



Post COVID-19 Retention Strategies for Nurses Using Six Sigma Framework

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Abstract

The COVID-19 pandemic has left the nursing profession bruised and battered from the already looming concerns of staffing shortages, forcing health care leaders to explore factors that are influencing burnout, implement supportive strategies, and meet the needs of the staff, thereby reducing the turnover rate, and increasing retention of the nurses. Without examining the fundamental concerns of turnover and exploring the issues that are causing nurses to leave the profession, attempts to remedy it would be perpetually exhausting and unsustainable. In a 2023 survey conducted by NSI (Nursing Solutions Inc.), the average cost of turnover for a bedside RN is \$52,350, a 13.5% increase over last year. Turnover is a costly endeavor for the health care business. The cost of a nurse leaving their position is estimated to cost a hospital system between \$11,000 to \$90,000 per loss of a nurse staff member according to literature. Furthermore, the American Organization for Nursing Leadership longitudinal study in 2022 concluded that the biggest challenges facing nurse leaders after the pandemic include low morale/burnout, staffing shortages, and staff retention. It is the intent of this paper to identify the factors that increased turnover rates among healthcare workers and to develop an evidenced-based plan to improve nurses' retention in healthcare organizations based on current evidence using Six Sigma as a framework.

Keyword: Nursing retention, Turnover, Nursing shortage, Six Sigma, Evidence based retention plan, Burnout

RETENTION STRATEGIES AMONG NURSES

The COVID-19 pandemic has left the nursing profession bruised and battered from the already looming concerns of staffing shortages. According to the World Health Organization (2020), nurses play a crucial role in health systems, constituting approximately 60% of the professionals in this field [1]. The COVID-19 pandemic and staffing shortages are forcing medical leaders to explore factors that are influencing burnout, implement supportive strategies, and meet the needs of the staff, thereby reducing the turnover rate, and increasing retention of the nurses. Without examining the fundamental concerns of turnover and exploring the issues that are causing nurses to leave the profession, attempts to remedy it would be perpetually exhausting and unsustainable. In a 2023 survey conducted by NSI (Nursing Solutions Inc.) [2], the average cost of turnover for a bedside RN is \$52,350, a 13.5% increase over last year. Turnover is a costly endeavor for the health care business. The cost of a nurse leaving their position is estimated to cost a hospital system between \$11,000 to \$90,000 per loss of a nurse staff member. "It is estimated that nurses leaving a typical hospital cost between \$3.6 million and \$6.5 million annually and that for every percent a hospital organization improves retention, it may decrease annual turnover costs by \$270,800" [3]. Furthermore, the American Organization for Nursing Leadership longitudinal

study (2022) concluded that the biggest challenges facing nurse leaders after the pandemic include low morale/burnout, staffing shortages, and staff retention. It is the intent of this paper to identify the factors that increased turnover rates among healthcare workers and to develop an evidenced-based plan to improve nurses' retention in healthcare organizations based on current evidence using Six Sigma as a framework.

LITERATURE REVIEW

A literature search was conducted using EBSCOhost through Indiana University of Pennsylvania's (IUP) library. CINAHL and Medline databases were searched limiting results to full text, English language, and dated 2020 to present. Key words used in the search were "nurse or nurses or nursing" and "work environment(s) or working condition(s)" and "job satisfaction or work satisfaction or employee satisfaction or

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retention or attrition” and “COVID-19 or coronavirus or 2019-ncov or sars-cov-2. According to the US Bureau of Labor Statistics, more than 275,000 additional nurses are needed from 2020 to 2030 [4]. The nurse turnover rate at hospitals, including nurses who left their jobs temporarily to take travel assignments, increased by 2.8% in 2020 to an annual rate of 18.7% [4,5]. Hadaad found the key indicators affecting nursing shortages were an aging population, nurse burnout, career and family, regions, growth, and violence in the healthcare setting. Factors also fueling the nursing shortage are the lack of potential educators, high rates of turnover, and workforce distribution. Nurses’ turnover intention is defined as a tendency towards changing occupations or leaving one’s current work due to dissatisfaction with the job [6]. This rate is considered high compared with those of other professions, according to multiple reviews, with COVID-19 appearing to have increased the nurses’ turnover intention rate [7,8]. This result has been forecasted by many studies and is reported to be due to the social and psychological impacts of COVID-19. According to Kim & Kim [6-8] and Elangovan the main reason for nurse shortages is high turnover rates in nursing, which can have serious negative effects on the management of healthcare organizations. An integrative review of forty-three studies completed by Falatah [8] determined limited literature on nursing turnover, however, it indicates that there are many more studies available evaluating nursing turnover intention, which is the most accurate predictor of nurse turnover. Multiple studies have linked turnover intention to several adverse outcomes for an organization and patients such as lower job satisfaction, medication, error, falls, pressure injuries, reduced nursing quality, poor patient outcomes, and increased healthcare system costs [7-9]. Elangovan also reported that intention to leave does not lead to automatically leaving the job, but it underscores a different kind of problem, disengagement, especially among this group of nurses who want to quit their job. Several studies have been conducted to investigate the factors that contribute to increased turnover rates among nurses. Falatah [8] identified predictors of turnover intention, pre-Covid, as job satisfaction, job commitment, and leadership style which were different from post-Covid predictors of fear of disease, stress, and anxiety [6]. Kim & Kim completed a meta-analysis on predictors of turnover intention of hospital nurses in South Korea, the factors that prevented nurses’ turnover intention was job satisfaction and included work engagement and professional self-concept. All these studies and reviews emphasize the urgency of reducing such high turnover among nursing population. A systematic review done by de Vries in 2023 determined six factors key to retention: personal characteristics, job demands, employment services, working conditions, work relationships, and organizational culture. Job satisfaction, career development and work-life balance were the top contributing factors. Focusing on these areas that are important to nurses will help to build strategies to enhance work satisfaction overall [10].

RETENTION PLAN

The success of any quality improvement plan depends on the level of commitment to quality of the project manager, stakeholders, and leadership. The plan should begin with an improvement theory to ensure the structure and success of the project. The Six Sigma theory has been adopted in many health systems to help change the organization and set up a culture of quality. While most people associate Six Sigma with manufacturing, the method applies to every type of process in any industry. In all settings, organizations use Six Sigma to set up a management system that systematically finds errors and provides methods for eliminating them [11]. Six Sigma has been defined as “data-driven quality methodology that seeks to eliminate variation from a process” and is best applied to important, costly issues in key processes [12]. Six Sigma employs a structured process called DMAIC (Define, Measure, Analyze, Improve and Control). In the first stage, the manager takes steps to define the issue and drafts a project charter outlining the problem, the target, and the boundaries of the process improvement effort. The second stage determines the magnitude of the issue and how it is currently impacting the organization. The third stage analyzes what is causing the problem and determines the root causes. The next step determines how the team will fix the root cause of the problem. The final stage, control, is about ensuring that the improvements are sustained and developing a response plan if a dip in performance should occur.

THE DEFINE STAGE

In the define stage, the focus is on addressing the main issue of high nurse turnover intention rate. Turnover impacts an organization in quality of care, productivity, and funding as it is expensive to recruit new nurses into the global or organizational workforce. Elangovan [7] report that the cost of replacing a nurse can range up to \$50,000. It is therefore valuable to consider how turnover can be reduced and retention of nurses increased, particularly voluntary turnover where nurses are lost to an organization or the profession [13]. The business case is presented with a focus on the financial and employee benefits of reducing turnover and is approved by leadership as it aligns with the company’s core values of customer first, transformational leadership, purposeful execution, and trust working together. The required resources associated with the implementation of this plan would be time, personnel, and money. The project goal is to improve the quality of patient care by reducing nurse turnover intention and increasing the retention of the nurses within the organization. The timeline of reporting outcomes, the scope of the project, and team members that will participate in the project will be defined by the manager in this stage and communicated to key stakeholders.

THE MEASURE STAGE

It is in this stage that the team defines the current baseline and the magnitude of the problem. Mathisen [14] reported that high employee turnover in hospitals can hamper workflows, lead to lower quality of care, and incur considerable financial expenses. In a study by Nursing Solutions [2], a survey of 136 organizations indicated bedside registered nurse turnover averaged 14.9%, with an annual hospital financial loss of 5.134 M-7.86 M and 80% of hospitals reporting a registered nurse vacancy rated greater than 5% [13]. Furthermore, because it is difficult to expect maximum productivity from nurses with turnover intention, high turnover also negatively influences patient safety, quality, and patient outcomes.

THE ANALYZE STAGE

It is in this stage that the manager determines the true root cause of the issue before exploring a resolution to the problem. Job satisfaction has been shown in many studies to have a direct impact on turnover intention rate. Mathisen [14] found that job satisfaction is one of the most important aspects of the psychosocial working environment in relation to turnover. During this phase, 1:1 conversation is held with team members centering around dissatisfiers of the current work environment. An anonymous survey could also be implemented at this stage to ensure candid feedback from the staff. An additional measure to explore issues includes interviewing past employees that have left the organization for other viewpoints for consideration. After feedback is collected and analyzed, the improvement plan will be based on the results of collected data to achieve the desired outcomes.

THE IMPLEMENT STAGE

The next phase is to implement the plans to resolve the root problem of turnover and collect data to confirm there is an improvement. Interventions aimed at improving the psychosocial work environment in hospitals hold the potential for reducing employee turnover rates [4]. The COVID-19 pandemic has had an impact on front line workers causing fear of disease, stress, and anxiety. One strategy suggested by Falatah [8] is to improve nurses' competencies in caring for patients with COVID-19, stating that it might reduce the psychological factors, thereby reducing turnover intention. Working together along with education and continuous improvement departments to publicize and offer trainings aimed at increasing knowledge of the COVID-19 virus and ensuring proper use of personal protective equipment (PPE) will reassure nurses and reduce the fear of the disease. A second strategy aimed at improving job satisfaction would be implementing structured huddles. The focus of these huddles includes skilled communication, team collaboration, and meaningful recognition, all of which have been identified as job satisfaction indicators. Building positive and nurturing professional relationships is crucial

for nurse leaders as they navigate this crisis [15,16]. Raso recommends incorporating appreciation to the everyday workflow by adding regular shout outs to huddles and meetings. Green [9] conducted a quality improvement intervention that was successful in improving job satisfaction rates by conducting structured huddles with 69% of the respondents feeling they were beneficial and recommending continuation. Moreover, nurse leaders should focus on onboarding and supporting new team members. A critical time for the turnover of nurses is during the first year after qualification [5,13]. Therady suggests staying connected with new employees through 30-, 60-, 90-, and 180- day meetings to identify any issues the team member may be having and intervene appropriately. Such an action would be securing investment in the team, thereby increasing employee satisfaction, and reducing turnover within the first year of employment. Other strategies included preceptorship and strengthening the residency program to promote retention and reduce turnover [17]. Having the preceptee and mentor working nearly identical schedules for a set period of up to a year, will develop work relationships and bonds that will help to keep nurses in their current job, as well as giving them the feeling that someone is always there to help them. Additionally, flexible scheduling can have a positive impact on nurses' retention [18]. Continuing education, and professional development such as specialty training, and leadership development can demonstrate investment in professional growth of nurses [19]. Changes in policy to allow nurses to cross-train into other units and areas in a hospital, float pools, and interdisciplinary teams are some of the proven strategies for this area of concern [20]. Additional strategies include increased skilled communication education [21]. Implementing shared governance throughout the organization will be important so nurses have a voice in decision-making situations and committees that impact patient care [20]. Providing consistent meaningful recognition to staff is another important factor in a healthy work environment. Initiating an award in the organization will be one way for meaningful recognition as well as having monthly newsletter including shout outs to staff [22]. Also, tying bonuses to excellence in patient care is another form of recognition [22]. Also, ensuring there is an advancement plan in place for staff will aid in meaningful recognition. As staff see the hospital invest in staff by developing, training, and coaching, employees will value staying within in the hospital [19]. Additionally, promoting peer-to-peer recognition encourages team building and appreciation of others [23].

THE CONTROL STAGE

In the control stage, the focus is sustaining the improvement. The outcomes will be evaluated as compared to the original projected goals. If adjustments to the plan are determined to be needed, they will be implemented here, and the improvement cycle will repeat. The results will also be

communicated to leadership and the stakeholders. The project manager will determine who is responsible for the continued monitoring of the improvement plan and communicate that accountability. Consideration should be made to expand the project to other areas to help improve the entire organization if proven successful. Celebrate the success.

PLAN OUTCOMES AND EVALUATION

The goal of the retention plan is to decrease the turnover intention rate by reducing fear and anxiety related to the COVID-19 pandemic, increasing job satisfaction, and therefore, improving nurse retention. It is highly recommended that nurse manager conducts a survey 3 to 6 months post implementation to evaluate the effectiveness of the plan by measuring pre- post intention to quit, actual turnover, job satisfaction, and nurses' well-being including burnout, compassion fatigue, depression, and stress.

CONCLUSION

It was best stated by Thready [5], "These moves toward a sustainable future for healthcare will only be possible if leaders consider their workforce an investment, not an expense, to make them feel valued and appreciated." Nursing retention and turnover, while already considered a global issue, has been thrust into the spotlight among organizations and is now fueled even more by the COVID-19 pandemic. Many studies have associated nurse turnover intention with great costs to an industry, including patient outcomes, patient safety, and increased expenditures on recruiting and replacing staff members. Implementing retention strategies focusing on decreasing turnover intention rates and increasing job satisfaction are imperative for the success of all organizations.

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