Effects of Leadership Education and Mentoring for Assistant Nurse Managers

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Effects of Leadership Education and Mentoring for Assistant Nurse Managers

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Effects of Leadership Education and Mentoring for Assistant Nurse Managers

Abstract

**Background:** Nurse manager knowledge and leadership styles influence quality of care, patient satisfaction, staff engagement, and retention. Dissatisfaction with the assistant nurse manager (ANM) role can lead to high job turnover with negative influences on patient satisfaction, quality of care, workforce engagement, and achievement of organizational goals.

**Local Problem:** Two hospitals and one free-standing ambulatory surgery unit of a large integrated healthcare organization experienced high ANM turnover due to role dissatisfaction, ANM frustration with low-quality care in the units they oversaw, and patient satisfaction metrics below the 65th percentile. The regional healthcare system leadership team recognized the need to increase ANM knowledge, competency, and job satisfaction, with the goals of improving role resilience and reducing high turnover.

**Methods:** Quantitative data was collected in pre- and post-intervention surveys constructed from the AONL Nurse Manager Competencies tool and the Acute Care Nurse Job Satisfaction Scale. Qualitative data was collected with open-ended questions in post-intervention surveys.

**Interventions:** A 16-hour education and 2-hour mentorship program for ANMs drew on the AONL Nurse Manager Learning Domain Framework to enhance knowledge, competency, and job satisfaction.

**Results:** Knowledge improved from baseline by 11.2% and competency by 9.65%. Job satisfaction decreased from baseline by 3.1%.

**Conclusions:** Although the specific aim of 15% improvement in knowledge, competency, and job satisfaction was not met, formal education and mentoring improved ANM knowledge and
competency. Through mentoring, the ANMs embraced the 10 Caritas Processes® and developed innovative ideas to incorporate these factors for compassionate patient care.

**Keywords:** assistant nurse managers, education, frontline leaders, leadership, job satisfaction, mentorship, turnover.
Effects of Leadership Education and Mentoring for Assistant Nurse Managers

Nurse leaders play a decisive role in nurse scheduling and staffing, motivation, efficiency, and quality (Mendes & Fradique, 2014). The development of nursing leaders is imperative to organizational success. This DNP project discusses the impact of education and mentoring for the Assistant Nurse Managers (ANMs) on knowledge, competency, and job satisfaction.

Background

Nursing leaders influence nurse performance and patient satisfaction and set the tone for staff engagement, quality of care, and fiscal responsibility (Alloubani et al., 2019). Strengthening leadership behaviors helps reduce adverse events and improve quality of nursing care (Labrague, 2021). Conversely, high leadership turnover within a diminishing pool of experienced nurses can weaken the leadership infrastructure and result in the loss of experienced-based knowledge, with implications for the clinical management of today's complex, high-acuity patients (Hill, 2010).

Problem Description

In a recent internal job satisfaction survey, 42% of ANMs reported dissatisfaction with their role and that they would feel uncomfortable as patients in the units they oversaw. As communicated informally to the Chief Nurse Executive (CNE) by several ANMs, the lack of structured leadership education and mentoring programs has contributed to inadequate leadership knowledge for the ANM role and high turnover at two community hospitals in the Central Valley of California. The ANM position is characterized by low job satisfaction and high turnover. The turnover rate from 2020 to 2021 was 25%. Patient experience metrics have dropped to the 65th percentile. The ANMs see themselves as glorified charge nurses, with all the responsibility of managing daily workflow and the expectation that they will also fulfill management roles and
separate sets of responsibilities. As a result, the ANMs are very task-oriented and struggle with the softer skills of communication and motivation, as well as the professional competencies of the role, such as quality of care, patient satisfaction, fiscal management, and strategic initiatives. The regional healthcare system leadership team is working to improve the resiliency of current roles and reduce high turnover as there has been no formal educational program since 2018. Providing managers with the tools for effective responsibility management may improve their personal satisfaction and role proficiency, impacting role retention and improving the organization’s fiscal outcomes (Seabold et al., 2020). As such, the regional healthcare system leadership team supported the implementation of structured leadership education and mentorship to increase knowledge, competency, and job satisfaction.

**Setting**

This performance improvement project was conducted at two hospitals and a free-standing ambulatory surgery unit spanning 30 miles across the Central Valley of California. These three centers are part of a national non-profit integrated healthcare delivery organization. Together, the two hospitals and free-standing surgery centers have a bed capacity for 375 patients and employ approximately 2,000 nurses, of which 52 are ANMs.

**Specific Aim**

The specific aim of the project was to evaluate if structured educational programs and mentorship improve ANM knowledge, competency, and job satisfaction by 15% from baseline measured four months from the initiation of the intervention. The goal was to increase ANM engagement, reduce ANM turnover through an education and mentorship intervention, and ultimately improve patient care and satisfaction.
Available Knowledge

PICOT Question

In assistant nurse managers (P), how does providing formal leadership education and mentoring (I), compared to not providing formal leadership education and mentoring (C), affect knowledge, competency, and job satisfaction (O) within four months (T)?

Search Methodology

The initial search was performed using the Cochrane Database of Systematic Reviews, Joanna Briggs Institute Evidence-Based Practice database, Cumulated Index to Nursing and Allied Health Literature (CINAHL) Complete, PubMed, and Scopus. The keywords were manager, leadership education, mentoring, retention, and job satisfaction. The Boolean operator "AND" was used to link the keywords in various combinations. The initial search returned 492 articles. By adding the filters peer-reviewed, research, published between 2010 and 2021, and English language, the yield was reduced to 112 articles. Titles and abstracts were reviewed for the prevalence of keywords, healthcare setting, specific mention of nurse leadership or management, and relevance to the PICOT question. Fifteen studies met the selection criteria. The full texts were reviewed, of which nine studies were chosen for literature review. During project implementation, an additional literature search was performed, extending the publication date range to 2023. Three studies from this search were selected for appraisal and added to the review of evidence. In total, twelve studies were appraised using the Johns Hopkins Evidence-Based Practice for Nurses and Healthcare Professionals Model (JHNEBP) tools (Dang et al., 2022). Eleven studies were Level III, of which three were qualitative with an A/B quality rating (Eddy et al., 2009; Galuska, 2012; Westcott, 2016). Seven of the Level III studies were B quality: four cross-sectional, two mixed-methods, and one systematic review (Alloubani et al., 2019;
Labrague, 2020 and Labrague, 2021; Le Comte & McClelland, 2016; Patrician et al., 2018; Pihlainen et al., 2016; Warshawsky et al., 2022). One Level III quantitative observational, prospective cohort design study was rated Quality C (Seabold et al., 2020). The single quality improvement study in the review was rated Level V-B (Fennimore & Wolf, 2011). See Appendix A for the Evidence Evaluation Table.

**Integrated Review of the Literature**

Evaluating evidence about a topic is necessary to answer clinical questions for practice improvement (Buccheri & Sharifi, 2017). Many studies returned by the initial search focused on leadership skills and competencies, but few specifically addressed the influence of nurse leadership style and competencies on organizational outcomes and quality of care. No studies specifically addressed the assistant manager role; however, the manager and leadership roles addressed could be presumed to include ANMs by the description of the duties. The studies selected for this review most directly addressed leadership education and mentoring as it affects nurse leader knowledge, competency, and job satisfaction in relation to organizational and care outcomes. Three themes emerged from the nine studies reviewed: leadership competencies, mentoring, and quality of care.

The review of the literature revealed that standardized competencies play a crucial role in leadership success and job satisfaction. The three themes were consistent across the studies reviewed. First, the evidence suggests an instrumental role in leadership training and behaviors shaping organizational outcomes. Second, coaching and mentoring improve job satisfaction, and third, quality of care is adversely impacted when solid, transformational leadership is absent.
Leadership Competencies

As the complexity of healthcare increases, so does the need for competent, successful, inspiring leaders to meet organizational outcomes. Eddy et al. (2009) discussed the shortage of nurse leaders with the needed competencies to respond to the changing healthcare environment. Semi-structured interviews and focus groups involving 23 varying levels of nurse leader participants were used in this Level III-A/B qualitative study. The researchers aimed to uncover essential themes related to highly skilled nursing leadership and identify tactics to transfer knowledge to practice. Additionally, this study sought to develop deeper connections between practice and academia. The authors identified communication skills that emphasized listening and conflict resolution, with motivating, inspiring, and communicating a vision as essential nursing leadership competencies. They also pointed to the need for fiscal acumen, willingness to take initiative during rapid change, and technological competence (Eddy et al., 2009).

Pihlainen et al. (2016) conducted a Level III-B systematic literature review of 13 empirical research studies, theoretical models, or literature reviews to describe the management and leadership competence characteristics of healthcare leaders and managers. The authors considered management and leadership competence for their study as knowledge, skills, abilities, and attitudes required for managerial levels and tasks in hospitals or clinical settings. The 13 papers were subjected to inductive content analysis to assess the data. From the findings, three main categories of healthcare competence emerged: healthcare context-related, operational, and general, each with sub-categories. Healthcare competence contained the sub-categories of social, financial, and organizational competence. Operational competence encompassed the sub-categories of process, operation, clinical, and development competence. General competence covered the subcategories of time management, interpersonal skills, strategic mindset, thinking,
application skills, and human resource management. Within operational competence, all the subcategories proved important for the managerial role, based on the analysis of the functions described in the studies. However, a common unsatisfactory experience of new nurse managers that emerged from the study was appointment to a management role without possessing adequate skills (Pihlainen et al. (2016). The dominance of individual approaches to leadership and management competence and diverse perspectives of management illustrated in the studies suggested to the authors the need for a more unified framework for learning that includes elements that are not profession-based but common across an organization.

Seabold et al. (2020) evaluated the effectiveness and sustained impact of intensive leadership training on nurse manager satisfaction and the perceived importance of competencies. The Level III-C quantitative study used an observational, prospective cohort design, with 33 nurse manager participants employed by a large urban, academic, and public healthcare system. A two-day training seminar was designed based on needs identified from a previous assessment of American Organization for Nursing Leadership (AONL) competencies. Job satisfaction and perceived importance of 17 AONL competencies were assessed immediately before the training, and at six months and 12 months after participation. Job satisfaction was measured using 30 of the 31 items in the McCloskey/Mueller Satisfaction Scale (MMSS), a valid and reliable tool widely used in healthcare. The scheduling item was removed from the MMSS as scheduling was not covered in the training. Mean satisfaction scores did not change significantly, which the authors attributed to a multitude of factors that impact manager satisfaction, none of which were individually measured. There were persistent variations in scores from baseline to 12 months for the perceived importance of the 17 competencies. Trended data indicated the largest increases from baseline to 12 months in five items: staffing, discipline, interviewing, performance
improvement, and research. From baseline to 12 months, steady gains were observed in five items: communication, recruitment, retention, interviewing, and performance improvement knowledge. None of the changes were statistically significant. Scores peaked at six months but had returned to baseline at 12 months for the remaining seven items: patient acuity, staff development, legal issues, conflict resolution, productivity measures, budget control, and financial resource monitoring. Participants in the study had been in management positions for an average of eight years, ranging from one to 30 (SD 8.92). The authors suggested that management training can effectively expose managers at various experience levels to core competencies outlined by AONL. Many of the competency items included in the training seminar were not formally addressed during nurse manager orientation programs at the healthcare system where the study took place, nor were they outlined for experienced managers. The authors also suggested the importance of ongoing competency training, indicated by the return to baseline at 12 months in the perceived importance of seven of the 17 (41%) of the AONL competencies. Although this study appraised at Level III Quality C due to the small sample size, it used validated tools for assessment, reflected how nurse managers viewed the importance of competency over time, and has a strong worth for nursing practice.

In a Level V-B quality improvement project, Fennimore and Wolf (2011) discussed the design, implementation, and outcomes of a nurse manager leadership program at a large academic medical center. One of the desired outcomes of the nurse manager leadership program was to improve nurse retention, especially among new graduate nurses. A leadership development task force completed a comprehensive review of the nursing and business literature to identify essential nurse manager leadership and management competencies. A program curriculum was designed with an instructional framework focused on contemporary issues in
healthcare, evidence-based content, links to resources from professional organizations, and reflective self-assessment. The curriculum focused on the "science, art, and leader within," incorporating aspects of leadership development programs offered by AONL, the American Association of Colleges of Nursing (AACN), and the Association of PeriOperative Registered Nurses (AORN). Learning activities included readings from assigned texts, lectures, discussions, and preparation of a business case to transfer knowledge to practice. The program was offered in five eight-hour sessions over two months. Twenty-five nurse managers participated in the pilot program, and more than 100 nurse leaders completed the course in the two years following the pilot.

Pilot program participants completed a self-assessment based on the Nurse Manager Inventory Tool developed by the Nurse Manager Leadership Partnership to assess 15 competency domains. The Nurse Manager Leadership Partnership was a team from AONL that developed the Nurse Manager Inventory Tool in 2006. Participants completed the assessment before the first-course session and six months following completion. Participants' self-perception of their competency improved in each of the domains. The most significant average increase (27%) was in creating the leader within, followed by the science of managing people (26.7%) and the art of leading people (20.9%). At baseline in 2006, the experienced RN turnover rate was 10.7%, while the newly hired and newly graduated RN turnover rate was 17% in the first six to twelve months from the hire date. System-wide, nurse turnover improved during the three years following the pilot program to 9.2% for experienced RN staff and 11% for newly hired and newly graduated RNs. The authors suggested that the improvement may have been influenced by multiple factors beyond leadership development, including a change in the economic environment following the 2008 recession. Although retention was not measured in this study,
92% of the participating pilot program managers continued in their management roles two years after the initial course completion. This finding suggested competency improvement had a positive effect on satisfaction and retention and supported the need for leadership knowledge and competency raised by the DNP project’s PICOT question.

Galuska (2012) performed a Level III-A/B qualitative study to better understand leadership development characteristics that nurses considered effective and supportive and those that hindered their development. The study was a meta-synthesis of 21 qualitative studies on nursing leadership development, focusing on necessary competencies for any role or setting. Three themes emerged for creating a supportive leadership development framework: opportunity structure, relationship factor, and organizational culture for growth. The importance of role clarity was common in several of the studies. Without role clarity, the ANMs saw no difference between their role and clinical staff, except for more administrative duties. The study findings supported fostering advancement through education and mentoring to improve knowledge, competencies, and job satisfaction. The findings illuminated the importance of time: time for formal education, time for nurses to be involved in practicing leadership skills, time for reflection, and time for improvement of skills (Galuska, 2012).

In their Level III-B study, Patrician et al. (2018) partnered with an academic team to conduct a two-day workshop focused on the AONL nurse manager learning domain framework of “The Leader Within.” This explanatory mixed-method study collected quantitative data through a pre- and post-workshop survey using the Nurse Managers Skills Inventory and gathered qualitative data through telephone interviews. Of the 55 participants who qualified to participate in the study, 17 completed the pre/post survey and three participated in the telephone interviews. Although the workshop instruction focused on the AONL domain of “The Leader
Within,” significant improvements were demonstrated in all three domains of the AONL nurse manager competencies, “The Art,” The Science,” and “The Leader Within.” Qualitative interviews revealed three themes: the leadership journey, formal and informal educational value, and the value of action planning for personal goals. The participants expressed that their leadership journey was influenced by personal experiences, introspection, and previous nursing leaders. Participants found value in formal education (a two-day workshop) and informal education (networking with other nurse leaders) for their professional development. Participants left the workshop with a preliminary draft of a personal goal action plan, which has been shown to influence taking specific actions to meet personal goals. This study pointed to the importance of formal and informal education to advance knowledge and competency in leaders and informed the project design of including both formal education and informal mentoring sessions.

**Mentorship**

Le Comte and McClelland (2016) investigated partnering leadership programs with coaching and mentoring. This Level III-B exploratory mixed-method study incorporated a blend of training sessions, peer triad coaching and mentoring, and facilitator-led coaching and mentoring at a healthcare organization in New Zealand consisting of hospitals and clinics. Surveys sent to 291 participants received 71 responses (24%). The low response rate was attributed to a short time frame for responses. The results showed that 98% of respondents used what they learned, 64% changed their management approach, 57% encouraged others to complete the program, 54% began to coach and mentor other staff, and 97% felt that the program improved patient care. A convenience sample of post-program semi-structured interviews revealed improved communication and listening skills, ability to build problem-solving capacity
in others, implementation of coaching and mentoring skills in their work, and professional support and development.

Westcott (2016) explored the value of coaching nurse managers for personal and professional growth. This mixed-method study used a pragmatist paradigm; however, only qualitative data was presented, rating it Level III-A/B. Twenty-one nurse managers, coaches and directors of nursing participated in one-hour interviews to reflect on their encounters of coaching. Three themes emerged from the qualitative interviews. The first theme was why coaching occurred. Many participants perceived coaching as a corrective action rather than a role enrichment tool. Coaching was seen as beneficial when dealing with difficult decisions, for improving overall leadership skills, and for developing self-resilience when feeling overwhelmed.

The second theme was the experience of being coached, which focused on the intricacy and value of the relationship between coach and manager and the influence that relationship had on the manager, team, and organization. The relationship provided a safe space for nursing managers to discuss their concerns and worries with someone outside of the situation and get an outside opinion and advice. The third theme addressed coaching outcomes. Managers were able to transfer the coaching methods they encountered to other situations, which improved relationships with peers and team members, and increased their own resilience. Participants directly associated their improved ability to lead effective change to improve patient care to the skills acquired during coaching sessions.

Labrague (2020) conducted a cross-sectional study to examine the cause of nurse manager turnover both organizationally and professionally. This level III-B study at 17 hospitals in the Philippines included 240 nurse managers and implemented five validated self-reporting
scales focusing on four areas: work-family conflict, nurses' job satisfaction, turnover intent, and perceived stress. The strongest predictor of nurse manager organizational turnover was demonstrated in younger nurse managers ($r = -0.188; \rho < 0.01$). The study deemed that younger managers lacked the preparation for their roles and were, therefore, unable to handle the challenges and stress of the position. Developing a structured program, including orientation, coaching, mentoring, and leadership support, was an evidence-based solution (Labrague, 2020). The other aspects of the study found work-family conflict ($r = -0.198; \rho < 0.01$), job stress ($r = 0.377; \rho < 0.01$), and job satisfaction ($r = -0.317; \rho < 0.01$) all correlated with organizational turnover. Coaching and mentoring sessions have decreased turnover rates by increasing job satisfaction, coping skills, and staff resilience (Labrague, 2020; Le Comte & McClelland, 2016).

**Quality of Care**

According to Alloubani et al. (2019), leaders' management styles affect nurse performance and patient satisfaction, two quality of care indices. In this Level III-B descriptive, and-correlational quantitative study, the authors aimed to explore managers' leadership styles from the viewpoint of RNs and the effects of leadership styles on the quality of nursing care in both the private and public healthcare sectors in Jordan. Patient ratings measured quality of care outcomes. The authors collected data to determine if a correlation existed between the organizational outcomes of job satisfaction and leadership effectiveness and whether leadership style influenced nursing staff engagement. Fifty nurse managers, 150 staff nurses, and 200 patients represented the 400 study participants. The researchers evaluated transformational, transactional, and laissez-faire leadership styles using Bass's Transformational Leadership theory as their foundational framework. The authors found a positive correlation between the transformational leadership style and the quality of nursing care perceived by patients and staff.
They also positively correlated transformational leadership style with staff engagement, job satisfaction, and leadership effectiveness.

Warshawsky et al. (2022) reviewed the positive influence of nurse manager competence on quality patient care. This Level III-B cross-sectional study surveyed 541 nurse managers who oversaw units that participated in the National Database of Nursing Quality Indicators (NDNQI) RN survey. The survey assessed their knowledge and competence in the nurse manager role. Each survey was linked to department-specific NDNQI RN and quality results for their organization. The study revealed that higher nurse manager competence was more closely associated with experience than education. Higher competence was found in positive RN work environments, while positive work environments were associated with lower rates of missed care and higher quality of care overall. The authors concluded that advanced education for nursing leaders is an important factor in leadership competence, but experience rather than education is more closely associated with competence. Additionally, they cautioned that retention is imperative for continued improvements in knowledge and competence.

One potential strategy to reduce adverse events and improve nursing care quality is to address leadership behaviors. Labrague (2021) conducted a Level III-B quantitative cross-sectional study to evaluate the effect of toxic nurse manager leadership behaviors on nurse-reported adverse events and quality of care. The study included 1,053 participants at 20 hospitals in the Philippines and used three standardized scales. The results strongly associated nurse leaders' toxic behaviors with nurse-reported events of increased patient complaints, verbal mistreatment of staff by patients and families, hospital-acquired infections, patient falls, medication errors, and decreased quality of care. The Labrague (2021) study findings underscored the importance of positive leadership styles and behavior in improving the quality of
care. Together, the Warshawsky et al. (2022), Labrague (2021) and Alloubani et al. (2019) studies suggested that education and mentorship can positively affect leadership competency, styles and behavior, thus improving the quality of care.

**Summary/Synthesis of the Evidence**

The review of the literature revealed that standardized competencies play a crucial role in leadership success and job satisfaction. Three themes were consistent across the studies reviewed. First, the evidence suggests an instrumental role in leadership training and behaviors shaping organizational outcomes. Second, developing a mentoring program improved job satisfaction and decreased turnover. Third, quality of care is adversely impacted when stable, competent, transformational leadership is absent.

Specific requirements and measures for competency were inconsistent across the studies. However, the studies were consistent in using tools from nationally recognized professional organizations as frameworks for developing competencies (Fennimore & Wolf, 2011; Patrician et al., 2018; Labrague, 2020; Seabold et al., 2020). Several studies analyzed nurse leadership generally and were not specific to the ANM role (Alloubani et al., 2019; Eddy et al.; 2009; Labrague, 2021; Warshawsky et al., 2022). However, the findings apply to the ANM position, as roles across different levels of leadership have many competencies in common. A gap in the literature was identified as no studies specifically addressed ANM leadership competencies, tools for measuring ANM competencies, and ANM influence on the quality of care. Two studies (LeComte & McClelland, 2017; Seabold et al., 2020) that evaluated leadership development and mentoring in hospital settings provided evidence for the feasibility of the proposed DNP project.

The evidence answered the PICOT question. The strength of the evidence warranted ANM education and mentoring as a practice change for increasing knowledge, competency, and
job satisfaction. Education and mentorship provided the ANMs with the necessary skills to motivate them to serve at the highest capacity and derive satisfaction from their role. The review of the literature showed that the measures implemented to educate nurse leadership on role competencies produced the desired outcomes of higher job satisfaction, improved quality outcomes, and improved staff and patient satisfaction (Alloubani et al., 2018; Fennimore & Wolf, 2011; Galuska, 2012; Labrague, 2020; Labrague, 2021). These findings were used to guide development and implementation of the ANM education and mentoring program in the DNP project. Based on the evidence, it was anticipated that ANM education and mentoring would improve nursing practice and the quality of patient care. In addition, implementing consistent education and mentoring to enhance the competency of ANMs was expected to stabilize the role (i.e., increase retention and competency), inspire staff to advance in their careers, and improve organizational succession planning, essential to advancing the quality of nursing practice and improving patient care.

**Rationale**

Theories and conceptual models help expand knowledge by providing direction and impetus (Polit & Beck, 2017). A conceptual framework is the scaffolding for the DNP project and is an essential tool to assist nursing doctoral students in developing their work architecture (Durham et al., 2015). Polit and Beck (2017) described the conceptual framework as "interrelated concepts or abstractions assembled in a rational and often explanatory scheme to illuminate relationships among them" (p.723). This DNP project applied two theories to construct a conceptual framework: Watson's Theory of Human Caring and Lippitt's Seven-Step Change Theory. The constructed conceptual framework guided the rebuilding of the ANM team through knowledge, competency, and increased job satisfaction.
Jean Watson developed the Theory of Human Caring while teaching at the University of Colorado between 1975 and 1979 (Watson, 1979). The major conceptual elements of Watson's original theory are the ten Caritas Processes, which embody the holistic approach of nursing, and complement the curative philosophy of conventional medicine (Watson & Woodward, 2010). The 10 Caritas Processes (shown diagrammatically in Appendix B) are:

- helping, trusting, caring relationships; expression of negative and positive feelings;
- allowance for existential-phenomenological spiritual forces; teaching-learning; assisting with basic human needs; sensitivity to self and others; instillation of faith and hope;
- formation of humanistic and altruistic system of values; supportive and protective all-around environment; and creative problem solving. (Watson & Woodward, 2010, p. 354)

The regional organization has adopted Watson's Theory of Human Caring as its nursing model to integrate caring into the healing environment of nursing care and practice since 2008. Applying this theory to the DNP project will facilitate educating and mentoring the ANMs to instill a caring environment and foster self-reflection. The ANMs, in turn, should be able to mentor their teams using the Theory of Human Caring to transform clinical practice.

Ronald Lippitt developed the Phases of Change Theory in 1958 with Jeanne Watson and Bruce Westley (Lippitt et al., 1958). Lippitt’s Phases of Change Theory has seven steps of change, incorporates a detailed plan for generating change, and aligns with the four elements of the nursing process: assessment, planning, implementation, and evaluation. See Appendix C for Lippitt's Phases of Change Theory.

Incorporating these two theories into one constructed conceptual model provided the transformational framework for the project. Analysis of the current state in the project setting revealed the ANMs as a team felt angry, disheartened, and disconnected from their work.
Integrating Watson's Theory of Human Caring in the DNP project helped rebuild the compassionate aspect of the team and refocused them on the importance of human kindness, patient care, and love of self. Previous changes to the nursing leadership structure had not been accepted by the ANMs. Therefore, their capacity for change was assessed using Lippitt’s Phases of Change Theory before any education or mentoring was introduced. The combination of Watson's Theory of Human Caring with Lippitt's Phases of Change Theory allowed ongoing assessment at different stages of change ensuring the team’s readiness to move to the next phase. Lippitt’s phases of change steps aligned with the four elements of the nursing process. Step one, diagnosing the problem, aligns with nursing assessment, and incorporates the gap and SWOT analyses, literature review, and initial stakeholder meeting. Lippitt’s steps two and three, evaluation and assessment of capacity for change, align with the planning stage of the nursing process. These steps include data collection, curriculum and budget development, and assessment of mentors for future assignments. The implementation stage of the nursing process and Lippitt’s steps four and five define objectives, develop processes, and set clear expectations. This stage includes developing and finalizing the educational curriculum, scheduling, and delivering the education and mentoring sessions, and administering post-intervention surveys. Evaluation, the final stage of the nursing process, aligns with Lippitt’s steps six and seven, and includes data analysis, interpretation of results, ROI analysis, and presentation of the final project to the stakeholders and the DNP committee.
Methods

Context

This project was implemented across three facilities in two counties (San Joaquin and Stanislaus) in the Central Valley of California: two acute care hospitals and one free-standing ambulatory surgery unit. Staffing at all three facilities conforms to the California Code of Regulations Title 22 Social Security Division 5, § 70217 (2005) requirements, which specify the maximum licensed nurse-to-patient ratio based on the level of patient care required. The largest hospital, located in Stanislaus County, has 152 acute care beds serving a diverse population of an often-underserved community. According to the 2020 Stanislaus County Community Health Assessment, 46.3% of the population is Hispanic or Latino, with a county median household income 17% lower than the California state median (Stanislaus County Health Services Agency, 2020). This hospital provides general acute care, cardiac, gastrointestinal, and maternal-child health services, and is a stroke receiving center. The second acute care hospital has 99 licensed beds and provides general acute care services to the community. The free-standing ambulatory surgery unit offers outpatient surgical services primarily for ophthalmology and sports medicine. Both facilities are in San Joaquin County, where the population is 41.6% Hispanic or Latino, and 17.8% of county residents have incomes below the federal poverty level (Dignity Health, 2019). On average, a crime occurs every 22 minutes in Stanislaus County (Crimegrade, 2022a) and every 18 minutes in San Joaquin County (Crimegrade, 2022b), threatening the health and well-being of the population.

Key stakeholders for this project were the executive team, consisting of the Area Manager, Chief Operating Officer, Area Finance Officer, Human Resources Leader, and the patient care services leadership team, which comprises the Adult Service Line, Perioperative
Service Line, and Maternal-Child Health Service Line Directors, Managers, and Assistant Nurse Managers. The key stakeholders were aware of the need to stabilize the ANM role, develop ANM leadership competencies, and improve job satisfaction and retention. Leadership support at the executive level was imperative for the success of the project. See Appendix D for Letter of Organizational Support.

**Interventions**

To improve the knowledge and competency of the ANMs, four courses of four hours each were offered. The courses were provided once a month at two different times to accommodate ANM schedules. The four sessions covered (a) transformational leadership and the ANM role; (b) day-to-day finances and time management; (c) difficult conversations and leading in a union environment; and (d) engaging in care experience individually and with the care team. See Appendix E for the Educational Sessions Outline.

The topics within each session were chosen to align with AONL competencies that match the ANM role responsibilities in the organization and respond to feedback provided by the ANMs and service line managers and directors. The specific topics chosen were (a) financial management, (b) diversity, (c) career planning, (d) performance improvement, (e) human resource management, (f) strategic management, (g) relationship management and influencing behaviors, (h) human resource leadership skills, and (i) personal and professional accountability.

The first session's topic, transformational leadership, and the ANM role, covered emotional intelligence, what matters most, and coaching mindset. This session included group work to discuss the three aspects of intelligence (i.e., emotional, situational, and relationship) and how these three forms of intelligence influences work and conversations. In smaller groups, ANMs role-played conversations with a coaching mindset about what matters most. Team toxins
and antidotes were discussed. An electronic whiteboard was used for the team to share their thoughts on the current working and team environment and suggest what they would like to influence and change.

The finance team led the second session, covering day-to-day finances. Session content on finance defined full-time equivalent (FTE); reviewed staffing budget calculations (productive, non-productive, and total paid); defined Patient daily rate (PDR), translating PDR into average daily census (ADC); calculated hours per patient day (HPPD), and managing HPPD, and described effect of the census on HPPD, and staffing effectiveness. The importance of throughput and “heads in bed by midnight” were also discussed. Midnight census is used by organizations for billing and reporting processes, budgeting, staffing, and bed capacity (Khanna et al., 2013).

Session three covered conducting difficult conversations, how to respond to assignments despite objection (ADO) forms from staff, and High-Reliability Organizations training. Conducting difficult conversations, led by the Human Resources team, emphasized conflict resolution, truthful and tactful communication, communication styles under stress, and how to adjust communication style during stressful situations. The Nursing Operations Director led the ADO education, emphasizing timely responses, electronic tracking, consistent messaging, and conversations to address staff concerns. The regional team led High Reliability Organization training, focusing on the five principles of high reliability: (a), preoccupation with failure, (b) reluctance to simplify, (c) sensitivity to operations, (d) commitment to resilience, and (e) deference to expertise.

The fourth and final session, engaging in care experience, was led by the Care Practice Leader. The session focused on (a) reconnecting with purpose, (b) the importance of consistency
in evidence-based practice, (c) the difference between leading (i.e., predictive) and lagging (i.e., retrospective) indicators for performance improvement, (d) the importance of the fundamental four (i.e., bedside shift report, authentic hourly visit, direct report rounding, and nurse leader rounding), (e) increased coaching for improvement, and (f) ways to track daily leading indicators.

All session topics were presented in the context of the AONL Nurse Manager Competencies, which are organized in three domains of the Nurse Manager Learning Domain Framework. The three domains are The Art, The Science, and The Leader Within. The ANMs learned about their influence on financial management through maximizing care efficiency, throughput and evaluating productivity via scheduling, staffing, hours per patient day, and overtime. Human resource leadership and management skills covered leading staff within the scope of labor laws and collective bargaining agreements, having difficult conversations, and influencing and engaging a team. The participants improved their knowledge of performance improvement, as it relates to patient safety, survey readiness, and patient satisfaction through education on High Reliability Organization training and Care Experience Live (i.e., patient experience) training. These two corporate initiatives were combined into the sessions to maximize education and time allotment. The ANM mentoring sessions focused on the leader within by guiding and supporting the ANMs in their personal journeys of growth and reflection.

The CNE led small, relatively unstructured group mentoring sessions called Coffee with Karen. These sessions allowed mentees to discuss their ideas, goals, and challenges. Jean Watson's 10 Caritas Processes provided a framework for these sessions. The ANMs, facilitated by the CNE, worked as a group to assist each other to develop solutions to challenges or barriers they encountered. Mentoring in small groups of five to ten ANMs allowed the mentees to
improve their leadership and communication skills, exposed them to diverse perspectives, and enabled sharing of each participant's knowledge and experience.

**Gap Analysis**

The Agency for Healthcare Research and Quality (2016) describes a gap analysis as a way of comparing best practices with what is presently in place within an organization. The organization had no formal onboarding or continuing education program for the ANMs to foster satisfaction and success in their role. The Assistant Nurse Managers' knowledge of team motivation, fiscal and strategic planning, and engagement of staff and patients was inadequate, as reflected by the organization's low quality and patient satisfaction scores and lack of budgetary adherence. This change project intended to narrow the gap between current and desired states through formalized education and mentoring for the ANM team. See Appendix F for the Gap Analysis.

**Gantt Chart**

The Gantt chart provides a timeline for project implementation and is a crucial element of project management (Geraldi & Lechter, 2012). The baseline data for this project was obtained at the end of June 2022. Education and mentorship, informed by the literature search and pre-education survey, commenced in September, and continued through December. Post-intervention surveys were administered upon completion of the sessions. The data was then compiled, verified, and analyzed. The final project report will be prepared in April and presented to the key stakeholders in May. See Appendix G for the Gantt Chart.
Work Breakdown Structure

A work breakdown structure (WBS) shows the lines of responsibility in taking a project from inception to completion (Dewey, 2021). The WBS for this project consisted of four project categories that align with Lippitt's phases of change and the four elements of the nursing process, assessment through evaluation. In the first phase of the WBS, the gap analysis is completed by gathering data and establishing a baseline to ensure that the perceived gap is grounded in reality. The SWOT analysis and stakeholder meeting to ensure alignment is included in the first WBS category and align with Lippitt’s first phase of change. The executive support and engagement category, aligned with Lippitt’s phases two and three, contains outlining, developing, and approving the project prospectus, developing the curriculum, and scheduling the sessions. The goal was to make the classes as convenient as possible to encourage participation, as ANMs work different shifts in a 24-hour period. The financial category consists of developing a budget and analyzing the return on investment.

Once the items in these three categories were completed, the project proceeded to the implementation phase, where the educational and mentoring sessions occurred. Project evaluation is the final category, where data were reviewed, analyzed, and interpreted. A question-and-answer session will be held in May with the key stakeholders to review the outcomes and discuss opportunities for sustainability and spread. See Appendix H for the Work Breakdown Structure.
Responsibility/Communication Matrix

Communication is the cornerstone of a successful project. Project team members need to collaborate, share, collate, and integrate information and knowledge to realize project objectives (Zulch, 2014). The project plan was initially introduced to the Regional CNE and Regional Director of Professional Excellence for review and discussion. Areas of focus and potential for regional alignment were discussed. The Area Manager, Chief Operating Officer, Human Resources Leader, Area Financial Officer, and Assistant Chief Nurse Executive for all three facilities were then presented with a high-level plan overview for review, discussion, and approval. Individual meetings were held with potential contributors to the project to enlist their support and commitment to participate. Weekly meetings were held to finalize the curriculum and prepare the program plan. Monthly meetings were held with Patient Care Services (PCS) directors and managers to discuss outcomes of the educational and mentoring sessions, identify areas for improvement, and receive feedback. See Appendix I for the Responsibility/Communication Matrix.

SWOT Analysis

A SWOT analysis evaluates strengths, weaknesses, opportunities, and threats to a project or organization. Strengths and weaknesses are internal factors, while opportunities and threats are external. Based on SWOT analysis, organizations can capitalize on strengths and opportunities and forecast the anticipated impact of weaknesses and threats (Li, 2020). The strengths of the ANM team are their organizational knowledge, staff relationships, collaboration with peers, patient-centeredness, and belief in the organizational vision. An additional strength that aligns with the project is the organization’s mission, vision, and adoption of the Watson caring theory framework as their nursing model. Weaknesses are job dissatisfaction, workload,
lack of preparation for the ANM role, inconsistency in practice, and high turnover. External opportunities for the ANMs are regional career advancement, organizational sponsorship of certification in their specialty areas and higher education, and involvement in the organization's community investment initiatives using their expertise. An external opportunity is for the DNP project to serve as a model for education and mentoring in other service areas. External threats to the ANM team are employment opportunities and better compensation outside the organization; negative reevaluation of a nursing career due to the COVID pandemic and California vaccine mandates; dissatisfaction with the regional model for the ANM role; or a work stoppage due to an RN labor strike. See Appendix J for the SWOT Analysis.

**Budget and Financial Analysis**

Ensuring the accuracy of budgetary predictions is necessary for successful project completion. The project plan employed two repeating four-hour educational sessions a month for four months. The ANMs were relieved of their duties in the department to attend these sessions, with coverage provided by Relief in Higher Class (RHC) RNs while the ANMs were in class. The *Coffee with Karen* sessions were one hour in length and conducted at the beginning or end of an ANM's shift, with no costs incurred. Salary costs for RHC RNs consisted of 16 hours per person AMN coverage for the four sessions at an average hourly rate of $85.00. Anticipated participation was 52 ANMs, for a coverage outlay of $70,720. ANM salary for the time allotted for classes and mentoring was calculated at $76,069. Materials and refreshments added $1,300. The instructor cost was $9,394, an in-kind contribution. The total budget for the program was $157,484. See Appendix K for the Budget.

While this project required a substantial financial outlay, the anticipated retention-related cost avoidance far outweighs the cost. Currently, the organization pays $200 per hour for interim
nurse leaders to fill vacancies. Therefore, retaining ANMs would lead to over $225,000 annually per ANM cost savings. When unable to obtain traveler staff to cover ANM vacancies, RHC staff fills the roles. As they are part of the union, the RHC staff is not permitted to perform any managerial aspects of the ANM role, making it crucial to retain ANMs. See Appendix L for the Return on Investment.

**Study of Interventions**

The ANM role is one of the most important roles of the healthcare team, as ANMs oversee the day-to-day operations of the unit (Keith et al., 2021). The project gap analysis highlighted the need for structured education and mentoring for the ANMs to be successful in their role. Pre- and post-education and mentoring session surveys were conducted to assess the impact of the interventions. Evidence from the literature suggests retention is positively influenced by increased confidence and greater success in the ANM role after education and mentoring (Labrague, 2020; Le Comte & McClelland, 2016). Retention of nurses in all capacities, including management, is one of the most profound challenges facing healthcare (Buerhaus et al., 2017).

The review of the literature for this project clearly supported the interventions of education and mentoring for improved knowledge, competency, and job satisfaction. As many of the studies reviewed incorporated the AONL competencies in their designs and used the (AONL) Nurse Manager Competencies tool (AONL, 2015) to assess knowledge and competencies, a similar approach was adopted for the DNP project. Feedback from the PCS leadership team, including the ANMs, informed the project design and content of the educational intervention. Using Lippitt’s Seven Stages of Change Theory and Watson’s Theory of Human Caring as a
constructed conceptual framework for the project allowed process improvement to take place at a steady pace while ensuring compassion was maintained at the forefront of all interactions.

In reviewing the pre- and post-intervention data, ANM education and mentoring pointed toward positive change in knowledge and competency. The decrease in job satisfaction may be attributed to the settlement of the union contract during project implementation. Further assessment of job satisfaction at six months and one-year post-implementation could help establish the presence or absence of this influence.

**Outcome Measures**

The goal of this project was to improve ANM knowledge, competency, and job satisfaction. The outcome measures were knowledge, competency, and job satisfaction expressed as percent change from baseline four months from implementation. The specific aim was to achieve a 15% improvement in all three measures.

**CQI Method and Data Collection Tools**

The study design is a pre/post survey of one cohort of participants from two hospitals and one free-standing ambulatory surgical unit. Lippitt’s Phases of Change Theory served as a basis for continually assessing improvement during project implementation and ensuring the team’s readiness to move to the next phase. Lippitt’s theory has seven steps of change, a detailed plan for generating change, and aligns with the four elements of the nursing process: assessment, planning, implementation, and evaluation.

The American Organization for Nursing Leadership (AONL) Nurse Manager Competencies tool (AONL, 2015) was used to assess knowledge and competencies, and the Acute Care Nurse Job Satisfaction Scale (Yasin et al., 2021) was used to assess job satisfaction. See Appendix M for Outcomes and Corresponding Questionnaire Scales. The surveys were
administered using Qualtrics software, with responses coded to ensure the confidentiality of participants.

The Nurse Manager Competencies tool is a 57-item self-assessment tool based on the three domains of the AONL Nurse Manager Learning Domain Framework and captures the skills, knowledge, and abilities that guide the practice of these nurse leaders. The three domains are *The Science: Managing the Business; The Art: Leading the People;* and *The Leader Within: Creating the Leader in Yourself.* Quantitative self-assessments are derived using a five-point Likert scale across three levels, starting at one for novice, three for competent, and reaching five for expert. Reliability and validity for the Nurse Manager Competencies are established by ongoing studies of nurse manager role delineation in relation to skills and abilities; however quantitative validity and reliability measures were not found in the Nurse Manager Competencies Tool descriptions. Items for the pre/post survey were selected from each domain to align with the learning outcomes of the educational content and mentoring objectives. See Appendix O for the Pre/Post AONL Survey.

The Acute Care Nurse Job Satisfaction Scale (ACNJSS) was developed in 2021 to assess the job satisfaction of acute care nurses as a focused branch of nursing (Yasin et al., 2021). The developer of the ACNJSS has granted permission for use in the DNP project in exchange for acknowledgement and a copy of deidentified demographics. See Appendix P for Permission to Use the Acute Nurse Job Satisfaction Scale. This tool comprises 31 questions and covers six factors of acute care nurse satisfaction: (a) achievement, job interest, and responsibility; (b) hospital policy; (c) quality of supervision; (d) peer support and work condition; (e) growth and advancement; and (f) benefits and job security. The ACNJSS scored on a 6-point Likert scale ranging from 1 ("very dissatisfied") to 6 ("very satisfied"). Cronbach's alpha score to determine
the overall reliability of the scale was 0.95, with the 6-factors ranging between 0.71 and 0.92. Validity confirmation scores were achieved (r = 0.82; p < .0001). See Appendix Q for the Acute Care Nurse Job Satisfaction Scale.

Anecdotal narrative information was collected using open-ended questions aligned with the learning outcomes of the educational session and the mentoring objectives. Demographic information was collected in the pre-intervention survey on age, gender, ethnicity, years of experience as a nurse, years of experience in a nurse leadership role, years of experience in the organization, professional certifications, and clinical areas.

Several measures ensured the completeness and accuracy of data. First, all returned surveys were complete, with no unanswered prompts. Second, both the AONL and ACNJSS are scored on a Likert scale. The quantitative data provided removes any evaluative subjectivity from the responses. Third, any surveys lacking the respondent’s unique identifier were excluded from the data.

Multiple contextual elements interacted with the interventions that may have affected the outcomes. The ANMs in the project interacted with each other as a single cohort during project implementation. The teamwork and peer support they experience in their daily interactions and sharing views about the educational intervention and mentoring sessions could have influenced how ANMs individually responded to the post-intervention survey. Contract negotiations and potential strike preparations required canceling two of the four Coffee with Karen sessions. Eliminating half of the sessions gave participants fewer opportunities to share their experiences, contribute their ideas, and improve their leadership skills. After the union contract was ratified, ANM disappointment may have contributed to the low response rate for the post-intervention survey and the lower ratings in the majority of categories in the ACNJSS.
Analysis

Qualtrics was used for data collection, and SPSS for data analysis. Descriptive statistics were used to describe the outcomes, which were expressed as percentages, averages, standard deviations, and confidence intervals set at 95%. The project included quantitative and qualitative data analysis. Quantitative analysis was conducted using IBM SPSS version 29. Demographic data were analyzed using descriptive statistics (n, %) for the baseline and post-implementation groups. Open-ended questions were analyzed using content analysis.

Demographics

Demographic data collected on pre- and post-intervention surveys resulted in 48 responses (33 pre and 15 post). Merging all demographic data and removing all duplicates left 38 responses for analysis. Of the total respondents, 44.7% (n=17) were between ages 49 and 56, with 71.1% female (n=27) and 28.9% (n=11) male; one respondent did not select a gender. Respondents identified themselves as 50% (n=19) Caucasian/White, 23.7% (n=9) Asian, and 7.9% (3) American Indian/Native American or Alaska Native. For years of nursing experience, 31.6% (n=12) reported 14-19 years, 21.1% (n=8) reported 8-13 years, and 15.8% (n=6) reported 32 years or more. For experience in a leadership role, 34.2% (n=13) had been in a leadership role for more than ten years, and 42.1% (n=16) for five years or fewer. See Appendix R for the Participant Demographic Information Table.

Knowledge, Competency, and Job Satisfaction

To examine the impact on ANM knowledge, competency, and job satisfaction, independent samples t-tests were conducted in addition to percentage change calculations to determine if the 15% improvement goal was met. Independent samples t-tests were conducted instead of the proposed paired t-test due to a lack of paired data availability. The level of
significance for data analysis was set to $p < .05$. Data was exported from Qualtrics to Excel and uploaded to IBM SPSS and coded into numeric values. Subscales for knowledge, competency, and satisfaction were created according to the psychometric guidelines for each survey.

Appendix O Table O-2 displays the items for each subscale associated with each outcome in the project. The AONL survey had a Likert response scale ranging from 1 to 5; the ACNJSS scale had a Likert response scale ranging from 1 to 6.

**Knowledge.** Although not statistically significant as all p-values were greater than .05, the independent samples t-tests for knowledge mean scores were higher than baseline in all domains. Financial management increased from a mean of 2.4 to a mean of 2.57 ($p = .558$); Diversity had a baseline mean of 2.91 that increased to 3.53 at post ($p = .151$); Career planning increased from 3.12 to 3.50 ($p = .085$). Knowledge scale score increases ranged from 7.1% to 14.4%. See Appendix S for Knowledge Scale Scores.

**Competency.** Scales related to specific competencies were also compared using independent samples t-tests. Similar to knowledge, competency among all domains examined showed higher scores than baseline, although not statistically significant. All p-values were greater than .05. The competency scale scores were higher than at baseline by 4.9% to 14.7%, with improvement in all categories. Personal and professional accountability had the highest increase from baseline at 14.7%, indicating stronger ANM confidence in this area. See Appendix T for Competency Outcomes.

**Satisfaction.** Satisfaction items were completed by 26 ANMs at baseline and 11ANMs following the intervention. The scale mean scores were compared at baseline and post-implementation using independent samples t-tests. For five of the six subscales and the overall satisfaction scores, the mean declined from baseline to post-implementation (scale is 1 to 6 with
higher scores indicating more satisfaction). The Peer Support/Work Conditions satisfaction scale showed a very slight increase from a mean of 4.74 at baseline to a mean of 4.75 at post-intervention. The Benefits/Job Security satisfaction scores declined significantly from baseline (mean = 4.77) to post-intervention (mean = 4.44), p = .045. All other scales did not have statistically significant changes, as indicated by p-values greater than .05. The goal of 15% improvement was not met, as the overall satisfaction score declined 6.9% from baseline to post-implementation. The largest decline (6.9%) was for the Benefits/Job Security mean scale scores. See Appendix U for Satisfaction Results.

**Evaluation of ANM Sessions**

When asked, “Did you find these sessions beneficial?” eight (72.7%) said yes and three (27.3%) said no. Responses to three open-ended items were coded using content analysis to assess for themes that were reflected in the ANM’s responses. Responses to the question, “What offerings would you like to see in the future?” included: (1) classes for further advancement; (2) how to be better communicators; and (3) HR/Union contracts (new contract was negotiated after the survey was conducted). See Appendix V for Content Analysis of Open-Ended Questions.

**Ethical Considerations**

The University of San Francisco School of Nursing and Health Professions Doctor of Nursing Practice Department determined that this project met the evidence-based change in practice project guidelines and was approved as non-research. The project prospectus was reviewed and determined to be a quality improvement project. See Appendix W for the Statement of Non-Research Determination. Additionally, this project’s prospectus was reviewed by the organization’s Research Determination Committee and determined to “not meet the regulatory definition of research involving human subjects”. See Appendix X for Research
Determination Outcome Letter. The DNP project lead completed IRB training on Human Subjects Research (HSR) through the Collaboration Institutional Training Initiative (CITI) program to ascertain IRB guidelines. See Appendix X for the CITI Certificate of Completion. There were no identifiable issues related to the potential for harm or conflicts of interest. Participation in the educational and mentoring sessions was mandatory as it is within the ANM job description; however, participation in the pre- and post-intervention surveys was voluntary. If any of the ANMs expressed psychological well-being concerns, referral to the Employee Assistance Program was available. Participants used the last four digits of their cell phone numbers to link the pre/post survey results to individuals while maintaining confidentiality. The links to the pre- and post-intervention surveys, which were administered via email, included the statement, “Clicking on the survey link below provides your implied consent to participate in the surveys for this project. These education and mentoring sessions are offered as part of your role as an ANM; however, participation in the surveys is voluntary.”

Provision 5 of the American Nurses Association (ANA, 2015) Code of Ethics describes nurses’ responsibility to promote the health and safety of self and others, act with integrity, and consider the wholeness of character in interactions. Provision 5 also sets forth a nurse's responsibility to maintain competence and continue personal and professional growth. This project enabled the ANMs to fulfill their ethical responsibility of competence and continued professional development. This project also aligned with the Jesuit value of cura personalis—care of the whole person (University of San Francisco, 2022). The project addressed job satisfaction, a contributor to mental and spiritual well-being, and leadership knowledge and competency.
Results

When developing a project plan, normal conditions were used to predict time and processes (Capella, 2023). Many aspects of this project evolved over time due to unforeseen circumstances that required flexibility and changes to the original plan. Session one of the ANM course was delayed from August until September due to operational factors that required staff relocation for four weeks. Additionally, the organization’s Human Resources Leader resigned during project implementation, delaying the HR education sessions.

The outcome measures of improved knowledge, competency, and job satisfaction were measured before the sessions started and one month after the last session was completed. The original plan was to compare pre- and post-results for each participant and determine statistical significance using paired t-tests. However, due to low response rates, data could be analyzed only in aggregate using independent t-tests to determine statistical significance. As demographic data was collected in pre- and post-intervention surveys, data was merged, and duplicate demographic data were removed. Demographic data reflects 38 individual participants who responded, while the results data reflects all 48 survey responses.

Multiple contextual elements interacted with the interventions that may have affected the outcomes. Staff relocation delayed the start of the sessions, while contract negotiations and preparations for a potential strike required canceling two of the four Coffee with Karen sessions. The organization renegotiated a union contract with the nurse’s union, which compressed the difference between the pay of bedside nurses and ANMs far more than anticipated. The ANM’s disappointment with the contract may have contributed to the low response rate for the post-intervention survey and the lower ratings in the majority of categories in the ACNJSS.
The goal of the interventions was to achieve 15% improvement in each of the three outcome measures. Although the goal of 15% improvement was not met, the increase in knowledge and competency mean scores suggested a meaningful effect on clinical practice (Ranganathan et al., 2015). Job satisfaction did not improve, which was consistent with the negative views ANMs expressed in leadership meetings and the final Coffee with Karen session. Positive project outcomes were indicated in the ANMs’ qualitative responses to the surveys. Respondents offered “key takeaways from the sessions, such as “encouraging the ANM group to continue to speak up,” “the importance of teamwork and awareness” and “provided tools that will help us.” Additionally, the sessions gave them the feeling that “we’re not alone.” Applying what they learned to their daily routine has enabled them to “take each new day as it comes and continue to learn and grow from each challenge,” be “more inclined to reach out” and that their “interactions have been more productive.”

During the Coffee with Karen sessions, it became clear that few of the ANMs were aware that Jean Watson’s Theory of Human Caring or that the 10 Caritas Processes were part of the organization’s nursing foundational framework. This led to a pivotal discussion during the Coffee with Karen sessions on how to raise awareness of the Caritas Processes and integrate them into the daily work of leaders and staff to improve the working environment. The ANMs expressed the desire to have the 10 Caritas Processes posted in their office for reference so they could refer to them when they were having a difficult day. Additionally, the ANMs suggested creating a Caritas board to engage staff, presenting a “Caritas Process of the month,” and having staff nominate team members who exemplified this process.
Discussion

Summary

Key takeaways from the educational and mentoring sessions were that 72.7% of ANMs found them beneficial and “eye opening” and suggested future sessions focusing on further advancement, improved communications, and human resources/union contracts. The ANMs relayed in leader rounding, that the educational and mentoring sessions improved their teamwork and collaboration. The ANMs gained the sense that they were not alone in their feelings and shared experiences. The higher post-intervention scores in peer support/working conditions were consistent with these observations. The ANMs sought to understand their role in the leadership team and embrace it, using the tools obtained through the educational and mentoring sessions to improve the quality of patient care and the work environment. Through the mentoring sessions, the ANMs embraced their lack of knowledge of the 10 Caritas Processes and developed innovative ideas to encourage incorporating these factors into their work and daily lives and the lives of their staff. The educational and mentoring sessions pointed to the importance of strengthening the knowledge, competency, and job satisfaction of the leadership team, starting with those closest to the work at hand. Strengthening nursing leadership enhances advanced nursing practice for future organizational leaders.

Preliminary results of this project were shared regionally, which encouraged a greater organizational focus on the 10 Caritas Processes and the development of local Caritas Coaches® to improve local engagement and implementation. The project outcomes also influenced the organization to provide leadership classes in partnership with a major university to improve the knowledge and competency of supervisors, ANMs, managers, and directors.
Multiple competing projects that required ANMs to participate in additional hours of training came to fruition and ran concurrently with the implementation phase of the project. Aspects of the High-Reliability Organization training and Care Experience nurse leader rounding and implementation corporate initiatives were addressed in two of the sessions to help mitigate training fatigue. Still, training fatigue may have set in, reducing the ANM’s enthusiasm for participation in the surveys.

**Interpretation**

Consistent with studies by Fennimore and Wolf (2011), Patrician et al. (2018), Labrague (2020), and Seabold et al. (2020), ANM knowledge and competency scores increased with targeted education. The AONL Nurse Manager Competencies provided a structure to improve the ANM’s work. The education and mentorship stabilized the leadership of the teams. The ANM turnover decreased from 25% in 2020-2021 to 4.6% for 2022-2023. While the project did not directly assess the impact of the intervention on retention, stabilization of the leadership teams and increased ANM knowledge and competency may have contributed to lower turnover. Improved ANM retention in 2022-2023 offset the financial costs of the program. As calculated for the return on investment, the cost variance of an interim agency nurse leader versus retaining an ANM is $225,000. The total financial outlay for the DNP program was $157,484. If just one of the ANM participants was influenced to stay as a result of the project, the direct financial benefit to the organization as cost avoidance during the project year would be $67,516. The delay in starting the educational sessions, the shortening of the mentoring sessions, and the ratification of a new union contract had potential negative implications for the project, the lower than anticipated response rate, and ratings on the post-implementation survey. These findings
support ongoing education for the leadership team, with a focus not just on the ANMs, but on the nursing leadership team as a whole.

**Limitations**

This project had several limitations. The specific focus on a single cohort of ANMs in two hospitals and a free-standing ambulatory surgery unit limits the generalizability of the results to other healthcare settings and nursing leadership roles. Participation in the pre- and post-intervention surveys was voluntary, introducing the possibility of participant bias. Only 45.5% of participants who responded to the knowledge and competency domains on the pre-intervention survey responded post-intervention. For the satisfaction domain, only 42.3% of respondents to the pre-intervention survey responded post-intervention. Low response rates on the post-intervention survey affected internal validity. Individual improvements could not be evaluated using a paired t-test, and results were reported only in aggregate. Contract negotiation during the implementation, which resulted in a substantial pay increase for bedside nurses, introduced a confounding variable of unknown impact on the ANMs.

**Conclusion**

Nursing leadership plays a decisive role in nurse staffing, motivation, efficiency, and quality (Mendes & Fradique, 2014). The ANM role is vital for quality patient outcomes and staff engagement. In the project setting, observed ANM dissatisfaction with their role due to inadequate education and support was seen as contributing to high turnover and unsatisfactory quality outcomes. A review of the literature provided consistent evidence that education tailored to the ANM role and mentoring could increase knowledge, competency, and job satisfaction and have a lasting effect on ANMs’ ability to perform their roles at the highest level. A conceptual framework constructed from Watson's Theory of Human Caring and Lippitt's Seven-Step
Change Theory informed the intervention, with the objective of rebuilding the ANM team through change and caring.

Although the specific aim of 15% improvement in knowledge, competency, and job satisfaction was not met, positive directional outcomes were seen in knowledge (increase of 7.1%-14.4% from baseline) and competency (increase of 4.9% – 14.7%). Had there been a larger number of respondents to the post-intervention survey, the outcomes may have been different. Job satisfaction results decreased from baseline with a statistically significant (p=.045) decrease in the Benefits/Job Security category. Three-quarters of participants gave feedback that the educational offerings were helpful. Additionally, during leader rounding, the ANMs expressed positive feelings about the educational and mentoring sessions. It can be inferred that salary compression between the ANMs and the frontline staff due to the newly ratified union contract decreased the job satisfaction scores. Further review of the ANMs job satisfaction will need to be done at six-month and one-year marks. The ANMs provided positive anecdotal narrative feedback and offered recommendations for further educational topics. These suggestions will be incorporated into ongoing training to sustain improvements from the project. Education and mentoring will be spread to the rest of the PCS leadership team. An implication for nursing practice is that even with outside forces impacting education and mentoring for ANMs built on a conceptual framework combining Watson's Theory of Human Caring and Lippitt's Phases of Change Theory increases knowledge and competency and decreased turnover in ANM role.

**Funding**

No direct funding was provided for this project. Time and resources reflected in the project budget were allocated from within the operational budget with support from the health system.
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### Appendix A

#### Evidence Evaluation Table

<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
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<th>Study findings</th>
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<tr>
<td>Investigate managers' leadership styles from the perspective of RNs and its effects on the quality of nursing care in both the private and public healthcare sectors, as rated by patients.</td>
<td><strong>Design:</strong> Quantitative cross-sectional, descriptive and correlational</td>
<td><strong>Sample:</strong> N=400 participants power analysis n=364</td>
<td><strong>Independent:</strong> Manager's leadership styles</td>
<td><strong>Measurement:</strong> 2 questionnaires: multi-factor leadership questionnaire (MLQ) - patient satisfaction with nursing care quality questionnaire (PSNCQQ)</td>
<td><strong>Data analysis:</strong> Transformational leadership style had significant positive correlation with organizational outcomes - job satisfaction - leader effectiveness - RN enthusiasm to spend extra efforts - quality of nursing care</td>
<td><strong>Study findings:</strong> Transformational leadership has greater impact on organizational outcomes and patient satisfaction than transactional</td>
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</table>

<p>| Level of Evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) | Alloubani, A., Akhu-Zaheya, L., Abdelhafiz, I., &amp; Almatari, M. (2019). Leadership styles' influence on the quality of nursing care. <em>International Journal of Health Care Quality Assurance, 32</em>(6), 1022-1033. | <strong>Level of Evidence:</strong> Level IIIb | <strong>Worth to Practice:</strong> Transformational leadership has greater impact on organizational outcomes and patient satisfaction than transactional | <strong>Strengths:</strong> - Measurement tools reliable - Sample size - Included patient perspective - Achieved power analysis | <strong>Limitations:</strong> - Country with medical tourism study may not be applicable to countries that do not. |</p>
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<td><strong>Conclusion:</strong></td>
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<td>-Leadership style affects job satisfaction, employee performance, quality of nursing care.</td>
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<td>-Transformational leadership style has positive effects on quality of care.</td>
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<td>Education on transformational leadership style for improved outcomes, staff retention, and job satisfaction.</td>
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Overall goal— to gather information from practicing nurse leaders at differing levels and in multiple settings in order to revise and update nursing leadership curricular offerings.

Aims of this project were to:
(a) uncover meaningful themes related to highly competent nursing leadership, (b) identify strategies to move the knowledge gained into the

**Conceptual Framework:** Heideggerian interpretive hermeneutics

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<tr>
<td><strong>Independent:</strong></td>
<td>Semi-structured interviews</td>
<td>Interpretable analysis proceeded from identification of themes to uncovering of paradigm cases.</td>
<td>Leadership is a vital nursing function</td>
<td>Level IIA/B</td>
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<td><strong>Dependent:</strong></td>
<td>-Course and curriculum development</td>
<td>-Displaying data</td>
<td>Essential nursing leadership competency themes</td>
<td>Significant discussion and review of important leadership skills and relevance applicable to formation of leadership curriculum.</td>
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<td></td>
<td>-Revision of organizational leadership focal area of master's program</td>
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<td>-communication with emphasis on leadership skills</td>
<td>Strengths:</td>
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<td>-conflict resolution is critical</td>
<td>-Significant focus on many areas found in study with good explanation of each.</td>
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<td>-ability to communicate vision, motive and inspire</td>
<td>-Participant leaders in the focus groups who functioned at differing levels of nursing, from COO or executive director, through unit leader or middle management, and the nurse leader at the point of care.</td>
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<td>-using and translating evidence and data in decision making and fiscal dexterity</td>
<td>-Data from the focus groups resulted in strategies to incorporate themes into nursing education programs preparing nurse leaders.</td>
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<td>-courage to be proactive in the face of change</td>
<td>-Thematic analysis in hermeneutics and analytic methods mirrored Leonard's</td>
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<td>Eddy, L. L., Doutrich, D., Higgs, Z. R., Spuck, J., Olson, M., &amp; Weinberg, S. (2009). Relevant nursing leadership: An evidence-based programmatic response. <em>International Journal of Nursing Education Scholarship, 6</em>(1), 1–17. <a href="https://doi.org/10.2202/1548-923X.1792">https://doi.org/10.2202/1548-923X.1792</a></td>
<td><a href="#">Education and practice of nurse leaders, and (c) develop stronger linkages between practice and academia.</a></td>
<td><a href="#">Participants, and notes were taken as back up.</a></td>
<td><a href="#">Linking practice to academia themes identified both affirmed and differed from previously published findings.</a></td>
<td><a href="#">1994) method.</a></td>
<td><a href="#">Weaknesses:</a> - regional variance - purposive sampling - lack of ethnic diversity</td>
<td><a href="#">Feasibility:</a> Could be replicated</td>
<td><a href="#">Conclusion:</a> The process of asking nursing leaders for their input into curriculum development resulted in increasing connections between practice and academia.</td>
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Development of a nursing middle manager education program to improve skill and knowledge of middle managers | **Design:** Quality Improvement **Method:** The program was offered in five 8-hour sessions offered every other week over a 2-month period. Self-completed evaluation for each session and a summative course evaluation. Self-assessment tool. **Conceptual Framework:** - Nurse Manager Leadership Collaborative Learning Domain Framework (NMLC); a cooperative project of the | Sample: 25 participants Setting: multiple facilities across an integrated healthcare system | **Independent:** - development of education program. Learning activities focused on (1) contemporary issues in healthcare, (2) evidence-based content, (3) links to recommendations from professional organizations, and (4) knowledge of self through assessment. **Dependent:** - turnover rate - knowledge and skill of middle nurse managers | Used Nurse Manager Inventory Tool created by the Nurse Manager Leadership Partnership Descriptive statistics - Composite pre-course and post-course scores computed and means were compared across 15 competency areas: Average raw score improvement of 0.68 for all competency areas. | Average raw score improvement of 0.68 for all competency areas 6 months after completion of course. 26.7% improvement in managing people 20.9% increase in art of leading people 27.0% increase in creating the leader within turnover rate From evaluation tool there were qualitative comments that demonstrated appreciation for classes and information to make things better. | Level of Evidence: V-B Worth to Practice: Study of importance of nurse leader education. Primary role of CNO to develop leadership capacity and model would lend itself to my project. Strengths: - customized educational program to meet institutional needs - taught by executive leadership team and faculty from school of nursing - creation of standardized approach - leadership conceptual model used Weaknesses: - did not measure nurse turnover of units where managers underwent training - did not identify study design Feasibility: Could be replicated to create
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<td>Report results of meta-synthesis of qualitative studies on nursing leadership development and to enhance understanding of both those conditions nurse have reported to be effective and supportive, as well as those that have hindered their development.</td>
<td><strong>Design:</strong> Systematic Review: Meta-synthesis of qualitative &amp; mixed-method studies  <strong>Method:</strong> Inclusion criteria: - focus of the study was on the development of leadership competencies in nurses in any role or setting - the research design was qualitative or that there was a qualitative component to the study. - there were no limitations on the type of qualitative design.  <strong>Conceptual/theoretical framework:</strong> Noblit and Hare</td>
<td><strong>Sample:</strong> N=21 studies based on inclusion criteria</td>
<td><strong>Independent:</strong> Nursing leadership development  <strong>Dependent:</strong> Supportive and effective nurse conditions, Unsupportive and ineffective nurse conditions.</td>
<td>The criteria for inclusion in the meta-synthesis were that the focus of the study was on the development of leadership competencies in nurses in any role or setting, and that the research design was qualitative or that there was a qualitative component to the study. There were no limitations on the type of qualitative design.</td>
<td>Mindmap using Mindjet Mind Manager software</td>
<td>Three essential themes for creating supportive context for leadership development: - opportunity structure - relationship factors with three subthemes: - enabling or blocking role of manager - bolstering or undermining role of colleagues - role of mentor in guiding growth - organizational culture for growth.</td>
<td>Level of Evidence: Level IIIA/B  <strong>Worth to practice:</strong> Understanding key elements for development of competencies for nurses at all levels. Importance of competencies.  <strong>Strengths:</strong> - Data table matched the narrative - Good sized sample  <strong>Limitations:</strong> - No limit to types of qualitative studies so could be difficult to conduct meta-synthesis.  <strong>Feasibility:</strong> - Could be replicated for further advances in practice.  <strong>Conclusion</strong> - Development of competencies for transformational roles. - Mentor relationship essential to optimal nurse development. - Leadership takes time to develop.</td>
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| To examine impact of toxic leadership behaviors among nurse managers on nurse-reported adverse events and quality of care | **Design:** Cross-sectional Quantitative  
**Method:** Secondary analysis of Regional & Nursing Workforce Survey which aimed to evaluate the current state of nursing across the region. This analysis focused on influence of toxic leadership behaviors and patient safety and quality of care. | **Sample:** N=1,053 nurses  
**power analysis n= 926**  
**Setting:** Multi-center of 20 hospitals in Philippines | **Independent:** -Toxic leadership behaviors among nurse managers  
**Dependent:** -Nurse-reported adverse events  
-Quality of care | Toxic leadership behaviors of nurse managers scale (TOXBH-NM)  
-Adverse Patent Events Scale (APES)  
-single item quality of care measure  
-Nurse assessment of patient adverse events – Cronbach reliability score of 0.93 overall care quality – Cronbach reliability score of 0.89 | SPSS version 22 software  
-Means percentage and SD with progressions and regression model  
-Exceeded their power analysis sample size (needed 926 nurses) | 96.2% of nurses appraised quality of care as good to excellent and cited complaints from patients and families as most common adverse event. | **Level of Evidence:**  
Level III B  
**Worth to practice:** Implications for leadership behaviors on clinical outcomes  
**Strengths:** -Strong sample size  
**Weaknesses:** -limited generalizability of study findings -data gathered through nurse self-reports rather than robust data-gathering -research design as cause/effect relationship not feasible in cross-sectional study  
**Feasibility:** Can be Replicated  
**Conclusions:** Highlights impact of toxic leadership behaviors on staff and patient outcomes  
**Recommendations:** |
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<td>Labrague, L. J. (2021). Influence of nurse managers’ toxic leadership behaviours on nurse-reported adverse events and quality of care. <em>Journal of Nursing Management, 29</em>(4), 855-863. <a href="https://doi.org/10.1111/jonm.13228">https://doi.org/10.1111/jonm.13228</a></td>
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| Examination of factors associated with turnover intent among nurse managers | **Design** Cross-sectional Survey  
**Method:** Use of 4 validated survey tools: -Work-Family Conflict Scale -Job Satisfaction Index -Perceived Stress Scale -Two-item Turnover intent (O’Driscoll & Beehr, 1994)  
**Conceptual Framework:** Developed their own framework based on previous studies on individual, unit, hospital variables, work-family conflict, | **Sample:** 240 nurse managers  
**Setting:** 17 acute care hospitals in the Philippines | **Independent:** Nurse, unit, and hospital characteristics  
**Dependent:** Professional and organizational turnover intention. | Work Family Conflict Scale, Job Satisfaction Index, 4-item Perceived Stress Scale, single question professional and organizational turnover intention items | SPSS-23 for analysis  
Strong turnover intent was significantly correlated to high work-family conflict .127  
Job satisfaction .315  
Job stress -.200 | Organizational turnover intent higher in the following: -Younger managers. -those with spans of control >16 employees. -High job stress and burnout.  
Increased autonomy improves intent to stay. Smaller facilities lower turnover. | Level of Evidence III B  
**Worth to Practice:** Organization factors, span of control, onboarding/orientation, stress management, and coaching can influence nurse manager job satisfaction and intent to stay.  
**Strength:** Use of four validated and standardized tools for survey.  
**Weakness:** Focus on Philippines nurses may not be generalizable. Possible response bias as data was collected using self-report scales  
**Feasibility:** Supports structured transition program for new nurse managers to improve job satisfaction and retention.  
**Conclusion:** Improvement in following areas to increase nurse manager
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<td>To determine the value and impact of the Leadership Development Coaching and Mentoring Program (LDCMP) at Counties Manukau Health and understand how the skills gained are applied.</td>
<td><strong>Design:</strong> Exploratory Mixed-method <strong>Method:</strong> -literature review -eight to nine-month program with mix of training days, peer triad coaching and mentoring, and coaching and mentoring with a course facilitator -surveys of program participants and senior staff -semi-structured interviews <strong>Conceptual Framework:</strong> Gateway framework</td>
<td><strong>Sample:</strong> N=291 n=71 -21 managers -12 educators</td>
<td><strong>Independent:</strong> Leadership development coaching and mentoring program</td>
<td>Literature review, -eight to nine-month program with mix of training days, peer triad coaching and mentoring and coaching and mentoring with a course facilitator -Spirited Leadership staff survey was sent to program participants assessing value, skills, challenges and learnings -Spirited Leadership manager survey was sent to senior staff assessing perception of impact on staff</td>
<td>Survey responses were thematically analyzed and quantitatively summarized -depicted in graphs</td>
<td>-98% utilized learning from program -64% changed management approach -57% encouraged others to complete program -54% coach and mentor others staff -18% received coaching and mentoring themselves -97% program embedded values of organization -97% felt program improved patient care Themes from interviews -working with</td>
<td>Level of Evidence: III-B <strong>Worth to practice:</strong> Coaching and mentorship have a positive influence on leadership <strong>Strengths:</strong> -direct quotes from participants -appendix included survey tools <strong>Weaknesses:</strong> -short timeframe -small manager sample size -low response rate (24%) <strong>Feasibility:</strong> Could be replicated <strong>Conclusion:</strong> Coaching and mentoring programs can be effective for leadership development. <strong>Recommendation:</strong> Possible incorporation of tools in DNP project.</td>
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<td>To improve leadership competency through 2-day facilitated workshop focusing on the American Organization for Nursing Leadership (AONL) Nurse Manager (NM) Learning Domains Framework “The Leader Within”</td>
<td>Design: mixed method study Initially, participants completed the 81-item Nurse Manager Skills Inventory (NMSI), 8-months later a post survey and telephonic interview Method: Pretest/Posttest Study design using the Nurse Manager Skills Inventory and telephonic interview Conceptual Framework: The AONL NM conceptual Framework</td>
<td>Sample: 17 matched pre/post surveys with 3 participants interviewed Setting: 12 hospitals within the Burmigha m region of Alabama Independent: Leadership competency</td>
<td>Measurement of Variables: Nurse Manager Skills Inventory and telephonic interviews</td>
<td>Data Analysis: IBM SPSS version 22 -t test for continuous data -X^2 test for categorical data -paired t test for normal distributions -Wilcoxon tests used for skewed distributions -conventional content analysis to examine the interview data, coding the narrative components with 1st-level codes and then</td>
<td>Study Findings: The Science: -posttest scores improved by 1.2-2.3 on 9-point scale The Art: Posttest scores improved by 1.0-1.7 on 9-point scale The Leader within: Posttest score improved by 2.0 on 9-point scale Qualitative interviews: 3 themes -leadership journey -value of formal and informal</td>
<td>Level of evidence: Level III B Worth to practice: Use of standardized framework, focusing on professional growth, improved overall knowledge Strengths: -participant diversity -academic and practice partner collaboration -incorporated leaders from multiple sites Weaknesses: -Small sample size -Lack of power analysis in advance of study -Lack of generalizability -only included leaders from acute care settings Feasibility: Study is replicable Conclusion: Focus on “The Leader Within” promoted improved overall leadership competency Recommendation: Broader implementation across healthcare settings and</td>
<td>APA reference: Patrician, P. A., Prapanjaroen, A., Dawson, M., White-Williams, C., &amp; Miltner, R. S. (2018). Mapping and sustaining leadership development: An innovation academic service partnership. <em>JONA: The Journal of Nursing Administration, 48</em>(11), 567–573. <a href="https://doi.org/10.1097/NNA.0000000000000681">https://doi.org/10.1097/NNA.0000000000000681</a></td>
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<td>Purpose of article or review</td>
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<td>Study findings</td>
<td>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /</td>
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consolidating the codes into themes. education -value of action planning for changing behavior partnership with academia to improve access
<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
<th>Data analysis</th>
<th>Study findings</th>
<th>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
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</table>
| The purpose of this study is to describe the characteristics of management and leadership competence of healthcare leaders and managers, especially in the hospital environment. | **Design:** Systematic review | **Sample:** N=13 articles | **Independent:** Management and leadership competence in this study signifies knowledge, skills, abilities, and attitudes that are necessary for managerial levels and tasks in hospitals or clinical settings. | **Inclusion criteria:** - reviews or research in English or Finnish with titles related to study topic - date range: 2003-2013 - abstract available - title and abstract pertain to research question or topic - excluded duplicated and thorough review of articles | **Inductive content analysis:** - competence and skills, identified as characteristics from the studies were classified into concepts - words and short phrases used and grouped by similarities into synonymous groups - further analyzed and regrouped into 13 subcategories: a) social organizational, b) business, c) clinical, d) financial, e) process, f) operational, g) a) process, h) management, i) interpersonal skills, j) strategic mindset | **Competence divided into three categories with each having its own set of sub-categories:** -health-care-context-related management and leadership competence: a) social organizational, b) business, c) clinical, d) financial, e) process, f) operational, g) a) process, h) management, i) interpersonal skills, j) strategic mindset | **Level of Evidence:** Level IIIB **Worth to Practice:** Identified categories and sub-categories of competence for integration into nurse leadership education | **Strengths:** Reviewed both physician and nurse competency training | **Weaknesses:** Only 13 articles obtained | **Feasibility:** Difficult to replicate in the timeframe for DNP project | **Conclusion:** Diverse perspectives on what is required for leadership competence and the development of management and leadership competence will strategically and systematically improve general organizational performance.

<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
<th>Data analysis</th>
<th>Study findings</th>
<th>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
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<td>Databases:</td>
<td>CINAHL</td>
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<td><strong>Recommendations:</strong> They posed the need for combined physician and nurse leader competency, which I found intriguing.</td>
</tr>
<tr>
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<tr>
<td><strong>categories previously identified:</strong></td>
<td>d) thinking and application skills</td>
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<tr>
<td></td>
<td>e) human resource management</td>
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</tbody>
</table>

**Setting:** Hospital or clinical setting

**Categories previously identified:**
- d) thinking and application skills
- e) human resource management

**Recommendations:**
They posed the need for combined physician and nurse leader competency, which I found intriguing.
The purpose of this study was to evaluate the effectiveness and sustained impact of this training seminar on nurse manager satisfaction and perceived importance of competencies before and at 6 and 12 months after participation.

**Design:** Quantitative observational, prospective cohort design

**Method:** 2-day session. Those who attended at least 1 session completed anonymous survey before session and at 6- and 12-month mark after training.

**Sample:** N-45 n-33

**Setting:** Multi sites in an urban academic healthcare system

**Independent:** Training seminar

**Dependent:** - Effectiveness and sustained impact on satisfaction
- Perceived importance of competencies

**Major variables studied with definitions**

- Completion of self-reported surveys
- CNMCI.II evaluated NM perceptions of the importance of knowledge and competency items. Domains include: - knowledge of the healthcare environment - communication and relationship management - professional competencies - leadership skills

**Measurement of major variables**

- All data were anonymous and entered into a database for analysis with statistical software (software not named).
- CNMCI.II 53-item tool based on essential nurse competencies outlined by AONL.
- Descriptive statistics, mean, frequencies, ANOVA

**Data analysis**

- Not covered in course; however, secondary side effect - Improved physician relationships.
- Overall scores varied across measures and time points, and there was not stable trended increases or decreases in scores.
- Trended data indicated the largest increases in scores from baseline to 12 months for importance of leadership education and competencies

**Study findings**

- Improved satisfaction in nursing leadership
- Perceived importance of competencies improved over time depicting importance of leadership education and competencies

**Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s)**

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Worth to Practice</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Feasibility</th>
<th>Conclusion(s)</th>
<th>Recommendation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C</td>
<td>Improved satisfaction in nursing leadership</td>
<td>- improved self-worth and satisfaction</td>
<td>- single site design</td>
<td>- did not evaluate competencies but perception of competencies</td>
<td>- did not evaluate data figures</td>
<td>- did not quantify how many of each position existed to determine if participation was adequate</td>
</tr>
<tr>
<td>Purpose of article or review</td>
<td>Design / Method / Conceptual framework</td>
<td>Sample / setting</td>
<td>Major variables studied with definitions</td>
<td>Measurement of major variables</td>
<td>Data analysis</td>
<td>Study findings</td>
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</table>


- Business principles and skills
  - The tool has established content validity and demonstrated acceptable reliability estimates ranging from 0.75 to 0.95.
  - McCloskey/Mueller Satisfaction Scale (MMSS) a 31-item tool composed of eight subscales: satisfaction with extrinsic rewards - scheduling - family/work balance - coworkers and standard deviation.
  - Competency knowledge related to staffing (mean = 3.81, 4.0), discipline (mean = 3.58, 3.87), interviewing (mean = 3.39, 3.87), performance improvement (mean = 3.59, 3.75), and research/EBP (mean = 3.45, 3.38).

**Feasibility:**
- Aspects can be replicated in my project

**Conclusion:**
- Self-awareness and perceived importance of competencies may lead to improved skill and retention and increased job satisfaction.

**Recommendations:**
- Evaluation post study to measure actual competency and skill.
<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
<th>Data analysis</th>
<th>Study findings</th>
<th>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
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<tr>
<td>Seabold, K., Sarver, W., Kline, M., &amp; McNett, M. (2020). Impact of intensive leadership training on nurse manager satisfaction and perceived importance of competencies. <em>Nursing Management, 51</em>(1), 34–42. <a href="https://doi.org/10.1097/01.NUMA.0000580592.92262.40">https://doi.org/10.1097/01.NUMA.0000580592.92262.40</a></td>
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</table>

- interaction opportunities 
- professional opportunities 
- praise and recognition 
- control and responsibility

The tool has strong reliability coefficients (0.89 to 0.90), and construct validity has been established.
<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
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<td>Measurement of major variables</td>
<td>Data analysis</td>
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  - model, linking nurse manager leadership style and leadership processes to nurses' professional practice environment and team building to achieve patient outcomes.

  - had over 200 beds, over two thirds - 68.1% - were either teaching hospitals or academic medical centers - nearly half had ANCC accreditation

  - - .492 and higher overall quality of care (β = .476) create professional practice environments that support quality nursing care and positive patient outcomes.

  **Recommendation:** Investment in nurse manager development to improve RN work environments, decrease missed nurse events, and improve patient quality of care.
<table>
<thead>
<tr>
<th>Purpose of article or review</th>
<th>Design / Method / Conceptual framework</th>
<th>Sample / setting</th>
<th>Major variables studied with definitions</th>
<th>Measurement of major variables</th>
<th>Data analysis</th>
<th>Study findings</th>
<th>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical exploration of the role that coaching plays in the development of nurse managers in order to inform further research and policy makers about coaching's utility and value</td>
<td><strong>Design:</strong> mixed method study using a pragmatist paradigm – only qualitative data was presented in this article  <strong>Method:</strong> qualitative interviews were undertaken with nurse manager, coaches, and directors of nursing to draw out their own experience of coaching for nurse managers  <strong>Conceptual Framework:</strong> a hybrid of the embedded design from Creswell and Plano Clark was used</td>
<td><strong>Sample:</strong> 21 participants consisting of nurse managers, coaches and directors of nursing  <strong>Setting:</strong> Participants worked in England, Scotland, and Wales</td>
<td><strong>Independent:</strong> Coaching for leadership development  <strong>Dependent:</strong> -relationship with peers -professional initiative -job satisfaction -coaching's utility and value</td>
<td><strong>Measurement of Variables:</strong> 21 hour-long interviews over nine months</td>
<td><strong>Data Analysis:</strong> Thematic analysis framework was utilized for data interrogation, identifying new patterns and emerging themes</td>
<td><strong>Study Findings:</strong> Three themes: Why coaching Occurred: -Sometimes viewed as remedial rather than role enhancing -recognized coaching value with difficult decisions &amp; situations both with staff and upper leader -improved resilience, work-life balance, coping with stress, and self-efficacy Experience of being coached: -recognized value and complexity of work</td>
<td><strong>Level of evidence:</strong> Level IIIA/B  <strong>Worth to practice:</strong> Discussed importance of coaching support for complex or new roles to improve leadership, resiliency, and face adversity  <strong>Strengths:</strong> -strong sample size for qualitative study -in-depth discussion/answers shared and reviewed  <strong>Weaknesses:</strong> -no identified weaknesses  <strong>Feasibility:</strong> Study is replicable  <strong>Conclusion:</strong> Introduction to coaching as part of development programs and complex leadership positions is crucial to enhance management and leadership skills  <strong>Recommendation:</strong> Provide access to coaching</td>
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<th>Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) / APA reference: Westcott, L. (2016). How coaching can play a key role in the development of nurse managers. <em>Journal of Clinical Nursing, 25</em>(17–18), 2669–2677. <a href="https://doi.org/10.1111/jocn.13315">https://doi.org/10.1111/jocn.13315</a></th>
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<tbody>
<tr>
<td>relationships and the part coaching played -organizational importance of shared ethics and values between manager and coach -confidentiality between coach and nurse manager allowing for open conversation <strong>Outcomes following coaching:</strong> -gained expertise in leadership and management leading to improved relationships with team and colleagues</td>
<td>for complex or those in new roles to improve leadership and provide support</td>
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<td></td>
<td>- transferable skills learned to address new problems</td>
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<td>- coaching important at different stages of career</td>
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<td></td>
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<td>- improved job satisfaction</td>
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Appendix B

Jeanne Watson's Theory of Human Caring: 10 Caritas Processes®


Permission to use the diagram in the DNP project was granted by the publisher. See Appendix Y.
Appendix C

Lippett’s Phases of Change Theory

Step 1: Diagnose the problem by examining all possible consequences, determining who will be affected by the change, identifying essential management personnel who will be responsible for fixing the problem, collecting data from those who will be affected by the change, and ensuring that those affected by the change will be committed to its success.

Step 2: Evaluate motivation and capability for change by identifying financial and human resources capacity and organizational structure.

Step 3: Assess the change agent’s motivation and resources, experience, stamina, and dedication.

Step 4: Select progressive change objectives by defining the change process and developing action plans and accompanying strategies.

Step 5: Explain the role of the change agent to all involved employees (e.g., expert, facilitator, consultant) and ensure that expectations are clear.

Step 6: Maintain change by facilitating feedback, enhancing communication, and coordinating change effects.

Step 7: Gradually terminate the helping relationship of the change agent.

Appendix D

Letter of Support

September 22, 2021

Dr. K.T. Waxman
Director, Executive Leadership Doctor of Nursing Practice Program
School of Nursing & Health Professions
2130 Fulton Street
San Francisco, CA 94117

Dear Dr. Waxman,

This letter is to serve as formal notification of my support for Karen T. Descent, MSN to implement her Doctor of Nursing Practice (DNP) comprehensive project, “Effect of Education and Mentoring on Job Satisfaction and Competency for Assistant Nurse Managers” at Kaiser Permanente in the Central Valley Service Area.

Karen has permission to use the name of our organization in her DNP comprehensive project paper and in future presentations or publications.

Sincerely,

Corwin N. Harper, MHA, FACHE
Senior Vice President/Area Manager
Kaiser Permanente, Central Valley Service Area

Executive Assistant: Felicia Perez, (209) 735-4159
Appendix E

Educational Sessions Outline

Effects of Leadership Education and Mentoring for Assistant Nurse Managers

Four monthly sessions (repeated twice per month)

Session 1 - 4 hours

- Three types of intelligence: emotional, social & relationship - 30 minutes
- What matters most - prioritizing - 30 minutes
- Team Toxins and Antidotes – 60 minutes
- Coaching Mindset – 60 minutes
- Practice Conversations – 45 minutes

Session 2 - Finances/Time Management - 4 hours

- FTE defined
- Staffing budget calculations
- Patient daily rate (PDR) and translating into Average Daily Census (ADC)
- HPPD
- Staffing effectiveness

Session 3 – Difficult Conversations & High Reliability Organizations (HRO) - 4 hours

- Conducting difficult conversations
- Responding to ADOs
- High Reliability Organization training – 2 hours

Session 4 – Care experience - 4 hours

- Reconnecting with Purpose
- Consistency with Evidence-based Practice
- Leading and lagging indicators
- Importance of Fundamental Four
- Coaching for Improvement
- How to track daily leading indicators

Mentoring and Engagement

- Coffee with Karen - two - 1-hour monthly sessions
- Late night rounding by PCS leadership - once monthly
Appendix F

Gap Analysis

Area under consideration: Implementation of education and mentoring program for ANMs for increased knowledge, job satisfaction and competency

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<th>Desired State</th>
<th>Current State</th>
<th>Action Steps</th>
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<tbody>
<tr>
<td>ANM role education as a standard practice</td>
<td>No formal ANM education</td>
<td>Implement education for role clarification</td>
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<tr>
<td>Job satisfaction improvement by 15% as measured by ACNJS</td>
<td>Job dissatisfaction</td>
<td>Provide 16 hrs education and 4 hrs mentoring</td>
</tr>
<tr>
<td>Role turnover rate of &lt; 15%</td>
<td>Turnover rate of 25% from 2020-2021</td>
<td>CNE will mentor ANMs</td>
</tr>
<tr>
<td>Decreased Hospital acquired events by 20%</td>
<td>Increased Hospital Acquired events</td>
<td>High Reliability Organization (HRO) training</td>
</tr>
<tr>
<td>Consistency in practice</td>
<td>Inconsistency in practice</td>
<td>Educate ANMs on standard work practice</td>
</tr>
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<td>Manageable workload</td>
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# Appendix G

## Gantt Chart

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<th>ID #</th>
<th>Education and Mentorship for Assistant Nurse Managers</th>
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<th>2023</th>
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<td>Conduct Gap Analysis</td>
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<td>SWOT Analysis</td>
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<td>Conduct pre education survey</td>
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<td>✓</td>
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<tr>
<td>3.3</td>
<td>Conduct Education</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.4</td>
<td>Off-shift engagement with ANM Team</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.5</td>
<td>Coffee with Karen sessions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3.6</td>
<td>Conduction post education survey</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.1</td>
<td>Review pre/post data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.2</td>
<td>Analyze data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.3</td>
<td>Validate analysis</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.4</td>
<td>Final project write–up</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.5</td>
<td>Develop Stakeholder presentation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4.6</td>
<td>Hold Stakeholder meeting to present findings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5.1</td>
<td>Ongoing use of educational and mentorship plan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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</table>

**Definition of Abbreviations:**
- University of San Francisco (USF), Institutional review board (IRB)
### Appendix H

#### Work Breakdown Structure

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Nursing Process/Lippit’s Stage Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANM Education &amp; Mentorship Project</td>
<td>1.1 Assessing (Lippitt’s step 1)</td>
<td>1.1.1 Gap Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1.2 SWOT Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1.3 Stakeholder Meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1.4 Communication Plan</td>
</tr>
<tr>
<td></td>
<td>1.2 Planning (Lippitt's step 2-3)</td>
<td>1.2.1 Collect Baseline Data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2.2 Develop Curriculum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2.3 Budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2.4 Assess potential mentors for future assignment</td>
</tr>
<tr>
<td></td>
<td>1.3 Implementation (Lippitt's step 4-5)</td>
<td>1.3.1 Write Curriculum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.2 Schedule Classes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.3 Conduct pre-education survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.4 Conduct Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.5 Coffee with Karen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.6 Off-shift engagement with Team</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3.7 Deliver Post-Intervention Surveys (data collection)</td>
</tr>
<tr>
<td></td>
<td>1.3 Evaluation (Lippitt's step 6 &amp; 7)</td>
<td>1.4.1 Review Pre/Post data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.2 Analyze data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.3 Validate analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.4 ROI Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.5 Final project write-up</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.6 Develop Stakeholder presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.7 Hold Stakeholder meeting to present findings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4.8 Ongoing use of educational &amp; mentorship plan (dissemination and sustainability plan)</td>
</tr>
</tbody>
</table>
### Appendix I

**Responsibility/Communication Matrix**

<table>
<thead>
<tr>
<th>Communication</th>
<th>Who (by/to)</th>
<th>Frequency</th>
<th>Goal</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Advisors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Knighten</td>
<td>Karen</td>
<td>Bi-weekly</td>
<td>Review project status, discuss barriers and updates, share progress</td>
<td>Email, Zoom, phone calls</td>
</tr>
<tr>
<td>Dr. Knighten</td>
<td>Karen</td>
<td>As needed</td>
<td>To receive feedback from draft prospectus</td>
<td>Email, Zoom if necessary</td>
</tr>
<tr>
<td>Dr. Capella</td>
<td>Karen</td>
<td>As needed</td>
<td>Review and approve prospectus</td>
<td>Email, Zoom if necessary</td>
</tr>
<tr>
<td><strong>Project Sponsors (Corporate/System Nursing Leadership)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ann Williamson (Regional CNE)</td>
<td>Karen</td>
<td>Once</td>
<td>Review project from a systems perspective, strategize about barriers and facilitators, provide updates</td>
<td>Email and conference call</td>
</tr>
<tr>
<td>Jim D'Alfonso (Director Professional Excellence &amp; KP Scholars Academy)</td>
<td>Karen</td>
<td>Once</td>
<td>Review project from a clinical perspective, strategize about barriers and facilitators, provide updates</td>
<td>Email and conference call</td>
</tr>
<tr>
<td><strong>Site (Central Valley) Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Janis Lacy Human Resources Leader (HRL)</td>
<td>Karen/ Janis</td>
<td>Once</td>
<td>Introduce the project plan and request participation</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Justin Miller Business Strategy &amp; Finance (BS&amp;F)</td>
<td>Karen/Justin</td>
<td>Once</td>
<td>Introduce the project plan and request participation</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Mia Abaya Organizational Development (OD)</td>
<td>Karen/Mia</td>
<td>Once</td>
<td>Introduce the project plan and request participation</td>
<td>TEAMS Meeting</td>
</tr>
<tr>
<td>Corwin Harper (AM)</td>
<td>Karen</td>
<td>Once</td>
<td>Introduce the project plan and request letter of support</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>AM, COO, HRL, AFO, ACNE</td>
<td>Karen</td>
<td>Once</td>
<td>Introduce the project plan and request site participation</td>
<td>TEAMS meeting</td>
</tr>
<tr>
<td>HRL, OD, BS&amp;F, PCS Leadership</td>
<td>Karen</td>
<td>Monthly</td>
<td>Discuss project, request participants, review curriculum</td>
<td>TEAMS meeting</td>
</tr>
<tr>
<td>PCS Director and Managers</td>
<td>Karen/PCS Directors and Managers</td>
<td>Monthly</td>
<td>Discuss education and mentoring session outcomes and areas for improvement, receive feedback</td>
<td>TEAMS meeting</td>
</tr>
<tr>
<td>AM, COO, HRL, AFO, PCS Leadership</td>
<td>Karen</td>
<td>Once</td>
<td>Closeout presentation with final data</td>
<td>Teams Meeting</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------</td>
<td>------</td>
<td>--------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Research and Innovation Team</td>
<td>Karen</td>
<td>Weekly</td>
<td>Discuss data collection and analysis methodology</td>
<td>Phone conference and TEAMS</td>
</tr>
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</table>
Appendix J

SWOT Analysis

<table>
<thead>
<tr>
<th>Internal (attributes of the organization)</th>
<th>Favorable/Helpful</th>
<th>Unfavorable/Harmful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Organizational knowledge</td>
<td></td>
<td>● Job dissatisfaction</td>
</tr>
<tr>
<td>● Staff relationships</td>
<td></td>
<td>● Workload</td>
</tr>
<tr>
<td>● Collaboration with peers</td>
<td></td>
<td>● Lack of preparation for the role</td>
</tr>
<tr>
<td>● Patient-centeredness</td>
<td></td>
<td>● Inconsistency in practice</td>
</tr>
<tr>
<td>● Kaiser mission, vision and support</td>
<td></td>
<td>● High turnover</td>
</tr>
<tr>
<td>● Watson's caring theory framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External (attributes of the organization)</td>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Regional career advancement</td>
<td></td>
<td>● Outside employment opportunities with better compensation</td>
</tr>
<tr>
<td>● Organizational sponsorship of national certification in specialty</td>
<td></td>
<td>● Influence of COVID-19 and vaccine requirements on satisfaction with career choice.</td>
</tr>
<tr>
<td>● Organizational sponsorship of higher education</td>
<td></td>
<td>● Dissatisfaction with regional model for ANM role</td>
</tr>
<tr>
<td>● Involvement in sponsored community initiatives</td>
<td></td>
<td>● Work stoppage due to RN labor strike</td>
</tr>
<tr>
<td>● Internal growth opportunities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix K

Budget

Average ANM wage: $91.45/hr
ANM count: 52
2 repeating 4-hr sessions per month x 4 months = 16 hours per ANM
Total: $76,069.00 (in kind contribution)
AMNs are salaried positions. Education will occur during work time and classified as educational hours.

During education sessions, the cost would accrue from backfilling these positions with Relief in Higher Class (RHC) RNs.
Average RHC wage: $85.00/hr
Covering 16 hours per ANM (52 ANMs)
RHC Total cost: $70,720.00
Refreshments and materials: $1,300.00
36 hours of CNE time: $4,978.00
32 hours of various subject matter experts time: $4,416.00

Total budget for the program: $157,484.00
Appendix L

Cost Avoidance/Return on Investment

Currently, the organization pays $200 per hour for interim nurse leaders to fill vacancies. Therefore, retaining ANMs would lead to over $225,000 annually per ANM.

This only includes the direct cost of wages, not the indirect costs of the inability of RHC to perform certain ANM functions, and intangibles that an actual ANM would bring to the team.

Below is the annual estimated cost of having to cover one ANM vacancy. ANM vacancy rate for the past 12 months has averaged five FTEs.

<table>
<thead>
<tr>
<th>Position</th>
<th>Hourly Rate</th>
<th>Annual Wage</th>
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</thead>
<tbody>
<tr>
<td>ANM Average Wage</td>
<td>$91.45</td>
<td>$190,216</td>
</tr>
<tr>
<td>RHC Average Wage</td>
<td>$85.00</td>
<td>$176,800</td>
</tr>
<tr>
<td>Traveler Agency Cost</td>
<td>$200.00</td>
<td>$416,000</td>
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</tbody>
</table>

The annual cost of five Travelers to cover the average ANM vacancy: $2,080,000.

Annual salary of five ANMs retained via education and mentorship program: $951,080.

Cost of ANM educational program: $157,484

**Return on Investment:** $971,436
## Appendix M

### Outcomes and Corresponding Questionnaire Scales

<table>
<thead>
<tr>
<th>Project Outcome</th>
<th>Questionnaire</th>
<th>Scales used to measure outcome</th>
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<tbody>
<tr>
<td>Knowledge</td>
<td>AONL</td>
<td>Financial Management</td>
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<tr>
<td></td>
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<td>Diversity</td>
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<tr>
<td></td>
<td></td>
<td>Career Planning</td>
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<tr>
<td>Competency</td>
<td>AONL</td>
<td>Performance Improvement</td>
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<tr>
<td></td>
<td></td>
<td>Human Resource Management</td>
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<tr>
<td></td>
<td></td>
<td>Strategic Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relationship Management and Influencing Behaviors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Resource Leadership Skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal and Professional Accountability</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>ACNJSS</td>
<td>Achievement/Job Interest</td>
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<tr>
<td></td>
<td></td>
<td>Hospital policy</td>
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<tr>
<td></td>
<td></td>
<td>Quality of Supervision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Support/Work Condition</td>
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<tr>
<td></td>
<td></td>
<td>Growth/Advancement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benefits/Job Security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General (All scales combined)</td>
</tr>
</tbody>
</table>
Appendix O
Assistant Nurse Manager Pre/Post AONL Survey

PART 1

Q1 Please enter the last 4 digits of your phone number

Q2 What is your current age?

- under 25 (1)
- 25-32 (2)
- 33-40 (3)
- 41-48 (4)
- 49-56 (5)
- 57-64 (6)
- 65 or older (7)

Q3 How do you describe yourself?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer to self-describe (4)
- Prefer not to say (5)
Q4 Choose one or more races that you consider yourself to be

- White or Caucasian (1)
- Black or African American (2)
- American Indian/Native American or Alaska Native (3)
- Asian (4)
- Native Hawaiian or Other Pacific Islander (5)
- Other (6)
- Prefer not to say (7)

Q5 Years of experience as a Registered Nurse

- less than 2 years (1)
- 2-7 years (2)
- 8-13 years (3)
- 14-19 years (4)
- 20-25 years (5)
- 26-31 years (6)
- 32 years or more (7)
Q6 Years of experience in a Leadership Role

○ Less than 1 year (1)
○ 1-2 years (2)
○ 3-5 years (3)
○ 6-8 years (4)
○ 9-10 years (5)
○ greater than 10 years (6)

Q7 Do you currently have a professional certification (CCRN, CEN, MEDSURG-BC, CNOR, etc)

○ No (1)
○ Yes (2)

Q8 Years employed by organization

○ less than 1 year (1)
○ 1-2 years (2)
○ 3-5 years (3)
○ 6-8 years (4)
○ 9-10 years (5)
○ greater than 10 years (6)
Q9 Clinical area of oversight

- Adult Patient Services (1)
- Maternal Child Health (2)
- PeriOperative (3)

Rank the following questions on your current knowledge from novice to expert:

Q10 Maximize care efficiency and throughput

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q11 Monitor a budget

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q12 Analyze a budget and explain variance

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q13 Conduct ongoing evaluation of productivity

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q14 Capital budgeting: justification

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q15 Staffing needs: Evaluate staffing patterns/needs

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q16 Staffing needs: Match staff competency with patient acuity

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q17 Manage human resources within the scope of labor laws

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q18 Staff selection: Apply individual interview techniques

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q19 Staff selection: Apply team interview techniques

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q20 Staff selection: Select and hire qualified candidates

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q21 Scope of Practice: Implement changes in role consistent with scope of practice

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q22 Scope of Practice: Oversee orientation process

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q23 Scope of Practice: Evaluate effectiveness of orientation

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q24 Performance Improvement: Identify key performance indicators

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q25 Performance Improvement: Evaluate performance data

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q26 Performance Improvement: Respond to outcome measurement

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q27 Customer and patient engagement: Assess customer and patient satisfaction

- 1. Novice (1)
- 2. Advanced Beginner (2)
- 3. Competent (3)
- 4. Proficient (4)
- 5. Expert (5)

Q28 Customer and patient engagement: Develop strategies to address customer satisfaction issues

- 1. Novice (1)
- 2. Advanced Beginner (2)
- 3. Competent (3)
- 4. Proficient (4)
- 5. Expert (5)
Q29 Patient Safety: Monitor and report sentinel events

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q30 Patient Safety: Participate in root cause analysis

- 1 - Novice (1)
- 2 - Advanced Beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

PART 2

Q31 Please enter the last 4 digits of your phone number

-----------------------------------------------
Q32 Patient safety: Manage incident reporting

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q33 Maintain survey and regulatory readiness

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q34 Monitor and promote workplace safety requirements

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q34 Promote intra/interdepartmental communication

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q35 Facilitate change: Involve staff in change processes

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q36 Facilitate change: Communicate changes

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q37 Facilitate change: Evaluate outcomes

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q38 Facilitate change: Evaluate outcomes

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q39 Demonstrate written and oral presentation skills

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q40 Manage meetings effectively

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q41 Influence the practice of nursing through participation in professional organizations

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q42 Collaborate with other service lines

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q43 Shared decision-making: support a just culture

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q44 Performance management: Conduct staff evaluations

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q45 Performance management: Initiate corrective actions

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q46 Staff development: Ensure competency validation

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q47 Staff development: Promote professional development of staff

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q48 Staff retention: Develop and implement strategies to address staff satisfaction issues

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q49 Staff retention: Develop methods to reward and recognize staff

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q50 Manage conflict

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q51 Relationship management: Promote team dynamics

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q52 Influence others: Role model professional behavior

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q53 Promote professional development: Apply principles of self-awareness

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q54 Cultural Competence: Understand the components of cultural competence as they apply to the workforce

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q55 Personal growth and development: Manage through education advancement, continuing education, career planning and annual self-assessment and action plans

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q56 Involvement in professional associations: Including membership and involvement in an appropriate professional association that facilitates networking and professional development

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q57 Achieve certification in an appropriate field/specialty

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Q58 Know your role: Understand current job description/requirements and compare that to current level of practice

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)

Q59 Position yourself: Develop a career path/plan that provides direction while offering flexibility and capacity to adapt to future scenarios

- 1 - Novice (1)
- 2 - Advanced beginner (2)
- 3 - Competent (3)
- 4 - Proficient (4)
- 5 - Expert (5)
Appendix P

Permission to Use ACNJSS Scale

Permission to Use the Acute Nurse Job Satisfaction Scale

From: Yasin Yasin <yasin.yasin@ucalgary.edu.qa>
Date: Sun, May 15, 2022 at 5:41 AM
Subject: RE: Permission to use Acute Nurse Job Satisfaction Scale
To: Karen Descent <kdescent@doms.usfca.edu>

Hello Dr. Karen,

I am happy to give you permission to use the ACNJSS for your research. Note that the full version of the scale is in the attached files.

I would ask for acknowledgment in any works that arise from the scale and inclusion of reliability analyses in these works. Thank you and please let me know if you have any questions or concerns.

Kind regards,

Yasin M. Yasin, RN, PhD
Faculty
University of Calgary in Qatar

Office +974 4406 5280
Fax +974 4406 5299
Email yasin.yasin@ucalgary.edu.qa
Website www.ucalgary.edu.qa
Appendix Q

Acute Care Nurses’ Job Satisfaction Scale

The Acute Care Nurses’ Job Satisfaction Scale

Instructions: The following list of items known to have varying levels of satisfaction among registered nurses (RNs). Please answer all questions. If there is a question not applicable to you, please answer it based on your expectations if you have that option.

**HOW SATISFIED ARE YOU IN YOUR CURRENT JOB AS A REGISTERED NURSE WITH THE FOLLOWING FACTORS?**

<table>
<thead>
<tr>
<th>Items</th>
<th>V.D</th>
<th>D.</th>
<th>M.D</th>
<th>M.S</th>
<th>S.</th>
<th>V.S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Feeling pride about your job</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2 Ability to deliver quality care</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3 Your salary/hourly wage</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4 Clarity of workplace employment policies</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5 Physical working conditions (lights, noise, cleanliness, heating, ventilation)</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6 Your job security</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7 Being responsible for the work you do</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8 Opportunity to seek advance education</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9 Sense of value for what you do</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10 The direct interaction between you and your supervisor</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11 Opportunity for professional growth</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12 Ability to use your own judgment</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>13 Supervisor competence</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>14 How you are informed about new policies</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15 The way new policies are implemented</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16 Challenge in your work</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17 Opportunity for promotion within the organization</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>18 Supervisor support and backup</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19 Recognition for your direct superiors</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
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<td>20 Fairness of assignment distribution</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>21 Workload</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>22 Benefits package</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>23 Sense of accomplishment</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>24 Completeness of workplace policies</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>25 Enjoyment from your job</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>26 Peer support during the work shift</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>27 Opportunity to expand your scope of practice</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>28 Availability of resources and supplies</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<td>29 Opportunity to develop and implement ideas.</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<td>30 Ease of search for workplace policies</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>31 Retirement plan</td>
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<td>3</td>
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<td>6</td>
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<td>Item number</td>
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<td></td>
<td></td>
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<td>---------------------------------------------</td>
<td>---------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Factor 1: Achievement/job interest/responsibility</td>
<td>1,7,9,12,16,23,25</td>
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<td></td>
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<td></td>
<td></td>
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<td>Factor 2: Hospital policy</td>
<td>4,14,15,24,28,30</td>
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<td>Factor 3: Quality of supervision</td>
<td>10,13,18,19</td>
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<td>Factor 4: Peer support/work condition</td>
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<td>Factor 5: Growth and advancement</td>
<td>8,11,17,27,29</td>
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<td>Factor 6: Benefits/job security</td>
<td>3,5,22,31</td>
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</table>

Please add source
### Appendix R

#### Participant Demographic Information Table

**ANM Demographics (N = 38)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td><strong>Age</strong></td>
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<tr>
<td>25-32</td>
<td>1</td>
<td>2.6</td>
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<tr>
<td>33-40</td>
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<td>15.8</td>
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<td>41-48</td>
<td>11</td>
<td>28.9</td>
</tr>
<tr>
<td>49-56</td>
<td>17</td>
<td>44.7</td>
</tr>
<tr>
<td>57-64</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>71.1</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>Race</strong></td>
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<td></td>
</tr>
<tr>
<td>American Indian/Native American or Alaska Native</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Asian</td>
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<td>23.7</td>
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<tr>
<td>Black or African American</td>
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<td>5.3</td>
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<tr>
<td>White or Caucasian</td>
<td>16</td>
<td>42.1</td>
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<tr>
<td>White or Caucasian, Other</td>
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<td>Prefer not to say</td>
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<td><strong>Years of experience as a Registered Nurse</strong></td>
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<tr>
<td>8-13 years</td>
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<td>21.1</td>
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<tr>
<td>14-19 years</td>
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<td>31.6</td>
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<tr>
<td>20-25 years</td>
<td>5</td>
<td>13.2</td>
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<td>26-31 years</td>
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<td>15.8</td>
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<td>32 years or more</td>
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<td>15.8</td>
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<td><strong>Years of experience in a Leadership Role</strong></td>
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<td>Less than 1 year</td>
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</tr>
<tr>
<td>1-2 years</td>
<td>7</td>
<td>18.4</td>
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<tr>
<td>3-5 years</td>
<td>8</td>
<td>21.1</td>
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<tr>
<td>6-8 years</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>9-10 years</td>
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<td>5.3</td>
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<tr>
<td>Greater than 10 years</td>
<td>13</td>
<td>34.2</td>
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<td><strong>Professional Certification (CCRN, CEN, MEDSURG-BC, CNOR, etc)</strong></td>
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<td>No</td>
<td>21</td>
<td>55.3</td>
</tr>
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<td>Yes</td>
<td>17</td>
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<td><strong>Years employed by organization</strong></td>
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<td>Less than 1 year</td>
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<td>18.4</td>
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<td>1-2 years</td>
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<td>3-5 years</td>
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<td>6-8 years</td>
<td>17</td>
<td>44.7</td>
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<tr>
<td>Greater than 10 years</td>
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<td>23.7</td>
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<td><strong>Clinical Area of Oversight</strong></td>
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</table>

*Note. n = count; % = percentage*
Appendix S

Knowledge Outcome Results for AONL Scales

Table S-1

Knowledge Outcome Results

<table>
<thead>
<tr>
<th>Knowledge-Related Scale</th>
<th>Baseline (n = 33)</th>
<th>Post (n = 15)</th>
<th>t (46)</th>
<th>p</th>
<th>% improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Management</td>
<td>2.40</td>
<td>2.57</td>
<td>1.04</td>
<td>-.59</td>
<td>.558</td>
</tr>
<tr>
<td>Diversity</td>
<td>2.91</td>
<td>3.33</td>
<td>.72</td>
<td>-1.5</td>
<td>.151</td>
</tr>
<tr>
<td>Career Planning</td>
<td>3.12</td>
<td>3.50</td>
<td>.71</td>
<td>-1.8</td>
<td>.085</td>
</tr>
</tbody>
</table>

Note. M = mean; SD = standard deviation; Possible mean scores range from 1 to 5, with higher scores indicating more knowledge in that scale domain.

Figure S-1

Knowledge Outcome Results
Appendix T

Competency Outcomes Results for AONL Scales

Table T-1

<table>
<thead>
<tr>
<th>Competency-Related Scale</th>
<th>Baseline (n =33)</th>
<th>Post (n =15)</th>
<th>t (46)</th>
<th>p</th>
<th>% improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource Management</td>
<td>2.98</td>
<td>3.25</td>
<td>.96</td>
<td>-.91</td>
<td>.183</td>
</tr>
<tr>
<td>Performance Improvement</td>
<td>2.93</td>
<td>3.25</td>
<td>.62</td>
<td>.50</td>
<td>.088</td>
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<td>Strategic Management</td>
<td>3.15</td>
<td>3.52</td>
<td>.77</td>
<td>.76</td>
<td>.066</td>
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<td>Human Resource Leadership Skills</td>
<td>3.16</td>
<td>3.37</td>
<td>.72</td>
<td>.70</td>
<td>.348</td>
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<td>Relationship Management</td>
<td>3.24</td>
<td>3.40</td>
<td>.72</td>
<td>.69</td>
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<td>Management and Influencing Behaviors</td>
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<td>3.44</td>
<td>.77</td>
<td>.71</td>
<td>.065</td>
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<tr>
<td>Personal and Professional Accountability</td>
<td>3.00</td>
<td>3.44</td>
<td>.77</td>
<td>.71</td>
<td>.065</td>
</tr>
</tbody>
</table>

Note. M = mean; SD = standard deviation; Possible mean scores range from 1 to 5, with higher scores indicating more knowledge in that scale domain.

Figure T-1

Competency Outcome Results for AONL Scales
# Appendix U

## Satisfaction Outcome Results for Acute Care Nurse Job Satisfaction Scale

### Table U-1

<table>
<thead>
<tr>
<th>Satisfaction Scale</th>
<th>Baseline (n = 26)</th>
<th>Post (n = 11)</th>
<th>t (35)</th>
<th>p</th>
<th>% change</th>
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</thead>
<tbody>
<tr>
<td>Achievement/Job Interest</td>
<td>4.89 ± 0.67</td>
<td>4.71 ± 0.78</td>
<td>.72</td>
<td>.476</td>
<td>-3.7</td>
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<tr>
<td>Hospital policy</td>
<td>4.38 ± 0.81</td>
<td>4.22 ± 0.87</td>
<td>.52</td>
<td>.607</td>
<td>-3.7</td>
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<tr>
<td>Quality of Supervision</td>
<td>5.17 ± 0.59</td>
<td>5.01 ± 0.75</td>
<td>.73</td>
<td>.469</td>
<td>-3.1</td>
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<td>Peer Support/Work Condition</td>
<td>4.74 ± 0.55</td>
<td>4.75 ± 0.53</td>
<td>-0.06</td>
<td>.949</td>
<td>+0.21</td>
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<tr>
<td>Growth/Advancement</td>
<td>4.64 ± 0.69</td>
<td>4.55 ± 0.74</td>
<td>.35</td>
<td>.730</td>
<td>-1.9</td>
</tr>
<tr>
<td>Benefits/Job Security</td>
<td>4.77 ± 0.39</td>
<td>4.44 ± 0.52</td>
<td>2.1</td>
<td>.045</td>
<td>-6.9</td>
</tr>
<tr>
<td>General (all scales)</td>
<td>4.72 ± 0.46</td>
<td>4.59 ± 0.59</td>
<td>.73</td>
<td>.469</td>
<td>-2.8</td>
</tr>
</tbody>
</table>

*Note. M = mean; SD = standard deviation; Possible mean scores range from 1 to 6, with higher scores indicating more satisfaction in that scale domain.*

### Figure U-1

Satisfaction Outcome Results

![Satisfaction Outcome Results for Acute Care Nurse Job Satisfaction Scale](image-url)
## Appendix V

### Content Analysis of Open-Ended Questions

<table>
<thead>
<tr>
<th>Evaluation Question</th>
<th>Theme</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>What was a key takeaway from the ANM sessions?</td>
<td>Informational</td>
<td>&quot;learning the management process&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;informative&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;provided tools that will help us&quot;</td>
</tr>
<tr>
<td></td>
<td>Encouraging</td>
<td>&quot;we're not alone&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;helpful&quot;</td>
</tr>
<tr>
<td>How will you apply what you learned in your daily routine?</td>
<td>Application</td>
<td>&quot;apply policy&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;all good strategies&quot;</td>
</tr>
<tr>
<td>How did the coffee with Karen sessions improve your knowledge of Jean Watson's Ten</td>
<td>Expanded</td>
<td>&quot;will be more inclined to reach out&quot;</td>
</tr>
<tr>
<td>Caritas Processes?</td>
<td>knowledge</td>
<td>&quot;interactions have been more productive&quot;</td>
</tr>
<tr>
<td></td>
<td>Mutual Benefits</td>
<td>&quot;caring is mutually beneficial&quot;</td>
</tr>
</tbody>
</table>
Appendix W

Statement of Non-Research Determination

Doctor of Nursing Practice
Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

General Information

Last Name: Descent  First Name: Karen
CWID Number: 20647252  Semester/Year: Spring semester/2022
Course Name & Number: PRACTICUM III: MESO-SYSTEM - E2 (SPRING 2022)- NURS-762E-E2
Chairperson Name: Dr. Knighten  Second Reader: Dr. Capella
Advisor Name: Dr. Knighten

Project Description

1. Title of Project: Effect of Leadership Education and Mentoring for Assistant Nurse Managers

2. Brief Description of Project
   a. PURPOSE: The goal is to evaluate if structured educational programs and mentorship improve job satisfaction, knowledge, and role retention in Assistant Nurse Managers. BACKGROUND: Nurse leaders have a profound influence on the care provided to patients. Organizations need to invest in programs to develop leaders for success. Leadership knowledge and styles influence quality of care, staff engagement, patient and staff satisfaction, and retention. PROBLEM: Current lack of a standardized leadership education program and mentorship has resulted in a leadership knowledge gap and high turnover in the Assistant Nurse Manager role.

3. AIM Statement: What are you trying to accomplish?
   This project aims to evaluate how providing leadership education and mentoring in assistant nurse managers compared to not providing leadership mentoring and education affects job satisfaction, competency, and knowledge within three to four months.

4. Brief Description of Intervention (150 words):
   a. Development and implementation of education and mentorship program for assistant nurse managers based on needs assessment. Pre and post educational survey will be conducted.

4a. How will this intervention be implemented?
   • Where will you implement the project?
     o Macrosystem level – 2 hospitals and 1 ASU
   • Attach a letter from the agency with approval of your project.
   • Who is the focus of the intervention?
     o Assistant Nurse Managers
DNP Statement of Determination

Evidence-Based Change of Practice Project Checklist*  
The SOD should be completed in NURS 7005 and NURS 791EP or NURS 749/ACE

Project Title:  
Effect of Education and Mentorship for Assistant Nurse Managers

<table>
<thead>
<tr>
<th>Mark an “X” under “Yes” or “No” for each of the following statements:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/accepted</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>standards, or to implement evidence-based change. There is no intention of using the data for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>research purposes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is a part of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>usual care. All participants will receive standard of care.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>The project is not designed to follow a research design, e.g., hypothesis testing or group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comparison, randomization, control groups, prospective comparison groups, cross-sectional, case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>control. The project does not follow a protocol that overrides clinical decision-making.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>monitoring, assessment or evaluation of the organization to ensure that existing quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>standards are being met. The project does not develop paradigms or untested methods or new</td>
<td></td>
<td></td>
</tr>
<tr>
<td>untested standards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of care practices and interventions that are consensus-based</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>or evidence-based. The project does not seek to test an intervention that is beyond current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>science and experience.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project is conducted by staff where the project will take place and involves staff who are</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>working at an agency that has an agreement with USF SONHP.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project has no funding from federal agencies or research-focused organizations and is not</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>receiving funding for implementation research.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agency or clinical practice unit agrees that this is a project that will be implemented to</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>improve the process or delivery of care, i.e., not a personal research project that is dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upon the voluntary participation of colleagues, students and/or patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>If there is an intent to, or possibility of publishing your work, you and supervising faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and the agency oversight committee are comfortable with the following statement in your methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>section: “This project was undertaken as an Evidence-based change of practice project at X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hospital or agency and as such was not formally supervised by the Institutional Review Board.”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Answer Key:  
- If the answer to all of these items is “Yes”, the project can be considered an evidence-based activity that does not meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files.  
- If the answer to any of these questions is “No”, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: [http://answers.hhs.gov/ohrp/categories/1559](http://answers.hhs.gov/ohrp/categories/1559)

University of San Francisco, School of Nursing and Health Professions

REV 071810, 001010, 073120; ed_mil_fsq_10-8-20; DFN Faculty Approval 11.10.20

DNP Statement of Determination Form | Page 3
DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist Outcome
The SOD should be completed in NURS 7005 and NURS 791/E/P or NURS 749/A/E

☑ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:
This is a much-needed QI project, as the ANMs at the health system where it will be implemented need and will benefit significantly from leadership development.

Student
Last Name: Descent
Student Signature: [Signature]
Student First Name: Karen
Date: 5/24/2022

Chairperson Name: Mary Lynne Knighten, DNP, RN, NEA-BC
Chairperson Signature: [Signature]
Date: 5/24/2022

Second Reader Name:
Second Reader Signature:
Date: 05/24/2022

DNP SOD Review Committee Member Name:
Knighten & Capella
DNP SOD Review Committee Member Signature:
[Signature]
Date: 05/24/2022
Appendix X

Research Determination Outcome Letter

Date: July 15, 2022
Subject: RDO KPNC 22-080
Title: Effects of Leadership Education and Mentoring for Assistant Nurse Managers

Dear Dr. Nnaji:

The Research Determination Committee for the Kaiser Permanente Northern California region has reviewed the documents submitted for the above referenced project for Karen Descent’s DNP project. The project does not meet the regulatory definition of research involving human subjects as noted here:

Not Research

The activity does not meet the regulatory definition of research per 45 CFR 46.102(d); Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.

This determination is based on the information provided. If the scope or nature of the project changes in a manner that could impact this review, please resubmit for a new determination. The word “research” should not appear in any posters or publications resulting from this project. Further, if publications, presentations or posters are generated from this project the following wording must be used to reference to the project research determination outcome:

“The Research Determination Committee for the Kaiser Permanente Northern California region has determined the project does not meet the regulatory definition of research involving human subjects per 45 CFR 46.102(d)”

You are expected, however, to implement your study or project in a manner congruent with accepted professional standards and ethical guidelines as described in the Belmont Report (http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html).

Additionally, you are responsible for keeping a copy of this determination letter in your project files as it may be necessary to demonstrate that your project was properly reviewed. Provide this approval letter to the Physician in Charge (PIC), your Area Manager, and Chief of Service, to determine whether additional approvals are needed.

Finally, all manuscripts/case series/case studies must receive written approval prior to submission to a journal or book. The Principal Investigator (PI) or first author (if different) must request their PIC\(^1\), or the Division of Research (DOR) Director\(^2\), or the Research & Innovation Academy (RIA)\(^3\) or an equivalent level leader\(^4\) review and provide written approval for publication submission. The PI is responsible for retaining a copy of the approval.

Sincerely,

The Research Determination Committee
KPNC-RDO@kp.org

\(^1\)PIC approval is required for all manuscripts/case series/case studies that do not include a DOR employee as an author, including but not limited to medical students, residents, and fellows.

\(^2\)DOR Director approval is required for all manuscripts/case series/case studies that include DOR employees as authors.

\(^3\)For all nurse-authored manuscripts/case series/case studies, approval by the Research & Innovation Academy is required.

\(^4\)If you are not sure who this would be, please contact the Research Determination Office (KPNC-RDO@kp.org)
Appendix Y

Completion of CITI Human Subjects Research Course

This is to certify that:

Karen Descent

Has completed the following CITI Program courses:

- Human Subjects Research (HSR) (Curriculum Group)
- Human Subjects Research (HSR) (Course Learner Group)
- 1 - Basic Course (Sage)

Under requirements set by:

University of San Francisco

Verify at www.citiprogram.org/verify?w38832750-219c-435b-95ce-cea2243e73c7-44144305
Appendix Z

Permission to Use Schematic of Jeanne Watson's Theory of Human Caring:

Ten Caritas Factors

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Licensed Content Publication Springer eBook
Licensed Content Title The Basics of Professional Growth
Licensed Content Author Jennifer M. Manning
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Number of figures/tables/illustrations 1
Will you be translating? no
Circulation/distribution 1 - 29

Author of this Springer Nature content no

Title Karen Descent – ELDNP student

Institution name University of San Francisco

Expected presentation date May 2023

 Portions Jean Watson’s theory of human caring diagram

Karen Descent
3402 Trevi Court

Requestor Location STOCKTON, CA 95212
United States
Attn: Karen Descent

Total 0.00 USD

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<th>Duration of Licence</th>
</tr>
</thead>
<tbody>
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<td>12 months</td>
</tr>
<tr>
<td>Presentations</td>
<td>12 months</td>
</tr>
<tr>
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<td>Lifetime of the edition in the language purchased</td>
</tr>
</tbody>
</table>

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