

Pre-Conference Discussions

OECD Human Resources for Health Care Project – Update

Gaetan Lafortune

The Health Project of the Organization for Economic Cooperation and Development has undertaken an analysis of the performance of health systems in OECD nations, with examination of efficiency, effectiveness and equity. The Human Resources for Health Care Project is one important component of this effort. Final reports from the Health Project as they relate to human resources issues include a synthesis chapter in the publication *Towards High Performing Health Systems: Policy Studies* (released in September 2004) and three upcoming OECD Health Working Papers: Ensuring an Adequate Supply of Physician Services in OECD Countries; Tackling Nurse Shortages in OECD Countries; and Skill Mix and Policy Change in the Health Workforce: Nurses in Advanced Roles.

The objective of the Human Resources for Health Care Project was to identify, compare and evaluate physician and nurse supply and distribution in the 20 participating countries. Data were collected on physician demographics, types, activity levels, and remuneration. Comparative data on physicians per population, growth in physician workforce in countries that limit medical education slots vs. those that do not, women in the physician workforce, remuneration and international medical graduates in the workforce were highlighted. It was noted that migration of physicians is one aspect of movement in labor markets; the concern is about excessive movement. There have been attempts to analyze physician productivity, with a finding of higher activity levels in fee-for-service arrangements.

Policies to address physician shortages in the participating countries were reviewed, including training rates, recruitment and retention, migration, adjusting skill mix through substitution, and raising productivity. The proportion of women in the physician workforce varies significantly among the countries. The impact of women in the workforce was suggested as a topic for the next IMWC meeting.

Discussion centered around the need for better comparability of data across countries, particularly with regard to the inclusion or exclusion of residents in physician counts and defining generalist physicians.

Data Collection, Modeling and Planning: Four Countries Addressing Critical Workforce Questions

Planning for the Australian Medical Workforce- Recent Developments and Next Steps

Dr. Jeannette Young noted that physician work hours are declining. She described the work of Australia's Medical Workforce Advisory Committee. Australia assembles a physician data set from the Medicare database, state and territorial health departments, and professional organizations. The physician data set is thought to be sound with respect to overall

demographics, although weak in areas of timeliness, identification of IMGs, and physician activity. The data are used to model physician supply, although further work needs to be done to allow modeling on a disaggregated level. Information on demand for physician services is much more problematic. Australia continues to try to enhance its physician data set and recently completed a career choice study.

Information on the data sets is available at www.healthworkforce.health.nsw.gov.au and www.aihw.gov.au.

Canadian Innovation in Health Human Resources Data Collection and Modeling

Dr. Joshua Tepper described efforts by Canada to collect better physician data through a national physician survey. There are plans to survey physicians, residents, and students every three years. Development of the survey instrument involved an extensive literature search and focus groups with a variety of experts to identify priority data elements. Despite a large media campaign, only 36 percent of physicians responded to the initial survey. Survey findings are available at: www.nps-snm.ca.

There has been some supply and demand modeling. The physician data were used in one effort to survey neurosurgeons in a defined region about their practice activities. The responses allowed researchers to determine the number of clinical hours utilized for specific procedures and diagnoses.

Discussion included a suggestion to require physicians to complete the survey as a requirement for licensure.

Data Collection, Modeling & Planning: Addressing Critical Workforce Questions in England

Dr. Judy Curson- England engages in medical workforce modelling to gauge physician supply and estimated requirements. The country is undertaking major changes in medical education in order to modernise medical careers, move to competence-based training, have more flexibility in training physicians, place a cap on training time, and to produce more doctors more quickly.

Three models were presented:

1. Modelling the workforce by specialty
2. Modelling the transition to the new career pattern
3. An integrated workforce planning model is being developed to incorporate workforce, activity and funding. Local health authorities must have tools for short-term planning for the health sector, as they make decisions about actual services that will be provided.

U.S. Physician Workforce: Data and Methods for Projections through 2020

Edward Salsberg and Gaetano Forte -A recent report of the Council on Graduate Medical Education forecasts physician supply in the U.S. through the year 2020 and predicts an

impending shortage. There is no physician workforce planning in the U.S., although there are advisory committees that occasionally have an impact. The GMENAC report released in 1980 forecast an oversupply of physicians and medical schools subsequently began to limit class size. COGME made much discussed recommendations in the 1990's to limit the number of residency positions to 110 percent of the number of US medical graduates and that half of physicians should be in primary care. COGME's forecasts were not correct and the U.S. is now concerned about a shortage. Managed care did not evolve as expected and there has been a rebound in physician demand.

Existing forecasting models and physician data were used in developing the COGME forecasts. The goal was to provide ranges rather than specific numbers. Assumptions included a ten percent decrease to reflect changes in physician lifestyle and a twenty percent increase to reflect enhanced productivity. The different forecast ranges incorporate potential increases in the number of U.S. medical graduates and potential increases in physician productivity. See slide attachments for specific forecasts.

Discussion

Speakers were asked to discuss the goal of physician planning and what would constitute "getting it right." Responses included:

- the right number is society's choice (Canada);
- "getting it less wrong," achieving a closer fit, avoiding shortages and overproduction, and training physicians to match the money available (UK);
- ensure access to quality health care (US)
- avoid shortages and sudden problems, provide guidance (Australia)

There was discussion on the usefulness of physician data for meeting short-term service needs vs. long-term physician workforce planning. The need for a macroeconomic approach to long-term forecasting was emphasized.

Speakers were asked to address whether medicine is still an appealing career and how their countries are addressing limited physician work hours. Responses included:

- "Safe hours" are built into physician workforce modeling; there are still more qualified applicants than positions so resulting shortages may not be a problem, but finding enough space in suitable training environments will be a challenge (Australia);
- Work hour limits are built into models and are an important link to patient safety; while physician career goals may be changing, interest in medicine remains high (Canada);
- The large proportion of women in medicine (70 percent of medical school graduates) reflects medicine's declining status (UK);
- Medical school applications are up this year, but more applicants are needed in order for medical school classes to expand; U.S. physicians spend an average of 55 hours per week on patient care activities, the U.S. model is different from the other IMWC countries (US).

Plenary Session #1: Programs and Policies Discussion

Bob Elliott: Which programs/policies will be most effective in RETAINING physicians in urban areas and in rural areas? What are the similarities and differences in these programs?

- More than total remuneration needs to be considered in retaining physicians in these areas, though the evidence shows that differences in remuneration have an important role to play. Other aspects are also important, such as the specific attributes of jobs in different geographic areas, and where the particular physician is in terms of career and family life cycle. This is particularly important in households where both partners work, raising issues of dual careers. This gets played out in terms of physicians choosing areas to work that can support education for the children, and the family's lifestyle preferences.
- Another issue is whether there would be more success in retaining physicians in urban and/or rural areas if it wasn't seen as a permanent attachment, but rather an attachment that was time-limited.
- Was there a sufficient evidence base on the policies that are effective in determining the balance between physicians work and family activities
- Focusing solely on the physician supply doesn't address all the issues; given care delivery today, it is important to examine substitution possibilities between physicians and other providers
- Some additional factors that were identified as being important to physician retention included the income constraints, lack of purchasing power, and the overall potential lack of financial prosperity of the community the physician served.
- This reminded us that we need have regard to the broader economic context within both urban and rural communities within which health care is delivered.

Tom Ward: What programs and policies will be most effective in RECRUITING MDs to urban and rural areas? What are the similarities and differences in these programs?

- Group highlighted the interdependence of recruitment and retention, that it is really not possible to separate them
- Recruitment of physicians should acknowledge that physicians are part of families, and the recruitment should be targeted to the family/spouse, rather than to the individual physician alone

- Similar to the group that addressed the question of retention, this group raised the issue about whether recruiting was being done for a “lifetime” commitment, or a more limited time period
- Another issue that was raised was the importance of understanding physician career paths, and how that information might be used to develop more effective recruiting programs
- The lack of congruence was noted between implementing policies that have been demonstrated to be effective and the political will to implement them
- The use of fiscal incentives was discussed, specifically that there has been quite a bit of experience with so-called “front-end loaded” incentives, but not a lot of experience with “backloaded” incentives. The sense was that it would be important to study the impact of such backloaded incentives in recruiting physicians.
- Another issue, particularly related to recruitment of physicians to remote areas, was the need to build infrastructure to attract and support physician practice.
- Related to the above was the rural/remote area’s lack of schools and hospitals that make the area less attractive to physicians and their families
- A creative idea was raised about transportation subsidies. In rural/remote areas, these subsidies would be used to transport families TO specialists (rather than trying to get specialists to practice in remote areas). Conversely, in urban areas, the movement would be in the opposite direction – transporting patients to primary care physicians.
- Finally, there needs to be a stronger link to political policy

Karen Bloor: How does physician labor market behavior differ from other health professions? What are the implications for rural remote vs. inner city recruitment and retention?

- It is important to recognize that physicians are not a homogeneous group; they are comprised of primary, secondary, and sub-specialty providers, and there is diversity in race, ethnicity, and gender
- Physician income tends to be higher than other health professions
- Mobility is higher than other health professions, so there may be increased freedom to make choices
- Physicians are more likely than other health professionals to be heads of households

- Physicians are more likely to enjoy higher prestige, value and respect than other health professionals
- Physicians may have more desire for academic links
- Physicians are driven by values, not by money, and are motivated by “higher things”
- Physicians have more concentrated training, which has an impact on where they later live and practice
- Physicians are subject to different reimbursement and regulation policies
- There are implications for policy development of these differences
 - The need for more diverse training sites
 - More explicit evaluation for underserved areas
 - Need to examine the appropriate skill mix to provide appropriate care
 - Needs to be more analysis of physicians’ professional values – are they different than other health professionals?
 - Need for more data – a great deal of thinking in this area is based on anecdotes, rather than on empirical research
 - Need for more evaluation, specifically focusing on what has been learned from the strategies and policy interventions that have been implemented thus far

Neil Calman: How should we measure/monitor MD shortages in inner cities and remote areas?

- This group raised the issue of the meaning of “shortage” – and asked “shortage” in terms of what goals and for what purposes?
- Recommend that there is a need to look at supply in relation to NEED, rather than just DEMAND when one considers physician manpower needs
- Group pointed out that inequalities of access lead to inequalities in health status, and that shortages need to be considered in this light
- Raised the issue that counting is not an adequate measurement of the supply of physicians, since it does not provide information about what the physician is actually doing in his/her job, or about productivity. Nor does “counting” provide information about how accessible the physician is to the population he/she is serving

- Raised the important issue of supply-induced demand as a background to understanding physician manpower needs
- The US has the ability to address the issue of workforce for the underserved if it had the will to do so
- A very successful model exists in the National Health Service Corps (NHSC)
- Good workforce planning requires good workforce data and no national effort has been expanded to develop a system to track physicians through training and into practice
- A shortage designation process must be developed which is data driven and not dependent on communities or organizations to apply for designation in order that previously unidentified shortage areas may be addressed.

General discussion of the plenary session:

- There is a great deal of overlap among programs that all attempt to redistribute physicians to areas of identified need, making it virtually impossible to evaluate the incremental effects of one program over another.
- A practical problem arises (follow-up to the comment just above): how do you justify any *single* program when ALL programs do the same thing?
- Policy goals need to be adjusted to obtain a uniform metric for measuring a shortage
- What are the key researchable questions, and how should evaluation be built in from the “front end” of these programs? Doing so would provide us more valid and reliable data that would enhance our ability to truly evaluate these programs.
- There is a paradox: inner cities have a lack of family physicians, but not specialists, while rural areas tend to have a lack of specialists. The nature of these jobs is quite different, which raises the question: “What are the roles and jobs for the primary care physician in the inner city?”
- Finally, there is difficulty in implementing policy in a highly political context, which raises the issue: How could the public become more involved in policy making in such a way to support policy through informed public opinion?

Plenary Session 2: Education and Training

Overview of Common Themes – Jeanette Young, Australia

The common themes of the four papers covered a spectrum of education and training issues from medical education to continuing professional education.

1. Factors Driving Change or “Why Do We Need to Change”?

Authors identified several factors that are creating a need to modify existing education and training practices. First is the changing health care environment including dynamics such as reduced length of hospital stay and increased acuity, increased ambulatory care, increased subspecialization, and increasing use of day surgery. All these changes have led to a reduction in the availability of clinical placements for students. At the same time, there is an increased requirement for clinical placements. Most countries are increasing medical school enrollment.

There is an increased emphasis on patient safety and the expectations of more informed consumers that have an impact on the education and training environment. Medical students themselves have increased expectations for their education and training as they bear more of the burdens of the cost of education.

These factors led to the development of the first group discussion question: What are the key priorities for change in education and training?

2. The relationship between the health and education sectors

The papers identified the need to better define the objectives of medical education and to identify roles and responsibilities of educational institutions and health care providers, particularly with respect to curriculum. This issue led to the second discussion question: Should there be formal relationships between the health and education sectors?

3. Financing of Undergraduate and Graduate Medical Education

The issue of financing both medical school and graduate medical education, with specific emphasis on costs of ambulatory training, was also a common theme. Governments, hospitals, and individuals are all players in this area. The third discussion question is: How should education and training be financed?

4. Models for Education

At the undergraduate medical education level, there is a need to work toward more problem-based learning, more integrated curricula, and greater use of skills laboratories. There needs to be a better understanding of how to provide clinical training as patients move from tertiary hospitals to community hospitals and ambulatory-based care sites. Rural rotations will need to be integrated in the education process.

At the vocational or graduate medical education level (GME), the four countries have different models for setting education standards. In Canada, GME is managed by the university. Not so for the UK – educational standards for postgraduate medical education are set by 2 Competent Authorities – the Specialist Training Authority (STA) and the Joint Committee for Postgraduate Training on General Practice Training (JCPTGP). In Australia, it is managed by the medical college. The Accreditation Council for Graduate Medical Education (ACGME) sets standards in the U.S. In all cases, the leaders of the professional discipline control the process. The fourth discussion group question is: How well does the apprenticeship model work?

While the context of medical education and training is slightly different in each country, all are experiencing similar changes in the system of care. In all cases, patient safety needs to be at the center of the medical education model.

Country Responses

Australia - Geoffrey Metz:

There is an increased body of knowledge that students must acquire. Small group learning and “skilling” are more appropriate models for this environment than is the traditional didactic approach. Bedside apprenticeship is still the most appropriate clinical teaching model, but skills laboratories for students can reduce student errors and risks to patients. Professionalism is best taught at the bedside.

The decreased length of hospital stays and increased number of students must be addressed. Training needs to occur in private, regional, and rural hospitals, as well as in physicians’ offices. The Australian government set up a Medical Specialist Task Force that will report related recommendations next month. The Australian Health Minister has emphasized that clinicians need to be qualified to teach and that the infrastructure for learning needs to be available.

Canada – Ian Bowmer

While the goals of medical education are good, the management of curriculum and the layout of learning experiences have been problematic. It needs to be recognized that physicians don’t always provide positive experiences for students in community-based settings. Patient groups have been a positive force in clinical skills teaching by helping inform educators about how to do exams from a patient perspective.

Education systems should recognize that physicians often have more than one career and that not much of what is learned in formal education is used years into practice. Lifelong learning skills need to be incorporated into training, rather than paying lip service to this critical skill. Longer formal training periods lead to fewer providers.

U.S. – Michael Whitcomb

The education system should serve the interests of patients and assist physicians in maintaining clinical competence. The U.S. has a poor scorecard in this regard. Surveys have found that physicians do not feel that they are adequately prepared for practice. This is due to the structure of education programs, not education strategies.

Residency programs are designed by the culture of the specialty and by the service needs of clinical sites, with students often training in sites where they will never practice. There are no data about scopes of practice that can be translated into training, therefore students aren't trained for practice.

Medical education should help physicians stay educated as the practice environment changes; the current system doesn't work. Re-licensure requires physicians to sit in lectures, but they don't change their practice behaviors. Physicians need to know about current standards of practice. Given our current system, it is not surprising that patient care doesn't reflect clinical standards.

United Kingdom – Shelley Heard

The UK is about to undertake major changes in its medical education system through its Modernising Medical Careers program. It has had to ask the questions: What makes a physician fit for purpose? Fit for what patients need? What is the relationship between health and education?

In the UK, almost all hospitals engage in postgraduate medical training. Patient safety is the priority. Clinical governance and accountability for care have had to be addressed. Part of the outcome of much deliberation is a decision to move towards more care being delivered by fully accredited doctors, with less dependence on care being delivered by doctors still in postgraduate training.

With large changes in the health care system, medical careers have to be adaptable and modernized. The UK's new system will introduce formal assessment of competency in a range of clinical and professional areas. Following graduation from medical school, doctors will be required to undertake a 2-year Foundation Programme. It is anticipated that there will be access to training in primary care for all trainees during this time as well as work in hospital specialties, along with an emphasis on managing the acutely ill patient. Exposure to primary care during this period is not just to encourage doctors to consider primary care careers but also to provide an understanding of the primary care model to all physicians. There is flexibility built into the program to allow trainees to explore career directions that meet their own needs and to align them to those of the NHS. Following foundation training it is anticipated that there will be streamlined specialist training which should enable doctors to gain accreditation more rapidly.

More information is about the Modernising Medical Careers program is available at www.mmc.nhs.uk.

Discussion Group Reports

What are the priorities for change?

Despite all the talk about patient-centered care, the system doesn't reflect that goal. This is because health care systems are dominated by a medical model that doesn't allow patients and the public to have a say.

Funding incentives for education and training are badly designed. The funding support should move with the students and trainees as education needs change, but it doesn't. This is complicated by the fact that most of the costs of education and training are hidden. The role models for students and trainees offer less than ideal experiences. Institutions cannot teach values that are not part of their institutional culture. Moving the education and training system is a difficult challenge.

Should there be formal relationships between the health and education sectors?

The group felt there should be formal relationships, but found it difficult to determine how this should be done and what it would mean. The education system needs its students to be part of the health system. Residents have a need for a minimum numbers of cases in surgery for example, but involvement of students and residents in patient care goes well beyond surgery. Most patients, but not all, are willing to be seen by residents. It must be acknowledged from a legal standpoint that students will be involved in the care of patients.

The funding of training is a key issue. Hospitals need to maintain service volume. They don't want changes that involve more training costs. It is costly to train students in ambulatory settings. In a US example, students make high tuition payments to medical schools that then ask community physicians to provide clinical training to students with no compensation. Representatives of Canada felt the departments of health should fund clinical training, not educators. Australian representatives raised the point that if health systems aren't willing to educate trainees now, they incur the risk of an inadequate workforce for the future.

How should education and training be financed?

Undergraduate and graduate training are separate systems and, in most cases, financed differently. States/provinces are more involved at the undergraduate level and in some countries the federal government is more involved with graduate training. All the countries have public medical schools, and some also have private, with students generally paying fees. Trainees are viewed as people providing care and receive payment for their work. The profession ultimately decides who is certified.

Against this background, the explicit costs of education and training need to be defined. Funding should follow students so that those who incur the costs receive the payment.

There is little funding available for continuing education and new knowledge learning. If this is viewed as important, it needs to be funded. Distinctions can be made between programs that are for personal career decisions and public need.

How well does the apprenticeship model of training fit the need?

The apprenticeship model works well; the problem is with the health care system and its culture. There is a threat to the model when there is a demand for increased service. Apprenticeship slows service, which is particularly problematic if the service is reimbursed on a case basis.

Reduced working hours among physicians leads to a need for more service to be provided during those working hours. Reduced working hours also threatens continuity of care.

While the apprenticeship model was originally hospital based, it should work as well in an ambulatory service. Skills laboratories are an improvement on the model. The preparatory courses prior to becoming an apprentice that were initiated in the UK were seen as very positive. It was noted that the apprenticeship model needs to be modified for teaching continuity of care. It also needs to be acknowledged that training is different from delivering care.

There are tensions in the model that come from demands of the education and service sectors that are sometimes at odds. While communities see the benefit of academic health centers and teaching hospitals do see teaching as a core service, there are conflicts such as patients demanding to be cared for by the attending physician and not the resident. However, research shows that outcomes are as good, and sometimes better, when services are provided by attending and resident physician teams as when care is provided by attending physicians alone.

Plenary Session #3 Discussion: Models of Care

John Ramsay: What should policy makers consider to be the overriding goal in considering new models?

- The major question is WHO are the policy makers?
- The process of achieving change in models of care requires attention to the following:
 - importance of political issues
 - model change needs to be “saleable”
 - needs to provide evidence of success
 - political opportunities may enhance the likelihood of success of a model change
 - there needs to be the requisite political will to support a model change
 - the model needs to be relatively risk free from the perspective of both stakeholders and politicians
 - conversely, the model needs to be attractive to stakeholders
 - there needs to be consumer engagement with the model
 - a coalition of interests must support the model
 - the model must have measurable outcomes and evaluation criteria
 - changes required by the model must be open and transparent and the tradeoffs must be made explicit
 - the model must be targeted to meeting unmet need in vulnerable recipients

Alan Maynard: What are the barriers/enablers of changing care, including interdisciplinary teams?

- The example of midwifery in the UK was cited as an example of the use of multidisciplinary teams, where midwives do many deliveries. However, a member of the audience challenged this assertion by stating that delivery rooms were still staffed with physicians. This “challenge” brought to the forefront some of the difficulties in interpreting data
- One enabler of changing models of care is the growth of physician assistants, changes in skill mix, and the growth in informal demand for model change

- Another facilitator is the growth of self-directed care, for example, e-visits and other ways of consulting a physician. The point was made, however, that these innovative ways of delivering services may not be reimbursed, so that reimbursement policy serves as a barrier to their implementation.
- Another example is patient-led change, for example, changes in breast cancer care in the UK that are responsive to patients' demands for psychological support
- One example of a barrier is the rigidity of current health care systems in providing what patients want; therefore they go outside the system to buy it themselves. This can be seen as both a barrier and a facilitator.
- The importance of interdisciplinary training – what is the evidence that this kind of training makes any long-lasting difference in careers and in team performance?
- A significant barrier is that model change often leads to redistribution of power, income and status between provider groups. We do not have the information on what kind of incentives would be effective in promoting such change, particularly when some “turf” issues are reinforced by legal responsibility.

Louise Nasmith: What would be the outcomes that should be evaluated from an interdisciplinary approach to care delivery?

- Teams are not new, but there is not a lot of team outcome data
- Important to identify outcomes that relate to the actual functioning of the team
- The patient should be considered to be part of the team
- What are the critical educational components of team functioning?
- The point was made that an evaluation of an intervention can cost more than the intervention itself, making evaluation, while a critical part of understanding a multidisciplinary team approach, less likely to occur
- The level of relevant outcome measures also needs to be considered. For example, should outcomes be measured at the patient level or at the community level?
- At the patient level, one needs to consider specific vs. generic outcomes; the use of quality of life outcomes; helping patients to evaluate their values with regard to the choices they make; and outcomes related to access to care.
- At the team level, potential outcomes include satisfaction, collaboration, retention and continuity

- Cost and efficiency of structural change also need to be evaluated
- The critical issue in terms of evaluation is to remember the original purpose of the model or framework and to examine outcomes through a team, rather than an individual lens

David Meyers: The question given to this group was “Who is responsible for control of a fragmented system of care?” – but they changed the question to “Who should be in control of workforce planning in a fragmented system of care?”

- All planning efforts require better data, better analysis and better research
- Workforce planning needs to take place outside the disciplines themselves, but needs to be coordinated with planning that goes on within each discipline
- Workforce planning needs to “think globally, but act locally”
- Workforce planning should be placed in the hands of the same group that is ultimately responsible for the functioning of the health care system
- Planning, if not separated from politics, is doomed, since politics is short-term, while planning is long-term. This statement provoked a rebuttal from a participant who asserted that planning, IF separated from politics, is, in fact, doomed to fail.
- Need to have more collaboration between economists and clinicians.
- In considering the future of the conference, the group felt that the organizers need to think about including the perspective of non-physician clinicians and younger people who may have a different generational perspective

General discussion of the plenary session:

- How would simultaneous planning go on (i.e., planning that is outside the discipline and planning that occurs within the discipline)? Ramsay responded that this is the process that was used in Australia.
- We should not talk only about physicians, when there are other health professions for which there is a strong evidence base supporting their contributions to health
- Substitution in primary care, and the unintended consequences of substitution need to be better studied. The example was given that there is now sufficient evidence demonstrating the similar effectiveness of nurses in providing care (compared with physicians), but that nurses may not be more cost effective because of their increased use of resources.
- There was a recognition of both the overlapping and unique skills of registered nurses and physicians
- Family doctors have new roles than need to be identified and clarified

- Substitution means competition and creates political problems
- There are differences in urban and rural scopes of practice that need to be further examined.

COUNTRY SUMMARY COMMENTS

Australia

- Obvious that the countries shared many similar challenges despite dramatic differences in their operating environments
- Found that the pre-conference visit to the Cardozo Health Care Center was a powerful reminder about how health care should be delivered
- Suggested that investment in data is an ongoing process requiring continuing investment and evaluation. The creation of a national minimum database should be a priority.
- There was recognition that there is an on-going balance/tension between needs for micro level and macro level information to support workforce planning.
- Urban shortages are a new phenomenon in Australia
- With regard to education and training – there is no consensus that the current model is the appropriate model. The intersection of service and training provides opportunities for further research and learning.
- Changes in models of care seems a logical step to take now, given projections for a marked decrease in workforce growth
- With regard to international medical graduates – all of the countries represented at the meeting identified self-sufficiency in production of health care providers as their goal
- Finally, some of the projects underway in Australia will look different based on what was learned at the meeting

United Kingdom

- Found reassurance in the meeting that all the countries represented were experiencing the same issues
- Meeting was useful in terms of ideas for research sharing

- The weakness of the link between evidence and policy was highlighted. The UK workforce collaborative tries to make those connections, so that policy is informed by evidence
- Increased awareness of the potential impact of changes in the flow of funds in NHS and how that might affect education
- Suggested an article about the value of the conference (as long as someone else did it!)
- Specific action that will be taken as a result of this meeting:
 - Department of Health will review the code of conduct for IMG recruiting
 - The nature of post-graduate education will be reviewed
 - The British Medical Association will take a more critical view of the physician shortage

**Plenary Session 4:
International Medical School Graduates and Global Workforce Issues**

IMGs in the U.S.: The Role of the ECFMG – James Hallock

The Educational Commission on Foreign Medical Graduates was founded in the U.S. after World War II to provide a mechanism for foreign-educated physicians to train in the U.S. and return to their countries to practice medicine. Graduates of medical schools outside the U.S. must obtain J-1 (education and training) visas –sponsored by the ECFMG. ECFMG certification is required for participation in graduate medical education, Step 3 of the LCME exam, and state licensure. In order to become certified, the applicant’s transcripts must be verified, they must pass Steps 1 and 2CK and CS of the USMLE exam, which includes the clinical skills exam. Once certified, international medical graduates can compete for a place in any U.S. residency program, but selection by a program is not guaranteed. Residency program contracts are required in order for ECFMG to sponsor J-1 visas, and trainees must reregister with ECFMG each year. If an IMG obtains a visa waiver by working in an underserved area, s/he can practice in the U.S., apply for a “green card” and seek U.S. citizenship.

Contrary to expectations, there has been a rise in ECFMG applicants since 9/11. Approximately 35,000 have applied in recent years. While 6,000 took the clinical skills exam in 2001 over 11,000 did so in 2003. Certification numbers have stayed relatively constant over time, with slight increases in the past several years. Increases in certified applicants does not lead to more IMGs, as the number of residency positions is fixed. About 6,000 IMGs enter residency training in the U.S. each year. Ten years ago, this number included 500 U.S. citizens attending foreign medical schools; USIMGs now account for 1,800 of the entering IMGs.

World conditions affect physician migration. Most ECFMG applicants were from Europe in the 1940’s and this pattern has changed fairly dramatically with most non-USIMGs coming from India. Recruitment of physicians from other countries, particularly developing countries, raises ethical issues.

In a discussion period, questions were raised about the competitive process in the U.S. and whether IMGs are treated equitably. Dr. Hallock explained the process for matching applicants to residency programs. He noted that there are 23,000 PGY-1 positions and 16,000 U.S. medical school graduates each year. The system is designed to train U.S. graduates for the U.S. workforce. IMGs have an opportunity to train in the U.S. and, in theory, return to their country of origin to practice.

International Medical Workforce: An Overview – Fitzhugh Mullan

All of the participating nations have used the global market and their economic draw to recruit IMGs. IMGs are defined as a physician whose country of qualification (medical school) is not the country of practice.

Members of the International Medical Workforce Collaborative helped to provide comparative data on IMGs practicing in each of the represented countries, which are presented in the

accompanying paper. U.S. data were derived from the American Medical Association's 2004 Physician Masterfile and the ECFMG. NHS provided data for England, with a 15 percent adjustment to reflect the UK and a 10 percent adjustment to reflect physicians working outside the NHS. Canadian physician data are from the Southam Medical Data Base. The Australian physician data are from the Labor Force and Rural Health Unit of the Australian Institute of Health and Welfare and they are adjusted to reflect missing data. Please review the paper submitted by Dr. Mullan for specific findings.

The "physician ex-patriot factor" measures the proportion of physicians migrating out of country to its total physician workforce. African and Caribbean countries have the highest proportion of physicians leaving, followed by Middle Eastern countries. India has the highest number of migrating physicians, but a lower percentage because of its large physician population.

There is a cycling of physicians between the four IMWC countries, with the U.S. and Australia as "net winners". The U.S. is the largest importer of physicians and its movement toward self-sufficiency would have the biggest impact on exporting countries.

The four IMWC countries share some similar circumstances:

- There is pressure to increase the size of the physician workforce, along with an unstated assumption that physicians can always be imported;
- There are underserved/hard to staff regions;
- There are structured conditions for entry and training of immigrant physicians so that they work disproportionately in hard to serve areas.

A variety of options can be considered for managing physician migration:

- Policies to restrict immigration and emigration won't work as this violates fundamental human rights.
- Codes of conduct for physician recruitment are not a promising approach.
- Decreasing the "push" factors in source countries by improving economies, political stability and living conditions is a powerful solution, but outside the scope of workforce planners.
- Reparations to exporting countries seems like a fair idea, but it is not politically viable (i.e., who writes the checks and to whom?). Governments and other organizations could work more bi-laterally in the development of education and training opportunities.
- Increased self-sufficiency on the part of IMWC countries will have the largest impact. It increased domestic opportunity, promotes global stability of the physician workforce, does not eliminate international training opportunities, and it does not eliminate the possibility of physician immigration/emigration.

The Indian Experience – Dr. Ravinda Bapat

Medical education in India is built on the physician-student relationship. Before Indian independence in 1947, medical education was urbanized. There was a proposal to change the system through a model of comprehensive primary care in rural and urban areas. This never happened and the model has remained curative rather than preventative.

Prior to independence, there were 30 medical schools in India; today there are 229, mostly in Southern India. The physician workforce i.e. Allopathic comprises of 10 percent primary care, 40 percent specialists, and 50 percent super-specialists. There is a mushrooming of Modern Allopathic Educational Institutions and there is concern about standards. The growth did not fulfill aims of providing health care throughout the country and there are many rural areas deprived of health services being primarily serviced by other pathies e.g. Ayurved/Homoeopathy.

Maharashtra, a state with a population of 100 million, is an illustrative example. Prior to independence there were four medical schools; today there are 38, with few opening in rural areas. Merely opening more schools does not solve maldistribution problems. More than half of the physicians are not trained in the allopathic model. This is a case of “pride without prudence allopaths can't serve 70% population.” Within allopathic institutions, students feel social pressure to specialize and more than 80 percent do so. The rural population is cared for by physicians without allopathic training. Shouldn't they be empowered with knowledge of modern medicine? The privatization of higher education is accepted policy in India.

Dr. Bapat's suggestions to address the Indian situation include:

- Place a moratorium on new colleges;
- Strengthen existing institutions;
- De-affiliate from lower quality training settings;
- Increase the use of audio-visual aids in teaching;
- Empower other pathies with sufficient knowledge to serve social needs.

Physicians migrate from India for a variety of reasons, including:

- academic pursuit;
- to gain advanced knowledge;
- to achieve economic prosperity;
- to increase social standing;
- job opportunities;
- “craze for foreign lands”

An exodus for higher education began in the 1960's. It is not clear that physicians achieved academic excellence. After 1985, fewer Indian physician left because of reforms in the US and the UK. There is now a need for planned migration that includes shorter fellowships and more bi-lateral training.

Although ten percent of Indian physicians migrate, this migration has little impact on health services. Seventy percent of the population lives in rural areas that have no health infrastructure. Urban families want their children to receive education in foreign countries. There is serious dilemma of creation of three different classes of medical graduates, which will lead to social tensions.

The South African Experience – Percy Mahlathi

The problem statement was defined as the increase in unmanaged migration of health professionals from developing countries to wealthier countries. This is not as big of a problem in South Africa as it is in other countries. The challenge is to develop relevant recruitment and retention programs and to establish mechanisms to manage the exchange of skills and knowledge on regional and international levels.

The philosophical issues for South Africa are the provision of affordable and accessible health care, addressing the needs of rural and high-poverty areas, ensuring that society benefits from investment in public goods, and incorporating health care into the overall development strategies for the country. The challenges are to strengthen the educational base, make the health system sustainable, improve social conditions, reduce the dependence of wealthy systems on poor systems for skilled human resources, and to compete with other expanding career opportunities for skilled workers.

Prior to the dismantling of the apartheid system in 1994, South Africa had a segregated hospital-centered system that excluded the majority of the population. South Africa was increasing as an exporter of physicians even before 1994. Since that time, South Africa has expanded care for the poor and is transforming its health care system under the authority of a new health act.

Health professionals are a scarce resource trained at great expense. The “commodification” of health professionals has turned them into resources purchased by the highest payor. The human resources strategy in South Africa has been the development of a primary care approach and the creation of mid-level health care workers. The migration of professionals has had to be addressed. Policy measures addressing physicians have included limitations on private practice, the need for approval for outside practice, and salary adjustments.

There are eight medical schools which graduate 1,200 students per year. Interface between academia and health policy has generally been lacking. There are several strategies for developing the physician workforce. Bi-lateral training agreements have been established with the UK, but there have been violations. South Africa will not ban migration of health professionals. There are capacity building programs and specialized training agreements with other countries, such as Cuba. South Africa has established restrictions against recruiting physicians from other countries in South Africa, although it does reserve training spaces for neighboring countries. The country is exploring new categories of health workers and modified roles.

Economics is the principal factor in physician migration. Social conditions also play a role. There is a great need for the health professionals trained in South Africa, as evidenced by the fact that there are no unemployed nurses.

In looking toward the future, the overall economic prospects of South Africa will be a major factor in the development of health systems and the health workforce. Developing countries face many economic constraints. South Africa will continue to review its human resources strategies. Both developing and developed countries can benefit from an exchange of skills and knowledge. South Africa can use overseas exposure as an incentive for young professionals to come back and make contributions in the public sector.

The Philippine Experience – Dr. Jaime Galvez-Tan

The Philippines is the second largest exporter of physicians. The country is comprised of 7,000 islands, its population of 84 million is growing rapidly, and 34 percent live in poverty. Health statistics for the population reflect little access to professional health services, yet the brain drain

of health professionals is better characterized as a hemorrhage. Eighty-five percent of nurses trained in the Philippines work overseas. Because health professionals send money, “remittances,” back to the country, migration is not viewed as negative.

The Philippines has no unified, official policy with respect to the health workforce and no official data. Health professionals are “pulled” by higher compensation, more job opportunities, and greater political, economic, and social stability in other countries. They are “pushed” by low compensation, an obligation to support the family, and political instability. There has been large-scale migration of nurses, who generally go to the U.S., the U.K., Saudi Arabia, Ireland, and Singapore. U.S. hospitals recruit directly in the Philippines.

This migration has been supported by a large growth in nursing schools. At the same time, there has been decreased performance on the national nurse licensing exams. The pass rate was 80-90 percent in the 1970’s and 80’s; the pass rate was 45 percent in 2002.

The Philippines has experienced the unique phenomenon of physicians retraining as nurses. About 3,500 physicians have migrated since 2000 to practice as nurses in other countries. Doctors have been “pushed” by low salaries, family obligations, high taxes imposed on doctors, poor working environments, malpractice threats, and political instability. They have been “pulled” by higher salaries, better working conditions, and easier access to nursing licenses than to physician licenses. Thirty-seven nursing schools offer two-year courses for physicians to become nurses. These “nursing medics” come from all medical specialties, all age groups, their years of practice range from 0 to 35, there are equal numbers of males and females, and they come from all regions of the country.

There have been decreases in the number of students taking the National Medical Admission test and enrolling in medical school, as well as decreases in the number of residency applicants. The Philippines has 35 medical schools, of which seven are public. There are 3,600 graduates per year. Slightly more than half of these graduates are women.

The consequences of these migrations to the Philippine health care system are increased disparities and inequities in the health care system and decreases in the delivery of health services. The Philippines is challenged to tame the mass exodus of health professionals, achieve a rational departure policy, and secure a win-win solution for both the Philippines and the recipient country. There need to be bilateral discussions that consider an ethical framework for recruitment and compensation for the Philippines. Recruiters often compete with each other and receive high fees, while the country that trains the health professionals receive nothing. There is potential for agreements with hospitals in recipient countries and joint research projects.

Within the Philippines, there is a need to reform health financing and the management of medical education. There is a need for new learning models and career opportunities for physicians and nurses. A national health service act and a health professions registry must be established. Scholarships should be provided for health professionals who serve in underserved areas. Overall, there is a need for global solidarity in achieving a more balanced health workforce.

Discussion

The issue of developed countries having a smaller proportion of young people in their populations was raised as a potential obstacle to achieving self-sufficiency in the physician workforce. Dr. Bapat responded that, while India does have an increase in its elderly population, there is still as large pipeline of students being educated. There is a perception that high-scoring students will enter medical or engineering careers, and India cannot now fulfill the aspirations of all students. There was disagreement that developed countries cannot become self-sufficient. The high number of USIMGs was cited as an example of increased demand for medical education. In response, it was argued that these students are already going into the U.S. workforce and that the numbers of physicians being produced will not meet future needs unless the something is changed.

The panel was asked whether IMGs have realistic expectations about their experiences in other countries. India provides some tutorials and students have exposure to other cultures and systems through the internet. IMGs who plan to return to India either want to earn enough money to be able to set up a practice in India or they want high-tech training experiences. South Africa's goal is for physicians to be trained to obtain a common set of skills that can be used internationally and, consequently, there is not much emphasis on preparing students for experiences abroad. In the Philippines, students have Americanized role models and this affects their aspirations; few IMGs return. A number of Canadian students attending Irish medical schools are not prepared for difficulty they sometimes encounter in their ability to return to Canada to practice medicine.

There was much appreciation expressed to the speakers for presenting their perspectives on the migration of physicians.

Country Delegation Reports on Conference Outcomes

Canada

The Canadian delegation discussed how to “get the biggest bang for the buck” from the IMWC conference and how to use the information gained in its own workforce planning.

- The conference raised their awareness of IMG issues and the special accountability developed nations have in this regard; the issue of self-sufficiency and leadership in international health issues resonates.
- The presentation by Dr. Cohen of the AAMC, in particular, raised their awareness of issues of race and culture that need to be addressed in their own institutions.
- They see the potential for partnerships in the development of a GME dataset on the model of the Australian experience.
- In a general discussion, the opportunity to use data together was discussed as a model for the future. The modeling strategies of the NHS were lauded.
- Future IMWC meetings should build in more time for informal discussion and should include representatives from other health professionals and the political and business spheres.

- Issues that will be brought back for consideration include physician incentives, physician retention strategies, population-based health professions needs, and research on the use of other professionals.

U.S.

The U.S. does not have a system for physician workforce planning. The conference stimulated the need for delegates to raise awareness of the need for workforce research and planning and to secure funding for these efforts. The Association of American Medical Colleges is sponsoring a physician workforce research conference next May that may push this agenda. There was a sense among the delegates that the meeting educates them and has an impact on their work at their various institutions. The discussions at the conference have gotten better each year. There is a need to continue to push each year to move further on issues that have been discussed, such as data, IMGs, physician research, supply and demand, and self-sufficiency, and to hold ourselves accountable for progress in these areas. We need to continue to learn from each other.