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# Healthcare Delivery and Pharmacy Workforce: Pharmacy (Wo)Manpower - 2016 and beyond...

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## Healthcare Delivery and Pharmacy Workforce: Pharmacy (Wo)Manpower — 2016 and beyond...

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#### Stanley Kent, RPh, MS, FASHP

Stan Kent joined the University of Michigan Hospitals and Health Centers in 2015 as chief pharmacy officer. Kent is also the associate dean for clinical affairs at the University of Michigan College of Pharmacy. Kent received his bachelor of science in pharmacy from State University of New York at Buffalo and his master of science in hospital pharmacy from the University of Wisconsin.

Kent was previously the assistant vice president of pharmacy services at NorthShore University HealthSystem, located in Evanston, IL. Kent served as the president of the Wisconsin Society of Hospital Pharmacists and was also selected as the Illinois Council of Health System Pharmacist's - Pharmacist of the Year. From 2010 to 2011 Kent was the president of the American Society of Health-System Pharmacists (ASHP).



Stanley Kent

#### Introduction to the Pharmacy Workforce

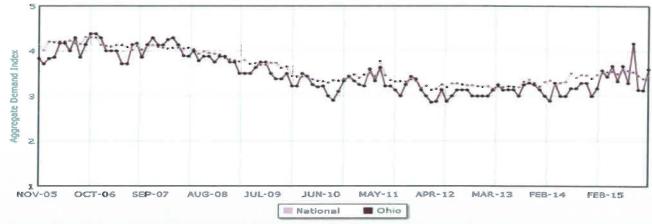
"Is there a shortage of pharmacists? Do we have too many pharmacists? How many do we need anyway?" voices Stan Kent, the chief pharmacy officer at the University of Michigan Health System. As the former American Society of Health-System Pharmacists (ASHP) president, Stan Kent has worked through the years to analyze how the changing population of pharmacists has affected the pharmacy workforce, as well as the increasing role that pharmacists are playing within the healthcare system. Practicing pharmacists, current students, professional organizations, researchers and professors are all affected by the ever-changing workforce climate of pharmacy, and it is critical for all pharmacists to understand the impact that the workforce projections may have on each sector of the profession.

#### **Brief History of the Changing Pharmacy Workforce**

Kent discussed the history of pharmacy from 1970 to 2010, where the demand for pharmacists began to increase rapidly, creating a large shortage in the number of pharmacists across the United States. Per ASHP data, "Pharmacy staffing [in hospitals] went from about nine pharmacists per 100 occupied beds, and it literally doubled to about 18 at its peak a couple of years ago," explains Kent. Kent also discussed several other crucial trends that contributed to the shortage of pharmacists, including an increased volume of prescriptions, an increase in the number of pharmacies, an increasing amount of women in the profession, a flourishing economy and the expansion of a pharmacist's role on the healthcare team. This produced "a period of 30 or so years" of pharmacist shortages and, in response, "... we tried to do more with less... and tried to produce more pharmacists." Kent highlighted that from 2000 to 2016 the profession of pharmacy tried to combat the shortage problem by using new technology, hiring more technicians, reducing services offered and encouraging universities to increase the number of pharmacy graduates.

The Pharmacy Workforce Project, formerly known as the Pharmacy Manpower Project, is composed of members from 15 major pharmacy organizations in the nation. The goal of the project is to prepare a system to analyze whether there is a shortage or oversupply of pharmacists and then attempt to develop strategies to improve the overall condition of the workforce. According to the Pharmacy Workforce Project, the state of Ohio still has "a moderate shortage," according to Kent. The project's website contains information regarding demand for pharmacists across the entire United States.<sup>1</sup> Figure 1 compares the aggregate demand index (ADI) trends for Ohio versus the rest of the nation for the past 10 years.

Figure 1. Aggregate Demand Index. Pharmacy Workforce Center, Inc. http://www.pharmacymanpower.com/trends.jsp<sup>1</sup>



ADI data for National and Ohio (NOV 2005 to OCT 2015)

Demand categories

5 = High demand; difficult to fill open positions

4 = Moderate demand: some difficulty filling open positions

3 = Demand in balance with supply

2 = Demand is less than the pharmacist supply available

1 = Demand is much less than the pharmacist supply available

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#### A Look into Future Workforce Projections

According to Kent, when the U.S. economy suffered in 2008, many pharmacists kept working instead of retiring in order to secure their retirement funds which contributed to the increasing supply of pharmacists over the years. Since then the economy has improved and the recovery of retirement funds has transpired, pharmacists may expect to see a decline in the aging workforce population. However, "...people are working longer than we ever have... it's something that has really impacted society and particularly our profession..." explains Kent, providing an uncertain factor for future workforce projections.

Pharmacy graduates have drastically increased for the past few decades, heavily adding to the supply of pharmacists in the United States. "We always had about somewhere between 75 and 80 colleges of pharmacy. Last year, we had 135, so it has almost doubled...since 1995" explains Kent, highlighting that the number of colleges has doubled over the last 20 years, when it had remained the same for about 60 years prior. In 2015, about 13,800 pharmacists graduated, and there are now close to 1,800 residency programs available to provide diverse opportunities for students to improve their skills. However, there is still a large disconnect between the number of pharmacy graduates looking to match with a residency, and the number of matches that are available. Kent suggests that more research should be done in this area.

According to the current statistics for the 2016 ASHP residency match, a total of 5,729 applicants participated in the match.<sup>2</sup> The applicant match rate for 2016 was only 69 percent, with 3,953 graduates matching with either PGY1 (3,309) or PGY2 (644) residencies. This leaves 1,776 new graduates across the United States that did not match with a residency. Although these statistics seem to be discouraging, there are still other ways that new graduates can further develop themselves to become more competitive in the workforce. For instance, according to the American Association of Colleges of Pharmacy (AACP), there are 73 colleges across the nation that offer more specialized pharmaceutical science degrees that pharmacy graduates can pursue to earn higher degrees.<sup>3</sup> These programs provide degrees in leadership, pharmaceutical research, pharmacoeconomic studies and many other fields of pharmacy that are rapidly developing.

#### **Maintaining a High-Quality Profession**

"My big concern...and our greatest fear was that we were on a trajectory to have too many pharmacists; and what happens is, if there are too many, then there won't be enough jobs...the number of applicants to pharmacy schools will decrease, and eventually, the quality of the pharmacist that we're producing might not be as good as we hoped, or what we need," says Kent. He suggests that the projections of the workforce will have a great impact on the quality of the profession as a whole, which is the reason it is important to be proactive in leveling the supply and demand of pharmacists in the United States. This contributes to the Pharmacy Workforce Project prediction that a shortage in pharmacists will again develop by the year 2020.<sup>4</sup>

Kent recommended that pharmacy schools make sure they are adjusting to market demands over the years, while still keeping their admission standards high. Kent said, "No matter how many applicants there are, if the colleges maintain high admission standards, then it doesn't matter." Quality is more important than quantity, and Kent emphasized that the profession of pharmacy should not be compromised solely for colleges to maintain their class sizes. He also spoke about the American Association of Colleges of Pharmacy (AACP) strategy to maintain high quality applicants to pharmacy school by attempting to spark interest in the profession of pharmacy in the younger school age populations.<sup>3</sup>

While maintaining high standards can be difficult for colleges at times, pharmacy leaders and those in charge of hiring pharmacists after graduating tend to move in the opposite direction to require even higher standards. Kent said, "I really hope that managers don't take advantage of people and raise expectations too high, even though it's sort of tempting because if you were a manager the last 25 years...you had to compromise, oftentimes, on some things in order to hire someone." Kent explains that it used to be difficult to find professionals to fill positions, but now there are usually about 20 applicants per position when looking to hire someone, increasing the push for pharmacists to become more and more specialized. Some recommendations that Kent provided for current students or residents included preparing for a large amount of flexibility when entering the workforce, displaying a great amount of professionalism and connectedness with the profession, as well as being a reliable team player.

#### ASHP Forecast Recommendations for 2016-2020<sup>5</sup>

The ASHP Forecast introduced several recommendations for institutes to implement in order to combat the changes of the workforce.<sup>5</sup> First, it suggests a planned development for pharmacist privileging. It is predicted that pharmacists will gain roles in modifying or initiating drug therapies, and Kent suggested looking to the Department of Veterans Affairs (VA) pharmacy for some of the models that they have in place in order to develop a plan for other areas of pharmacy. The ASHP also recommends minimizing "cognitive surplus" which refers to professionals of different degree levels performing duties that fit their particular level of education. For instance, it is important for pharmacists to perform tasks that they can to perform, i.e., medication checks, while providing training for interns and technicians to perform more clerical work, i.e., counting and labeling prescriptions. Another provided suggestion is to ensure the fair treatment and compensation of pharmacy technicians.<sup>5</sup> As an example of this issue, Kent referenced struggles with technician compensation at the University of Michigan in 2015. A new law in the state required technicians to become licensed after certification, neither of which had been previously required. However, the University of Michigan had always required their technicians to be certified, whereas other pharmacies did not. As a result, the other pharmacies in the area increased their technician pay by \$2 to \$3 per hour and hired a large population of the University's technicians, creating a large shortage for the University.

The ASHP Forecast also recommends that the profession as a whole heavily advocates for provider status, expands roles for the pharmacist in the ambulatory care setting, as well as working to better integrate different pharmacy roles across the discipline.<sup>5</sup> For instance, a pharmacist in a hospital system can dispense for several days per week and work in a more clinical setting for the other days per week.

These topics led to a more in-depth discussion of concerns with motivating current pharmacists in the workforce to expand their roles with the changing healthcare systems. "It's tough, and it's causing satisfaction issues," noted one attendee. Requiring additional training or special certifications for pharmacists that have been established employees in healthcare systems for years will continue to be an implementation challenge moving forward. Another attendee suggested that continual professional development is a very attractive asset to have as a pharmacist and may set certain pharmacists ahead of others in their perspective fields.

#### **Concerns Regarding New Pharmacists in the Workforce**

Other participants at the Summit weighed in on the topics of incoming pharmacists and how students can differentiate themselves from the large wave of professionals. One of the other speakers highlighted that as long as pharmacists continue to try to advance themselves further and further, the profession will continue to grow and there will be a place for everyone. Stan Kent suggested that students and new graduates consider professional experience or employment in areas where there are greater shortages of pharmacists and referenced areas such as South Dakota, Montana, or Alaska. One attendee suggested that students and young pharmacists aim to differentiate themselves in any way that they can.

#### The Pharmacy Workforce and Changing Healthcare Models

As the healthcare model in the United States changes, the profession of pharmacy must be able to adapt and grow. A discussion among the pharmacists ensued involving the healthcare model that the VA currently practices. This model has already been adapted into several ambulatory care clinics and focuses services around the patient instead of the typical fee-for-service model that the U.S. healthcare system originally utilized. Specifically, the VA targets greater prescribing authority for pharmacists, staff development and improvement, and even the physical design of the pharmacy is often superior to other models.<sup>6</sup> The VA offers a highly consistent quality of care across the nation by developing national drug formularies with pharmacy benefit managers (PBMs) and by stressing a constant development of interprofessional patient-centered care.

#### Conclusion

Stan Kent's presentation on the ever-changing pharmacy workforce environment sparked excellent discussion among several renowned pharmacists at the 2016 Ohio Northern University Leadership Summit. In summary, pharmacists should continue to grow and adapt to the changing workforce need, and it is important for the betterment of the profession to analyze the workforce in order to prepare for a shortage or surplus of pharmacists. Through the past several decades, the profession of pharmacy has seen a transition from a great shortage of pharmacists to somewhat of a surplus; however, with the increasing involvement of the pharmacist on an interdisciplinary healthcare team, and the ability for the profession to adapt with the healthcare and economic climate of the United States, the profession still maintains an image of a bright future. There are many opportunities for pharmacists and pharmacy students alike to continuously develop themselves. As long as individuals in the workforce continue to progress, so will the profession of pharmacy.

#### Acknowledgement

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#### References

- 1. Aggregate Demand Index. Pharmacy Workforce Center. [Cited February 2016] Available from: www.pharmacymanpower.com/trends.jsp.
- 2. National Matching Service Inc. ASHP [Internet]. Toronto, (ON): National Matching Services Inc. 2016. Match Statistics; [cited 2016 April 15]. Available from: www.natmatch.com/ashprmp/aboutstats.html.
- AACP [Internet]. Alexandria, (VA): American Association of Colleges of Pharmacy. 2016. Student Recruitment Ideas; [updated 2016 April 5; cited 2016 April 15]. Available from: www.aacp.org/resources/studentaffairspersonnel/ admissionsguidelines/Pages/studentrecruitmentideas.aspx.
- 4. Knapp DA. Professionally determined need for pharmacy services in 2020. Am J Pharm Educ. 2002; 66:421-429.
- 5. Zellmer WA, ed. Pharmacy forecast 2016-2020: strategic planning advice for pharmacy departments in hospitals and health systems, December 2015. Bethesda, MD: ASHP Research and Education Foundation. www.ashpfoundation.org/pharmacyforecast.
- 6. Ogden J, Muniz A, Patterson A, Ramirez D, Kizer K. Pharmaceutical services in the Department of Veterans Affairs. Am J Health Syst Pharm 1997; 54(7):761-765.