

SMART DEVELOPMENT INSTITUTE 3110 Fairview Park Drive, Suite 120 Falls Church, VA 22042-4536 U.S.A.

1-833-77-SMART (777-6278)1-833-777-6278

www.sdinst.org

## Research – White Paper Addressing the Shortage of Healthcare Professionals in the United States

Authors: JiAe Sohn and David Fernandez Date: October 10, 2024

## **Objective:**

This white paper examines the severe shortage of healthcare workers in the United States and explores viable intervention programs to address this workforce crisis. The shortage is causing longer wait times, limited access to essential services, and increased strain on current healthcare professionals, ultimately compromising care quality and escalating healthcare costs. By analyzing shortages across various specializations—such as primary care, geriatrics, mental health, dental hygiene, and critical care—this paper emphasizes the need for comprehensive, strategic initiatives to strengthen the healthcare workforce. One of the key intervention programs explored is utilizing the H-1B visa program to recruit qualified foreign healthcare professionals, including but not limited to nurses, dental hygienists, nurse educators, and physical therapists. By ensuring these professionals meet U.S. credentialing standards and are properly vetted, the H-1B program offers a streamlined, reliable pathway to fill critical staffing gaps, thereby enhancing healthcare delivery and helping to meet the increasing demands of the U.S. healthcare system.

## Understanding Labor Shortage of Healthcare Workers in the U.S.

The United States is facing a profound healthcare worker shortage that spans many different specializations in health care, deeply affecting critical roles including but not limited to nursing, dental professionals, and geriatric care professionals<sup>1</sup>. This workforce gap is driven by a confluence of factors, including an aging population, the rising prevalence of chronic diseases, and the increasing retirement rates among existing healthcare professionals<sup>2</sup>. The Bureau of Labor Statistics (BLS) projects a 7% growth in employment for registered nurses (RNs) from 2019 to 2029, but even this growth is insufficient to meet the escalating demand<sup>3</sup>. Similarly, the need for dental hygienists and healthcare workers specializing in geriatric care is rapidly increasing as the elderly population swells, leading to significant shortages in these essential services<sup>4</sup>. These gaps are particularly acute in rural and underserved urban areas, where attracting and retaining qualified staff is a persistent challenge.

This shortage is most pronounced in specific healthcare specializations that are vital to meeting the needs of an aging and chronically ill population. Geriatric care, for example, is facing critical shortfalls in key roles such as geriatric nurses, geriatricians, home health aides, and other

<sup>&</sup>lt;sup>1</sup> U.S. Department of Health and Human Services. "Health Workforce Strategic Plan."

<sup>&</sup>lt;sup>2</sup> National Academy of Medicine. "The Aging Workforce: Implications for Healthcare."

<sup>&</sup>lt;sup>3</sup> Bureau of Labor Statistics. "Occupational Outlook Handbook: Registered Nurses."

<sup>&</sup>lt;sup>4</sup> American Dental Association. "The Growing Demand for Dental Hygienists in Aging Populations."



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essential providers. The scarcity of dental hygienists is another pressing issue, driven by a growing emphasis on preventive care and an increasing number of elderly patients requiring specialized dental services. The COVID-19 pandemic has only exacerbated these challenges, leading to heightened stress, burnout, and turnover across the healthcare workforce. As healthcare demands continue to rise, it is imperative to develop and implement comprehensive strategies that address these shortages, ensuring that all Americans, particularly the elderly and those in underserved areas, have access to quality care.

## **Nursing Specialization Shortages:**

The shortage of healthcare professionals across various specialties in the U.S. is a growing crisis, driven by a complex interplay of factors, including an aging population, the retirement of experienced healthcare workers, and challenges in attracting new talent to the field. Specializations such as primary care, geriatrics, mental health, physical therapy, home health, etc. are experiencing particularly severe shortages, with professionals in these areas facing high burnout rates due to demanding work environments, comparatively low wages, and an increased patient load. Geriatric care is one area of concern, as the need for specialized professionals to support an expanding elderly population is expected to intensify significantly by 2050. However, the impact of these shortages extends beyond geriatric care; a lack of adequately trained professionals across all areas can lead to longer wait times, reduced access to essential services, and ultimately, poorer health outcomes for patients of all ages. Addressing these labor shortages is critical to ensuring accessible, high-quality care and supporting a sustainable healthcare system.

## 1. Primary Care Nurses

**Reason for Shortage**: The primary care nurse shortage is primarily due to the increasing demand for primary healthcare services driven by an aging population and a growing emphasis on preventive care. Additionally, the shortage of primary care physicians has placed a greater burden on nurse practitioners (NPs) to fill the gap.

**Projection and Impact**: The American Association of Nurse Practitioners (AANP) expects that The NP profession is trending to be the fastest-growing profession of the next decade, especially in underserved areas. According to the most recent data from the U.S. Bureau of Labor Statistics, the profession is projected to grow by nearly 45% by 2032<sup>5</sup>. This shortage impacts the healthcare industry by increasing patient wait times, reducing access to essential primary care services, and potentially worsening health outcomes for communities, particularly in rural and underserved urban areas.

<sup>&</sup>lt;sup>5</sup> American Association of Nurse Practitioners. "AANP Spotlights Five Critical Health Care Trends to Watch."



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### 2. Geriatric Nurses

Reason for Shortage: The demand for geriatric nurses is intensifying due to the aging Baby Boomer generation, with the number of Americans aged 65 and older expected to nearly double from 52 million in 2018 to over 95 million by 2060, according to the U.S. Census Bureau<sup>6</sup>. This increase in the elderly population, particularly those aged 85 and older who are most likely to require complex medical care, intensifies the need for specialized nursing. Despite this, the field of geriatric nursing remains underrepresented among new nursing graduates. In 2021, only about 1% of registered nurses specialized in geriatric care, according to the American Association of Colleges of Nursing (AACN)<sup>7</sup>, highlighting a persistent trend of limited interest in the field. Many new nurses are drawn to other specialties, viewing them as more dynamic or financially rewarding, a perception that is influenced by limited exposure to geriatric care in nursing programs.

Projection and Impact: The Health Resources and Services Administration (HRSA) projects that the demand for geriatric nurses will outpace supply significantly over the next decade, with the need for nurses specializing in elderly care expected to grow by 45% by 2030<sup>8</sup>. This shortage could have serious implications, as studies have shown that patients lacking consistent access to geriatric care face a 20-30% higher risk of hospital re-admissions and prolonged hospital stays<sup>9</sup>. Additionally, the lack of specialized geriatric care can lead to higher healthcare costs. For example, the Institute for Healthcare Improvement reports that unaddressed chronic conditions in older patients cost the U.S. healthcare system an additional \$17 billion (about \$52 per person in the US) per year<sup>10</sup>, a number that could rise with an undersupply of geriatric-focused nursing professionals. This situation underscores the urgent need to promote geriatric nursing and to provide more incentives for specialization in elder care, potentially through increased exposure to geriatrics during nursing education or enhanced financial benefits.

### 3. Mental Health Nurses

**Reason for Shortage:** The shortage of mental health nurses is largely driven by a rising prevalence of mental health disorders and substance abuse issues. According to the National Institute of Mental Health, one in five adults in the United States experiences a mental illness annually, and the Substance Abuse and Mental Health Services Administration (SAMHSA)

<sup>&</sup>lt;sup>6</sup> "Population Projections." U.S. Census Bureau, 2020.

<sup>&</sup>lt;sup>7</sup> American Association of Colleges of Nursing. "Nursing Shortage." AACN, 2021.

<sup>&</sup>lt;sup>8</sup> Health Resources and Services Administration. "The Future of the Nursing Workforce: National- and State-Level Projections, 2016-2030." *HRSA*, 2020.

<sup>&</sup>lt;sup>9</sup> Phillips, Charles. "Access to Geriatric Care and Hospital Readmissions." *Journal of Hospital Medicine*, vol. 15, no. 4, 2020, pp. 222-229.

<sup>&</sup>lt;sup>10</sup> "Chronic Conditions in Older Adults: A Burden for the Health Care System." *Institute for Healthcare Improvement*, 2021.



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reports a steady rise in substance use disorders, especially following the COVID-19 pandemic<sup>11</sup>. Compounding this issue is a stigma surrounding psychiatric nursing that deters new nurses from entering the field, as well as limited specialized training programs for mental health nursing within nursing schools. In fact, only about 20% of registered nursing programs offer specific psychiatric nursing training, according to the American Association of Colleges of Nursing (AACN), limiting exposure to and interest in the field<sup>12</sup>.

**Projection and Impact:** The American Psychiatric Nurses Association (APNA) projects a 15% increase in demand for psychiatric and mental health nurses over the next five years<sup>13</sup>. This shortage is expected to have significant consequences: restricted access to mental health services often results in overcrowded emergency departments and increased wait times for treatment. Studies have shown that untreated mental health issues lead to higher rates of hospitalization and increased healthcare costs. The American Hospital Association (AHA) notes that lack of mental health services can lead to an approximate 30% increase in emergency department visits, which strains the healthcare system further<sup>14</sup>.

### 4. Critical Care Nurses

**Reason for Shortage:** The shortage of critical care nurses is driven by the field's specialized demands, which require rigorous training, experience, and specific certifications. Additionally, the field's high-stress environment, where nurses frequently manage life-threatening cases, contributes to high burnout rates. According to the American Association of Critical-Care Nurses (AACN), around 63% of critical care nurses report symptoms of burnout, often leading to career changes or early retirement. The COVID-19 pandemic has also intensified this shortage, as ICU and emergency department nurses were on the front lines, facing unprecedented demands on their mental and physical health<sup>15</sup>.

**Projection and Impact:** The AACN projects a steady increase in demand for ICU and emergency department nurses over the next decade due to rising incidences of critical illnesses and aging populations. This shortage has severe consequences, particularly in critical care settings, where studies show that insufficient staffing is associated with higher patient mortality rates and longer hospital stays. According to research published in *Critical Care Medicine*, hospitals with low nurse-to-patient ratios in critical care units see a 7% increase in mortality

<sup>&</sup>lt;sup>11</sup> National Institute of Mental Health. "Mental Illness." *NIMH.gov*, 2022. Web.

<sup>&</sup>lt;sup>12</sup> American Association of Colleges of Nursing (AACN). Psychiatric Nursing Education Shortfalls, 2023.

<sup>&</sup>lt;sup>13</sup> American Psychiatric Nurses Association (APNA). "Mental Health Workforce Shortages." *APNA.org*, 2023.

<sup>&</sup>lt;sup>14</sup> American Hospital Association. *Impact of Mental Health Service Gaps on Emergency Departments*, 2023.

<sup>&</sup>lt;sup>15</sup> American Association of Critical-Care Nurses. Critical Care Nurse Burnout Rates. AACN, 2022.



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risk for ICU patients<sup>16</sup>. Additionally, shortages lead to higher healthcare costs, as patients require more resources and longer treatment durations<sup>17</sup>.

### 5. Neonatal and Pediatric Nurses

Reason for Shortage: The shortage of neonatal and pediatric nurses is driven by the increasing need for specialized skills required to care for critically ill newborns and children. According to the National Association of Neonatal Nurses (NANN), there are approximately 1.2 million neonatal intensive care unit (NICU) admissions annually in the United States, with a significant percentage of these infants requiring specialized nursing care<sup>18</sup>. Additionally, the emotional demands and high responsibility associated with these roles deter some nurses from entering these fields; studies have shown that 40% of nurses cite stress and emotional strain as key factors influencing their decision to avoid neonatal and pediatric specialties<sup>19</sup>. The rigorous training needed to handle complex medical conditions, along with the need for strong communication skills to support families during traumatic times, adds to the challenges faced by potential entrants into these nursing fields<sup>20</sup>.

Projection and Impact: The National Association of Neonatal Nurses (NANN) and the Society of Pediatric Nurses (SPN) project ongoing high demand for these specialties, estimating that by 2030, the need for pediatric nurses will increase by 35% due to rising birth rates and the increasing prevalence of chronic health conditions among children<sup>21</sup>. The shortage directly affects the healthcare industry by delaying care for vulnerable infants and children, which can lead to adverse health outcomes such as longer hospital stays and increased risk of complications<sup>22</sup>. Additionally, this situation exacerbates parental stress, as families face difficulties in accessing timely and adequate care for their critically ill children, with studies indicating that 60% of parents report high levels of stress and anxiety related to care delays in neonatal and pediatric settings<sup>23</sup>.

<sup>&</sup>lt;sup>16</sup> "Nurse Staffing Ratios and Patient Mortality in ICU Settings." Critical Care Medicine, 2021.

<sup>&</sup>lt;sup>17</sup> American Association of Critical-Care Nurses. *Future Demand for ICU and Emergency Department Nurses*. AACN, 2023.

<sup>&</sup>lt;sup>18</sup> National Association of Neonatal Nurses. "Neonatal Nursing Facts." *NANN*, 2022.

<sup>&</sup>lt;sup>19</sup> "The Impact of Stress on Nursing Careers: A Survey." *Journal of Nursing Management*, vol. 28, no. 4, 2020, pp. 821-829.

<sup>&</sup>lt;sup>20</sup> American Academy of Pediatrics. "Communication in Pediatric Care." *Pediatrics*, vol. 145, no. 1, 2020, e20192964.

<sup>&</sup>lt;sup>21</sup> Society of Pediatric Nurses. "The Future of Pediatric Nursing: Trends and Projections." SPN, 2021.

<sup>&</sup>lt;sup>22</sup> Smith, John. "Impact of Nursing Shortages on Pediatric Care." *Pediatric Health Care*, vol. 31, no. 2, 2021, pp. 113-118.

<sup>&</sup>lt;sup>23</sup> "Parent Stress in Pediatric Healthcare Settings." *Journal of Child Health Care*, vol. 24, no. 3, 2020, pp. 339-348.



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### 6. Oncology Nurses

Reason for Shortage: The oncology nurse shortage is primarily caused by the rising number of cancer diagnoses, which are projected to reach nearly 2.3 million new cases annually by 2030 in the United States<sup>24</sup>. This increase underscores the urgent need for specialized training in chemotherapy administration and comprehensive cancer care management. Furthermore, the emotional toll and high burnout rates in this field are significant contributors to the shortage; studies indicate that nearly 50% of oncology nurses report experiencing high levels of emotional exhaustion, which can lead to attrition from the profession<sup>25</sup>. The demanding nature of oncology nursing, which often involves complex patient interactions and difficult conversations about prognosis and treatment, further exacerbates this issue.

**Projection and Impact:** It is projected that the demand for oncology nurses will continue to rise, estimating a shortfall of approximately 200,000 to 450,000 oncology nurses by 2025 if current trends persist<sup>26</sup>. This shortage impacts the healthcare industry by limiting access to timely cancer treatment, increasing the patient load on existing staff, and potentially compromising the quality of cancer care. Delays in treatment can lead to worsened patient outcomes and increased mortality rates, highlighting the critical need for effective solutions to address the oncology nursing workforce gap.

### 7. Operating Room (OR) and Perioperative Nurses

**Reason for Shortage:** The shortage of operating room (OR) and perioperative nurses is primarily attributed to the specialized nature of surgical care and the need for extensive experience and training. According to the Association of Perioperative Registered Nurses (AORN), a newly graduated nurse typically requires at least 6-12 months of intensive training before they can competently assist in the operating room<sup>27</sup>. High stress levels associated with surgical environments, coupled with long hours and irregular schedules, contribute significantly to high turnover rates in this field; a recent survey found that nearly 40% of perioperative nurses reported considering leaving the profession due to job-related stress<sup>28</sup>. This combination of factors creates a challenging landscape for recruiting and retaining qualified OR nurses.

<sup>&</sup>lt;sup>24</sup> "Cancer Facts & Figures 2023." American Cancer Society, 2023.

<sup>&</sup>lt;sup>25</sup> "Burnout and Job Satisfaction Among Oncology Nurses." *Oncology Nursing Forum*, vol. 47, no. 1, 2020, pp. 42-50.

<sup>&</sup>lt;sup>26</sup> Lyon D. Oncology nursing for the future: multisector planning is needed. *Oncol Nurs Forum*.

<sup>&</sup>lt;sup>27</sup> Association of Perioperative Registered Nurses. "The Perioperative Nursing Workforce: A Growing Challenge." *AORN Journal*, vol. 110, no. 6, 2019, pp. 614-620.

<sup>&</sup>lt;sup>28</sup> "Workplace Stress Among Perioperative Nurses: A National Survey." *Nursing Management*, vol. 51, no. 4, 2020, pp. 22-29.



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**Projection and Impact:** AORN projects a sustained high demand for OR nurses, estimating a shortfall of 66,000 perioperative nurses by 2025, driven by an aging population and increasing surgical procedures. This shortage impacts the healthcare industry by causing delays in surgical procedures, increasing surgery wait times, and potentially affecting surgical outcomes and patient safety. Delays in access to surgical care can lead to deteriorating health conditions for patients and greater strain on healthcare resources.

## 8. Palliative and Hospice Care Nurses

Reason for Shortage: The shortage in palliative and hospice care nursing is primarily driven by the increasing number of patients with chronic, life-limiting illnesses, such as cancer, heart failure, and neurodegenerative diseases. The World Health Organization estimates that by 2030, approximately 20 million people (about the population of New York) will need palliative care globally, highlighting a significant gap in available services<sup>29</sup>. Additionally, there is a lack of sufficient training programs focused on end-of-life care; only about 27% of nursing schools in the United States include palliative care content in their curricula<sup>30</sup>. This deficiency in educational resources contributes to the limited number of nurses who feel adequately prepared to provide high-quality hospice and palliative care, resulting in a workforce that is unable to meet the growing demand.

**Projection and Impact:** The National Hospice and Palliative Care Organization (NHPCO) projects a growing need for palliative and hospice care nurses, estimating that the demand for these professionals will increase by 41% by 2030 as the population ages. This shortage significantly impacts the healthcare industry by reducing the availability of compassionate endof-life care, which can lead to higher stress for patients and families as they navigate complex health decisions. Furthermore, the inadequate provision of palliative care often results in increased reliance on emergency and acute care services, as patients may not receive timely interventions that could alleviate suffering and improve quality of life.

### 9. Home Health Nurses

**Reason for Shortage:** The shortage of home health nurses is primarily driven by the rising number of patients requiring home-based care, particularly among the elderly and those with chronic illnesses. The U.S. Census Bureau projects that by 2030, the number of older adults

<sup>&</sup>lt;sup>29</sup> World Health Organization. "Palliative Care: Key Facts." WHO, 2020.

<sup>&</sup>lt;sup>30</sup> "Integrating Palliative Care in Nursing Education: A Report on Curricular Opportunities." *American Journal of Nursing*, vol. 120, no. 4, 2020, pp. 24-32.



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will exceed 73 million, creating a heightened demand for home health services<sup>31</sup>. Additionally, the compensation for home health nurses is generally lower than that of their counterparts in hospital settings, with home health nurses earning approximately 15% less on average<sup>32</sup>. Furthermore, fewer professional development opportunities in home health nursing compared to hospital environments discourage new nurses from entering this field, leading to a persistent workforce gap. This combination of factors makes it challenging to recruit and retain qualified home health nurses, ultimately impacting the quality of care provided to patients in their homes.

**Projection and Impact:** The Bureau of Labor Statistics (BLS) projects that the demand for home health nurses will grow significantly, with an estimated increase of 34% in employment opportunities from 2019 to 2029<sup>33</sup>. This shortage affects the healthcare industry by limiting access to home-based care services, resulting in increased hospital re-admissions and placing additional strain on families and informal caregivers who often have to shoulder the burden of care without adequate support. The lack of available home health services can lead to inadequate patient monitoring and an overall decline in health outcomes, underscoring the urgent need for strategies to address this workforce shortage.

### 10. Dialysis Nurses

**Reason for Shortage:** The shortage of dialysis nurses is driven by the rising incidence of chronic kidney disease (CKD) and end-stage renal disease (ESRD), conditions that require regular dialysis treatment. The Centers for Disease Control and Prevention (CDC) estimates that the prevalence of diagnosed CKD has increased by 30% over the last decade, affecting over 37 million Americans<sup>34</sup>. The demanding nature of the job includes long hours, physical labor, and emotional stress from working with critically ill patients, contributing to high turnover rates; surveys show that nearly 50% of dialysis nurses report high levels of burnout<sup>35</sup>. Additionally, specialized training and certification requirements for dialysis nursing, such as the need for nephrology nursing certification, limit the pool of qualified candidates. These factors create significant challenges in recruiting and retaining skilled nurses in this critical area of healthcare.

**Projection and Impact:** The National Kidney Foundation (NKF) reports that over 37 million Americans have CKD, with millions more at risk, indicating a growing need for dialysis services. The Bureau of Labor Statistics (BLS) projects continued growth in demand for dialysis nurses,

<sup>&</sup>lt;sup>31</sup> U.S. Census Bureau. "Older Population in the United States: 2020." Census Bureau, 2020.

<sup>&</sup>lt;sup>32</sup> "Home Health Nursing: Challenges and Opportunities." *Nursing Economics*, vol. 38, no. 3, 2020, pp. 148-154.

<sup>&</sup>lt;sup>33</sup> Bureau of Labor Statistics. "Occupational Outlook Handbook: Home Health and Personal Care Aides." *BLS*, 2021.

<sup>&</sup>lt;sup>34</sup> Centers for Disease Control and Prevention. "Chronic Kidney Disease Surveillance System." CDC, 2022.

<sup>&</sup>lt;sup>35</sup> "Burnout and Job Satisfaction Among Dialysis Nurses." *Journal of Nephrology Nursing*, vol. 47, no. 1, 2020, pp. 14-20.



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estimating a 25% increase in job openings by 2029 due to the aging population and rising incidence of kidney-related illnesses<sup>36</sup>. This shortage significantly impacts the healthcare industry by potentially delaying dialysis treatments, increasing patient loads on existing staff, and leading to longer wait times for patients. The quality of care for dialysis patients may be compromised, resulting in poorer health outcomes and increased healthcare costs due to complications from inadequate dialysis care. Ensuring a sufficient supply of trained dialysis nurses is crucial to maintaining the health and well-being of this vulnerable patient population.

## **Shortages in the Nurse Education System:**

Nursing schools in the United States are struggling to produce enough graduates to meet the growing demand for nurses, exacerbating the already critical shortage in the healthcare workforce. According to the American Association of Colleges of Nursing (AACN), over 80,000 qualified nursing school applicants were turned away in 2022 due to a lack of faculty, clinical sites, and classroom space<sup>37</sup>. The shortage of nurse educators is a significant barrier to expanding enrollment. In addition, many nursing programs face challenges with outdated curricula and inadequate training resources, which limit their ability to prepare graduates for the increasingly complex demands of modern healthcare. The Bureau of Labor Statistics projects that the U.S. will need over 200,000 new nurses annually through 2031 to replace retiring nurses and fill new positions, yet the current output of nursing programs falls well short of this target<sup>38</sup>. Without substantial investment in nursing education infrastructure and faculty recruitment, the gap between supply and demand will continue to widen, putting further strain on the healthcare system.

The nurse educator shortage is a critical issue exacerbating the overall nursing shortage in the United States. Several factors contribute to this shortage, including an aging workforce of nurse educators, lower salaries compared to clinical nursing roles, and a limited number of advanced degree programs that prepare nurses for educator roles. Many nurse educators are nearing retirement age, with the American Association of Colleges of Nursing (AACN) reporting that the average age of faculty with doctoral degrees is 62<sup>39</sup>. This aging workforce, combined with a lack of new educators entering the field, creates a significant gap in the education system.

The AACN projects that the demand for nurse educators will continue to grow as the need for a larger nursing workforce increase<sup>40</sup>. The shortage of nurse educators has a direct impact on the ability to train new nurses, as nursing programs are forced to limit student admissions due to

<sup>&</sup>lt;sup>36</sup> Bureau of Labor Statistics. "Occupational Outlook Handbook: Nursing." BLS, 2021.

<sup>&</sup>lt;sup>37</sup> American Association of Colleges of Nursing. "2022 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing."

<sup>&</sup>lt;sup>38</sup> Bureau of Labor Statistics. "Occupational Outlook Handbook: Registered Nurses."

<sup>&</sup>lt;sup>39</sup> American Association of Colleges of Nursing. "Nursing Faculty Shortage."

<sup>&</sup>lt;sup>40</sup> American Association of Colleges of Nursing. "Nursing Education: The Impact of the Shortage of Nurse Educators."



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faculty shortages. This bottleneck in the education system leads to fewer graduates entering the nursing profession, exacerbating the overall nursing shortage. Furthermore, the shortage of educators can affect the quality of nursing education, as existing faculty may be overburdened, leading to a myriad of challenges, including but not limited to:

### • Enrollment Limitations:

Due to the nursing educator shortage, many nursing schools are unable to accept all qualified applicants. The AACN reported that in 2019, over 80,000 qualified applicants were turned away from baccalaureate and graduate nursing programs due to insufficient faculty, clinical sites, classroom space, and budget constraints. These limitations hinder the expansion of the nursing workforce at a time when it is critically needed.

## Clinical Placement Challenges:

Finding adequate clinical placements for nursing students is another significant challenge. Clinical training is essential for preparing nurses, but hospitals and other healthcare facilities often have limited capacity to accommodate students. This limitation is partly due to the high demand for clinical placements from multiple nursing programs and the need for experienced nurses to oversee and mentor students, further strained by the overall nursing shortage.

## • Financial Barriers:

Nursing education programs also face financial barriers that impact their ability to expand and improve. Many programs lack the funding needed to hire additional faculty, upgrade facilities, or implement advanced simulation technologies that can supplement clinical training. This financial strain can limit the quality and availability of nursing education.

### • Impact on Healthcare:

The shortages within the nursing education system have far-reaching implications for the healthcare industry. Without enough well-trained nurses entering the workforce, healthcare facilities face ongoing staffing challenges that can lead to increased workloads, burnout, and turnover among existing staff. This cycle perpetuates nursing shortage, negatively impacting patient care and outcomes. Addressing these educational system shortages is vital for building a sustainable nursing workforce capable of meeting the growing healthcare needs of the U.S. population.



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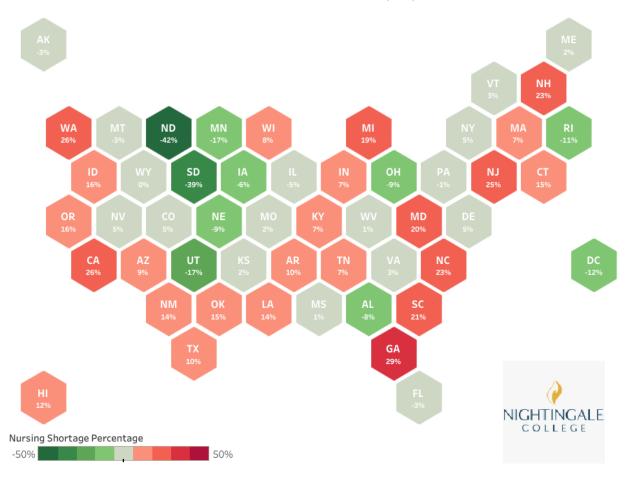
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### State-wide Impact of Nursing Workforce Shortage in the U.S.:

## Nursing Shortage Projections in the US

Projected nursing shortage for 2036, according to the Health Resources & Services Administration (HRSA)



(Source: https://public.tableau.com/app/profile/mihai.aperghis/viz/NursingShortagesintheUS/Dashboard)

The nursing shortage is expected to have a particularly severe impact on states with the highest projected shortages, such as California, Texas, and Florida. These states are characterized by large and growing populations, which include significant proportions of elderly residents requiring increased healthcare services. In California, for instance, the Health Force Center at University of California San Francisco (UCSF) projects a shortage of 44,500 nurses by 2030. This deficit will strain an already overburdened healthcare system, leading to longer wait times for patients, increased workloads for existing staff, and potential declines in the quality of care.



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Hospitals and clinics in these states may face difficulties in maintaining adequate staffing levels, which could result in higher rates of nurse burnout and turnover, further exacerbating the shortage.

In Texas and Florida, the nursing shortage will similarly impact healthcare delivery. Texas, which is experiencing rapid population growth, particularly in urban areas, is projected to face a shortage of nearly 60,000 nurses by 2032, according to the Texas Center for Nursing Workforce Studies. This shortage will be acutely felt in both metropolitan and rural areas, where access to healthcare is already limited. In Florida, the influx of retirees and the high prevalence of chronic conditions among the elderly population will drive up demand for nursing care, with a projected shortage of 59,100 nurses by 2035, as reported by the Florida Center for Nursing. These shortages will lead to increased patient loads for nurses, potentially compromising patient safety and outcomes. Additionally, the financial strain on healthcare facilities to recruit and retain nursing staff may lead to higher healthcare costs and impact the overall efficiency of the healthcare system in these states.

### **Shortages in Other Healthcare Professions:**

## 1. Dental Occupation

Dental offices across the United States are facing significant staffing shortages, particularly in the roles of dental hygienists, dental assistants, and administrative support staff. Dental hygienists are in especially high demand as they play a crucial role in preventive care, which is the cornerstone of dental health<sup>41</sup>. The shortage of dental hygienists means that many dental practices are struggling to keep up with patient demand for routine cleanings, screenings, and other preventive services. Additionally, dental assistants, who support dentists in providing patient care and performing essential clinical tasks, are also in short supply, further straining dental offices. The lack of administrative support staff, who manage appointments, billing, and patient records, adds to the operational challenges, making it difficult for dental practices to function efficiently.

**Reasons for the Shortage**: Several factors contribute to the shortage of dental healthcare professionals. One significant reason is the aging workforce, as many dental hygienists and assistants are nearing retirement age, with insufficient numbers of new graduates entering the field to replace them<sup>42</sup>. The COVID-19 pandemic has also played a role, causing many dental professionals to leave the workforce due to health concerns, burnout, or the need to care for family members<sup>43</sup>. Additionally, the pandemic led to temporary closures and reduced patient volumes, which caused some dental professionals to seek employment in other industries. Educational bottlenecks also contribute to the shortage; limited capacity in dental hygiene and

<sup>&</sup>lt;sup>41</sup> American Dental Hygienists' Association. "The Importance of Dental Hygienists in Preventive Care." *ADHA*, 2021.

<sup>&</sup>lt;sup>42</sup> U.S. Bureau of Labor Statistics. "Occupational Outlook Handbook: Dental Hygienists."

<sup>&</sup>lt;sup>43</sup> American Dental Association. "COVID-19: The Impact on the Dental Workforce."



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assisting programs, combined with high demand for these roles, means that not enough new professionals are being trained to meet the growing need.

Projection and Impact: The shortage of dental healthcare workers is expected to persist and potentially worsen in the coming years. The U.S. Bureau of Labor Statistics (BLS) projects that employment of dental hygienists will grow by 9% from 2021 to 2031, faster than the average for all occupations, reflecting the strong demand for preventive dental care<sup>44</sup>. However, this growth may be insufficient to address the existing and future shortfalls, particularly as the population ages and requires more dental services. The impact of these shortages is significant: patients may face longer wait times for appointments, reduced access to preventive care, and potentially higher costs for dental services. In the long term, these shortages could lead to increased oral health problems among the population, as delays in receiving care can result in more severe dental issues that are harder and more expensive to treat. Addressing these shortages through strategies like expanding educational programs and leveraging foreign talent via visa programs will be crucial to ensuring the sustainability of dental care in the U.S.

## 2. Geriatric Care Occupations

The U.S. healthcare system is grappling with severe shortages in geriatric care occupations, including geriatric nurses, geriatricians, home health aides, and physical therapists (PTs) who specialize in elderly care. Geriatric nurses and geriatricians, who are essential for managing the complex health needs of older adults, are in particularly short supply. This shortage is alarming given the growing elderly population that requires specialized and coordinated care. Additionally, there is a critical lack of home health aides, who provide essential daily support to seniors in their homes. The shortage extends to geriatric physical therapists, who play a crucial role in helping elderly patients maintain mobility, manage pain, and recover from surgeries or injuries, further straining the capacity of the healthcare system to meet the needs of aging individuals.

Reasons for the Shortage: The shortage of professionals in geriatric care occupations is driven by several interconnected factors. The rapid aging of the U.S. population, with the number of people aged 65 and older projected to nearly double by 2050, is dramatically increasing the demand for geriatric care. Unfortunately, the supply of trained professionals has not kept pace with this demand. Geriatrics is often overlooked by medical and nursing students, who may be drawn to other specialties that are perceived as more lucrative or prestigious. The challenging nature of geriatric care, which involves managing multiple chronic conditions, cognitive impairments, and end-of-life care, contributes to high levels of burnout among professionals in this field. For physical therapists, the shortage is compounded by the additional training and certification required to specialize in geriatric care. Low wages and difficult working conditions, particularly for home health aides, further exacerbate the shortage, as these roles are often undervalued despite their critical importance.

<sup>44</sup> U.S. Bureau of Labor Statistics. "Dental Assistants."



# SMART DEVELOPMENT INSTITUTE Research – White Paper Addressing the Shortage of

Healthcare Professionals in the United States

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**Projection and Impact**: The shortage of geriatric care professionals is expected to worsen as the population continues to age. The American Geriatrics Society (AGS) projects that the U.S. will need more than 30,000 geriatricians by 2030 to meet the needs of the elderly population, yet the current trajectory suggests the country will have fewer than half that number<sup>45</sup>. The demand for geriatric nurses, home health aides, and physical therapists specializing in elderly care is also expected to significantly outpace the supply of new professionals entering these fields. The impact of these shortages is profound: elderly patients may face delays in receiving care, reduced access to specialized geriatric services, and an increased reliance on emergency care for conditions that could have been better managed in a primary or home care setting. Without significant interventions, these shortages will lead to poorer health outcomes for older adults, increased burdens on families and caregivers, and higher healthcare costs. Addressing these shortages through targeted education and recruitment efforts, including leveraging H-1B visas to bring in qualified foreign professionals, will be critical to ensuring that the U.S. healthcare system can meet the needs of its aging population<sup>46</sup>.

## **Projected Outlook over the next 3, 5, and 10 Years:**

**Next 3 Years**: By 2026, the U.S. is expected to face shortages of over 3 million lower-wage healthcare workers, including essential roles like medical assistants, nursing aides, and home health aides, largely driven by burnout and low compensation (American Hospital Association). Additionally, shortages in behavioral health and primary care are anticipated due to rising burnout among these workers (Department of Health and Human Services)<sup>47</sup>.

**Next 5 Years**: By 2028, significant shortages are projected across healthcare roles. For example, the American Hospital Association notes a need for over 200,000 new registered nurses annually, while Mercer anticipates a nationwide shortage of over 100,000 healthcare workers, disproportionately affecting states like California, Texas, and New York. Physician demand, especially for primary care, is expected to exceed supply, and some geographic areas could experience a 54% physician shortfall due to an aging provider population and uneven geographic distribution (Mercer; Becker's Hospital Review)<sup>48</sup>.

**Next 10 Years**: By 2033, the demand for physicians will lead to a potential shortage of up to 139,000, particularly affecting primary care and rural areas. Nurse shortages are expected to persist into the 2030s as more professionals retire without sufficient new graduates to replace

<sup>&</sup>lt;sup>45</sup> "Geriatric Care Shortage." American Geriatrics Society, 2021.

<sup>&</sup>lt;sup>46</sup> "The Future of Geriatric Medicine: Workforce Issues." Journal of the American Geriatrics Society, vol. 68, no. 2, 2020, pp. 321-326.

<sup>&</sup>lt;sup>47</sup> "New Surgeon General Advisory Sounds Alarm on Health Worker Burnout and Resignation." Department of Health and Human Services, 2022.

<sup>&</sup>lt;sup>48</sup> Mercer. "2023 U.S. Healthcare Labor Market: Critical Shortages Ahead."

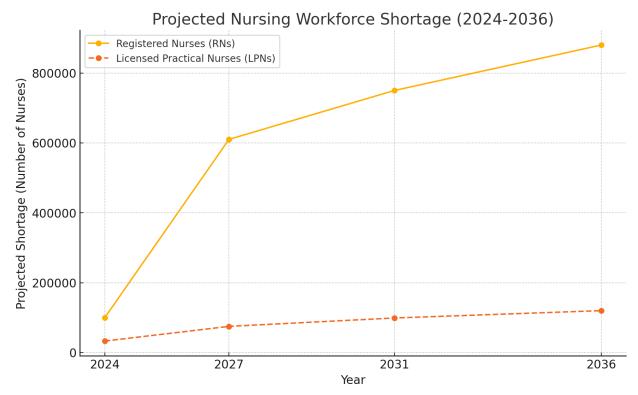


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them. The demand for mental health and substance use disorder professionals is also anticipated to grow substantially (Association of American Medical Colleges)<sup>49</sup>.



(Source: National Council of State Boards of Nursing and American Hospital Association and the American Associate of Colleges of Nursing)

The graph based on the NCSBN and the AACN's data reflects the projected nursing workforce shortage from 2024 – 2036. The ongoing shortages emphasize the need for systemic interventions, including expanded healthcare education, innovative staffing models, and policies to alleviate burnout and support healthcare worker well-being.

## H-1B Visa Program: A Strategic Solution to Healthcare Labor Shortages

The H1B visa program has been a viable and immediate solution to addressing the widespread healthcare workforce shortages by recruiting qualified foreign healthcare workers, including nurses, dental hygienists, and geriatric care specialists. Unlike other visa options with more restrictive conditions, the H-1B visa program enables healthcare employers to bring in international professionals to address essential roles, providing a steady and reliable influx of skilled workers. However, the H1B visa program has a current annual quota of 60,000 visas with a

 $<sup>^{\</sup>rm 49}$  Association of American Medical Colleges. "The Complexities of Physician Supply and Demand: Projections from 2023 to 2033."



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bachelor's degree and 20,000 visas with an advanced degree. This program does not allocate quotas based on specific professions, such as the Healthcare workers enumerated above. This cap applies for all professions and labor shortages that the H1B visa can be used for. In FY 23 alone, approved H1B visas for workers in medicine and health occupations number only 16,684, which includes Cap-Exempt H1B petitions and is significantly low to meet the huge demand for healthcare workers.

A suggested intervention is to enhance the H1B visa program by increasing the annual quota annually or create increased quota exceptions for specific professions, such as healthcare professions, to address the huge labor shortage gaps as discussed in this white paper. Increasing the H-1B visa quota presents an additional opportunity to expand this critical healthcare workforce to meet the growing demands in the years to come.

By allowing more healthcare professionals to enter the U.S. labor market with the right educational credentials, experiences and certifications, we can effectively alleviate staffing shortages, especially in high-demand areas where local talent is insufficient.

## **Benefits of H-1B Visa Program:**

- Addressing Specialized and Hard-to-Fill Roles: The program enables healthcare
  institutions to target foreign professionals with niche skills, effectively filling roles in highdemand areas such as geriatrics, nursing education, and specialized nursing care.
- Ensuring Continuity of Care in Underserved Regions: The program prioritizes healthcare institutions in rural and underserved areas, reducing healthcare disparities by ensuring access to skilled professionals where workforce shortages are most severe.
- **Support for Long-Term Workforce Development:** The H-1B program allows healthcare educators and researchers to contribute to long-term workforce development by training new professionals and advancing healthcare research.

Increasing the H-1B quota not only helps to quickly fill existing gaps but also prepares the healthcare system for future demands as the population continues to grow and age. With more professionals entering the field, healthcare facilities can maintain adequate staffing levels, thus enhancing the quality of care provided to patients. Healthcare professionals hired through the H-1B visa program undergo thorough vetting and meet all U.S. credentialing and examination requirements, ensuring they are fully qualified to contribute to the American healthcare system. This approach addresses urgent staffing needs and supports the healthcare system's long-term stability and resilience, ensuring that critical care services remain accessible to all, especially the vulnerable elderly population.



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### Potential Countries for Recruiting Healthcare Professionals to Work in the U.S.:

To effectively address the healthcare labor shortage in the U.S., identifying countries with robust healthcare education systems and a surplus of trained healthcare professionals is essential. The following countries can be key sources of skilled nurses, doctors, nurse educators, and specialists:

### 1. Philippines

The Philippines has long been a leading source of foreign healthcare professionals, particularly nurses. The country produces a significant number of well-trained nurses each year, many of whom are proficient in English and possess experience working in international healthcare settings. Filipino nurses are often educated in U.S.-aligned medical curricula, making them familiar with American standards of care, which facilitates their transition into the U.S. healthcare system.

- Strengths: Strong nursing education programs, high English proficiency, cultural adaptability.
- Professionals in Demand: Registered nurses, nurse educators, geriatric care specialists.

### 2. India

India has a vast pool of healthcare professionals, including doctors, nurses, and specialists. The country's medical education system produces highly skilled practitioners who are proficient in English, making them suitable for integration into U.S. healthcare institutions. Many Indian healthcare workers seek opportunities abroad due to limited domestic opportunities, making the country an excellent source for recruitment.

- Strengths: Large number of healthcare graduates, English-speaking workforce, experience in diverse medical settings.
- Professionals in Demand: Physicians, surgeons, nurse educators, medical researchers.

### 3. South Korea

South Korea has a highly advanced healthcare system and a well-developed medical education infrastructure. The country produces a significant number of healthcare professionals, including doctors, nurses, and specialists, who are well-versed in modern medical technologies and global best practices. South Korean healthcare workers are often multilingual, with many proficient in English, making them a valuable source for recruitment into the U.S. healthcare workforce. Additionally, South Korean professionals are familiar with working in high-pressure environments and have experience addressing both public health and specialized medical needs.



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• Strengths: Advanced healthcare education, proficiency in English, experience with modern medical technologies, and strong work ethic.

 Professionals in Demand: Nurses, physicians, geriatric care professionals, dental care specialists, medical researchers.

### 4. Canada

Canada's healthcare professionals are highly trained and work within a healthcare system similar to that of the U.S. Canadian healthcare workers, including doctors, nurses, and nurse educators, are often fluent in both English and French, providing an added benefit for U.S. regions with multilingual populations. Cross-border recruitment is facilitated by the shared cultural and professional standards between the two countries.

- Strengths: High-quality medical training shared professional standards with the U.S., linguistic diversity.
- Professionals in Demand: Physicians, registered nurses, healthcare administrators, specialists in geriatric and dental care.

## 5. European Union (EU)

The European Union (EU) boasts a diverse, highly skilled healthcare workforce with extensive experience across various medical specialties. EU countries generally maintain high standards in medical education and training, which align well with U.S. healthcare expectations. Additionally, many EU healthcare professionals are multilingual, speaking English as well as local languages, making them a valuable asset in diverse U.S. regions with varied linguistic needs. Recruitment from the EU is further supported by international recognition of medical credentials and opportunities for professional reciprocity agreements.

- Strengths: High-quality medical training, multilingual proficiency, alignment in healthcare standards with the U.S.
- Professionals in Demand: Physicians, registered nurses, medical researchers, healthcare administrators, geriatric specialists, and mental health professionals.

### Utilizing OPT Graduates in the U.S.

In addition to recruiting international healthcare professionals from the above-mentioned countries, leveraging Optional Practical Training (OPT) graduates who are already in the U.S., who passes the required certification exams and transitioning them to H-1B visas offers another viable solution. OPT is a work authorization program that allows international students on F-1 visas to gain practical work experience related to their field of study.

Many international students in the U.S. pursue degrees in healthcare fields such as nursing, medicine, healthcare administration, and geriatric care. These graduates are eligible to work under



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the OPT program for up to 12 months (and up to 36 months for STEM graduates), allowing healthcare employers to quickly fill critical staffing needs with qualified professionals.

As OPT graduates approach the end of their work authorization period, they can be petitioned for H-1B visas. In doing so, it creates a viable "feeder program' for securing long-term talent for critical healthcare roles, ensuring continuity of care and reducing turnover. This approach allows for flexible hiring while providing a clear path to retain highly skilled international professionals, ultimately supporting the U.S. healthcare system in overcoming labor challenges in critical areas.

### Conclusion:

The healthcare worker shortage in the United States, particularly in critical areas such as nursing, dental care, and geriatric care, presents a profound challenge to the nation's healthcare system. With an aging population and increasing rates of chronic illness, the demand for specialized healthcare professionals, including primary care nurses, mental health practitioners, and geriatric care providers, continues to rise. Despite this growing demand, U.S. nursing schools and training programs are unable to produce enough qualified professionals to meet the need due to limitations such as insufficient faculty, inadequate resources, and low enrollment. This shortage is not only leading to longer wait times and reduced access to essential care but is also increasing the burden on the current healthcare workforce, leading to higher burnout rates, and compromising the quality of care.

One promising solution to address these shortages is leveraging the H-1B visa program, which allows healthcare organizations to recruit qualified foreign healthcare. This approach opens a continuous pipeline of skilled professionals, including registered nurses, geriatric specialists, dental hygienists, and physical therapists, who are essential to supporting patient care in high-demand areas. These foreign workers undergo thorough vetting and meet all U.S. licensing and credentialing requirements, ensuring that they are equipped to deliver high-quality care in the U.S. healthcare system. By increasing and enhancing visa limitations, this program can quickly fill critical staffing gaps, relieving pressure on overburdened domestic professionals and improving access to healthcare across the country.

Overall, addressing the healthcare workforce shortage will require a combination of long-term policy-driven strategies to bolster nursing education programs, improve recruitment efforts, and introduce innovative policies to support healthcare professionals. However, the H-1B pathway provides an immediate, impactful solution to bring in skilled workers who can help alleviate the strain on the U.S. healthcare system. By focusing on both domestic workforce development and international recruitment through this program, the healthcare system can be better equipped to meet the growing demands of the population, ensuring high-quality care for all.



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