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# Physician Shortage in America

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**Abstract:** The physician shortage occurring in the United States is vast, and many people will not realize it is happening until it affects them directly. Primary care physicians make up the majority of this shortage, but other specialties will also be affected. By the year 2025, it is estimated that the United States will be forty-five thousand to ninety-thousand physicians short. There are simply not enough physicians to meet the demand. Causes of the shortage include the Affordable Care Act insuring millions of people, Medicare and Medicaid continually expanding, the growing population, and the baby boomer generation seeking more and more medical care due to their old age. America can combat this impending physician shortage by increasing the amount of residency slots available to medical school graduates and by expanding the freedom of other medical professionals to decrease the burden on primary care physicians.

Keywords: physician shortage, lack of physicians in American, primary care physician shortage, physician shortage in the United States, physician shortage in rural areas, physician supply and demand, aging population, defensive medicine, Affordable Care Act.

There is a physician shortage occurring in the United States, and U.S. citizens might not even realize it is happening. The signs are everywhere: long waits in waiting rooms, the short visit from the actual doctor, and the increasing cost of appointments. These are only a few of the many consequences that would arise if the U.S. does not address this problem. A large number of people are already being affected, and should nothing change, everyone in America could experience a lack of access to care, difficulty making appointments with a primary care physician, unnecessary appointments with specialty physicians, increased costs, decreased positive health outcomes, higher mortality rates, and decreased satisfaction in the health care delivery system in America (Christian, 2011). This shortage of doctors in America has many causes, with the main one being the rapidly changing population. A large portion of the population is getting older, sicker, and are getting more and more overweight (Appleby, 2012). The population as a whole is also growing, and as a result the amount of people obtaining healthcare coverage is growing. The supply of physicians cannot keep up with this demand.

The physician shortage in the United States that is projected to

increase by as much as ninety-thousand by 2025 will impact the entire population in America, especially the elderly population with reductions in quality of care (Wiener & Tilly, 2002). This will require changes in health care including increasing the number of training/residency slots that are available to newly graduated medical students seeking internships, because there is currently an unnecessary cap on the number of slots available, as well as making the role of the primary care physician more appealing to medical students.

### **Literature Review**

The United States has a supply and demand issue in health care that will affect everyone on a national and community based level. The demand for physicians is projected to grow by eleven to seventeen percent, but the supply is only projected to grow by about nine percent (Hower & Centor, 2015). The number of physicians in the United States is growing, but by the year 2025 it is projected that the demand for physicians in America will exceed the supply of physicians by forty-six-thousand to ninety-thousand (Smith, 2016). Many people depend on the services that will be in short supply in order to function in their daily lives. This shortage is even worse in rural areas because they have increased issues to access due to the limited amount of medical practices located nearby (Shi & Singh, 2015). The services that will be affected include primary care physicians, medical specialists, surgical specialists, and other specialists. A study completed by the Life Science division of HIS Inc. found that "the numbers of new primary care physicians and other medical specialists are not keeping pace with the health care demands of a growing and aging population" (Bergen, 2016).

The healthcare system has already had to make changes in order to accommodate this physician shortage, but these changes only add to the burden of the shortage. Such changes include each physician being assigned to so many patients that they are unable to connect with each one, patients getting a limited treatment time from the physician because the physician has to make time for all the other patients on his/her list, and physicians have stopped accepting new patients altogether because they are already overloaded which makes it even more difficult for people to access primary care physicians (Christian, 2011).

The Affordable Care Act (ACA) gave access to health insurance coverage to millions of people who did not have access to health care coverage before. Because of this, millions of people are seeking services from physicians that were not seeking it prior to the ACA. This means that the physician shortage is even greater than it seems because America was already facing an impending shortage before the ACA expanded insurance coverage to tens of millions more Americans (Christian, 2011). The ACA is projected to cause at least a two percent increase in physician demand (Hower & Centor, 2015). People who choose to go without health insurance

in 2017 will be charged an annual penalty increasing over time. The ACA is requiring every single person in the U.S. to have some type of health care coverage to avoid penalties, which means the physician shortage will increase dramatically over time. With health care reform's emphasis on expanding coverage, "one question is how to provide adequate care, because increased health coverage would not ensure the public's health without an adequate workforce" (He, 2012, p. 1566).

The three cornerstones of healthcare are cost, quality, and access (Shi & Singh, 2015). The physician shortage will continue to play a role in driving healthcare costs up because it is a simple issue of supply and demand (Hooker & Muchow, 2014). The quality of health care also declines because some facilities are understaffed depending on what area attracts the most physicians. There is a correlation between where the physician trained and where he/she decides to practice which is why the North East has a greater ratio of physician to patient than any other area in the United States. Access to healthcare, especially in rural areas, is greatly affected by the physician shortage (Rovner, 2014). Rural areas have fewer providers and hospital beds. An analysis of the 1980-2008 U.S. Census data found that there is a consistent shortage of physicians in rural areas. This study conducted in the state of Ohio found that about ninety-three percent of Ohio's physicians work in metropolitan areas while a mere six percent serve in rural areas (He, 2012). There are excess resources available, but they are not distributed equally. Another issue when it comes to access is that many people have insurance, but they have to wait months to get the service that they need because of the physician shortage (Christian,  $\bar{2}011$ ).

# **Research Questions**

The main question being posed to the health care system in the United States is what can be done to halt the increasing gap between physicians and the ever-growing population. Extensive research on this topic for this project has provided many answers to that question. This project also sought to address how the physician shortage impacts the field of occupational therapy, how the physician shortage will change the American health care delivery system, and what population will mainly be impacted by the physician shortage.

#### Method

# **Design and Procedure**

The purpose of this research project was to synthesize discussion of the physician shortage among medical professionals from the current literature to identify the causes behind this shortage and to find a number of solutions that can be implemented. The following databases were searched: CINAHL, Google Scholar, and Academic Search Complete. The following

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keywords were used: physician shortage, lack of physicians in American, primary care physician shortage, physician shortage in the United States, physician shortage in rural areas, physician supply and demand, aging population, defensive medicine, Affordable Care Act. The author reviewed each article to narrow to determine those that were appropriate for the purposes of this project. The current physician shortage in the United States was analyzed in relation to the national health care delivery system, health care policies, as well as occupational science and occupational therapy philosophies. This paper presents the results of this literature review and analysis.

#### Results

# **Change in Health Care Delivery**

There will be changes in the organization and delivery of health care due to the aging population, but also because medical professionals will need to improve the system so that there is a more equal balance in the ratio of physicians to the population seeking medical care (Wiener & Tilly, 2002). These changes could involve allowing other medical practitioners to perform services so that physicians do not need to, such as physicians assistants, nurse practitioners, pharmacists, and social workers. These services could include pre-operative care, phone calls, follow ups, and giving advice (Hanno, 2009). How many physicians the United States 'needs' is dependent on how the health care delivery system is organized.

# **Population Impacted**

The elderly population especially depends on physician services, because in general older people require more medical care than any other portion of the population (Appleby, 2012). Because many elderly people have chronic conditions, and since this portion of the population is increasing, the health care system will have to shift from acute to chronic conditions. People with chronic conditions will be required to see primary care physicians before they can access a specialist. These chronic conditions include Alzheimer's disease and heart disease among others (Wiener & Tilly, 2002). The demand for physicians is projected to grow by up to seventeen percent before the year 2025. The population below eighteen years old is projected to grow by five percent and the elderly population is estimated to grow by forty-one percent (Smith, 2016). The elderly population is increasing at a faster rate than the younger, working population. Because of this, there will be a shortage of physicians that offer the medical care that the elderly population requires because a large number of people will be

requiring it at the same time. The population as a whole will also be impacted because the supply of physicians is linked to the achievement of better health outcomes. These outcomes include overall health, life expectancy, stroke, mortality, cardiovascular disease, and perception of self-rated health (Smith, 2016).

# Connection to Occupational Science and Occupational Therapy

Occupational therapists work with other providers including primary care physicians, dieticians, physical therapists, surgeons, among many others to form the members of their patient's team (Shi & Singh, 2015). The job of a healthcare provider is to perform the service that the patient requires and to help them on their journey to health. Each medical professional has a specific role on the patient's medical team. The role of the occupational therapist might include improving strength, range of motion, dexterity, and function all for the purpose of helping the patient return to their basic activities of daily living and other valued occupations (Shi & Singh, 2015). A shortage of primary care physicians in America would disrupt the balance of the entire team of medical professionals because patients need to obtain a referral from primary care before they can receive treatment from any specialist.

All of the medical practitioners that a patient sees make up his/her health care team (Shi & Singh, 2015). Physicians recommend that patients see occupational therapists, and if the patient cannot get an appointment to see their physician, they may not know that they require a service such as occupational therapy. Also, if the patient cannot get in to see their primary care physician, they will not be able to obtain the referral that they need to see an occupational therapist. In addition to not being able to access occupational therapy services, if individuals cannot get the care they need, they may experience a decline in their ability to perform valued occupations. Valued occupations make up an individual's world and that individual's health is partly dependent on their occupations (Christiansen & Townsend, 2010). The role of an occupational therapist is to journey with clients through the process of getting back their freedom and their ability to engage in valued occupations. A dangerous cycle may be created where a patient is unable to see their doctor so they lose their ability to perform certain occupations because of sickness/disability because they are also unable to get a referral for needed services like occupational therapy due to this lack of access to the doctor. The patient's health will then decline even more since they are unable to engage in valued occupations because lifestyle and occupational choices influence both physical and psychological well-being (Christiansen & Townsend, 2010). Also, occupational therapy encourages therapists and physicians to see clients as unique individuals. Short physician visits due to the limited availability may impede on the physician's ability to see the patient as an individual because of limited time to get to know the patient

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more personally. Each patient may become another diagnosis and just another name among a long list of names (Hasselkus, 2011).

#### **Solution**

Addressing the physician shortage in America will not only be beneficial, but it is necessary. To address the looming shortage, the U.S. needs to remove the temporary-turned-permanent-cap that was placed on residency slots for graduating medical school students. Commins (2015) discusses how the Association of American Medical Colleges (AAMC) wants Congress to fund three-thousand residency slots each year, in addition to the twenty-seven to twenty-nine thousand residency slots already in place. As for who decides where the new residency slots are placed, that is up to each hospital, or each potential training site. Hower (2015) explains why the limited amount of residency slots is such a big factor in the looming physician shortage: "We have a significant number of U.S. graduates who cannot find an internship. We cannot give people the care they deserve if we do not have proper training, and right now the lack of training slots is really hampering us." The United States must train more doctors to account for the expanding population, but that is impossible to do when there is a cap on the amount of residency slots offered. Also, medical schools have the ability to adapt their admissions requirements in order to ensure that these shortages are either decreased or eliminated (Isaac et al, 2014).

The United States must also make working in primary care more appealing to graduating medical school students. The first step that could be taken to address this aspect of the issue is state laws need to be changed to allow nurse practitioners or other medical professionals to fully perform the work for which they are trained so that more advanced nurses can assist physicians and take some of the load off their shoulders (Appleby, 2012). According to an analysis done on future supply and demand, thirtyseven states are projected to have primary care physician shortages by 2025, and nine states are projected to have shortages of both primary care physicians and physician's assistants (PAs). Nurse practitioners, however, are projected to be bountiful (Streeter, Zangaro, & Chattopadhyay, 2017). Nurse practitioners and physician assistants cannot replace physicians completely, but they can ease the job of the physician so that the physician has more time with each patient and has fewer patients. This would lead to better health outcomes because the primary care physician is able to focus better on each patient at a time. In 2013 there were 84,064 licensed PAs in the United States and that number is projected to increase (Hooker & Muchow, 2014). It is predicted that the supply of PAs will grow to 125,847 by 2026 which would help mitigate the physician shortage in the United States.

The second step that should be taken to make primary care more appealing is that there needs to be less intrusion in the health care

decision-making system by non-medical personnel (Fine, 2007). This decrease in freedom for physicians has led to skepticism for many young physicians in training. These young physicians would rather specialize in order to avoid the frustration, challenges, and decreasing salary of the primary care physician because these setbacks make the profession "uncomfortable". Rovner (2014) states that primary care doctors are not paid as much as specialists which discourages medical school students from becoming generalists. The job of a primary care physician is becoming uncomfortable which is why not many young people are attracted to it and many older physicians are retiring earlier than ever. If primary care is made more comfortable by reducing the setbacks and intrusion currently being applied to the profession, older primary care physicians may wait to retire. Increasing the comfort of a primary care physician would include raising the salary of primary care physicians, and it would encourage primary care physicians to retire later in life. Petterson et al (2015) speculates that if primary care physicians retire at age sixty-four, the shortage of physicians grows to 38,622 from 33,283. However, if physicians stay in practice only four more years until age sixty-eight, the shortage decreases to 26,835. In the documentary Money Driven Medicine (2009) one physician pulls the cost of primary care into the mix. The cost of primary care has skyrocketed which is why many people, even insured ones, have begun to use the hospital as their source of primary care. In other words, fewer people are utilizing a primary care physician which leads to fewer medical students choosing primary care over a specialty area.

#### Discussion

#### Relevance

According to the ACA's current healthcare policies approximately twenty-six million people have newly gained access to health care, the baby boomer generation will be retiring over the next few years meaning large numbers of people enrolling in Medicare, and Medicaid has been expanding to cover all individuals with incomes up to 133% the federal poverty level (Appleby, 2012). All of these changes have been playing and will continue to play a role in the shortage of physicians in the United States.

The healthcare delivery system faces implications because of this physician shortage. It must change whether that means that medical schools must expand more and the cap on residency slots available to medical school graduates must be lifted, or if it means that other health care providers such as nurses and physician's assistants should be allowed and required to perform similar tasks that a primary care physician or any specialist can perform. Currently, regulations require that nurses and physician's assistants must be supervised by a physician and everything that they do must be double checked (Christian, 2011). As a result of the physician shortage, healthcare service delivery would become more unreliable than it currently is. People

would stop depending on educated professionals for help as the physician shortage gets worse because they would be unable to get an appointment when they need it.

#### Conclusion

The shortage of physicians is a real problem that is looming in the near future for the United States. It is already occurring to a certain extent, even if the consequences cannot be felt fully yet. By the year 2025, America will certainly be aware that a major shift in health care has occurred. This is because America could potentially be short by up to 90,000 physicians by 2025. Many studies have analyzed statistics and trends, and have found that the supply is just not meeting the demand. The demand for physicians will continue to increase in amounts greater than the supply. The health care system in the United States needs a major makeover if this problem is going to be addressed before 2025.

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