists by primary care providers/ LPCI's
- Ensure that adequate resources are in place to support training of IMG's
- Create collaborative networks with other DOM's and Faculties to access and share intellectual capital

Each individual division chief identifies recruitment as critical for sustaining the current level of service; the rapidly expanding population in the Region will only exacerbate the current shortage of physicians and alternate care providers.

Appendix # 1: Summary of Medicine Quality and Safety Improvement Projects

Project Name	Comments	Status	Type of Request	Site	Divisions
PLC Medication Order Error Reduction Project	Aimed at reducing the incidence of medication order errors. Includes standardizing processes, education of unit clerks, promoting physician order entry (especially of medications)	Test cycles ongoing	Process mapping, measurement, process redesign, setting up and evaluating test cycles, communication with site	PLC	GIM/ Hospitalist/ Surgery/ Pharm/ Nursing/ other specialties included in interventions/education
Safety Action Teams (see Appendix #? for details)	Composed of front line staff. Based on three main mandates: identifying safety hazards; fixing them and telling someone about the fix (or telling someone about the things the team cannot fix).	New teams being formed and communication system being implemented	Team set up and baseline measurement, cause and effect mapping, facilitation, communication	ALL	Pulm/ GIM/ Hem/ Oncology/ Rehab/ Pharm/ Nursing
Medication Reconciliation	Main goal is to complete a best possible medication history form within 24hrs of admission to inpatient unit, and compare list with the physicians admitting medication orders. Any discrepancies are clarified with the ordering physician.	Baseline measurement	Involved with steering committee, audits/measurement, developing process and testing cycles	RGH/FMC	Hospitalist/ Pulmonary/ GIM
Central Line Infections	To apply intervention bundles to reduce the incidence of central line infections among the dialysis/oncology population	Team formation		FMC	Nephro/ Hem/ Oncology
Intrathecal Chemo	QI methodology to facilitate a safety review of the current chemotherapy delivery system regionally to help identify potential failure points that may lead to the inadvertent intrathecal delivery of Vincristine	Review of current process and gaps completed. Working on next steps	Process mapping, Failure Mode & Effect Analysis, review of established recommendations and safety steps	Regional	Hem/ Oncology/ Pharm/ DI/ Nursing

Project Name	Comments	Status	Type of Request	Site	Divisions
Febrile Neutropenia	Obtain chart list from QIHI of patients who had a MRD of febrile neutropenia and a secondary diagnosis of hematologic pathology. QA study of use and yield of blood cultures in this patient population with goal of guideline development	Resident Project ongoing At chart review stage	Request for data	FMC/PLC	Hem/ Oncology and ID
BIPAP Guideline	To review the use of BiPAP with respect to clinical indication, physician ordering, monitoring strategies and patient outcomes. We hypothesize that BiPAP may be inappropriately prescribed, insufficiently monitored and applied in settings beyond those for which both clinical research and expertise support safety.	Awaiting funding for increased RT support to implement guideline	Development of audit tool and assessment plan and support of guideline review and implementation	Regional	Pulmonary
PICC	To determine if certain patients within the general surgery population would benefit from PICC line insertion earlier in their admission or prior to admission.	Chart review	Development of audit tool, assistance with audit, process improvement methodology	RGH	ID
Sepsis	To utilize protocol aimed at early detection of sepsis and the application of early goal-directed therapy	Team formation	Process improvement and project members	PLC	GIM/ ICU/ ED
SBAR	To improve communication through the use of a tool based on categories of situation, background, assessment, and recommendation. Provides framework to quickly and efficiently present important patient information to physicians.	Team formation	Process improvement tools, development of SBAR tool and assistance with piloting and implementation	FMC	Pulm/ Thoracic Sx, Hospitalist, nursing
Alcohol Withdrawal Protocol	To standardize the assessment and treatment of patients experiencing EtOH withdrawal.	Admin Guideline review	Assistance with implementation of guideline in DOM	All	All

Project Name	Comments	Status	Type of Request	Site	Divisions
Code Blue	Examine frequency, timing and outcomes of code blue events on Unit 36 compared to outcomes on Unit 61	Resident Project, ongoing, chart and database review	Assistance with process mapping, audit tool and data management	FMC	GIM/ Nephrology (SSB units vs. rest of hospital)
CMV Negative Transfusions	To determine the use of CMV negative and/or irradiated blood products in hematology and oncology inpatients	Resident project, ongoing at chart review stage	Assistance with audit tool, data request, guideline development	FMC/PLC	Hem/ Oncology
Pulmonary Clinics PLC	Assist with process review and redesign to improve clinic booking, review of results and other patient safety issues	Awaiting reevaluation of process improvement steps	Assistance with process mapping, redesign and evaluation	PLC	Pulm
System Flow Teams	Improve flow through system using QI methodology around process redesign, discharge orchestration, team function and communication	Testing cycles ongoing	Chair and data support of PLC team, flowmapping, measurement, setting up and testing cycles of change.	PLC	GIM/ GI/ Hospitalist Surgery/ ED/ rehab/ lab/ DI
GI Referral	Working with Family Medicine Quality Council to improve access and communication with medicine subspecialties	Involved with testing of centralized referral process spread to PLC	Review of referral forms and process	FMC/PLC	GI/ Family medicine
DI Thoracentesis	Improve process of lab testing ordered through DI	Testing cycles ongoing	Process mapping and redesign, setting up and testing cycles of change	PLC, try to spread to FMC/RGH	DI/ GIM/ Pulm/ Hospitalist
GI Bleed	Improve care for patients admitted with GIB	New team formation	Process mapping transition prior orderset for use by Hospitalist/ MTU	PLC/RGH	GIM/ GI/ Hospitalist
MTU Consultation	Improve process of consultation on the MTU	Resident project ongoing, at evaluation phase	Assistance with project planning and data management	FMC/PLC	GIM/ subspecialties

Project Name	Comments	Status	Type of Request	Site	Divisions
Diabetes Order Set	Improve patient safety for diabetic inpatients	Orderset being used at RGH	Try to implement to other sites	PLC	GIM/ Endo/ Hospitalist
Midline PICC insertions	To determine whether RGH & PLC inserted midline catheters have an acceptable complication rate (as benchmarked against the literature).	Audit tool development	Audit tool development and data request	RGH	ID/ HPTP
Febrile Neutropenia Project	Improve process of assessment and early management of this population. Use of guidelines developed elsewhere, including use of a patient information card and a process redesign of how patients enter system (to reduce risk of infection and delayed evaluation and treatment)	Team formation and development of patient information card	Process mapping, process redesign, testing and evaluation,	FMC/PLC	Hem/ Oncology/ GIM/ ED

Appendix # 2 Division Reports (presented in alphabetical order by Division)

Division of Endocrinology and Metabolism

Division Chief - Dr. Alun Edwards, MB FRCPC

The Division of Endocrinology is at 13 members as of March 31, 2005 with an additional position of a clinical scholar in Dr. Doreen Rabi. Dr. Hanan Bassyouni joined the Division as a member with on-site activities at the Peter Lougheed Centre on January 1, 2005. All Division members also became members of the Department of Medicine's ARP on August 1, 2004 and have been full participants in the process of innovation and evaluation expected of this relationship. Several proposals for innovation projects and programs were submitted by the Division to the Department of Medicine.

CLINICAL AND INNOVATIONS

The Division continues to be a leader in looking at different ways of delivering its services and is actively supporting different forms of interaction with managed care teams dealing with the management of diabetes, hypertension, and dyslipidemia. This approach has allowed Division members to look at more effective triage of referrals and deferral of consultation, if necessary, while providing management suggestions to primary care teams (including alternative care providers) with the use of electronic communications. It is anticipated that the Division's proposal for Telehealth initiatives will easily meet the goals set by Alberta Health and Wellness when it announced funding at the end of the financial year.

These innovations place the Division at the forefront of departmental initiatives and strategies and have been much easier to implement because of the ARP and also because every one of the Division members is remunerated in this way.

EDUCATION

Education continues to be a major plank of the Division's activities: the undergraduate endocrine course being highly ranked by undergraduate medical students. A substantial number of Division members have received awards for the excellence of their teaching. The Division continues to train two specialty residents and also actively participates in the teaching of core internal medicine residents and residents from other training programs (e.g. Medical Genetics, Neurosciences).

RESEARCH

Research continues to be a major mandate for the Division. There is perhaps a gradual shift in the flavour of the research. Although laboratory research is conducted by three Division members, there are more Division members involved in epidemiology and health outcomes research and this could well become an area of strength for the Division over the coming years, reinforced by appropriate recruitment of faculty.

ADMINISTRATION

There have been some administrative changes within the Division. Dr. Alun Edwards became the Division Head in June of 2004 after Dr. Hanley's tenure in the position for 12 years. Dr. Donovan took over Dr. Edwards's responsibilities for regional diabetes administration though the latter may require devotion of considerably more Division members' time particularly with the rollout of the Chronic Disease Management Program, ARP innovation initiatives, and the expansion of Telehealth programming.

CHALLENGES FOR 2005/2006

The clinical workload for the Division appears to be increasing steadily. This is apparent for in-hospital consultation, but also for an increasing demand for ambulatory care consultation, and particularly for assistance with long-term and on-going follow-up for chronic diseases. Increasing stringency of requirements for diabetes control and management and the restriction of some other specialists' practice to acute in-hospital care seems to be placing an increased demand for specialist assistance in the outpatient area. Division members' waiting lists for patients are all increasing gradually. Although there are 14 Division members the amount of clinical FTE time varies from 0.2 to 0.9 and the effective clinical FTE is closer to half of the membership number. It is hoped that participation in multidisciplinary team care and using allied health professional case managers that the contribution of the specialists can be broadened and more effective to reach a greater number of patients. It will be seen over the coming one to two years whether this is proving to be effective and desirable. Recruitment of clinicians will still be required though limitations in the ARP allocation may mean that some of these members will work in private practice and a fee for service setting.

There appear to be no particular challenges in the educational front though finding adequate space to provide ambulatory care teaching may well be a critical issue with increasing numbers of medical students and residents. Perhaps this problem will be helped by capital projects and restructuring within the region/University.
Academic recruitment remains high on the priority list of the Division as many of the academic members are within five to eight years of retirement. There are prospects for recruiting young researchers over the next one to five years.

The administrative load for dealing with innovation particularly in the area of diabetes care and the management of cardiovascular risk reduction is significant, and there are a number of pressures that require the expertise of endocrinologists to provide leadership and assistance in developing policies in the acute, ambulatory care and community sectors. The development of obesity programs in the region will add further pressures in this area.

Overall, the Division has excellent clinical strength that is spread across all of the subspecialty areas covered by endocrinology from metabolic bone diseases to neuroendocrine tumours and from diabetes to reproductive endocrinology. Such coverage of all clinical areas is hard to find in many Canadian cities. The Division's educational record is outstanding and there is no reason to believe that it should not continue as many of the excellent educators are still early in their careers. There is a prospect of reenergizing research within the Division and exploring some fields of research that have not previously been a divisional strength, provided recruitment strategies are successful over the next one to five years.

DIVISION OF GASTROENTEROLOGY

Division Chief - Dr. Ron Bridges, MD

The past year has been a time of transition for the Division of Gastroenterology. All areas of the Division are evolving. By working together we are integrating patient care activities with educational programs and research activities. Recruitment is a priority and the division has worked diligently over the past year to take on new members. Divisional success has lead to the loss of Drs. Meddings, May and Romagnuolo to prominent academic positions at other Canadian and American Institutions. The Alternate Relationship Plan (ARP) has been a benefit in recruiting physicians to the Division. We have been fortunate to recruit three Gastroenterologists, Dr. Jonathan Love (therapeutic endoscopy), Dr. Shane Devlin (inflammatory bowel disease) and Dr. Melanie Stapleton (nutrition). All have accepted major clinical appointments as members of the ARP with the Calgary Health Region (CHR) and University of Calgary. They bring specific areas of expertise to complement the growth of the Division. Several other individuals have been interviewed and will hopefully join the division in the future to improve patient access to care and foster the research and educational endeavours of the Division. Following Dr. Meddings departure, Dr. Ron Bridges was appointed Acting Head of the Division while a formal search for a new Division Head is completed.

With the support of the CHR and the University of Calgary we have been actively developing a Centre for Digestive Health that will contain a structured Colon Cancer Screening Program. The vision is to provide a superb, innovative, efficient, cost effective and integrated outpatient program for colon cancer screening, research and education. By removing screening colonoscopies from hospital endoscopy units, an associated gain is improved access for patients with gastrointestinal problems to the existing acute care system. Development of a central referral, triage and telephone consultation service at the Foothills Medical Centre site is being aided by ARP Innovation Funds. Eventually the system will be expanded to all interested members of the Division to improve access for patients with gastrointestinal disorders. Dr. R. Panaccione has supported the training of a nurse practitioner who upon completion of training will join the Division to enhance the care of patients with Inflammatory Bowel Disease (IBD) and other gastrointestinal problems. Hepatology nurse clinicians continue to offer significant support to the ongoing care of the large number of people with viral liver disease.

With the help of the CHR, private donors and peer-reviewed research grants, new technologies are being utilized in the area of therapeutic endoscopy – photodynamic therapy and capsule endoscopy. The latter is being performed as a part of a study to assess the cost effectiveness of the technique. The volume of patients requiring endoscopic ultrasound continues to grow and further recruitment and expansion will be required in this area.

The Lloyd Sutherland Chair in Inflammatory Bowel Disease and the Noel Hershfield Foundation of Calgary Health Trust were established and are partially funded. The GI Division is diligently working to fully fund these positions. A proposal for a Chair in Therapeutic Endoscopy has been developed and funding is to be secured. Each will enhance the scholastic activities of the Division and Department and ultimately lead to advances in patient care.

The Division is actively involved in all aspects of research and continues to be a national leader in clinical and basic science research. As of March 2005, four Division members hold salary support awards from AHFMR. Division members were principal applications or co-applicants on several new AHFMR and CIHR operating grants. The Division of Gastroenterology has a strong working relationship with the University of Calgary Gastrointestinal Research Group (GIRG) and III Institute. Division members conduct research from all four CIHR research pillars. There are a variety of research interests including inflammatory bowel disease, hepatology, therapeutic endoscopic, functional gastrointestinal diseases and GI cancers. The Division currently has strong clinical trials programs in viral hepatitis, inflammatory bowel disease and functional gastrointestinal disorders. A divisional clinical trails unit is being developed to facilitate an effective, efficient and coordinated approach to future clinical trials and to expand the scope of trials to other areas in hepatology and gastroenterology. The development of a divisional database is essential to the success of the future growth of divisional population

health and clinical research. Numerous publications and presentations originated from division members during the year.

Under the leadership of Dr Eldon Shaffer, the GI training program continues to be recognized as one of the premier Canadian training programs. Four trainees completed their core GI training and passed their specialty exams. Each plans an academic career and has obtained funding to continue subspecialty training. Melanie Stapleton has joined the division and has taken a leave of absence to obtain further training in nutrition. Shane Devlin has joined the division and will take a leave in July 2005 to obtain further IBD training at Cedars Sinai, UCLA, California. Alex Aspinall is in Birmingham England to complete post-doctoral training in hepatic immunology. Chris Andrews is at the Mayo Clinic pursuing further training in the area of functional gut disease. The latter two people will return to Calgary following the completion of training.

Two first year trainees successfully completed their Internal Medicine exams. The second year trainees, Steve Heitman and Gil Kaplan, have both applied for AHFMR and CIHR funding to support further subspecialty training following the completion of core training. Dr. Heitman will pursue therapeutic endoscopy and health economics in England and Dr. Kaplan will go to Harvard for additional IBD and public health training. The trainees have actively engaged in a number of research projects that have resulted in a number of publications and presentations at national (Canadian Digestive Diseases Week and Canadian Association for the Study of the Liver meeting) and international meetings (American Gastroenterology Association meeting and American Association for the Study of Liver Disease meeting). Both Drs. Heitman and Kaplan plan to return to Calgary following the completion of training. With the assistance of the CHR the GI training program will expand to take 5 Canadian trainees beginning in July 2005. For the first time GI trainees will do rotations at the Rockyview General Hospital beginning in the fall of 2005. The challenge will be to ensure the larger program continues to provide excellent training.

The Faculty of Medicine Case-Based GI course was a success. A web-based approach has been utilized to disseminate course schedules, outlines and updates in a very successful manner. Ensuring adequate manpower to provide undergraduate teaching is a challenge as the undergraduate medical program expands. With the rescheduling of the Faculty of Medicine curriculum the GI course will be taught twice within 5 months in 2006. Planning has commenced to accommodate a scheduling anomaly that will result in the GI course being taught twice within 5 months in 2006.

Division members supervise several graduate students through the Gastrointestinal Sciences Program and the Department of Community Health Sciences.

Members of the Division planned and facilitated the following high quality CME programs:

- Western Canadian Inflammatory Bowel Disease Course
- Alberta GI Emergencies Course
- Alberta Society of Gastroenterology Annual Meeting
- Post Digestive Disease Week Update Course

In the last year, members of the Division of Gastroenterology received the following awards:

Dr. Rob Myers – Graduate Student Scholarship – Alberta Minister of Advanced Education
Dr. Syl Coderre – 2004 University of Calgary CAME Certificate of Merit Award
Dr. Syl Coderre – Gold Star Teacher, University of Calgary
Dr. Syl Coderre – elected to University of Calgary “Great Teachers” website
Dr. Syl Coderre – CMSA Letter of Excellence in Clerkship Training
Dr. Syl Coderre – Canadian Association of Gastroenterology Award to attend “OMGE-OMED Train the Trainers Program” in Uruguay
Dr. Remo Panaccione – elected to University of Calgary “Great Teachers” website
Dr. Remo Panaccione – College of Physicians and Surgeons of Alberta Physician Review (PAR) Recognition
Dr. Remo Panaccione – 2004 Gastroenterology Training Program Teacher of the Year

Dr. Remo Panaccione – 2004 Crohn's and Colitis Foundation of Canada Featured Researcher
Dr. Remo Panaccione – 2004 Gold Star Teaching Award
Dr. Remo Panaccione – Rotary Club International Paul Harris Fellowship Award

By working together with the CHR, University of Calgary and private donors the Division of Gastroenterology intends to focus on clinical care, research and education programs that result in enhanced knowledge, innovations and training to improve patient care. This will be facilitated by fulfillment of the ongoing divisional priority to actively recruit clinicians, clinician scientists and clinician educators and the continued development of innovative programs to enhance patient access to specialty care and wellness programs in gastroenterology and Hepatology. This will further the development of the vision and mission of the CHR, Department of Medicine and University of Calgary Faculty of Medicine. There is a significant opportunity to develop new, innovative, efficient programs to promote and deliver gastrointestinal care to the community. The challenge will be to recruit adequate numbers of physicians to support these programs and to ensure we foster the ongoing development of the excellent training and research programs. Space limitations within the CHR potentially jeopardize these endeavours. Effective critical evaluation of the services and programs provided by the Division of Gastroenterology and Department of Medicine is vital to ensure continued support from the CHR, University of Calgary and the community.

DIVISION OF GENERAL INTERNAL MEDICINE

Division Chief - Dr. R.J. Herman, MD

This last year has brought many important changes to the Division of GIM.

1) REORGANIZATION OF GIM UNDER THE ARP

Undoubtedly, the most significant accomplishment in late 2004 has been the signing of the ARP agreement by all Division members at the FMC, plus an additional 2 members at the RGH. This lays the foundation for a fair and stable compensation package, particularly for academic faculty, and has already enabled the recruitment of several new General Internists to the Calgary Health Region in 2004/2005. It also brings huge opportunity in the form of dollars for innovation of which GIM is a major contributor. The potential exists for significant change in the way that internal medicine specialists practice and deliver future health care in the Calgary region.

2) RECOGNITION BY THE RCPSC OF GIM AS A DISCRETE IM SPECIALTY

Dr. Jane Lemaire of our Division has been instrumental in trying to move GIM on a national level towards recognition of subspecialty status. There have been numerous proposals and counter proposals over the years, however, all the obstacles have been overcome and GIM is now a discrete and fully recognized subspecialty of the RCPSC. This is a major breakthrough and goes hand in hand with the other advancements discussed above. Clearly, Dr. Lemaire has made an enormous contribution. For this, she was awarded the distinguished Osler Award of the Canadian Society of Internal Medicine for 2005.

3) EDUCATIONAL PROGRAMS

GIM has a long and illustrious history in the teaching of undergraduate and postgraduate medical trainees. Thus, it comes as no surprise that this occupies a significant portion of our efforts and accomplishments for 2005. The expansion of the University of Calgary Medical College from 80 to 105 students is complete and clearly we are now seeing these people on our admitting and consultation services. At the same time, the IM Residency Training Program has grown from 30 core positions in 2003 to 40 core in 2005. This along with other successes in our GIM R4 Fellowship and IMG programs has meant that we have had to create new and innovative learning opportunities in order to accommodate these people.

<u>The U Of C Clinical Clerkship & Internal Medicine Residency Training Programs</u>

Dr. Paul Gibson, Co-director of the Internal Medicine Residency Training Program for the Foothills Hospital site, is heading up a Strategic Planning Initiative for the GEC looking at populating the GIM Teaching Units with IM residents at the Rockyview Hospital. Also under consideration are plans to enter into formative agreements with General Internists and subspecialists in midsized cities such as Lethbridge, Medicine Hat and Red Deer to send our residents to broaden their experience and at the same time expose them to practice opportunities within these communities. In times of severe physician shortages, it is very important that the University of Calgary, and with it the College of Medicine and IM Residency Program, consider and be seen as meeting the educational physician resource needs of all Alberta constituents, not just tertiary care hospitals in Calgary and Edmonton.

In 2003, Dr. Marcy Mintz assumed a major role in the organization and planning of the IM Residents Academic Half-day. Dr. Mintz' efforts in this capacity were rewarded with a DOM Teaching Award in 2005. More importantly, she was recently appointed to the position of Director of the Clinical Clerkship Program for the College of Medicine. Dr. Elizabeth MacKay, Dr. Cheryl Goldstein and Dr. Tara Cowtan also received recognition for their teaching in 2005. These are important accomplishments, which along with our other commitments on GEC and to undergraduate teaching, solidifies our relationship to the Clerkship and core IM Residency Training Programs.

GIM R4 Fellowship Program

Dr. Troy Pederson continues to give full effort and support to the R4 GIM Training Program. Dr James Kennedy completed his training and examinations in Internal Medicine in June and has moved on to a position in Stroke research with Dr. Alistair Buchan at Oxford. Drs. Khan Ali and Jessica Simon will be finishing their Fellowships in December with examinations scheduled for June 2006. Dr. Simon has applied for a Fellowship in Palliative Care with hopes of doing some original research on pain control in patients with non-malignant disease. Dr. Ali is presently looking for a position within the Calgary Health Region. Two additional Fellows, Dr. Laura Heemskirk and Dr. Johan Conradie, both from the Calgary IM Program, joined our Division this July. With 4 PGY-4 Fellows presently in the system, these people have been attending and providing educational and subspecialist support at all 3 Calgary hospital sites. New this year has been the addition of administrative support for R4s at the PLC site and the introduction of GIM Fellows Clinics. The success of this Program is visible proof of the growing stature of GIM as an end career in Internal Medicine.

GIM Clinical Scholar Program

Dr. Caren Wu is currently a Clinical Scholar in our Division. As she will be commencing a faculty appointment with the University of Calgary in January 2006, we will begin advertising for a replacement early this fall.

IMG Program

Three years ago the Division of GIM made a commitment to begin training International Medical Graduates for possible entry into the Canadian Health Care System. Last summer, 2 important decisions were made with respect to the future of this Program. These were; 1) to change our focus from one of training IMG's to strictly hiring IMG's for GIM service support, and 2) to preferentially recruit applicants suitable for transfer into the so-called 'second-entry' pathway into IM residency. In other words, we would continue to recruit and prepare IMG's for practice in Alberta, but that their training and subsequent qualification would be left to the bodies charged with this responsibility, namely the Internal Medicine Residency Training Program. Thus, each July over the last 2 years, we have contributed 1 or 2 of our graduates to the IM Residency Program in Calgary and recruited anew. These individuals have literally flourished and now support an expanded IM Training Program and allied GIM and subspecialty services across the Region. The expectation is that in their final year of training they will rejoin the Division as GIM R4 Fellows and eventually qualify as fully licensed General Internists practicing in Calgary, Lethbridge, Medicine Hat or Red Dear and adjoining rural communities. This has been so successful that the Region has recently expanded the number of IMG-funded positions available to all specialties by15 and our Program is now the model for integrating foreign trained physicians into professional practice in Canada.

More recently, we have come to recognize the need for a second pathway for IMG entry into the Health Care System, separate from re-qualification through the Residency Program. Specifically, there is a need for highly trained professional support on some of our acute care in-hospital admitting services and on specialized outpatient services such as bone marrow transplant and oncology. Indeed, it is in this context that we have spent the last 3 years training 1 of these individuals, namely Dr. Jan Sporina, for practice as a Physician Extender on our new non-resident supported General Medicine Admitting Unit at the Foothills. Dr. Sporina has a 1-year term contract with the Region till April 2006, following which the plan is to sponsor his application to write the RCPSC qualifying examinations in June 2007. Thus, in 2005 we recruited 5 new IMG's - 2 or 3 for re-entry into the IM Residency Program, 1 or 2 to follow Dr. Sporina's lead as an IM Physician Extender and another GP-IMG Physician Extender to support the IM Program at the Rockyview.

Other Plans

At its Annual Retreat last fall, the Department of Medicine gave support to establishing a presence in Clinical Pharmacology in Calgary. We have had the faculty to initiate such a Program for a number of years now, but only since the recruitment of Dr. Tim Pollak from Halifax in December 2004, do we finally have a member willing to take a lead role. The plan is to establish a post-graduate training program in Clinical Pharmacology to which

we could recruit Fellows and Clinical Scholars. If successful, this could become one of the academic pillars of our Division, alongside Clinical Epidemiology and Health Outcomes, Maternal Fetal Health and the Ward of the 21st Century. It will also contribute to more appropriate and cost effective prescribing by Alberta physicians.

Risks and Recommendations

Above all, it is important to protect the academic mission of the University of Calgary and the Faculty of Medicine. However, we must recognize that our educational programs do not work in isolation, in that they also serve an important clinical service role. With the planned major expansion of clinical services over the next 5 years, we have likewise experienced modest growth in our educational mandate, largely through enhancement of the Clerkship and IMG Programs and to a lesser extent the IM Residency Training Program, itself. While changes in these sectors are welcome, such growth is clearly insufficient to support the needed introduction of new Medical Teaching Units at the RGH and proposed South Calgary Campus and certainly not the expanding need for community-based General Internists throughout the province. Thus, we support senior administration and others in leadership roles within the University and CHR to consider the Report of the Kirby Commission when it recommends the number of ministry-funded post-graduate positions be increased from 100 per 100 undergraduate positions to a more favorable125 per 100 positions. Furthermore, the Department of Medicine must effectively recruit to the 7.86 positions allotted to education in the 2003 PRPWG document (only 1 has been filled to this date). This will be particularly important should enrollment to our Medical School be allowed to increase to the targets currently proposal by the Dean.

4) EXPANSION OF EXISTING CLINICAL SERVICES AND NEW MODELS OF HEALTH CARE

CHR tracking statistics indicate that the 10-year mean population growth rate for patients cared for by General Internists in Calgary is 3.06% per annum for patients aged 64 years and older and 2.62% per annum for patients aged 20 to 64 years. However, the number of hospital discharges and total patient days attributable to the Division of GIM as a measure of our total in-hospital admitting activity increased by over 32% and 27% compared to 2004 figures to 3412 patients (26% of the total DOM inpatient activity) and 35,555 patient days (34% of the total DOM inpatient activity), respectively. Average length of stay, on the other hand, increased only modestly from 10.0 to 10.4 days (4% increase). Corresponding statistics on our consultation services suggest that in-patient assessments increased 12.2% over 2002 figures to 13,281 patient visits (29% of the total DOM activity), where total Departmental consultations decreased 2.9% over the same time period. Thus, we are admitting and directly caring for considerably more patients in 2005 than in previous years. I suspect this occurred largely through the development of a second Teaching Unit at the RGH and the GMU at the FMC, as there have been only modest increments in patient numbers attended on Teams at the 2 IM Program sites.

Consolidation Of GIM In-Patient Admitting Services At The Rockyview Hospital

As the volume and complexity of acute, in-hospital care has increased throughout the Region, the private General Internists at the Rockyview Hospital have successfully merged their common interests into a single, group practice including an integrated call and teaching schedule. A geographically dedicated area was developed, and medical students and residents from General Surgery, Anesthesia and Family Medicine began attending on their Medical Teaching Unit, which officially opened in April 2004. They regularly see GIM R4 Fellows and IMG's on these and other clinical services, and have proven themselves to be enthusiastic and capable educators of allied health professionals such as Hospital Pharmacists and Nurse Practitioners. The expectation is that with the improved organization and diversity of patient care in a community hospital setting along with a strong and committed faculty, they will soon start attracting core IM residents to their Program. Patient census now stands at 40 - 45 versus historical highs of 18 to 20 and recent data suggest that length of stay has dropped from 15 to 10.3 days. This is a huge success story and speaks strongly to the future of GIM at this site.

Opening Of The Ward Of The 21st Century (W21C)

The Ward of the 21st Century was officially commissioned at the FMC on April 29, 2004. Originally the 'brainchild' of Dr. John Conly and Andrea Robertson, GIM has played a major role in the design, implementation and staffing of this new Unit. The goal is to create a multi-disciplinary, patient centered, medical ward focusing on the evaluation and treatment of patients with complex, multi-system clinical problems and, at the same time, bridge this to innovations in education and technology and to outcomes research. A committee has been struck to oversee the development of a research agenda, which has progressed to submission of a CFI grant this Fall. The over-riding theme of the proposal is patient safety and quality of care. Partnerships have been forged with local and multi-national businesses, the Faculties of Medicine, Engineering, Computational Sciences and Social Sciences at the University of Calgary, and with Harvard University, the University of Aberdeen, and the University of Toronto. Other applications are pending with AHFMR, NSERC/CIHR and Alberta Science and Innovation. There has been a Retreat with worldwide participation, which occurred in Calgary on October 4th, 2004. The Ward of the 21st Century truly is a city-wide resource. Indeed, we see it as a major focus and springboard for academic development and research in our Division over the decades to come.

Opening Of A General Medicine Admitting Service (GMU) At The Foothills Hospital

The General Medicine Admitting Unit opened on PCU 62 at Foothills Hospital on March 14, 2005. It adds11 acute care in-hospital beds to the IM complement and is supported by 1 GIM attending and a Physician Extender (Dr. Jan Sporina weekdays 8AM to 6 PM plus Dr. Sporina or 1 of our IMG's, GIM Fellows or senior IM residents on a 1 in 4 rota after hours and on weekends). The purpose of the GMU is to create capacity on the MTU's and Hospitalist's services by breaking down barriers to admission and transfer of patients between the major IM admitting pathways. For this, the GMU has fully met its goals and expectations. However, this has not come without compromise. The issue is that GIM, like other specialties, see themselves as partners in health care delivery, working in consultation with the patient's own family physician. Certainly, in the past we have not had the resources or the interest to assume a large role in primary care. The Division of GIM has moved from its former position and is now taking responsibility for additional in-patient beds at the Foothills site. The situation is being closely monitored both by our members and by the CHR.

Splitting Of The GIM In-Patient Consultation Service At The Foothills Hospital

Because of increasing demand, this year our in-hospital GIM Consultation service at the Foothills become oversubscribed. There were questions whether patients were being cut too quickly from follow-up thereby potentially compromising care. Also, workload was severe and unrelenting, contributing to significant physician job stress. This has recently been resolved by opening a second, complementary, service with the 2 units taking calls for new patients on alternate days. At the same time, new positions for residents, clerks and other learners have been created.

Dr. Ravi Agarwala collected utilization data from our consult service over the past year and will be reporting the results of his study with recommendations in the coming months.

Expansion Of The Urgent Assessment Clinic (UAC) To The Rockyview Hospital

Last year, GIM submitted a proposal to the Innovation Fund looking to expand the UAC at the Foothills site to a full day clinic 7 days a week. Booking of existing clinic slots was over 90% subscribed, and interest amongst community physicians to further access the clinic was very high. However, space was not immediately available. However the RGH group expressed an interest in developing its own UAC and had the necessary space to support it. The final piece was in the planning, whereby existing strengths of triage, booking and the organizational structure of Area 1b was used to support a satellite clinic at the RGH. Additional staff have been recruited and the new unit officially will open September 2005.

Preop Consultations For The Health Resource Center (HRC) At The Old Grace Hospital

Recently, physicians from the PLC and RGH have been doing preop assessments at the HRC. This is an initiative by Orthopedic Surgery to see whether low acuity patients can receive their joint replacements and reconstructive procedures in an expedited manner in a 'non hospital' environment. There are many questions surrounding the project including; 1) Where do patients go when they get into difficulties at the Grace? 2) Does inappropriate referral of moderate to high risk patients occur, and, if so, does this allow these people more ready access into our acute care facilities, thereby circumventing 'the cue'? 3) What is the role of user pay, private health care? and 4) What effect does all this have on the availability of space and functioning of the publicly funded health care system?

Opening Of The Mind And Body Clinic At The Rockyview Hospital

The Mind and Body Clinic was established in December 2004 at the RGH to explore the role of high level cerebral processes on chronic disease and disability. It employs a full time Psychologist and nurse and has the part-time support of the Department of Psychiatry. Dr. J. Schaefer acts as the Co-Director of this Clinic.

Ambulatory Clinics

Plans are underway at all CHR sites to implement a centralized computer booking service in order to take full advantage of time and existing clinic space. If you are unable to attend or have your clinics only partially booked on a particular date, others will be offered use of the rooms. Likewise, you may be able to make up extra clinics by booking into other's unfilled clinic allotments. This is likely to cross traditional divisionally assigned space.

The Deans Office is planning to recover space in the UCMG Clinics area of the Health Sciences Building for the proposed new Veterinary College. Thus, plans are underway to re-locate all GIM ambulatory clinics. The old Alberta Children's Hospital is the likely destination, although the building will require renovation before any move can be considered. This is not likely to occur before next summer or even later.

Changes are underway or in the works for the Preop (PAC) Clinics at the Foothills Hospital. Patients are presently being booked to the Clinic rather than individual physicians and the service is now supported as a line item on the Divisional call schedule. Since the same physician attends on a weekly basis, all blood work and other expedited investigations including ECG, X-ray, Ultrasound, Echo, Thallium scan, etc can be rapid-faxed to the PAC rather than to the physician's office. Patient records should not be forwarded to Admitting until a patient is deemed fit for surgery and the chart signed off by the consulting physician. Finally, a large number of low risk patients are still being referred to the Clinic and this is wasting physician capacity and causing delays in attendance for higher risk patients. Also, unnecessary testing is routinely being performed. Thus, a screening tool has been developed to assess the necessity of referral and there is a list of suggested preop tests. These latter are presently being assessed, but it is hoped that they may be fully implemented at the FMC site, and perhaps elsewhere, before the winter.

Other Plans

In conjunction with Dr. Peter Sargious and the Chronic Disease and Primary Care Initiatives, Drs. Charlotte Jones, Ravi Agarwala, Barry Baylis, Don Cook and myself (RJH) are currently in discussions to establish a multi-disciplinary cardiovascular risk clinic that expands the boundaries of the traditional consultation process. All of the variables we measure and follow in cardiac risk are eminently amenable to collection by the patient, a laboratory and/or an alternate care provider. Thus, it is conceivable that all this information could be obtained and an assessment and care plan designed for over 90% of referrals without ever seeing the patient. For these people, the consultative process would change from a patient-centered approach to a telephone discussion between the consultant, the clinic nurse coordinator and the primary care physician and his/her nursing counterpart. This would have several advantages over the existing process. First and foremost, it re-establishes a critical link between the consultant and the primary care physician. Secondly, direct involvement of the referring physician in the consultation algorithm brings buy-in and learning so that they may start to employ many of the assessment and treatment strategies on other patients earlier in the process and perhaps without the engagement of the consultant. Third, since the consultation focuses on treatment rather than information

gathering, the time for assessment should be much shorter so that more patients could be attended on a single clinic half-day. Finally, precious resources such as parking, clinic space, nursing and even the patient's own time would be reserved for those that truly need to be seen in clinic. If successful, this innovation may be applicable to other chronic care referral pathways.

Risks And Recommendations

The CHR Master Plan is to open 753 acute care beds over the next 5 years at RGH, FMC, PLC and the new South Calgary Campus. Assuming an historical 25/75 medical/surgical split and the current division of workload of 33% Internal Medicine and 67% Hospitalist, of which GIM carries a major portion of in-patient IM care, we will likely be asked to assume responsibility for an additional 60 to 100 beds. How this will play out in terms of new MTU's, other high level assisted care like the GMU and possibly a Day Hospital, remains to be determined. However, what is clear is that we can expect see further significant expansion of our in-patient admitting and consultative services. There are also plans underway to enhance GIM ambulatory clinics. Thus, continued recruitment is essential.

5) RESEARCH INITIATIVES

It is difficult at this time to fully quantify the academic achievements of the Division for the 2004 - 2005 fiscal year. For the year ending December 31, 2004 the Division participated in the publication of no less than 67 peer reviewed scientific papers, 26 abstracts, 4 book chapters, and a host of other non peer reviewed publications. We have presented at national and international forums around the globe and collectively are associated with more than $3.5M in research support. Bill Ghali, is the major contributor (himself an AHFMR Research Scholar and holder of a CIHR Research Chair and the Buchanan Chair).

6) FACULTY

Recruitment

PLC

Dr. Hanan Bassyouni, ARP, 0.3 FTE GIM and 0.3 FTE Endocrinology

RGH

Dr. Anna Purdy, Fee-for-Service

FMC

Dr. Ravi Agarwala, ARP, some outpatient Cardiology in Heart Function Clinic
Dr. Fiona Dunne, ARP
Drs. Jonathon Yau, Associate member
Dr. Tim Pollak, ARP, some outpatient Cardiology in Atrial Fibrillation
Dr. Christine Banage, ARP

Promotions And Development

Dr. Bill Ghali promoted to full Professor July 2005
Dr. Jane Lemaire, appointed Vice Chair Dept of Medicine, Faculty Development
Dr. Norm Campbell, Sabbatical July 2004-June 2005
Dr. Caren Wu defends her Masters Degree in Clinical Epidemiology in November
Dr. Fiona Dunne is working on a Masters in Medical Education.

Risks And Recommendations

The ARP has brought numerous opportunities to the Division of GIM. However, there are at least as many challenges. Although there will continue to be a need to bring clinically-based General Internists into the Region, we must devote greater attention to the recruitment of academic Internists and to the ongoing development of academic interests of our existing faculty. Given the inherent attraction of the Calgary ARP Agreement and the growing strengths and successes of our programs, I believe we will recruit additional high-level people in the years ahead. The Buchanan Chair is another effective tool that we possess for these purposes.

The changing academic focus of our group is also clearly evident. Indeed, the challenge is quickly becoming how best to balance academic and clinical demands in a fair and equitable manner. Thus, it will be important to formalize how, as a group, we reduce our FTE commitment, and what is required clinically and academically to remain a General Internist within the former definitions of a GFT, Major Clinical and Part Time appointment.

A second major issue is the interplay between the ARP and Fee-for-Service plans. This is particularly evident at the RGH where there has recently been a sizable recruitment into the ARP domain. The concern has been expressed that these people have been given clinical duties at a lower level than their Fee-for-Service equivalent but are contributing meaningfully in other administrative and academic arenas and at the same time offices and other clinical support is being provided, which has not formerly been given to others. These are complex issues with no easy answers, except the certainty of change that created them in the first place and the certainty of change that will eventually provide some solutions. However, it is critically important that in all these endeavors we create opportunities that allow the private and university, the GFT and Major Clinical and the ARP and Fee-for-Service physicians to flourish in an understanding and cooperative environment.

DIVISION OF GERIATRIC MEDICINE

Division Chief - Dr. James Silvius, MD

The past year was one of a number of both challenges and successes for Geriatric Medicine. No changes occurred administratively in the Region that affected us, and this allowed for stability in terms of planning for initiatives to be pursued over the next few years. The challenges occur in that we are able to consider changes to existing services and expansion to new ventures, but are limited by both fiscal and human resources as we pursue excellence in Geriatric care. No Division succeeds by standing still; practical realities limit the potential, and there is always concern over promising something that can't then be delivered.

Success has come in several areas. The Division was delighted to recruit Dr. Heidi Schmaltz for the vacant position at the Peter Lougheed Centre. Heidi came to Calgary by way of Johns Hopkins in Baltimore and will provide clinical service for 60% of her time, and further develop a program of research in the other 40% of her time. Her arrival has assisted both with clinical coverage at the PLC and in enhancing our academic strength, one of our key priorities for the next few years.

Success has also come through the phenomenal growth of Telegeriatrics as a mechanism of providing Geriatric Medicine care outside of the urban centre of Calgary. The service was developed to provide Geriatric Medicine expertise to individuals closer to their home communities and to improve their access to this expertise. The service is now provided routinely to 7 rural Calgary Health Region sites with two further rural sites able to access the service should they wish to do so. The service is provided from each of the acute care sites to their traditional referral areas; the PLC provides service to Strathmore and Didsbury, the FMC to the Bow Corridor, and the RGH to rural south Calgary Health Region. In addition, expansion occurred in terms of service to the David Thompson Health Region, and now incorporates two main sites, Red Deer and Drumheller. Each of these sites now has capability for scheduled new and follow-up assessments. One of the goals for the coming year is to expand this service to other Calgary Health Region and DTHR sites with Telehealth capability. Another is to explore the potential for Team-based assessment, though this is a longer term goal.

At the end of the year we were working on a new method for Team communication within urban Calgary, using webcam links between the Seniors Health Clinic at the Crossbow and the Specialists in Geriatric Medicine based at the FMC who support that Clinic. The intent was to improve access from the Team to Geriatricians, and to improve on the efficiency of time for the Geriatricians by not having them drive from site to site to provide care. Although there had been some technical issues, it is anticipated that this initiative will be in place within the coming year.

Two other initiatives were underway at the end of the year. The first was planning for the Regional Falls Initiative, in which David Hogan has had a key role. This initiative was approved for implementation by the Region and much work was done to prepare for this, with the anticipation of submission of further resource requirements to the Region for funding in the '06-'07 fiscal year. In the interim, pilot projects are planned for '05-'06 to test some of the components planned within this initiative.

The second was planning for the Regional Cognitive Impairment Strategy, a key initiative from the Broda Report and an identified strategic direction from Alberta Health and Wellness in the 10-Year Continuing Care Strategic Service Plan. Jim Silvius has played a key role in overseeing this initiative and providing direction; and Dave Hogan has provided significant time and expertise to development of the strategy, also intended to be submitted to the Region for funding in the '06-'07 fiscal year.

The greatest issue for the Division continues to be manpower. The challenge of attempting to balance service demands with requirement and interest in pursuing other activities remains significant. This will be our greatest challenge if the initiatives on which we have worked so hard over the last year come to fruition in the next couple of years. This will also not be made any easier by the planned capital expansion at each of the acute care sites, which will add to the requirement for clinical service at each of these sites. In '05-'06 we will also therefore explore further alternate models of care that may help assist with the increasing service demands.

Our greatest strength in the Division is our manpower. The members of the Division have “stepped up to the plate” when asked to give further time and effort to support the programs that we have, and for this each needs to be individually recognized. In non-clinical areas, Darren Burback has continued to ably run our Undergraduate Teaching program. Dave Hogan, Colleen Maxwell, and Jim Silvius have continued with their academic research programs, and are now joined by Heidi Schmaltz. Dave Hogan also continues to be active in our National Organization, the Canadian Geriatrics Society, and with the Royal College. While Jimmy Kwok and Anna Forbes have limited their practices to clinical activity, each has supported the significant clinical service needs, allowing other members to pursue other activities.

In addition, significant contributions have been made to the Department by Division members. Although we are a small Division, 4 of our members are involved in a number of ARP Committees including Dave Hogan who has been chair of the ARP Management Committee. Jim Silvius has been the DOM Clinical Telehealth Advisor.

As a whole, the group has supported each other and allowed us to move forwards, both collectively and as individuals. Though at the end of the year we are aware of the impending loss of one member and uncertainty over replacement, we remain optimistic that we will be able to continue to provide the exemplary service in all areas for which our Division has come to be recognized.

DIVISION OF HEMATOLOGY AND HEMATOLOGIC MALIGNANCIES

Division Chief - Dr. Graham Pineo, MD, FRCPC

For the period of April 2004 through April 2005 Dr. Pineo was Head, Division of Hematology and Hematologic Malignancies. Also during that time he became Program Head for Bone Marrow Transplantation and Hematologic Malignancies within the Tom Baker Cancer Centre, one of the four major programs within the TBCC. He sat on a transition committee for the ARP and chaired the Task Force on Innovations.

Without doubt, the main challenge for the Division is shortage of human resources. The other major challenge is the distribution of medical manpower within the CHR and the Tom Baker Cancer Centre. Of the sixteen members of the division, ten are based at the FMC with nine individuals being within the ARP. Two individuals heavily involved with Bone Marrow Transplantation and hematologic malignancies are based in the TBCC and are funded through the Department of Oncology. Four individuals are in clinical practice at the PLC/RVH hospitals. Two members of the division are cross-appointed with the Division of General Medicine. From a clinical standpoint, the members of the division at the PLC/RVH account for four FTE clinician and the two at the TBCC account for two FTE. On the other hand, the nine members of the division at the FMC who are part of the ARP account for approximately four FTE. Therefore, a major proportion of the clinical activities within the Division of Hematology and Hematologic Malignancies are carried out by individuals who are not part of the ARP but who make a major contribution to the management of hematologic diseases within the CHR and the TBCC. The recent development of the program for BMT and Hematologic Malignancies within the TBCC which is headed by the Division Head for Hematology and Hematologic Malignancies within the CHR and the University provides responsibility and accountability for all hematologic activities within the CHR and the cancer centre.

During the year the workforce planning for the Division was revised with the projected needs being for eight hematologists approximately half of whom would be GFT and two or three would share responsibilities with the BMT program. A further requirement for four clinical hematologists to be based at the south hospital was projected. During the year we were fortunate to recruit a senior investigator (Dr. Jan Storek) to a Canada Research Chair in Stem Cell Biology with cross appointments to the Department of Oncology and the Department of Microbiology and Infectious Diseases. He is also a member of the Triple I Institute and the Immunology Research Group. A major recruitment drive was initiated in the fall of 2004 resulting in interviews with six individuals at the American Society of Hematology meeting. Altogether, eight individuals were invited for recruitment visits, most of whom were seen before the end of March 2005. However, there are many opportunities for hematologists across the country and none of these recruitment visits resulted in actual recruitment. Those efforts are still underway. One individual was recruited to share on-call and service duties with the group at the PLC/RVH hospitals. Efforts are still underway to recruit a Division Head.

The Division continued to fulfil its education obligations with three individuals heavily involved in educational administration. There are three fellows in the division with one planning to spend a two-year period doing clinical and research training in BMT. During the year plans for reorganization of the ward physicians on Unit 57 were undertaken resulting in the recruitment of two IMG's for hematology and BMT.

This Division remains very active in research and publications. Five individuals have major research commitments resulting in publications of sixty-seven articles. There were six new grants and twelve continued research grants. Numerous abstracts have been presented and a number of publications are in press.

The major innovation program for the Division was a proposal for a Comprehensive Program for the Prevention of Venous Thromboembolism for the CHR. By the end of March 2005 this proposal was approved. At the same time a task force was developed for the CHR and QIHI for the development of order sets for all departments and divisions within the region for the prevention venous thromboembolism. A second proposal was developed for the development of a clinic for rare blood disorders but this was withdrawn as it was evident that it would take some time to get such a proposal underway. This proposal however does remain a major objective for the Division.

The major challenge and primary objective for the Division is to further develop our human resources with the recruitment of at least one further hematologist for the PLC/RVH and four to five for the FMC, one of whom will be Division Head. During this reporting period, one member was off on extended LOA following an injury and another member went off on maternity leave. Two members intend to take sabbatical leave in 2005 and 2006, all of which results in further manpower shortages. Our ability to meet the goals and objectives of the Division and of the Department will depend upon the recruitment of these individuals. Despite these deficiencies, the Division has continued to provide comprehensive clinical services to the Region and the TBCC and to maintain our major commitments to education and research. If we are successful in recruiting individuals to our special areas of need, these challenges will become much more manageable.

ADMINISTRATIVE APPOINTMENTS

September 1, 2004 - Director, Division of Hematology and Hematologic Malignancies. Acting Director for two years. This appointment will continue for two years or until we appoint a new division head. The highlights for the division include the recruitment of four new hematologists, including the Canada Research Chair for Stem-cell Biology (Jan Storek) a major clinical becoming GFT (Nizar Bahlis) and two major clinical (Lynn Savoie and Deirdre Jenkins). Priorities for the coming year include at least one clinical hematologist for the PLC/RGH site, a division head based at the Foothills site and at least one more clinical hematologist for the Foothills site. In the coming year, Dr. Man-Chiu Poon will be going on sabbatical and one member will be going off on sabbatical leave, so manpower will remain a major concern. This year we have three Fellows and one is being appointed for 2005 as well.

During the year there was a further attempt to develop more formal relationships between the Tom Baker Cancer Centre and the Department of Medicine with particular reference to the Bone Marrow Transplant Program and the management of hematologic malignancies within the cancer centre. A committee was struck to explore ways of formalizing the relationships to ensure proper lines of reporting authority between the CEO of the Tom Baker Cancer Centre, the Chairman of the Department of Medicine and the Head of the Division of Hematology and Hematologic Malignancies. Major progress has already been made and this will be taken further with the recent appointment of Dr. George Browman as the CEO for the TBCC. In the meantime, the Division Head of Hematology has become a member of Bone Marrow Transplant Steering Committee and has been involved in future directions for the Bone Marrow Transplant Program. With the addition of Drs. Storek, Bahlis and Savoie, the manpower needs have been satisfied and there is a major opportunity to advance research, particularly in the line of stem-cell biology.

With the development of the ARP I sat on the Interim Management Committee and since August have chaired the Task Force on Innovations. This committee brought together a number of individuals both from the department and other departments and working with two consultants a proposal has been submitted for review by the various portfolios prior to submission to the PBMA and ultimately to Alberta Health and Wellness. The task force operated in a very short time frame and received a high degree of cooperation from members of the department and the administrative staff.

DIVISION OF INFECTIOUS DISEASES.

Division Chief - Dr. Ron Read, MD

Since last year's annual report, the Division of Infectious Diseases has been successful in establishing a full ID service at the Rockyview Hospital. There are now 3 physicians, Dr. Manny Mah, Dr. Andy Pattullo, and Dr. Roy Cook sharing a full-time ID consult service, in addition to the previously established 7-day per week HPTP program. Dr. Pattullo has also begun a general ID outpatient clinic to offer specialist consultation in ambulatory ID. Dr. Mah has assumed site responsibilities for Infection Control at the RVH. The plan to move the RVH HPTP program to the South Calgary Health Centre was put on hold for lack of support facilities at that site. We are now looking at a plan to coalesce the FMC and the RVH HPTP programs as part of the ACH site redevelopment project. The Calgary STD Clinic and the Southern Alberta HIV Clinic continue to work toward relocation at the Sheldon Chumir Centre on 12th Avenue.

ACCOMPLISHMENTS 2004-2005:

Clinical:

For this year, the Division of Infectious Diseases welcomes Dr. Andy Pattullo, previously working as an ID consultant in the United Arab Emirates, who has relocated to Calgary to form part of the new RVH ID service. Dr. Pattullo will also have responsibilities in developing and implementing the new Clinical Information System at the RVH site. Dr. Pattullo is working on some innovative service delivery models, including clinical rounds with the intensivists in the ICU. The Division developed a plan to introduce a Nurse Practitioner role into the HPTP program, starting at the FMC site. The number of patients seen in all of the ID-related clinics (HPTP, HIV, STD and General ID) continued to increase this year. It is hoped that the Nurse Practitioner function at the FMC HPTP will allow us to avoid creating wait lists for this urgent-access clinic. Dr. Harvey Rabin has been recognized with a Mountain of Heroes award for his work in Cystic Fibrosis, as well as receiving the Clinician of the Year Award (2004) from the Foothills Hospital Medical Staff.

Education:

Divisional members continue to actively support the educational objectives of the University, including teaching in the undergraduate medical school, the clinical clerkship (3-5 clinical clerks rotate on ID in each 2 week block), the residency programs, and in CME activities. Dr. Ron Read has completed a review of the Infectious Diseases/Medical Microbiology content in the undergraduate curriculum requested by the Associate Dean of Undergraduate Education. This was presented to the Curriculum Committee, and Dr. Read is working with the Curriculum Committee to help implement the recommendations. Dr. David Megran has been awarded the Mentor of the Year Award by the Royal College of Physicians and Surgeons of Canada for his longstanding efforts to mentor young physicians in their medical careers.

Research:

The Infectious Diseases Research Group continues to define itself within the newly created Institute of Infection, Inflammation and Immunity, and is one of the more active groups within the III in terms of educational activities. Members of the Division continue to be actively involved in research in the areas of antibiotic resistance, *Clostridium difficile* colitis, Sexually Transmitted Infections, Infection Control, Cystic Fibrosis, and Infectious Diseases epidemiology. Members of the Division have made many presentations at scientific meetings and published papers in peer-reviewed journals. Dr. Kevin Laupland was awarded the prestigious Young Investigator Award at the Interscience Congress on Antimicrobial Agents and Chemotherapy, only the second time a Canadian has been given this award.

Administration:

At the PLC site, Dr. David Megran has become the Chief Medical Officer for the CHR, recognizing his considerable administrative skills. This leaves a significant manpower deficit at this site, which will require immediate recruitment to fill. Dr. Conly continues to lead the Department of Medicine as Department Head. Dr. Thomas Louie continues to develop the Infection Prevention and Control program for the region, and has

instituted proactive programs for control of Clostidium difficile and other nosocomial infections, including an innovative hand hygiene initiative lead by Dr. Manny Mah.

UPCOMING CHALLENGES FOR THE DIVISION

In the coming year, the major challenge facing the Division continues to be recruitment, to fill the gap left by the secondment of Dr. Megran to the CMO office, an upcoming sabbatical leave, and to stay ahead of the increasing volume of inpatient consultations and outpatient clinical responsibilities. We will be looking at the Nurse Practitioner role to see how alternate care providers can work with Infectious Disease specialists to increase access to ID care, and to prevent admissions and expedite discharges from hospital. In the longer term, the Division will need to grow by an additional 25% to meet the ID requirements of the planned South Health Campus. As well, we are expecting 2 of our senior members to retire in the next 2-4 years. Toward this end we are working with a cadre of excellent young Internal Medicine residents with an interest in Infectious Diseases to train with us toward meeting this manpower deficit.

DIVISION OF NEPHROLOGY

Division Chief - Dr. Nairne Scott-Douglas, MD

The Southern Alberta Renal Program (SARP) continues to expand in 2005 with the opening of hemodialysis units in Drumheller and the Northland Shopping Centre in Calgary. The Northland unit is unique in Canada having specific availability set aside for travelers. Home dialysis therapies have flourished in with a 40% increase in the number of patients on Peritoneal Dialysis and thirty patients starting on Nocturnal Hemodialysis. The introduction of Nocturnal Hemodialysis is being implemented as the first prospective randomized controlled clinical trial compared to conventional hemodialysis and is looking at efficacy and cost effectiveness under the guidance of Drs. Culleton and Manns.

Under the expertise of Dr. Garth Mortis, SARP has developed and implemented an electronic patient data base called Renal PARIS that has also been purchased by Edmonton for the Northern Program. This program which allows physician, nurses, dieticians, social workers and administrators to rapidly access renal patient information including notes, medical conditions, lab results, medications and much more also schedules patient clinic visits and will become wed-based in the fall of 2005.

The Nephrology Training Program received a very strong external review and is awaiting formal notification of certification. Under the guidance of Dr. Kevin McLaughlin this program continues to attract superior internal and external candidates and has expanded to six trainees this year.

The Division of Nephrology is very fortunate to have recruited two exceptional Nephrologists. Dr. Jennifer MacRae comes from Vancouver with a strong clinical research background in hemodialysis vascular access. The Division also welcomes back Dr George Vitale, a trainee in our program who is finishing a Master's degree looking at a Glomerulonephritis data base in Toronto. We hope that in the future he and others will start a Western Canada Glomerulonephritis data base. Dr. Vitale is also the new Director of Peritoneal Dialysis taking over for Dr. Bruce Culleton. Dr. Culleton will now be Director of the Renal Clinical Practice which has the lofty goal of implementing evidence based guidelines and standards across Southern Alberta.

The Division of Nephrology continues to excel in academic areas with more than 10 first authored papers. Furthermore, the Alberta Kidney Disease Network (AKDN) is starting to bear fruits with numerous publications and securing over $500,000 in grants. In addition, Drs, Manns, Culleton, and Hemmelgarn have received over $750,000 in AHFMR funding within the AKDN to investigate cardiovascular and renal protective medication in patients identified through the Alberta wide laboratory prompts for increased serum creatinine levels. Dr. Bruce Culleton has been selected to Chair the Canadian Society of Nephrology Guidelines Committee and Dr. Brenda Hemmelgarn has received CIHR and Heritage Funding. Continued development of research in basic science, medical education and clinical trials is a priority with in the Division.

DIVISION OF RESPIROLOGY

Division Chief - Dr. Christopher H. Mody MD, FRCPC, FCCP, FACP

The Division of Respirology has had an exciting and productive year. There have been a great many changes, and many accomplishments. Additionally, the division is facing a number of enormous challenges, which we face with hope, optimism and determination.

The Division consists of 23 members based at three hospital sites and in private clinics in the Calgary Health Region. The Division provides continuous consultative service and in patient ward service at these three acute care hospitals, while maintaining a very busy outpatient clinical service across the region. Additionally, lead by Dr. Jeff Mellor, the Division has outreach respirology clinics in rural Alberta.

The Calgary Asthma and COPD Program is nationally recognized for providing a cohesive service that links together family physician offices, hospitals, and emergency departments. Dr. Bob Cowie leads this team of dedicated health care providers, including physicians, respiratory therapist kinesiologists and nurses.

The Interventional Bronchoscopy Service is one of only two such services in Canada. Dr. Alain Tremblay is the leader of this program, and along with Dr. Gaetane Michaud, is using a variety of innovative tools and techniques including endobronchial ultrasound, permanent and removable stents, and indwelling pleural catheters. Helped 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 first Interventional Respirology Fellow will begin training in October 2005. Consequently, the Service is providing unique training opportunities for this rapidly expanding area in respirology.

Respirology has also established a Pulmonary Hypertension Program, one of only four such services in Canada. Dr. Doug Helmersen is the leader of this program, and along with Dr. Naushad Hirani, the Program provides day to day management as well as comprehensive diagnostic services including right heart catheterization and pharmacologic treatment. Added by a private donation, Dr. Helmersen has purchased the equipment, including a dedicated fluoroscopic system that is required for right heart catheterization studies.

Members of the Division are also one of Canada's leaders in Sleep Medicine. The Sleep Centre has developed a unique and successful working relation ship in the assessment and management of Sleep Disordered Breathing within the Calgary Health Region. This has improved patient access to diagnosis and treatment both for uncomplicated obstructive sleep apnoea and more severe sleep disordered breathing, and has reduced waiting lists. This is the first time that this Public Private Partnership with home care companies has been employed in Canada. As an extension of this, Dr. Bill Whitelaw is conducting a study (funded by the Alberta Heritage Foundation for Medical Research), which is evaluating the management of obstructive sleep apnoea in the primary care setting. Recently, Dr. Whitelaw published a landmark scientific paper demonstrating the efficacy of this approach that was featured in the Globe and Mail, the Calgary Herald and TV and radio.

The Division of Respirology Residency Education Program is fully accredited by the Royal College of Physicians and Surgeons of Canada. Under the direction of Dr. Karen Rimmer, the program is recognized as one of the best in the country. Additionally, a number of members of the division set the standard of competence in respirology by participating in the Royal College Examination Program. Recently, the Division received the highest teaching rating by Residents in the Department of Internal Medicine, and the division was also honoured when Dr. Stephen Field, Dr. Ward Flemons and Dr. Chris Mody became "Great Teachers" at the University of Calgary. Other awardees include Dr. Richard Leigh, who was a finalist for the Wilbert J. Keon Award Competition for Junior Faculty at the National Research Forum for Young Investigators in Circulatory and Respiratory Health. In addition, Dr. Ford was recently elected to become the president of the Canadian Thoracic Society.

Members of the division have been involved in research. Recently a paper has been accepted demonstrating the manifestations of *Mycobacterium avium* complex pulmonary disease in patients not infected with human immunodeficiency virus, and another paper was published describing a mandibular device that is operated by remote control to establish therapeutic settings for treatment of sleep apnoea. Additionally, members of the division have been visiting professors all over Canada and the world.

After more than a decade of sustained effort, and made possible by a $1M donation from Glaxo Smith Kline, the Division successfully established the “GSK Professorship in Inflammatory Lung Disease”. The position will provide leadership in research, education and patient care in the area of airway inflammatory lung disease. Recruitment is currently underway.

Respirology has recruited Dr. Richard Leigh, who joined the Division as an assistant professor. His focus will be establishing the mechanisms or remodeling in asthma. He has published some very fascinating observations on the role of cell mediated immunity and interleukin 13. Additionally, the division has recruited Dr. Pat Hanly, who is an established principal investigator and scientist in sleep medicine. Dr. Hanly has become the director of the Sleep Centre, and is investigating the interaction between kidney disease and sleep disordered breathing.

Members of the division have been very active in national and international clinical guideline committees. Dr. Ward Flemons was the chairperson for the joint American Thoracic Society/American College of Chest Physicians/American Academy of Sleep Medicine guidelines for home diagnosis of sleep apnoea. Dr. Gordon Ford was a member of the Canadian Thoracic Society guidelines for COPD and was chair of the “Risk factor” and “ 1-antitrypsin” subsections of those guidelines, and Dr. Chris Mody is a member of the ATS committee for a statement on the treatment of fungal diseases.

Members of the division are also active in basic science research. Three members of the division had salaried positions from the Alberta Heritage Foundation of Medical Research, and one has salary support from the CIHR. A paper elucidating the mechanism by which NK cells exert their direct microbiocidal activity was published.

Despite these numerous successes, the Division is, and will, continue to face many challenges.

The most pressing problems have to do with provision of outpatient services. Clinic space at all three sites (UCMG, RGH and PLC) is insufficient. More outpatient offices are needed. At the UCMC site, the space needs to be used more efficiently. A coordinated system of booking is needed so that utilization of space is optimal.

We are unable to provide adequate pulmonary function testing in the region. Waiting lists to obtain pulmonary function tests have increased to unacceptable levels. Patient care is now impaired because we are waiting for pulmonary function tests. Personnel need to be provided immediately to deal with the backlog of testing that needs to be performed.

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 would increase the efficiency of providing services, in addition to being required to respond to sudden or emergency changes in provision of services (e.g. Flu outbreak or pandemic).

Provision of community services needs to be improved. While progress had been made, we are touching only 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.

Manpower is inadequate. The division is facing a number of retirements. It can be expected that 3 active members of the Division (Cowie, Kennedy and Whitelaw) will be retiring within the next five years. It is estimated that together these 3 individuals provide 4-4.5 FTE. The division is barely handling the current load, and we will need to recruit 4 additional respirologists to continue to provide the current level of service. The most pressing need is to recruit a respirologist with expertise in asthma, airways disease, epidemiology and clinical trials. Additionally, Calgary’s population is growing and aging. An additional 2 respirologists are required to allow for growth and aging of the population.

The academic and scholastic contribution of the division is inadequate. In a time motion study performed in the department, the division spent only 4% of its time in academic activity. This activity is mandated by the burden of clinical and administrative service provided by the members of the Division; however, it equates to less than 1 FTE in academic activity among a division of 23 members. This is inadequate for a University affiliated division.

To increase the academic activity to 20% (stated in each division members contract), an additional 4 members are required that will devote the majority of their time to investigation and the pursuit of new knowledge.

These projections reflect the need for an additional 10 respirologists.

A group has been established, with the guidance of Dr. Brent Winston, with an interest in interstitial lung disease. We need to recruit a respirologist with a special interest in interstitial lung disease, epidemiology and clinical trial that can be the nucleus for this group.

We will also face significant challenges if Thoracic Surgery moves to the RGH site. If this occurs, the care of patients with cancer will become spread over multiple sites, which will present many challenges. Additionally, interventional pulmonary medicine, which has a close working relationship with Thoracics, will continue to be at the Foothills Medical Centre and will need to function and develop independently.

We will soon face renegotiation of the ARP. Our hope is to continue to provide an opportunity within the ARP for all respirologists in the Calgary Health Region. However, the requirement to recruit may force us to consider positions outside the ARP. If is this is necessary, planning and integration will be paramount.

The developing South Hospital will present great challenges. The goal will be to provide a full complement of respirology inpatient and outpatient services and 24 hour call coverage. It is anticipated that this hospital will be functional in 2009-2010, and an additional 6 recruits will be required for this purpose. Since there is no indication that 6 recruits will be available in the year prior to the hospital opening, this will need to be accomplished over the next 5 years.

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, MD

In the fiscal year April, 2004 to March, 2005 the Division of Rheumatology has seen a number of changes. We have moved our clinical practice at the University of Calgary Medical Clinic to area 5. This has allowed us to change the way we practice by having a concentration of rheumatologists in clinic on five half days per week. This has allowed us to offer an improved clinical service to patients with rheumatic diseases. It has also allowed us to institute the collection of appropriate clinical data to manage our patients who are being treated with biologic agents. Our clinical service has been increased at the Rocky View General Hospital where we recruited an experienced rheumatologist from Edmonton. This has increased the outpatient service by 4 half days per week. The institution of the Alternative Relationship Plan in the Department of Medicine has also helped our community practice colleagues to increase the number of outpatient clinics that they provide. We continue to have a Nurse Practitioner attend clinic at the UCMC. This Nurse Practitioner is funded by Bone and Joint Health. The Nurse Practitioner has helped to increase clinical output, but more importantly has provided the rheumatologist at the clinic with the experience of training and working with a Nurse Practitioner. The presence of the Nurse Practitioner will help our Division members to adapt to the integration of a Nurse Practitioner as part of the Division's ARP Innovation Projects.

The Division continues to be innovative in the management of patients being treated with Biologic Agents for severe rheumatoid arthritis. We have developed a Pharmacovigilance Program which is a model for other constituencies in the evaluation of expensive and potentially dangerous therapies. The Division awaits the appropriate funding to expand this program and we continue to be in negotiations with the Department of Health and Wellness as well as Alberta Blue Cross for this funding.

During the fiscal year, we were involved in the assessment and training of a foreign medical graduate from Argentina. This graduate is a rheumatologist who trained in rheumatology in Argentina. He was being recruited to Chinook Health Region and we offered to assess his skills and abilities to practice in the Canadian environment. This individual successfully completed the assessment and is now in full time practice in Lethbridge.

In the education domain, Dr. Chris Penney has developed an educational program for both clinical clerks and medical residents to increase their proficiency in the evaluation of patients with rheumatic diseases. This program is referred to as the GALS Program. It has been well received by both the clerks and the medical residents and is now included in the OSCE examination of both clerks and residents.

The Division continues to provide excellence in clinical research in the assessment and evaluation of biologic therapies in rheumatic diseases. This clinical expertise has resulted in us being involved in the early phases of clinical trials of cutting edge biological treatments. It has also helped us to provide biologic therapies for patients who are being treated for off-label indications for currently approved biologic therapies. Furthermore, as a result of our experience with biologic therapies, our Division members provide expert knowledge to physicians who are treating co-morbidities in patients with rheumatic diseases who are currently taking these agents.

The Division of Rheumatology has submitted a number of innovation projects for consideration for funding under the Alternative Relationship Plan. These projects will allow us to improve the access of patients to our services and to improve the clinical care of patients with rheumatic diseases. Our innovation projects will also help us to establish a more refined data base for patients with rheumatic diseases and increase our abilities to undertake clinical studies related to outcomes in this patient group. The Division continues to be active in the development of the Provincial Bone and Joint Institute and also in the development of the Faculty of Medicine Bone and Joint Institute.

In this fiscal year we successfully recruited one rheumatologist to our Division. This individual is an experienced practitioner who brings with her many skills and enthusiasm. She is a leader in our application for funding for a

Tele-health Program. This program will have a particular emphasis on the aboriginal population in the Pincher Creek area. The Division has found that patients from this area are often under-serviced for various reasons, most commonly because of lack of attendance at clinic. We are still trying to recruit at least two more rheumatologists to the Division, including one with an interest in the immunology and inflammatory processes involved in rheumatic diseases. Unfortunately, in spite of contacting many different units in both Canada and the United States, we have been unable to find appropriate individuals. The Division has identified certain needs and the recruits will have to meet these needs.

Issues and challenges that the Division faces over the coming year include the recruitment of appropriate individuals to the Division and we have already recruited. The ARP provides very significant advantages in the recruitment of new rheumatologists to Calgary. We will also face the challenges which our innovation projects will bring. These challenges will be welcome ones however, as the Division members recognize that our current service model is unsustainable. We see the recruitment of a Nurse Practitioner as well as a Nurse Clinician as being extremely important in our delivery of care to patients with rheumatic diseases. We plan to meet the challenge provided by innovation funding by being very focused on the changes that we know need to be made. Individual members within the Division will take on leadership roles in the different projects to ensure their success.

The recruitment of residency staff to our training program is a challenge that we have been trying to address for the last number of years. Dr. Chris Penney has developed a Residents Arthritis Day which will be offered to residents in year one and two from both Calgary and Edmonton. Dr. Penney has recruited Faculty from both Calgary and Edmonton to teach at this event.

Over the next two years we expect that there will be a significant change in the way that we deliver care to patients with rheumatic diseases. This is both a strength and a weakness for our Division. The strength encompasses the notion that the Division has banded together as a group to ensure that these changes will take place in a timely manner. The weakness is that the group of rheumatologists may run out of energy due to their current workload. There are many opportunities for the Division to move forward, provided we are able to recruit appropriate personnel to assist with the development of our “New Way” of delivering service, both at the clinical research and educational levels. In the longer term, we in the Division are greatly concerned about our inability to recruit young medical residents to our Specialty. This problem is not unique to Calgary but we need to address the local issues. Many of our Division members are in their early to late fifties making this concern a very real one. Division members have suggested that we may have to recruit from abroad, primarily from the British Isles, in order to address the shortage of rheumatologists that will occur over the next ten years. We are hopeful that, over time, there will be some improvement in the recruitment of medical residents to rheumatology when we are successful in changing the way we deliver care.