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What Impact does the Nursing Shortages have on the Financial Health of the Kentucky Healthcare System?

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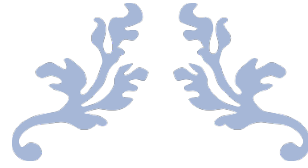
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WHAT IMPACT DOES THE
NURSING SHORTAGES HAVE ON
THE FINANCIAL HEALTH OF THE
KENTUCKY HEALTHCARE
SYSTEM?



JULY 29, 2022
MICHELLE W. COOPER
PA 681 – Capstone

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EXECUTIVE SUMMARY

This study investigates how the nursing shortage affects the financial health of healthcare systems. Further, it examines the economic impact that healthcare systems face due to the nursing shortage and what they are doing to cope during this time to meet their nursing staff needs. The study focuses on hospitals in Kentucky and compares Kentucky to other states in the United States. This research aims to determine how the nursing shortage financially impacts Kentucky hospitals. The main question that this research paper will address is what impact do the nursing shortages have on the financial health of the healthcare system? Other specific questions to be answered are:

- 1) What are Kentucky hospitals doing to cope or address the shortage at their facilities?
- 2) Which areas in Kentucky are most affected by the nursing shortage?
- 3) How do areas within Kentucky compare to each other as well as other states?

INTRODUCTION

The most critical part of healthcare is the nurses, as they are the most significant area of the healthcare profession. There are approximately 29 million nurses and midwives globally, with about 3.9 million in the United States. In 2022, it is believed that more registered nursing jobs will be available as opposed to any other profession in the United States. Also, between 2020 to 2030, the US Bureau of Labor Statistics projects that more than 275,000 additional nurses will be needed. From 2016 through 2026, it's projected that nursing employment opportunities will grow at an increased rate of 9 percent compared to other occupations (Haddad et al., 2022).

There are many contributing factors to the nursing shortage throughout the United States, with an insufficient number of educators, nursing turnover being high, and inequitable workforce

distribution. The multiple factors it is causing the nursing shortage to be a complex problem. All these combined factors continue to drive the nursing shortage and cause the deficit of nurses to grow further.

LITERATURE REVIEW

One thing that is clear throughout all the literature reviewed for this study is for decades, the United States has been experiencing a nursing shortage, and it's expected to continue for years to come. The impact of individuals not going into the nursing field and nurses leaving the industry is costing hospitals billions. Hospitals are left to pay increased rates to travel agencies for travel nurses while also paying more to hire and retain nurses already working at their facilities.

History – Timeline & Contributing Factors

It is thought that in the mid-1930s, the nursing shortage came to light in the United States (Whelan, n.d.). Many in the healthcare field thought of this shortage as a surprise, but the Great Depression caused financial devastation that the country was still suffering. The unemployment rates for RNs had climbed dramatically during the early years of the Great Depression, and hospitals were finding it relatively easy to secure nurses who were always in plentiful supply. People thought that it was almost unbelievable that nurses would become scarce. Although by 1936, many hospitals were reporting severe shortages of nurses. The nursing shortage, which lasted during World War II and into the 1960s, was just the beginning of the nursing shortage which would curse the United States healthcare system over the next five decades.

Most of the nursing shortages in the twentieth century were demand-driven shortages related to the increased utilization of registered nurses (RNs). As a result, in the mid-1930s, is what happened when several economic, technological, and the increasing demand for RNs

combined with healthcare-related events laid the groundwork for a shortage (Whelan, n.d.). Within the 1930s, there was an increase in hospital use, changes in hospital construction, more technologically patient care requirements, and a decrease in the hours worked by all necessitated an increased number of nurses to deliver bedside care. By 1935, there were reports of a nursing shortage, which was the most severe in the acute-care hospital sector and increased as time passed. As hospitals were unfamiliar with dealing with nursing shortages, it caused the hospital administrators reacted slowly to the situation. Nurses were blamed for creating the nursing shortage by failing to live up to the ideals of their profession and refusing to work. When the United States began World War II, signs that the country faced a critical problem were too obvious to ignore.

Nurses were highly needed to serve in the armed forces when the United States first entered the war. The supply of registered nurses indicated that enough active and eligible nurses were present in the workforce to meet military needs. Still, over 77,000 nurses joined the military services by the war's end, severely compromising the civilian population's nursing needs (Whelan, n.d.). The US needed an aggressive response to the problem. Since other efforts were taken previously, hospitals now focused on expanding the nurse educational system as the primary means of maintaining good nursing services. In the 1940s, the nurse educational system was a traditional apprenticeship type of training in which hospital-based nursing schools took in students, teaching them the essentials of the profession while also having them deliver most of the care to patients. Approximately 1,300 hospitals in the country operated nursing schools and used the students to perform bedside nursing care for patients (Whelan, n.d.). Hospitals hoped to alleviate the nursing shortage by admitting more students to the educational system, but the strategy created a challenge for the hospitals. According to Whelan, the traditional nursing

student population was young, white females with secondary school education, the same group, heavily recruited by war-related industries. Along with other discrepancies in working conditions for nurses, such as the long hours, the low salaries, and the requirements of nurses to live on hospital grounds. With the working conditions of other occupations being better, it made nursing a less attractive career for young people to consider.

There was a small amount of money to subsidize some nurse education activities from the federal government during the early stages of the war. After the programs proved ineffective at increasing the number of student nurses, Congress decided to authorize a more comprehensive program. The federal nurse education program became known as the 1943 Bolton Act, which created the Cadet Nurse Corps and ran through 1948. The purpose of the Bolton Act was for nurse education funding and financial support for nursing students as the federal government appropriated \$160 million for both the students and the hospitals as it provided free education to students and provided them with a monthly stipend and uniforms. Cadet Nurse Corps was created with the mindset to increase the number of students within nursing education programs to care for hospitalized patients. Still, they weren't required to serve in the military. The program's goal was to produce nurses quicker, making the participating schools reduce the length of the educational period. The Cadet Nurse Corps had over 160,000 students that were a part of the program, making it considered a huge success (Whelan, n.d.).

Another strategy put into place during the war was to use nursing aides and licensed practical nurses as nursing assistive personnel in civilian hospitals. Licensed practical nurses (LPNs) were nurses educated in short programs, generally about a year in length, who carried out basic nursing care under the supervision of a registered nurse. The LPN movement began in the late 1930s and became more formalized during the 1940s (Whelan, n.d.). It was thought that they

could solve the nursing shortage problem by using LPNs, a group of people that weren't as educated as a nurse because this hospital welcomed them into the healthcare facilities. With LPNs only requiring a short training period, this appealed to hospital administrators, who needed more nurses quickly, and there was a lower cost associated with educating LPNs. It was thought that LPNs would attract a larger population of students than RN programs since LPNs' educational requirements weren't as rigorous as the nursing programs.

During World War II, nurse's aides were heavily relied upon too. Using nurse assistive personnel, such as ward maids, nurse aides, and orderlies, was a common practice in the early-twentieth century hospitals. During the war, the use of nurse's aides, both those who worked in a voluntary capacity and those who were regular hospital employees, increased dramatically. Hospital administrators thought that nurse aides were particularly appealing to employ because of their low costs and flexibility. Nurse aides were moved around the hospital as needed and assigned to various functions because they could be trained in multiple areas/departments. Since nurse aides were unlicensed, the training period could be as short as a few hours up to six weeks, so hospitals felt free to use them wherever the demand was. It eventually reached the point that both LPNs and nurse aides were frequently and often inappropriately used as nurse substitutes, which they weren't intended for this use.

After the war, leaders in healthcare and nursing anticipated that nurses who were released from the military would return to the jobs that they had before the war, and this would cause the nursing shortage to stop, but that wasn't the case as it did the opposite. The nursing shortage continued and worsened as nurses who had served in the military failed to return to their former positions. This caused hospitals to engage in a continual battle to staff nurses in hospitals in the late 1940s. The postwar demand for nurses skyrocketed as nurses seemed to be shunning hospital

work. Hospital utilization rates continued to increase, and hospital admission rates went up to 26 percent from 1946 through 1952. In 1946, the federal government put together the Hill-Burton Act to fund hospital construction, increasing and expanding healthcare facilities (Whelan, n.d.). Nurses wanting to work fewer hours and patient technological needs continued to escalate, causing the nursing profession to be more in demand than before. Still, there was a decrease in the number of new employees in this line of work. The result of the Cadet Nurse Corps program during the war caused nursing school admission to be on the rise, but as soon as the federal money ran out for the program, the less appealing the profession was again. In 1946, nursing school enrollments were 129,000, but in 1949 they fell to 99,000 (Whelan, n.d.).

Since supply and demand played a role in what could be considered a decade-long shortage with brief periods of relief throughout the middle of the 20th century, two crucial factors can explain many of the shifts in supply and demand, such as demographic changes and the attractiveness of the nursing profession. First, the demographic changes from the early 20th century meant that more Americans were experiencing more age-related healthcare needs as they lived longer. Also, there was an increase in people's ability to pay for medical services as people, on average, were wealthier. Second, the nursing field continued to vary in regards to the attractiveness of the profession throughout this time. Most nursing professionals were young women, and they were going into other competing industries instead of nursing as World War II came and went. The industry was struggling to make the nursing profession attractive, and the appeal of nursing regarding ease of entry and demand were continuously changing.

Literature reports that nursing has previously been a female profession, but career options for women have increased over the years, causing nursing to not stand out as a career choice as it once did. In the 1980s and 1990s, women graduating from high school were 35 percent less

likely to become RNs than in the 1970s. In the 1990s, there was a change in the healthcare work environment with downsizing, reorganization, and reengineering, which resulted in the nursing image being viewed negatively (Murray, 2002) and (Clipboard Health, 2022).

Current Situation

From the point of view of patients, providers, and healthcare professionals who are experiencing the nursing shortage firsthand believe that the current nursing shortage may seem unprecedented. People looking from the outside may interpret the nursing shortage as being created by the COVID-19 pandemic, but nursing shortages have persevered over most of the past century. At times, healthcare-specific causes have been to blame, but the labor market and the economy are other general causes. This means the nursing shortage may have many consequences. Unlike other industries, their reasons aren't necessarily unique or healthcare-specific (Clipboard Health, 2022).

According to Greenwood, “a 2015 study predicted that over one million RNs will retire from the workforce between now and 2030.” As nurses retire, they are taking with them the invaluable amount of collected knowledge and nursing experience they have gained over their years of service. It’s important to point out that COVID-19 created an increase in nurses retiring early due to medical facilities having limited access to patients and staff for an extended period. Hospitals were forced to stop performing elective surgeries, and patients feared going to the hospital, resulting in the hospital's decreased income and the need to reduce staff to avoid going under. Many hospitals had to force furloughs on their employees, which led some individuals to retire when they hadn't planned to do that yet (Greenwood, 2022).

Currently, the United States is amid a critical nursing shortage expected to continue through 2030. Around the globe, nursing shortages are being reported, and the World Health

Organization noted there possibly could be a shortage of 5.7 million nurses by 2030 (Greenwood, 2022). The pandemic that the US has faced has placed the reality of our current nursing shortage into the spotlight. The COVID-19 pandemic aggravated the national nursing shortage requiring policymakers to invest in higher education and plan ways to alleviate the stressors on the nursing workforce and make the entire health care system more equitable and stable. While COVID-19 has strained the health care system, nurses have endured most of the pressure. There was a 3 percent decline between 2020 and 2021 in registered nurses' employment levels, the most significant decline in 20 years.

In 2020, the US faced a nursing shortage of approximately 1 million nurses, and with burnout and fatigue, the nursing shortage has intensified as nurses continue to leave (Why Is Nurse Pay Skyrocketing?, 2022). With the labor shortage, many hospitals are responding by turning to travel nurses to fill the openings of their staffing needs. According to the article *Why Is Nurse Pay Skyrocketing*, “the travel nursing industry has doubled in size over the last year, as the average weekly pay in December 2019 was \$1,706 and in December 2021 was \$3,290.”

As the demand for nurses continues to stay high, especially in areas overran with Covid-19 patients, hospitals have endured significant labor expenses as they attempt to support their workforces. Along with the increased costs, some hospitals have been using federal Covid-19 relief funds to cover the difference between the rates for travel nurses vs. staff salaries.

The Federal Emergency Management Agency said, “Texas has used billions of dollars in federal relief funds to help cover travel-nursing costs.” With them using the funds in this manner, it has made several lawmakers and trade groups believe that this is putting pressure on wages.

Turnover costs can be defined and measured by productivity losses (e.g., pre-turnover productivity of the departing nurse). Turnover costs contribute to financial issues facing the

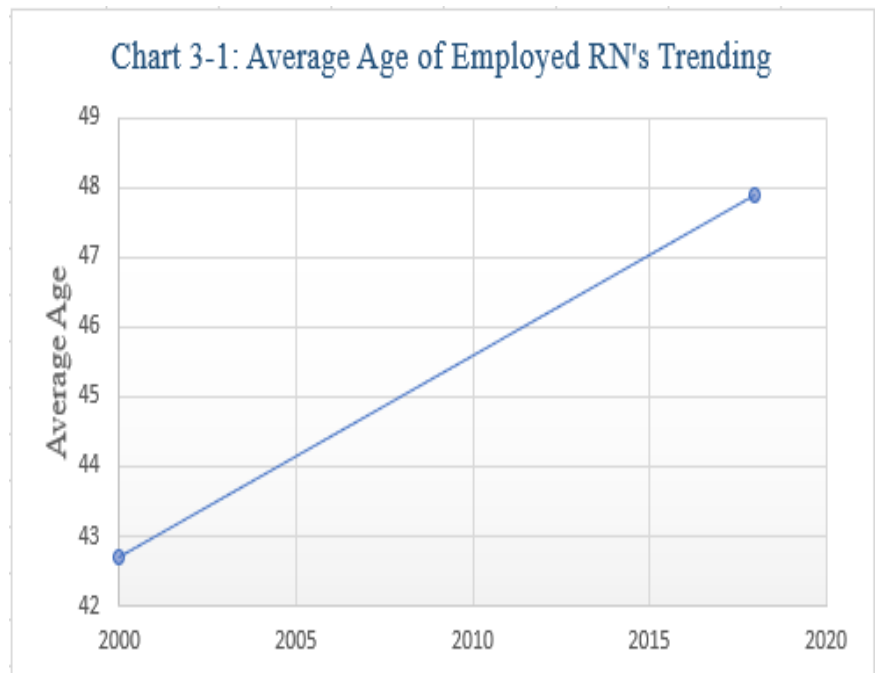
health care industry, and these costs are in addition to the increased wages and salaries resulting from the shortage. Nurse retention focuses on preventing nurse turnover and keeping the nurses that the organization already employs, but healthcare organizations face a recurring problem of nursing turnover. Most of the time, decisions about nursing turnover and retention are made without fully understanding and/or knowing their associated costs and benefits. Reports have shown that nurse turnover costs range from about \$22,000 to over \$64,000 (US) per nurse (Jones et al., 2007). Turnover costs for general employment have been estimated to range between 0.75 to 2.0 times the salary of the departing individual, averaging at approximately 1.3 times the salary of the departing nurse. Various factors are playing into the turnover cost figures, which are the era during which the nurse departs (for example: at the beginning versus the height of a nurse shortage); human capital (for example: the education, experience, and tenure of the nurse who leaves); and other environmental and organizational factors (for example the local labor market and whether the organization is in a rural or urban location) (Jones et al., 2007).

According to MacDonald, hospitals have been paying billions to recruit and retain nurses as they are offering higher salaries, signing bonuses, and even repaying student loans to address the nationwide nurse shortage. Some hospitals have started to reimburse existing employees and pay new hires tuition if they agree to work at the hospital for a set amount of years. These costs are impacting rural hospitals even more. Rural hospitals in surrounding Kentucky states have reported this year that they have spent more than \$10 million in efforts to hire and retain nurses. There are using that money to give \$10,000 sign-on bonuses and offer free housing to nurses who live further than 60 miles from the healthcare organization (MacDonald, 2017).

Demographics Contributing to the Nursing Shortage

Between 1946 and 1964, the generation known as the baby boomers is one of the largest generations in American history, with about 21 percent of the current American adults being baby boomers. It's projected that by 2029, 71 million Americans will be age 65 or older (Behring, 2021). With a significant rise in the need for healthcare services due to the age-related conditions of this generation. The Centers for Disease Control and Prevention (CDC) reports that Americans over the age of 65 have two or more chronic health conditions, which is more than 50 percent of these individuals. With the advancements in healthcare and the steps taken to improve healthcare access, it's thought that the baby boomer generation will likely have a longer lifespan than previous generations. The demographic changes in the United States as an aging population synchronously reduce supply and increases demand for healthcare services. With the surge in the population from the baby boomer generation has resulted in not only a more significant number of aging patients but a nursing workforce headed toward retirement due to the aging generation.

In 2000, the average age of an employed RN was 42.7 years old, but over the years, the age has increased to an average of 47.9 years old in 2018, with almost half of all registered nurses being over 50 years old (Clipboard Health, 2022) and (Greenwood, 2022).



The “Great Resignation” was the labor market phenomenon. It continues to cause issues for employers across various industries, as individuals retiring, either scheduled or unplanned, are forcing experienced nurses out faster than they can be replaced by nurses just beginning their careers (Clipboard Health, 2022). People could have assumed this trend would take place years ago, looking only at the birth rates. It was always known that baby boomers would begin retiring in their 60s and other generations weren't as large. Still, the great resignation has accelerated the retirement age, intensifying it even more than birth rates indicated. This means that more people have retired sooner than expected.

Healthcare systems have changed because an increased number of Americans can access care, which has changed the healthcare focus into many nursing-driven roles. All Americans could get health insurance when the Affordable Care Act was enacted (Behring, 2021). The Affordable Care Act, in numerous states, meant that more people qualified for Medicaid and enabled newly insured people to seek the care they couldn't previously, creating a demand for more nurses. Initiatives to minimize hospital stays over the last several years it has led to the increasing importance of primary care, urgent care, and home healthcare. As healthcare continues to change in America, nurses will continue to play an important role.

Experienced nurses retiring creates a lack of qualified nurses to train and educate new nurses. The current nurse educators are retiring, and nursing programs around the country are feeling the pressure as they need qualified and experienced individuals to take their places. Without enough faculty, nursing programs can't address the nursing shortage and train new nurses. However, it isn't just nurses reaching retirement age leaving the profession, but other reasons too. Nurses are feeling a lack of support and burnout, leading skilled RNs to transition to different healthcare roles or leave the profession entirely. Nursing burnout is thought to be a

cause and a symptom of the nursing shortage with understaffed nursing units, and it has increased the pressure and stress on nurses. Burnout can come quickly with its mental and physical toll on individuals.

An increase in the need for patient care, an increased number of individuals reaching retirement age, and recent healthcare legislation are all components that are driving the nursing shortage in the United States (Behring, 2021). Although, it's complicated by nursing burnout, which is often caused by short staffing and job stress, which has led to nurses leaving the field. The cycle of burnout will continue until the nursing shortage, and the needs of nurses can be addressed.

COVID's Impact

“The global COVID-19 pandemic is a predictable target for those seeking to assign blame for the problems of US healthcare. Even granting the pandemic's heavy repercussions, it's not the sole factor in the current nursing shortage, which is more complex than it might seem (Clipboard, 2022).” It's thought that the COVID-19 pandemic sped up the retirement of many nurses across the country, leading to an even greater nursing shortage. Although the retirement of many baby boomers was anticipated long before the pandemic, the pandemic caused increased risks of working in a hospital environment, which resulted in the surge of retirements coming sooner than expected.

The COVID-19 pandemic identified nursing as incredibly stressful and demanding, with the repeated surges of COVID-19 making the situation dreadful, partly because of nurse burnout and moral distress. "In September 2021, the American Association of Critical Care Nurses conducted a survey of more than 6,500 critical care nurses. The pandemic has depleted nurses in their hospitals, according to 92 percent of surveyed nurses, and their careers would be shorter

than they intended. Sixty-six percent of respondents stated they were considering leaving the profession because of their COVID-19 experiences, and 76 percent said that unvaccinated patients threatened nurses' physical and mental well-being (Berlin et al., 2022).

As COVID-19 shifts to its endemic over the next three years, additional stress is likely to continue for healthcare providers in the United States, and more Americans are expected to need extra care due to COVID-19. There is an estimated 1 to 12 percent increase in inpatient hospitalization days in 2025 relative to 2019 (Berlin et al., 2022). Increases could be from patients that contracted COVID-19 and survived but are now dealing with chronic issues from having been infected in the first place. It is still uncertain how delayed care between 2020 and 2022 will affect the healthcare systems from inpatient hospitalizations and care across settings, as well as the backlog of outpatient procedures. Based on research, delaying preventative care has changed the inpatient volume and life expectancy.

Nursing Shortage in Kentucky

Kentucky's nursing shortage led Gov. Andy Beshear to sign an executive order on Dec. 9, 2021, to declare the nursing situation as an emergency. Even though the nursing shortage was a problem before the pandemic, the pandemic intensified the problem in Kentucky, according to the four-page executive order. The Kentucky Nurses Association (KNA) reports that there still was a 12 to 20 percent shortfall of nurses that are needed for patient care, even though there are 89,000 licensed nurses in the state (Rickert, 2022). KNA predicts that an additional 16,000 nurses will be needed within the next two years. In October 2021, KNA surveyed over 800 nurses. Many felt overworked, underpaid, and ready to leave. Three-fourths stated they felt overstaffed, with heavy patient loads significantly contributing to the shortage. One-fourth said

within the next three months would leave their current positions, and sixteen percent would likely leave the nursing profession altogether (Rickert, 2022).

The nursing shortage problem is not limited to Kentucky, and that itself is a problem. With the shortage reaching national heights, all hospitals compete for a minimal pool of candidates. Demand for nurses incentivizes staffing agencies to increase prices for nursing contract workers. These agencies can pay nurses a larger salary than hospitals, so nurses often leave for travel agency work. Hospitals pay staffing agencies to fill in for the shortage at a higher rate, and the average hourly rate for staffing nurses is between \$150 and \$200 (Larson, 2021). The US Bureau of Labor Statistics website shows that the average registered nurse's wage was \$31.12 in May 2020. Kentucky hospitals also face a harsher reality with staff nursing costs because the government health plan Medicaid pays hospitals at a lower rate than in other states. So, they are not configured to cover the expenses of national-level rates or even rates in other states for nurses. Hospitals don't have the funds to do it, so it's forcing hospitals to go into their reserves, going into a negative situation, to try nevertheless to get some nurses in to help provide patient care. It's a huge financial drain on hospitals on all hospitals, urban and rural.

RESEARCH METHOD

Qualitative research relies on data obtained by the researcher from firsthand observation, interviews, questionnaires, focus groups, participant-observation, recordings made in natural settings, documents, case studies, and artifacts. Qualitative research is a process of naturalistic inquiry that seeks an in-depth understanding of social phenomena within their natural environment while focusing on the "why" rather than the "what" of social phenomena and relies on the direct experiences of human beings as meaning-making agents in their everyday lives.

I have chosen a qualitative research method approach for exploring the information contained in this paper. This is the appropriate approach for this paper, as I explore the various ways hospitals are dealing with the nursing shortage and measures they are having to take to cope with the situation, as well as the impact that it is having on hospitals' financial health. Using articles and journals that describe the details about how our nation has arrived at this nursing shortage, what steps are being taken when trying to retain nurses, as well as attract new nurses with details about how this is affecting the hospital's bottom line.

Archival data exist before any actions by current researchers, although previous scholars may have assembled them. Current researchers gather these preexisting data. Archival research data may be collected from numerical records, verbal documents, or visual artifacts such as those on websites. I will also use archival data for nursing salaries and pay scales. I have reviewed information from the University of Kentucky's salary scales and the Bureau of Labor Statistics.

DATA ANALYSIS/FINDINGS

Most Affected States

Nursing continues to be an in-demand profession, as nearly every hospital is hiring for one of healthcare's most important roles. In 2019, it ranked as the third-most in-demand job of any profession in the United States, and this trend shows no signs of slowing down (Nurse Journal, 2022). As the baby-boomer generation ages and overall population numbers increase, the demand for nurses continues to grow, especially in times of crisis like the 2020 COVID-19 outbreak. Furthermore, the gap between people graduating from nursing school and available jobs continues to grow. In 2030, California is projecting the highest nursing shortage rate of a deficit of 44,500 RNs, nearly three times the deficit in the following several states suffering from

a shortage. Texas is projecting a deficit of 15,900), New Jersey is projecting a deficit of 11,400, and South Carolina is projecting a nursing deficit of 10,400 (Nightingale College, 2020).

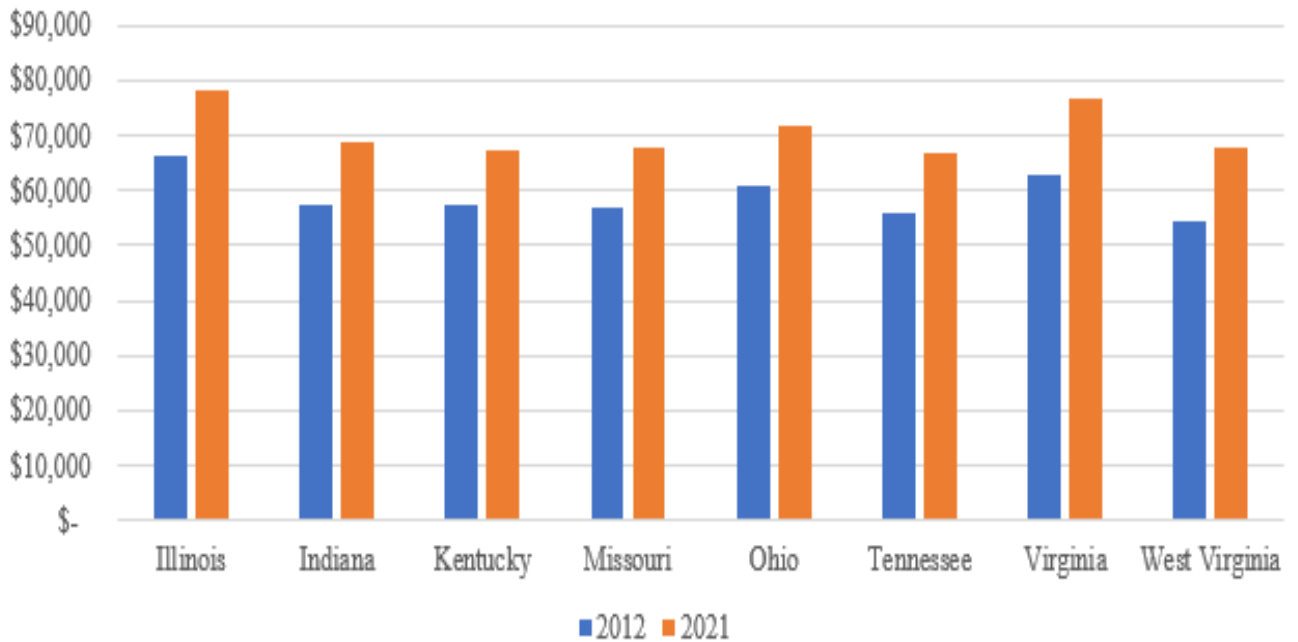
Affected states, hospitals, and health care systems in Kentucky are experiencing the negative impacts of nursing shortages.

State	RN's
California	44,500
Texas	15,900
New Jersey	11,400
South Carolina	10,400

Pay Scale Trends

From 2011 to 2020, the average salary for a registered nurse grew by 1.66 percent per year, according to data by the US Bureau of Labor Statistics (BLS). In 2020, data showed an above-average growth of 3.29 percent in salaries. This could be linked to the nationwide nursing shortage and the COVID-19 epidemic (Paton, 2021). The demand for nurses will continue to

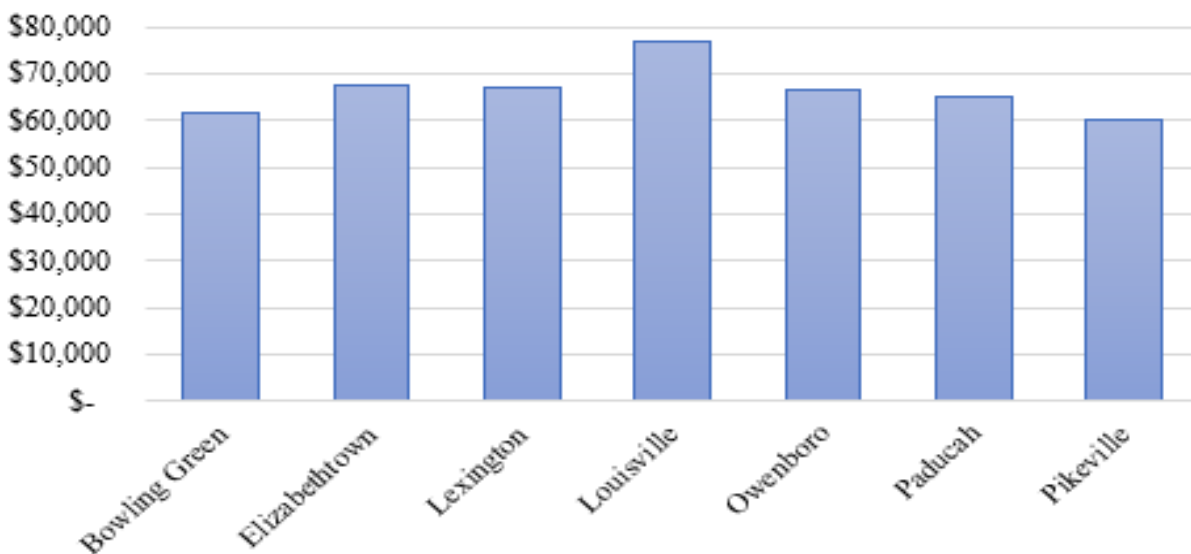
Graph 5-2: Kentucky & Surrounding States Average RN Salaries



grow along with nursing salaries. As of 2022, the US Bureau of Labor Statistics (BLS) reported that between May 2020 and May 2021, “RNs brought in a mean salary of \$82,750 per year nationally.” While Kentucky and its surrounding states are below the national average for RN pay, they have all increased in compensation over the last decade, as shown in Graph 5-2.

When looking at the average RN salaries in different cities in Kentucky, I reviewed Bowling Green, Elizabethtown, Lexington, Louisville, Owensboro, Paducah, and Pikeville. The salaries throughout Kentucky range from \$60,370 to \$77,010, with a difference of \$16,640 overall. Elizabethtown, Lexington, Owensboro, and Paducah were all very similar regarding their average, with Pikeville being the lowest and Louisville being the highest. Graph 5-3 shows average salaries for selected Kentucky cities.

Graph 5-3: 2021 Kentucky Average RN Salaries



Financial Impacts of Retraining Nurses and Travel/Agency Nurses

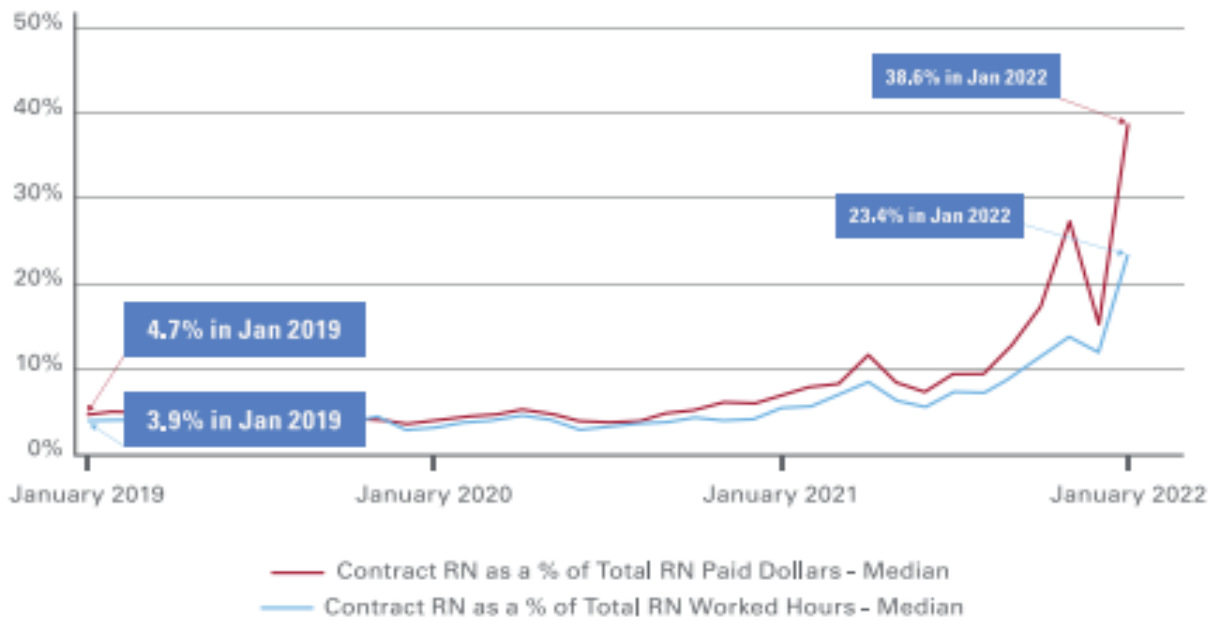
The workforce in healthcare facilities is essential and often the most significant expense for hospitals. “There is no surprise that even before the pandemic, labor costs (which include

costs associated with recruiting and retaining employed staff), benefits, and incentives accounted for more than 50 percent of hospitals' total expenses (American Hospital Association, 2022).” For this reason, even a minor increase in a hospital’s workforce costs can significantly impact the hospital's total expenses and operating margins. Adding employee burnout, increased patient acuity, higher demand in patient care, and decreased available staff has forced hospitals to turn to contract staffing firms to help address staffing shortages (American Hospital Association, 2022). There has always been a need for contract staffing in hospitals to bridge temporary gaps in staffing. The pandemic-driven staffing shortage has made hospitals rely even further on contract staff. Travel nurses serve a critical role in providing care for both COVID-19 and non-COVID-19 patients and are allowing hospitals to meet the demand for care, making travel nurses essential.

According to a survey by AMN Healthcare, one of the nation's largest healthcare staffing agencies, 95 percent of healthcare facilities reported hiring nurse staff from contract labor firms during the pandemic. Staffing firms have illustrated the significant growth in the demand for travel nurses as they have increased their recruitment. According to data from EMSI/Burning Glass, pre-pandemic, in January 2019, there were 14,328 travel nurse job postings, and in January 2022, there were 31,309, which was nearly 120 percent increase (American Hospital Association, 2022). As the number of contract or travel nurses’ positions has increased, so have the costs of employing travel nurses compared to pre-pandemic levels. Hospitals spent an average of 4.7 percent of their total nurse labor expenses on contract travel nurses in 2019, but in January 2022, this skyrocketed to 38.6 percent (See Figure #3) (American Hospital Association, 2022). A quarter of hospitals relying disproportionately on contract travel nurses saw their costs for contract travel nurses account for over 50 percent of their total nurse labor expenses. Looking

at Figure #3, you see that contract travel nurses accounted for 23.4 percent of the total nurse hours in January 2022. They accounted for nearly 40 percent of the labor expenses for nurses. An increase like this suggests that the prices that staffing companies are charging are a primary driver of higher hospital labor expenses (American Hospital Association, 2022).

Figure #3: Contract RN as a % of Total RN Worked Hours and Paid Dollars



The American Hospital Association shows that in January 2022, a 213 percent increase in hourly rates charged by staffing companies for travel nurses to healthcare organizations compared to pre-pandemic levels in January 2019. It's thought that this drastic increase is due to staffing agencies exploiting the situation by increasing the hourly rates they are billing to hospitals for contract travel nurses, which are even higher than the hourly rates they are paying the travel nurses. With hospitals relying so heavily on contract or travel staff, it is preventing hospitals and health systems from investing those costs into their existing employees, leading to

low morale and high turnover, further intensifying the challenges hospitals and health systems have faced facing.

As Kentucky hospitals aren't exempt from the nationwide nursing shortage, there's a battle within the industry to retain nurses they already have. The Kentucky Organization of Nurse Leaders reported that "Kentucky nurses are leaving the bedside to become travel nurses to work temporarily in healthcare systems around the country. Some travel nurses are making more than \$200 an hour, often working as a travel nurse in the same hospital they left. Since healthcare systems have to pay their former employees more as travelers, the cost impacts healthcare's financial health.

How Kentucky Hospitals Are Coping with The Shortage

Some hospitals throughout Kentucky have been so desperate for qualified applicants that they've had to start offering exorbitant signing bonuses. In 2017, Pikeville Medical Center in eastern Kentucky offered a \$25,000 signing bonus to compete with other hospitals. This allowed them to recruit over 300 nurses at a time while other hospitals were experiencing dire shortages (Nurse.Org, 2017). Pikeville Medical Center is offering a \$10,000 to \$20,000 sign-on bonus for

registered nursing jobs. CHI Saint Joseph Hospital in various cities within Kentucky and Kindred Hospital in Louisville offers up to a \$15,000 sign-on bonus. At the same time, Frankfort Regional Medical

Facility	Sign On Bonus
CHI Saint Joseph Hospitals	Up to \$15,000
Frankfort Regional Medical Center	Up to \$10,000
Kindred Hospitals	Up to \$15,000
Pikeville Medical Center	\$10,000 - \$20,000
TJ Samson Community Hospital	Up to \$10,000

Center in Frankfort and TJ Samson Community Hospital in Glasgow is offering up to a \$10,000-dollar sign-on bonus.

While some of the larger healthcare organizations in Kentucky have always offered education reimbursement or free education incentives, such as the University of Kentucky and Baptist Health Facilities for their current employees, this is now offered at more organizations in Kentucky. Also, healthcare organizations are taking it a step further. The University of Kentucky Healthcare has recently launched a new program developed with Bluegrass Community and Technical College (BCTC) that will accelerate the path toward a health care career for high school students. The Healthcare Jumpstart Program will first focus on nursing, enabling students to complete prerequisite courses for a two-year nursing degree while still in high school. Participating high school students will be given dual-credit course options that will allow them to complete the prerequisite courses for a healthcare-focused program of study through BCTC while also earning credits toward that high school graduation. After graduation, students may enter BCTC on a fast track toward a degree, with the option of a full tuition scholarship from UK HealthCare that guarantees them employment upon graduation. Also, KentuckyOne Health has started offering a \$6,000 sign-on bonus in exchange for a two-year work commitment or up to \$24,000 worth of student loans paid off after committing to work for four years. KentuckyOne is also offering their employees across the state the opportunity to get a \$5,000 cash bonus for just referring one nurse with two or more years of experience, or \$1,000 if they refer a nurse with less than two years experience. KentuckyOne isn't alone in this strategy, as Appalachian Regional Healthcare (ARH) formed a partnership with Galen College of Nursing, which opened an Eastern Kentucky campus to train future RNs. ARH has also offered sign-on bonuses to bring in nursing students to get familiar with ARH through an extern program, and the new hires also will receive either a \$5,000 sign-on bonus or monthly tuition reimbursement (Costello, 2017). The University of Louisville is relaunching an accelerated

program for individuals who want to become a nurse to help the nursing shortage in the long run. The program is designed for someone with a degree in something else and allows for in-person and online course work in which the degree can be completed in 15 months (Harkins, 2021).

Another way that the University of Kentucky Healthcare is coping with the nursing shortage is to announce in October of 2021 that they were investing over \$74 million in salaries, benefits, and surge pay¹ for nursing positions along with other positions. They have increased their salary hiring scales for nurses to be able to offer new hire nursing positions increased hourly rates, and they raised their existing nurse employees to fall within their new salary scale, which are broken down by level of experience the individual has as well as which degree they hold such as ADN, BSN, and MSN².

University of Kentucky Nursing Hiring Scale									
	MIN	24 MTHS	36 MTHS	60 MTHS	84 MTHS	120 MTHS	180 MTHS	240 MTHS	360 MTHS
ADN	\$28.00	\$29.12	\$30.28	\$31.50	\$32.76	\$33.74	\$34.75	\$35.79	\$36.87
BSN	\$30.00	\$31.20	\$32.76	\$34.73	\$36.81	\$38.28	\$39.81	\$41.41	\$43.06
MSN	\$30.25	\$31.46	\$33.03	\$35.01	\$37.12	\$38.60	\$40.14	\$41.75	\$43.42

Kentucky’s Executive Order

In December of 2021, Kentucky’s Governor Andy Brashear signed an executive order addressing Kentucky's nursing shortage, which was considered an emergency as it threatened the health of patients and the entire healthcare delivery. At that time, Kentucky was operating at a 12 to 20 percent shortfall to meet the nursing staff needs, with the state projecting more than 16,000 additional nurses needed by 2024 (WLEX, 2021). This executive order will

¹ Surge Pay – This is a way to incentivize employees to come in and work extra shifts by offering them additional money on top of their regular pay and/or overtime rates.

² ADN – Associates Degree in Nursing, BSN – Bachelors of Science in Nursing, and MSN – Masters of Science in Nursing.

allow Kentucky nursing schools to enroll more students and require the Kentucky Board of Nursing to approve increasing enrollment for schools with enough resources to handle more students. It also required schools to report vacant student seats monthly to the Board of Nursing. The Board would be able to be more involved in the vacancies at schools and faculty that needed to meet total enrollment. The order also allowed existing schools that wanted to open new campuses to do so much more quickly if they had enough resources. It allowed nurses licensed in other states to come to Kentucky to practice in this emergency.

RECOMMENDATIONS

Based on this research, the following recommendations are made to address this issue, including retention plans, promoting nursing as a career choice for high school students, and maximizing licensure reciprocity.

- 1) **Retention Plans:** The Kentucky Nurse Association (KNA) asked the state to allocate \$100 million to use for retention efforts and recruitment of new nurses. The money is intended to use for bonuses for local nurses, loan forgiveness for nurses in underserved areas, efforts to have retired nurses return to work, and marketing to make nursing appealing again (Gessner, 2021). One of the first places to start when addressing this issue is with the nurses that you already employ. All healthcare organizations need to develop a retention plan for their current nurses. Also, employers need to look at a work-life balance for nurses and seek input from their nurses at their specific organization, as all organizations will be different. If organizations could retain their current nurses, there wouldn't be a need for contract or travel nurses, which is financially hurting hospitals. Also, it is a situation of supply and demand; if the demand for contract or travel nurses decreases, the cost it costs hospitals would also decrease.

- 2) **Promoting Nursing as a Career to High School Students:** Is a great way to make nursing appealing to the younger generation. The University of Kentucky Healthcare and BCTC's Healthcare Jumpstart Program enables high school students to complete prerequisite courses for a two-year nursing degree. After graduating high school, students may enter BCTC on a fast track toward a degree with the option of a full tuition scholarship from the University of Kentucky HealthCare, guaranteeing them employment upon graduation. This program is not only allowing high school students to begin working towards a degree but after graduation, they are being offered a full tuition scholarship which is a great way to help individuals who want to further their academic careers after high school. Although the organization will be spending money for the individual's education, it is building a relationship with the person, which could promote the individual to want to stay and work with the organization that helped them get to that point in their life.
- 3) **Consider Maximizing Licensure Reciprocity:** Kentucky's executive order allowed registered nurses from other states the right to practice in the state of Kentucky during a state of emergency. Allowing nurses with a license in one state to practice in another could alleviate barriers and encourage mobility. I think that this should be considered on a going-forward basis.

CONCLUSION

The workforce in healthcare organizations is crucial to the care process and typically is the most substantial expense for hospitals. Even a slight increase in these costs can significantly impact a hospital's total expenses and operating margins (American Hospital Association, 2022). Healthcare organizations throughout Kentucky are being forced to offer lucrative sign-on bonuses and reimburse or pay for the education of RNs. At the same time, these same

organizations are still relying disproportionately on contract/travel nurses, costing these organizations exceedingly more than before.

While the nursing shortage throughout our nation has been going on for decades, now more than ever before is when we need to find ways to address the problems as healthcare organizations are feeling the financial impact that is being caused. Addressing the nursing shortage by implementing a retention plan in each organization is one place to start, promoting nursing as a career choice for high school students and maximizing licensure reciprocity.

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