Shaping the Health Care Workforce

By Julia Ross

As the dawn of a new century approaches, the global health care workforce--a group that includes physicians, nurses, midwives, dentists, pharmacists, feldshers and epidemiologists--finds itself expanding and contracting in new directions, according to the progress of health reform in different nations and the economic realities guiding that progress.

At the International Conference on the Health Care Workforce for the 21st Century, held this spring in Tashkent, Uzbekistan, 85 US and NIS deans and rectors of medical, nursing and allied health training institutions addressed this metamorphosis, sharing ideas on how to shape workforce development to better meet the public's health care needs.

Sponsored by the US-based Association of Academic Health Centers, an AIHA-founding organization represented on the Board of Directors; the government of Uzbekistan; and AIHA partner Second State Medical Institute of Tashkent (TASHMI II), the April 20-24 conference was the first opportunity for many of the US attendees to discuss medical education and training with colleagues from 11 different NIS nations, and for many NIS medical educators to deliberate on these issues among themselves.

Addressing NIS participants in the initial plenary session, US Ambassador to Uzbekistan Stanley Escudero said: "This is a significant milestone in the ongoing effort to fully reform the health care systems which all of your nations inherited from the Soviet Union .... What is needed now is an ongoing cooperative and successful effort to bring the health care systems that exist in all of your countries in synch with the systems that exist internationally."

"We believe that this conference is timely in terms of the importance of health care reform in the NIS," added Anwar Alimov, adviser and consultant to the presidential administration of the Republic of Uzbekistan. "We view health reform as part of broader social welfare reform."

Global and US Workforce Planning

Throughout the conference, NIS and US participants discovered that many of the challenges they face in workforce planning are the same: Reducing the number of specialist physicians, increasing the supply of nurses and extending their role, redefining and strengthening family practice, and improving training and setting practice standards for all health care workers seem to be universal priorities.

In a keynote speech on the conference's first day, Willy DeGeyndt, PhD, principal public health specialist (retired) at The World Bank in Washington, DC, gave a global overview of some of these issues, and summarized the methods currently used to plan, train and manage health care workers.

Certain aspects of health care reform--privatization, improving physical infrastructure, reconfiguring the provider payment structure, and expanding information systems, for example--have affected the health care workforce to some degree in every nation, DeGeyndt said, but no country has undertaken a comprehensive restructuring of its workforce.

"Workforce development is an integral part of health care reform and health care planning," he noted. "Workforce planning should be a public sector activity. Market forces will not do the job."

The planning process should address various workforce imbalances--from geographical to occupational to gender-based--and seek to determine how many workers are needed, what

type of workers are needed and where workers should be posted. A physician oversupply, particularly a specialist oversupply, plagues many NIS nations and the US, DeGeyndt said, as does an inordinately high concentration of physicians and nurses in urban areas. As of 1993, the US had 2.5 active physicians per 1,000 people, while, in 1994, Uzbekistan had 3.4 physicians per 1,000 people, and Kyrgyzstan had 3.1 per 1,000 people. Each of these nations is attempting to decrease its physician supply.

Global health care workforce planning is most often based on five methods, he noted: 1) determining an ideal personnel-to-population ratio; 2) extrapolating health sciences university admissions and projecting a long-term supply of health care professionals; 3) making needs-based projections such as estimating the number of individual specialists needed to treat particular diseases; 4) making demand-based projections for figures like the number of beds occupied and lengths of stay in hospitals; and 5) "benchmarking," or comparing resources to a standard within one country or among several countries.

"Solutions to distribution imbalances must be tailor-made to each country ... Ultimately, we have to come up with our own solutions, taking into consideration social, political and economic factors," DeGeyndt said. "Patient care outcomes and patient satisfaction must guide workforce decisions."

In the US, several recent studies have dissected health care workforce issues and offered solutions, Neal Vanselow, MD, professor of medicine at Tulane University in New Orleans, Louisiana, told conference participants. According to Vanselow, the most troublesome US physician workforce issues are: an aggregate physician oversupply, a maldistribution by specialty, a geographic maldistribution, minority under-representation, and inadequacies in medical education and training. A 1995 study by the Council on Graduate Medical Education predicted a US surplus of 105,000 physicians by the year 2000, which will be comprised entirely of specialists; currently, two-thirds of the country's 750,000 physicians are specialists.

Vanselow said the US physician oversupply is due to an overproduction of physicians and a decreased utilization of physicians due to the advent of managed care. Though the number of US medical school enrollees has continued at a flat rate in recent years, he said, the influx of international medical school graduates--notably from India, Pakistan and the Philippines--has led to increasing numbers of practicing physicians.

The US federal government, professional organizations and health care institutions themselves have been slow to take corrective action on workforce issues, he said, but two new private sector studies have offered a roadmap for a more balanced physician workforce. A few of the more aggressive actions suggested by the studies, issued by the Institute of Medicine and Pew Charitable Trusts, include reducing entering medical school classes by up to 25 percent, closing medical schools, and reducing the number of first-year residency slots.

As a result of these studies, six US professional organizations have developed a consensus statement on managing the physician workforce. "Private sector reports can have a significant impact on government policy, and I think these reports have catalyzed national action," Vanselow said.

Changing Roles and Training

The conference's second day was devoted to discussion of the changing roles and training of health care professionals.

Yuri Ignatov, MD, PhD, deputy rector of St. Petersburg State Medical University in the Name of Pavlov, outlined the reforms his university has implemented in physician education; a six-year MD program now in place focuses on educating students in liberal arts, natural sciences, biomedical sciences, preventive medicine, clinical sciences, and specialized clinical training

during the last two years. Other innovations at Pavlov include a disaster medicine training program, and family planning and drug treatment centers, which serve as a training ground for both undergraduate students and residents.

Offering elective courses to fifth- and sixth-year students strengthens the MD program, said Ignatov. "By the third or fourth year, students know which specialty they are interested in and can plan their education accordingly. We must give our graduates modern knowledge. Practitioners should be knowledgeable in subjects like genetics, pathology and physiology."

To receive their degrees, students must pass a multidisciplinary test that includes an assessment of clinical knowledge and bedside manner, as well as a personal interview. Graduates then have the choice of entering one of the university's 29 two-year residencies.

The role and training of another type of health professional--the public health expert--was addressed by James Kimmey, MD, MPH, vice president for health sciences, St. Louis University, St. Louis, Missouri. He noted that public health experts have an important role to play in the US in assessing, analyzing and disseminating information concerning community health; developing policy and promoting the scientific knowledge base; and providing assurance that adequate community health services are available to the public.

Training of public health professionals in the US is conducted primarily through multidisciplinary Masters of Public Health (MPH) programs, which provide a broad-based education to students who have often already received medical or nursing degrees. Epidemiology is at the center of the MPH curriculum, Kimmey said, and programs focus on prevention of disease and applied research.

"A healthy population is essential to economic development and to social progress, and public health practice is the linchpin for obtaining a healthy population in any culture," he said.

Assessing Competence and Quality

For NIS and US health care professionals facing career-long series of licensing and recertification exams, keeping updated on an ever-growing medical knowledge base can be a challenge. But continuing medical education (CME) can make this knowledge base accessible to health care workers, while assuring workforce competence at the same time, David Davis, MD, associate dean, University of Toronto School of Medicine in Toronto, Canada, and president, [North American] Society of Medical College Directors of Continuing Medical Education, told conference participants.

A variety of CME strategies are used in the US and Canada, Davis said: Meetings and conferences; printed material; community-based activities like hospital case discussions or distance learning; and practice-based activities like patient education and physician-nurse consultations are a few examples. Not only does competency improve through high quality CME programs, he added, but hospital performance and patient outcomes can improve as well.

Davis also highlighted the role of professional associations in the US, which, along with state governments, are responsible for licensing and recertification of health care professionals. Associations are responsible for establishing standards for professional and clinical behaviors; disseminating, monitoring and testing for these standards; recognizing professional excellence; and encouraging self-directed learning.

CME in the NIS, said Galina Perfilieva, MD, PhD, dean, Department of Higher Nursing Education, Moscow Medical Academy, also is geared to increasing professional competence and introducing new methods of preventive care and clinical treatments. A 1992 Russian Federation law promoting CME led to the establishment of 48 medical university departments

for physician and pharmacist retraining, and six new postgraduate nursing schools, she said. Annually, more than 130,000 physicians now go through retraining in Russia; the Ministry of Health requires recertification every two to five years, depending on the specialty.

"We have done a lot of work to make the CME system more accessible for medical professionals," said Perfilieva, emphasizing CME's heightened impact on nursing. "Nurses previously didn't have any other opportunity for professional growth other than to become a doctor ... and, as a result, many smart and talented nurses left their profession because it didn't have any future. Now, having a PhD in nursing is perhaps more respected than having an MD."

Conference participants also discussed assessing the quality of hospitals and health care institutions. Peter Kohler, MD, president, Oregon Health Sciences University in Portland, Oregon, summarized the functions of the Joint Commission on Accreditation of Health Care Organizations (JCAHO)--the private, voluntary US organization that accredits US hospitals. The JCAHO appoints independent teams of physicians, nurses and administrators to visit US hospitals every three years, and evaluate them based on a set of over 500 standards designed to assess every aspect of hospital service--from the number of emergency carts available to the quality of information systems management to the quality of patient education.

The accreditation process needs to be conducted by an independent group in order to ensure an objective application of standards, Kohler advised.

"The values of accreditation are many," he said. "The quality of care improves, there is greater work satisfaction on the part of providers, and payers can be more satisfied with the quality of the product they receive ... Patients will definitely want to be seen at accredited institutions if they have a reputation for quality."

The nation of Moldova is currently considering establishing hospital accreditation standards and will study JCAHO's standards as a guide, said Ivan Ababiy, MD, PhD, rector at Chisinau Medical University. Until now, only Moldova's teaching hospitals have chosen to comply with standards, usually developed by special commissions appointed within the hospital itself, he said. Russia, Ukraine and Kyrgyzstan also are developing accreditation processes.

Universal Goals

In a series of breakout sessions held over the course of the conference, participants discussed barriers to and opportunities for broader international collaboration on reconfiguring the health care workforce. Though varying economic and political structures between the US and NIS nations may preclude a common approach to workforce development, conference attendees found they had many of the same goals in mind.

The lack of a central planning organization that controls the supply of health care professionals in the US is one systemic difference that needs to be considered when conducting a US-NIS dialogue, said Linda Aiken, RN, PhD, director of the Center for Health Services and Policy Research at the University of Pennsylvania in Philadelphia. In the NIS, the Ministries of Health and Education share health care workforce planning responsibilities.

Though a national coordinating agency can streamline the planning process, Aiken said, "There is a positive and a negative: Because we have no centralized planning, we have a maximum of innovation and we are able to adopt new ideas ... [the NIS nations] might run the risk of too much standardization and not allow [their] systems to develop over time."

Because NIS nations do not have a tradition of self-regulating professional associations like those in the US, several participants noted, government will likely continue to exercise authority over credentialing and creating standards for the health professions.

But, with ministry support, workforce reforms are beginning to occur across the region, and NIS participants offered a litany of examples throughout the conference: Belarus and Turkmenistan are augmenting salaries and benefits to encourage physicians to work in underserved rural areas; Kazakstan has established a new medical school focused on educating family physicians; Uzbekistan has reduced its medical school enrollment dramatically and is emphasizing general practitioner training in rural ambulatory settings; and Ukraine is developing Western-style physician exams.

While health reforms are proceeding at different paces in different nations, conference attendees were positive about opportunities for further international dialogue. For example, US and NIS health care professionals may be able to share information on developing professional standards, said Gary Filerman, PhD, consultant to the Association of Academic Health Centers.

"We all want standards that assure us and the public we serve of quality. At the same time, we want to encourage flexibility and change. The balance between these two is a central issue in all of our countries," he said.

"We are looking for the creation of a new health care environment ... including laws and financing," added Damilya Nugmanova, MD, PhD, head, Chair for Family Physician Training, Postgraduate Institute for Physicians in Almaty, Kazakstan. "And we are certain that the international community can assist us in developing a new environment for the family practitioner."

"We need to focus on raising the competency level of physicians and nurses ... the competent workforce will ensure the highest standard of quality care," said Igor Denisov, MD, PhD, deputy rector of Moscow Medical Academy. "Our solutions will be different to a certain extent, but I believe we have much in common in our approaches."