Responses to Age-Related Shortages of Healthcare Professionals in the United States

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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The relationship between progress in cancer treatment and demand in healthcare services is complex. By extending life expectancy, increased cancer treatment efficacy contributes to an aging population. As aged populations have a higher incidence of chronic disease, comorbidities, cognitive impairment, and other age-related health problems, they require more healthcare services. However, more effective treatments plausibly might dampen the volume of these age-associated illnesses, resulting in a healthier elderly population and decreased healthcare demand. Today, however, most cancer patients do not fully recover to their pre-cancer state of health (Miller, 2022). Though noninvasive, more targeted, and non-ionizing therapies are on the horizon, most are in early stages of development and it will be many years before they are the standard of care. Patients who have undergone chemotherapy may experience heart and nerve damage, changes in cognitive ability, and increased risk of developing secondary cancers due to damaged cells. Radiotherapy can also cause a host of similar long-term side effects. Though immunotherapy, a newer treatment approach, has been lauded for its better targeting, patients are still at a higher risk of suffering endocrine and autoimmune disorders (Cukier et al., 2017). Thus, rapid improvements in oncology contribute to growing healthcare demands.

Aged populations require more primary care and nursing services, both of which have had staffing shortages. Any country with an aging population is likely to face growing demands on its healthcare system, and consequent stresses, including shortages of health professionals. In the United States, however, such stresses have been exacerbated by a substantially private healthcare system in which health professionals are well organized and politically influential, and whose interests historically have included preventing any oversupply of fellow professionals. Nevertheless, in recent years, as age-related stresses on the US healthcare system have grown,

medical professionals and trade associations have joined with advocates for the elderly to improve older Americans' access to quality care.

Primary Care Physician Shortages

Elderly people have distinct health needs. Older adults are more likely to have chronic conditions and comorbidities, and to experience functional decline. They are also more likely to be taking several medications simultaneously. Because of these differences, older adults need physicians who are adept at coordinating screenings and vaccinations, handling referrals to specialists, managing medications, and advising family caregivers. Physicians who handle these tasks are known as primary care providers (PCPs). Thus, an aging population results in a greater need for PCPs. Family physicians and geriatricians fall under the PCP umbrella. Shortages of PCPs can extend patients' appointment and office wait times. Longer wait times for non-emergency services are associated with delayed treatment access, worse clinical outcomes, and patient dissatisfaction (McIntyre & Chow, 2020). Basu (2019) found that the supply of PCPs per capita declined from 2005 to 2015, due to population growth and physician retirements. This problem is exacerbated by an aging population, as people aged 65 and older make up 30-40% of primary care visits (Adams, 2002). Responses to this shortage have included initiatives to increase the overall and regional supply and availability of physicians and expanding the scope of practice for a wider range of medical professionals.

The supply bottleneck is traceable to the steps to becoming a PCP. After graduating medical school, prospective physicians will enter residency, where they will train and work with practicing physicians. To practice medicine in the US, a physician must have completed an accredited residency training program in the US or CanadaThough the labor cost of a resident is

lower than that of a practicing physician, residency programs are costly for hospitals to operate. Training a resident takes three to seven years, and time spent supervising and instructing residents means time lost delivering care to a patient. Yet residencies are necessary because graduated medical students need practical experience before they can practice independently. As a result, residencies in the US are primarily funded by the government through the Centers for Medicare and Medicaid Services (CMS) (CGFGME, 2014).

The American Medical Association (AMA) is the largest professional society and lobby representing physicians and medical students in the US. In the 1980s, evidence indicated an impending physician surplus (Peterson, 1983). In the 1990s, the AMA responded by lobbying for fewer medical schools and limiting Medicare-funded residency slots, provisions achieved in the Balanced Budget Act of 1997 (Cooper, 2004). A political watchdog group found that the AMA topped the spending list of lobbying groups during the first half of 1997 (All Politics, 1998). In a joint statement, the AMA and five other medical associations called for a limit to public spending on doctor training (Pear, 1997). Today, the AMA has reversed its position, and states that the CMS "should expand the residency funding cap at institutions where residents must extend their training" (AMA, 2020a). The American Hospital Association, a trade association representing hospitals and healthcare providers, also favors rescinding the cap on residency slots (AHA, 2021). However, since the Balanced Budget Act of 1997, the cap has been raised only once, when an additional 1,000 Medicare-funded slots were approved as part of the Consolidated Appropriations Act of 2021 (CMS, 2021). In 2021, there were 42,508 active applicants, and only 35,194 first-year and 2,912 second-year residency positions (NRMP, 2021).

In addition to the cap on residents, the decline in US medical school graduates who apply to match with primary care residencies also contributes to the PCP shortage. In their last year of

medical school, students apply to residency programs in the specialty of their choice. The percentage of US medical school graduates who match into PCP residencies has been declining since 2011 (Knight, 2019). The CEO of the US residency matching program speculates that a large part of this is due to the income difference between PCPs and physicians in other specialities (Knight, 2019). In the US, the 2017 median specialist compensation was $399,000, while the PCP median compensation was $215,100 (Hsiang et al., 2020).

In much of the US, especially rural regions, healthcare systems have personnel shortages (NCPF, 2009), and an aging population may soon cause demand to outstrip supply. Rural populations are also less likely to be insured, and have a greater proportion of people on Medicare and Medicaid compared to metropolitan areas (Foutz et al., 2018). In rural regions of the US, there is a shortage of all types of physicians, not just PCPs, and 23% of rural Americans report that they struggle with getting access to good-quality hospitals and doctors (Lam et al., 2018).

Looking closely at the different specialties and the percentage of the residency positions filled by US medical school graduates compared to IMGs unveils a trend that may aid in prescribing the shortage and geographic distribution of PCPs. In a listing of the seven most competitive residency programs in the US, all seven programs had over 86 percent of positions filled by US medical school graduates, with the most competitive program comprising 95.5 percent US graduates (Murphy, 2018). Meanwhile, 51.2 percent of geriatricians are IMGs as of 2019 (AAMC, 2021). One possible reason for this is because physicians in the US are compensated more than in other countries (Condon, 2021). If US medical graduates continue to prefer other specialties over primary care, IMGs may continue to fill this widening gap.

Increasing the supply of IMGs can also help alleviate the geographic distribution of physicians. However, restrictive immigration policy can limit the supply of IMGs. The annual cap on H-1B visas is 65,000 (USCIS, 2022) and there exists a J-1 visa program for medical residents, however, historically only about 500,000 annual certificates of eligibility are given out for all J-1 visa programs (AIC, 2020). The AHA supports visa relief that would permit foreign-born healthcare workers to stay in the US , stating that they support "the bipartisan Healthcare Workforce Resilience Act, which would expedite the visa authorization process for highly-trained nurses … and provide protections to US-trained, international physicians" (AHA, 2021). The AMA also supports the Healthcare Workforce Resilience Act, stating that they support "granting premium processing rights … for J-1 physicians," and want IMGs working in underserved areas to be "exempted from the per country cap of H-1B to green card visa conversion" (Robeznieks, 2022a). However, many labor unions oppose reform or increases in the H-1B visa cap. Notably, the American Federation of Labor and Congress of Industrial Organizations has released a report stating that Walmart's reliance on the H-1B program is "potentially displacing US workers" (Rani, 2021). And in an issue briefing, the International Federation of Professional and Technical Engineers urged Congress to " oppose any efforts to expand the H-1B program since the widespread abuse of the … program is crowding out employers' ability to use the visa program to meet legitimate needs" (IFPTE, 2021).

Some policymakers and advocacy groups have looked to medical professionals other than MDs to provide primary care services. AARP (formerly the American Association of Retired Persons), is an advocacy group for individuals older than 50. Members pay a small yearly due and receive discounts for travel, insurance, and other services. AARP has demonstrated support for the expansion of independence for mid-level providers, such as nurse practitioners (NPs) and

physician assistants (PAs) as a potential solution for the shortage of PCPs. AARP's Public Policy Institute opposes rules that require NPs to contract with physicians before practicing, arguing that "removing these and other restrictions ... would enlarge the pool of skilled clinicians who could provide people with much-needed care" (Quinn et al., 2020). AARP urged governors to rescind such rules to help healthcare systems meet surges in demand during the COVID-19 pandemic, and several states have temporarily relaxed old restrictions (Quinn et. al., 2020). During the pandemic, the AHA also released a statement that stated "we must support state efforts to expand scope of practice laws to allow health care professionals to at the top of their license" (AHA, 2022a). Though these changes were implemented in response to a spike in demand during the pandemic, they may not be temporary, as demand for primary care services will continue to increase as the population ages.

This has been a cause of concern for some physicians, and the AMA has expressed its opposition to these expansions of mid-level provider independence. Condemning the expansions as "scope creep," the AMA led an online campaign with the #StopScopeCreep hashtag. The AMA campaign accuses NPs and PAs of attempting to "expand the scope of their practice" (2020b). The AMA has been very proactive in working with state medical associations to defeat bills that expand mid-level independence through writing alternative model bills, providing survey data, testifying in hearings, and writing letters to legislators, says AMA senior news writer (Robeznieckes, 2022b). The president and CEO of the American Academy of Physician's Assistants has rejected the AMA's claims that PAs provide poorer care (Bailey & Madara, 2020).

Nursing Shortages

Elderly populations also have greater direct care needs, in both residential and clinical settings. This includes tasks such as vitals monitoring, medication administration, and other basic care, like grooming and bathing. The main providers of these services include registered nurses (RNs), certified nursing assistants (CNAs), licensed practical nurses (LPNs), and medical assistants. The US Bureau of Labor Statistics projects that there will be a shortage of 275,000 nurses from 2020 to 2030 (DOL, 2022). Proposed responses to the nursing shortage include streamlining nursing education, improving nurse compensation and working conditions, promoting more optimal geographic distribution of nurses, and reforming nursing standards of care. To support these changes, professional nursing associations, trade associations, and advocacies for the elderly have lobbied Congress to pass legislation to fund training and recruitment, enforce staffing requirements, and encourage widespread health insurance coverage.

Research that shows that improved working conditions significantly improve nursing retention and recruitment (Erenstein & McCaffrey, 2007). Though many factors contribute to an ideal working condition, some of the most important factors are patient to nurse ratios and compensation (McHugh & Ma, 2014). Many hospitals are accordingly raising wages for nurses. The Oregon Nurses Association secured a contract with the Providence Hood River Memorial Hospital that includes wage increases from 14 to 21 percent over the period of 2023 to 2025 and measures for supporting hospital staffing committees (Gooch, 2022). The New York State Nurses Association also secured a new contract across several private hospitals that includes a 19 percent pay raise after they striked in protest of staff shortages and low wages (Lasarte, 2023). In late 2022, the governor of New York also announced pay increases for nurses in public hospitals (Governor's Press Office, 2022).

While hospitals can adjust their budgets to hire more nurses or improve nursing conditions, it is also important for states and the federal government to introduce policies that can facilitate these changes. The state of California has mandated nurse-to-patient ratios in hospitals for the past two decades, with later studies corroborating the success of this legislation in improving patient outcomes and nurse retention (Hollowell, 2023). On their website, the ANA states that safe staffing is one of its core federal policy priorities, and that they advocate for "mandated nurse to patient ratios or standards, in legislation or regulation" (ANA, 2022). In the past, the ANA has also successfully lobbied Congress to appropriate more funds towards nursing education programs in Title VIII of the CARES Act (2020a). A major grant program in Title VIII allocates funding for nurses who "provide direct care for the elderly, to support geriatric nursing curriculum, to train faculty in geriatrics, and to provide continuing education to nurses who provide geriatric care" (ANA, 2020a).

Despite the research on patient outcomes, some states have instead passed legislation to relax nursing standards in response to shortages. Outside of hospitals, nursing homes and long-term care facilities are other large entities that provide healthcare services to the elderly. The responsibility of taking care of older people has traditionally fallen on their younger family and friends. However, as the population ages, there will be fewer young people to take on this eldercare role. By 2034, for the first time in the US, people over 65 will outnumber children (US Census Bureau, 2018). Trade associations in the for-profit nursing home industry, such as the Florida Health Care Association (FHCA) have advocated for more relaxed staffing standards in nursing homes. Backing a state bill (HB1239) that would reduce the required minimum hours of care delivered by certified nursing assistants per patient in nursing homes, the FHCA's CEO said, "We know Governor DeSantis understands this need, and we strongly encourage him to make

this issue a priority by signing this legislation" (FHCA, 2022). The governor approved the bill, which became state law on April 6, 2022. The FHCA (2022) contends that relaxing standards of care in nursing homes will alleviate nurse staffing shortages and ease nurses' burdens. Under the new standards, "specialist care" counts as "nurse care" in the per-patient minimum daily care time requirement. AARP, however, opposes this law and supports increasing federal minimum staffing requirements in nursing homes—the Florida AARP division and the Service Employees International Union, which represents nursing home workers, opposed HB1239, arguing that it would degrade patient care in nursing homes (Saunders & Urban, 2022).

Another consideration is that hospitals might not hire additional nurses because of budget constraints. In the first half of 2022, 52 percent of hospitals were operating with negative margins (AHA, 2022b). Even before the COVID-19 pandemic, in 2019, 34 percent of hospitals were operating with negative margins (AHA). The HCA, a large hospital chain, will ask insurers for higher prices in 2023 "after seeing $500 million in higher-than-expected labor costs this year, CEO Samuel Hazen said" (Evans, 2022). As easing the nursing shortage relies greatly on hospitals being able to afford more nurses, the non-labor costs of providing services in hospitals must be examined closely. Non-labor costs are expenses that hospitals incur other than the cost of staff wages, such as buying equipment or staff training costs. One of the most costly of these non-labor expenses is for uncompensated care, with hospitals providing $37 billion in uncompensated care in 2013 (CMS, 2023).

Some legislation attempts to address the volume of uncompensated care, notably the Affordable Care Act and Medicaid expansion provisions (Karpman et al., 2021). A study found that Medicaid expansion was associated with improved nurse staffing ratios (Tarazi, 2020). The ANA (2021) urged the Secretary of the US Department of Health and Human Services to declare

nurse staffing shortages a national crisis, and proposed that the Center for Medicare and Medicaid Services work with the ANA to "adopt new payment methodologies that recognize the value that nurses bring to patient care." AARP also backed the establishment of Medicare (Senate Committee on Labor, 1960) and the Affordable Care Act (ACA) (Obama, 2009). In 2009, the AMA opposed parts of the bill that would later become the ACA, specifically the public option (Pear, 2009). America's Health Insurance Plans (AHIP), the largest health insurance provider trade association in the US, also opposed the public option and their CEO released a letter in 2021 reiterating AHIP's opposition to it (Eyles, 2021). The bill was passed into law in 2010 without the public option (Kirk, 2010). The AMA also opposed expansion of Medicare due to doctor pay cuts (Hitt & Adamy, 2009). The AMA's more recent stance going into the 2020 Presidential campaign is in support of building on the ACA and considering studying a public option, as opposed to switching to a single payer healthcare model (Jaspen, 2019).

Telehealth is a means of alleviating the shortage of healthcare workers in rural areas. In its statement of priorities for the 2022 legislative session, AARP Connecticut included telecommunications and telehealth as priorities (Humes, 2022). The ANA (2020b) urged CMS to expand telehealth care permanently, asserting that "telehealth delivery models ... are appropriate for the post-pandemic environment, and can be expanded further, to improve access not only in rural areas, but in appointment-shortage urban and suburban areas as well." The AMA also supports keeping these changes after the pandemic, with their news editor stating in reference to a bill passed by the house July 27th of 2022, "the Senate should…pass the "Advancing Telehealth Beyond COVID-19 Act" and also seek a permanent extension" (O'Reilly, 2022). The

bill was received by the Senate on July 28th of 2022 and referred to the Committee on Finance, but no actions have been taken since (US Congress, 2022).

Conclusion

In the US, stresses on the healthcare system due to an aging population have been exacerbated by influence from powerful professional associations and trade associations. Despite these setbacks, in recent years, age-related stresses and the COVID-19 pandemic have spurred medical professionals to join with advocates for the elderly to improve older Americans' access to quality care. From the evidence stated, it can be foreseen that reform to immigration policy, medical residency caps, the ACA, and nursing staffing standards will be required to alleviate healthcare shortages from the impending shift in age demographics.

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