The Cost of Agency Nursing: A Conceptual Analysis and Potential Path Forward

by

# Laura Elizabeth Scales

Bachelor of Science in Biology, Susquehanna University, 2017

Submitted to the Graduate Faculty of the School of Public Health in partial fulfillment of the requirements for the degree of Master of Health Administration

University of Pittsburgh

2023

#### UNIVERSITY OF PITTSBURGH

# SCHOOL OF PUBLIC HEALTH

This essay is submitted

by

# Laura Elizabeth Scales

and approved by

March 29, 2023

and approved by

Coleman Drake, PhD, School of Public Health, Health Policy and Management

Andrew Dierkes, PhD, School of Nursing, Acute and Tertiary Care

Copyright © by Laura Elizabeth Scales

2023

#### The Cost of Agency Nursing: A Conceptual Analysis and Potential Path Forward

Laura Elizabeth Scales, MHA

University of Pittsburgh, 2023

#### Abstract

The COVID-19 pandemic accelerated nursing labor trends. Nurses facing difficult working conditions and increased demand for their labor retired or joined nursing agencies. Prior to the pandemic, agency nurses were hired by healthcare institutions to fill critical, short-term staffing needs. Agency nurses are now employed for routine, long-term contracts resulting in higher operational costs and reduced profitability. Staff nurses frustrated by low compensation and poor work environments chose agency contracts for higher salaries and increased flexibility. Institutions, with legal obligations to meet safe staffing requirements, have little choice but to hire agency at these high prices. To address this staffing shortfall, the supply of Foreign Educated Nurses (FENs) should be increased. Nursing programs should be incentivized to expand. Nurses need support and proper compensation to become educators in these programs. If these issues are not addressed, healthcare institutions will continue to pay the high costs associated with agency nursing.

# **Table of Contents**

1.0 Introduction	1
1.1 Background	1
1.2 Nurse Staffing Challenges	2
1.3 Introduction to Agency Nursing	4
2.0 Nursing Labor Markets	6
2.1 Characteristics	6
2.2 Argument for Agency Use	7
2.3 Responses to High Prices	12
3.0 Policy Recommendations	15
4.0 Conclusion	18
Bibliography	19

# List of Tables

Table 1 Conceptual Comparison of the Costs and Benefits of Different Nurse Staffing

Approaches ...... 10

# List of Figures

Figure 1 Breakdown of Agency	v Nursing Positions by Specialty	v <b>8</b>
Figure I Dicakuowii of Argene	y nulsing i osicions by specially	y

#### **1.0 Introduction**

## **1.1 Background**

Nursing first formalized as a profession in 300 AD during the Roman Empire when early nurses assisted physicians in state run and religious hospitals.<sup>1</sup> Nursing gained prominence in the 19<sup>th</sup> century due to the need to care for soldiers on the front lines of conflict. Nurses have historically traveled to meet increased staffing needs during disaster and calamity. Modern agency nursing originated in New Orleans, Louisiana in late 1970s in response to annual influx of patients during Mardi Gras. These nurses are employed by a staffing agency that arranges contracts with a facility, typically spanning six weeks to six months, to fill critical, temporary staffing shortfalls. The practice spread over the next decade with agency nurses receiving elevated but overall comparable wages to staff nurses.

Nursing staff provide the majority of direct patient care. They monitor clinical status, administer medications, detect and correct errors in the medical record and clinical practice, identify and communicate changes in condition, and countless other duties.<sup>2</sup> They cannot diagnose medical conditions and diseases but can assign nursing diagnosis to human responses to health problems and life processes.<sup>3</sup>

Within the nursing field there is a major distinction between Registered Nurses (RNs) and Licensed Practical or Vocational Nurses (LPNs). The general path to practicing is the same: earn

<sup>&</sup>lt;sup>1</sup> (Smith, 2023)

<sup>&</sup>lt;sup>2</sup> (Malliaris et al., 2021)

<sup>&</sup>lt;sup>3</sup> (Slyter, 2022)

a degree, pass the NCLEX exam, and obtain state licensure. An LPN, however, has a shorter path to licensure. LPN programs are typically completed in twelve months whereas RN programs take two to four years.<sup>4</sup>

Nurse licensing and scope of practice varies by state. Generally, as part of a multidisciplinary team, the primary duties of an RN are to perform health assessments, accept and administer the orders and treatments as prescribed by providers, counsel patients about their health, and identify changes in patient condition. LPNs, however, have a more restricted scope of practice and must operate under the supervision of an RN. They generally cannot record a patient's time of death, administer IV medications, or assess the mental and physical status of a patient.<sup>5</sup>

#### **1.2 Nurse Staffing Challenges**

An estimated 28 million nurses currently practice worldwide. The global nursing shortage is expected to reach 13 million by 2030 with the largest deficits concentrated in lower-income countries.<sup>6</sup> While healthcare facilities must meet legal staffing requirements, the language of this legislation and guidelines are imprecise and varies by state. Exceptions are found in California and Massachusetts which place explicit limits on nurse-patient ratios.<sup>7</sup> In acute care hospitals, the Centers for Medicare and Medicaid Services (CMS) has no specific patient-nurse ratio. Hospitals are required to ensure adequate numbers of staff are present to provide care as needed.<sup>8</sup> Staffing

<sup>&</sup>lt;sup>4</sup> (Slyter, 2022)

<sup>&</sup>lt;sup>5</sup> Ibid.

 $<sup>^{6}</sup>$  (Buchan et al., 2022)

<sup>&</sup>lt;sup>7</sup> (Davidson, 2022)

<sup>&</sup>lt;sup>8</sup> (Malliaris et al., 2021)

in skilled nursing and short-term rehabilitation facilities (SNFs) is measured by the hours of care provided per patient per day (HPPD). The HPPD is calculated as total care hours, which includes certified nursing assistant (CNA) time. These requirements differ between states and there is no strict requirement for minimum nursing hours, however, an RN must be always present in the facility to provide evaluations and treatments outside scope of an LPN.<sup>9</sup>

The American Nurses Credentialing Center (ANCC) now considers staffing levels when evaluating a hospital for Magnet status. By considering an organization's transformational leadership, structural empowerment, professional practices, innovation, and quality improvement measures, this recognition demonstrates to patients and staff that an organization is focused on nursing excellence and quality care.<sup>10</sup> The inclusion of turnover and retention rates into the Magnet selection and renewal criteria will force hospitals to consider culture rather than supplemental agency staffing. SNFs must also take staffing into account. In 2022, CMS included turnover and retention into the Five Star Program.<sup>11</sup> The star rating received by a facility allows patients and families to compare facilities.

Nurse staffing challenges, prevalent before the pandemic, were exacerbated by COVID-19 stressors. Shortfalls in other departments led to an expansion of nurse roles beyond critical care and into housekeeping, phlebotomy, respiratory therapy, transportation, and more. The United States is expected to face a nurse deficit of at least 275,000 by 2030 with the greatest shortages in California, Alaska, the Midwest and the south.<sup>12</sup> The primary causes for this shortage are a lack of nurse educators, high turnover and burnout, early retirement due to pandemic stress, and job

<sup>9 (</sup>Malliaris et al., 2021)

<sup>&</sup>lt;sup>10</sup> (Gagnon, 2021)

<sup>&</sup>lt;sup>11</sup> (Design for Care Compare Nursing Home Five-Star Quality Rating System: Technical User's Guide, 2022)

<sup>&</sup>lt;sup>12</sup> (Haddad et al., 2022; TrustedHealth, 2019)

dissatisfaction.<sup>13</sup> The perception that nursing does not provide a good work-life balance also prevents those interested from entering the field. Furthermore, the population of the US is aging, which will increase demand for nursing services. Unless systemic changes are made, agency nursing will remain the primary means to fill these gaps.

#### **1.3 Introduction to Agency Nursing**

Nurse movements are now facilitated by Enhanced Nursing Licensure Compacts (ENCL). Established in 2000, these allow nurses to practice in multiple states under a single license without additional application fees and requirements.<sup>14</sup> While not a requirement for agency nurse contracts, the ENLC facilitates and enables nurses to easily move between states without applying for multiple state licenses.

With the outset of the COVID-19 pandemic nurses long frustrated by working conditions and compensation decided to join agencies at higher numbers to obtain higher salaries and flexible and variable working environments. By 2022, the field of agency nursing grew to over 100,000 nurses and a value of \$11.1 billion.<sup>15</sup> Due to increased demand from healthcare organizations left short-staffed by the COVID-19 pandemic, nurse agencies can charge mark-ups on nurse salaries of 32%-65%. This resulted in agency staff as the major contributing factor to an estimated \$24 billion in additional staffing costs paid by healthcare organizations between May, 2020 and July, 2021.<sup>16</sup> At the height of the pandemic, agency nurses could command salaries of \$5,000 to \$10,000

<sup>&</sup>lt;sup>13</sup> (Blouin & Podjasek, 2019)

<sup>&</sup>lt;sup>14</sup> (Oyeleye, 2019)

<sup>&</sup>lt;sup>15</sup> (Lee 2022; Bonn 2018)

<sup>&</sup>lt;sup>16</sup> (Yang & Mason, 2022)

per week depending on specialty, location, and need.<sup>17</sup> More than double the salary for an in-house nurse, this disparity has created a feedback loop as permanent staff left for more lucrative agency positions, which has required facilities to hire additional agency staff to fill the gap. However, many agency nurses describe feeling isolated and experiencing antagonistic relationships with staff nurses with fewer educational opportunities, and a lack of job security.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> (Yang & Mason, 2022)

<sup>&</sup>lt;sup>18</sup> (Simpson & Simpson, 2019)

#### 2.0 Nursing Labor Markets

## 2.1 Characteristics

The COVID-19 pandemic altered the power dynamic in nursing labor markets. Prior to COVID-19, nursing markets tended to be monopsonic.<sup>19</sup> Employer power has steadily increased with consolidation. Healthcare organizations were able to compensate for increased material costs and decreased reimbursement through wage reduction and stagnation. The pandemic led to a surge in demand for nurses and a commensurate increase in wages to meet the demand. There are no adequate substitutes for nurses in the market. Though physicians and nurse practitioners can perform nursing duties, a similar shortage exists for these professionals and they are far costlier to hire and retain.<sup>20</sup> Thus, nursing agencies further increase their ability to command higher compensation rates.<sup>21</sup> With such high demand, communication issues between healthcare organizations can allow nurses to be fired with cause at an institution but quickly obtain employment to another facility unless the offense causes loss of license.

From an organizational perspective, wage elasticity of demand in nursing labor markets is generally inelastic as it is insensitive to changes in the costs associated with salaries and retention. Healthcare organizations must legally maintain safe staffing levels and must pay the increased costs associated with nursing agencies. They cannot quickly and easily pass increased costs onto consumers, in this case patients, because reimbursement rates are contractually set by insurance

<sup>&</sup>lt;sup>19</sup> (Depasquale, 2020)

<sup>&</sup>lt;sup>20</sup> (Howley, 2022)

<sup>&</sup>lt;sup>21</sup> (Gottleib, 2020)

companies and CMS. Facilities with poorer staffing levels and retention rates may produce poorer patient outcomes and satisfaction, lower CMS 5 Star ratings, and may have difficulty attracting new admissions. These further decrease the wage elasticity of demand and improve the bargaining position of nurses. Nurses themselves are sensitive to changes in salary and compensation. Thus, wage elasticity of supply is more elastic.

#### 2.2 Argument for Agency Use

Considering the seemingly high costs of agency nurses, the question is why use them at all instead of increasing compensation for existing staff? Ideal for fulfilling short-term, critical positions, agency staff can be onboarded and trained within three days and put on an assignment while a staff nurse can take three to six months to fully train.<sup>22</sup> This shortened timeframe allows healthcare organizations to immediately fill a staffing shortfall and increase admissions without further diverting staff resources to train a new hire. Facilities face competing pressures between opening beds and safely staffing them. Closed beds result in lost patient revenue and facilities must pay costs for continued building maintenance and utilities.<sup>23</sup> It is also expensive to transition facilities into new functionalities and service lines –potentially millions of dollars to retrain staff, purchase equipment, and advertise new services. A lengthy approval process is also required from local departments of health when eliminating licensed beds. Thus, it is often more economically and operationally feasible to hire supplemental agency staff to maintain licensed beds.

<sup>&</sup>lt;sup>22</sup> (Hornbeck, 2022)

<sup>&</sup>lt;sup>23</sup> (Adams et al., 2010)

Agency nurses serve in positions across the healthcare industry but are concentrated in hospitals (Figure 1). Approximately 10% of patients who are eligible for discharge from a hospital have complex medical needs requiring skilled stays. Legally, if a safe discharge cannot be obtained, the patient must remain in the hospital or leave against medical advice. Poor staffing levels in skilled nursing facilities impact the ability of hospitals to facilitate safe discharges. In 2021, readmissions associated with early and inappropriate hospital discharges that occurred more than 30 days after the index hospitalization after the 30-day point cost Medicaid an estimated \$5 billion with a further \$28 billion spent on associated short-term care stays.<sup>24</sup>

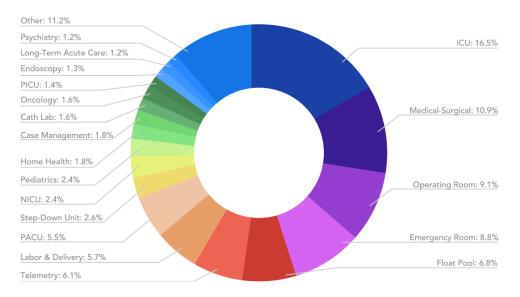


Figure 1 Breakdown of Agency Nursing Positions by Specialty<sup>25</sup>

As Medicare and most commercial plans pay a flat fee per episode of care, hospitals do not receive additional funds for patients with extended stays and cannot admit another into the occupied bed. To increase the number of available skilled beds, and by extension the number of

<sup>&</sup>lt;sup>24</sup> (GAO-21-408, 2021)

<sup>&</sup>lt;sup>25</sup> (TrustedHealth, 2019)

available hospital beds, Medicaid increased reimbursement for long-term nursing residents by \$35 per resident per day in July 2022.<sup>26</sup> However, this is not enough to offset a sustained increase in operating costs due to staffing and supplies. In an additional effort to decrease hospital readmissions from SNFs, CMS instituted a reimbursement reduction of up to 2% for facilities with high readmissions.<sup>27</sup> Staffing shortages also persist in home health. While some services can be shifted into the home environment, Medicare and Medicaid cover a maximum of 16 hours of patient care per day. Patients requiring 24/7 care must remain in skilled nursing facilities unless a patient can otherwise compensate for the remaining care hours. Funding restrictions combined with staffing limitations has resulted in many patients remaining in skilled facilities when they would be better suited to home healthcare, a generally cheaper and more comfortable option for patients.

Within hospitals, staffing shortages are associated with adverse patient outcomes and poorer working environments. Multiple studies have found an association between higher patientnurse ratios and nurse turnover rates with increased risks of patient safety events, morbidity, mortality, higher readmissions, longer length of stay, missed care episodes, and nosocomial complications.<sup>28</sup> Hospitals are indirectly financially penalized for poor staffing. The Hospital Readmission Reduction Program (HRRP) carries a potential maximum financial penalty of a 3% reduction in total Medicare payments for facilities with higher than expected 30-day readmission rates of acute myocardial infarction, heart failure, pneumonia, exacerbation of COPD, and elective total hip and knee arthroplasty.<sup>29</sup>

<sup>&</sup>lt;sup>26</sup> (Mamula, 2022)

<sup>&</sup>lt;sup>27</sup> (GAO-21-408, 2021)

<sup>&</sup>lt;sup>28</sup> (Malliaris et al., 2021; Aiken et al., 2012; Kane et al., 2007)

<sup>&</sup>lt;sup>29</sup> (Mcllvennan et al., 2016)

Table 1, found below, demonstrates the costs and benefits of four broad staffing scenarios. Under approaches I and III, facilities continue to suffer from short staffing with related negative patient consequences but have increased marginal profits. Approaches II and IV are optimal for patient care but reduce facility profitability. The optimal approach is IV provided the agency nurses are supplied by internal agency staff.

Approach	Cost	Benefits
(I) Short staffed	-Lost revenue due to unoccupied	-No agency costs
with in-house	beds	-Greater HR control
nurses	-Staff burnout and low morale,	-Highest marginal profit
	increased turnover	
	-Potential adverse patient outcomes	
(II) Fully staffed	-Difficulties recruiting and	-Fully utilized facilities
with in-house	retaining staff	-Higher staff satisfaction
nurses	-Must increase compensation and	-Better patient outcomes
	benefits to achieve	-Greater HR control
	-Diminished marginal profit	-Optimal profit
(III) Short	-Higher staff costs due to agency	-Lower burnout for staff nurses
staffed,	rates	-Decreased benefit costs
supplemented	-Potential loss of staff nurses to	
with agency	agencies	
	-Lost revenue due to closed beds	
	-Potential adverse patient outcomes	
(IV) Fully staffed	-Higher staffing costs due to	-Decreased benefit costs
supplemented	agency rates	-Better patient outcomes
with agency	-Potential loss of staff nurses to	
	agencies	
	-Loss of HR control	

Table 1 Conceptual Comparison of the Costs and Benefits of Different Nurse Staffing Approaches

Adverse events or death can trigger CMS investigations for EMTALA noncompliance. If substantiated, termination of a facility's Medicare contract could result.<sup>30</sup> Novant Health New Hanover Regional Medical Center in North Carolina was threatened with contract termination after the death of a patient in the ED waiting room was found to be a result of delayed diagnosis. As a result, the facility was forced to onboard over 300 nurses to become CMS compliant.

Staffing levels also open facilities to medical malpractice and negligence cases. Commonly due to delayed diagnosis, inadequate monitoring, medical errors, and wrongful death, a facility is then responsible for monetary damages to the harmed party.<sup>31</sup> In these cases plaintiffs must establish a standard of care regarding the minimum staff required to safely provide care and that this standard is breached by the facility. Depending on the state the suit is being brought, the plaintiff must then demonstrate that breach was a proximate or primary cause in the bad outcome. Expert testimony is required. Agency nursing provides healthcare organizations with potential protection against nursing negligence. Instead of the healthcare facility where the agency nurse works, the staffing agency is now considered the employer and is consequently held legally responsible under vicarious liability and *respondeat superior*. The facility and nurse managers, however, must ensure staff assignments are adequate for patient needs.

Overall nurse workload is the major factor associated with poor outcomes. While facilities with higher proportions of agency use were associated with higher patient mortality rates and higher transmission rates of COVID-19, these facilities were also associated with poorer working environments.<sup>32</sup> Longer shifts and overtime are associated with job dissatisfaction and adverse

<sup>&</sup>lt;sup>30</sup> (McAdams, 2022)

<sup>&</sup>lt;sup>31</sup> (Kusterbeck, 2022)

<sup>&</sup>lt;sup>32</sup> (Aiken et al., 2012; Shallcross et al., 2021)

patient outcomes due to fatigue, poor judgement, and worsening concentration and alertness.<sup>33</sup> Organizational commitment to quality improvement, workplace culture, and supplemental agency staffing alleviates these stressors. Contradictorily, while organizations must adequately staff their units, overstaffing also carries risk. Overstaffing is associated with worsened readmissions and no improvements to quality of patient care.<sup>34</sup> Facilities will incur higher payroll costs with minimal improvement to patient outcomes.

#### 2.3 Responses to High Prices

Healthcare organizations have responded to the proliferation of agency staff in a number of ways. As COVID hospitalization rates stabilize and state and federal emergency funds end, systems are reducing the number of offered contracts and negotiating lower contract rates for staff they decide to retain.<sup>35</sup> Large and influential healthcare organizations including Allegheny Health Network, CommonSpirit Health, Kaiser Permanente, Trinity Health, and UPMC have created their own internal nursing agencies.<sup>36</sup> Although these agencies increase internal FTE costs, it enables organizations to regain control, reduce overall staffing costs, and improve internal culture. Through the UPMC Supplemental Work and Transition (SWAT) program, RNs and LPNs with at least two years prior experience are paid higher hourly rates provided that they work a minimum

<sup>&</sup>lt;sup>33</sup> (Randolph et al., 2004; Son et al., 2019; Stimpfel et al., 2012)

<sup>&</sup>lt;sup>34</sup> (Yakusheva et al., 2021)

<sup>&</sup>lt;sup>35</sup> (Norman, 2022)

<sup>&</sup>lt;sup>36</sup> (Yang & Mason, 2022)

of three twelve-hour shifts per week, at least one of which must occur in the evening or night, and rotate through regional assignments based on facility need.<sup>37</sup>

Prior to COVID-19, agency nurses were considered a necessary staffing supplement during extraordinary events. The proliferation, however, has also led to contention between healthcare organizations, staffing agencies, and agency nurses. In 2021 conflicting lawsuits were filed between Steward Health Care Systems and AYA Healthcare.<sup>38</sup> Although ongoing, Steward is claiming price gouging, and wrongful and retaliatory contract cancellation while AYA claims an outstanding bill of over \$40 million in unpaid wages owed by Steward. A group of agency nurses is also seeking class action status for lawsuits brought against AYA, Maxim Healthcare, NuWest Group, and CrossCountry Healthcare. The nurses allege that these firms, which include the largest in the United States, breached their contracts by lowering pay rates before the conclusion of the contract duration. The staffing agencies, however, are arguing for dismissal due to the at will employment status of their staff.<sup>39</sup> Unfortunately, agency nurses are largely prevented from litigation when pay rates are unexpectedly reduced due to arbitration clauses. Similar suits brought by employees of Uber and FanDuel ultimately proved successful because individual filing fees of \$1,500 in arbitration lawsuits are paid by the employer but nurses in these cases do not have comparable strength in numbers.

The American Hospital Association and 200 congressional members have called for an investigation into nurse staffing agencies to determine if anticompetitive conduct was the cause of pandemic increases in rates.<sup>40</sup> If hearings are held, the investigation could bring the high rates

<sup>&</sup>lt;sup>37</sup> (5 Things You Never Knew About S.W.A.T. Nursing, 2022)

<sup>&</sup>lt;sup>38</sup> (Evans & Carlton, 2021)

<sup>&</sup>lt;sup>39</sup> (Bauman, 2022)

<sup>&</sup>lt;sup>40</sup> (Hornbeck, 2022)

charged by nursing agencies and high prices charged by healthcare organizations into the broader public sphere. Evidence discovered can be used as a basis for criminal prosecution and to inform future legislative action. Additionally, the Travel Nursing Agency Transparency Act has been introduced into both houses of Congress. If passed, it would require the Government Accountability Office (GAO) to study and report to Congress on staffing agency business and payment practices and the impact of hiring travel nurses during the pandemic.<sup>41</sup>

Individual states have begun enacting legislative forms of price control. Laws have been passed in Connecticut, Iowa, Illinois, Louisiana, and Oregon that would require nursing agencies to register with a state body, pay a registration fee, and prohibit anti-competitive practices.<sup>42</sup> While the exact requirements differ depending on the state, these laws represent the first explicit legislative controls placed on nurse staffing agencies and contract prices. Similar legislation is proposed in Ohio and Pennsylvania.

<sup>&</sup>lt;sup>41</sup> (John, 2022)

<sup>&</sup>lt;sup>42</sup> Ìbid.

## **3.0 Policy Recommendations**

It is clear that nurse staffing agencies and the high costs associated with their use will remain for the foreseeable future. Nursing staff and organizational leadership will need to develop both short and long-term solutions to dealing with this issue. One potential solution would be utilizing existing price gouging legislation to reduce the mark-ups charged by agencies. While this would help facilities reduce costs, there is not published literature to suggest that savings would be used to increase wages or compensation of in-house staff.

Historically, anti-trust enforcement efforts have concentrated on healthcare consolidation. The FTC and DOJ have announced that enforcement will begin against anti-competitive staffing practices including wage fixing, non-compete agreements, and the exchange of sensitive employee information. <sup>43</sup> Doing so reduces barriers to nurse movement between facilities and could increase wages and compensation. While these actions would improve the market power of nurses, they do not address the current labor shortage.

Unionization provides an avenue to increase compensation and improve working conditions. Nursing union levels remain higher than other sectors of the economy but face unique challenges because they are required to provide a 14-day notice of a strike.<sup>44</sup> In theory this limits the effects on patient care, however, in practice it reduces the power of the strike. No single labor union represents nurses, which further diminishes their power nationally. Studies since 1980s have shown that unionization has a mixed impact on nurse wages, a neutral to positive impact on quality

<sup>&</sup>lt;sup>43</sup> (John, 2022)

<sup>&</sup>lt;sup>44</sup> (Burger, 2022)

of care, and improved employee satisfaction.<sup>45</sup> While unionization can be valuable for nurses and consequently patient care, the labor shortage is not improved.

One solution to the staffing shortage in the United States could be utilizing nurses from abroad. Facilities in the US have a long history of recruiting foreign-educated nurses (FEN) to address nursing shortages. FENs currently account for approximately 8% of the nursing workforce and are predominantly from the Philippines, Jamaica, and India.<sup>46</sup> In addition to wages, FENs are offered housing assistance and H1B or EB3 visa sponsorship. In exchange, nurses agree to work at a facility for a minimum number of years depending on visa type and individual contract terms. Complicating the issue, patients who received care at facilities with higher numbers of FENs had a perceived decreased quality of care. However, due to nurse shortages, these FENs were actually associated with improved quality of care and have higher overall job satisfaction<sup>47</sup>.

The long-term solution to increasing the nursing supply is to increase the number of nurse educators and available spots in nursing schools. Currently 6% of nurse educator positions are vacant with demand expected to grow 22% by 2031.<sup>48</sup> In 2018 alone, over 65,000 prospective students were denied admission to BSN and MSN programs due to insufficient faculty, clinical sites, preceptors, and budget limitations.<sup>49</sup> While some of these students likely found placement in vocational nursing programs, many likely found alternative career choices. Increasing the number of faculty would require incentivizing practicing nurses to obtain a Master of Science in Nursing (MSN) or doctoral degree, which generally cost between \$35,000-\$70,000 or more.<sup>50</sup> While 18%

<sup>&</sup>lt;sup>45</sup> (Feldman & Scheffler, 1982; Hirsch & Schumacher, 1995; Adamache & Sloan, 1982; Sojourner et al., 2015; Spetz et al., 2010; Dube et al., 2016)

<sup>&</sup>lt;sup>46</sup> (Merelli, 2021)

<sup>&</sup>lt;sup>47</sup> (Germack, 2015; Germack et al., 2017; Furtado & Ortega, 2020)

<sup>&</sup>lt;sup>48</sup> (Gaines, 2022)

<sup>&</sup>lt;sup>49</sup> (Blouin & Podjasek, 2019)

<sup>&</sup>lt;sup>50</sup> (Balan, 2022)

of nurses have obtained this level of education, the higher salaries associated with specialization are earned by Nurse Practitioners and anesthetists and those entering leadership and informatics roles. A nurse educator earns a median income of \$80,000 annually, only several thousand more than the median RN salary.<sup>51</sup>

Two national initiatives have attempted to address the nursing faculty shortage. The Nurses Higher Education & Loan Repayment Act (2008) provides loan reimbursement for MSN and nursing doctoral degrees while the Nurse Education, Expansion, and Development Act (2009) provides grants to nursing schools to increase educator salaries.<sup>52</sup> The shortage persisted despite these programs. Current efforts to increase the number of nurse faculty include partnerships between nursing schools and healthcare facilities that allow faculty to continue clinical practice, fast-track programs, and faculty mentorship.<sup>53</sup> Increasing the number of nursing faculty would further decrease the number of practicing nurses in the short-term. This is a necessary trade-off as the most effective instructors are those with adequate practical experience. Expanding the capacity of nursing programs is the optimal long-term solution to addressing the nursing shortage in the United States.

<sup>&</sup>lt;sup>51</sup> (Gaines, 2022)

<sup>&</sup>lt;sup>52</sup> (Penn et al., 2008)

<sup>&</sup>lt;sup>53</sup> Ibid.

## 4.0 Conclusion

Nursing shortages have been an area of concern for health care organizations since the 1970s. Since then, various methods have been used in an attempt to address this shortage. Unfortunately, these efforts have been unsuccessful in fully addressing the issue and the shortage persists. Combined with the COVID-19 pandemic, agency nurse use has proliferated across healthcare organizations, resulting in increasing operational costs and reducing profitability. Ultimately, the supply of nurses will need to be increased to improve working conditions and patient outcomes. In the short-term, the supply of FENs should be increased. The long-term sustainable solution is increasing the domestic supply of nurses by expanding the capacity of nursing programs without decreasing program quality. Funding incentives for program development should be tied to the number and quality of graduates –potentially to the percentage that successfully pass the NCLEX examinations.

#### **Bibliography**

- 5 Things You Never Knew About S.W.A.T. Nursing. (2022). UPMC Careers.
- Adamache, K., & Sloan, F. (1982). Unions and Hospitals: Some Unresolved Issues. Journal of Health Economics, 1, 81–108.
- Adams, T., Epstein, S., Gregory, W., & Wikening, T. (2010). Operations and Maintenance Benchmarks for Health Care Facilities.
- Aiken, L., Shang, J., Xue, Y., & Sloane, D. (2012). Hospital Use of Agency-Employed Supplemental Nurses and Patient Mortality and Failure to Rescue. Health Services Research.
- Balan, R. (2022, November 17). What is an MSN Nursing Degree and Is It Worth Studying in 2023? Studyportals.
- Bauman, V. (2022, September 25). Travel Nurses Suing Agencies Say Their Pay was Slashed in "Bait and Switch." Newsweek Magazine.
- Blouin, A., & Podjasek, K. (2019). The Continuing Saga of Nurse Staffing Historical and Emerging Challenges. Journal of Nursing Administration, 49(4), 221–227.
- Buchan, J., Catton, H., & Shaffer, F. (2022). The Global Nursing Workforce and the COVID-19 Pandemic.
- Burger, C. (2022, August 5). Do Unions Benefit or Harm Healthcare & Nursing Industries? RegisteredNursing.
- Davidson, A. (2022, September 15). Nurse-to-Patient Staffing Ratio Laws and Regulations by State. NurseJournal.
- Depasquale, C. (2020, June). Hospital Consolidation And Monopsony Power In The Labor Market For Nurses. Competition Policy Institute Antitrust Chronical.
- Design for Care Compare Nursing Home Five-Star Quality Rating System: Technical User's Guide (pp. 1–36). (2022). Centers for Medicare and Medicaid Services.
- Dube, A., Kaplan, E., & Thompson, O. (2016). NURSE UNIONS AND PATIENT OUTCOMES. Industrial and Labor Relations Review, 69(4), 803–833.
- Evans, M., & Carlton, J. (2021, April). Soaring Costs of Nurses During Covid-19 Pandemic Are at Center of Lawsuits. Wallstreet Journal.

- Feldman, R., & Scheffler, R. (1982). THE UNION IMPACT ON HOSPITAL WAGES AND FRINGE BENEFITS. Industrial and Labor Relations Review, 35(2), 196–206.
- Furtado, D., & Ortega, F. (2020). Does Immigration Improve Quality of Care in Nursing Homes? [Discussion Paper Series No. 13552]. University of Bonn.
- Gagnon, D. (2021, November 5). What is a Magnet Hospital? Southern New Hampshire University.
- Gaines, K. (2022, December 22). How to Become a Nurse Educator. Https://Nurse.Org/Education/Msn-Nurse-Educator-Guide/.
- GAO-21-408. (2021). Medicare: Additional Reporting on Key Staffing Information and Stronger Payment Incentives Needed for Skilled Nursing Facilities [Reissued with revisions on Aug. 10, 2021.].
- Germack, H. (2015). Foreign Educated Nurses And Patient Care Experience In England And The United States [Dissertation]. University of Pittsburgh.
- Germack, H., McHugh, M., Sloane, D., & Aiken, L. (2017). U.S. Hospital Employment of Foreign-Educated Nurses and Patient Experience: A Cross-Sectional Study. Journal of Nurse Regulations, 8(3), 26–35.
- Gottleib, J. (2020). When Nurses Travel: Labor Supply Elasticity During COVID-19 Surges (No. 2020–166).
- Haddad, L., Annamaraju, P., & Toney-Butler, T. (2022). Nursing Shortage. StatPearls.
- Hirsch, B., & Schumacher, E. (1995). Monopsony power and relative wages in the labor market for nurses. Journal of Health Economics, 14, 443–476.
- Hornbeck, A. (2022, February 9). AHA and Congress Request Federal Investigation Into Nurse Staffing Agencies. The Well News.
- Howley, E. (2022, July 25). The U.S. Physician Shortage Is Only Going to Get Worse. Here Are Potential Solutions. Time Magazine.
- John, S. (2022, October 5). Recent Federal and State Legislative Action Targeting Health Care Staffing Agencies. Mintz.
- Kane, R., Shamliyan, T., Mueller, C., Duval, S., & Wilt, T. (2007). The Association of Registered Nurse Staffing Levels and Patient Outcomes: Systemic Review and Meta-Analysis. Medical Care, 45(12).
- Kusterbeck, S. (2022, March 1). Dangerously Understaffed EDs can Legally expose Hospital. ED Management.

- Lee, J. (2022, September 3). Travel nurses' gold rush is over. Now, some are joining other nurses in leaving the profession altogether. NBC News.
- Malliaris, A., Phillips, J., & Bakerjian, D. (2021, April 21). Nursing and Patient Safety. Agency for Healthcare Research and Quaity. https://psnet.ahrq.gov/primer/nursing-and-patient-safety
- Mamula, K. (2022, August 29). Nursing shortages and skilled unit closures are slowing down discharges at Pittsburgh hospitals. Pittsburgh Post-Gazette.
- McAdams, A. (2022, August 23). Medicare regulators confirm woman coded in ER waiting room after waiting 5+ hours for care. WECT6 News.
- Mcllvennan, C., Eapen, Z., & Allen, L. (2016). Hospital Readmissions Reduction Program. Circulation, 131(20), 17961803.
- Merelli, A. (2021, December 5). There's one group of nurses in America who don't hate their job. QUARTZ.
- Norman, H. (2022, May 8). Travel nurses raced to help during Covid. Now they're facing abrupt cuts. NBC News. https://www.nbcnews.com/health/health-news/travel-nurses-raced-help-covid-now-facing-abrupt-cuts-rcna27716
- Oyeleye, O. (2019). The Nursing Licensure Compact and Its Disciplinary Provisions: What Nurses Should Know. Journal of Issues in Nursing.
- Penn, B., Wilson, L., & Rosseter, R. (2008). Transitioning From Nursing Practice to a Teaching Role. The Online Journal of Issues in Nursing.
- Randolph, J., Rogers, A., & Steinwachs, D. (2004, September 1). Longer hours and overtime are taking a toll on nurses and patients alike. Relias Media.
- Shallcross, L., Burke, D., Abbott Owen, Donaldson, A., Hallatt, G., Hayward, A., Hopkins, S., Krutikov, M., Sharp, K., Wardman, L., & Thorne, S. (2021). Factors associated with SARS-CoV-2 infection and outbreaks in long-term care facilities in England: a national cross-sectional survey. The Lancet Healthy Longevity, 2, 129–142.
- Simpson, K., & Simpson, R. (2019). What do we know about our agency nurse population? A scoping review. Nursing Forum.
- Slyter, K. (2022, March 24). LPN vs. RN: Exploring the Differences. Rasmussen University.
- Smith, Y. (2023, January 2). History of Nursing. Medical & Life Sciences News.

- Sojourner, A., Frandsen, B., Town, R., Grabowski, D., & Chen, M. (2015). Impacts of Unionization on Quality and Productivity: Regression Discontinuity Evidence From Nursing Homes. Industrial and Labor Relations Review, 68(4), 771–806.
- Son, Y., Lee, E., & Ko, Y. (2019). Association of Working Hours and Patient Safety Competencies with Adverse Nurse Outcomes: A Cross-Sectional Study. International Journal of Environmental Research and Public Health, 16(21).
- Spetz, J., Ash, M., Konstantinidis, C., & Herrera, C. (2010). The effect of unions on the distribution of wages of hospital-employed registered nurses in the United States. Journal of Clinical Nursing, 20, 60–67.
- Stimpfel, A., Sloane, D., & Aiken, L. (2012). The Longer The Shifts For Hospital Nurses, The Higher The Levels Of Burnout And Patient Dissatisfaction. HealthAffairs, 31(11), 2501– 2509.

TrustedHealth. (2019). 2019 Travel Nurse Compensation Report.

- Yakusheva, O., Bang, J., Hughes, R., Bobay, K., Costa, L., & Weiss, M. (2021). Nonlinear association of nurse staffing and readmissions uncovered in machine learning analysis. Health Services Research, 57(2), 311–321.
- Yang, T., & Mason, D. (2022, January 28). COVID-19's Impact On Nursing Shortages, The Rise Of Travel Nurses, And Price Gouging. HealthAffairs.