The Changing Face of Medical Education:
Social Responsibility as a Guiding Principle

Carol P. Herbert
Fall Regional Partnership Leadership Forum
Lamplighter Best Western
London, Ontario
September 12, 2007
Medical Education 2020: Southwestern Ontario Medical Education Networks

Carol P. Herbert
Regional Partnership Meeting
May 16, 2001
Outline

• Background – Vision for Social Accountability; HHR Planning
• Who are our medical trainees
• Changing curricula
• Where are they learning
• Next steps
• “….the obligation to direct…education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation [the medical school] have a mandate to serve….”

• “The development of an effective social accountability model for medical schools will provide the basis for all partners to work collectively on meeting the needs of the Canadian population in a collegial and collaborative manner”
Policy makers

* Academic Institutions

Teaching

Research

* Health Professionals

* Health Services based on community needs

Health Managers

Communities

C. Boelen, 2003
HHR “Burning Platform”

• Aging cohort of practicing physicians
• Changing patterns of practice
• Insufficient numbers of MD graduates
• Changing roles for health professionals
Romanow Report: “…changing trends, corresponding changes must be made in the way health care providers are educated and trained. If health care providers are expected to work together and share expertise in a team environment, it makes sense that their education and training should prepare them for this type of working arrangement”

2003 First Ministers’ Accord on Health Care Renewal
- Develop a Health Human Resources (HHR) Action Plan Strategy
- First Ministers commit to involving HC providers in this work

2004 First Ministers’ 10-Year Plan
- F/P/T governments agree to increase supply of health care professionals in their jurisdiction and make action plans public.
Vision

Shaping the future of health care
Mission

The Schulich School of Medicine & Dentistry provides an outstanding education within a research intensive environment where tomorrow’s physicians, dentists and health researchers learn to be socially responsible leaders in the advancement of human health.
As leaders who are committed to exceptional results, we embrace the following core values:

- Commitment to innovation, knowledge creation and scientific excellence

- Student-centred curricula which fosters academic leaders, critical inquiry, and a passion for lifelong learning

- Compassionate, patient-centred care

- Inter-disciplinarity, collaboration and outreach

- Respect for diversity in culture and perspectives

- Accountability to our community of scholars and to the public
Who are our Canadian medical trainees?
Average Age of Applicants to Canadian Medical Schools, 1995 to 2005

The graph shows the average age of applicants to Canadian medical schools from 1995 to 2005. The data is presented for two categories: Total Applicant Pool and Registered Applicants. The average age generally increases over the years, with slight fluctuations. The Total Applicant Pool has a consistently higher average age compared to Registered Applicants.
Postgraduate Trainees


Trainees: Post-MD Trainees Year 1 only, Post-MD Trainees Total Trainees
First Year Trainees (CC/PR), 1996 – 2005
Proportion of Women Entering Family Medicine and All Training Fields
## First Nations/Métis/Inuit First Year Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
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<tbody>
<tr>
<td>1999</td>
<td>8</td>
</tr>
<tr>
<td>2000</td>
<td>17</td>
</tr>
<tr>
<td>2001</td>
<td>13</td>
</tr>
<tr>
<td>2002</td>
<td>18</td>
</tr>
<tr>
<td>2005</td>
<td>36</td>
</tr>
<tr>
<td>2006</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
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</tbody>
</table>
Diversity of Student Population

Visible Minorities
• 32% in medical schools
• 20% in population

But …
• 1.2% black students
• 2.5% in population (age 15-24)
“Rural and Small Town” Canada

- 22% of population
- 17% of family doctors
- 2.8% of other specialists
- 10.8% of medical students
International Medical Graduates

- Canadian-born graduating abroad
- IMGs eligible for entry into residency match (CaRMS)
- IMG programs
Application Eligibility

• Must be a Canadian citizen or Permanent Resident of Canada

• Have completed or currently be enrolled in a four-year honours degree program or equivalent at a recognized university

• Expect to have completed 20 full or equivalent courses by the end of the academic year (Sept – April) in which the application is being made
“Honours Program or Equivalent”

• Must have taken sufficient senior level courses during their second, third, and fourth year of their 4-year program to enable them to be eligible for admissions into a graduate (Masters Degree) program.

• There are no prerequisite courses
Meds 2011 – Interview Requirements

MCAT:
• non-SWOMEN Region: BS (10), PS (10), VR (10), WS (Q)
• SWOMEN Region: BS+PS+VR= 30, no score <8; WS (O)

(Score Range: BS, PS, VR, 1-15; WS, J– T)

GPA:
3.70 (80-84%) for at least one undergraduate year* if still in an UG program in the application year

(*for final acceptance, applicants must have two UG years with 3.70 in each of the two years; and must have completed a 4-year honours degree program)
## Meds 2011 – Application/Interview/Admission Profile

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td><strong>Total # of Applicants</strong></td>
<td>1870</td>
<td>2531</td>
<td>2300</td>
</tr>
<tr>
<td><strong># of Non-SWO Applicants</strong></td>
<td>1710</td>
<td>2309</td>
<td></td>
</tr>
<tr>
<td><strong># of SWO Applicants</strong></td>
<td>160</td>
<td>223</td>
<td></td>
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<tr>
<td><strong>Total # Invited for Interview</strong></td>
<td>420</td>
<td>440</td>
<td>445</td>
</tr>
<tr>
<td><strong># of Non-SWO invited for Interview</strong></td>
<td>385</td>
<td>361</td>
<td>360</td>
</tr>
<tr>
<td><strong># of SWO invited for Interview</strong></td>
<td>35</td>
<td>79</td>
<td>85</td>
</tr>
<tr>
<td><strong># of SWO offered admissions</strong></td>
<td>32</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td><strong># of SWO accepted offer of admissions</strong></td>
<td>25</td>
<td>56</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total # of Registrants</strong></td>
<td>133</td>
<td>139</td>
<td>147</td>
</tr>
<tr>
<td><strong>% SWO Students</strong></td>
<td>19%</td>
<td>40%</td>
<td>33%</td>
</tr>
<tr>
<td>Location</td>
<td>2006</td>
<td>2007</td>
<td></td>
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<tr>
<td>---------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>London-Goderich</td>
<td>24</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Windsor-Essex</td>
<td>10</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Sarnia</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>St. Thomas</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Woodstock-Tillsonburg</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chatham-Wallaceburg-Leamington</td>
<td>3</td>
<td>2</td>
<td></td>
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<tr>
<td>Owen Sound/Meaford</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Kincardine-Listowel</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Stratford</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>48</strong></td>
<td></td>
</tr>
</tbody>
</table>

- London-Goderich: 43% in 2006, 50% in 2007
- Windsor/Chatham/Sarnia: 36% in 2006, 29% in 2007
Number Accepted: 147

Men: 75 (51%) (2010: 55%; 2009: 53%)
Women: 72 (49%)

Average age: 23.1 (2010: 22.5; 2009: 23)

From:
- Ontario: 134 (91%) (2010: 94%; 2009: 89%)
- Alberta: 4
- BC: 4
- NL: 2
- NS: 2
# Meds 2011 – Last University Attended

<table>
<thead>
<tr>
<th>University</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>50 (34%)</td>
</tr>
<tr>
<td>McMaster</td>
<td>28</td>
</tr>
<tr>
<td>Toronto</td>
<td>19</td>
</tr>
<tr>
<td>Guelph</td>
<td>10</td>
</tr>
<tr>
<td>Queen’s</td>
<td>7</td>
</tr>
<tr>
<td>Waterloo</td>
<td>6</td>
</tr>
<tr>
<td>Windsor, Ottawa</td>
<td>4</td>
</tr>
<tr>
<td>Dalhousie</td>
<td>3</td>
</tr>
<tr>
<td>Brock, Memorial</td>
<td>2</td>
</tr>
</tbody>
</table>

One student:
- Wilfred Laurier, UBC, UVic, Calgary, McGill, Simon Fraser, Acadia, St. Thomas Aquinas, Calvin, Washington, Maastricht
Meds 2011 – Designated Programs

3 designated seats in each of the following:

MD/PhD 5* (Total in program: 14)
Anat/CB, 1; Biochem., 4; Health Sc., 1;
Med. Biophys., 3; Micro/Immunol., 1;
Neurosc., 1; Phys/Pharm., 3)

MD/BESc 1 (Total: 8)

Aboriginal 2 (Total: 5)

*With Approval from Admissions Committee
Changing Curricula

- Decreased lectures
- Self-directed learning
- Web-based curricula (Gender Health website)
- E-learning/videoconferencing
Changing Curricula

- Patient Safety – core competencies
- Simulation (eg., CSTAR)
- Interprofessional Education
What is Interprofessional Education (IPE) ?

“occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care”

(CAIPE, 1997 revised)
What is Collaboration?

“an interprofessional process of communication and decision making that enables the separate and shared knowledge and skills of health care providers to synergistically influence the client/patient care provided”

(Way & Jones 2000)
Why do we need **Collaborative Patient-Centred Practice?**

- To promote the active participation of each discipline in patient care;
- To enhance patient and family-centred goals and values;
- To provide mechanisms for continuous communication among care givers;
- To optimize staff participation in clinical decision making within and across disciplines; and
- To foster respect for disciplinary contributions all professionals

(Health Canada, 2003)
Need teaching settings with health professionals that practice collaboratively

Need to train health professionals to practice collaboratively
Continuum of Learning

- 4 year degree replaces specific premed courses
- Defined undergraduate learning objectives
- Maintenance of competency
- Enhanced skills training for identified needs
Constant elements

• Patient-physician communication
• Scientific principles
• Clinical skills
Where are they learning?

- Increased utilization of Distributed Education – NOSM, UBC system, Sherbrooke/Moncton, UWO-UWindsor Medical Program
- Medical Education Rural/Regional Networks (SWOMEN)
- International opportunities (Rwanda, MEOP, MSIC, MSIndia)
SW Ontario has a population of 1.4 million people.

SWOMEN works with over 50 communities in various programs throughout SW Ontario.
SWOMEN: Western’s Medical Education Network

- UWO and U of Windsor Medical Program
- Builds on SWORM experience (1997)
- Contributes to regional physician resources
- Based on true collaborative relationships
- October 1 2001 announcement of Rural/Regional Program with 20 residency positions
SWOMEN: Goals

- Learn rural medicine
- Learn regional specialist care model
- Engage community-based physicians as faculty
- Attract academic faculty to region
- Encourage graduates to practice in rural/regional communities
12 SWOMEN PGY-1 specialty positions in addition to 8 PGY 3 enhanced Family Medicine.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Positions each year 2002-Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesia</td>
<td>3</td>
</tr>
<tr>
<td>Enhanced Family Medicine PGY 3</td>
<td>8</td>
</tr>
<tr>
<td>General Surgery</td>
<td>1</td>
</tr>
<tr>
<td>Medicine</td>
<td>3</td>
</tr>
<tr>
<td>OB/GYN</td>
<td>1</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>3</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>
SWOMEN Windsor
Undergraduate Training Activity
2002 - 2007

Number of Students
Training Months

Schulich School of Medicine & Dentistry
The University of Western Ontario
SWOMEN Rural Regional Postgraduate Training Activity
1999 - 2007

Number of Residents
Training Months
SWOMEN Windsor
Postgraduate Training Activity
2002 - 2007
Windsor Program Evolution

- 2000-2001: proposal for Windsor program
- 2001: funding announced
- 2002: first group of third year clerks
- 2006: funding announced for full 4 year UME program in Windsor, to begin 2008
SWOMEN Hospitals

- Critical to success of medical education networks
- Windsor Regional and Hotel Dieu have taken risks
Academic Liaison with LHINs

- Formal Academic Liaison Committee
- Ongoing SSMD representation in LHIN processes
- Excellent relationship with LHIN 1 and 2
Summary

- Medical education: 2020 is a new model for educating physicians
- Medical education networks are community-university partnerships
- Learning is distributed and multidirectional
- Southwestern Ontario is in the forefront
In conclusion...

- Social accountability include a responsibility to represent the communities we serve
  - Understanding the culture
  - Speaking the language
- Next steps
  - 2008 Windsor campus of SSMD
  - Continue SWOMEN Rural/Regional
  - Mentoring/faculty development
  - CPD for SWO health care professionals