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# Frontline Focus: A Nurse Manager's Employee Engagement Toolkit

Christen Straw

University of San Francisco, [cnstraw@usfca.edu](mailto:cnstraw@usfca.edu)

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Frontline Focus: A Nurse Manager's Employee Engagement Toolkit (NMEET)

Christen N. Straw

University of San Francisco

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**Table of Contents****Section I. Title and Abstract**

Title	1
Acknowledgements	2
Table of Contents	3
Abstract	5

**Section II. Introduction**

Setting	7
Problem Description	8
Available Knowledge	10
Literature Review	10
Rationale	13
Conceptual Frameworks	13
Aim Statement	14

**Section III. Methods**

Context	15
Authorization of the Project	17
Key Stakeholders	17
Interventions	17
Engagement Surveys	17
Nurse Manager's Employee Engagement Toolkit	19
Increasing the Size of the Float Pool	29
Gap Analysis	30
Gantt Chart	30
Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis	31
Work Breakdown Structure	32
Information Communication Plan	32
Project Budget	33
Cost/Benefit Analysis and Return on Investment (ROI)	33
Study of the Interventions	34
Measures	35
Analysis	36
Ethical Considerations	37

**Section IV. Results**

Results	38
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**Section V. Discussion**

Summary	41
Interpretations	42
Limitations	44

FRONTLINE FOCUS	4
Conclusions	45
Recommendations	47
<b>Section VI. Other Information</b>	<b>48</b>
Funding	48
<b>Section VII. References</b>	<b>49</b>
<b>Section VIII. Figures</b>	<b>56</b>
Figure 1: IHI High-Impact Leadership Framework	56
Figure 2: Nurse Manager’s Employee Engagement Toolkit Components	57
<b>Section IX. Appendices</b>	<b>58</b>
Appendix A: Level of Evidence and Quality Guide	58
Appendix B: Evaluation Table	59
Appendix C: IRB Determination of NOT Human Research	63
Appendix D: Letter of Support from Organization	64
Appendix E: IRB and/or Non-Research Approval Documents (Statement of Determination)	65
Appendix F: 2017 Press Ganey Pre-Intervention Survey Results	69
Appendix G: 2017 Press Ganey Survey Items Selected for Project	73
Appendix H: Nurse Manager’s Employee Engagement Toolkit Dashboard	75
Appendix I: Gap Analysis	76
Appendix J: Gantt chart	77
Appendix K: Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis	79
Appendix L: Work Breakdown Structure	80
Appendix M: Information Communication Matrix	81
Appendix N: Project Budget	82
Appendix O: Cost-Benefit Analysis and ROI: Nurse Manager’s Employee Engagement Toolkit	83
Appendix P: Onboarding and Annual Salary Cost Comparison	84
Appendix Q: Cost-Benefit Analysis and ROI: Increasing Float Pool FTEs	85
Appendix R: 2017 & 2018 Crosswalk of PGEES Survey Responses	86
Appendix S: 2017 & 2018 Comparison of PGEES Survey Responses	88
Appendix T: SCORE Survey Results	89
Appendix U: Turnover Trends	94
Appendix V: FTE Trends	95
Appendix W: Premium Pay Trends	96
Appendix X: Synthesis of Post-Intervention PGEES and Score Survey – 2018	97

## Section I. Abstract

### Abstract

Average hospital turnover rates in the US reached 18.2% in 2017. Turnover rates for registered nurses (RNs) were also at an all-time high of 16.8%. RN turnover can cost up to \$61,100 per nurse resulting in the average hospital loss of \$5.7 million per year (NSI, 2018). Employee engagement and job satisfaction levels are predictors of nursing turnover and patient outcomes and should be a top priority for nurse leaders. A disengaged workforce not only affects team morale and organizational spending, but it also impacts the quality of patient care. Multiple studies suggest that employee engagement is the number one variable linked to patient mortality (Kruse, 2015; Zwillinger & Huster, 2017). Therefore, a Nurse Manager Employee Engagement Toolkit (NMEET) was created and implemented over 18 months with the intent to mitigate low engagement levels, high rates, and unsustainable spending within an urban, academic organization.

Comparison of pre- and post-implementation data revealed significant improvements in employee engagement and team morale leading to a decrease in departmental turnover by 11.5%. Additionally, substantial cost savings are associated with increasing the size of the float pool as a safe staffing strategy to decrease the use of overtime and contract RNs. Successful implementation of the NMEET highlights the critical role nurse managers play in improving staff engagement through investing and empowering frontline staff while simultaneously creating a work environment that fosters high performing teams capable of achieving superior patient outcomes.

*Keywords:* engagement, turnover, job satisfaction, toolkit, nurse manager, float pool

## Section II. Introduction

### Frontline Focus: A Nurse Manager's Employee Engagement Toolkit (NMEET)

Over the last decade, hospitals have transformed into a patient-centered business model focusing on patient experience to attract new and return customers (or patients) amid an increasingly competitive market. With the introduction of value-based purchasing and the Hospital Consumer Assessment of Healthcare Providers and Systems (a patient satisfaction survey required by the Centers for Medicare and Medicaid Services [CMS]), patient experience has become a critical factor in the financial wellbeing of healthcare organizations (Torpie, 2014). In addition to patient experience and satisfaction, the government mandated value-based purchasing also hold providers accountable for the quality of care and patient outcomes – basing payments for services rendered on the quality of care provided rather than the number of services. For most organizations, the critical focus on patient safety, outcomes, and experience have proven difficult and costly. Across the US, healthcare organizations have endured payment cuts by \$371 million to 721 hospitals for high rates of hospital-acquired conditions and fined another 2,610 hospitals for high readmission rates with more government reimbursement cuts added each year (Kruse, 2015). Understandably, patient experience and high-quality care are top priorities for hospital executives, but achieving and sustaining these goals is unlikely if frontline staff (at the forefront of patient care delivery) is not engaged in their work.

Gray (2012) defines engagement as an individual's emotional attachment to the organization based on feelings about the value the organization holds toward their contributions. Work engagement is also defined as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and passion for work (Ong, Short, Radovich & Kroetz, 2017). According to Enwereuzor, Ugwu, and Eze (2018), engaged staff are typically more optimistic

and convey a positive attitude towards the organization and its values. A disengaged workforce not only affects team morale and organizational spending, but it also impacts the quality of patient care. Multiple studies suggest that employee engagement is the number one variable linked to patient mortality (Kruse, 2015; Zwillinger & Huster, 2017). Increased medication errors, falls, pressure injuries, decreased patient satisfaction, lack of care continuity, and an overall decrease in quality of care metrics are all associated with low engagement levels and high turnover rates (Hayes et al., 2012). Despite an abundance of evidence underscoring the importance of staff engagement, Gallup research revealed that only 30% of U.S. employees and 13% of employees worldwide are engaged in their work, while 26% are considered actively disengaged (Berson, 2015; Beck & Harter, 2015).

Employee engagement is a key operational metric for hospitals that can lead to increased productivity, better outcomes, and improved patient satisfaction. A Deloitte consultancy study revealed that although 90% of executives appreciate the importance of employee engagement, fewer than 50% understand how to address this issue (Berson, 2015). According to Harpst (2014), hospitals with high levels of employee engagement recover value-based incentive payments in higher amounts than those with a less engaged workforce. Evidence suggests that higher engagement levels can return \$1.17 for every dollar at risk in value-based purchasing payments (Press Ganey, 2015). Based on the correlation between employee engagement in hospitals and its influence on essential performance indicators and financial outcomes, a quality improvement project in an urban academic medical center set out to improve organizational focus on frontline engagement levels and related performance metrics. The initiative resulted in an evidence-based Nurse Manager's Employee Engagement Toolkit (NMEET).

### **Setting**



The setting for this project involved the float pool department within Keck Medical Center of the University of Southern California (KMC), a 401-licensed bed academic facility in Los Angeles, California. KMC is a non-profit, acute care facility accredited by the Joint Commission and a recent recipient of an inaugural Magnet designation in August 2018. The medical center is one of three hospitals within the university-based medical system and has received recognition as a center of excellence in urology, oncology, geriatrics, and orthopedic surgery. Other areas of specialty include heart and solid organ transplantation, neurology, ophthalmology, cystic fibrosis, and acute rehabilitation. The float pool department at KMC serves both critical care and non-critical care areas, which includes six subspecialty telemetry units, a step-down unit, a medical-surgical unit, an inpatient rehabilitation unit, inpatient and outpatient interventional radiology, pre-operative area and post-anesthesia care unit, esophageal lab, infusion center, evaluation and treatment clinic, and seven highly subspecialized critical care units.

### **Problem Description**

Longitudinal research conducted by Nursing Solutions, Inc. (NSI; 2018) revealed that the year 2017 recorded the highest hospital workforce turnover in the US since the study began nearly ten years ago. Increasing by 2% from 2016, hospital turnover rates reached 18.2% in 2017 with the average hospital turning over 83% of its workforce in the last five years. The national average registered nurse (RN) turnover rate was 16.8% (NSI, 2018). In 2017, the RN turnover rate at KMC was well below the national average at only 9%, while the float pool department suffered from one of the highest turnover rates in the organization with 20.5% of staff leaving the department within one year (Straw, 2018b). Turnover can cost up to \$61,100 for a bedside RN resulting in the average hospital loss of \$5.7 million per year (NSI, 2018). Furthermore, a

disconcerting trend of rising RN vacancy rates is being reported due to economic factors allowing RNs to retire sooner, to consider travel nursing, and to work fewer shifts when part-time or per diem – all while the demand for RNs continues to grow. According to NSI (2018), national RN vacancy rates have reached 8.2% and indicate that an RN shortage is imminent.

Due to high turnover and vacancy rates, hospitals are being forced to use costly staffing alternatives such as contract nurses and employee overtime to meet mandated staffing ratios and deliver safe patient care (Dziuba-Ellis, 2006). Organizational-wide spending related to staffing shortages within KMC and the subsequent use of contract RNs and overtime rose to nearly \$50 million in 2016. Over the last year, inpatient usage of contract labor and overtime accounted for a total of 122.3 full-time equivalents (FTEs; 74.7 FTEs and 47.6 FTEs, respectively), reaching an estimated cost of \$27 million (this total pertains to overtime and nursing contract labor and does not account for non-nursing contractors or other variables such as extra shift bonuses). The float pool consisted of 53.2 FTEs, an inadequate number to solve the staffing issues affecting the hospital (Straw, 2018b).

Results from the 2017 Press Ganey Employee Engagement Survey (PGEES) revealed that employee engagement at KMC had fallen below the national nursing excellence mean of 3.91, with the inpatient units scoring an average of 3.73 (Press Ganey, 2018). According to the PGEES results, the float pool scored above the national average in employee engagement with a score of 3.95, but when coupled with a 20.5% turnover rate, it became evident that the float pool team suffered from low job satisfaction and engagement and was not capable of meeting the staffing needs of the organization. Advances in work engagement and nursing turnover research are indicative of ongoing concern for staffing instability and patient safety in health care organizations. Reducing spending related to inefficient or mismatched staffing patterns should be

a priority given declining reimbursement rates, high costs of hospital staff disengagement and consistent employee turnover.

### **Available Knowledge**

A systematic review of the literature was conducted to answer two PICOT questions (population, intervention, comparison, outcome, and timeframe).

#### **PICOT Question #1**

In the float pool department, how does implementing strategies from the Nurse Manager Employee Engagement toolkit (NMEET) compared to routine leadership strategies improve employee engagement and retention over 18 months?

#### **PICOT Question #2**

In an acute academic medical center, how will increasing the full-time equivalent employees in the float pool compared to current staffing shortage strategies of overtime and contract usage help decrease organizational spending for short-term staffing solutions over 18 months?

### **Literature Review**

An ongoing literature review ensured the use of the most recent evidence and continued throughout the project. The web-based search included CINAHL, PubMed, ProQuest, USF Scholarship Repository, and Google databases using the following terms interchangeably: *float pool, float nurses, staffing, staffing strategies, costs, patient outcomes, nurse engagement, employee engagement, engagement strategies, engagement, turnover, job satisfaction, and leadership strategies*. Search criteria included peer-reviewed publications printed within the last ten years in the English language. Following the initial search results, the scope of the literature review was broadened to include non-medical professions and non-nursing related research to

capture a more comprehensive view of national engagement levels and improvement strategies to create a toolkit that is relevant and adaptable to interprofessional leaders in addition to nursing.

The Johns Hopkins Research and Non-Research Appraisal Tools (Johns Hopkins Hospital/The Johns Hopkins University, 2012) were used to assess the level of evidence and quality of the research articles selected for this project. When assessing the level and quality of evidence, areas of focus included the strength of study design, quality, and consistency of the results, identification, and discussion of limitations, as well as relevant study findings and recommendations. The following themes and concepts surfaced during the ongoing review of evidence (See Appendix A: Level of Evidence and Quality Guide; see Appendix B: Evaluation Table).

### **Turnover**

According to Lu, Barriball, Zhange, and While (2012), job satisfaction is a critical factor in nursing turnover. Organizational, professional, and personal variables can lead to turnover; specific variables can include work-related stressors caused by recent healthcare restructuring and technological changes, staffing shortages leading to busier assignments, or nurses' unfulfilled day-to-day work expectations. The top ten reasons for turnover are personal reasons, career advancement, relocation, retirement, scheduling, workload/staffing ratios, salary, education, commute/location, and immediate management (Takase, Teraoka, & Kousuke, 2015; NSI, 2018).

**The role of leadership.** According to Beck and Harter (2015), performance fluctuates widely and unnecessarily in most companies, in no small part from the lack of consistency in how people are being managed. Multiple studies report that 70% of the variance in engagement is tied to the immediate manager (Kruse, 2015; Beck & Harter, 2015). Hayes et al. (2012)

corroborate this concept by suggesting that turnover is influenced more by managers or supervisors than co-workers. Nurse managers are pivotal in influencing increased job satisfaction of nurses by providing decisive, ethical leadership; role modeling; and an understanding of local issues that affect the work environment (Hayes, Bonner & Pryor, 2010). Visibility, secure communication, recognition, and a supportive approach are all leadership strategies attributed to higher retention and improved quality of care. Adapting a leadership style aimed at understanding what is valued most by nurses is considered a formula for retention.

**Staff satisfaction.** The Institute for Healthcare Improvement's (IHI) recent White Paper, *IHI Framework for Improving Joy in Work*, highlights the role of nurse leaders in creating an environment that fosters joy and engagement which can result in better patient experiences, fewer medical errors, increased productivity, reduced turnover, and improved financial performance (Perlo et al., 2017). O'Connor and Dugan (2017) state that a dissatisfied employee may not deliver the same quality of care as a satisfied one, insinuating that a lack of staff satisfaction compromises patient safety. Hayes et al. (2010) assert that scheduling, protected time off, and ensuring enough resources are important factors within a nurse manager's locus of control. Balancing work and social life is imperative for work engagement, especially with the newest generation of nurses. Each employee thrives on his or her ability to contribute to a greater good, and management's job is to set goals, provide support, coach for high performance, and provide timely, constructive feedback to continuously improve the work environment.

**Work environment.** Nurses work in complex environments and endure challenging workloads every day (Stalter & Mota, 2018; Paris & Terhaar, 2011). Float pool nurses experience the same complexities and challenges, but also struggle with expectations requiring that they seamlessly mirror the specialized skill-sets of unit-based staff. According to Van den

Heede et al. (2013), persistently heavy work assignments did not necessarily lead to higher turnover rates, unless coupled with low job control and lack of team support. Berson (2015) concludes that if a leader wants people to engage with their organizations, they must provide a flexible and supportive work environment. Several authors suggest that investing in healthier nursing work environments is a fundamental strategy to enhance nurse retention (Stalter & Mota, 2018; Van den Heede et al., 2013; Paris & Terhaar, 2011).

### **Float Pools**

Incorporation of *float pools* to supplement staffing variations was first conceptualized in 1981 and is now an accepted solution to meeting staffing needs across all patient care settings and populations (Smith, 1981). Further research shows that hospitals utilizing float pools as a staffing strategy typically save two to five percent of total nursing labor costs (Mendez de Leon & Stroot, 2013; Lebanik & Britt, 2015). Buck (2015) observed high turnover rates in the float pool noting 30% of nurses transferred to another department within the organization or left the company altogether within the first year of employment. Despite its role in decreasing costs associated with staffing shortages, float pools often suffer from significantly lower work engagement and recurring turnover when compared to other nursing departments. National and local retention rates for float pool departments are unknown due to a lack of research studies focused on this non-traditional department.

## **Rationale**

### **Conceptual Frameworks**

**Quadruple aim.** The Quadruple Aim represents an expansion of the Triple Aim, a well-documented roadmap for optimizing health systems performance; this framework was utilized as a conceptual guide for project development (Perlo et al., 2017). The Triple Aim comprises three

dimensions influencing outcomes and performance: improving the health of the population, enhancing the patient care experience, and reducing the per capita cost of health care (Bodenheimer & Sinsky, 2014). The Quadruple Aim introduces a fourth dimension focused on improving the work life and wellbeing of health care providers. Integration of the fourth aim should be considered a prerequisite to other dimensions based on the premise that the care of the patient requires care of the provider. Adapting components of the Quadruple Aim as a conceptual framework, this project aimed to reduce organizational costs and improve work engagement and satisfaction within the float pool as a gateway to enhancing patient experiences and population health, thus satisfying all four elements of the Quadruple Aim (Bodenheimer & Sinsky, 2014).

**Systems thinking.** Adopting systems thinking when pursuing change management commands understanding of fundamental interdependencies and interrelationships among nursing, the work environment, and organizational goals. The systems approach impacts cause and effect where solutions to complex problems are accomplished through collaborative efforts while concurrently addressing factors at the organizational level (Stalter et al., 2017). Utilizing systems thinking as a conceptual framework for this project enables the nurse manager to step out of one's daily routine and comfort zone within the primary microsystem and to identify and analyze the potential impact on mesosystems, the macrosystem, and other microsystems. Systems-level thinking incorporates a multifaceted, evidence-based approach to change management. Both conceptual frameworks shaped components of a new toolkit that addressed engagement and retention issues within the float pool (Stalter & Mota, 2018).

### **Aim Statement**

This project aimed to develop and implement the NMEET for leaders to improve staff engagement through investing and empowering frontline staff while simultaneously creating a work environment that fosters high performing teams capable of achieving superior patient outcomes.

### **Section III. Methods**

#### **Context**

This project began in March 2017 when a new nurse manager was recruited from an outside facility to oversee the float pool department at KMC. The float pool team experienced four managers over two years, all of which were expected to be accountable for one to two units in addition to the float pool. Upon hire, the new manager was given an urgent task of significantly increasing the FTEs in the department to meet the staffing needs of the hospital and decrease the costs associated with contract RNs and overtime. Before taking on this task, an in-depth assessment was conducted with the intent to learn existing team dynamics, assess individual engagement levels, and ascertain interdepartmental relationships.

Initial evaluation of team dynamics included staff interviews and assessing the work environment in real time by implementing nurse-focused leader rounds on the units where individual float pool employees were assigned each day. Informal staff interviews uncovered a team with an “outsider” mentality where common statements included “float pool staff always receive the heaviest assignments” and “staff on the units just assume I am a traveler or registry and have no idea I am staff here” and “I haven't had a consistent manager since I began working in the float pool.” Assessment findings also revealed that the float pool team was lacking in positive working relationships with other nursing units, that nurses were not in receipt of timely house-wide communication integral to their job, and that the nurses lacked awareness of internal



educational and professional growth opportunities. These realities negatively impacted job satisfaction within the float pool, engagement level, and intent to stay within the department.

Float pool turnover and retention data from the human resources (HR) department revealed a turnover rate of 20.5% in January of 2017 – well above the average turnover rate of 9% at KMC. The (PGEES) results from early 2017 (before the new manager's arrival) demonstrated the following:

- 55% of staff did not feel they were involved in decisions that affected their work
- 53% felt their ideas and suggestions were not seriously considered
- 56% of staff did not feel their manager adequately coached them on professional development
- 44% of staff were not satisfied with the recognition received for doing a good job
- 44% felt they lacked autonomy while at work
- 44% felt they were not provided with opportunities to be creative and innovative at work.

Initial team assessment results paired with findings from the PGEES indicated low engagement levels within the float pool and highlighted the importance of focusing on frontline engagement in order to achieve overarching goals of decreasing costs associated with staffing shortages at KMC. Therefore, objectives for this project include (1) increasing float pool FTEs to meet inpatient staffing needs and (2) creating a toolkit for nurse managers that contains multiple leadership strategies designed to improve staff engagement and retention. Objectives were selected based on the evidence that when empowered to practice to their maximum potential, nurses in float pools provide flexibility in meeting safe staffing demands while simultaneously decreasing organizational costs (Muffley & Health, 2017; Dziuba-Ellis, 2006).

### **Authorization of the Project**

This project proposal received the approbation of the Chief Nursing Officer (CNO) and nursing directors. A copy of the Doctorate of Nursing Practice (DNP) Student's Statement of Non-Research Determination was provided to the CNO and directors and included a synopsis of planned interventions and outcomes related to the NMEET. The project proposal was also submitted to the USC Health Sciences Campus Institutional Review Board (IRB) and received exemption as a quality improvement project (see Appendix C: IRB Determination of NOT Human Research; see Appendix D: Letter of Support from Organization; and Appendix E: IRB and/or Non-Research Approval Documents (Statement of Determination)).

### **Key Stakeholders**

Key stakeholders for this project function across all systems in the organization. The group included nursing directors, hospital executives, the quality and finance departments, HR, float pool RNs, nurse managers, as well as staff from other inpatient units, the staffing office, and the patients. Nursing leadership supported project goals of creating an employee engagement toolkit for managers while simultaneously increasing the size of the float pool and its potential to positively impact patient outcomes and improve the overall quality of care.

### **Interventions**

#### **Engagement Surveys**

One of the ways to measure employee engagement is to conduct annual engagement surveys. Many benefits come from engagement surveys: employees feel they have a voice, organizational identification of opportunities for improvement and areas of strengths, and retention of high performers (Harpst, 2014). According to Zwillinger and Huster (2017), engagement surveys also provide a way for employees to provide feedback anonymously and gives the management team

an opportunity to collaborate with staff in developing action plans to address their personal needs. Multiple studies suggest that obtaining regular, unbiased, and anonymous feedback should be expected and encouraged to ensure continuing success (Berson, 2015; O'Connor & Dugan, 2017). Surveys are benchmarked for comparison with other units in the organization as well as similar organizations within the region or state (for example, academic or Magnet-designated hospitals). This project incorporated data from two organizational-wide engagement surveys (the PGEES and the SCORE survey) for measuring float pool staff engagement (Safe & Reliable Healthcare, 2018).

**Press Ganey employee engagement survey.** The PGEES of 2017 was used for pre-intervention data collection and was made available to all KMC employees between February and March 2017. Thirty-four respondents (n = 34) from the float pool completed the 56-item survey that addressed four domains: employee, manager, organization, and engagement indicators. The themes of this survey included adequacy of resources and staffing, interprofessional relationships, leadership access and responsiveness, professional development, autonomy, fundamentals of quality nursing care, and teamwork and collaboration (Press Ganey, 2017). The survey utilizes a 5-point Likert scale and asks respondents to express how much they agree or disagree with each statement. The scale consisted of the following options: "strongly agree and agree," (considered "favorable" responses), "neither agree or disagree" (considered a "neutral" response) and "disagree and strongly disagree" (considered "unfavorable" responses).

Upon evaluation of pre-intervention PGEES results and incorporating learned components from initial assessment, project focus narrowed to include survey items scoring less than 70% favorable on the Likert scale and questions specifically designed to measure engagement levels. Organizational questions that involved senior leadership and compensation

were eliminated. The process resulted in the selection of sixteen questions from the PGEES intended to measure project effectiveness when presented post-intervention (See Appendix F: 2017 Press Ganey Pre-Intervention Survey Results; see Appendix G: 2017 Press Ganey Survey Items Selected for Project).

**SCORE survey.** Instead of continuing to use the PGEES in 2018, KMC executives in collaboration with HR transitioned to the SCORE survey provided by Safe and Reliable Healthcare (2018). The SCORE survey combined the elements of the Agency for Healthcare Research and Quality (AHRQ) Culture of Safety survey and the PGEES into one survey – thus, reducing the number of surveys per employee per year and their associated costs. The SCORE survey was available to all KMC employees in April 2018. Sixty-nine respondents (n = 69) from the float pool department completed the 85-item survey which included the following themes: improvement readiness, local leadership, burnout climate, personal burnout, teamwork, safety climate, work/life balance, growth opportunities, job certainty, intentions to leave, decision making, advancement, and workload strain (Safe & Reliable Healthcare, 2018).

**Post-intervention survey.** Float pool engagement levels were evaluated post-intervention using the sixteen focus questions selected from the pre-intervention PGEES results. Using the same 5-point Likert scale, the post-intervention survey was created using an online survey tool, SurveyMonkey, and e-mailed to all (n = 122) float pool staff. The post-intervention survey was available from September 2018 to October 2018, and a total of fifty-six responses were received (n = 56).

### **Nurse Manager's Employee Engagement Toolkit (NMEET)**

The NMEET was created based on findings from an initial needs assessment, informational interviews, engagement survey results, previous experiences with nurse leaders,

and bedside nurse observations. Guiding principles for creating strategies within the toolkit derived from IHI's White Paper, *High-Impact Leadership*, and included the following leadership strategies: *person-centeredness*, *frontline engagement*, *boundarilessness*, and *transparency* (see Figure 1: IHI High-Impact Leadership Framework; Swensen, Pugh, McMullan, & Kabacene, 2013). Based on initial assessment results identifying specific needs for improvement and professional growth within the department, a fifth category *work environment* was added to the toolkit (see Figure 2: Nurse Manager's Employee Engagement Toolkit Components) (See Appendix H: Nurse Manager's Employee Engagement Toolkit Dashboard).

**Person-centeredness.** IHI's definition of person-centeredness is "being consistently person-centered in word and deed" (Swensen et al., 2013, p. 4). For this project, person-centeredness focuses on the employee as a person first, as a clinician second, and learner third. This approach nurtures relationships beyond a typical manager-employee relationship and is intended to foster trust, transparency, and open communication without fear of punishment.

**Investing in staff.** Leaders must continuously invest their time and energy in creating and maintaining relationships with their employees. This personal and professional investment includes regular meetings with each employee (individually or as a team), recognizing opportunities for constructive feedback or meaningful dialogue, listening intently, and exhibiting authentic concern for each person's wellbeing. According to an engagement study by Deloitte, investment in people matters during good times and bad; nurturing strong relationships is imperative to show that manager's care and is also capable of building staff resilience (Kester, 2018). One fundamental strategy that leaders can utilize to invest and connect with their staff is to perform purposeful daily rounding. For the manager, knowing one or two personal details

about each staff member helps foster a connection that can be effective in building a personal, yet professional rapport.

***Coaching.*** Coaching is another leadership strategy that facilitates engagement. Driving a coaching culture is considered one of the most valuable roles for leaders. According to Berson (2015) coaching strongly correlates with organizational performance, employee engagement, and overall retention. Coaching for performance is much more comfortable after leaders have established a credible and trusting relationship with the employee. The ability to coach for performance and communicate practice issues or areas for improvement without eliciting a defensive response can be challenging. However, when approached with the intent to understand the perspective of the employee and giving him or her the benefit of the doubt, information finding and resolution to practice issues occur more efficiently. This process fosters trust and accountability between employee and manager.

***Professional development.*** According to research by Berson (2015), learning opportunities, professional development, and career progression are among the top drivers of employee satisfaction. A Deloitte study recently found that employees under the age of 25 rate professional development as their number one driver of engagement (Berson, 2015). Based on frequent assignments to different work environments nearly every shift, float pool nurses have an opportunity to serve as models for best practices. Therefore, it is wise to offer float pool nurses the same opportunities for professional development that unit-based RNs receive (Lebanik & Britt, 2015). Statements from several float pool RNs indicated a perception that there were insufficient opportunities for professional development. Collaborating with the education department and other units to identify opportunities available to the float pool team is an important step to improve the teams' perception. Frequent collaboration with other units and

communication with the float pool team regarding available or new professional development opportunities is an effective way to encourage further professional development while also improving engagement through perceived investment into their role as a clinician and learner.

**Frontline engagement.** IHI describes frontline engagement as the act of a leader being a “regular, authentic presence at the frontline and visible champion for improvement” (Swenson et al., 2013, p. 4). This project defines *frontline engagement* as manager visibility evidenced by purposeful staff rounding, employee recognition, and staff involvement in shared-decision making. Perlo and colleagues (2017) reinforced the importance of joy at work and the value of applying a systems approach that correlates greater employee engagement with safer, more efficient patient care.

**Visibility.** Manager visibility is crucial for engaging the frontline workforce – especially float pool teams. Purposeful rounding provides a tangible level of support and the opportunity to connect with staff. Rounding on staff every day and asking questions like “How is your day going?” and “Is there anything you need?” have resulted in decreased staff anxiety and instilled a sense of belonging and community in an otherwise unpredictable work environment. Of all the leadership strategies recommended in this toolkit, daily staff rounding and manager visibility are the most important interventions for achieving higher levels of staff engagement. Float staff need to feel valued – taking time out of a manager’s busy day to visit each employee provides a personal and professional connection. Informal check-ins also provide the nurse manager with an opportunity to assess the work environment and create mutually respectful relationships with both staff and leaders who work alongside float pool nurses.

**Recognition.** Employee recognition is another success factor for engagement and retention (Zwillinger & Huster, 2017). In many instances, local and regional awards, practice

initiatives, staff recognition, friendly competitions, and opportunities for professional growth are unit-based which inadvertently isolates float pool staff. Recognition and rewards are essential if nurse managers want to retain valued staff (Hayes et al., 2010). Employees should feel respected, needed, and appreciated by the department, and recognition for a job well done is a great way to achieve this. Managers should never take this fact for granted and always remember that genuine affirmation is fundamental in engaging and retaining staff (Cohen, 2013; Straw, 2018a).

***Shared governance.*** The concept of shared governance underscores the importance of nurses having access to information, resources, and growth opportunities as well as involvement in the decisions that affect their work. According to Zwillinger and Huster (2017), shared governance imparts nurses with a sense of professional autonomy and contributes to healthy work settings, improved job satisfaction, higher employee engagement levels, and increased quality outcomes for organizations. This concept promotes accountability for improving care quality and safety on the unit. It is vital that nurse leaders encourage an assertive approach in solving problems at the point of care by identifying work unit inefficiencies and analyzing operational failures. The shared governance model encourages collaboration among nurses and leaders when devising a plan to solve inefficiencies in the workplace as well as improve practice at the bedside (Ong et al., 2017). Rainess, Archer, Hofmann, and Nottingham (2015) correlate the implementation of shared governance with increased certification rates, clinical ladder advancement, feelings of empowerment, and significant increases in nursing satisfaction scores. Hospital-wide committee involvement is also embedded in the shared governance model and provides a precise mechanism for communicating important updates, policy changes, or product rollouts. Adapting this concept offers a consistent method for sharing hospital-wide updates and information as well as addressing initial staff complaints of feeling disconnected.



**Boundarilessness.** Swenson et al. (2013) describe *boundarilessness* as encouraging and practicing systems thinking and collaboration across boundaries. This project similarly defines boundarilessness with the added component of uncovering existing educational opportunities previously unavailable to float pool staff. A Deloitte workforce engagement study found that organizations with a strong learning culture are likely to be 52% more productive, 17% more profitable than their peers, and achieve 30% – 50% higher engagement and retention rates (Berson, 2015). This intervention also enhances professional growth, competency, and confidence of float pool RNs who work in high acuity units and provides mutual benefits for assigned units that require specialized knowledge and technical skills for critical care devices such as intra-aortic balloon pumps (IABP) or continuous renal replacement therapy (CRRT).

**Educational opportunities.** Float pool nurses are unique in their ability to support multiple areas while maintaining core competencies that are equivalent to unit-based nurses (Lebanik & Britt, 2015). Multiple strategies were employed to increase competency levels in the department for device-specific care needs on high acuity units. A pre-intervention interdepartmental assessment revealed a high incidence of overtime due to an inadequate number of unit-based nurses with the appropriate competencies to care for critical care devices (i.e., CRRT, Impella, IABP, External Ventriculostomy Device). This shortage also impacted continuity of care for the patients as assignment changes were required if, for example, a patient returned from surgery with an IABP and the nurse caring for the patient had not received the appropriate training to care for this device. The unit-based needs assessment also included queries about specialty devices and their requirements for achieving and maintaining user competencies.

***Collaborating with other departments.*** Collaboration with other unit managers and educators is critical to ensuring appropriate education and orientation. According to O'Connor and Dugan (2017), cross-training staff to unfamiliar areas or devices reduces anxiety related to floating and makes it easier to provide a better quality of care for patients. Identification of the specialty and device needs for each unit involves collaboration with unit-based managers, educators, clinical nurse specialists, and any other unit specific staff that can help facilitate initial education and competency and act as a resource for staff when clinical questions arise. Bridging the gap between the float pool and specialty units led to mutual understanding and collaboration to fulfill unit-specific device needs. Creating relationships and attaining buy-in from key players on each unit leads to increased opportunities for continuing education and professional development for float pool staff.

**Transparency.** Swensen et al. (2013) define transparency as "requiring transparency about results, progress, aims, and defects" (p. 4). This project defines transparency as clear and concise communication of positive and negative information, outcomes, or results and providing consistent opportunities for team or individual discussions. New research shows that transparency from managers is a primary driver of company loyalty and engagement particularly among the millennial generation (Berson, 2015).

***Communication.*** Dynamic and high-performing nurse leaders must create multiple channels to communicate with frontline staff – examples of this can include monthly staff meetings, shift huddles, or daily leadership rounding (King & Drake, 2018). Creativity in managing communication can ensure that nurses are informed and receive the necessary tools to execute their jobs properly. According to Zwillinger and Huster (2017), ensuring communication

and transparency helps to support engagement levels on the unit and inspires creative thinking that drives passion for patient care.

***Roundtable discussions.*** Providing time for roundtable or open discussions at the end of each meeting is an essential component of transparency and communication. Roundtable discussions enable staff to ask questions, vocalize concerns, obtain follow-up information on previous issues, and give or receive feedback. If the team is suffering from sustained burnout or disengagement, implementing roundtable discussions may be uncomfortable at first; therefore, it is essential to set boundaries, promote transparency, and conduct all interactions in a positive, results-driven manner. When approached with questions or comments that seem argumentative or personal, it is vital for roundtable facilitators to use logic instead of responding with emotion. Refraining from an immediate emotional or defensive stance provides the manager an opportunity to deliver information in an objective manner that addresses the employee or team's underlying concerns. Approaching a disengaged employee with empathy and understanding has the benefit of decompressing a negative, blame-shifting environment and brings the dialogue back to a productive, results-driven work session.

***Effective feedback.*** Feedback is a valuable tool for leaders to gather information, measure effectiveness, and identify strengths and areas to improve (Hardavella, Aamli-Gagnat, Saad, Rousalova & Sreter, 2017). There are two main types of feedback: formal and informal. Informal feedback is most common and happens on a day-to-day basis and is primarily given in verbal form. Formal feedback is part of a structured assessment, like engagement surveys, and is usually provided in written form (Hardavella et al., 2017). The overall aim of formal and informal feedback is to foster a higher level of performance by dealing with underperformance constructively.

As leaders, obtaining feedback from staff is part of the continuous improvement process. Achieving personal, professional and organizational level goals requires giving and receiving feedback at all levels, regularly. Asking for constructive feedback from peers and direct reports facilitates a "reality check" and gauges the perception of leadership performance (Hardavella et al., 2017). Adoption of an open-minded listening strategy, practicing reflection, and a willingness to improve performance are all prerequisites to receiving feedback effectively. Reflection remains one of the most important self-awareness tactics to become an effective leader because it honors the practice of humility and continuous improvement.

**Work environment.** Several authors suggest that investment in healthier nursing work environments enhances nurse retention (Stalter & Mota, 2018; Van den Heede et al., 2013; Paris & Terhaar, 2011). Engagement surveys today heavily focus on work environments as a significant factor for nursing engagement. This project defines the *work environment* as the area where patients receive care and encompasses surrounding behaviors, interactions, communications, and perceptions of teamwork and community.

**Advocacy.** O'Connor (2018) defines advocacy as the "act of promoting, supporting, and/or defending a proposal or cause" and describes it as a "multidimensional concept that requires knowledge, experience, self-confidence, and above all, courage" (p. 136). Advocacy is, in essence, caring. In order to promote engagement, leaders must show they genuinely care for the wellbeing of their staff and patients. Advocacy is a required element for achieving retention, engagement, and patient care outcomes. Without the presence of advocacy, other elements within the NMEET will lose effectiveness. O'Connor (2018) emphatically states an "ethical nurse leader advocates for nurses' autonomy and healthy work environment" (p. 137).

At the beginning of the project, there was an assumption that float pool nurses were temporary workers or travel nurses, and the float pool staffs' perception was that the patient assignments they received were higher in acuity and busier than the assignments given to unit-based staff. They also felt they were being treated like "outsiders," that they were being sent home or "flexed off" inappropriately (as if they were travelers, who are contractually sent home before regular staff) when the census dropped or if a unit was overstaffed. Furthermore, the float pool team did not feel they had the same opportunities for education and training as the other inpatient units. A common assumption within the education department was that the float pool staff would be able to learn about new initiatives or product rollouts from unit-based huddles and that float pool-specific education was unnecessary. Therefore, advocacy was a vital component for creating new expectations and establishing the float pool team as a recognizable, independent, and valuable department. Advocacy through collaboration with the education department and directors was also integral to achieving equal education opportunities, department recognition at the organizational level, fair assignments, and following the appropriate staffing protocols when overstaffed.

*Creating a sense of community.* Kulig et al. (2018) refer to a sense of community as a sense of belonging, inclusivity, social relations, and ties experienced within the work environment. Creating a sense of community heightens engagement levels and resilience among team members. Because the float pool does not belong to a primary work unit or microsystem in the traditional sense, it can be difficult for staff to feel a sense of community or belonging similar to connections that are commonly present within unit-based teams (Rainess et al., 2015). Creating consistency within an inconsistent environment is an important tactic to build cohesion among teams, especially within float pools. Consistency can be accomplished by providing

regular opportunities for knowledge sharing and congregating as a team entity; for example, monthly staff meetings or quarterly activities designed to support teamwork. New staff introductions, staff recognition from patients or units, and games intended for team building are useful ideas to incorporate into staff meetings when the goal is to create a sense of community (Straw, 2018a).

***Social events.*** Other options for creating a sense of community may include activities outside of work, such as volunteering in the region or planning a social event together. In this project, these events have created a high level of excitement within the float pool team as well as attention from other units whose nurses often ask float pool staff for an invitation to various activities. Research by Kulig et al. (2018) concluded that fostering a sense of community creates an environment of engagement, resilience, and retention among nursing teams.

### **Increasing the Size of the Float Pool**

Staffing shortages are often precipitated by fluctuations in patient census and acuity, staff illness, vacations, leaves of absence, and turnover (Muffley & Health, 2017; Dziuba-Ellis, 2006). The mission of a float pool team is to mitigate staffing shortages within the organization. As a leader, it is crucial to identify staffing needs and hire intentionally to meet those needs while simultaneously aiming to decrease costs associated with contract nurses and overtime. Multiple studies suggest that safe staffing levels directly impact the quality of patient care (Africa, 2017; Paris & Terhaar, 2011).

According to NSI (2018), a hospital can save, on average, \$1.5 million by eliminating 20 contract nurses. Given the financial implications and sense of urgency conveyed by hospital administration, the new nurse manager began the recruitment and hiring process immediately. Before posting any positions for recruitment, data was collected from all nursing departments to

include contract labor use, overtime, extra shifts worked, and the specific shift (day versus night) most commonly associated with premium hours and pay. This practice is an example of strategic recruitment efforts guided by organizational trends, staffing needs, and skillsets required for inpatient units. The staffing needs assessment included informational interviews with unit managers and finance representatives, as well as an independent analysis of staffing and overtime reports using organizational-specific workforce management software. Following data aggregation and analysis, positions were posted incrementally for recruitment with the intent to hire eight to ten new staff each month. The nurse manager repeated the staffing needs assessment quarterly to assure that new positions were created strategically to fill gaps in staffing across all inpatient units.

### **Gap Analysis**

The NMEET was developed based on findings of a formal gap analysis. A gap analysis compares actual performance with potential performance, identifying factors needed to reach the target or benchmark, and outlining a plan on how to get there (Harris, Roussel, Thomas, & Dearman, 2016). The gap analysis identified multiple themes beginning with the urgent need to establish and maintain a dedicated nurse manager position as a prerequisite to increasing the volume of staff and improving team engagement and retention within the float pool. Additional themes (which are included in the NMEET) addressed the need to create a sense of community, improve relationships with nursing staff on inpatient units, increase opportunities for professional development, broaden float pool competencies, adopt a shared governance model, optimize communication and staff recognition efforts, and increase nurse manager visibility (see Appendix I: Gap Analysis).

### **Gantt Chart**

Using a Gantt chart for this 18-month project helped organize the timeline and steps required for successful development and implementation of the NMEET and interventions to increase the size and capability of the float pool team. The Gantt chart includes chronological action items and tasks in the following sections: DNP project requirements and planning, toolkit and template development, implementation and evaluation, data analysis, and project completion (see Appendix J: Gantt Chart).

### **Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis**

A SWOT analysis of the current state was developed to provide valuable insights into positive and negative factors influencing project outcomes (Harris et al., 2016). When in the project planning phase, a SWOT analysis serves as a reference point for optimizing strengths and opportunities, while addressing and controlling for potential weaknesses and threats.

Organizational strengths include the number of supportive senior leaders in management and the stability of leadership support systems leveraging an organizational culture that is open to change management and risk-taking. Strengths include strong evidence for project rationale and interventions, as well as a multidimensional approach that targets complex systems issues.

Leadership opportunities include the recent appointment of a dedicated float pool manager. Other opportunities included an organizational vision for targeted growth by 50 FTEs over the next year and the charge to engage and retain new members of a growing team while maintaining existing willingness of employees to increase skills, knowledge, and abilities in caring for highly acute patients in complex systems.

Weaknesses were high turnover rates for nurse managers and float pool team members stemming from chronic staffing shortages, inconsistent standards and practice expectations among nineteen microsystems where float pool staff are assigned, the lack of joy and work



engagement among unit-based teams, as well as historically negative perceptions of the float pool.

Threats to the project included current organizational cost-cutting efforts that had the potential to derail opportunities for improvement — a recent example of this involved house-wide standardization of orientation and education practices for new staff resulting in a significant decrease in on-unit orientation. The omission of adequate unit-specific orientation and education can lead to team disengagement and preventable medical errors. Additional threats to retention efforts include the inconsistency in differentiating between float pool staff and travelers, perceived heavy patient assignments, and the lack of a home unit (see Appendix K: Strengths, Weaknesses, Opportunities, Threats [SWOT] Analysis).

### **Work Breakdown Structure**

Creating a work breakdown structure helped to identify objectives and goals for the project and the resources needed to accomplish each task (Moran, Burson, & Conrad, 2017). The phases of the project included six segments – initiation, planning, toolkit development, implementation, evaluation, and project completion (see Appendix L: Work Breakdown Structure).

### **Information Communication Plan**

An information communication plan was created to ensure timely and focused messaging to all stakeholders, including the CNO, nursing directors, on-site support, float pool team, and unit-based nursing staff. The purpose of the information communication plan is to align the project with organizational values while reinforcing the importance of providing adequate support for optimization of float pool team dynamics, engagement, and retention while simultaneously increasing the volume of the float pool. Communication methodologies

throughout each phase of the project included individual and group meetings, conference calls, emails, and video-conferencing via the online application, Zoom. This multi-modal approach provided maximum flexibility for stakeholder involvement and supported accessibility, flow of information, and engagement throughout each phase of the project (see Appendix M: Information Communication Matrix).

### **Project Budget**

A project budget was developed to support the 18-month implementation plan and included the costs of the annual subscription for web-based software, SurveyMonkey, for collecting post-intervention survey responses, supplies for toolkit components, such as vouchers, folders, and certificates, small gifts – among many other viable options for staff recognition. Also included in the budget were the costs of staff attendance to unit practice council meetings and representation on hospital-wide committees as well as the costs of didactic education and on-unit orientation for critical care devices. Key stakeholders' salary costs were not included in the project budget, as these are considered integral to their already compensated roles and organizational responsibilities. Project interventions considered a fundamental part of nurse managers' role, responsibilities, or job description were excluded. The annual estimated cost for NMEET toolkit execution was \$34,674 annually (see Appendix N: Project Budget).

### **Cost/Benefit Analysis and Return on Investment (ROI)**

According to the AHRQ (2017), a return on investment (ROI) shows how much financial gain an organization can obtain from each dollar invested in a project or quality improvement program. The planned ROI for implementation of the NMEET toolkit included annual investment costs of \$34,674 (as outlined in the project budget) and an estimated return of \$1,242,020 over three years. The calculated ROI for toolkit implementation was 109%. Within

the first year of implementation, the benefit to cost (B/C) ratio was 21% with a net benefit of \$690,420, and an average B/C ratio of 12% over three years (see Appendix O: Cost/Benefit Analysis and ROI: NMEET).

Cost comparison of staff nurse salary versus contract nurse salary shows a \$13,553 difference in annual salary with contract nurses receiving \$190,944 per year and staff nurses earning \$177,391 per year (including benefits). The costs of orientation for newly hired staff nurses range from \$8754 - \$10,460 (variation based on ICU versus non-ICU classification) while orientation costs for contract nurses were much less at \$4080. Contract RNs receive approximately \$31/hour more than staff RNs, but due to competitive benefits and other perks for staff (like the \$7,500 sign-on bonus), a contract RNs salary was only \$14,000 more than a staff RNs annually (see Appendix P: Onboarding and Annual Salary Cost Comparison).

The cost-benefit analysis of increasing float pool FTEs to combat the use of contract nurses resulted in an average 7% B/C ratio over three years with the initial year yielding a B/C ratio of 13%. The planned ROI for implementation of increasing float pool FTEs over three years is 412% based on total investment costs of \$1,500,780 and a return of \$7,679,229 (see Appendix Q: Cost/Benefit Analysis and ROI: Increasing Float Pool FTEs).

### **Study of the Interventions**

This project created and implemented leadership strategies within the NMEET based on multifactorial data from years 2016 and 2017. Qualitative and quantitative data included engagement levels, turnover rates, and the use of contract nurses and staff overtime relative to the size of the float pool. Study of the interventions involved gathering data and reports from multiple departments including HR, finance, and hospital administration. The overall impact of the NMEET implementation was assessed pre- and post-intervention using commercially

available employee engagement surveys, informational interviews, finance reports, turnover reports, feedback, and nurse manager observations.

### **Measures**

As previously mentioned, the objectives for this project are (1) to increase float pool FTEs to meet inpatient staffing needs and decrease organization spending associated with contract labor and overtime and (2) to create a toolkit for nurse managers that contains multiple leadership strategies designed to improve staff engagement and retention. Using the Donabedian Quality-of-Care framework, the classification of project measures resulted in three categories: outcome, process, or structural (AHRQ, 2018). Outcome measures reflect the impact of the intervention and are considered a “gold standard” in measuring quality; process measures are considered informative and used to measure performance; lastly, structural measures involve evaluation of the setting or environment where care is delivered (AHRQ, 2018). The outcome measure for this project included evaluation of float pool engagement levels by comparing pre- and post- engagement survey results. Pre-intervention engagement levels were measured using the PGEES, and post-intervention engagement levels were evaluated using results from the 16 question post-intervention survey adapted from the 2017 PGEES and supplemented with results from the SCORE survey.

Process measures for this project involved comparison of pre- and post- intervention turnover rates within the float pool. Turnover data collection for 2016 - 2018 included retrieval of turnover reports from HR and compilation of data in excel measuring the incidence and rational of staff turnover occurring throughout the project. Validating turnover data included cross-referencing both sets of data and reviewing inconsistencies or discrepancies with HR personnel.

Lastly, the structural measure for this project included ongoing evaluation of filled FTEs in the float pool and corresponding trends of contract RNs and overtime use. Pre- and post-intervention data for the use of contract RNs and overtime in the inpatient setting derived from budget reports from the finance department. Reports were cross-referencing with records available through an institutional time-keeping application capable of producing overtime and contract labor usage reports on demand. Financial data also stemmed from monthly finance reports sent to the leadership team via institutional e-mail. Data validation included comparing financial and contract labor data with information available via an online application used by the organization for time-keeping purposes, tracking productivity, contract nurse usage and overtime hours. Further attempts for validating data included informational interviews with staff, the contract RN supervisor, Associate Chief Nursing Officer, and director of the finance department.

### **Analysis**

Both quantitative and qualitative methods were used to analyze data collected pre- and post-project implementation. Team and individual engagement levels were analyzed using the PGEES, SCORE survey, and post-intervention survey results. Analysis of turnover data involved comparing HR reports from before and after the project. The fiscal impact of increasing float pool FTEs was analyzed using financial reports, contractor timekeeping records, and comparing the number of travelers contracted at KMC pre- and post-intervention.

Post-intervention engagement data derived from 16 pre-selected PGEES questions and was sent to staff via e-mail using the online survey tool, SurveyMonkey. Data were analyzed using the same online application and also included informational interviews, which were synthesized into themes and compared against pre-intervention data. Statistical analysis for pre- and post- survey results was performed using Excel's *t*-test formula and resulted in a *p*-value of

0.01, deeming project results statistically significant. Excel was also used for ongoing data management and graphs. Descriptive analysis, including percentages, was used to describe and demonstrate the results.

### **Ethical Considerations**

#### **Jesuit values**

This project aligns with Ignatian Pedagogy by seeking to develop persons of compassion, competence, and conscience for their vocation (in this case, nursing) based on the premise that self-reflection is integral for personal growth and professional development (Pennington, Crewell, Snedden, Mulhall & Ellison, 2013). This model of reflective practice asks critical, thoughtful questions focusing on context, reflection, experience, action, and evaluation to improve nursing practice. Using this model as a guidepost for improving and sustaining engagement and retention in the float pool requires that nurse managers practice self-reflection on a regular basis in order to avoid inevitable culture disparities and bias that is harmful to the planned trajectory of the float pool team. The concept of emotional intelligence also includes self-reflection and awareness and is fundamental to understanding, collaborating, and improving dynamics of interaction and acceptance of an ambitious, highly specialized, and dynamic float pool team (Hutchinson, Hurley, Kozlowski, & Whitehair, 2018).

#### **American Nurses Association (ANA) Ethical Standards**

The American Nurses Association's (ANA; 2015) *Code of Ethics for Nurses with Interpretive Statements* defines accountability as being "answerable to oneself and others for one's own actions" (p. 41). This project relates to the *Code* by incorporating ethical standards outlined in Provisions 1.5 and 6.3. Provision 1.5 underscores the importance of creating and maintaining professional, respectful, and caring relationships with all individuals with whom the

nurse interacts. Unproductive and morally unacceptable behaviors, such as gossiping, bullying, harassment, intimidation, or manipulation must be reported immediately and acted upon to achieve a culture of civility and kindness. This Provision is especially relevant in the float pool due to the increased exposure to unit-based cultures and personalities that may differ from the culture within the float pool. Float pool staff must be able to collaborate with each unit they float to in order to meet the shared goals of providing compassionate, transparent, and effective care. Fostering a culture of trust and justice must be a top priority for nurse managers.

Provision 6.3 emphasizes that nurses must contribute to a moral workplace environment, outlining the nurse leader's responsibility for the healthcare environment in assuring that nurses are treated fairly and given the opportunity to be involved in decisions related to their practice and work environment (ANA, 2015). This project aligns with this provision by introducing the shared decision-making model to the float pool and ensuring that staffing and assignment practices are fair and conducted in a manner that adheres to hospital policy and supports safe patient care.

## **Section IV. Results**

### **Results**

Project objectives included creating and implementing a toolkit for nurse managers that contains multiple leadership strategies designed to improve staff engagement and retention while simultaneously increasing float pool FTEs to meet inpatient staffing needs and decrease costs associated with high utilization of contract RNs and overtime. As previously stated, project effectiveness and results were measured using outcome, process, and structural measures.

### **Employee Engagement**

The outcome measure included evaluation of float pool engagement levels by comparing pre- and post- engagement survey results. Results from the pre-intervention PGEES, the SCORE survey, and the post-intervention survey were displayed similarly with each item reported in calculated percentages of responses that fell into three categories: favorable, neutral, and unfavorable responses. Results were calculated based on employee responses to each question using the previously mentioned 5-point Likert scale. Responses considered favorable required selection of “strongly agree” or “agree;” a neutral response stemmed from the selection of “neither agree or disagree;” and an unfavorable response resulted from choosing “disagree” or “strongly disagree.”

Comparison of the 2017 PGEES and the 2018 post-intervention survey revealed significant improvements in staff perception of leadership, professional development opportunities, shared decision-making, recognition, and sense of community. The most noteworthy improvements were revealed upon pre- and post-intervention comparison of the following survey items:

- 93% of staff responded favorably to “the person I report to uses the performance process to coach me on my professional development” (an increase of 49%)
- 97% of staff responded favorably to “the person I report to supports free exchanges of opinions and ideas” (an increase of 34%),
- 73% of staff responded favorably to “I am involved in decisions that affect my work” (an increase of 28%),
- 85% of staff responded favorably to “my work unit works well together” (an increase of 24%),
- 73% of staff responded favorably to “I am satisfied with the recognition I receive for doing a good job” (an increase of 19%), and



- 64% of staff responded favorably to “my ideas and suggestions are seriously considered” (an increase of 17%) (Press Ganey, 2018).

A significant drop (from 63% pre-intervention to 38% post-intervention) was noted for survey item “I have sufficient time to provide the best care/service for our clients/patients” and is likely attributed to increased perceived workload and patient acuity as well as a recent spike in practice improvement initiatives prompting updates to numerous policies requiring significant and sudden changes in practice. Results reveal that project interventions had an insignificant impact on areas of involvement in quality improvement projects (+1%), opportunities to influence nursing practice (+1%), perception of different units working well together (+3%), and desire to stay within the organization if offered a similar position elsewhere (-1%)(Press Ganey, 2018).

Review of the SCORE survey results identified similar themes found in the PGEES and revealed helpful insights into post-intervention employee engagement levels. Results from the SCORE survey also indicated high favorability percentages in the following areas: receiving positive feedback (96%), receiving useful feedback related to performance (88%), consideration of employee input and suggestions (88%), leadership communication of expectations (99%), and participation in decision-making (84%). Survey items with the lowest percentage of favorable responses included the employee's perception of influence on organizational decisions (54%), feelings of working too hard (44%), events at work affecting life in an emotionally unhealthy way (55%), and feelings of burnout (57%). Due to the lack of pre-intervention measurement for specific components and themes within the SCORE survey, results are not considered a valid independent measure for project effectiveness; instead, the data is viewed as substantiating evidence of post-intervention engagement levels (see Appendix R: 2017 & 2018 Crosswalk of

PGEES Survey Responses; see Appendix S: 2017 & 2018 Comparison of PGEES Survey Responses; see Appendix T: SCORE Survey Results).

### **Turnover**

Process measures for this project involved comparison of pre- and post- intervention turnover rates within the float pool. Comparison of pre- and post- intervention turnover data revealed a significant decrease in turnover in the float pool following implementation of the NMEET. Turnover rates were 20.5% in January 2017 and dropped to 9% by August 2018. The lowest turnover rate occurred in April 2018 with an average of 5.2% turnover within the department.

### **Float Pool FTEs**

Lastly, the structural measure for this project included ongoing evaluation of filled FTEs in the float pool and corresponding trends of contract RNs and overtime use. In January 2017, the float pool consisted of 48 FTEs (n = 53) and increased by 130% resulting in a total of 109.3 FTEs (n = 122) by September 2018. Monthly tracking by the nurse manager and final detailed financial reports revealed corresponding decreases in overtime and contract RN relative to the size of the float pool over time. By the end of the project, overtime use decreased by 26% from 58 FTEs to 43 FTEs and the use of contract RNs decreased by 53%, trending down from 87 FTEs to 41 FTEs at project completion (see Appendix U: Turnover Trends; see Appendix V: FTE trends; see Appendix W: Premium Pay Trends).

## **Section V. Discussion**

### **Summary**

The findings from this 18-month practice improvement project demonstrate the rationale and necessity of investing in staff – personally, professionally, and clinically. This project aimed

to create and implement a toolkit for nurse managers that contained multiple leadership strategies designed to improve staff engagement and retention while simultaneously increasing float pool FTEs to meet inpatient staffing needs and decrease costs associated with high utilization of contract RNs and overtime.

Project objectives were met through the successful implementation of strategies within the NMEET as evidenced by the significant increases in post-intervention engagement scores and the substantial decrease in float pool turnover rates. Cost savings were also realized following the recruitment and onboarding of approximately 70 new float pool employees and subsequent decrease in costs associated with overtime and contract nurse usage. This project has generated organizational attention and a newfound appreciation for the float pool team as an established department within KMC as well as highlighted areas of focus for future system-wide changes needed in order for the float pool to reach its full potential as a cost-effective staffing strategy. System-wide improvements are still needed in areas related to unit perception of float pool staff, fair and equitable patient assignments, and professional development opportunities. Hospital executives and nurse leaders at KMC continue to make changes designed to improve organizational culture and work environments across all microsystems. Overall, the float pool team has grown substantially in their ability to support and instill positivity in each other (despite working in one of the most challenging departments) and has become a recognized and trusted addition to healthcare teams across the hospital.

### **Interpretations**

Triangulation of themes and concepts between the SCORE survey and baseline data gathered from the PGEES highlighted similar themes between surveys such as decision-making, growth opportunities, teamwork, intention to leave, and perception of leadership. Despite sharing

multiple common themes, there were insufficient similarities between the two surveys to rely on the SCORE survey as an independent source for accurately measuring the effectiveness of project NMEET interventions; therefore, a 16-question post-intervention survey based on questions from the PGEES was created and disbursed to float pool staff. Despite this finding, the SCORE results added significant value in showcasing elements of burnout climate, personal burnout, work/life balance, staff perception of work environment, local leadership, and risk of burnout.

One of the observations made when comparing the SCORE survey results to the post-intervention survey was the difference in responses to questions with similar themes; for example, both surveys asked the employee to rate their involvement in decisions that affect their work – 84% responded *favorably* on the SCORE survey while only 73% responded *favorably* on the post-intervention survey. SCORE survey results with similar themes to the post-intervention survey had a higher percentage of favorability for nearly every item. These differences may be due to the timing of survey completion. The SCORE survey was completed in April 2018 when organizational enthusiasm and engagement were elevated due to the impending arrival of Magnet® surveyors and the potential to achieve the inaugural Magnet® designation.

In contrast, the post-intervention survey was completed at the end of September 2018, immediately following sequential visits from CMS and the California Department of Public Health (CDPH) where multiple areas for improvement were cited, leading to numerous action plans requiring immediate re-education of all staff, auditing, and frequent constructive feedback throughout their workday. This high-stress environment is likely a contributing factor that may explain the differences in favorability responses between both surveys (See Appendix X: Synthesis of Post-Intervention PGEES and Score Survey – 2018).

### **Limitations**

Overall, there were several limitations to this project. Pre- and post-implementation engagement data originated from the PGEES survey and post-intervention survey and were considered primary sources for employee engagement measurement. Limitations for this intervention include a low response rate ( $n = 34$ ) to the pre-implementation PGEES leading to potentially lower reliability further perpetuated by the high level of leadership and staff turnover at the time of the survey.

Calculation of overtime hours and contract nurse FTEs was completed pre- and post-project implementation to measure the impact of increasing float pool FTEs, but this data cannot be considered a reliable independent metric. The incidence and accumulation of overtime are not exclusively dependent on units being short-staffed or the number of FTEs in the float pool and can vary significantly based on multiple factors, such as high acuity assignments, poor time management, delay in handoff report, sick calls, late admissions or discharges. Therefore, the significant decrease in overtime post-intervention cannot be solely attributed to increased float pool FTEs due to factors outside the scope of this project.

External factors may also be responsible for the significant decrease in the use of contract nurses. While increasing float pool FTEs played a significant role in decreasing the use of contract RNs, there may have been other factors leading to this result. Simultaneously, an organization-wide initiative to reduce contract labor began mid-way through the project. Hospital executives began to pay closer attention to the request and extension process – requiring director and manager level accountability and transparency when requesting to add or extend any contract RNs. This added level of executive oversight resulted in the denial of many requests for

additional contract labor unless unit shortages were due to extended leaves of absences or other extenuating circumstances.

Pre- and post-intervention float pool turnover rates were used to indicate team engagement levels. While this data is helpful in measuring project outcomes, it is not considered the sole indicator of employee engagement as turnover may result from factors other than low job satisfaction and staff nurse disengagement. Some employees may experience high levels of engagement, but leave the organization for reasons like relocation, schooling, retirement, or for family reasons.

Lastly, the SCORE survey results from HR only included the percentage of favorable results without the percentages of neutral or unfavorable responses. Despite multiple requests to HR personnel and nursing directors, a comprehensive report of all responses was unobtainable; therefore, percentages of neutral and unfavorable responses had to be estimated based on color-coded bar graphs included on the initial report (green = favorable, yellow = neutral, and red = unfavorable). This limitation is being explored with senior management to stratify and correlate results by department.

### **Conclusions**

Work engagement and job satisfaction have been well documented and widely accepted as critical indicators for burnout prevention and employee retention (Lu et al., 2012). Therefore, it can be assumed that employee engagement is a predictor of job satisfaction and turnover and its presence in the workplace is foundational for creating and sustaining high-performing organizations (Perlo et al., 2017). Recent reimbursement changes, fines, and government mandated value-based payment incentives have stimulated a national shift in focus for hospitals. Healthcare organizations have transitioned to a patient-centered care business model and adopted

a renewed focus on the quality of services and patient safety. In order for hospital executives to fully realize the benefits of these changes, achieving and sustaining workforce engagement must also be a priority. Organizations in the US are struggling to keep teams engaged with only 30% of U.S. employees and 13% of employees worldwide citing that they are engaged in their work, and 26% of workers reporting that they are actively disengaged (Berson, 2015; Beck & Harter, 2015). It is imperative that hospital administrators understand the correlation between employee engagement and important performance indicators including patient satisfaction ratings, higher profitability, productivity, and patient care quality, lower turnover, less absenteeism, and fewer safety-related incidents (Beck & Harter, 2015).

Successful implementation of the NMEET highlights the important role leaders play in improving staff engagement through investing and empowering frontline staff while simultaneously creating a work environment that fosters high performing teams capable of achieving superior patient outcomes. This project utilized systems thinking and elements from the quadruple aim to create and implement leadership strategies within the NMEET that resulted in improved employee engagement, decreased turnover, and cost savings for the organization.

As the struggle to recruit and retain skilled and compassionate RNs continues to plague healthcare organizations and deepen financial woes, hospital executives must shift their focus to engaging employees at the front line. Hospitals are urged to attack this problem by investing in *human capital* (specifically employee engagement) to reverse the dangerous trends associated with medical errors, poor patient outcomes, high turnover, high vacancy rates, declining reimbursement rates, use of contract nurses, and unnecessary overtime (Kruse, 2015; Mendez de Leon & Stroot, 2013; Hayes et al., 2010; Hayes et al., 2012). The formula is realistic and straightforward – improving nurse engagement leads to improved organizational performance.

### **Recommendations**

According to Berson (2015) and Perlo et al. (2017), high-impact leadership organizations spend 1.5–3 times more on management development than their peers and cultivate joyful work environments. Future organizational and governance efforts intended to increase engagement and decrease burnout should consider focusing on management development and ensuring that new leaders have ample support from HR, finance, and executive sponsors. Organizations with high levels of employee engagement tend to focus on developing superior, well-rounded leaders. When given the right tools, nurse leaders can create a team of skilled nurses who are empowered to go above and beyond expectations by cultivating a culture of continuous learning, caring and improvement where all nurses feel supported, valued, and engaged within their work environments.

Ultimately, without autonomy and buy-in from key decision makers and the executive team, it will be difficult to realize and sustain the benefits of using the NMEET. This reality underscores the critical communication skills, and role functions of the nurse manager as he or she advocates for frontline teams by building a persuasive business case and value proposition for systems change in the organization.

In conclusion, the Nurse Manager's Employee Engagement Toolkit (NMEET) is a useful guide for nurse leaders to optimize nursing engagement through an investment of their time and efforts to motivate, engage and empower frontline staff. The payoff will likely yield a work environment characterized by high engagement levels, trust, and ongoing learning that promote professional gratification and improved organizational culture. Interventions described in this project are not specific to solely float pool teams - leaders from different facilities, specialties, and disciplines may also benefit by adopting and integrating these tools.



**Section VI. Other information**

**Funding**

There were no external funding sources to support this project.

## Section VII. References

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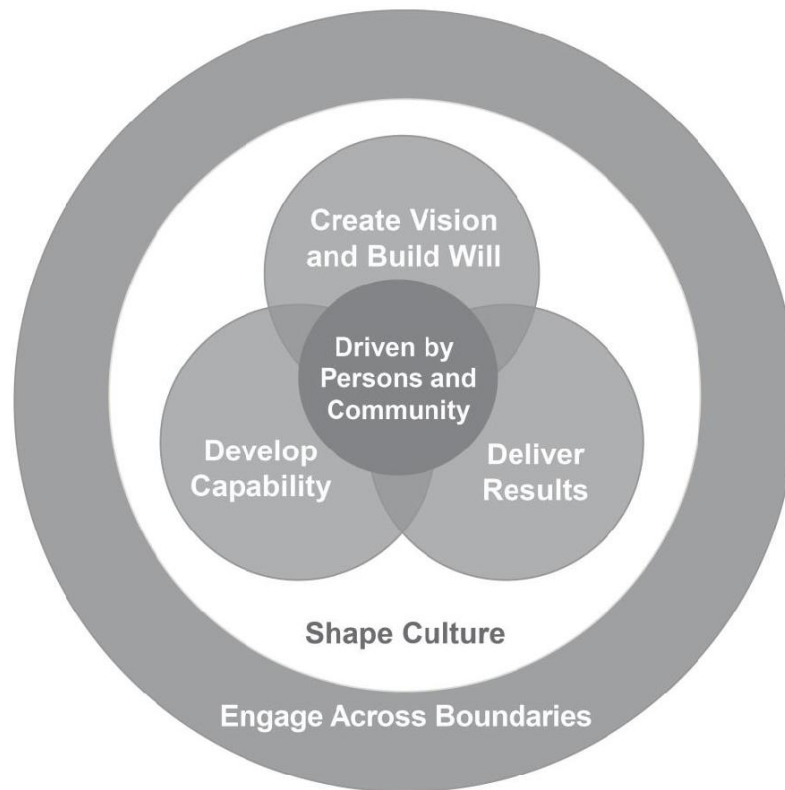
**Section VIII. Figures****Figure 1. IHI High-Impact Leadership Framework**

Figure 1. IHI High-Impact Leadership Framework. From *High-Impact Leadership: Improve Care, Improve the Health of Populations, and Reduce Costs* [White Paper] by S. Swensen, M. Pugh, C. McMullan, and A. Kabcenell, 2013. Permission Pending.

**Figure 2.** Nurse Manager Employee Engagement Toolkit (NMEET) Components



## Section IX. Appendices

### Appendix A

#### Level of Evidence and Quality Guide

Evidence Levels	Quality Guides
<p><b>Level I</b> Experimental study, randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis</p>	<p><b>A High quality:</b> Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence</p>
<p><b>Level II</b> Quasi-experimental study Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis</p>	<p><b>B Good quality:</b> Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence</p>
<p><b>Level III</b> Non-experimental study Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review with or without a meta-synthesis</p>	<p><b>C Low quality or major flaws:</b> Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn</p>

Evidence Levels	Quality Guides
<p><b>Level IV</b> Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific evidence</p> <p>Includes:</p> <ul style="list-style-type: none"> <li>• Clinical practice guidelines</li> <li>• Consensus panels</li> </ul>	<p><b>A High quality:</b> Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years</p> <p><b>B Good quality:</b> Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years</p> <p><b>C Low quality or major flaws:</b> Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies, insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years</p>

<p><b>Level V</b> Based on experiential and non-research evidence</p> <p>Includes:</p> <ul style="list-style-type: none"> <li>• Literature reviews</li> <li>• Quality improvement, program or financial evaluation</li> <li>• Case reports</li> <li>• Opinion of nationally recognized experts(s) based on experiential evidence</li> </ul>	<p><b>Organizational Experience:</b></p> <p><b>A High quality:</b> Clear aims and objectives; consistent results across multiple settings; formal quality improvement, financial or program evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence</p> <p><b>B Good quality:</b> Clear aims and objectives; consistent results in a single setting; formal quality improvement or financial or program evaluation methods used; reasonably consistent recommendations with some reference to scientific evidence</p> <p><b>C Low quality or major flaws:</b> Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement, financial or program evaluation methods; recommendations cannot be made</p> <p><b>Literature Review, Expert Opinion, Case Report, Community Standard, Clinician Experience, Consumer Preference:</b></p> <p><b>A High quality:</b> Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader(s) in the field</p> <p><b>B Good quality:</b> Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions</p> <p><b>C Low quality or major flaws:</b> Expertise is not discernable or is dubious; conclusions cannot be drawn</p>
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Appendix B  
Evaluation Table

Article #	Citation	Study Design	Sample Size & Setting	Study Findings that Help Answer the EBP Question	Limitations	*Evidence Level (EL) & Quality (Q)
1	Hayes, B., Bonner, A., & Pryor, J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. <i>Journal of Nursing Management</i> , 18(7), 804-814.	Literature Review	17 articles were reviewed under the criteria January 2004 – March 2009 using keywords satisfaction and dissatisfaction, job satisfaction and job dissatisfaction to identify factors contributing to nurses' job satisfaction in acute hospital settings	This review concludes that collaboration between nurses, nurse managers and others is crucial to increase nursing satisfaction and retention. Recognition and regular check-ins are considered pivotal if nurse managers want to retain valued staff.	Difficulty in identifying work context (acute care settings versus non-acute); frequent use of IWS tool by multiple studies restricts job dissatisfaction to only six factors	EL: V Q: B
2	Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., & ... North, N. (2012). Nurse turnover: A literature review – An update. <i>International Journal of Nursing Studies</i> , 49(7), 887-905.	Literature Review	68 studies were selected for the review following a web-based search using electronic databases: MEDLINE, CINAHL, and PubMed; search criteria included publications published 2006 or later that examined turnover or turnover intention in acute care settings.	Advances in nursing turnover research are indicative of ongoing concern about staffing instability in health care organizations. A better understanding of nurse turnover costs and interventions are needed to alleviate nursing shortages to increase organizational capacity for delivery of nursing services.	Very little research exists that identifies nursing turnover determinants and impact on patient, nurse, and system outcomes.	EL: V Q: A
3	Lu, H., Barriball,	Systematic	100 papers were	Their search concluded	This review was	EL: III

	<p>K. L., Zhang, X., &amp; While, A. E. (2012). Job satisfaction among hospital nurses revisited: A systematic review. <i>International Journal Of Nursing Studies</i>, 49(8), 1017-1038.</p>	<p>Review</p>	<p>analyzed following a web-based search using seven databases covering English and Chinese language publications from 1966 to 2011 with the intent to identify factors leading to job satisfaction of hospital nurses.</p>	<p>that job satisfaction is a key factor in nursing turnover and is attributed to organizational, professional, and personal variables. Lower job satisfaction leads to increased turnover, therefore it's important for nurse leaders to identify these variables and take action. Variable examples can include work-related stressors caused by recent healthcare restructuring and technological changes, staffing shortages leading to heavier assignments, or those with unfilled expectations regarding the work nurses do daily.</p>	<p>limited to general acute care hospital settings</p>	<p>Q: A</p>
<p>4</p>	<p>Takase, M., Teraoka, S., &amp; Kousuke, Y. (2015). Investigating the adequacy of the Competence-Turnover Intention Model: How does nursing competence affect</p>	<p>Cross-Sectional Survey Design</p>	<p>Surveys were distributed to 1337 registered nurses/midwives in October, 2013 with the intent to measure adequacy of the Competence-Turnover Intention Model using structural equation modelling; 766</p>	<p>The aim of this study was to test the adequacy of the Competence-Turnover Intention Model, which was developed to identify how nursing competence could affect nurses' turnover intention. The results showed that the level of nursing competence was related</p>	<p>It is these different perceptions that might have produced a relatively weak correlation in this study between nurses' perception of their competence and the quantity of the rewards they</p>	<p>EL: III Q: B</p>

	nurses' turnover intention? <i>Journal of Clinical Nursing</i> , 24(5/6), 805-816.		questionnaires were returned.	positively to the quantity of organizational rewards they felt they had received, and negatively related to the level of exhaustion they experienced. Moreover, the perceived organizational rewards and exhaustion were correlated with nurses' turnover intention through affective commitment.	perceived themselves to have received. Therefore, the adequacy of the model must be examined from the perspectives of both managers and nurses in future studies. Second, the CTI model is not exclusive.	
5	Van den Heede, K., Florquin, M., Bruyneel, L., Aiken, L., Diya, L., Lesaffre, E., & Sermeus, W. (2013). Effective strategies for nurse retention in acute hospitals: A mixed method study. <i>International Journal of Nursing Studies</i> , 50(2), 185-194.	Mixed Method Study	3186 bedside nurses of 272 randomly selected nursing units in 56 acute hospitals were surveyed. Analysis of survey responses focused on reported intention to leave the organization and accompanying hospital and nurse characteristics. For the second portion of the study, researchers conducted interviews with the chief nursing officers of the three highest and three lowest performing hospitals based on	Researchers conclude that investing in improved nursing work environments is a key strategy to nurse retention.	Secondly, the selection of hospitals for the qualitative data gathering was limited to six hospitals and therefore the generalization of our results is limited. Thirdly, the qualitative part of this study was limited in scope. Data triangulation (e.g. field observations management style, focus groups), member checking	EL: II Q: A

			nurses' intention to leave the organization.		(e.g. interviewing bedside nurses) and using specific software to analyses the interviews could have contributed to the trustworthiness	
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\*Johns Hopkins Hospital/The Johns Hopkins University. (2012). Non-research appraisal tool. S. L. Dearholt & D. Dang. (Eds.). Johns Hopkins nursing evidence-based practice: Model and guidelines (2nd ed., pp. 241-244). Indianapolis, IN: Sigma Theta Tau International Honor Society of Nursing.

Appendix C  
IRB Determination of NOT Human Research



**UNIVERSITY OF SOUTHERN CALIFORNIA HEALTH SCIENCES CAMPUS  
INSTITUTIONAL REVIEW BOARD**

LAC+USC Medical Center, General Hospital Suite 4700  
1200 North State Street, Los Angeles, CA 90033  
323-223-2340 (phone)  
323-224-8389 (fax)  
[irb@usc.edu](mailto:irb@usc.edu)

Determination of NOT Human Subjects Research

**Date:** Apr 02, 2018, 10:14am  
**To:** [Christen Straw](#)  
**From:** [Sandy Jean](#)  
**Project** Engagement and Retention in Float Pools: Keeping the Team Above  
**Title:** Water ([IIR00002440](#))

The USC Health Sciences Institutional Review Board (HSIRB) designee reviewed the information you submitted pertaining to your project and concluded that the project does not qualify as Human Subjects Research.\* You do not need to submit an IRB application.

This project is a quality improvement program in the nursing float pool at Keck Hospital of USC. The activities as described do not meet the Federal definition of research and are not subject to the requirements of 45 CFR 46 or continuing review.

This review and opinion is based on the information provided and is not valid if the proposed project is not exactly as described, or if information has been withheld. If your project design changes in ways that may affect this determination, please contact the IRB for guidance.

Sandra K Jean, MS  
IRB Analyst II

**\*From 45 CFR 46.102, The Federal Regulations on Human Subjects Research:**

- Human Subject: A living individual about whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual, or identifiable private information.

- Research: A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge.

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Appendix D  
Letter of Support from Organization

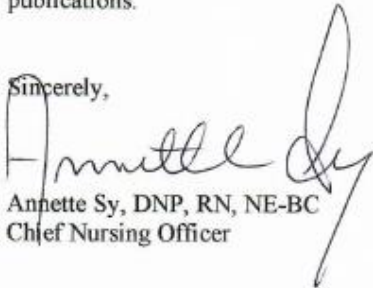
Keck Medical Center of **USC**  
Keck Medicine of **USC**

April 2, 2018

Dear Sir or Madam,

This is a letter of support for Christen Straw to implement her DNP Comprehensive Project at Keck Medical Center of USC, Los Angeles. We give Christen Straw permission to use the name of our hospital in her DNP Comprehensive Project Paper and in future presentations and publications.

Sincerely,



Annette Sy, DNP, RN, NE-BC  
Chief Nursing Officer

Appendix E  
IRB and/or Non-Research Approval Documents (Statement of Determination)



**DNP Statement of Non-Research Determination Form**  
**Christen Straw, MSN, RN, CNL, OCN**

**Title of Project:**

A Multidimensional Approach to Improve Organizational Outcomes by Investing in and Sustaining a High Performing Float Pool Team

**Brief Description of Project:**

**A) Aim Statement:**

Multiple global studies suggest that quality patient care is directly impacted by the healthcare work environment and safe nurse staffing levels (Africa, 2017). Academic medical centers provide highly complex, tertiary care in an environment where teaching and research also prevail. Specialized nursing care and management of such high acuity patients requires constant attention and adjustments to maintain quality outcomes, safety and cost-effective staffing solutions. The Float Pool has traditionally been available to supplement staffing needs; however, variation may exist regarding the capacity, productivity, utilization, skill mix and level of staff engagement (Penner, 2017). The aim of this project is to develop, implement and evaluate a comprehensive toolkit for nurse managers to improve outcomes related to float pool team development and organizational cost savings. The toolkit will include resources and a 3-year business plan that could potentially result in cost-savings of \$5 million annually by decreasing contract labor costs while simultaneously sustaining or increasing levels of staff engagement and retention compared to baseline metrics (Harris, Roussel & Thomas, 2018).

**Description of Intervention:**

The interventions in the comprehensive toolkit for nurse managers will include templates for monitoring effectiveness of daily leadership rounds with staff, integration of the shared leadership model through initiation of a float pool specific unit practice council, individualization of the orientation and onboarding processes, and provision of professional growth opportunities to ensure skill development, retention and staff satisfaction.

Increasing the number of float pool nurses incrementally over the next 3 years will be a vital component of the business plan. According to Rainess, Archer, Hofmann, and Nottingham (2015), increasing the volume of the float pool is a unique staffing solution that is capable of eliminating the need for contract labor, decreasing the costs associated with overtime, and significantly improving patient safety and outcomes. While the cost savings associated with expanding the float

DNP Department Approval 5/8/14

pool are significant, concurrent investments must also be made to realize long term benefits.

**B) How will this intervention change practice?**

According to Good and Bishop (2011), in order for hospitals to ensure safe staffing in a steadily changing acute-care environment, a high functioning float pool team is an economic necessity. Traditionally, float pool nurses are utilized as supplemental staff assigned to various high acuity inpatient units and often perceived as temporary staff rather than a member of a cohesive team. This project will change nursing practice by recognizing the value of team development and engagement within the float pool and how that improves work culture, team dynamics and patient outcomes on the units served by individual float pool nurses. According to Shinnars et al. (2016), work satisfaction is an important predictor of a nurse's intention to remain in his or her current position. Implementation of the nurse manager's toolkit will also change practice by promoting higher rates of retention.

**C) Outcome measurements:**

Outcome measures include pre- and post- intervention comparison of staff engagement levels, retention rates, costs associated with contract labor and overtime, and selected patient outcomes.

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/1569>

This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (seen below). 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:

**EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST \***

**Instructions: Answer YES or NO to each of the following statements:**

<b>Project Title: A Multidimensional Approach to Improve Organizational</b>	<b>YES</b>	<b>NO</b>
---	------------	-----------

DNP Department Approval 5/8/14



UNIVERSITY OF | School of Nursing and  
SAN FRANCISCO | Health Professions

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

**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.

**Signature of Student:**

DNP Department Approval 5/8/14



*Christen Straw*

Christen Straw DATE: 3/1/2018

**Signature of Supervising Faculty Member (Chair):**

*Catherine Coleman*

Catherine Coleman DATE: 3/1/2018

**Signature of DNP Committee Member**

*Timothy S. Godfrey, SJ*

Timothy S. Godfrey, SJ DATE 3/2/2018

Appendix F  
2017 Press Ganey Pre-Intervention Survey Results

#	Press Ganey Items	Domain	% Favorable	% Neutral	% Unfavorable	Score	Responses	Vs. Nat'l Healthcare Avg	Nat'l Healthcare Avg (Score)	Vs. Nat'l Academic Healthcare Avg	Nat'l Academic Healthcare Avg (Score)
1	My work unit works well together.	Employee	63%	31%	6%	3.78	32	-0.41	4.19	-0.38	4.16
2	The person I report to treats me with respect.	Manager	74%	21%	6%	4	34	-0.34	4.34	-0.32	4.32
3	The person I report to cares about my job satisfaction.	Manager	74%	21%	6%	3.97	34	-0.13	4.1	-0.11	4.08
4	Different work units work well together in this organization.	Organization	62%	21%	18%	3.56	34	-0.17	3.73	-0.16	3.72
5	I am satisfied with the recognition I receive for doing a good job.	Manager	56%	21%	24%	3.53	34	-0.18	3.71	-0.16	3.69
6	This organization conducts business in an ethical manner.	Organization	68%	26%	6%	3.82	34	-0.3	4.12	-0.29	4.11
7	I am involved in decisions that affect my work.	Manager	45%	35%	19%	3.32	31	-0.39	3.71	-0.38	3.7
8	This organization provides high-quality care and service.	Organization	82%	15%	3%	4.29	34	0.03	4.26	0.03	4.26
9	This organization supports me in balancing my work life and personal life.	Organization	71%	26%	3%	3.85	34	-0.01	3.86	0.01	3.84
10	I like the work I do.	Employee	94%	6%	0%	4.56	34	0.09	4.47	0.11	4.45
11	My pay is fair compared to other healthcare employers in this area.	Organization	56%	26%	18%	3.38	34	0.01	3.37	0.03	3.35
12	This organization makes employees in my work unit want to go above and beyond.	Employee	56%	41%	3%	3.74	34	0.14	3.6	0.15	3.59
13	This organization treats employees with respect.	Organization	68%	21%	12%	3.79	34	-0.15	3.94	-0.14	3.93
14	The person I report to encourages teamwork.	Manager	73%	24%	3%	4.03	33	-0.19	4.22	-0.17	4.2
15	I am proud to tell people I work for this organization.	Engagement Indicator	94%	6%	0%	4.41	34	0.13	4.28	0.11	4.3

16	I would stay with this organization if offered a similar position elsewhere.	Engagement Indicator	76%	18%	6%	4.06	34	0.15	3.91	0.14	3.92
17	My job makes good use of my skills and abilities.	Employee	82%	12%	6%	3.97	34	-0.16	4.13	-0.14	4.11
18	This organization provides career development opportunities.	Organization	71%	29%	0%	3.94	34	0.15	3.79	0.12	3.82
19	I would recommend this organization to family and friends who need care.	Engagement Indicator	88%	12%	0%	4.26	34	0	4.26	0	4.26
20	I respect the abilities of the person to whom I report.	Manager	91%	9%	0%	4.26	34	0	4.26	0.02	4.24
21	I would like to be working at this organization three years from now.	Engagement Indicator	91%	6%	3%	4.3	33	0.14	4.16	0.14	4.16
22	The person I report to is a good communicator.	Manager	74%	21%	6%	3.91	34	-0.1	4.01	-0.09	4
23	I would recommend this organization as a good place to work.	Engagement Indicator	76%	21%	3%	4.09	34	-0.01	4.1	-0.01	4.1
24	Overall, I am a satisfied employee.	Engagement Indicator	79%	21%	0%	4.18	34	0.16	4.02	0.17	4.01
25	My ideas and suggestions are seriously considered.	Manager	47%	38%	16%	3.41	32	-0.4	3.81	-0.38	3.79
26	There is a climate of trust within my work unit.	Employee	68%	23%	10%	3.77	31	-0.04	3.81	-0.01	3.78
27	I have confidence in senior management's leadership.	Organization	50%	31%	19%	3.44	32	-0.34	3.78	-0.32	3.76
28	Physicians and staff work well together.	Organization	70%	24%	6%	3.91	33	-0.06	3.97	-0.01	3.92
29	This organization makes every effort to deliver safe, error-free care to patients.	Organization	82%	12%	6%	4.09	34	-0.18	4.27	-0.19	4.28
30	My work provides me an opportunity to be creative and innovative.	Employee	56%	29%	15%	3.62	34	-0.16	3.78	-0.06	3.68
31	Senior management's actions support this organization's mission and values.	Organization	70%	21%	9%	3.76	33	-0.19	3.95	-0.2	3.96
32	When appropriate, I can act on my own without asking for approval.	Manager	56%	31%	13%	3.56	16	-0.47	4.03	-0.44	4
33	My work unit is adequately staffed.	Organization	47%	33%	20%	3.47	15	0.21	3.26	0.22	3.25

34	I get the training I need to do a good job.	Organization	69%	25%	6%	3.75	16	-0.24	3.99	-0.22	3.97
35	Patient safety is a priority in this organization.	Organization	94%	0%	6%	4.44	16	0.06	4.38	0.06	4.38
36	I get the tools and resources I need to provide the best care/service for our clients/patients.	Organization	88%	0%	13%	3.94	16	0	3.94	0.02	3.92
37	I have sufficient time to provide the best care/service for our clients/patients.	Employee	63%	13%	25%	3.44	16	-0.24	3.68	-0.24	3.68
38	Within my scope of nursing practice, I have the freedom to act in the best interest of the patient.	Manager	88%	0%	13%	4.06	16	-0.11	4.17	-0.11	4.17
39	I have the opportunity to influence nursing practice in this organization.	Employee	63%	25%	13%	3.75	16	-0.07	3.82	-0.09	3.84
40	I have opportunities to learn and grow in this organization.	Organization	94%	6%	0%	4.25	16	0.24	4.01	0.2	4.05
41	The person I report to uses the performance process to coach me on my professional development.	Manager	44%	50%	6%	3.69	16	-0.2	3.89	-0.21	3.9
42	The person I report to supports free exchanges of opinions and ideas.	Manager	63%	31%	6%	4	16	-0.05	4.05	-0.05	4.05
43	The person I report to is responsive when I raise an issue.	Manager	67%	27%	7%	4.07	15	0.08	3.99	0.09	3.98
44	Nurse leaders are accessible in this organization.	Organization	69%	19%	13%	3.75	16	-0.1	3.85	-0.11	3.86
45	Senior nursing leadership is responsive to my feedback.	Organization	47%	33%	20%	3.47	15	-0.15	3.62	-0.16	3.63
46	Communication between physicians, nurses, and other medical personnel is good in this organization.	Organization	75%	19%	6%	4.06	16	0.25	3.81	0.25	3.81
47	We effectively use cross functional (interprofessional) teams in this organization.	Organization	94%	0%	6%	4.31	16	0.41	3.9	0.4	3.91
48	There is good collaboration between nursing	Organization	88%	13%	0%	4.5	16	0.59	3.91	0.6	3.9



	and the different ancillary services.										
49	Overall, I am satisfied with the expertise of the nursing staff.	Employee	88%	0%	13%	4.06	16	-0.07	4.13	-0.08	4.14
50	My work unit uses evidence-based practice in providing patient care.	Employee	88%	13%	0%	4.25	16	0.02	4.23	0.01	4.24
51	My work unit demonstrates a commitment to patient- and family-centered care.	Employee	94%	6%	0%	4.38	16	0.04	4.34	0.03	4.35
52	I am involved in quality improvement activities.	Employee	50%	36%	14%	3.57	14	-0.35	3.92	-0.35	3.92
53	Our organizational values are reflected in our Nursing Professional Practice Model.	Organization	80%	13%	7%	4	15	-0.12	4.12	-0.13	4.13
54	Nurse leaders share a clear vision for how nursing should be practiced in this organization.	Organization	60%	20%	20%	3.67	15	-0.23	3.9	-0.23	3.9
55	Nurses in my work unit help others to accomplish their work.	Employee	93%	7%	0%	4.4	15	0.11	4.29	0.12	4.28
56	Nurses in my work unit help others even when it's not part of their job.	Employee	100%	0%	0%	4.5	16	0.27	4.23	0.29	4.21

Adapted from Press Ganey Employee Engagement Survey, 2017 (permissions pending)

Appendix G  
2017 Press Ganey Survey Items Selected for Project

	<b>Press Ganey Items</b>	<b>Domain</b>	<b>% Favorable</b>	<b>% Neutral</b>	<b>% Unfavorable</b>	<b>Score</b>	<b>Responses</b>	<b>Vs. Nat'l Healthcare Avg</b>	<b>Nat'l Healthcare Avg (Score)</b>	<b>Vs. Nat'l Academic Healthcare Avg</b>	<b>Nat'l Academic Healthcare Avg (Score)</b>
1	I am involved in decisions that affect my work.	Manager	45%	35%	19%	3.32	31	-0.39	3.71	-0.38	3.7
2	My ideas and suggestions are seriously considered.	Manager	47%	38%	16%	3.41	32	-0.4	3.81	-0.38	3.79
3	I am involved in quality improvement activities.	Employee	50%	36%	14%	3.57	14	-0.35	3.92	-0.35	3.92
4	My work provides me an opportunity to be creative and innovative.	Employee	56%	29%	15%	3.62	34	-0.16	3.78	-0.06	3.68
5	When appropriate, I can act on my own without asking for approval.	Manager	56%	31%	13%	3.56	16	-0.47	4.03	-0.44	4
6	I have the opportunity to influence nursing practice in this organization.	Employee	63%	25%	13%	3.75	16	-0.07	3.82	-0.09	3.84
7	My work unit is adequately staffed.	Organization	47%	33%	20%	3.47	15	0.21	3.26	0.22	3.25

8	Different work units work well together in this organization.	Organization	62%	21%	18%	3.56	34	-0.17	3.73	-0.16	3.72
9	My work unit works well together.	Employee	63%	31%	6%	3.78	32	-0.41	4.19	-0.38	4.16
10	I have sufficient time to provide the best care/service for our clients/patients.	Employee	63%	13%	25%	3.44	16	-0.24	3.68	-0.24	3.68
11	The person I report to uses the performance process to coach me on my professional development.	Manager	44%	50%	6%	3.69	16	-0.2	3.89	-0.21	3.9
12	I am satisfied with the recognition I receive for doing a good job.	Manager	56%	21%	24%	3.53	34	-0.18	3.71	-0.16	3.69
13	The person I report to supports free exchanges of opinions and ideas.	Manager	63%	31%	6%	4	16	-0.05	4.05	-0.05	4.05
14	This organization makes employees in my work unit want to go above and beyond.	Employee	56%	41%	3%	3.74	34	0.14	3.6	0.15	3.59
15	I would stay with this organization if offered a similar position elsewhere.	Engagement Indicator	76%	18%	6%	4.06	34	0.15	3.91	0.14	3.92
16	Overall, I am a satisfied employee.	Engagement Indicator	79%	21%	0%	4.18	34	0.16	4.02	0.17	4.01

Adapted from Press Ganey Employee Engagement Survey, 2017 (permissions pending)

Appendix H  
Nurse Managers Employee Engagement Toolkit Dashboard

Nurse Managers Employee Engagement Toolkit (NMEET)					
	Person-centeredness	Frontline Engagement	Boundarilessness	Transparency	Focusing on the Work Environment
IHI definition:	Being consistently person-centered in word and deed	Be a regular, authentic presence at the frontline and visible champion for improvement	Encouraging and practicing systems thinking and collaboration across boundaries	Requiring transparency about results, progress, aims, and defects	N/A
Project Definition:	Focusing on the employees as a person first, as a clinician and learner second, and maintaining relationships beyond a typical manager-employee relationship – one that fosters transparency and communication both ways without fear of punishment.	Visibility through purposeful staff rounding, recognition, and engaging frontline staff in shared decision-making.	This project defines boundarilessness similarly with the added component of seeking out untapped educational opportunities to enhance professional growth for staff.	Clear and concise communication of the positive as well as the negative and providing space and time for open discussions on topics that are normally shied away from.	Work environment is defined as the area where float pool nurses perform their work (patient care) and includes surrounding behaviors/interactions/communications, and perceptions of team work and community.
NMEET Interventions:	Investing in staff <ul style="list-style-type: none"> <li>◦ Regular meetings with teams</li> <li>◦ Providing meaningful feedback</li> <li>◦ Purposeful rounding</li> </ul> Coaching Professional Development	Visibility <ul style="list-style-type: none"> <li>◦ Purposeful staff rounding</li> <li>◦ Daily/Weekly</li> </ul> Recognition <ul style="list-style-type: none"> <li>◦ Peer to peer</li> <li>◦ Employee of the Month</li> <li>◦ Recognition Preference Survey</li> </ul> Shared governance <ul style="list-style-type: none"> <li>◦ Hospital-wide committee involvement</li> </ul>	Seeking out untapped educational opportunities <ul style="list-style-type: none"> <li>◦ Unit-specific specialty care opportunities</li> <li>◦ Critical care device orientation</li> </ul> Collaborating with other departments <ul style="list-style-type: none"> <li>◦ What are their needs?</li> </ul> How can the float pool best support their unit?	Communication <ul style="list-style-type: none"> <li>◦ Participating in unit Huddles</li> <li>◦ Monthly staff meetings</li> <li>◦ Rounding</li> </ul> Roundtable discussions <ul style="list-style-type: none"> <li>◦ Provide time at the end of each meeting</li> </ul> Ask for honest feedback on performance as a leader  Engagement Surveys	Advocacy  Creating a sense of community.  Planning social events.
Note: Adapted from Straw (2018) and Swensen et al. (2013)					

Appendix I  
Gap Analysis

Organizational Level	Category	Actual Performance	Potential Performance	Factors Needed to Fill the Gap
Macrosystem	Finance	Unsustainable organizational spending on short term staffing solutions	Have a robust float pool capable of meeting the fluctuating staffing needs	Increase float pool FTE's
Mesosystem	Quality	Frequent changes in patient assignments due to lack of critical care device trained nurses	Continuity of care for patients with specialty devices	Increase device and specialty training opportunities for float nurses
	Quality	Inconsistent practice between unit-based nurses and float pool nurses	Float pool nurses contribute to unit-based quality outcomes and are active in planning and implementing measures to improve practice	Improved communication of unit-based initiatives and goals; consistent education and evaluation of float pool clinical practice
	Leadership	Turnover of five nurse managers over a three-year period	Consistent nurse manager	Investigate cause of high turnover and adjust management team and work environment as indicated
Microsystem	Leadership	Previous nurse managers expected to manage inpatient unit in addition to float pool department	Dedicated nurse manager for the float pool	Buy-in and approval of dedicated manager by finance department and senior leadership
	Turnover	Turnover rates reached 20.5% in January 2017	The float pool meets or exceeds national turnover rates	Engagement and retention strategies
	Engagement	Fifty-four percent of staff reports feeling that they were not involved in decisions that affect their work	Staff are engaged in the decisions that involve their work	Initiate shared leadership model by establishing a unit practice council and committee



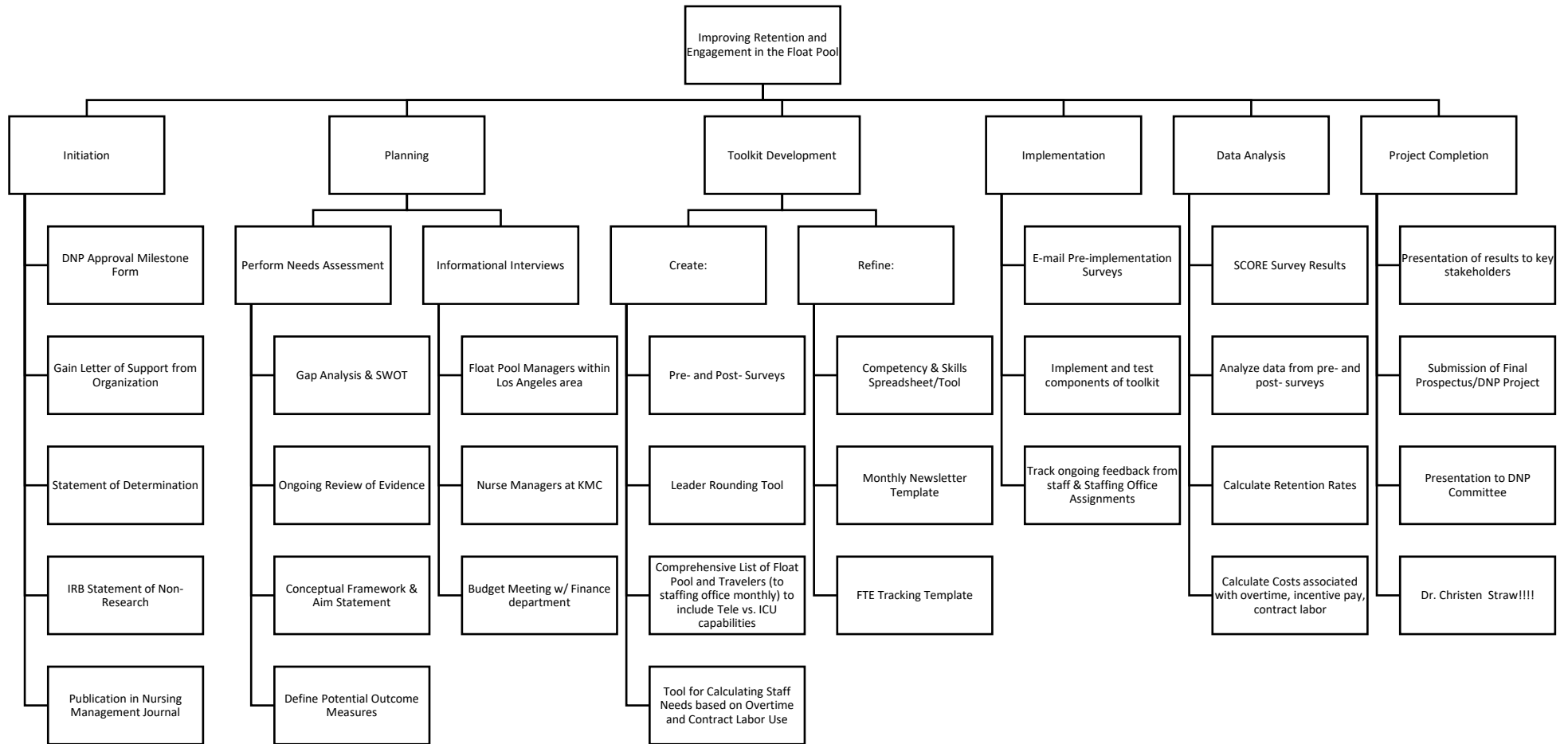


Appendix K  
Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis

Strengths	Weaknesses
<ol style="list-style-type: none"> <li>1. Number of supportive senior leaders in C-suite</li> <li>2. Stable leadership and mentor support systems in place</li> <li>3. Internal data trends demonstrate need, evidence for project rationale and change management interventions</li> <li>4. Multidimensional strategies that target complex systems issues concurrent with project implementation</li> <li>5. Organizational culture open to change management and risk taking</li> </ol>	<ol style="list-style-type: none"> <li>1. High turnover in float pool leadership and staff 2013-2016</li> <li>2. Historical negative perception of float pool reflective of competency and skillset of staff</li> <li>3. Each of 19 units/microsystems has variable standards and non-specific practice expectations for unit-specific policies and procedures</li> <li>4. Consistent staffing shortages daily on majority of units</li> <li>5. Lack of joy and work engagement exhibited by unit-based teams and staffing office</li> </ol>
Opportunities	Threats
<ol style="list-style-type: none"> <li>1. Retention and ongoing satisfaction of dedicated FP manager</li> <li>2. To cultivate culture of a learning health system by new manager who has earned trust and respect through leadership and management style to optimize team dynamics</li> <li>3. To continue to increase and exceed float pool retention goals</li> <li>4. Current float pool staff willing and open to increase skills, knowledge and abilities in caring for high acuity patients in complex systems and teaching/research environment</li> <li>5. Organizational vision aligns with float pool team growth – size of team, level of engagement and new competencies</li> </ol>	<ol style="list-style-type: none"> <li>1. Current organizational cost cutting efforts could derail opportunity for improvement in safe staffing and effective team dynamics</li> <li>2. Unpredictable nature and variability of patient acuity and hospital census</li> <li>3. Unit-specific culture exhibits hesitation and possessiveness over expanding education and training opportunities for float nurses to include unit-based specialty education/skills training</li> <li>4. Increased costs associated with increased training opportunities (short term losses)</li> <li>5. Inconsistent communication practices across units, float pool, staffing office and education department</li> </ol>



## Appendix L Work Breakdown Structure



Appendix M  
Information Communication Matrix

Information	Target Audience	When (tentative)	Method of Communication	Responsible
Project Planning & Check-In's	Dr. Catherine Coleman, DNP Committee Chair	Weekly 01/2018-12/2018	Zoom Session	DNP Student DNP Chair
Project Planning & Check-In	DNP Committee Dr. Timothy Godfrey SJ	02/2018 – 10/2018	Zoom Session & E-mail	DNP Student DNP Committee
Check-In's w/ Onsite Support at KMC	Dr. Brooke Baldwin-Rodriguez	Monthly 01/2018 – 12/2018	In-person meeting	DNP Student On-Site Support
Project Proposal	Nursing Director & DNP Chair	04/2018	In-person meeting	DNP Student
Submit DNP Manuscript to Nursing Management Journal	Nursing Managers	05/2018	Online	DNP Student
IRB Process at Keck	Associate Administrator Academic Affairs	04/2018	In-person meeting	DNP Student
Request for Letter of Support for Project	Chief Nursing Officer	04/2018	E-mail	DNP Student
Informational Interviews	Nurse Managers at KMC	05/2018 – 07/2018	In-person meetings	DNP Student
Informational Interviews	Float Pool Nurses at KMC	05/2018 – 07/2018	In-person meetings	DNP Student
Financial Implications of Improvement Efforts	Representative from Finance Department	06/2018	In-person meeting	DNP Student
Pre-Implementation turnover data from 2016 - 2017	Human Resources	06/2018	E-mail	DNP Student
Press Ganey Employee Engagement Survey Results (Pre-Implementation data)	Human Resources	06/2018	In-person meeting with HR representative to interpret results	DNP Student
SCORE Survey Results	Human Resources, Nursing Administration	10/2018	In-person meeting to review results	DNP Student
Request and Evaluate Post-Implementation Turnover rates	Human Resources	10/2018	E-mail Communication	DNP Student
Communication of Project Results	CNO, Nursing Director, DNP Chair	12/2018	In-person meeting	DNP Student
Final Presentation	USF DNP Committee	12/2018	In-person meeting	DNP Student

Appendix N  
Project Budget

Project Step	Cost Element	Description	Estimated Cost per Unit/Hr	Total Estimated Cost	Sustainability Costs		
					2019	2020	2021
Web-based Surveys	Software	Annual Subscription	\$37.00/month	\$444	\$0	\$0	\$0
Unit Practice Council	Nursing Salary Hours	Float Pool Unit Based Council Meeting	\$55.00/hr (x) 6 RNs 1.5hr/month (x) 12 months	\$5,940	\$5,940	\$5,940	\$5,940
Hospital Systems level Committees	Nursing Salary Hours	Quality Council	\$55.00/hr (x) 1 RN 3hr/month (x) 12 months	\$1,980	\$1,980	\$1,980	\$1,980
		Magnet Ambassador	\$55.00/hr (x) 1 RN 2hr/month (x) 12 months	\$1,320	\$1,320	\$1,320	\$1,320
		Council of Chairs	\$55.00/hr (x) 1 RN 1hr/month (x) 12 months	\$660	\$660	\$660	\$660
		Staffing Committee	\$55.00/hr (x) 1 RN 2hr/month (x) 12 months	\$1,320	\$1,320	\$1,320	\$1,320
Monthly Newsletter	Supplies	Paper	\$30.99/case	\$61.98	\$61.98	\$61.98	\$61.98
	Supplies	Ink Toner	\$87.11/color (4 colors)	\$348.44	\$348.44	\$348.44	\$348.44
Special Device Training	Nurse Salary Hours	In-Class Training	\$55.00/hr per 4-8hr class \$220 - \$440 per nurse/day (x) 20	\$8,800	\$8,800	\$6,600	\$4,400
On-Unit Orientation for Special Devices	Nurse Salary Hours	On-unit Orientation	\$55.00/hr per 12-hr orientation shift \$660/nurse per orientation shift (x) 20	\$13,200	\$13,200	\$9,900	\$6,600
Rewards and Recognitions	Supplies	Gift cards, monetary rewards, etc.	\$5 - \$10 per gift card at 5 per month x 12 months	\$600	\$600	\$600	\$600
Approximate Annual Budget:				\$34,674.42	\$34,674.42	\$28,730.42	\$23,230.42

Appendix O  
Cost-Benefit Analysis and ROI: Nurse Manager Employee Engagement Toolkit

	Pre-Implementation	Jan. 2017 – December 2017	January 2018 – September 2018	Projected October 2018 – December 2018	2019	Totals
<b>Initial Investment Costs</b>						
Web-based Surveys		\$444		\$444	\$444	
Unit Practice Council		\$5,940		\$5,940	\$5,940	
Hospital Wide Committees		\$5,280		\$5,280	\$5,280	
Supplies		\$410		\$410	\$410	
Nursing Orientation Hours		\$22,000		\$22,000	\$22,000	
Rewards and Recognition		\$600		\$600	\$600	
<b>Total Initial Investment Costs</b>	<b>\$0</b>	<b>\$34,674</b>		<b>\$34,674</b>	<b>\$34,674</b>	<b>\$104,022</b>
<b>Turnover Costs</b>						
# of Staff	18	11	8	1	6	
Multiply by avg. cost of turnover per nurse = \$61,100	\$1,099,800	\$672,100	\$488,800	\$61,100	\$366,600	
Avg. Position Vacancy/Recruitment Time = 81 days (11.57 weeks) = cost of backfill with contract/agency for full time staff (36hrs/week at \$102/hr)	\$764,730	\$467,335	\$339,880	\$42,485	\$254,910	
<b>Total Turnover Costs</b>	<b>\$1,864,530</b>	<b>\$1,139,435</b>		<b>\$922,265</b>	<b>\$621,510</b>	
<b>Projected Annual Savings (Benefits)</b>		<b>\$724,095</b>		<b>\$217,170</b>	<b>\$300,755</b>	<b>\$1,242,020</b>
<b>Total Costs</b>		<b>\$34,674</b>		<b>\$34,674</b>	<b>\$34,674</b>	<b>\$104,022</b>
<b>Net Benefit (Total Benefits – Total Costs)</b>		<b>\$690,420</b>		<b>\$182,496</b>	<b>\$266,081</b>	<b>\$1,138,997</b>
<b>Benefit-Cost Ratio (B/C)</b>		<b>21%</b>		<b>6%</b>	<b>9%</b>	
	Return on Investment = $\frac{\text{Return} - \text{Cost of investment}}{\text{Cost of investment}} \times 100$ $\frac{\$1,242,020 - \$104,022}{\$104,022} = \$1,137,998 \div \$104,022 \times 100 = 109\%$					

Appendix P  
Onboarding and Annual Salary Cost Comparison

Float Pool RN vs. Contract RN Cost Comparison		
	Float Pool RNs	Contract RNs
Average Hourly Wage <sup>1</sup>	\$71.07	\$102
Annual Salary	\$147,825.60	\$190,944.00
Productive Hours	1632	1872
Productive Wages	\$115,986.24	\$190,944.00
Non-Productive Hours	240	
Non-Productive Wages	\$17,056.80	
Fringe Benefit Rate	29.4%	N/A
Benefits	\$29,565.12	N/A
<b>Total Annual Payroll Costs</b>	<b>\$177,390.72</b>	<b>\$190,944.00</b>
Premium Shift/Overtime Rates		
>12hrs in one shift = double-time	\$142.14/hr	\$204/hr
>40 hours in a pay period = 1.5x base	\$106.61	\$153/hr
Initial Hiring Costs <sup>2</sup> Sign-On Bonus	\$7500.00	N/A
General Hospital Orientation		
Staff RNs = 5 days	\$2842.90	\$1632.00
Contract RNs = 2 days		
On-Unit Orientation		
Staff RNs = 4 – 6 days <sup>3</sup> Contract RNs = 2 days	\$3411.36 - \$5117.04	\$2448.00
<b>Orientation/Onboarding Costs Totals:</b>	<b>\$8754.26 - \$10,460.14</b>	<b>\$4,080</b>

<sup>1</sup>Average hourly wages account for shift and weekend differentials

<sup>2</sup>Sign-on bonus is paid over 3 years at \$2500/year

<sup>3</sup>On-unit orientation for staff RNs varies based on ICU vs. non-ICU floating cluster

**Appendix Q**  
**Cost-Benefit Analysis and ROI: Increasing Float Pool FTEs**

Cost-Benefit Analysis and Return on Investment					
	Pre-Implementation	Year 1	Year 2	Year 3	Totals
Initial Investment Costs	\$7107 per FTE added to the FP	\$7320 per FTE added to the FP	\$7540 per FTE added to the FP	\$7766 per FTE added to the FP	
Initial Investment Projected Cost					
Projected Increase in Float Pool FTE's	20	20	40	40	
1 <sup>st</sup> year Onboarding Costs	\$142,140	\$146,400	\$301,600	\$310,640	
Sign-On Bonus (1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> year allotments)	\$50,000	\$100,000	\$200,000	\$250,000	
<b>Total Initial Investment Costs</b>	<b>\$192,140</b>	<b>\$246,400</b>	<b>\$501,600</b>	<b>\$560,640</b>	<b>\$1,500,780</b>
Float Pool RN					
FTE's	53.2	93.2	133.2	173.2	
Hours/Year	110,656	193,856	277,056	360,256	
Hourly Wages (including projected wage increase)	\$71.07	\$73.20	\$75.40	\$77.66	
<b>Total Annual Float Pool RN Salary Costs*</b>	<b>\$9,437,186</b>	<b>\$14,190,259</b>	<b>\$20,890,022</b>	<b>\$27,977,481</b>	
Contract RN					
Total FTE's	74.7	49.8	25.29	0	
Hours/Year	155,376	103,584	52,601	0	
Overtime					
Total FTE's	47.60	32	16.26	2.0	
Hours/Year	99,000	66,560	33,821	4,160	
<b>Total Annual Contract RN &amp; Overtime Costs*</b>	<b>\$27,105,444</b>	<b>\$18,844,301</b>	<b>\$9,571,959</b>	<b>\$517,420</b>	
<b>Projected Annual Savings (Benefits)</b>		<b>\$3,453,810</b>	<b>\$2,317,379</b>	<b>\$1,908,040</b>	<b>\$7,679,229</b>
<b>Total Costs</b>	<b>\$192,140</b>	<b>\$246,400</b>	<b>\$501,600</b>	<b>\$560,640</b>	<b>\$1,500,780</b>
<b>Net Benefit (Total Benefits – Total Costs)</b>	<b>(\$192,140)</b>	<b>\$3,207,410</b>	<b>\$1,815,779</b>	<b>\$1,347,400</b>	<b>\$6,178,449</b>
<b>Benefit-Cost Ratio (B/C)</b>		<b>13%</b>	<b>5%</b>	<b>3%</b>	<b>7%</b>
Return on Investment = $\frac{\text{Return} - \text{Cost of investment}}{\text{Cost of investment}} \times 100$ $\frac{\$7,679,229 - \$1,500,780}{\$1,500,780} \times 100 = 412\%$					

\*Total Annual Float Pool RN salary costs includes benefit

Appendix R  
2017 & 2018 Crosswalk of PGEES Survey Responses

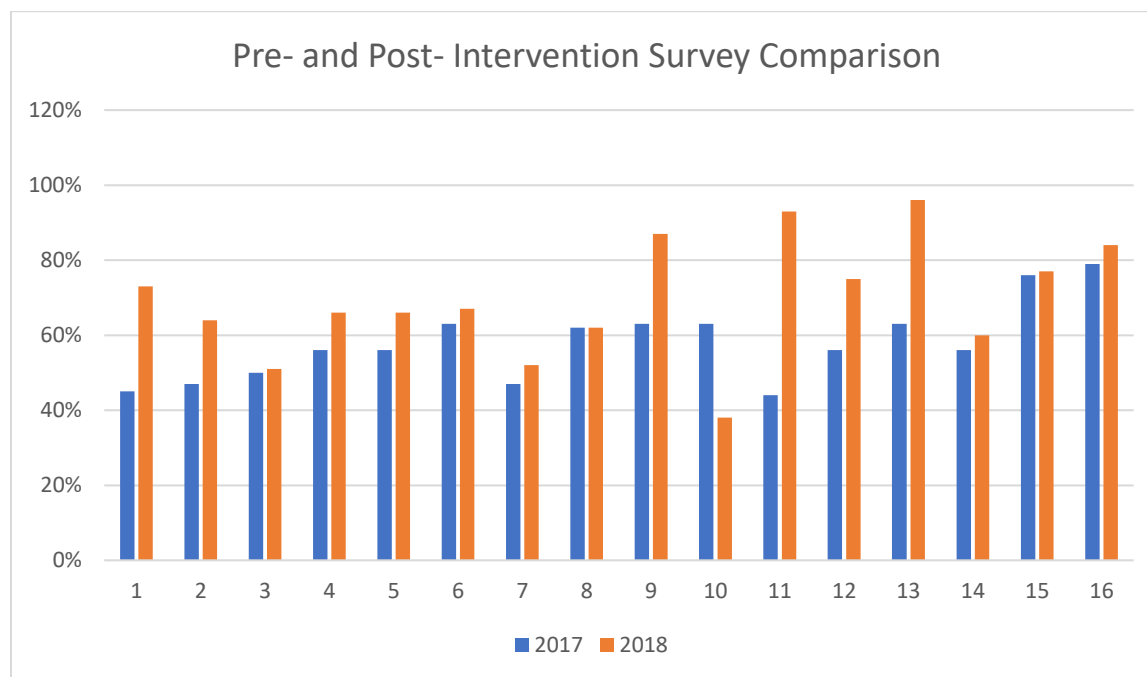
#	Variables	2017 PGEES Results – Pre-Intervention (n = 34)			2018 PGEES Results – Post-Intervention (n = 56)			Comparison of 2017 & 2018 Results by +/- % Change		
		% Favorable	% Neutral	% Unfavorable	% Favorable	% Neutral	% Unfavorable	+/- % Favorable	+/- % Neutral Change	+/- % Unfavorable Change
1	I am involved in decisions that affect my work.	45%	35%	19%	73%	13%	13%	+28%	-22%	-6%
2	My ideas and suggestions are seriously considered.	47%	38%	16%	64%	32%	4%	+17%	-6%	-12%
3	I am involved in quality improvement activities.	50%	36%	14%	51%	36%	13%	+1%	0%	-1%
4	My work provides me an opportunity to be creative and innovative.	56%	29%	15%	65%	25%	10%	+9%	-4%	-5%
5	When appropriate, I can act on my own without asking for approval.	56%	31%	13%	66%	25%	9%	+10%	-6%	-4%
6	I have the opportunity to influence nursing practice in this organization.	63%	25%	13%	64%	30%	6%	+1%	+5%	-7%
7	My work unit is adequately staffed.	47%	33%	20%	56%	27%	17%	+9%	-6%	-3%
8	Different work units work well together in this organization.	62%	21%	18%	65%	23%	12%	+3%	+2%	-6%
9	My work unit works well together.	63%	31%	6%	85%	13%	2%	+22%	-18%	-4%
10	I have sufficient time to provide the best care/service for our clients/patients.	63%	13%	25%	40%	26%	34%	-23%	+13%	+9%
11	The person I report to uses the performance process to coach me on my	44%	50%	6%	93%	6%	1%	+49%	-44%	-5%

	professional development.									
12	I am satisfied with the recognition I receive for doing a good job.	56%	21%	24%	73%	17%	10%	+17%	-4%	-14%
13	The person I report to supports free exchanges of opinions and ideas.	63%	31%	6%	97%	3%	0%	+34%	-28%	-6%
14	This organization makes employees in my work unit want to go above and beyond.	56%	41%	3%	61%	32%	7%	+5%	-9%	+4%
15	I would stay with this organization if offered a similar position elsewhere.	76%	18%	6%	75%	17%	8%	-1%	-1%	+2%
16	Overall, I am a satisfied employee.	79%	21%	0%	83%	17%	0%	+4%	-4%	0%

Note: areas highlighted in red indicate a decrease in favorability when comparing pre- and post-intervention data; sections highlighted in dark green indicate increased favorability post-intervention.



## Appendix S 2017 & 2018 Comparison of PGEES Survey Responses



Note: Graph compares 2017 PGEES survey results (n = 34) with 2018 post-intervention survey results (n = 56). *x* axis (horizontal): survey questions by number (see below list of questions correlating with each number on *x* axis). *y* axis (vertical): % favorable.

### Questions:

1. I am involved in decisions that affect my work.
2. My ideas and suggestions are seriously considered.
3. I am involved in quality improvement activities.
4. My work provides me an opportunity to be creative and innovative.
5. When appropriate, I can act on my own without asking for approval.
6. I have the opportunity to influence nursing practice in this organization.
7. My work unit is adequately staffed.
8. Different work units work well together in this organization.
9. My work unit works well together.
10. I have sufficient time to provide the best care/service for our clients/patients.
11. The person I report to uses the performance process to coach me on my professional development.
12. I am satisfied with the recognition I receive for doing a good job.
13. The person I report to supports free exchanges of opinions and ideas.
14. This organization makes employees in my work unit want to go above and beyond.
15. I would stay with this organization if offered a similar position elsewhere.
16. Overall, I am a satisfied employee.

## Appendix T SCORE Survey Results

### All SCORE Items

69 respondents in Float Pool/Nurse Extern

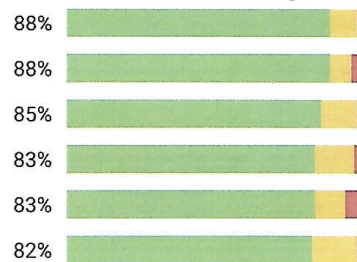
#### Improvement Readiness

In this work setting, the learning environment...

- ...utilizes input/suggestions from the people that work here.
- ...integrates lessons learned from other work settings.
- ...allows us to gain important insights into what we do well.
- ...allows us to pause and reflect on what we do well.
- ...effectively fixes defects to improve the quality of what we do.
- ...is protected by our local management.

Percent

Positive Percent Positive / Neutral / Negative



#### Local Leadership

In this work setting, local leadership...

- ...communicates their expectations to me about my performance.
- ...is available at predictable times.
- ...regularly makes time to provide positive feedback to me about how I am doing.
- ...regularly makes time to pause and reflect with me about my work.
- ...provides frequent feedback about my performance.
- ...provides meaningful feedback to people about their performance.
- ...provides useful feedback about my performance.

Percent

Positive Percent Positive / Neutral / Negative

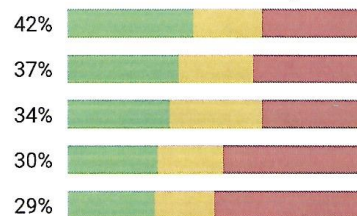


#### Burnout Climate

- Events in this work setting affect the lives of people here in an emotionally unhealthy way.
- People in this work setting are frustrated by their jobs.
- People in this work setting are working too hard on their jobs.
- People in this work setting are burned out from their work.
- People in this work setting are exhausted from their work.

Percent

Positive Percent Positive / Neutral / Negative

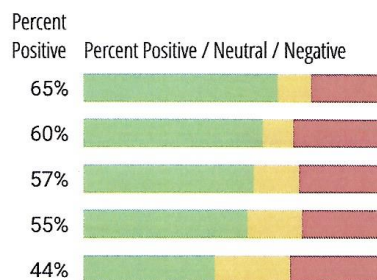


# All SCORE Items (cont.)

69 respondents in Float Pool/Nurse Extern

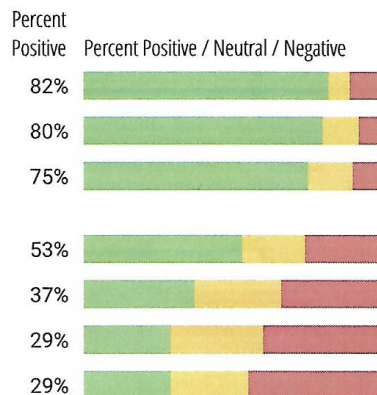
## Personal Burnout

- I feel frustrated by my job.
- I feel fatigued when I get up in the morning and have to face another day on the job.
- I feel burned out from my work.
- Events in this work setting affect my life in an emotionally unhealthy way.
- I feel I am working too hard on my job.



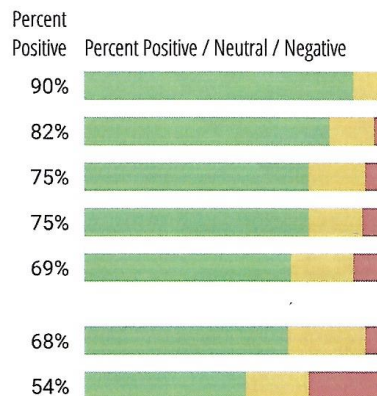
## Teamwork

- It is easy for personnel here to ask questions when there is something that they do not understand.
- The people here from different disciplines/backgrounds work together as a well-coordinated team.
- Disagreements in this work setting are appropriately resolved (i.e., not who is right but what is best for the patient).
- In this work setting, it is difficult to speak up if I perceive a problem with patient care.
- Dealing with difficult colleagues is consistently a challenging part of my job.
- Communication breakdowns are common when this work setting interacts with other work settings.
- Communication breakdowns are common in this work setting.



## Safety Climate

- I receive appropriate feedback about my performance.
- Errors are handled appropriately in this work setting.
- My suggestions about quality would be acted upon if I expressed them to management.
- I would feel safe being treated here as a patient.
- The values of facility leadership are the same values that people in this work setting think are important.
- The culture in this work setting makes it easy to learn from the errors of others.
- In this work setting, it is difficult to discuss errors.

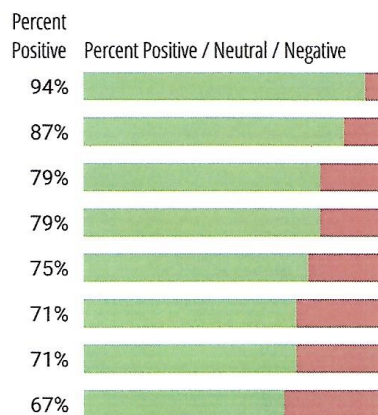


# All SCORE Items (cont.)

69 respondents in Float Pool/Nurse Extern

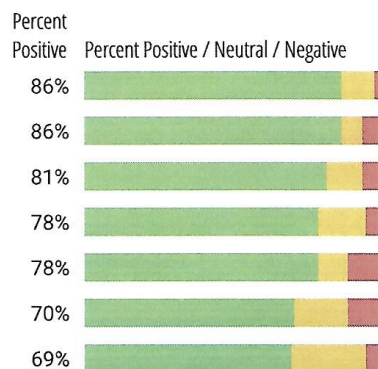
## Work / Life Balance In the past work week...

- ...skipped a meal.
- ...worked through a day/shift without any breaks.
- ...changed personal/family plans because of work.
- ...arrived home late from work.
- ...ate a poorly balanced meal.
- ...felt frustrated by technology.
- ...had difficulty sleeping.
- ...slept less than 5 hours in a night.



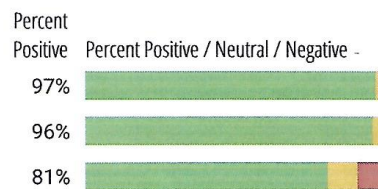
## Growth Opportunities With respect to the growth opportunities in this work setting...

- ...I have enough variety in my work.
- ...I have the feeling that I can achieve something.
- ...I have opportunities for personal growth / development.
- ...I have freedom in carrying out work activities.
- ...I have opportunities for independent thought and action.
- ...I have influence in decisions about work activity timelines.
- ...I have influence in the planning work activities.



## Job Certainty With respect to job-related uncertainty about the future in this work setting...

- ...I feel certain that I will still be working in one years time.
- ...I feel certain that I will keep my current job in the next year.
- ...I feel certain that next year I will keep the same function level as currently.



# All SCORE Items (cont.)

69 respondents in Float Pool/Nurse Extern

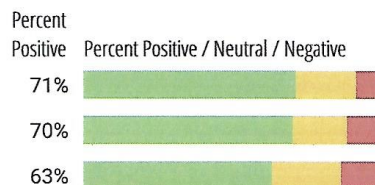
## Intentions to Leave

With respect to my intentions to leave this organization...

...I have plans to leave this job within the next year.

...I often think about leaving this job.

...I would like to find a better job.



## Decision Making

With respect to the participation in decision making that I experience here...

...I can discuss work problems with my direct supervisor.

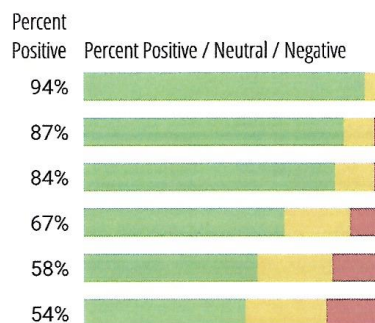
...it is clear to whom I should address specific problems.

...I can participate in decisions about the nature of my work.

...the decision making process is clear to me.

...this organization utilizes input from staff about technology initiatives.

...I have a direct influence on my organizations decisions.



## Advancement

With respect to advancement in this organization...

...I have opportunities to advance through training courses.

...this organization pays good salaries.

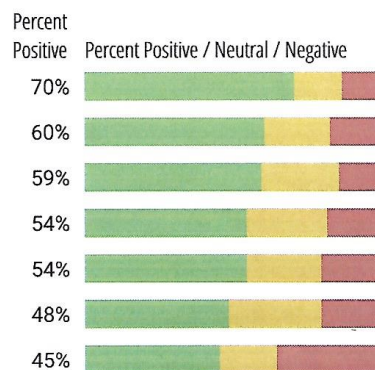
...I am satisfied with my total benefits package.

...I have opportunities to progress financially.

...I can live comfortably on my pay.

...I have opportunities to be promoted.

...I am paid enough for the work I do.



## All SCORE Items (cont.)

69 respondents in Float Pool/Nurse Extern

### Workload Strain

With respect to the workload in this work setting...

...I have to deal with things that affect me personally.

...I have too much work to do.

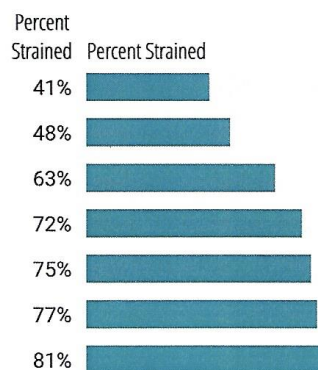
...I have contact with difficult people.

...I have to attend to many things at the same time.

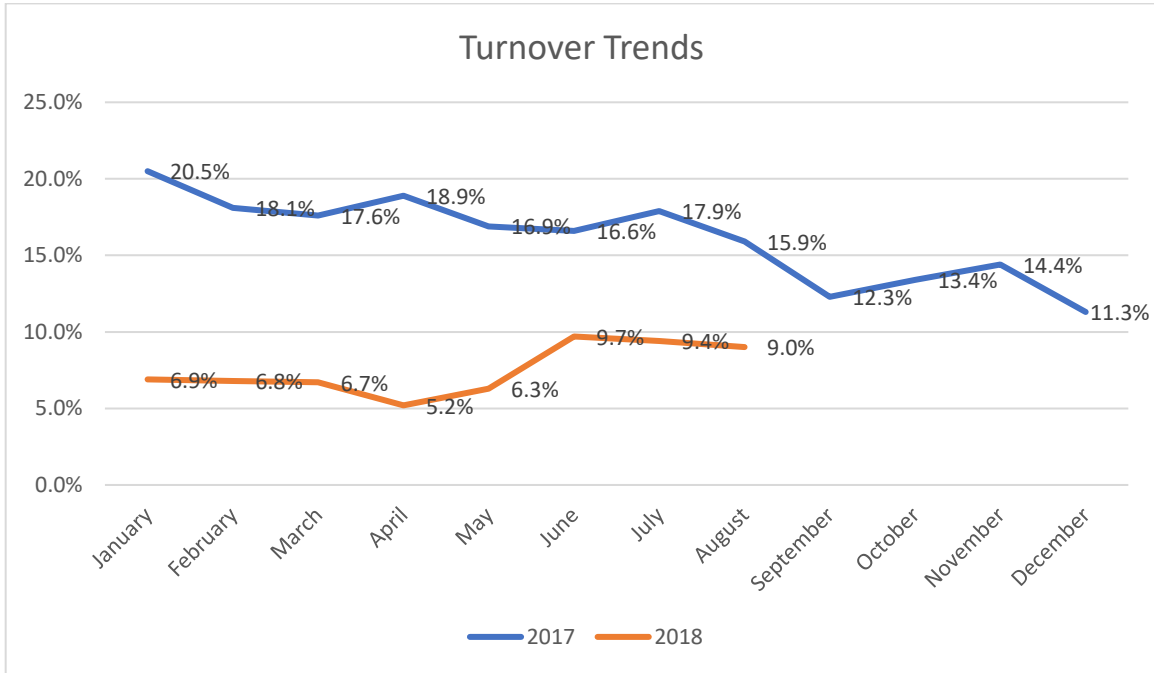
...I have to work under time pressure.

...I have to give continuous attention to work.

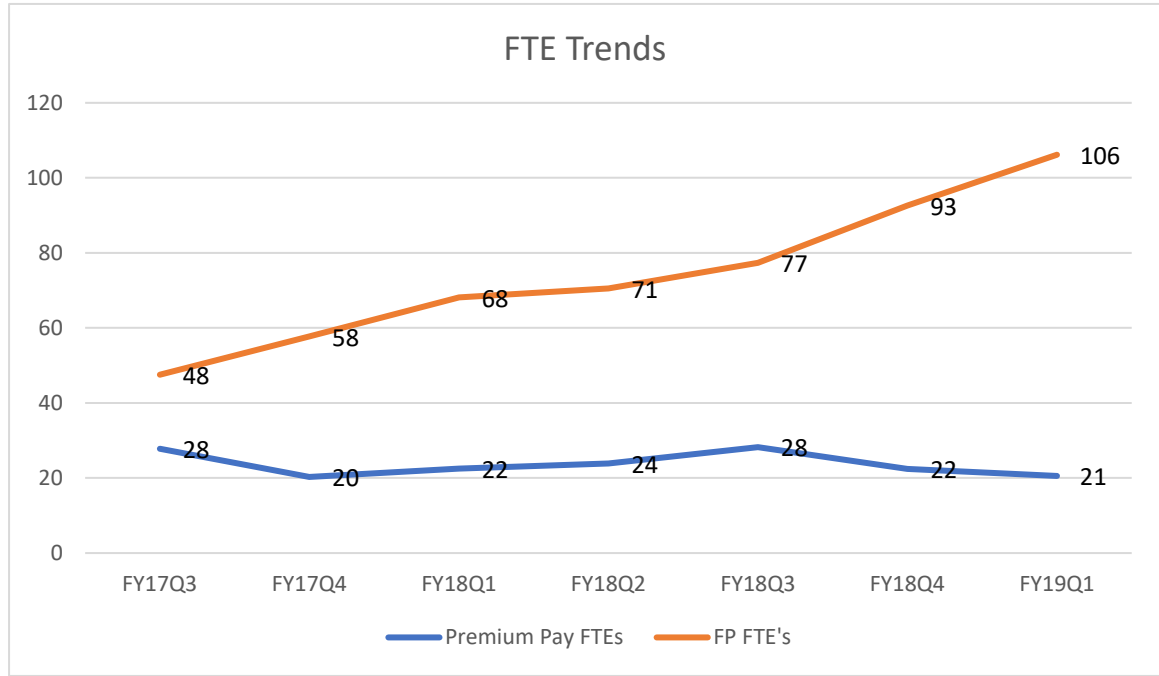
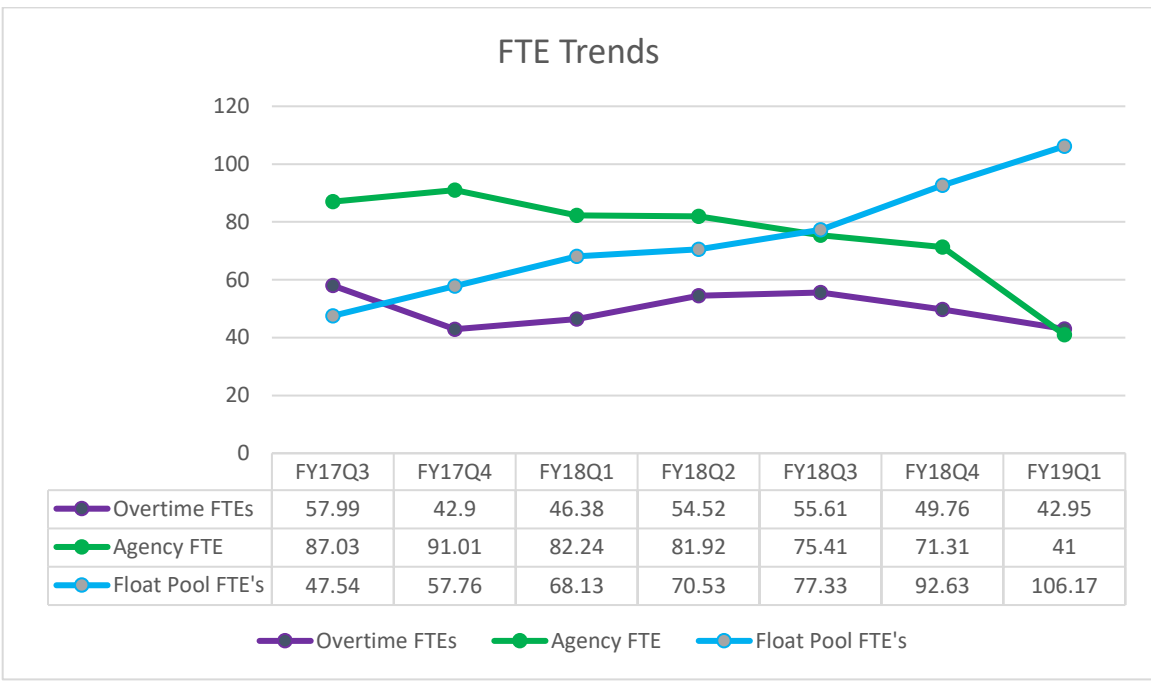
...I have to remember many things.



### Appendix U Turnover Trends 2017-2018

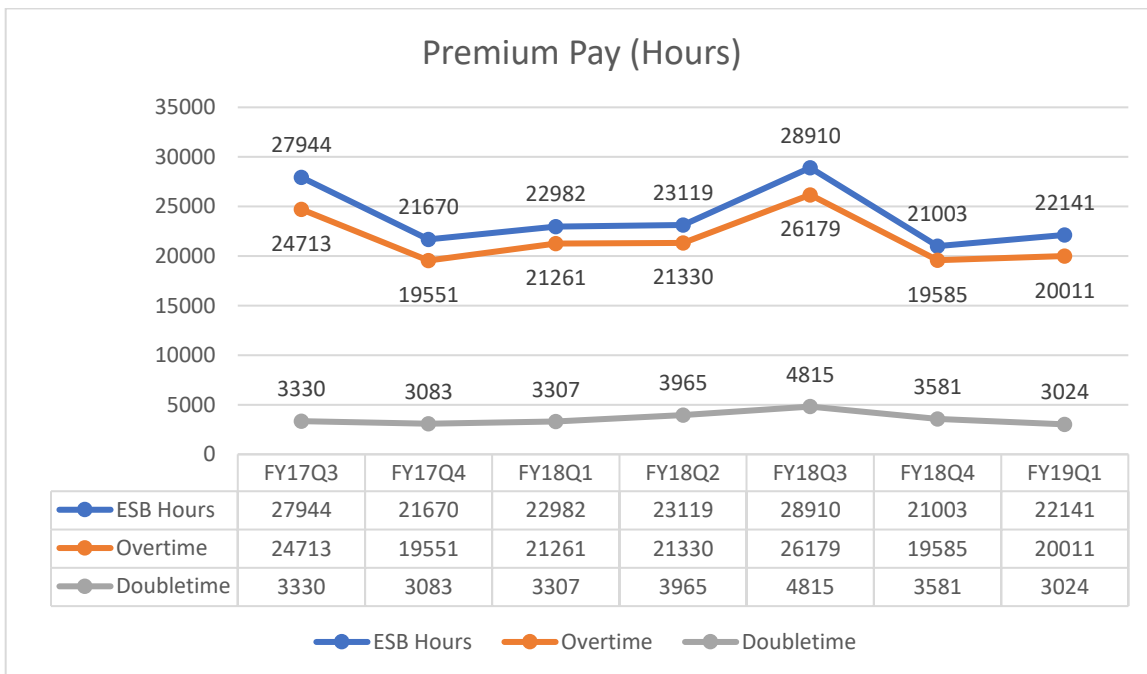
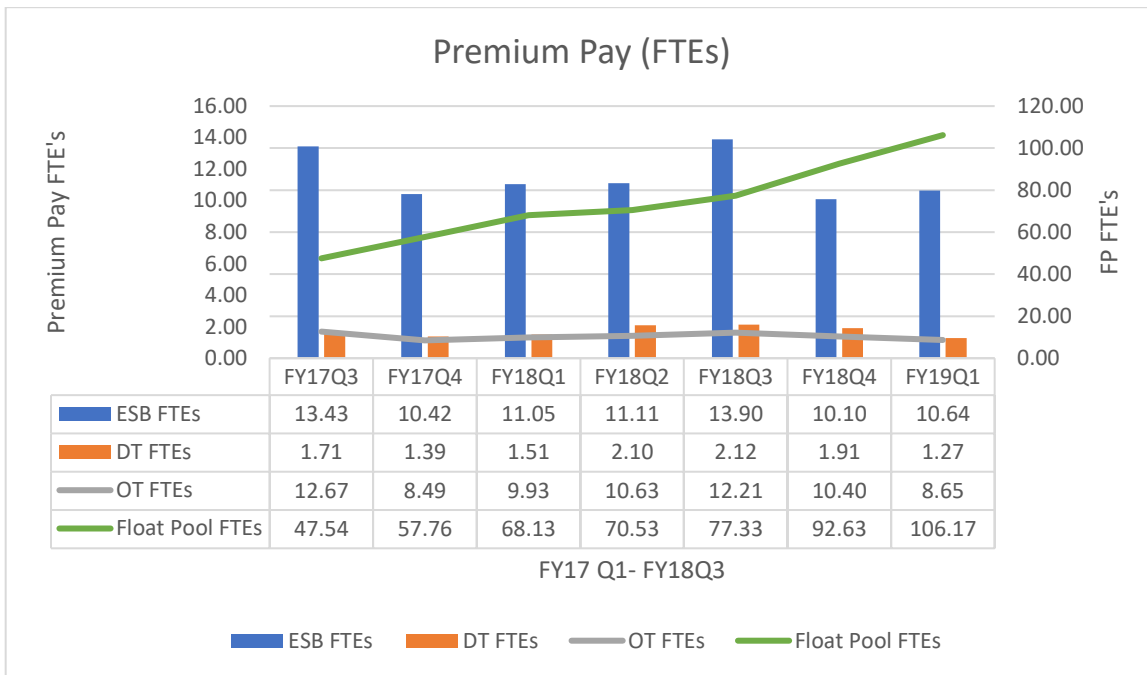


### Appendix V FTE Trends





### Appendix W Premium Pay Trends



Premium pay is defined as: Extra Shift Bonus (ESB), Overtime (OT), Doubletime (DT)

Appendix X  
Synthesis of Post-Intervention PGEES and Score Survey – 2018

#	PGEES Survey Questions	2017 PGEES Results – Pre- Intervention (n = 34)			2018 PGEES Results – Post-Intervention (n = 56)			Share d Theme s	SCORE Survey Questions	SCORE Survey Results (n = 69)		
		% Favora ble	% Neutra l	% Unfa vorab le	% Favor able	% Neutr al	% Unfa vorab le			% Favor able	% Neu tral (esti mat ed)	% Unfavo rable (estima ted)
1	I am involved in decisions that affect my work.	45%	35%	19%	73%	13%	13%	Decision Making	I can participate in decisions about the nature of my work	84%	12%	4%
2	My ideas and suggestions are seriously considered.	47%	38%	16%	64%	32%	4%	Improve ment Readines s	The learning environment utilizes input/suggestions from the people that work here	88%	9%	3%
3	I am involved in quality improvement activities.	50%	36%	14%	51%	36%	13%	Safety Climate	My suggestions about quality would be acted upon if I expressed them to management	75%	20%	5%
4	My work provides me an opportunity to be creative and innovative.	56%	29%	15%	65%	25%	10%	Growth Opportu nities	With respect to the growth opportunities in this work setting, I have opportunities for independent thought and action.	78%	9%	13%
5	When appropriate, I can act on my own without asking for approval.	56%	31%	13%	66%	25%	9%	Growth Opportu nities	With respect to the growth opportunities in this work setting, I have freedom in carrying out work activities	78%	13%	9%
6	I have the opportunity to influence nursing practice in this organization.	63%	25%	13%	64%	30%	6%	Decision Making	I have direct influence on my organization's decisions	54%	26%	20%
7	My work unit is adequately staffed.	47%	33%	20%	56%	27%	17%	Work Environ ment				
8	Different work units work well together in this organization.	62%	21%	18%	65%	23%	12%	Teamwo rk	The people here from different disciplines/back grounds work together as a well-coordinated team	80%	12%	8%
9	My work unit works well together.	63%	31%	6%	85%	13%	2%	Teamwo rk				

10	I have sufficient time to provide the best care/service for our clients/patients .	63%	13%	25%	40%	26%	34%	Work/Life Balance	In the past work week I arrived home late from work	79%	0%	21%
11	The person I report to uses the performance process to coach me on my professional development.	44%	50%	6%	93%	6%	1%	Local Leadership	Local leadership communicates their expectations to me about my performance	99%	1%	0%
									Local Leadership provides frequent feedback about my performance	91%	9%	0%
									Local Leadership provides useful feedback about my performance	88%	10%	2%
12	I am satisfied with the recognition I receive for doing a good job.	56%	21%	24%	73%	17%	10%	Local Leadership	Local leadership regularly makes time to provide positive feedback to me about how I am doing.	96%	3%	1%
13	The person I report to supports free exchanges of opinions and ideas.	63%	31%	6%	97%	3%	0%	Improvement Readiness	The learning environment utilizes input/suggestions from the people that work here	88%	9%	3%
14	This organization makes employees in my work unit want to go above and beyond.	56%	41%	3%	61%	32%	7%	Personal Burnout	I feel frustrated by my job	65%	10%	25%
									I feel burned out from my work	57%	14%	29%
									Events in this work setting affect my life in an emotionally unhealthy way	55%	16%	29%
									I feel I am working too hard at my job	44%	26%	30%
15	I would stay with this organization if offered a similar position elsewhere.	76%	18%	6%	75%	17%	8%	Intention to Leave	I have plans to leave this job within the next year	71%	21%	8%
									I often think about leaving this job	70%	17%	13%
									I would like to find a better job	63%	25%	12%
16	Overall, I am a satisfied employee.	79%	21%	0%	83%	17%	0%	Engagement				