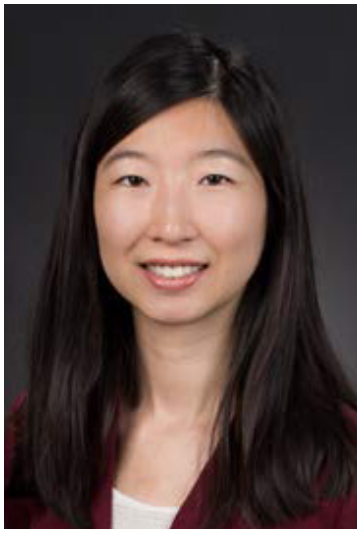

Aishan Shi

Aishan Shi is a first year medical and MBA student at the University of Arizona College of Medicine – Phoenix. Prior to medical school, she graduated from the University of Arizona with Bachelor's degrees in biochemistry, molecular and cellular biology, and English literature. Having grown up in Arizona, she considers herself a native to the state and hopes to continue her future training and practice here as well. In her spare time, she enjoys reading and analyzing Shakespeare and Post-modern literature, hiking, playing piano, and volunteering.

It has been widely reported that there is currently a physician shortage and that shortage will continue to increase. What changes do you foresee happening in healthcare to address this shortage? In addition, how do you think these changes will affect the quality of the healthcare product delivered to the patient?

Since the Affordable Care Act was signed into law, nearly 20 million individuals who were previously insured have better access to healthcare each year. Additionally, 40 million Americans reach retirement annually, and this number is only projected to increase as the Baby Boomer generation leaves the workforce. These two factors – as well as an overall growing population – result in a drastic increase in demand for healthcare services such that physician supply is predicted to be short by approximately 60,000, one-third of which is for primary care fields.[1] Although this area of healthcare is crucial for keeping patients healthy and out of hospitals, only one-third of physicians in the U.S. are PCPs, and they make up only 16% of nearly 30,000 U.S. medical graduates.[2] The rest of primary care providers are composed of foreign medical graduates, nurse practitioners, and physician's assistants. In order to help meet demand and reduce healthcare spending (currently 18% of GDP), new healthcare delivery models have evolved that focus on coordinating care stemming from the primary care field.

Two of the most popular acronyms that have been developed in the healthcare world in recent years are ACO and PCMH. Unlike previous models of healthcare delivery, Accountable Care Organizations (ACOs) aim to cut costs and maximize quality care by creating a single network of hospitals, physicians, insurers, and other medical resources that can coordinate and work together to manage patients' long-term care. Although insurance models such as Health Management Organizations (HMOs) have been established on similar goals, ACOs claim to be more effective because they incentivize and reimburse for the right treatments

rather than more treatments. The traditional fee-for-service (FFS) model is thought to be the cause of excessive diagnostics and care plans, resulting in wasted time, administrative work, and reduced quality of care. ACOs will avoid

fostering this sort of behavior by implementing per-member-per-month (PMPM) reimbursements with shared-savings rewards such that physicians in the ACO all profit the savings that result from staying below a targeted spending limit.

Yet, ACOs are more than just a method to incentivize healthcare spending reductions. As demand increases and healthcare professionals are expected to take care of more patients over the same number of hours in a day, efficiency in communication and operations leads to saved time, and therefore, is one method to accommodate growing demand. The complementary healthcare delivery model to ACOs is the Primary Care Medical Home (PCMH, also known as Patient Centered Medical Home). Whereas ACOs can be managed primarily as an insurance, hospital, or physician group organization, PCMHs are managed by primary care physicians and focus on preventative care. These are the individual practices and networks that can make up an ACO, which provides the financial framework to make coordinated care possible. Shared goals and processes include effectively and efficiently utilizing electronic medical records (EMRs) to communicate information between healthcare providers; analyzing performance data; providing patients with better access to medical information; and most importantly, improving patient outcomes.[3] These areas of performance are measured by the National Committee on Quality Assurance that accredits PCMH programs. Ultimately, the desired result is improved quality of care, better health management, and hence, a decrease in volume of patients requiring more complex procedures that drive up physician demand. Already, studies have shown that 40% of ACOs' reduction of healthcare-spending increase is attributed to improved healthcare management that decreases physician demand.[1]

Nonetheless, the physician shortage cannot only be resolved by employing techniques to hopefully curb demand. The supply side is also experiencing a change in culture that affects physician's time with patients. Overall, the number of U.S. medical graduates is increasing from year to year by about 30 percent. Additionally, with passing of the Resident Physician Shortage Reduction Act of 2015 (also known colloquially as the Graduate Medical Education or GME Bill), residency positions are projected to increase by 3,000 each year from 2015 to 2019 to compensate for 20 years of stagnant spots available to students.[4] These new positions will be allocated across specialties to those with the greatest need first. In spite of these efforts to increase physician supply, the AAMC Center for Workforce Studies finds that young physicians (ages 26-35) work an average of four hours less in 2010 compared to 1980, whereas physicians over 35 worked about the same amount as they did in 1980.[1] This disparity may be accounted for by a variety of reasons: 1) resident-hours restrictions were capped to 80 hours in 2011; 2) longer and more intensive education leading up to practicing

years results in greater burnout in young physicians; or 3) younger physicians also desire more flexibility in their schedules in order to start families or focus on wellness. Furthermore, fewer hours worked does not translate to fewer patients seen. Quite conversely, physicians now have a much heavier patient-load and must work more efficiently than the physicians before the turn of the century. Unfortunately, the reality remains that fewer work hours hurts the growing physician shortage.

However, just as technology is a key player for ACOs and PMCHs, it can also be part of the solution to the flexible work hours that young physicians are seeking. Telemedicine is a growing part of not only hospital practice, but also private practice and consultation. Companies like American Well, HealthTap, and 2nd MD connect patients directly to physicians virtually, through phone apps, kiosks, and computers. Although business-oriented with the goal to make healthcare more accessible and less expensive, these telemedicine companies are also well-suited for young physicians who need time away from the workplace in order to accommodate family, and for older physicians who have retired from the workplace. Furthermore, this business model supplements ACOs and PMCHs in their aim to streamline healthcare delivery and emphasize preventative medicine. Because the virtual meetings hosted by these companies have records delivered beforehand and are directly contracted with insurance or are subscription based, physicians time with patients is maximized. Of course, these services are no substitute for in-office visits in many situations, but they do function as another gatekeeper in medicine by limiting excess procedures, taking valuable time, and simultaneously reducing in-office volume while increasing supply.

For many years now, physicians, politicians, providers, and patients have cried out about the growing physician shortage. Other healthcare professionals such as physician's assistants and nurse practitioners have already played an important role in filling the gap in primary care. However, the need for physicians in this area and others still remains. Efforts to meet demand have been made by increasing medical school graduation classes, creating more residency positions, and creating technologies that should (in theory) help make administration processes easier. Yet, as supply remains limited, it becomes necessary to turn to changes in healthcare delivery to decrease demand and increase supply while focusing on improving quality of care through better health management and preventative medicine.

References

1. HIS inc. "The Complexities of Physician Supply and Demand: Projections from 2013 to 2025." March 2015.

2. UnitedHealth Center for Health Reform and Modernization. "Advancing Primary Care delivery: Practical, Proven, and Scalable Approaches." September 2014.

3. DeVries, Andrea, et al. "Impact of Medical Homes on Quality, Healthcare Utilization, and Cost." American Journal of Managed Care. 2012; 18(9): 534:544.

4. AMA Wire. "4 Things Students Should Know About the New GME Bill." May 2015.