

Update on the Pharmacy Manpower Project

Pharmacist Professional Advisory Committee Meeting · Thursday July 12, 2007

Meeting Information

The Board of Directors for the Pharmacy Manpower Project, Inc. (PMP) met on June 20, 2007 at NCPA Headquarters in Alexandria, VA.

Organization Roundtable

Representatives from the PMP member organizations discussed various ways that their organizations are addressing pharmacy manpower issues. Some highlights included:

- **Training for Pharmacy Technicians**
Several organizations discussed the need for increased training and certification programs for pharmacy technicians, recognizing their supportive role in the drug distribution process. Although member organizations wanted to further explore and define the role of pharmacy technicians now and in the future, the issue is already being addressed in a number of ways, including support from various organizations and regulatory bodies for an increased number of certified technicians, technological advances in the certification process, and vision statements that call for all technicians in certain practice settings to become certified.
- **Technological Advances**
The role of technology in alleviating some of the manpower issues focused on two main factors. First, technological advances in pharmacy workflow have allowed pharmacists to move away from traditional dispensing and distribute roles, providing them with the opportunity to concentrate on efforts to improve patient care. Additionally, technology has also permitted the expansion of new and existing educational programs through distributive learning, web-based education, and the development of satellite campuses.
- **Faculty Shortages and Experiential Training for Student Pharmacists**
One of the most pressing issues raised at the PMP meeting was the nationwide shortage of pharmacy faculty, especially as it relates to the provision of experiential training for student pharmacists. The faculty shortage has been well-documented and is being further complicated by the expansion of new and existing pharmacy programs nationwide.
- **Required Residency Training**
The issue of required residency training was also discussed with regards to issues of manpower and site availability. Several organizations have promoted visions of required post-graduate residencies for certain practice settings or for provision of patient care.
- **Guidelines for Practice**
Some member organizations have started making revisions to their practice guidelines that would facilitate more effective time management by pharmacists in those particular practice settings.
- **Grassroots Efforts**
Other organizations have focused on direct recruitment to address shortage issues, including programs to identify highly qualified high school students demonstrating strengths in math and science courses and the use of mentors to personally recruit students that may be considering pharmacy as a potential career.

Workforce Studies and Data Collection

Association of American Medical Colleges (AAMC)

A representative from AAMC discussed the expected physician shortage and their efforts to increase the supply over the next 5-10 years. The presentation primarily focused on the type of data collected and how it was used to form their recommendation that medical programs respond to the shortage by increasing their enrollment by 30%. Some of the data collected by AAMC includes:

- MCAT – entrance exam scores
- AMCAS – standardized application service; provides demographic information, experiences, personal statements, etc
- Surveys – pre-matriculation, matriculation, and two sets of graduation surveys (one identifiable, one anonymous)
- AMA Masterfile – current historical data on all physicians, including school, year of graduation, gender, DOB, residency training, geography, practice setting, specialty information

Update on Pharmacy Supply & Demand Data

Katherine Knapp, PhD, Professor and Dean, Touro University College of Pharmacy

From her recent paper: **New pharmacist supply projections: Lower separation rates and increased graduates boost supply estimates** (*J Am Pharm Assoc.* 2007; 47: 463-470.)

- **Aggregate Demand Index (ADI)**

The overall trend of ADI data shows a continuing pharmacist shortage with some notable changes in the distribution of demand on a state level. Some of the statistics include:

- Fewer states are at the “5” level (“highest demand; difficult to fill open positions), down from 6 to 3 this year
- More states are at the “4” level, up from 40 to 46 this year
- Fewer states are considered “in balance” (score of “3”), down from 16 to 2
- 99.4% of the US population lives in states with a demand level ≥ 4

The projected vision for the ADI includes a conversion from the static data that exists now to a dynamic and database-driven system that could be updated in real-time as new data is received. Dr. Knapp compared this vision to a finance portfolio website, such as Yahoo! Finance, which illustrates up-to-the-minute stock data.

- **Pharmacist Demand Issues**

An increase in demand was demonstrated in data from both the community and institutional practice settings. Explanations for this increase in demand included the size of the “baby boomers” cohort, increased participation in Medicare Part D and various clinical activities, and an improved overall economy.

- **Pharmacist Supply Issues**

The principal finding of the most recent data indicates an unexpected increase in the supply of pharmacists. In the accompanying paper, this increase was attributed to several factors, including lower separation rates and increased numbers of pharmacy graduates.

Increased work participation, especially by older pharmacists, is likely due to higher wages, availability of part-time work, and higher job satisfaction (more clinical activities and technological advances that permit pharmacists to engage in patient care activities). The expansion of new and existing schools and colleges of pharmacy have also contributed to

the increased supply and have also caused the average age of practicing pharmacists to decrease. Coupled with an expected shortage of pharmacy leadership, younger pharmacists may need to enter more management roles and positions with increased responsibility.

Although the new supply estimates will not completely reduce the expected pharmacist shortage, they do affect it significantly, demonstrating the need to redefine existing projection models and consider other issues, including distinctions between full-time and part-time employees and the impact of educational programs expanding at such a rapid rate.

Future Directions for PHS

The following are a few issues and implications for PHS regarding data provided by the most recent manpower studies and future directions.

- **PHS Manpower Data**

It is unlikely that PHS could significantly contribute to ADI data. A number of agencies would be unable to report and data submission would not be sustainable long-term. However, data from manpower studies could benefit PHS by providing justification for its recruitment and retention strategies.

- **ADI Limitations**

The primary limitation of the ADI is that its data is reported by state. In other words, no information is provided about the relative distribution of the workforce within each state. Supply and demand by PMP could be improved by including data on vacancy rates, the effect of location (e.g. urban vs. rural locations), and better-defined criteria on how vacancy and demand is scored.