Internal Medicine around the World: Education and Roles of the Internist

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Internal Medicine Forum, Brasilia, July 2016
Prof Patro, may I be excused? My brain is full."
By the end of this presentation you will be able to:
- differentiate ‘internal medicine’ and ‘general internal medicine’
- compare and contrast internal medicine practice patterns and the roles of internists around the world
- describe the varied training routes to becoming an internist
- discuss common challenges and solutions
- use this to inform a decision about what is best for Brazil
“I have heard the fear expressed that in this country the sphere of the physician proper is becoming more and more restricted, but I maintain ... that the opportunities are still great, the harvest is truly plenteous, and the labourers scarcely sufficient to meet the demand.”

William Osler, Internal Medicine as a Vocation, in Aequanimitas
What does that mean?

- **IM** – Internal medicine → Internist
- **GIM** – General Internal Medicine → General Internist
- **GP** – general practitioner ~ family physician
- **CTU** – Clinical Teaching Unit

inpatient ward for IM patients in a university affiliated hospital, where students & residents are supervised by an internist
• How many of you are in clinical practice?
• ... in internal medicine?
• ... in a subspecialty?
• ... in a university setting?
• ... in a community setting
Examples of different practice patterns
Dr. Louise P.

- 3 year residency in IM, 1 extra year in GIM
- PhD in Epidemiology
- Professor of Medicine
- Clinical practice in a university hospital
  - *In-patient care of complex patients on an IM CTU, consultation, out patient*
- Teaches medical students and residents
- Director of the academic Division of GIM
- Funded internationally for epidemiology research

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Dr. Jeff W.

- 3 year residency in IM, 1 year in hematology
- Master’s degree in medical education
- Associate professor
- Clinical practice in a university hospital & at community clinics
  - *In-patient care of complex patients in an IM CTU, consultations, Emergency Room, clinics*
- Excellent clinical teacher
- Medical student program director, CTU director
- Research program in medical education
Dr. Burt G.

• 3 year residency in IM, 2 years in GIM (including ICU training)
• Extra training in ultrasound / echocardiography
• Adjunct professor
• Clinical practice in a large regional non-university hospital
  – *In- and out-patient consultation, consults to GPs in ICU, community health advocacy*
  – *Supervises IM and GIM residents from the affiliated university*
Dr. Larry N.

- 3 year residency in IM, + 2 in pneumology
- Clinical associate professor
- In- & outpatient clinical practice primarily in pneumology
  - Also does some IM on his patients in clinic and attends on the IM CTU
  - ‘Private’ IM practice for a large corporation
- Teaches medical students /residents in IM & resp
Dr. Joanne M.

- 3 year residency in IM, 2 years in GIM including 1 year of oncology
- Clinical practice in GIM in a community hospital in a distant small city
  - Consultation, some primary care of complex patients. The local oncology expert for her group*, treating non complex cancer patients
  - *GIM specialists in her group have different areas of concentration
- Organizes the continuing education for her group
Dr. Anne-Marie B.

- 3 year residency in IM, one extra year in IM
- Practice at a community hospital:
  - IM consultations in Emergency Room and non IM wards
  - Primary care of IM inpatients
  - 1 month attending on university hospital CTU,
- Clinical teaching
Dr. Somnath M.

- 3 year IM training (in USA)
- Clinical practice in a large regional hospital
  - Primary care of adults in outpatient clinic
  - Pre-operative consultations and follows these patients during their hospital stay
- Medical student teaching in clinic
- Coordinates faculty development program for group
Internal medicine diversity of practice

- Complex
- In-patient
- Subspecialist
- Consultation
- Simple
- Outpatient
- Generalist
- Primary care
Meets the health needs of society

- In-patient
- Complex
- Subspecialist
- Consultation
- Simple
- Outpatient
- Generalist
- Primary care
An internist is a ‘generalist specialist’
Breadth of care

Depth of care

Family physician (general practitioner)

General internist

Sub-specialist

Specialist

Practitioner
Internal Medicine vs. General Internal Medicine

- **Internist**: highly trained specialist who provides non-surgical health care to adult patients. Includes both sub-specialists and general internists.

- **General Internist** (UK=general physician): diagnoses / treats a broad range of diseases involving all systems, is skilled in the management of patients with undifferentiated or multi-system disease processes.*
  
  - Focuses on the whole patient - integrated care of >1 condition in 1 individual

*RCPSC training objectives
General Internists in Canada

• are specialists with primarily consulting role to
  – primary care doctors (usually family physicians)
  – specialists: sub-specialists in IM & non-medical specialties.

• have a ‘broad based expertise & a focus on patients rather than organs or diseases.’

• roles depend on their practice setting.
Clinical roles of general internists

*Bridge the gap between primary care and subspecialty medicine by*

- management of patients with acute medical problems,
- intensive care,
- continuing care to patients with complex serious illnesses (often collaboratively with primary physicians),
- their approach to undifferentiated problems,
- dealing with problems in >1 sub-specialty area
- peri-operative assessment and care, medical problems of pregnancy, vascular medicine, ‘orphan’ diseases
Roles depend on practice setting

- Smaller communities or remote areas
  - *may be the only (medical) consultant*
  - *subspecialty / procedural expertise (groups of GIM)*
  - *special skills for remote areas e.g. trauma management*
  - *community development*

- Referral centres, regional hospitals
  - *subspecialty or procedural expertise*
  - *multidisciplinary care settings e.g. ‘medical day hospital’*

- University hospitals
  - *‘at the heart of the clinical teaching unit’*
  - *special programs e.g. HIV, HTN, C-V prevention, pain mgt*
Roles of Internists in USA, UK, Australia

- US – more primary care, hospitalist, broader practice
- UK, Australia – more consultant (the ‘general physician’)

Challenge: the decreasing attractiveness of the field
Non-clinical roles

**Education**
- *medical school*
- *residency & fellowship*
- *CME / CPD*

**Leadership**
- *health systems*
- *education*

**Research**

promote the concepts of generalism throughout the curriculum.
GIM roles in Canada affected by:

- History
- Geography
- Political & economic factors
- Public policy
- Health system structure
- Physician workforce
- Academic divisions of GIM
GIM roles in Canada affected by:

- **History**
  - British (& French) heritage & models
  - Royal College specialties 2→70 in 60 years

- **Geography**
  - Big, sparsely populated
  - Small to mid-sized hospitals
Population: 35 million
10 million km sq
GDP US$ 52,000 pc

Population: 210 million
8.5 million km sq
GDP US$ 11,000 pc
GIM roles in Canada affected by:

• Political & economic factors
  – economically advanced,
  – federal & provincial joint funding for health care,
  – need for cost effectiveness

• Public policy
  – access to health care enshrined in the constitution,
  – national socialized medicine,
  – government-mandated workforce planning
Health care system funding

- Publicly funded (through taxes)
- Private (e.g. insurance, corporate, personal)
- Mixed

How might this be linked with IM practice?
At 17.6% of GDP in 2010, US health spending is one and a half as much as any other country, and nearly twice the OECD average.

Total health expenditure as a share of GDP, 2010 (or nearest year)

1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.
2. Total expenditure excluding investments.
Information on data for Israel: [http://dx.doi.org/10.1787/888932315602](http://dx.doi.org/10.1787/888932315602).

Source: OECD Health Data 2012.
GIM roles in Canada affected by:

- Health system structure
  - *regionalized health care, ‘referral centers’*
  - *decreased length of in-patient stay with more outpatient programs*
  - *changed in-patient case mix*

- Physician workforce issues
  - *half MDs are GP/FP;*
  - *reluctance of sub-specialists to move to smaller communities,*
  - *aging GIMs – until recently*
GIM roles in Canada affected by:

- Academic divisions of GIM
  - Major teaching responsibilities
  - GIM training programs
  - Role models for students and residents to choose IM/GIM
  - Fill important clinical needs in teaching hospitals
  - Research: clinical epidemiology, medical education, clinical informatics, health services, basic & clinical research

- Recently revitalized
Training programs

“The art is getting longer and longer, the brain [of the learner] has its limits... the time is too short for a man already burdened to the breaking point, to study any specialty from the standpoint of the specialist.”

Wm Osler, Bull Johns Hopkins, 24:167-71,1913
Training pathways to IM and GIM

- Pre-Medical
- Medical school
- General PG training
- Core IM training
- Specialty training
- Fellowship
- Licensure
- Certification
- CPD

EXAM

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## Training pathways to IM and GIM

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IM=1, GIM=2
General objectives for GIM training

Upon completion of training, a resident in general internal medicine is expected to be a competent specialist in general internal medicine, capable of assuming a consultant’s role in the specialty. The resident must acquire the knowledge, attitudes, & skills common to all GIM practice. The resident must develop the unique skills of the general internist to provide comprehensive care of the whole adult patient in an integrated fashion as opposed to an organ-centered or disease-centered approach. They must be competent in the diagnosis, investigation, & treatment & ongoing care of the specific subset of patients seen by General Internists.
Residency training sites / roles

**Obligatory**
- Community GIM
- Consultation service
- GIM ambulatory care
- CTU as ‘Junior attending’
- Intensive care
- Pre-operative assessment
- Obstetrical medicine

**Flexible**
- Further clinical training GIM or other subspecialty
- Procedural skills
- Advanced degree e.g. MPH, MSc, MBA, MEd, MHA
  - Clinical epidemiology
  - Health services / economics
  - Basic / clinical research
  - Medical education
Maintaining Quality of Education

• Medical School

• Residency
  - RCPSC
  - ACGME
  - College of Physicians
  - Postgraduate Training Board

• Continuing Education
Outcomes (15-20 years)

- Royal College recognition of GIM as specialty
- 5 year training model – “3 and 2”
  - Appropriate training for practice
- Slow increase in recognition of the value of GIM
  - Funding
  - Government mandated increase residency numbers
- Increased # choosing GIM training ...but not enough!
- Collaboration of community and university GIMs
- Increased graduates choosing community context
Challenges

- Confusion of IM and GIM
- Subspecialists who do IM eventually focus on s/s
- GIM is ‘undervalued’ and low stature
  - By sub-specialists
  - Skills not properly understood or used by GPs
  - Unclear roles in academia/community
  - Little patient understanding of roles
- Perceived as unattractive
  - A ‘default’ choice of trainees: Little exposure to the range of roles
  - Financial & lifestyle disincentives
- Shortages & maldistribution of internists
Responding to the Challenges

- Define IM, GIM; recognition of GIM as a distinct specialty
- National bodies (RCP UK, Canada) emphasize generalism
- Broad education about GIM roles
- Appropriate training for practice (flexibility, length)
- Competency-based medical education
- Expose trainees to role models, practice patterns, contexts
- Admissions and selection policies
- Growth of national specialty societies & academic GIM
- Financial incentives
- Desirable lifestyle (education, care models)
In summary, GIM in Canada:

• Generalist specialists – distinct role between primary care and more focused sub-specialist
• Responding to societal and demographic forces
• Consultant role - spanning many disciplines
• Provides patient-centered holistic care
• Wide variety of roles depending on setting
• Flexible training for practice setting
• Slow increase in stature and desirability

→ Better health care!
Can you now...

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- use this to inform a decision about what is best for Brazil
“The good physician treats the disease; The great physician treats the patient who has the disease.”

Sir William Osler
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Obrigado!