PRECEPTOR BUY-IN AND ENGAGEMENT: A QUALITY IMPROVEMENT PROJECT

DNP Final Project

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Abstract

Challenged by the mass exodus of aging nurses into retirement and "the great resignation" of younger nurse generations, the nursing supply is struggling to meet the demand. The result is an overwhelming shortage of nurses nationwide. Improving the retention of new graduate registered nurses (NGRNs) may help replenish the nursing workforce. As key stakeholders in the development of NGRNs, preceptors have the potential to improve NGRN satisfaction and retentions rates by offering clinical expertise and psychosocial support to bridge the gap from nursing school to professional practice. According to the literature, buy-in has been associated with the preceptor's commitment to engage; therefore, this quality improvement project sought to examine the current levels of preceptor buy-in and engagement at a 92-bed, rural Midwest hospital. The entire population of preceptors (N=22) completed a three-part preceptor-focused assessment composed of Dibert and Goldenburg's (1995) Preceptor Questionnaire, Schaufeli and Bakker's (2004) Utretch Work Engagement Scale (UWES), and five open-ended questions. The majority of preceptors (91%, n=20) perceived benefits and rewards to preceptorship (e.g., opportunity to teach, integration of new staff into the unit, increase personal knowledge) and support for preceptors (i.e., adequate preparation for the role (86%, n=19), clear definition of goals (82%, n=18), appropriate workloads (68%, n=15)). In addition, most preceptors agreed that they are committed to the role via willingness to exceed normal work expectations (100%, n=22), enthusiasm about the program (68%, n=15), and alignment of personal values with program values (86%, n=19). However, 68% (n=15) of the preceptors felt that nursing staff do not understand the goals of the preceptor program, and 32% (n=7) agreed on some level that they felt very little loyalty to the preceptor program. Preceptor responses to UWES indicated that most of the preceptors felt engaged in their work at least some of the time. Review of assessment

results, collaboration among stakeholders, and hospital-wide dissemination followed. Assessing the perceptions of program participants, such as preceptors, offers an initial step in understanding the characteristics and needs of key stakeholders and facilitates recommendation formation and development of future quality-improvement projects.

Preceptor Buy-In and Engagement: A Quality Improvement Project

Section One: Evidence-Based Practice Process

Problem Statement

According to the U.S. Bureau of Labor Statistics (2021), registered nursing is among the top occupations for growth. The demand for registered nurses (RNs) is expected to increase by 7% from 2019 to 2029 due to emphasis on preventative care, higher rates of chronic conditions, and growing healthcare needs from the aging Baby-Boomer population. Meanwhile, the supply of RNs is threatened by (1) the mass departure of Baby Boomer nurses into retirement and (2) younger generations of nurses choosing to reduce work hours or leave the profession altogether (NSI Nursing Solutions, Inc., 2021). In 2020, the RN turnover rate increased by 2.8% and is at 18.7%; meanwhile, the RN vacancy rate increased to 9.9%, one point higher than the previous year. Prior to outbreaks of COVID-19, Zhang et al. (2018) projected a shortage of 154,018 RNs in 2020 that would rise to 510,394 RNs by 2030. Despite already staggering statistics, the effects of COVID-19 amplified the discrepancy between the supply and demand of nurses and clouded the accuracy of pre-pandemic predictions (NSI Nursing Solutions, Inc., 2021).

One year after the COVID-19 pandemic began, a survey of 1,273 U.S. nurses from 50 states indicated that 43% of respondents were considering leaving the profession in 2021 (Vivian Health, 2021). Of those surveyed, 87% reported that their facilities were still short-staffed. Seventy-two percent felt that hospital morale worsened compared to the previous year, while 53% did not feel optimistic about the future of healthcare in the U.S. According to a survey by the American Nurses Association (2021) of 22,316 U.S. nurses, 18% of respondents intended to leave their position with 21% still undecided; 4% intended to leave the nursing profession altogether with 11% undecided. Retirement was a reason some nurses intended to resign,

accounting for 16% of respondents planning to leave their current position and 52% of respondents planning to leave the nursing profession altogether. Similarly, the 2021 Frontline Nurse Mental Health and Well-Being Survey indicated that 46% of nurses felt less committed to the profession; nurses under the age of 40 were more likely to report decreased commitment (24% for ages 20-29 years, 15% for ages 30-39 years; Trusted Health, 2021). Of those surveyed, 25% of respondents stated that they were actively looking for a job outside of nursing or planning to retire; 46% stated that they were not actively looking for a job but planned to within the next year, 18% were actively looking for a job outside of nursing, 7% were planning to retire from the workforce, and 33% responded, "Other."

According to the American Organization of Nurse Leaders (AONL, 2021) COVID-19 Longitudinal Study August 2021 Report, 38% of respondents (n=1,781) named staffing shortages as the greatest new challenge faced today that was not faced six-to-eight months ago, a 137% increase from responses given to the same survey question 6 months prior. With more than 40% of nurses over the age of 50 and nurse retirements accelerating from 20,000 to nearly 80,000 over the next decade, the need to improve the number of active nurses is evident (Auerbach et al., 2015). According to the National Center for Health Workforce Analysis (2017), major contributors to the supply of nurses include entry of newly educated nurses into the profession and workforce-participation decisions (e.g., increase/decrease in hours worked, decision to leave the profession). Therefore, recruiting and retaining newly educated nurses is vital to balancing nursing supply and demand.

New Graduate Nurses

The 2021 NSI National Health Care Retention and Staffing Report reported that over a quarter of newly hired nurses leave within the first year, accounting for a third of all RN turnover

(NSI Nursing Solutions, Inc., 2021). Similarly, nearly half of the exited employees surveyed had fewer than two years of experience, whereas those with more than five years of tenure demonstrated greater levels of organizational commitment. Turnover such as this raises concerns as to why new-graduate registered nurses (NGRNs) are leaving and what measures support higher retention rates.

Balancing the Preparation-Practice Gap

According to a survey of Generation Y/Millennials (born 1980-2000), deliberate preceptor pairing, mentorship, and professional development were identified as strategies to foster empowerment, improve retention, and reduce role stress associated with the NGRN transition-to-practice (Lampe et al., 2011). Nurse residency programs help transition the novice nurse to full practice, increase NGRN satisfaction, decrease turnover, increase NGRN retention rates, and provide overall improvements to new graduate training via supplemental, experiential education (Ackerson & Stiles, 2018; Hernandez et al., 2020; Hickerson et al., 2016; Van Camp & Chappy, 2017). Success depends on participant performance, active support from hospital administration, and strong preceptors/mentors (Hickerson et al., 2016).

As clinical experts and sources of psychosocial support, preceptors contribute to the success of nurse residency programs by nurturing NGRNs from educational preparation to professional nursing practice (Quek & Shorey, 2018). In the supervisory role, preceptors ensure patient safety by preventing near-misses and adverse events, thereby improving the quality of care and protecting NGRNs from avoidable trauma, transition shock, and role stress (Hickerson et al., 2016; Lampe et al., 2011). Experienced preceptors help NGRNs develop clinical reasoning skills using reflective discussion and debriefings (Powers et al., 2019). Preceptors help NGRNs navigate challenging situations, such as difficult patients, demanding workloads, and social fears

like workplace bullying and generational diversity (Queck & Shorey, 2018; Ward & McComb, 2017). As a result, strong preceptor-preceptee relationships have the potential to follow NGRNs well into their careers and improve NGRN retention rates (Quek & Shorey, 2018).

Population Preferences and Values

Engagement and commitment are used interchangeably and represent a positive attachment to work and the organization (Anttila, 2014). According to Omer & Moola (2019), the preceptor-preceptee relationship represents caring through human interaction and words, making preceptor commitment to the role and professional comportment important contributors to the resident's sense of belonging and overall transition from student nurse to professional RN. Meanwhile, preceptor buy-in represents the preceptors' agreement with the program and willingness to participate. Without first establishing buy-in, achieving and maintaining preceptor engagement would be difficult. Therefore, assessing the current state of preceptor buy-in and engagement and determining preceptor perceptions of barriers and facilitators to increased buy-in and engagement are crucial to initiation of the New-Graduate Registered-Nurse Residency Program (NRP) Quality Improvement Project.

Organizational Assessment of the Problem

The site for the NRP Quality Improvement Project is a 92-bed rural, nonprofit hospital located in Ohio. The patient-care units include the emergency department (ED), the obstetrics unit, and the inpatient unit (IP)—an acuity-adjustable or flex unit in which each room permits patient care within the same room throughout the duration of the patient's stay regardless of acuity level (i.e., medical-surgical, telemetry, intensive care). In October 2018, the facility adopted a nurse residency platform developed by an external vendor to guide the initiation and sustainability of the NRP.

The 2020 NRP Focus Groups were conducted by the host organization to examine participant perceptions of the NRP, including preceptor buy-in and engagement. In 2021, it was determined that an updated preceptor assessment was needed due to substantial changes made within the work environment over the past year. These changes presented clinical challenges to preceptors and included: facing competing, complex clinical demands from the COVID-19 pandemic, transfer of the inpatient units to a new building, adoption of new equipment, implementation of intensivist telehealth consultations, and staffing shortages. Furthermore, the COVID-19 pandemic has negatively affected the facility's workforce environment in relation to patient ratios, patient acuities, and staffing availability.

Although the facility is not categorized as a critical-access hospital, finding healthcare professionals (e.g., RNs, support staff) to work in rural settings is challenging, and traditional methods of recruiting and retaining rural healthcare workers have not been proven effective (Redford, 2019; Rural Health Information Hub, 2020). The shifting demography and current U.S. economy make rural hospitals quickly outmoded, and various concerns may explain the reluctance of healthcare professionals to practice in rural settings, including a heavy workload, difficulty scheduling time off, frequently being on call, professional isolation, fewer educational opportunities, and challenges maintaining professional boundaries (Redford, 2019; Rural Health Information Hub, 2020). Likewise, limited job opportunities for spouses, accommodating longer commutes to school for children, and daycare availability may raise concerns for the family members of healthcare providers, thereby increasing reluctance for rural employment (Rural Health Information Hub, 2020). Competition with large, urban hospitals also makes nurse recruitment difficult; larger facilities in the city offer more opportunities and perks (Blouin & Podjasek, 2019). The challenges of recruiting and retaining new staff in rural settings make the

need for engaged preceptors that buy-in to the NRP and support the NGRNs' transition to practice especially impactful.

Background and Significance

Buy-In

French-Bravo and Crow (2015) defined buy-in as "a personal and professional commitment to actively engage in a process, task, or initiative" ("What Buy-In Looks Like," para. 2). As a by-product of stakeholder actions and interactions, the organization must recognize itself as an accumulation of vital components in which cultural transformation aligns the individual with the organization's goals (Ruddy et al., 2016). Within a culture of buy-in, the locus of control shifts from the top-down business hierarchies of the 20th century to networks that promote the decisional ownership of all stakeholders (Porter-O'Grady & Malloch, 2018).

Engagement

William Kahn (1990) was the first to introduce the concept of engagement in work role performance. Since that time, the seminal works of various authors (i.e., Kahn, 1990; Schaufeli et al., 2002) have been used to gestate definitions of employee engagement commonly cited in scholarly publications today (Chaudhary, 2019; Gull et al., 2020; Kwon & Kim, 2020; Motyka, 2018; Naeem & Khurram, 2020). Kahn (1990) referred to employee engagement as *personal engagement*, or "the simultaneous employment and expression of a person's 'preferred self' in task behaviors that promote connections to work and to others, personal presence…and active, full role performances" (p. 700). Meanwhile, Schaufeli et al.'s (2002) definition focused on "a positive, fulfilling, work-related state of mind…characterized by vigor, dedication, and absorption" (p. 74). As the antipode of burnout, engagement represents vital components of employee health, such as high levels of energy, mental resilience, willingness to invest effort in

work, persistence in the face of difficulty, the ability to concentrate, and happy engrossment in one's work (Bakker et al., 2014). It is "a multidimensional relational concept featuring psychological and behavioral attributes of connection, interaction, participation, and involvement, designed to achieve or elicit an outcome at individual, organization, or social levels" (Johnston, 2018, p.1).

Johnston (2018) described engagement on individual and social dimensions. At the individual level, cognitive engagement manifests as interest and absorption in a topic, willingness to apply effort, and personal investment to understand or learn a topic or idea. Individuals may ascribe to affective engagement, which involves emotional reactions that express the inherent attraction or repulsion to a topic, resulting in motivation, interest, or concern. Behavioral engagement includes concepts of participation, interaction, collaboration, action, and intended versus unintended behaviors. From a social perspective, engagement exists within a group, organization, or community as collective action, group participation, shared knowledge, orientation, purpose, and encounters.

Various studies have examined buy-in and engagement to find notable relationships. According to French-Bravo and Crow (2015), "buy-in is the difference between an engaged nursing staff and employees who are disengaged or are just going through the motions" ("What Buy-In Looks Like," para. 2). Meanwhile, engagement requires buy-in to enroll stakeholders in the decision-making process through the incorporation of personal values and perspectives (French-Bravo & Crow, 2015). Therefore, buy-in and engagement are mutually dependent factors that influence outcomes and merit assessment.

PICO Question and Search Strategy

The following Population-Intervention-Comparison-Outcome (PICO) question guided search of the evidence: In preceptors (P), how does "buy-in" and engagement (I) compared to lack of "buy-in" and engagement (C) influence preceptor retention (O)?

Search Strategy

CINAHL® Plus with Full Text, Health Source: Nursing/Academic Edition, MEDLINE with Full Text, APA PsychInfo®, and Psychology and Behavioral Sciences Collection were searched simultaneously in EBSCOhost using the following Boolean phrases: (search 1) *preceptor** AND *buy-in* OR *acceptance* OR *willingness* OR *agreement*, (search 2) TI *buy-in* (Title selected in the dropdown for Select a Field), and (search 3) *precept** AND *participation* OR *involvement* OR *engagement*. Because only one record was selected for synthesis from the first search, another broader search of *buy-in* was performed. Then, a search of *preceptor engagement* was conducted. The Cochrane Database of Systematic Reviews was searched using the single term, *preceptor*, and yielded zero results. Inclusive criteria for article consideration in all three searches included peer-reviewed articles from academic journals published in the English language from 2017 through 2021. Combined, the database searches for *buy-in* and *preceptor engagement* identified 881 records. Four additional records were identified through other means, such as secondary sources and separate Google searches.

Screening the Literature

From the total 885 records identified, 235 duplicates were removed. The resulting 646 records were screened by title. After excluding 511 records, 135 were screened by abstract. Ninety-two records were not applicable to the project and excluded; 44 full-text articles were assessed for eligibility.

Eligibility

Evidence emerging from non-NGRN study populations was included due to developmental similarities and shared core values, including pre-licensure NRPs, post-licensure NRPs, and pharmacist residency programs. A single article published prior to 2017 identified through a separate Google Scholar search was included due to its rich significance to the current literature review.

Appraisal

Of the 44 full-text articles assessed for eligibility, 28 full-text articles were excluded for the following reasons: out of scope (n=26), insufficient detail (n=1), and limited rigor (n=1). Studies focusing on preceptor development, nurse perceptions of student nurses, or the residents without regard to preceptor buy-in or engagement were excluded. One study addressing the prevention of preceptor burnout with an evidence level of VII was excluded. A quality improvement project outlining aspects of a previous and new orientation program was excluded for insufficient detail related to outcome measures and findings.

Inclusion

In total, 16 studies were evaluated and synthesized (See Appendix A.1 for Modified PRISMA 2009 Diagrams, evaluation tables, and synthesis tables). The search resulted in one level III-controlled trial without randomization. The remaining 15 studies were level VI descriptive or qualitative studies, literature reviews, quality improvement projects, or a combination of methods. Evaluation and synthesis of the evidence supported high-quality; level VI evidence as appropriate for the current project.

Critical Appraisal of the Literature

Preceptor Buy-In

Six themes related to stakeholder buy-in emerged from critical appraisal of the literature, including effective communication, feedback, leadership's influence, staff development, shared decision-making, and financial remuneration. Effective communication and feedback that (1) clearly defined and justified the *what*, *how*, and *why* of organizational change and (2) openly shared metrics were identified as necessary components to achieving stakeholder buy-in (Applequist et al., 2017; French-Bravo & Crow, 2015; French-Bravo et al., 2020). Strong communicative relationships between leadership and staff that accentuate staff efforts through public recognition, rewards, and positive reinforcement were also beneficial to increasing buy-in (Applequist et al., 2017; French-Bravo et al., 2020).

In addition, studies emphasized the leadership's role in influencing staff buy-in. Key leadership characteristics included transparent and involved leadership, promoting different work instead of "harder work," effective support of staff's initial engagement in organizational change, and allowing adequate time for initiative success (Applequist et al., 2017, French-Bravo & Crow, 2015). Building mutual trust with staff and promoting psychological meaningfulness, safety, and availability were other critical leadership elements highlighted in the literature (French-Bravo & Crow, 2015). In addition, staff expected leaders to serve as role models and influence change by demonstrating characteristics desired by staff, such as guiding instead of directing (Applequist et al., 2017; French-Bravo et al., 2020). Finally, identification of a "champion" or "team leader" to encourage and facilitate change was associated with increased buy-in (Applequist et al., 2017).

Other contributors to increased buy-in include adequate preparation for change via staff development, promotion of shared decision-making, and financial remuneration (Applequist et al., 2017; French-Bravo & Crow, 2015; French-Bravo et al., 2020; Morgan et al., 2017). According to the literature, preceptor development and training increased preceptor buy-in by

boosting confidence in the ability to precept residents (Miura et al., 2020; Morgan et al., 2017; Nunes D'Aquila et al., 2019). Meanwhile, promoting shared decision-making and following a model of shared governance that genuinely values staff input is central to successful stakeholder buy-in (Applequist et al., 2017; French-Bravo & Crow, 2015; French-Bravo et al., 2020). Finally, financial compensation was another important contributing factor (Morgan et al., 2017).

Preceptor Engagement

Engagement has been defined as active and committed decision-making about meaningful issues via respectful dialog and interaction in which everyone's voice is heard (Norris et al., 2016). According to the literature, preceptor development and training are associated with increased preceptor engagement, participation rates, and internal work motivation scores (Cervera-Gasch et al., 2018; Jones et al., 2017; Macy et al., 2021; Morgan et al., 2017; Mulherin et al., 2018; O'Donoghue et al., 2021). Similarly, access to preceptor support and development programs has been linked to higher preceptor preparedness levels, commitment to the role, and confidence (Macy et al., 2021; Morgan et al., 2017).

These findings are not unique to nurse residency programs and have been recognized in similar healthcare disciplines, such as pharmacy. Evaluation of pharmacist preceptor-training programs revealed high preceptor satisfaction rates; preceptors identified positive changes in their attitudes and behaviors toward precepting and increased understanding of the residents' learning needs (Knott et al., 2020). According to Mulherin et al. (2018), pharmacy faculties across Canada participated in a quality improvement project to gain detailed information, set goals, and offer recommendations for a national preceptor development program. Evidence from the project indicated that preceptor development programs were associated with increased preceptor satisfaction rates, participation rates, self-efficacy, perceived knowledge, and skill

retention and implementation. As a result, the authors recommended establishing a national preceptor development program that utilized gamification to increase preceptor engagement and effectiveness.

Finally, studies indicate that engagement is viewed differently according to governance level; predictors of global engagement include providing information, working together, and final decision-making authority (Norris et al., 2017, "Development"). O'Donoghue et al. (2021) recommend bidirectional leadership, staff training, and the use of contests and rewards to improve staff engagement. In addition, providing nursing staff dedicated time away from the bedside allows staff to invest appropriate levels of thought and engagement in activities, such as preceptorship (O'Donoghue et al., 2021).

Recommendations for Practice

The 2020 NRP Focus Groups identified a need for improved preceptor buy-in and engagement. Review of internal and external evidence supports recommendations for new preceptor-focused assessment.

Section 2: Project Planning

Purpose Statement and Objectives

The purpose of the NRP Quality Improvement Project is to examine preceptor buy-in and engagement. The objectives include:

1. Use the Preceptor-Focused Assessment, including the Preceptor Questionnaire, Utrecht Work Engagement Scale (UWES), preceptor demographics, and open-ended survey questions to measure the current level of preceptor buy-in and engagement and examine the preceptors' perceptions of (1) what is going well with the NRP, (2) what could be

improved with the NRP, (3) what is most important about the NRP, and (4) their general experience as a preceptor in the NRP.

2. Conduct a strength-weakness-opportunity-threat (SWOT) analysis, also known as the Preceptor SWOT Analysis, to guide ongoing quality improvement initiatives to increase preceptor buy-in and engagement. A SWOT analysis is a business strategy tool used to facilitate organizational strategy formation by examining internal and external elements (e.g., internal strengths and weaknesses, external opportunities, and threats; Teoli et al., 2020). Refer to Appendix G, Table 16: Preceptor SWOT Analysis.
3. Make recommendations for quality improvement initiatives to increase preceptor buy-in and engagement based on updated information from the Preceptor-Focused Assessment and Preceptor SWOT Analysis.

Return on Investment (ROI)

According to the 2021 NSI National Health Care Retention and RN Staffing Report, a single instance of RN turnover averages $40,038; essentially, the cost of turnover for a single RN ranges between $28,400 and $51,700 per year, averaging $40,038 annually and resulting in $3.6 million to $6.5 million in total losses each year (NSI Nursing Solutions, Inc., 2021). Meanwhile, the estimated cost of replacing an NGRN is between $49,000 and $88,000 per year (Beecroft et al., 2001; Jones, 2008). Each time the RN turnover rate increases or decreases by 1 percent, the average cost or savings fluctuates by $270,800 per year (NSI Nursing Solutions, Inc., 2021).

To cover staffing shortages, hospitals frequently turn to temporary employment of travel RNs. This is a pricey strategy, especially considering significant increases in the demand for travel nurses during the COVID-19 pandemic; rates for travel RNs currently average $120 per hour and can reach as much as $200 per hour (NSI Nursing Solutions, Inc., 2021). Compared to

the average staff RN, travel RNs make an average of $74.13 more per hour and $154,180 more per year. At these rates, the hospital can save an average of $3,084,000 for every 20 travel RNs eliminated from the payroll.

While the cost of turnover and hiring travel nurses is staggering, employing and retaining NGRNs can offer significant financial savings. New graduate salaries can be up to $10/hour less than experienced nurses with 5-10 years of experience; this equals $20,800 per FTE each year (Contino, 2002). According to this organization's *2020-2023 Agreement between the [Organization] and the [Professional Nurses Association]*, there are significant differences between the hourly base wages of NGRNs and RNs with 5-11 years of experience, ranging between $4.49/hr and $11.93/hr. The differences become even greater when examining the organization's current hourly rate for resources RNs ($40.72/hr) and the average salary for travel nurses ($120/hr; NSI Nursing Solutions, Inc., 2021). Retaining NGRNs can reduce the overall cost of staff wages, fill staffing gaps, reduce turnover intent and the overall turnover rate, and decrease the need to employ costly travel nurses.

Framework

Studies examining the relationships between leadership styles, nurse empowerment, and work engagement have revealed that the structural empowerment of nurses directly and positively influences nurse engagement, affective commitment to the organization, and turnover intentions (Albrecht & Adreetta, 2010; García-Sierra & Fernández-Castro, 2018; Mercurio, 2015). According to Kanter's (1977) *Structural Determinants of Behavior in Organizations*, opportunity, power, and relative numbers can explain numerous individual responses to the organization and link the job, workgroup, and overarching system to concrete, observable behaviors and statements. Understanding how the structural determinants of behavior influence

decision-making provides a framework for assessing the preceptor experience as it exists within a relatively small proportion and lower organizational influence and power. Additionally, recognizing the impact of high opportunity on work engagement will be used in forming recommendations to support preceptors and the NRP.

Structural Determinants of Behavior in Organizations

The variables of opportunity, power, and proportion in Kanter's (1977) *Structural Determinants of Behavior in Organizations* represent a structural approach to the problems faced by individuals in an organization (i.e., preceptors and residents). According to Kanter, each position has limitations that restrict the possibilities for recognition and autonomy, and employees must determine how to garner reward and reduce dependency on others using limited resources. Ultimately, organizational behavior results from the interactions of individual employees who seek to manage personal needs and situations, limiting their behavior choices.

The following are five key assumptions underlying Kanter's (1977) model:

1. Work is not an isolated relationship between the worker and the work. What happens to workers is determined by the global setting in which it occurs. Therefore, understanding the organization and how it functions is vital to discovering how people manage the work experience, and the nature of the entire system determines the relationship of any employee to the work.
2. Behavior in the organization is adaptive, and employees' actions, feelings, and behaviors reflect what they can make of the situation. Maintaining dignity requires a sense of value and mastery of autonomy or a reduction in dependency.
3. If behavior represents a reasonable reaction to an organizational situation, it is not automatically inevitable. As the worker interacts with a situation, the worker retains

freedom in choosing how to blend latent possibilities into action. Social structure (i.e., staffing) merely limits the range of options and tools and confronts the worker with problems to solve, often in the form of dilemmas. Ultimately, behavior results from sense-making using present experiences and future projections rather than psychological conditioning or controlling forces from the past.

4. Job content is the best predictor of how an employee will behave; specific psychosocial pressures arise from the formal constraints placed on people attempting to do their jobs. The relative hierarchies and formal constraints of those in different positions which depend on each other to complete jobs account for the balance of power when it is time to bargain for resources and attention. Promotional opportunities largely stem from how engaged an employee is in work.
5. An interest in the relationship of formal tasks, location, and behavioral response leads to emphasis on the ability to do the job. Social factors (e.g., gender, background, conformity) become more important to the complexity and ambiguity of evaluating competence. Finally, the opportunity to demonstrate competence is not equally distributed across the organization.

Context

Identifying Organizational Readiness for Change

Organizational readiness for continuous improvement of the NRP is evident through the organization's ongoing commitment to the program, Chief Nursing Officer/Vice President of Patient Services' (CNO/VP) support for the project, the NRP Coordinator's (the Coordinator's) contributions to the project's development and implementation, and previously conducted assessments (i.e., Pre-NRP Assessment, 2018; 2020 NRP Focus Groups, 2020). Allocation of

resources included dedicated time for project planning, implementation, and evaluation; appointment of NRP experts to participate in project collaboration; financial remuneration for preceptor participation in the project; and electronic devices to support the distribution of the Preceptor Questionnaires, data collection, and data synthesis.

Key Stakeholders

Table 1

NRP Quality Improvement Project: Key Stakeholders

Stakeholder	Role in the NRP
Preceptors	Responsible for program execution, NGRN development, side-by-side supervision of NGRN patient care
NGRNs	Relies on preceptor guidance and teaching to provide patient care and transition from practice
NRP Coordinator	Prioritizes, schedules, and executes program-related tasks and activities; liaises between NRP team members and other stakeholders; reviews feedback provided by NRP participants; provides individual and overall feedback about the NGRN immersion process; communicates important program details, dates, and deadlines
Patients	Directly impacted during patient care interactions with NGRNs and preceptors; adequate numbers of well-educated staff impacts quality of care
CNO/VP	Oversees and governs all inpatient units and the education department; seeks to reduce staff turnover, overtime, and use of agency staff
Education Manager	Oversees all aspects of the education department, manages the education coordinators; provides nursing education; helps conduct general hospital orientation for all new employees

Unit Directors & Coordinators	Responsible for scheduling sufficient nursing staff to permit preceptors and residents time away from the bedside for NRP education/training, completion of NRP requirements (i.e., group performance improvement (PI) project, simulation days), consistent preceptor-resident pairing, and appropriate NGRN-patient ratios; seeks to reduce staff turnover, overtime, and use of agency staff
Physicians	Benefit from collaboration with experienced nurses and improved RN staffing; expect safe, high-quality delivery of patient care from nurses
Nursing Staff	Benefit from collaboration with other experienced nurses and improved RN staffing; expect safe, high-quality delivery of patient care from nurse colleagues
Quality Department	Consistency of staff and patient care contributes to higher quality of care
Chief Executive Officer	Seeks to reduce staff turnover, use of overtime, and use of agency staff
Human Resources	Vested in improving recruitment and retention of staff

Practice Change Process

According to external evidence, NRPs have the potential to help balance the supply and demand of registered nurses by improving NGRN recruitment and retention rates; meanwhile, preceptors play a pivotal role in the immediate and long-term development of NGRNs (Ackerson & Stiles, 2018; Hernandez et al., 2020; Quek & Shorey, 2018; Van Camp & Chappy, 2017). Combined with current staffing needs and findings from the 2020 NRP Focus Groups, internal and external evidence supported reassessment of preceptor buy-in and engagement via the

Preceptor-Focused Assessment, including the Preceptor Questionnaire, UWES, and open-ended questions. These assessments were conducted during a two-week period.

Immediately following the Preceptor-Focused Assessment, the Preceptor SWOT Analysis was then performed to evaluate preceptorship in the NRP and to support strategic planning for next steps towards the ongoing improvement of preceptor buy-in and engagement. The preceptors were invited to participate in one of four Follow-Up Sessions, during which de-identified findings from the Preceptor-Focused Assessment were shared prior to completion of the Preceptor SWOT Analysis. Refer to Appendix G, Table 16: Preceptor SWOT Analysis. To maintain neutrality and anonymity, the Coordinator did not attend any of the Follow-Up Sessions.

The project's population included all NRP preceptors regardless of current active vs. inactive status—active status indicated a preceptor currently accepting NGRNs or actively precepting a NGRN; inactive status indicated a preceptor was not accepting NGRNs or precepting a NGRN. All preceptors received printed information about the upcoming project, the Preceptor-Focused Assessment, and the Follow-Up Sessions in the NRP Preceptor Newsletter (Newsletter); the Project Lead and Coordinator's contact information was also included in the Newsletter. Hospital-wide communication about the project was shared during morning huddle, posted in the staff lounge, communicated during the Coordinator's monthly rounding with preceptors, and via email. All communications encouraged and offered outlets for preceptors to provide feedback and ask questions.

Evaluation Plan

Preceptor buy-in and engagement was evaluated using the Preceptor-Focused Assessment, which included the Preceptor Questionnaire, the Utrecht Work Engagement Scale

(UWES), open-ended questions, and preceptor demographics. The Preceptor Questionnaire was developed by Dibert and Goldenberg (1995) using guidelines from a local preceptor program, evidence from the literature, and adaptations of Mowday et al.'s (1979) Organizational Commitment Questionnaire (OCQ); it consists of three parts:

- Part I: Preceptors' Perception of Benefits and Rewards Scale (PPBR)
- Part II: Preceptors' Perceptions of Support Scale (PPS)
- Part III: Commitment to the Preceptor Scale (CPR; Dibert & Goldenberg, 1995).

Reliability analysis of the three scales yielded acceptable alpha coefficients (PPBR: 0.91, PPS: 0.86, CPR: 0.87; Dibert and Goldenberg's, 1995). All three parts of the Preceptor Questionnaire total 11 items rated on a six-point Likert scale [1—strongly disagree to 6—strongly agree]. Refer to Appendix B.1-B3 to view the Preceptor Questionnaire.

The Utrecht Work Engagement Scale (UWES) was developed by Shaufeli and Bakker (2004) to measure preceptor engagement according to three constituents of work engagement, including vigor (VIG), dedication (DED), and absorption (ABS). Confirmatory factor analysis resulted in overall composite reliability (CR) and Cronbach's alpha (Cα) scores greater than .95 (VIG: CR .964/ Cα .971; DED: CR .972/ Cα .978; ABS: CR.955/ Cα .963), indicating UWES as a valid and reliable measure of engagement (Bon & Shire, 2019). Responses to each of 17 items are measured on a seven-point Likert-type scale [0—Never; 1—Almost Never (A few times or less); 2—Rarely (Once a month or less); 3—Sometimes (A few times a month); 4—Often (Once a week); 5—Very often (A few times a week); 6—Always]. Refer to Appendix B.2 to view the Utrecht Work Engagement Scale.

To offer deeper insight into the preceptor experience and demonstrate that the NRP values each preceptor's unique perspective, the preceptors were asked to (1) to explain any

negatively interpreted responses to Likert-type questions, (2) to explain what is going well with the NRP, (3) to identify what could be improved with the NRP, and (4) to share what is most important about the NRP. The final section of the Preceptor-Focused Assessment encouraged preceptors to comment freely about their experience as a preceptor in the NRP. Refer to Appendix B.3 to view the open-ended questions included in the Preceptor-Focused Assessment.

Participants were informed that completion of the Preceptor-Focused Assessment implied consent to participate in the project. In addition, preceptors were informed of the following:

- Replies to the Preceptor Questionnaire, UWES, and open-ended questions will be confidential and anonymous.
- Responses to the Preceptor Questionnaire, UWES, and open-ended questions will be used only to guide recommendations for future NRP QI projects; and
- All potions of the NRP Quality Improvement Project will be fully de-identified and available for review after project completion and publication.

Permissions

Permission to complete this project was granted by the CNO/VP. See Appendix H: Organizational Letter of Support. Permission to use the Preceptor Questionnaire by Dibert and Goldenburg (1995) was obtained from John Wiley and Sons and the Copyright Clearance Center and is in Appendix I.1. Permission for the Organizational Commitment Survey by Mowday et al. (1979) was obtained from Elsevier and the Copyright Clearance Center and can be found in Appendix I.2. Permission to use UWES is documented on the survey as “free for use for non-commercial scientific research” (Schaufeli & Bakker, 2004, p.48). All permissions were obtained by the Project Lead.

Data Collection Process and Logistics

The Project Lead and Coordinator's goal was to offer participation in the project without exhausting the preceptors' personal time, thereby demonstrating the NRP's respect for the preceptors' free-time, work-life balance, and health and wellbeing. To do this, the Project Lead and Coordinator initially planned to schedule 15-minute meetings during each preceptor's scheduled shifts for completion of the Preceptor-Focused Assessment. However, concerns were raised about the dynamic nature of bedside nursing and the possibility that a preceptor may not be available to leave patient care at the scheduled time due to time constraints and patient needs. To accommodate this concern, specific meeting times were not scheduled; instead, the Project Lead rounded on each preceptor over a designated two-week period. If a preceptor indicated that the timing was not appropriate, the Project Lead thanked the preceptor and returned later that shift or on a different day. If a preceptor confirmed that the timing was appropriate, the Project Lead emailed the preceptor an anonymous link to the Preceptor-Focused Assessment via QualtricsXM®, provided brief verbal and written instructions, and asked the preceptor to show the thank-you screen at the end of the assessment as evidence of submission. Completion times ranged from 3.67 minutes to 30.15 minutes, averaging 11.01 minutes in duration. Longer completion times were attributed to instances when the preceptor had to momentarily walk away from the assessment to attend to patient-care needs. To prevent duplicate entries, anonymous survey links were set to expire after twenty-four hours.

Data Analysis

Responses to the Preceptor-Focused Assessment was analyzed by frequency, percentage of responses within each point-value, mean score, and standard deviation. The Preceptor-Focused Assessment was examined using basic statistical analysis. The Mode, mean, and

standard deviation of scoring categories (i.e., preceptor perception of support, preceptor perception of benefits and rewards, preceptor commitment to the role) and subcategories of engagement (i.e., vigor, dedication, absorption) were calculated. Resulting data was organized into basic tables. Frequencies and the percentage of responses within each point-value was displayed in bar graphs.

Data from Likert-type questions were collected using QualtricsXM® software and exported to a spreadsheet for data analysis in Microsoft® Excel® for Microsoft 365 MSO (Version 2110) 64-bit. Responses to open-ended questions were grouped according to similarities and summarized. Results of the Preceptor-Focused Assessment, Preceptor SWOT Analysis, and evidence from the literature review were used to generate recommendations to improve preceptor buy-in and engagement in the NRP.

Barriers and Facilitators to Implementation

Barriers to this project included:

- Work-related distractions and difficulty stepping away from the bedside during preceptor completion of the Preceptor-Focused Assessment,
- Potential preceptor apathy from frequent surveying (i.e., annual staff satisfaction surveys, annual NRP surveys, strategic planning surveys),
- Low preceptor attendance and participation in the Follow-Up Sessions and Preceptor SWOT Analysis,
- Complications related to organizational culture, and
- Challenges faced by the staff, organization, and nursing profession related to the COVID-19 pandemic.

Facilitators included (1) the preceptors' openness to share their perceptions of the NRP and make improvements, (2) nursing leadership and the NRP's active support and participation in the project, and (3) efforts taken to bring the Preceptor-Focused Assessment to the preceptor. Leadership's acceptance of the project's results and stakeholder buy-in to proposed recommendations are crucial to the immediate and long-term success of this project and subsequent projects.

Policy and Guidelines

Sustainability Plan

Producing change is about 80 percent leadership—establishing direction, aligning, motivating, and inspiring people—and about 20 percent management—planning, budgeting, organizing, and problem-solving. -John P. Kotter (1998, p. 33).

According to Kotter (1998), the change process involves critical stages (e.g., establishing a sense of urgency, forming a powerful guiding coalition, creating a vision, communicating the vision, empowering others, planning for short-term wins, consolidating improvements/producing more change, and institutionalizing new approaches). Mismanagement during any of these stages can compromise otherwise well-conceived visions. The most volatile mistakes include under-communication of change vision, neglecting to lead by example, and declaring victory too soon. Kotter explained that simple memos and quick emails are not enough to light a fire and maintain a sense of urgency; substantial time and effort must be applied to this crucial step. In addition, talking too much and saying little via memos and speeches is an ineffective strategy. An effective change vision must include more than strategies and structures; leaders must lead through example and avoid inconsistencies that fuel cynicism and frustration from direct reports. Finally, celebrating small wins and recognizing incremental improvements is essential to

maintaining momentum; however, concluding a change project prematurely can be catastrophic. Kotter stresses that wrapping up a three-year process in just a few months threatens any previous gains; "the best leaders…balance short-term results with long-term vision" (p. 28).

The sustainability plan for this project follows Kotter's (1998) recommendations for the change process. The Project Lead recommends that the NRP conducts the Preceptor-Focused Assessment every three years; assessment times may be adjusted as needed to accommodate immediate concerns or perceived threats to preceptor buy-in and engagement. In addition, the Project Lead, Coordinator, unit directors, and unit coordinators must collaborate to lead by example and maintain open lines of communication between the preceptors, residents, and leadership. NRP progress, concerns and inquiries, future assessment results, and encouragement will be shared using multiple modes of communication (e.g., by request of personal meeting with the Coordinator, discussion at daily morning huddle, postings in the staff break room, NRP Preceptor Newsletter, and email). The Coordinator will continue to complete monthly unit rounding to offer support and facilitate communication with the preceptors.

Celebrating

Incremental celebration of small wins helps fuel momentum and promote sustainability (Kotter, 1998). According to Tawse et al. (2019), creating near-term deadlines and frequently celebrating progress toward implementation goals improves the desire to implement by (1) creating short deadlines that help maintain clear mental focus and (2) celebrating small victories to reinforce rewards of achievement. Meanwhile, emphasis on the larger vision reminds team members of the global picture. By continually highlighting the end goals, inspiration through motivational vision and mission statements can increase the desire to implement through the intrinsic reward of achievement (Tawse et al., 2019). To maintain momentum, the Project Lead

recommends that small wins be celebrated by recognizing preceptors annually during nurses' week and alongside NGRNs at NRP graduation ceremonies.

Timeline

Table 2

Tentative NRP Quality Improvement Timeline

Timing	Project phase
February 2022	Proposal Final Approvals
March-early April 2022	Project implementation
Early April 2022	Data collection and evaluation
Late April 2022	Develop and present recommendations in the organization
Summer 2022	Final Project Presentation

Resources Needed

The NRP Quality Improvement Project required financial resources related to hourly wages paid to twenty-two preceptors during completion of the Preceptor-Focused Assessment and three preceptors who attended the Follow-Up Sessions. Wages were also paid to the Coordinator for participation in project planning, implementation, and evaluation. Except for wages paid to preceptors during the Follow-Up Sessions, wages did not exceed the preceptors' or Coordinator's FTE. In addition, each preceptor that completed the Preceptor-Focused Assessment was entered into a $100 raffle for which the Project Lead provided funds. Other resources/supplies were minimal (i.e., WOWs, office supplies) and already accounted for in the hospital's operational budget.

Review Approvals Needed

Currently, the site for the NRP Quality Improvement Project does not have a written policy or formal process for the approval of quality improvement projects. Therefore, the Project Lead and Coordinator obtained initial approval from the CNO/VP to implement the NRP Quality Improvement Project. Then, the CNO/VP submitted a formal request for organizational approval from senior leadership. The Ohio State University (OSU) Subject Research Determination Form was submitted, and approval was granted by OSU's Institutional Review Board (IRB).

Section 3: Implementation

Practice Change Description

All active and inactive preceptors (N=22) were asked to complete the Preceptor-Focused Assessment via an email link to QualtricsXM®, a user-friendly cloud-based platform that allowed anonymous submission of Preceptor-Focused Assessment and data collection. To accommodate scheduling conflicts and avoid possible role strain, the Project Lead assisted preceptors in completing the Preceptor-Focused Assessment during regular working hours on facility-provided WOWs or desktop computers. The Preceptor-Focused Assessment can be viewed in Appendix B.1-: Preceptor-Focused Assessment. Once the Preceptor-Focused Assessment was completed, preceptors were invited to review and discuss results from the Preceptor-Focused Assessment and provide commentary to establish a Preceptor SWOT Analysis during Follow-Up Sessions.

To provide ample opportunities for preceptor participation, four Follow-Up Sessions were scheduled for approximately 2 to 2.5 hours each, keeping in mind the current strain on staffing and the burden already placed on preceptors to fill extra shifts. Two Follow-Up Sessions were scheduled on day shift, one was scheduled during evening shift, and another was scheduled

on a Saturday. All four Follow-Up Sessions took place within a two-week time frame. Each Follow-Up Session began with a 5-minute introduction followed by the Project Lead using 30-45 minutes to summarize findings from the literature review, present findings from the Preceptor-Focused Assessment, and explain the purpose and process of creating the Preceptor SWOT Analysis using printed copies of a displayed PowerPoint presentation. A 15–20-minute open discussion followed to allow for questions, answers, and commentary. Lastly,blank paper versions of the Preceptor SWOT Analysis were distributed to allow 10-15 minutes for brainstorming. A template of the *Blank Preceptor SWOT Analysis for Brainstorming* is in Appendix F. Only three of twenty-two preceptors attended a Follow-Up Session; each attended a different session. Originally, preceptors were to record final points for strengths, weaknesses, opportunities, and threats on the three-inch-by-three-inch sticky notes and to place each sticky note on the corresponding oversized sticky note on the wall. Because each Follow-Up Session allowed for one-on-one interactions between a single preceptor and the Project Lead, use of large display items was not necessary. After the Preceptor SWOT Analysis was completed, the Project Lead shared the Preceptor SWOT Analyses from preceding Follow-Up Sessions; this step was strategically delayed encouraging free, uninfluenced generation of ideas within each Follow-Up Session. Then, the preceptors were permitted to revisit the current session's Preceptor SWOT Analysis to make any additions or changes. A blank template of the *Preceptor SWOT Analysis* can be found in Appendix H. Attendance was taken at each Follow-Up Session. The Project Lead provided pizza or doughnuts and refreshments during each session as a gesture to show appreciation for preceptor participation.

Implementation Strategies and Adaptation

Four weeks prior to the first Follow-Up Session, promotional flyers were posted in the staff lounge alongside sign-up sheets for each of the four sessions. Two weeks before the first Follow-Up Session, the Project Lead sent follow-up email reminders to preceptors to encourage attendance during individual Preceptor-Focused Assessment encounters. The morning of the first Follow-Up Session, 3 out of 22 preceptors had signed up. By the end of the fourth and final Follow-Up Session, only 1 of the preceptors who signed up attended a Follow-Up Session. Despite low preceptor sign-up, the Project Lead attended each Follow-Up Session. Two additional preceptors attended despite not signing up. In the end, there was one preceptor at each of the first three follow-up sessions. No preceptors attended the fourth and final Follow-Up Session. Nevertheless, the Project Lead remained available for the entire two-hour duration. Blank templates of the *Follow-Up Session Sign-Up Sheet*, the *Follow-Up Session Agenda*, and the *Follow-Up Session Attendance Sheet* are in Appendices D through F. For those preceptors unable to attend, emailed PowerPoints outlining assessment results and the SWOT Analysis were distributed via email, and post-project contributions were welcomed to support continuous improvement and project sustainment.

Collection of Data

Results from the Preceptor-Focused Assessment (i.e., Preceptor Questionnaire, UWES, open-ended questions) and Preceptor SWOT Analysis were used to form recommendations for practice change to support increased preceptor buy-in and engagement. Each preceptor had the opportunity to complete the Preceptor-Focused Assessment over a two-week period, and responses were collected and stored in QualtricsXM®, where they were accessed by the Project Lead for analysis. Data from Likert-type questions were exported to a spreadsheet for data analysis in Microsoft® Excel® for Microsoft 365 MSO (Version 2110) 64-bit, and responses to

open-ended questions were grouped according to similarities and summarized. Preceptor SWOT Analysis entries were gathered and entered into the SWOT matrix during each Follow-Up Session. A final, comprehensive version of the Preceptor SWOT Analysis was completed by the Project Lead at the summation of all four Follow-Up Sessions. A final summary of the Preceptor-Focused Assessment, comprehensive Preceptor SWOT Analysis, and findings from the literature review were prepared by the Project Lead in printed and digital form for dissemination.

Clinical Expertise Integration

The preceptors, Project Lead, and Coordinator are all expert clinicians experienced in the preceptorship of NGRNs. The Project Lead and Coordinator hold advanced nursing and education degrees that complemented the project design, implementation, and evaluation. Examination and integration of both internal and external evidence was paramount to successful completion of the project and integration of findings into practice. Additional resources included academic partnerships between doctoral prepared nurses with experience in leadership, project management, and data interpretation.

Section 4: Evaluation

Results

Response Rates and Demographic Characteristics

Participants included 22 preceptors, 20 females and 2 males. The Preceptor-Focused Assessment had a 100% completion rate (N=22 preceptors). Completion times ranged from 3.67 to 30.15 minutes with a mean of 11.01 minutes. Respondents included 6 obstetrics nurses, 5 emergency-department nurses, 5 intensive-care nurses, and 6 telemetry/medical-surgical nurses. Three out of twenty-two preceptors attended one of four Follow-Up Sessions. Follow-Up

Sessions ranged from two to three hours long and included preceptors from the Inpatient Unit (telemetry/medical-surgical/intensive-care acuity-adjustable unit) and the Obstetrics Unit.

The Preceptor Questionnaire

Table 3 lists the number and percentage of preceptors who selected each response to the Preceptor Questionnaire. Statements II-3 and III-3 made negative assertions about preceptor perceptions of support and commitment to the role, resulting in desirable higher levels of disagreement (68% or 15 responses). For all other statements, the breakdown of responses revealed that most preceptors agreed, moderately agreed, or strongly agreed with statements, indicating that the majority of preceptors were committed to the role and perceived benefits, rewards, and support as preceptors. Only 4.5-9% of responses, or 1-2 responses per statement, indicated strong disagreement with positive statements with 4.5-23% of responses falling between moderately disagree and disagree.

Table 3

The Preceptor Questionnaire: Part I Perception of Benefits and Rewards Scale 1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree						
Statement	**1**	**2**	**3**	**4**	**5**	**6**
I-1	1 (4.5%)	0	1 (4.5%)	5 (23%)	9 (41%)	6 (27%)
I-2	1 (4.5%)	0	1 (4.5%)	4 (18%)	9 (41%)	7 (32%)
I-3	1 (4.5%)	0	1 (4.5%)	11 (50%)	4 (18%)	5 (23%)
The Preceptor Questionnaire: Part II Perception of Support Scale 1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree						
Statement	**1**	**2**	**3**	**4**	**5**	**6**
II-1	1 (4.5%)	0	2 (9%)	7 (32%)	7 (32%)	5 (23%)
II-2	1 (4.5%)	0	3 (14%)	7 (32%)	7 (32%)	4 (18%)
II-3	1 (4.5%)	5 (23%)	9 (41%)	6 (27%)	1 (4.5%)	0
II-4	1 (4.5%)	3 (14%)	3 (14%)	8 (36%)	5 (23%)	2 (9%)
The Preceptor Questionnaire: Part III Commitment to the Preceptor Role Scale 1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree						
Statement	**1**	**2**	**3**	**4**	**5**	**6**
III-1	0	0	0	6 (27%)	8 (36%)	8 (36%)
III-2	1 (4.5%)	1 (4.5%)	5 (23%)	4 (18%)	7 (32%)	4 (18%)
III-3	2 (9%)	4 (18%)	9 (41%)	6 (27%)	0	1 (4.5%)

III-4	0	1 (4.5%)	2 (9%)	8 (36%)	7 (32%)	4 (18%)

Legend:
I-1 I am a preceptor because as a preceptor I have the opportunity to: Teach new staff nursing and nursing students.
I-2 I am a preceptor because as a preceptor I have the opportunity to: Assist new staff nurses and nursing students to integrate into the nursing unit.
I-3 I am a preceptor because as a preceptor I have the opportunity to: Increase my own knowledge base.
II-1 I feel I have had adequate preparation for my role as a preceptor.
II-2 My goals as a preceptor are clearly defined.
II-3 The nursing staff do not understand the goals of the preceptor program.
II-4 My workload is appropriate when I function as a preceptor
III-1 I am willing to put in a great deal of effort beyond what is normally expected in order to help the preceptee be successful.
III-2 I am enthusiastic about the preceptor program when I talk to my nursing colleagues.
III-3 I feel very little loyalty to the preceptor program.
III-4 I find that my values and the values of the preceptor program are very similar.

Table 4 lists the mode, mean, and standard deviation (SD) of preceptor responses to the Preceptor Questionnaire which examines the preceptors' perception of benefits and rewards, support, and commitment to the preceptor role. In addition, preceptor responses were divided by the number and percentage of preceptors who either agreed or disagreed on some level with the given statement. Responses to the Preceptor Questionnaire indicate that most preceptors agreed with statements measuring preceptor perceptions of benefits and rewards (mode 5, mean 4.66, SD 1.18), support (mode 4, mean 3.97, SD 1.32), and commitment to the preceptor role (mode 5, mean 3.97, SD 1.30). Some statements were bimodal, each having two equal maxima in which an equal number of responses were given for agree and moderately agree (II-1, II-2), or moderately agree and strongly agree (III-1).

Table 4

The Preceptor Questionnaire: Part I Perception of Benefits and Rewards Scale
1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree

Statement	Mode	Mean	SD	Agree	Disagree
I-1	5	4.77	1.18	20 (91%)	2 (9%)
I-2	5	4.86	1.18	20 (91%)	2 (9%)

I-3	4	4.45	1.16	20 (91%)	2 (9%)
Overall	5	4.66	1.18	--------	--------
The Preceptor Questionnaire: Part II Perception of Support Scale 1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree					
Statement	**Mode**	**Mean**	**SD**	**Agree**	**Disagree**
II-1	4, 5	4.55	1.2	19 (86%)	3 (14%)
II-2	4, 5	4.41	1.17	18 (82%)	4 (18%)
II-3	3	3.05	0.93	15 (68%)	7 (32%)
II-4	4	3.86	1.29	15 (68%)	7 (32%)
Overall	4	3.97	1.30	--------	--------
The Preceptor Questionnaire: Part III Commitment to the Preceptor Role Scale 1 Strongly disagree, 2 Moderately disagree, 3 Disagree, 4 Agree, 5 Moderately Agree, 6 Strongly Agree					
Statement	**Mode**	**Mean**	**SD**	**Agree**	**Disagree**
III-1	5, 6	5.09	0.79	22 (100%)	0 (0%)
III-2	5	4.23	1.35	15 (68%)	7 (32%)
III-3	3	3.05	1.08	7 (32%)	15 (68%)
III-4	4	4.5	1.01	19 (86%)	3 (14%)
Overall	4	3.97	1.32	--------	--------

Legend: SD, standard deviation
I-1 I am a preceptor because as a preceptor I have the opportunity to: Teach new staff nursing and nursing students.
I-2 I am a preceptor because as a preceptor I have the opportunity to: Assist new staff nurses and nursing students to integrate into the nursing unit.
I-3 I am a preceptor because as a preceptor I have the opportunity to: Increase my own knowledge base.
II-1 I feel I have had adequate preparation for my role as a preceptor.
II-2 My goals as a preceptor are clearly defined.
II-3 The nursing staff do not understand the goals of the preceptor program.
II-4 My workload is appropriate when I function as a preceptor
III-1 I am willing to put in a great deal of effort beyond what is normally expected in order to help the preceptee be successful.
III-2 I am enthusiastic about the preceptor program when I talk to my nursing colleagues.
III-3 I feel very little loyalty to the preceptor program.
III-4 I find that my values and the values of the preceptor program are very similar.

Utretch Work Engagement Scale (UWES)

Table 5 lists the number and percentage of preceptors who selected each response to UWES. The breakdown of responses revealed that all preceptors felt dedicated, and most preceptors felt vigorous and absorbed in their role at least some of the time with the majority falling between sometimes and very often. One to three responses per statement (4.5-14%) indicated that some

preceptors rarely felt vigorous or absorbed with a single *never* response in the vigor section to the statement, “When I get up in the morning, I feel like going to work”.

Table 5

UWES: Vigor 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always								
Statement	**N**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
V1	22	0	0	2 (9%)	10 (45%)	7 (32%)	3 (14%)	0
V2	22	0	0	0	8 (36%)	9 (41%)	5 (23%)	0
V3	21	1 (5%)	3 (14%)	6 (29%)	4 (19%)	4 (19%)	3 (14%)	0
V4	22	0	0	2 (9%)	7 (32%)	7 (32%)	4 (18%)	2 (9%)
V5	22	0	0	3 (14%)	6 (27%)	6 (27%)	6 (27%)	1 (4.5%)
V6	22	0	0	0	7 (32%)	6 (27%)	7 (32%)	2 (9%)
UWES: Dedication 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always								
Statement	**N**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
D1	22	0	0	2 (9%)	4 (18%)	6 (27%)	5 (23%)	5 (23%)
D2	22	0	0	1 (4.5%)	7 (32%)	7 (32%)	6 (27%)	1 (4.5%)
D3	22	0	0	1 (4.5%)	9 (41%)	6 (27%)	5 (23%)	1 (4.5%)
D4	22	0	0	0	3 (14%)	4 (18%)	9 (41%)	6 (27%)
D5	22	0	0	2 (9%)	6 (27%)	9 (41%)	4 (18%)	1 (4.5%)
UWES: Absorption 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always								
Statement	**N**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
A1	22	0	0	1 (4.5%)	11 (50%)	5 (23%)	5 (23%)	0
A2	22	0	2 (9%)	6 (27%)	7 (32%)	4 (18%)	3 (14%)	0
A3	22	0	1 (4.5%)	2 (9%)	5 (23%)	9 (41%)	3 (14%)	2 (9%)
A4	21	0	0	3 (14%)	5 (24%)	5 (24%)	5 (24%)	3 (14%)
A5	22	0	0	8 (36%)	10 (45%)	3 (14%)	1 (4.5%)	0
A6	22	0	3 (14%)	7 (32%)	8 (36%)	3 (14%)	1 (4.5%)	0

Legend: N=number of preceptors that completed the question
V1 At my work, I feel bursting with energy.
V2 At my job, I feel strong and vigorous.
V3 When I get up in the morning, I feel like going to work.
V4 I can continue working for very long periods at a time.
V5 At my job, I am very resilient, mentally.
V6 At my work, I always persevere, even when things do not go well.
D1 I find the work that I do full of meaning and purpose.
D2 I am enthusiastic about my job.
D3 My job inspires me.
D4 I am proud of the work that I do.
D5 To me, my job is challenging.

A1 Time flies when I am working.
A2 When I am working, I forget everything else around me.
A3 I feel happy when I am working intensely.
A4 I am immersed in my work.
A5 I get carried away when I am working.
A6 It is difficult to detach myself from my job.

Table 6. UWES measures engagement according to three identified constituents of engagement, including vigor, dedication, and absorption. Table 6 lists the mode, mean, and standard deviation of preceptor responses to UWES. Responses to UWES indicate that the preceptors often identify with statements related to vigor (mode 4, mean 3.66, SD 1.14) and dedication (mode 4, mean 4.15, SD 1.11) and sometimes identify with statements related to absorption (mode 3, mean 3.31, SD 1.19).

Table 6

UWES: Vigor 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always				
Statement	**N**	**Mode**	**Mean**	**SD**
V1	22	3	3.5	0.84
V2	22	4	3.86	0.76
V3	21	2	2.76	1.41
V4	22	3, 4	3.86	1.10
V5	22	3, 4, 5	3.82	1.11
V6	22	3, 5	4.18	0.98
Overall	---	4	3.66	1.14
UWES: Dedication 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always				
Statement	**N**	**Mode**	**Mean**	**SD**
D1	22	4	4.32	1.26
D2	22	3, 4	3.95	0.98
D3	22	3	3.82	0.98
D4	22	5	4.82	0.98
D5	22	4	3.82	0.98
Overall	--	4	4.15	1.11
UWES: Absorption 0 Never, 1 Almost never, 2 Rarely, 3 Sometimes, 4 Often, 5 Very often, 6 Always				

Statement	N	Mode	Mean	SD
A1	22	3	3.64	0.88
A2	22	3	3	1.17
A3	22	4	3.77	1.20
A4	21	3, 4, 5	4	1.27
A5	22	3	2.86	0.81
A6	22	3	2.64	1.02
Overall	--	3	3.31	1.19

Legend: SD, standard deviation
V1 At my work, I feel bursting with energy.
V2 At my job, I feel strong and vigorous.
V3 When I get up in the morning, I feel like going to work.
V4 I can continue working for very long periods at a time.
V5 At my job, I am very resilient, mentally.
V6 At my work, I always persevere, even when things do not go well.
D1 I find the work that I do full of meaning and purpose.
D2 I am enthusiastic about my job.
D3 My job inspires me.
D4 I am proud of the work that I do.
D5 To me, my job is challenging.
A1 Time flies when I am working.
A2 When I am working, I forget everything else around me.
A3 I feel happy when I am working intensely.
A4 I am immersed in my work.
A5 I get carried away when I am working.
A6 It is difficult to detach myself from my job.

Open-Ended Questions

The primary objectives of the preceptor-focused assessment were to measure the preceptor's current level of buy-in and engagement and to examine the preceptors' perceptions of (1) what is going well with the NRP, (2) what could be improved with the NRP, and (3) what is most important about the NRP as well as (4) each participant's general experience as a preceptor in the NRP. To accomplish this, preceptors were given the option of answering four free-text questions. Each response to a question was unique to a single preceptor, thereby preventing a single preceptor from overloading the responses and skewing the summation of themes emerging from free-text responses.

Preceptor explanations of negative responses. When the preceptors were asked to explain negative responses to the Likert-type statements, most explanations were related to COVID-19 and other external influences, including:

- Fewer positive patient outcome since the outbreak of COVID-19 which were viewed as "very mentally taking on staff,"
- Exhaustion and burnout related to the COVID-19 pandemic that negatively impacted "the enthusiasm to teach/train."
- "Ungrateful and demanding" patients,
- Difficulty being "excited for work" when the organizational culture "has been going downhill,"
- A shift in the nursing profession from "patient care and a health perspective to client hospitality,"
- Lack of understanding and empathy from non-NRP staff,
- Short staffing that made it difficult to "explain skills or discuss things" in the moment, and
- Being forced to work overtime.

Themes more directly related to the NRP and preceptorship included "conflicting beliefs" about following the NRP's "married at the hip" concept throughout the entire program and a "lack of initiative" and "know-it-all attitude" from NGRNs. One preceptor commented that "precepting is rewarding, but it is not what gets me to work in the a.m."

What is going well with the NRP? Most responses focused on the practical experience, education, and professional preparation of NGRNs receive in the NRP, such as:

- "New grads get a wide range of experience," "the program prompts assist in talking about scenarios," and the NRP "gives new nurses a more rounded base of knowledge."
- The NRP helps NGRN gain "the skills and knowledge [needed] in the 'real world' to practice."
- "Students are gaining knowledge and confidence while working alongside their preceptors," and NGRNs "are more confident when starting to work on their own."
- The NGRNs "feel supported and able to grow at their own pace."

Other responses praised effective communication throughout the NRP, inspiration from motivated nurses and NGRNs, and the Coordinator's support of the program and its participants, including:

- "The students are motivated."
- "[There are] motivated nurses."
- "There is a lot of support from the nurse in charge of the program, and she truly enjoys educating people."

Some preceptors noted improvements made to NGRN checkoffs, the consistency of preceptor-NGRN pairing, and NGRN-patient ratios. One preceptor responded, "Our staffing with the program is better than it was prior to the program when precepting new grads. I also feel it really helps that the new grad is with only a couple preceptors and the consistency tends to help them more." A single preceptor failed to recognize anything as going well with the NRP and stated, "Only the idea of the program is good. The program is a lie."

What could be improved with the NRP? Various themes emerged from recommendations for NRP improvement. One theme centered around participation. Several preceptors expressed the need for greater nurse, preceptor, and NGRN involvement. One preceptor stated non-NRP

nurses should “learn about it still and not talk down about the program just because they aren’t involved.” Another preceptor felt that preceptorship “should be voluntary and not mandated.”

Another theme pertained to the NGRN validation process. Some preceptors felt that NGRN skill “validation should be streamlined” by “getting rid of some of the checkoffs that don’t apply.” Other comments focused on educational content and practices. One preceptor stated that the preceptor should take “patients that give the students the knowledge to be the best they can be.” Other preceptors felt that NGRNs required more consistent placement at the bedside and explained that NGRNs “barely get going before [they are] pulled away for classes and are absent from the floor for days which seems to set them back a little.” Another preceptor stated that “changing preceptors maybe just for a couple shifts might be helpful to allow new nurses to see that every nurse is going to have their own may of doing things/management time.” In some cases, respondents believed that the NRP was “infantizing the interns;” NGRNs “have successfully completed their education, been deemed competent by the state of Ohio, yet we treat them as children. They are adults and need to be treated as thus.” Similarly, one response stated that NGRNs “feel like they are still in school with projects rather than becoming adult workers.” Finally, one preceptor requested “less clicking” and stated that “it seems preceptors are often on the computer more than actually observing and assisting the new grad.”

Other suggestions for improvement were less common. In a single comment, NGRN retention was discussed, and the preceptor believed that NGRNs “need to be made to fulfill a contract in regards to the time they stay after completing the program.” Another preceptor was alone in stating, “Everything! Administration that is running it need to remember how nursing really is. This program needs to be changed to fit our hospital and not ran like it was at the major

hospital. Wayne Healthcare needs to go back to precepting how it was before." Finally, two preceptors stated that they could not think of any needed improvements to the NRP.

What is most important about the NRP to you? The majority of preceptors emphasized NGRN preparation, education, and confidence/relationship building. Examples of common responses include the following:

- "It is most important that the new nurses feel prepared and are ready to start on their own."
- "The most important part is making sure that the new nurses feel comfortable and important."
- "Giving the new nurses the opportunity to take enough time to feel confident in themselves before being on their own."
- "Making sure the student always feels supported and that they have someone to ask questions without judgement."
- The NRP "gives [NGRNs] the change to have a person to refer back to if they have questions or need help."
- "It is also important that NGRNs are building relationships with other staff and physicians."

Comment freely about your experience as a preceptor in the NRP. The final free-text prompt resulted in a combination of negative feelings, neutral responses, and positive feedback. One preceptor stated, "Major concerns for this program have been expressed multiple times, but administration does not hear us. Administration covers up all the concerns and portrays to the public and the rest of the hospital what an amazing and successful program it is. The preceptors are not heard, and if the orientee is not up to par, then the preceptors are blamed…I really love

being a preceptor, but the way in which this program has been conducted, I now hate being a preceptor." Another preceptor wrote, "I don't' like when my assignments have been switched to help the student learn. That contributes to me becoming behind and having to stay late to catch up my charting. I'm not happy being a preceptor." Finally, one preceptor said that "sometimes you just get burnt out and need a break, so you can be at your best for the new nurses."

Despite a several very negative comments, other preceptors expressed a more positive experience. For example, one preceptor felt that they "have had many opportunities to help others learn," while another sated that it "actually helped me learn new things along the way with my preceptee." Other preceptors shared similar statements that conveyed positive experiences resulting from teaching and learning alongside the NGRNs.

Most comments were neutral in nature or reiterated statements from previous free-text questions and prompts. Some preceptors explained that precepting in the NRP was "a learning process." Others echoed previous statements about streamlining checkoffs, scaling back NGRN validation requirements, and avoiding challenging NGRN-patient ratios. Finally, several preceptors simply concluded that they "have not had any bad experiences with the program to date."

Discussion

Responses to the Preceptor Questionnaire indicate that, overall, (1) the preceptors perceive the presence of rewards and benefits to preceptorship, (2) they recognize support within the NRP, and (3) they are committed to their role as preceptors. Meanwhile, responses to UWES suggest that the preceptors are likely engaged as preceptors in the NRP. Even though the free-text responses do not directly indicate levels of buy-in or engagement, they provide valuable insight into the preceptors' experiences and viewpoints about the NRP. Despite several very

negative statements, most comments were productive in offering either praise or constructive feedback. Some free-text responses were excluded from direct quotation because divulging certain quotes may have compromised anonymity due to the small population of preceptors; in these cases, feedback was carefully summarized.

Return on Investment (ROI)

The immediate return on investment for this project is the insight it provides into preceptor buy-in, engagement, and perspectives. Using this information to generate recommendations for support may improve long-term outcomes related to preceptor buy-in and engagement and influence the successful transition of NGRNs into practice, thereby influencing NGRN retention, decreasing the cost of turnover, and reducing the need for costly agency staff.

Sustainment Plan

The sustainability plan for this project follows Kotter's (1998) recommendations for the change process. The Project Lead continues to recommend that the NRP conduct the Preceptor-Focused Assessment every three years; assessment times may be adjusted as needed to accommodate immediate concerns or perceived threats to preceptor buy-in and engagement. Multiple modes of communication (e.g., by request of personal meeting with the Coordinator, discussion at daily morning huddle, postings in the staff break room, NRP Preceptor Newsletter, and email) will be employed to ensure that lines of communication remain open and fluid between the preceptors, residents, and leadership. The Coordinator will round monthly to offer support, facilitate communication with the preceptors, and address/assess concerns identified through the Preceptor-Focused Assessment. Finally, to maintain momentum, the Project Lead recommends that small wins be celebrated by recognizing preceptors annually during nurses' week and alongside NGRNs at NRP graduation ceremonies.

Limitations

A major limitation includes the preceptors' hesitation to disclose their true feelings. A few preceptors expressed apprehension during and after the project concerning the protection of their anonymity. Some preceptors felt that despite the measures taken to protect their identities, the small population of preceptors predisposed them to accidental exposure. Others indicated that they feared the true intentions of the project and shared suspicions that the project was not entirely genuine in nature and may be used to benefit administration. Another limitation is time constraints placed on preceptors to complete the Preceptor-Focused Assessment while momentarily stepping away from the bedside. Pressure to return to work may have affected the thoroughness of preceptor responses. Also, the timing of the assessments may have impacted the preceptors' immediate responses. For example, had the Preceptor-Focused Assessment taken place several months ago during a spike in the number of COVID-19 cases and subsequent short staffing and excessive periods of overtime, the preceptors' perspectives may have been dramatically altered, whereas the assessments were conducted during a period of rest and frequent voluntary and mandated time off from clinical duties.

Section 5: Dissemination

The following methods of dissemination will be used to share project results:

- The Project Lead and Coordinator met with the CNO/VP and Education Manager to present findings from the Preceptor-Focused Assessment, a summary of the external evidence, and recommendations for change.
- Due to extreme staffing shortages, live dissemination of project findings was not implemented. Instead, a printed and electronic summary of findings from the Preceptor-Focused Assessment, external evidence, and recommendations for change were shared

internally via the NRP Preceptor Newsletter, posting in the staff lounges, email messages, and brief discussion during daily morning huddle.

- The CNO/VP shared an executive summary of project findings during the senior leadership meeting.
- Finally, the Project Lead intends to submit a manuscript for publication to share methods used to assess preceptor buy-in and engagement, preceptor perceptions of barriers and facilitators to increasing buy-in and engagement, and possible methods of improving preceptor commitment to the role. Prospective journals include the Journal of Nursing Management, Nursing Management, The Journal of Nursing Administration, Journal of Nursing Education, Nurse Educator, and Nurse Education Today.

References

American Nurses Association. (2021). *Pulse on the nation's COVID-19 survey series: COVID-19 impact assessment survey – The first year*. https://www.nursingworld.org/practice-policy/work-environment/health-safety/disaster-preparedness/coronavirus/what-you-need-to-know/year-one-covid-19-impact-assessment-survey/

American Organization of Nurse Leaders. (2021). AONL COVID-19 longitudinal study August 2021 Report: Nurse leader's top challenges, emotional health, and areas of needed support, July 2020 to August 2021. *AONL & Joslin Marketing*. https://www.aonl.org/system/files/media/file/2021/09/AONL%20COVID-19%20Longitudinal%203%20Written%20Report.pdf

Ackerson, K., & Stiles, K. A. (2018). Value of nurse residency programs in retaining new graduate nurses and their potential effect on the nursing shortage. *Journal of Continuing Education in Nursing, 49*(6), 282–288. https://doi.org/10.3928/00220124-20180517-09

Anttila, E. (2014). *Components of organizational commitment: A case study consisting of line managers from Finnish industrial company* [Unpublished master's thesis]. University of Tampere.

Albrecht, S.L. & Adreetta, M. (2010). The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers: Test of a model. *Leadership in Health Services, 24*(3), 228-237. https://doi.org/10.1108/17511871111151126

Applequist, J., Miller-Day, M., Cronholm, P.F., Gabbay, R.A., & Bowen, D.S. (2017). "In principle we have agreement, but in practice it is a bit more difficult": Obtaining

organizational buy-in to patient-centered medical home transformation. *Qualitative Health Research, 27*(6), 909-922. https://doi.org/10.1177/1049732316680601

Auerbach, D.I., Buerhaus, P.I., & Staiger, D.O. (2015). Will the RN workforce weather the retirement of the baby boomers? *Medical Care, 53*(10), 850-856. https://doi.org/10.1097/MLR.0000000000000415

Bakker, A.B., Demerouti, E., & Sanz-Vergel, A.I. (2014). Burnout and work engagement: The JD-R Approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*(1). http://doi.org/10.1146/annurev-orgpsych-031413-091235

Beecroft, P.C., Kunzman, L., & Krosek, C. (2001). RN internship: Outcomes of a one-year pilot program. *Journal of Nursing Administration, 31*(12), 575-582. https://journals.lww.com/jonajournal/Fulltext/2001/12000/RN_Internship__Outcomes_of_a_One_Year_Pilot.8.aspx

Beecroft, P.C., Dorey, F., & Wentem, M. (2008). Turnover intention in new graduate nurses: A multivariate analysis. *Jouranl of Advanced Nursing, 62*(1), 41-52. https://doi.org/10.1111/j.1365-2648.2007.04570.x

Blouin, A.S., & Podjasek, K. (2019). The continuing saga of nurse staffing: Historical and emerging challenges. *Journal of Nursing Administration, 49*(4), 221-227. https://doi.org/10.1097/NNA.0000000000000741

Bon, A.T. & Shire, A.M. (2019). Measuring Utrecht Work Engagement Scale: Factor analysis approach in telecommunication sector. *IEOM Society International.* *http://ieomsociety.org/ieom2019/papers/771.pdf*

Cervera-Gasch, A., Gonzalez-Chorda, V.M., Mena-Tudela, D., Salas-Medina, P., Folch-Ayora, A., & Macia-Soler, L. (2018). Participation of clinical nurses in the practical education of

undergraduate nursing students. *Enfermería Clínica*, *28*(3), 171-178. https://doi.org/10.1016/j.enfcli.2017.11.003

Chaudhary, R. (2019). Corporate social responsibility perceptions and employee engagement: Role of psychological meaningfulness, safety and availability. *Corporate Governance*, *19*(4), 631-647. http://dx.doi.org/10.1108/CG-06-2018-0207

Contino, D.S. (2002). How to slash costly turnover. *Nursing Management*, *33*(2), 10, 12-13. https://journals.lww.com/nursingmanagement/Fulltext/2002/02000/How_to_slash_costly_turnover.3.aspx?casa_token=I89cob7jLL4AAAAA:kRCKMz9GvzTDFv7IltUZ3YQkSS0oog9FzlYOIRPI4jvGXSKW6Uh2ItVznGEvh6KbRY_CtBGEouajFxXSVbKivw

Dibert, C., & Goldenberg, D. (1995). Preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role. *Journal of Advanced Nursing*, *21*(6), 1144–1151. https://doi.org/10.1046/j.1365-2648.1995.21061144.x

French-Bravo, M. & Crow, G., (2015) Shared governance: The role of buy-in in bringing about change. *Online Journal of Issues in Nursing*,*20*(2). http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-20-2015/No2-May-2015/Articles-Previous-Topics/Role-of-Buy-In-In-Change.html

French-Bravo, M., Nelson-Brantley, H. V., Williams, K., Ford, D. J., Manos, L., & Brooks, J. V. (2020). Exploring nurses' perceptions of nurse managers' communicative relationships that encourage nurses' decisions to buy-in to initiatives that enhance patients' experiences with care. *Journal of Nursing Management, 28*(3), 567–576. https://doi.org/10.1111/jonm.12958

García-Sierra, R. & Fernández-Castro, J. (2018). Relationships between leadership, structural empowerment, and engagement in nurses. *Journal of Advanced Nursing, 74*(12), 2809-2819. https://doi.org/10.1111/jan.13805

Gull, I.A., Khan, A., Sheikh, A.M. (2020). Employee engagement-Performance relationship through innovative work behavior and intention to stay. *International Journal of Information, Business, and Management, 12*(4), 79-87. http://www.ijibm.site666.com/IJIBM_Vol12No4_Nov2020.pdf

Hernandez, S. H. A., Francis, M. A., & Winn, D. (2020). Employment and retention of nurses who completed an internship and residency program. *Journal of Continuing Education in Nursing, 51*(11), 504–508. https://doi.org/10.3928/00220124-20201014-06

Hickerson, K.A., Taylor, L.A., & Terhaar, M.F. (2016). The preparation-practice gap: An integrative literature review. *Journal of Continuing Education in Nursing, 47*(1), 17-23. https://doi.org/10.3928/00220124-20151230-06

Jones, C.B. (2008). Revisiting nurse turnover costs: Adjusting for inflation. *Journal of Administration, 38*(1), 11-18. https://doi.org/10.1097/01.nna.0000295636.03216.6f

Jones, E. A., Simpson, V., & Hendricks, S. M. (2017). Enhancement of professional development of front-line nurse preceptors in a dedicated education unit. *Journal of Continuing Education in Nursing, 48*(1), 40–46. https://doi.org/10.3928/00220124-20170110-09

Johnston, K.A. (2018). Engagement. In R.L. Heath & W. Johansen, *The International Encyclopedia of Strategic Communication*, 1-9. Joh Wiley & Sons, Inc. https://doi.org/10.1002/9781119010722.iesc0070

Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692-724. https://www.jstor.org/stable/256287

Kanter, R.M., (1977). *Men and women of the corporation*. Basic Books.

Khodakarami, N., Dirani, K., & Resaei, F. (2018). Employee engagement: Finding a generally accepted measurement scale. *Industrial and Commercial training*, *50*(6), 305-311. https://doi.org/10.1108/ICT-11-2017-0090

Knott, G. J., Mylrea, M. F., & Glass, B. D. (2020). A scoping review of pharmacy preceptor training programs. *American Journal of Pharmaceutical Education*, *84*(10), 1322–1334. https://doi.org/10.5688/ajpe8039

Kotter, J.P. (1998). Winning at change. *Leader to Leader, 1998*(10), 27-33. *https://doi.org/10.1002/ltl.40619981009*

Kwon, K. & Kim, T. (2020). An integrative literature review of employee engagement and innovative behavior: Revisiting the JD-R model. *Human Resources Management Review*, *30*, 1-18. https://doi.org/10.1016/j.hrmr.2019.100704

Lampe, K., Stratton, K., & Welsh, J. (2011). Evaluating orientation preferences of the Generation Y new graduate nurse. *Journal for Nurses in Staff Development*, *27*(4), E6-E9. https://doi.org/10.1097/NND.0b013e3182236646

Macey, A., Green, C., & Jarden, R. J. (2021). ICU nurse preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role: A mixed-methods study. *Nurse education in practice*, *51*, 102995. https://doi.org/10.1016/j.nepr.2021.102995

Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative literature review. *Human Resource Development Review, 14*(4), 389–414. https://doi.org/10.1177/1534484315603612

Miura, M., Daub, K., & Hensley, P. (2020). The one-minute preceptor model for nurse practitioners: A pilot study of a preceptor training program. *Journal of the American Association of Nurse Practitioners, 32*(12), 809–816. https://doi.org/10.1097/JXX.0000000000000300

Morgan, M., Brewer, M., Buchhalter, F., Collette, C., & Parrott, D. (2017). Sustaining regional preceptor partnerships: Preceptor incentive survey. *Journal for Nurse Practitioners, 14*(1), e1–e4. https://doi.org/10.1016/j.nurpra.2017.08.013

Motyka, B. (2018). Employee engagement and performance: A systematic literature review. *International Journal of Management and Economics*, *54*(3), 227-244. https://doi.org/10.2478/ijme-2018-0018

Mowday, R.T., Steers, R.M., & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, *14*(2), 224-247. https://doi.org/10.1016/0001-8791(79)90072-1

Mulherin, K., Walter, S., & Cox, C. D. (2018). National preceptor development program (PDP): Influential evidence and theory. The first of a 3-part series. *Currents in Pharmacy Teaching & Learning, 10*(3), 255–266. https://doi.org/10.1016/j.cptl.2017.12.002

Naeem, F. & Khurram, S. (2020). Influence of toxic leadership on turnover intention: The mediating role of psychological wellbeing and employee engagement. *Pakistan Journal of Commerce and Social Sciences*, *14*(3), 682-713. http://hdl.handle.net/10419/224956

National Center for Health Workforce Analysis. (2017). National and regional supply and demand projections of the nursing workforce: 2014-2030. U.S. Department of Health & Human Services, Health Resources and Services Administration. https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/nchwa-hrsa-nursing-report.pdf

Norris, J.M., Hecker, K.G., Rabatach, L., Noseworthy, T.W., & White, D.E. (2017). Development and psychometric testing of the clinical networks engagement tool. *PLOS ONE, 12*(3), e0174056. https://doi.org/10.1371/journal.pone.0174056

Norris, J.M., White, D.E., Nowell, L., Mrklas, K., & Stelfox. (2017). How do stakeholders from multiple hierarchical levels of a large provincial health system define engagement? A qualitative study. *Implementation Science, 12*, 1-3. https://doi.org/10.1186/s13012-017-0625-5

Nunes D'Aquila, M., Richter Lagha, R., Tramel, J., & Lie, D. A. (2019). Video technology to BOOST preceptor recruitment: A mixed methods study. *Journal of Physician Assistant Education*, *30*(3), 168–173. https://doi.org/10.1097/JPA.0000000000000263

NSI Nursing Solutions, Inc. (2021). 2021 NSI national health care retention & RN staffing report. https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf

O'Donoghue, S.C., DiLibero, J., Altman, M. (2021). Leading sustainable quality improvement. *Nursing Management, 52*(2), 42–50. https://doi.org/10.1097/01.NUMA.0000724940.43792.86

Omer, T.U. & Moola, S.M. (2019). The importance of the preceptor-preceptee relationship in creating well prepared professionals: A make or break experience. *Global Journal of Health Science, 11*(1), 1-14. https://doi.org/10.5539/gjhs.v11n1p1

Porter-O'Grady, T., & Malloch, K. (2018) *Quantum leadership: Creating sustainable value in health care* (5th ed). Jones & Barlett Learning.

Powers, K., Herron, E., Pagel, J. (2019). Nurse preceptor role in new graduate nurses' transition to practice, dimensions of critical care nursing, *Dimensions of Critical Care Nursing, 38*(3), 131-136. https://doi.org/10.1097/DCC.0000000000000354

Quek, G.J.H. & Shorey, S. (2018). Perceptions, experiences, and needs of nursing preceptors and their preceptees on preceptorship: An integrative review. *Journal of Professional Nursing, 5*, 417-325. https://doi.org/10.1016/j.profnurs.2018.05.003

Redford, L. J. (2019). Building the Rural Healthcare Workforce: Challenges--and Strategies--in the Current Economy. *Generations*, *43*(2), 71–75. https://www.ingentaconnect.com/contentone/asag/gen/2019/00000043/00000002/art00012

Ruddy, M. P., Thomas-Hemak, L., & Meade, L. (2016). Practice transformation: Professional development is personal. *Academic Medicine, 91*, 624–627. https://doi.org/10.1097/ACM.00000 00000 001059

Rural Health Information Hub. (2020). *Recruitment and retention for rural healthcare facilities*. https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention

Ryan, C., & McAllister, M. (2017). Enrolled nurses' experiences learning the nurse preceptor role: A qualitative evaluation. *Collegian, 24*(3), 267–273. https://doi.org/10.1016/j.colegn.2016.04.001

Schaufeli, W. & Bakker, A. (2004). Utrecht work engagement scale: Preliminary manual. *Utretcht University*, pp. 1-60. https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701–716. https://doi.org/10.1177/0013164405282471

Schaufeli W.B., Salanova M., González-Romá V., Bakker A.B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *J. Happiness Stud*3:71–92. https://doi.org/10.1023/A:1015630930326

Tawse, A., Patrick, V.M., & Vera, D. (2019). Crossing the chasm: Leadership nudges to help transition from strategy formulation to strategy implementation. *Business Horizons, 2019*(62), 249-257. https://doi.org/10.1016/j.bushor.2018.09.005

Teoli D, Sanvictores T, & An J. SWOT Analysis. [Updated 2020 Sep 7]. *In StatPearls* [Internet]. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK537302/

Trusted Health. (2020). *Frontline nurse mental health & well-being survey*. https://uploads-ssl.webflow.com/5c5b66e10b42f155662a8e9e/608304f3b9897b1589b14bee_mental-health-survey-2021.pdf

Van Camp, J., & Chappy, S. (2017). The effectiveness of nurse residency programs on retention: A systematic review. AORN Journal, 106(2), 128–144. https://doi.org/10.1016/j.aorn.2017.06.003

Vivian Health. (2021). *One year in—What's next for healthcare workers*. https://www.vivian.com/community/announcements/one-year-in-whats-next-for-americas-healthcare-workers/

Walker, S. (2012) *Employee engagement and communication measurement, strategy, and action*. Kogan page.

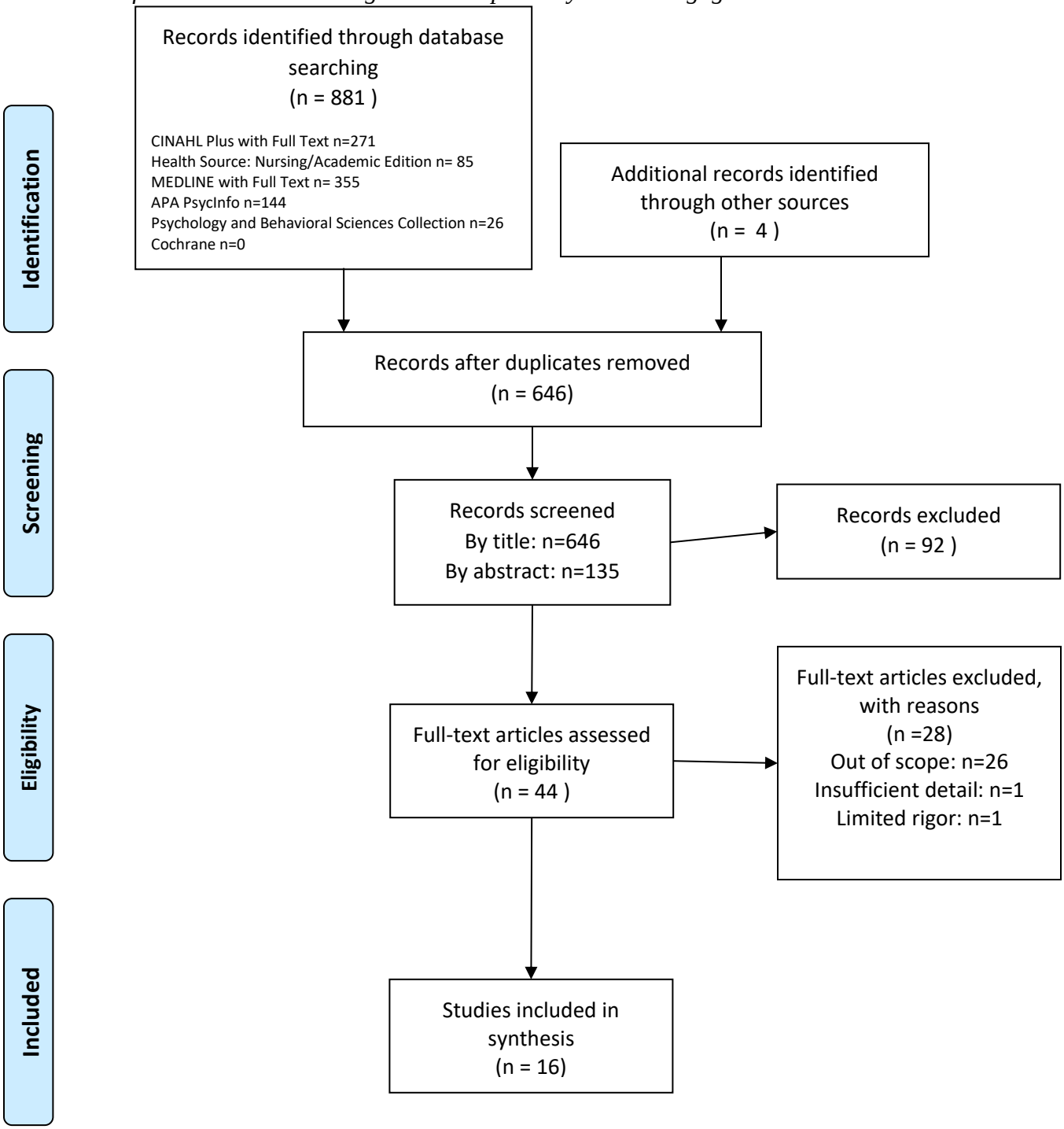
Ward, A., & McComb, S. (2017). Precepting: A literature review. *Journal of professional nursing, 33*(5), 314–325. https://doi.org/10.1016/j.profnurs.2017.07.007

Zhang, X., Tai, D., Hugh, P, Lin, V.W. (2018). United States registered nurse workforce report cared and shortage forecast: A revisit. *American Journal of Medical Quality, 33*(3). 229-236. http://doi.org/10.1177/1062860617738328

Appendix A.1

Figure 1

Modified PRIMSA 2009 Diagram: Preceptor Buy-In and Engagement



Adapted from: Moher, D., Liberati, A,, Tetzlaff, J., Altman, D.G., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med*, *6*(7). https://doi.org/10.1371/journal.pmed.1000097

Appendix A.2

Table 7

Evaluation Table: Preceptor Buy-In and Engagement

Citation 1:
Applequist, J., Miller-Day, M., Cronholm, P.F., Gabbay, R.A., & Bowen, D.S. (2017). "In principle we have agreement, but in practice it is a bit more difficult": Obtaining organizational buy-in to patient-centered medical home transformation. *Qualitative Health Research, 27*(6), 909-922. https://doi.org/10.1177/1049732316680601

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
Lewis's OSMCI, stakeholder theory	**Design**: Field-based investigation using interviews **Purpose**: (1) To describe the messages used to promote BI to OC and (2) to identify messages that organizational members report as most effective in securing BI to OC	**N=Not given** **Setting**: 20 medical practices in mid-Atlantic state	Messages used to promote BI to OC; how messages are conveyed in transitioning organizations	Overarching themes emerging from interviews	NVivo, 3-phase coding process,	**<u>Overarching themes</u>** **Effective communication and feedback** 1. Consistent and collaborative meetings -Weekly staff meetings promoted teamwork and provided setting for group discussions about decisions, staff recognition, and performance reviews -Weekly staff communication increased BI -Member input was important requirement for BI -Study participant believed that staff was more stable due to institutionalization of meetings where staff were heard,	VI	**Strength**: Interviews were audio recorded and professionally transcribed. Three-phrase coding process was used. Discrepancies in coding resolved by group consensus. **Weakness**: Study only focused on one geographical area. Patients were not included in interviews. **Conclusion**: The following overarching themes were identified as necessary components to gaining stakeholder BI: (1) effective communication and feedback, (2) appropriate reinforcement techniques, and (3) identification of a clear "champion" or "team leader" to encourage and facilitate change. Transformational

						involved in discussions, and engaged 2. Defining and justifying the PCMH model -Answering the *what*, *how*, and *why* about OC explained benefits of change and was important to accomplish BI -When the *why* for OC was not addressed, a visible lag in BI/total lack of BI were noted 3. Promotion of different work, not harder work -Properly preparing staff and care personnel for new ways of working essential for BI **Reinforcement techniques** 1. Accentuation of positive efforts made by practice members -Positive reinforcement and repetition necessary for sufficient change in behavior -Making a “big deal” about accomplishments and using rewards		leadership relates to the process of BI.

						2. Public display of outcomes promoted positive competition among members -Public reporting of individual successes and challenges in critical areas recommended by NCQA -Created public accountability -Displaying results via charts, rates, and other public displays motivated staff and increased staff awareness of performance **A Change Implementer (Champion/Leader) is Crucial** 1. Frequent face-to-face communication between leaders and personnel -Having a champion increased BI -Champions serve as motivational coaches, lead by example, and are successful communicators -Champion manages stakeholder interests, opinions, and concerns -Champions encourage face-to-		

						face, truly interpersonal, communication among staff -When champions help staff identify their own objectives and capabilities for change, the transformation goal was perceived as more realistic. 2. Promoting transition above transformation -Merely introducing the model and principles will not initiate immediate transformation -Reinforcement of "slow and steady" OC through transparent and involved leadership was viewed as helpful to BI		

Legend: BI=buy-in; LOE=level of evidence; NCQA= National Committee for Quality Assurance; OC=organizational change; OSMCI= organizational stakeholder model of change implementation; PCMH=patient-centered medical home

Citation 2:
Cervera-Gasch, A., Gonzalez-Chorda, V.M., Mena-Tudela, D., Salas-Medina, P., Folch-Ayora, A., & Macia-Soler, L. (2018). Participation of clinical nurses in the practical education of undergraduate nursing students. *Enfermería Clínica*, *28*(3), 171-178. https://doi.org/10.1016/j.enfcli.2017.11.003

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
N/A	**Design:** Observational, cross-sectional, descriptive study with validated online questionnaire **Purpose:** To determine clinical nurses' LOPCM of nursing students and to identify variables which could affect the LOPCM	**N=117 clinical nurses who have mentored previously**, study excluded nurses who have never mentored **Setting**: Public health centers and the Universitat Jaume in the Spanish provice of Castellón, January o June 2014	DV=Nurses' LOP in student mentorship as measured by IMSOC IV= Demographics of nurses with mentorship experience -Sociodem -Academic -Research -English use -Profession -Mentorship	Bivariate analysis to determine relationship between socio-dems, training research, and total IMSOC score variables IMSOC measures LOP of the clinical professional in mentoring nursing students	IMSOC with 5-point Likert scale (*Totally disagree* to *Totally agree*) and 3 categories (unsuitable, adequate, excellent)**,** SD, Me, IQR, 95% CI, Kol-Smir test, MWU test, Kruskal-Wallis test, Spearman test, IBM® SPSS® v. 21, p<0.05	**Overall Me IMSOC score** 122.838 (SD 18.69; 95% CI 119-46-126.26) -Previous training in mentorship showed correlation to higher participation in all IMSOC dimensions, (p<.001 to p=.034, depending on dimension). -Significant correlations between LOPCM obstacles faced during CM and the age of the mentor (p=0.43). -Attending >6 congresses associated with the least difficulty in CM (Me 29.5, IQR 1.2, p=0,06) -WE (p=.004). score was highest for primary care	VI	**Weaknesses:** Limited to Spanish setting, possibly limiting transferability to international settings. **Strengths:** Rigorous validation of goodness of fit and clear report of statistical significance. **Conclusion**: Predictors of higher LOPCM included previous training in mentorship, participation in congress, primary care work environments, and among fixed staff.

						professionals (ME 134, IQR 13.4). -Better results in involvement associated with WS (p=.026) and WE (p<.001) among fixed staff (Me 34, IQR 9.7) and primary care staff (Me 37, IQR 4) having better results. No significant correlation between overall IMSOC score and mentor age (p=.645), qualifications (p=.112), post-grad training (p=.371), communications at congresses (p=.785), level of English (p=.749), or employment situations (p=.785).		

Legend: CI=confidence interval; CM=clinical mentorship; IQR=interquartile range; IMSOC= Involvement, Motivation, Satisfaction, Obstacles, Commitment questionnaire; LOE=level of evidence; LOPCM=level of participation in clinical mentorship; N/A=not applicable; Me=mean; MWU=Mann Witney U; Kol-Smir=Kolmogorov-Smirnov; SD=standard deviation; IBM® SPSS®=International Business Machines Corporation Statistical Package for the Social Sciences; Socio-Dems=socio-demographics; WE=work environment; WS=working situation; yr=year

Citation 3:
French-Bravo, M. & Crow, G., (2015) Shared governance: The role of buy-in in bringing about change. *Online Journal of Issues in Nursing,20*(2). http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-20-2015/No2-May-2015/Articles-Previous-Topics/Role-of-Buy-In-In-Change.html

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
N/A	**Design**: LR **Purpose**: To identify prerequisites to BI and factors that facilitate BI which, when cultivated, may positively influence nurse engagement	N/A	N/A	N/A	N/A	-"Buy-in is considered to be a personal and professional commitment to actively engage in a process, task, or initiation" ("What Buy-In Looks Like, para.2) -Without BI, staff is more likely to "go through the motions and not commit to a level of change that results in active engagement" ("What Buy-In Looks Like, para.2) -Prerequisites to BI include voluntary attendance, verbalization, vote, show of hands, formal application, psychological states (psychological meaningfulness, safety, and availability), emotional BI (employee commitment) and	VI	**Strength**: Strong evidence from LR. Article published by the scholarly journal of the ANA. **Weakness**: Lower LOE. **Conclusion**: Understanding the prerequisites and barriers may help leaders obtain the BI needed to sustain engaged staff. "Buy-in is the difference between an engaged nursing staff and employees who are disengaged or are just going through the motions" ("Future Directions, para. 1). BI can be promoted by "(a) promoting psychological meaningfulness, safety, and availability and (b) spurring initial engagement and trust, helping employees understand the balance of options faced by the organization, creating positive personal connections built on mutual trust, and making time available for initiative success" ("Future Directions", para. 2).

						intellectual BI (understanding), initial factors (engagement, trust, balance of options, personal connection, adequate time to engage) -Shared governance can facilitate point-of-service nursing staff BI by allowing nurses greater control and autonomy -Obtaining BI requires timely, accurate, credible communication, and thorough understanding of what's important to employees -Barriers to BI: too many competing priorities frustrate and overwhelm, time constraints (not enough time to evaluate risks/benefits, not enough time to focus on quality nursing care)		

Legend: ANA=American Nurses Association; BI=buy-in; LOE=level of evidence; LR=literature review; N/A=not applicable

Citation 4: French-Bravo, M., Nelson-Brantley, H. V., Williams, K., Ford, D. J., Manos, L., & Brooks, J. V. (2020). Exploring nurses' perceptions of nurse managers' communicative relationships that encourage nurses' decisions to buy-in to initiatives that enhance patients' experiences with care. *Journal of Nursing Management*, *28*(3), 567–576. https://doi.org/10.1111/jonm.12958								
Conceptual Framework /Basis	**Design/ Method**	**Sample/ Setting**	**Major Variables**	**Outcome Measure**	**Data Analysis**	**Findings**	**LOE**	**Quality of Evidence**
Natural enquiry, ontological realism, epistemological constructionism	**Design**: Exploratory qualitative descriptive study **Purpose**: To explore nurses' perceptions of NMs' communicative relationships that encourages nurses' decisions to buy-in to OI to enhance PEC	**N=15 nurses**, purposive sampling **Setting**: 2 inpt med-surg units in a large. Magnet-designated acute care hospital, Midwest, USA		Semistructured interviews using open-ended questions (in-person & telephone); demographic questionnaire	CICA, code creation, categorization of codes into themes, Lincoln & Guba's (1985) criteria (i.e., credibility, dependability, confirmability, transferability),	Themes describing NM's communication leading to nurse BI to OI: 1. Multimodal approach to communicating and influencing -Communication info (action) -Using data to communicate results and influence performance (action) -Serving as role model to influence change (behavior) -Influencing culture (behavior) -Demonstrating characteristics desired by staff (behavior) 2. Engaging and supporting staff	VI	**Weakness:** Possible selection bias. **Strength:** The interviews were audio-recorded and transcribed verbatim. The PI took field notes. Interviews continued until saturation was reached with new information. Data was triangulated to support credibility and confirmability. **Conclusion**: Nurses in the study reported that strong communicative relationships with the NM encouraged BI and engagement in PEC initiatives.

						-Filtering messaging from the system to the unit (action) -Supporting & enabling individuals & teams (action) -Sharing accountability for success/failure (action) -Seeking to understand & help others to understand action (action) 3. Promoting staff-led decision-making. -Helping staff understand goals (outcome) -Supporting staff to drive the work (outcome) -Increasing peer interaction support unit work (outcome)		

Legend: BI=buy-in; CICA=conventional inductive content analysis; inpt=inpatient; LOE=level of evidence; med-surg=medical-surgical; NM=nurse manager; OI=organizational initiatives; PEC=patients' experiences with care; PI=principal investigator; PPT=PowerPoint presentation; pt=patient

Citation 5:
Jones, E. A., Simpson, V., & Hendricks, S. M. (2017). Enhancement of professional development of front-line nurse preceptors in a dedicated education unit. *Journal of Continuing Education in Nursing, 48*(1), 40–46. https://doi.org/10.3928/00220124-20170110-09

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
Roger's diffusion of innovation theory	**Design:** quasi-experimental pre-/post-, one-sample design using self-reported survey data **Purpose:** To evaluate if staff nurses who function as preceptors in a DEU demonstrate an improved sense of professionalism compared to nurses not serving in this role	**N=118 out of 356 surveyed preceptors** **Setting:** 4 medical surgical units at major metropolitan hospital, Indiana University Health Arnett Summer 2014	-RN self-reported RPPE survey data measuring components of professional practice environment -Front-line staff's participation in DEU as preceptor	Comparison analysis of RPPE survey before and after preceptor orientation program and participation as preceptor in DEU	Data Analysis, Qualtrics®, t-test at 95% CI, Cron α, effect size	Front-line nurses who participated as a preceptor for one semester in a DEU demonstrated statistically significant improvement in 2 of 8 components of professional practice measured by RPPE, including leadership and motivation. **Cron α of Pre- and Post-Survey Components** **Pre-Survey Me (SE, p-value)** Leadership 9.7776 (1.8798, p=0.0045) Motivation 17.1989 (1.8871, p=0.0325) **Post-Survey Me (SE, p-value)** Leadership 10.9117 (0.7218, p=0.0045) Motivation 18.2489 (1.4224, p=0.0325)	III	**Strength:** Statistical significance reported and considered in conclusion of study results. **Weakness**: Study was limited by the single hospital clinical site and specialized unit. Small sample size may have impacted the reliability of coefficients and the ability to identify statistically significant difference in some components. **Conclusion:** Front-line nurses who participated in preceptor orientation and DEU demonstrated significantly higher scores in *leadership autonomy in clinical practice* and *internal work motivation* than nurses who did not participate in the DEU.

Legend: CI=confidence interval; Cron α=Cronbach's alpha; LOE=level of evidence; DEU=dedicated education unit; Me=mean; RN=registered nurse; RPPE=Revised Professional Practice Environment; SE=standard error

Citation 6:
Knott, G. J., Mylrea, M. F., & Glass, B. D. (2020). A scoping review of pharmacy preceptor training programs. *American Journal of Pharmaceutical Education, 84*(10), 1322–1334. https://doi.org/10.5688/ajpe8039

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
ACPE, CCAPP, ASHP, and APC standards for pharmacist preceptor development; Kirkpatrick's model of educational effectiveness	**Design:** Scoping review **Purpose:** To review the literature pertaining to pharmacy preceptor training programs	**N=21 out of 222 potential studies** Review followed six-stage methodology of Johanna Briggs Institute. Databases: Cinahl, Medline (Ovid), Scopus, ERIC (educational), and Informit A+ Education; 2004-2018	**Guiding question:** "How are pharmacy preceptor training programs currently being designed, delivered, and evaluated?"	Design, delivery, and evaluation of pharmacy preceptor training programs	Newcastle-Ottawa Scale	**Common preceptor training methods**: face-to-face, web-based modules, written materials (i.e., preceptor manual, pre-session assignments, self-study readings), combination. **Support measures commonly offered:** online preceptor networks, preceptor meetings, preceptor "pearls", newsletters, mentoring of new preceptors, preceptor recognition/excellence Awards, incentives for preceptor participation, preceptor integration into academic team. Program evaluations highly positive with high preceptor satisfaction. **Preceptors-reported program benefits**: ease-of-access to training, self-directed learning, interactive,	VI	**Strength:** Study summarized common findings from preceptor training programs. Quality of findings evaluated using Newcastle-Ottawa Scale. **Weakness:** Literature rated as poor quality according to the Newcastle-Ottawa quality assessment scale. **Conclusion:** Evaluation of preceptor training programs show high preceptor satisfaction rates, with preceptors appreciating the ease of access of online training and the benefits of interaction with other preceptors in face-to-face training. Preceptors reported positive changes in their behavior and attitudes toward precepting and an increased understanding of student learning needs. The review recommended inclusion of preceptor training in teaching, mentoring, and site-specific material.

						good to share ideas, positive changes to behavior and attitudes, good insight into student learning, preceptor reported making changes to personal style of preceptorship, increased confidence and career satisfaction, better ability to maintain clinical skills, increased job opportunities. **Preceptor reported concerns and issues**: lack of time/remuneration/acknowledgement/ways of dealing with unmotivated/problem students. **Preceptor requests for training**: teaching skills, how to serve as role model, making time for students, effective communication, student assessment and feedback.		

Legend: ACP= Australian Pharmacy Council; ACPE=Accreditation Council for Pharmacy Education ; ASHP=American Society of Health System Pharmacists; CCAP= Canadian Council for Accreditation of Pharmacy Programs; LOE=level of evidence;

Citation 7:
Macey, A., Green, C., & Jarden, R. (2021). ICU nurse preceptors' perceptions of benefits, rewards, supports, and commitment to the preceptor role: A missed-methods study.

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
Conceptual framework of Kanter's Structural Determinants of Behavior in Organizations	**Design:** Cross-sectional mixed-method using questionnaire **Purpose:** To explore ICU nurses' perceptions of benefits, rewards, supports, and commitment to the role of preceptor	**N=33 nurses** **Setting:** Metropolitan hospital ICU, Victoria, Australia; October 2018	N/A	Preceptor responses to CPR scale, PPBR scale, & PPS scale; open-ended, focused questions, demographics	Liker-scale, Cron α, IBM® SPSS® v. 24, Sums, Me, G-Me, Pearson's product-moment coefficient	Correlation between: -Perceptions of benefits/rewards and commitment to the role (p=.003, r2=.39) -Preceptors' perceptions of support and their commitment to the role (p=.001, r2=.46) PPBR scales demonstrated overall commitment to the role (G-Me: Me 4.24, SD 0.62, n=20) PPS scale demonstrated lower perception of support for the role (G-Me: Me 4.77, SD 0.75, n=28) Strong correlations noted between	VI	**Strength:** Findings consistent with other studies. **Weakness:** Convenience sample from ICU may reduce generalizability to other settings. Small sample. **Conclusion:** Recognizing importance of preceptorship for the organization, increasing consistency of contact between preceptorship dyads, and increasing access to support and preparation associated with increased commitment to the preceptor role.

						perceptions of rewards/benefits of being a preceptor & commitment to the role (r=.63, p= .003, n=20) Stronger relationship noted between commitment to the role and perceived intrinsic rewards than extrinsic rewards (r=.61, p=.005, n=20 *vs* r=.56, p=.01, n=20, respectively) Moderate relationship between perceived support and commitment to the role (r=.68, p=.001, n=20). Significant different observed between perceived level of rewards and benefits to the organization and commitment to the role (MD=.56, 95% CI: .24-1.10, Hg=.98).		

						Perceptions of adequate preparation significantly higher among those who attended formal preceptorship preparation program (Me=4.33, SD=.95, n=12) vs those who did not (Me=3.20, SD=1.58, n=15, t=2.17, p=.039; MD 1.13, 95% CI: .06-2.20, Hg=.91) **Preceptors perceptions of benefits & rewards:** Helping, personal professional development, opportunity to teach, organizational improvement, personal satisfaction **Supports & Barriers to preceptorship** -Barriers: role conflict,		

						interpersonal relationships, under-preparation for the role, logistics (floor pattern) -Enablers**:** logistics (opportunity for patient continuity) -Adequate preparation -Peer support -Leadership support		

Legend: Cron α=Cronbach's alpha; CPR=Commitment to the Preceptor Role Scale; G-Me=grand mean; Hg=Hedge's g; ICU=intensive care unit; LOE=level of evidence; MD=magnitude of difference; Me=mean; PPBR=Preceptors' Perceptions of Benefits and Rewards; PPS=Preceptors' Perceptions of Support; SD=standard deviation, IBM® SPSS®=International Business Machines Corporation Statistical Package for the Social Sciences; the role=the preceptor role; vs=versus

Citation 8:
Miura, M., Daub, K., & Hensley, P. (2020). The one-minute preceptor model for nurse practitioners: A pilot study of a preceptor training program. *Journal of the American Association of Nurse Practitioners, 32*(12), 809–816. https://doi.org/10.1097/JXX.0000000000000300

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
OMP model, Parsons' Preceptorship Self-Efficacy Instrument	**Design:** Pilot study, one-group pretest/posttest design **Purpose:** To develop a nurse practitioner preceptor training program and to evaluate the program following implementation	**N=9 participants** **Setting:** FQHC in rural Hawaii, October 2018	**DV1** Preceptor self-efficacy **DV2** Participant willingness to become a preceptor **IV** 1.5-hr preceptor training program using OMP model	Participant feedback and self-assessments completed as pretest, posttest, and 3-month follow-up. Instruments included Willingness Questionnaire, NP Preceptor Self-efficacy Questionnaire, and Course Evaluation; Pretest demographic questionnaire	RMANOVA, Friedman Exact test, Excel	**Participant Demographics** Ages 34-66 yrs; 100% female; 1-10+ yrs preceptor experience; 1-20+ yrs NP experience; 75% reported previous formal preceptor training; 37.5% reported previous NP-specific preceptor training **Willingness (Pretest)** 88.9% participant response rate; 75% scheduled to precept in next 6 months; *time* and *getting paid* most frequently reported factors influencing decision to precept; 1 preceptor reported value of being a mentor as influence **Willingness (Posttest)** 77.8% (n=7) participant response	VI	**Strength:** Study distinguishes statistically significant results. **Weakness:** Focus on NP population may affect generalizability to bedside nurse population. Small sample size. Results reported as statistically significant not supported with numerical values. **Conclusion:** NP preceptor training improved aspects of participants' self-efficacy as NP preceptors and positively affected the decision to participate in preceptorship.

						rate; 57.1% served as preceptor in the preceding 3 months, used the OMP model, and rated the OMP model as "helpful" or "very helpful; Preceptors indicated that training program had positive effect on their decision to precept in the future *strongly agreed* (n=6), *neutral* (n=1); Five preceptors responses to *If you are not currently scheduled to precept in the next months, how likely are you to agree to become a preceptor in the next 6 months if given the opportunity?—very likely* (n=4), *somewhat likely* (n=1); Responses to open-ended question about factors influencing participants' future decision about becoming a preceptor included comments about the following: time, monetary compensation, fulfillment in helping		

						pass on knowledge, importance of having motivated students, one-minute preceptor helpful, mentorship. **Self-Efficacy Assessment** Pretest responses n=8, posttest responses n=9, follow-up n=7; Statistically significant results noted between time and self-efficacy, specifically related to knowledge to work with an NP student, knowledge of the preceptor role to perform effectively as a preceptor and abilities to maintain effective communication with students, balance multiple demands of students and own workload, effectively asses students' learning needs, adapt clinical teaching to meet a student's learning style, select learning experiences that are congruent with course objectives, and promote the		

						integration of skills learning in the classroom to the practice setting. **Post-Course Evaluation** Preceptor response rate 100% (n=9); *OMP lecture was helpful—strongly agree* 88.9% (n=8); *would use the skills and knowledge in teaching practice—strongly agree* 88.9% (n=8), *moderately agree* 11.1% (n=1); Qualitative comments: "liked being able to talk to other preceptors about problems," "enjoyed the free time at the end to talk story," "assessing different learning styles," and "great lecture."		

Legend: FQHC=federally qualified health center; LOE=level of evidence; NP=nurse practitioner; OMP=One-Minute Preceptor; RMANOVA=repeated-measures analysis of variance; yrs=years

Citation 9:
Morgan, M., Brewer, M., Buchhalter, F., Collette, C., & Parrott, D. (2017). Sustaining regional preceptor partnerships: Preceptor incentive survey. *Journal for Nurse Practitioners, 14*(1), e1–e4. https://doi.org/10.1016/j.nurpra.2017.08.013

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
N/A	**Design:** Preceptor incentive survey **Purpose:** To gain information on incentives and barriers to precepting with the intent to formulate a plan for sustaining the established partnerships for clinical training	**N= 165 (21%)** of 600 distributed surveys **Setting:** 4 academic partners of a federally funded Graduate Nurse Education project, Fall 2015 over 3 semesters	Preceptor incentive preferences rankings by tier, including preferences toward LOC, professional obligation, remuneration, library/faculty development access, academic affiliation, other. Barriers to preceptorship. Commitment to continue precepting.	Participant responses to voluntary and anonymous 5-question survey	Me, SD, rank	**Preceptor-Ranked Incentives to Precept** **Tier 1:** Preceptors' LOC in their ability to precept, teach, and evaluate (36.36%), sense of professional obligation (24.85%), remuneration (13.94%). Free-text survey responses: "love to teach," precepting as tool for recruitment, training, and hiring. **Preceptor-Ranked Barriers to Preceptorship** **Tier 1:** Decreased productivity (59.63%), adequate teaching time (54.66%). Free-text responses: "no barriers"/"none" (60% of free-text responses), "medical records slowing pt flow," "preceptor and student work,"	VI	**Strength:** Anonymous and voluntary sample **Weakness:** Small sample size **Conclusion:** Preceptor-indicated incentives to precept included preceptor LOC, professional obligation, and remuneration. Barriers to preceptorship were decreased productivity and adequate teaching time.

						Spanish language skills **<u>Preceptor Commitment to Continue Precepting</u>** 74.59% of respondents		

Legend: LOC=level of confidence; LOE=level of evidence; N/A=not applicable; Me=mean; pt=patient; SD=standard deviation

Citation 10: Mulherin, K., Walter, S., & Cox, C. D. (2018). National preceptor development program (PDP): Influential evidence and theory. The first of a 3-part series. *Currents in Pharmacy Teaching & Learning*, *10*(3), 255–266. https://doi.org/10.1016/j.cptl.2017.12.002								
Conceptual Framework /Basis	**Design/ Method**	**Sample/ Setting**	**Major Variables**	**Outcome Measure**	**Data Analysis**	**Findings**	**LOE**	**Quality of Evidence**
Adult educational theory	**Design:** QI research initiative employing a multi-method approach using semi-structured interviews (iterative, emergent), classic LR, advisory committee feedback **Purpose:** To gain detailed account of the current state of preceptor development; to compare and identify gaps between current state of preceptor development and published research; to ensure appropriate goals, objectives, and research questions; to provide feedback on final reports;	**Formal Interviews** N=15 **LR** N=167 articles **Stakeholder Interviews** N=2 interviews **Setting:** National PDP; Pharmacy faculties across Canada Interviews conducted between July 2014 to January 2015 included steering committee and PEP-C	**LR search terms**: preceptor development, training, education	Integrated analysis of all data obtained from interviews, LR, and advisory committee	**Interviews:** Audio capture technology, Nvivo qualitative data analysis software,	**Interviews** ExEd programs exhibited commonality in content and usually delivered programs online using modules or live lectures. Not all programs required preceptor education despite being mandated by academic accreditors. Perceptions varied regarding pharmacists' baseline knowledge, skills, and attitudes prior to engaging in the preceptor role. A national approach to PDP was desired. Seven content areas were identified as integral to preceptor development, including critical components of the preceptor roles, range of student learning styles, setting expectations	VI	**Strength:** Study followed a multi-method approach to support formation of 12 recommendations for development of PDP. **Weakness:** Authors report "absence of good evidence," thereby relying on adult educational theory. Setting within pharmacy/Canada should be considered in transfer to other disciplines/settings. **Conclusion:** Twelve recommendations emanate from the QI research initiative, 1-5 evidence-based and 6-12 from expert opinion. (1) Use of multiple media and mode options to attain preceptor competency, (2) PDP facilitated research, QI evaluation/reporting, and program assessment, (3) establishment of preceptor competencies as PDP foundational structure, (4) use of adult educational theories (constructivist social theory), (5) establishment of national PDP as primary point of

	to perpetuate recommendations	LR included search of CINAHL, Scopus, Medline, ERIC, EMBASE, and IPA;				for students, providing constructive feedback, formally assessing student performance, supporting students in succeeding, managing conflict and challenging situations, and policies and procedures. **LR** Literature of fair quality described numerous interventions but did not identify superior approaches to preceptor development. Twenty-nine of 167 articles reviewed included the following outcomes to PDPs: increased satisfaction rates, self-efficacy, perceived knowledge, skill retention, skill implementation, & participation rates.		access for all preceptors, (6) gamification of a learning platform to increase preceptor engagement and effectiveness, (7) independent evaluation of PDPs for effectiveness and efficiency, (8) perpetual resources to curate content and monitor social learning networks, (9) extraction of CPPD as an artifact of a larger CPD portfolio by a national platform, (10) collaboration between regulatory authority and faculties to phase in consistent regulation to make preceptor development mandatory, (11) integration of strategies known to positively impact preceptor retention, and (12) availability of support resources to enable staff to effectively assist preceptors in their educational role.

Legend: CINAHL=Cumulative Index to Nursing and Allied Health Literature; CPD=continuing professional development; CPPD= Continuous Professional Preceptor Development; EdEx= Experiential Education; EMBASE= Excerpta Medica Database; ERIC=Education Resources Information Center; IPA=International Pharmaceutical Abstracts; LOE=levels of evidence; LR=literature review; PDP=preceptor development program; PEP-C= Pharmacy Experiential Programs of Canada; QI=quality improvement

Citation 11:
Norris, J.M., Hecker, K.G., Rabatach, L., Noseworthy, T.W., & White, D.E. (2017). Development and psychometric testing of the clinical networks engagement tool. *PLOS ONE*, *12*(3), e0174056. https://doi.org/10.1371/journal.pone.0174056

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
IAP2	**Design**: Descriptive study **Purpose**: To develop a multi professional tool based on the IAP2 spectrum to measure engagement process in clinical network initiative and to assess the measurement properties of this tool, included reliability and validity of the scores	**N=424 surveys** out of 1,668 **Setting**: Strategic Clinical Networks in Alberta, Canada, January 2014-July 2014	**DV** overall engagement construct **IV** 5 potential engagement level constructs (inform, consult, involve, collaborate, empower) Items assessed engagement across 4 phases of implementation (setting priorities, planning, implementing, evaluating projects)	Survey responses from stakeholders (leaders, members, support, frontline stakeholders), expert panel review	Descriptive statistics, exploratory and confirmatory factor analysis, Pearson correlations, linear regression, multivariate analysis, Cron α analysis, IBM® SPSS® v22, EQS 6.1	**Exploratory factor analysis results** 4-factor solution/85.7% of total variance in engagement with clinical work initiatives (Cron α 0.87 to 0.99=acceptable reliability): *global engagement*, *inform* (provided with information), *involve* (worked together to address concerns), *empower* (given final decision-making authority) **Confirmatory factor analysis results and regression analysis** Confirmed *inform*, *involve*, and *empower* as significant predictors of *global engagement*, with *involve* as the strongest predictor **<u>Engagement Scores by Governance Level Me (SD)</u>** -Leaders (n=72)	VI	**Strength**: Hierarchically diverse sample of healthcare stakeholders used. **Weakness**: Potential for response bias from self-report survey. Potential selection bias because self-selected convenience sample prohibited comparison of responders to non-responders. Sample from single project in Alberta, Canada limits generalizability. **Conclusion**: The study offered foundational evidence for the use of the tool to assess engagement in clinical networks. Healthcare professionals viewed engagement differently depending on governance level. Use of an educational video did not significantly increase willingness to accept a preceptee.

						-Core and working group members (n=236) -Support personnel (n=50) -Frontline healthcare stakeholders (n=65) Global scale -Leaders 3.78 (1.08) -Members 2.51 (.95) -Support 2.75 (1.06) -Stakeholders 1.76 (.92) Inform scale -Leaders 4.24 (.97) -Members 3.59 (1.02) -Support 3.59 (1.10) -Stakeholders 2.69 (1.16) Involve scale -Leaders 4.03 (.96) -Members 3.24 (1.06) -Support 3.49 (1.02) -Stakeholders 2.44 (1.05) Empower scale -Leaders 2.83 (1.17) -Members 2.13 (1.02) -Support 2.47 (.94) -Stakeholders 1.74 (.77)		*Open access article distributed under the terms of Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in an any medium, provided the original author and source are credited

Legend: Cron α=Chronbach's alpha; EQS=EQS Structural Equation Modeling software; IAP2= International Association of Public Participation Spectrum; LOE=level of evidence; Me=mean; SD=standard deviation; IBM® SPSS®=International Business Machines Corporation Statistical Package for the Social Sciences

Citation 12:
Norris, J.M., White, D.E., Nowell, L., Mrklas, K., & Stelfox. (2017). How do stakeholders from multiple hierarchical levels of a large provincial health system define engagement? A qualitative study. *Implementation Science, 12*, 1-3. https://doi.org/10.1186/s13012-017-0625-5

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
N/A	**Design**: Qualitative thematic iterative approach, pragmatic philosophy, purposive sampling until data saturation reached **Purpose**: To explore how healthcare stakeholders defined engagement	**N=86 stakeholders** (leaders, core members, frontline clinicians, support personnel, other) **Setting**: Strategic Clinical Networks, Alberta Health Services, Canada	N/A	One-on-one telephone interviews that asked, "How do you define engagement?" and demographics	NVivo 10, coding, categorization, and conceptualization	**Themes** 1. Individual participation: -Individual participation - Individual willingness to participate -Active participation -Varying levels of involvement 2. Connecting around a purpose: -An interesting and relevant problem -Shared vision and decision-making -A voice around the table 3. Meaningful interactions and dialogue: -Two-way contribution, not a one-way information push -Communication -An invitation early in the process -Listening and understanding; being heard and considered -Respect and sincerity	VI	**Strength**: Interviews were digitally recorded, transcribed verbatim, and de-identified prior to analysis. Transferability of findings strengthened by diverse participant backgrounds. **Weakness**: Study limited to a single healthcare setting may affect transferability. **Conclusion**: Overall, the participants in the study defined engagement as active and committed decision-making about a meaningful issue through respectful interactions and dialog where everyone's voice is considered.

Legend: LOE=level of evidence; N/A=not applicable; NVivo= NVivo qualitative data analysis

Citation 13:
Nunes D'Aquila, M., Richter Lagha, R., Tramel, J., & Lie, D. A. (2019). Video technology to BOOST preceptor recruitment: A mixed methods study. *Journal of Physician Assistant Education*, *30*(3), 168–173. https://doi.org/10.1097/JPA.0000000000000263

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
N/A	**Design:** Mixed-methods study **Purpose:** To examine the impact of a brief video presentation for changing knowledge and attitude about precepting physician assistant students	**N=23 preceptors**; eligible participants practicing primary care or nurse practitioners **Setting**: 33-month Master of Physician Assistant Practice program in Los Angeles, California; 2016	Willingness to precept; belief that practice will benefit from precepting; knowledge about scope of practice of Pas; awareness of differences between precepting Pas, medical students, and NP students; comfort precepting a PA; comfort precepting a student from another profession; comfort evaluating clinical performance; comfort giving feedback about clinical performance; comfort precepting an	-Results from pre/post survey (5-point Likert scale; strongly disagree to Strongly agree) -Focus groups that were audiotaped, transcribed, and independently read by 3 researchers	Mean, standard deviation, p-value, pair samples t-test, independent samples t-tests, Bonferroni correction, descriptive statistics, IBM® SPSS® v. 23, G*Power, power analysis indicated sample of 20 needed to detect medium effect (d=0.50) with 80% power and alpha 0.05	**Pre-Survey/Post-Survey M(SD); t-test df** -Knowledge about scope of practice of PAs 3.3(1.0)/4.0(0.8) df 4.72* -Awareness of differences between precepting PAs and medical students 2.7(1.1)/4.0(0.9) df 5.60* -Awareness of differences between precepting PA and NP students 2.3(1.0)/3.4(0.8); df 4.64* -Comfort precepting a student from a profession other than their own 3.75(0.9)/4.2(0.6) df 4.38* -Comfort evaluating the clinical performance of a PA 3.7(0.8)/4.2(0.5) df 4.22* -Comfort precepting an interprofessional student team	VI	**Strength:** Participant demographic representative of a typical preceptor. Study survey determined to be adequately powered by a statistician, and survey findings were triangulated with qualitative arm. **Weakness:** Many participants taught medical students and were likely to already have positive attitudes about accepting PA students. **Conclusion:** Use of a portable, easy-to-present video was associated with increased knowledge and comfort in precepting PA students. Face-to-face presentations and in-person meetings were preferred to an email link with remote video. Preceptors expressed need for clear expectations about teaching and evaluating.

			interprofessional team			3.8(0.8)/4.1(0.6) df 3.10* * P < 0.05, P value adjusted using Bonferroni correction **Focus Groups Major Themes** Precepting increases my motivation to teach -Precepting viewed as way of "giving back" -Precepting keeps preceptors "up-to-date" Unclear about Expectations for Precepting PA Students -Better preparation made participants feel more comfortable precepting PAs -Better preparation translated into better student outcomes -One preceptor stated about residents, "If they…don't perform well, we're not performing well."		

						Barriers to Accepting PA Students -Time management -Administrative support Video Information Should Be Precented Face-to-Face Rather than via email link -Face-to-face presentations would be more effective -Questions would be directly answered at time of presentation Similarity between PA and MD students is a Positive for Taking PA Students -Similarities about PA and MD students shown in video encouraged preceptors to take PA students		

Legend: LOE=level of evidence; IBM® SPSS®=International Business Machines Corporation Statistical Package for the Social Sciences; N/A=not applicable; NP=nurse practitioner; PA=physician's assistant

Citation 14: O'Donoghue, S.C., DiLibero, J., Altman, M. (2021). Leading sustainable quality improvement. *Nursing Management, 52*(2), 42–50. https://doi.org/10.1097/01.NUMA.0000724940.43792.86								
Conceptual Framework /Basis	**Design/ Method**	**Sample/ Setting**	**Major Variables**	**Outcome Measure**	**Data Analysis**	**Findings**	**LOE**	**Quality of Evidence**
UK NHS Sustainability model, AI, Lewin's three-step change theory, Kotter's eight-stop change model	**Design**: Expert opinion and LR **Purpose**: To explore common causes of QI project failure and key strategies for success, including partnering with SNS to facilitate sustainable chane	**N**=N/A **Setting**: Healthcare QI projects in general	N/A	N/A	Evidence collected from LR	Staff require dedicated time away from the bedside to invest appropriate level of thought and engagement in QI activities. Bidirectional leadership from senior leadership to frontline staff and practical leadership from frontline staff to senior leadership facilitates staff engagement by making work meaningful, staff empowerment, & staff's commitment to sustainability. UK NHS Sustainability model involves factors to include staff involvement & training to	VII	**Weakness:** Support drawn from lower levels of evidence. **Strength:** Use of evidence from LR and conceptual frameworks/theories to support recommendations. **Conclusion**: Dedicated time away from the bedside, bidirectional leadership between leadership and frontline staff, staff involvement, staff training, and contests/rewards are recommended to promote engagement.

						support new process, staff behaviors toward sustainment, and engagement. AI promotes instituting a contest or rewards system to improve employee engagement.		

Legend: AI=appreciative inquiry; CNS=clinical nurse specialist; LOE=level of evidence; LR=literature review; UK NHS Sustainability model=United Kingdom's National Health Services sustainability model

Citation 15:
Ryan, C., & McAllister, M. (2017). Enrolled nurses' experiences learning the nurse preceptor role: A qualitative evaluation. *Collegian, 24*(3), 267–273. https://doi.org/10.1016/j.colegn.2016.04.001

Conceptual Framework /Basis	Design/ Method	Sample/ Setting	Major Variables	Outcome Measure	Data Analysis	Findings	LOE	Quality of Evidence
CoP model	**Design:** Qualitative evaluation using semi-structured group interviews **Purpose:** To evaluate if an innovating learning experience increased EN preceptor's knowledge of teaching and learning theory and assisted in EN preceptors in identifying specific learning needs required to support them in the role. *ENs are a type of diploma nurse in Australia that functions under the direction & delegation of	**N=15 EN preceptors**, snowball sampling **Setting:** 2 regional health services, Australia	- Preceptor perception of training in general - Preceptor perception of how well dedicated learning experience met preceptor needs - Learning experience about preceptor role using online learning resource via N2E website and 2 optional preceptor training workshops	Participant responses to semi-structured interviews	3-step thematic analysis -Read data in entirety -Highlighted to identify initial themes and interpretation check with research mentor -Researcher revisited data set using holistic reading approach to validate themes and uncover any new themes possibly missed previously	Themes prior to participation in dedicated preceptor learning: (1) Feelings of disempowerment hinder a desire to precept -Preceptors felt disempowered by feelings of inadequacy as teachers -Preceptors reported 4 areas for additional training: feedback, reflective practice, assessing students, teaching strategies (2) Preceptors open to embracing opportunities to learn about clinical teaching -Preceptors requested workshops/training at least 1x/yr -Preceptor reaction to online learning resources overwhelmingly positive. Like access	VI	**Strength:** Verbal data from semi-structured group interviews hand recorded. **Weakness:** Pilot intervention with small number of participants and snowball sampling. **Conclusion:** Preceptors shared similar experiences as RN colleagues in the literature and were lacking formal training in teaching/learning. This may affect their confidence and abilities in the role, suggesting that training needs to be more widely and consistently available for preceptors. Online learning resource and opportunities to increase shared community of preceptors was useful. Preceptors learned from others and felt empowered. This study gives preceptor perspective related o lack of training.

	RNs & NPs. ENs are permitted to precept.					to education for themselves and as a tool to educate their students. (3) Barriers to engagement -Time -Role conflict between clinician and preceptor roles (4) Precepting across nursing divisions -Precepting students from other domains/departments unsafe, unethical, and personal dilemma -Preceptor quote "I don't have the confidence to do the teaching but my surgical nursing skills and knowledge are good."		

Legend: CoP=community of practice; EN=enrolled nurse; LOE=level of evidence; N2E=nurse-to-educator; NP=nurse practitioner; RN=registered nurse; yr=year; x=time

Appendix A.3

Table 8

Levels of Evidence Synthesis_Preceptor Buy-In and Engagement

Level of Evidence	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Level I: Systematic review or meta-analysis of RCTs															
Level II: Randomized controlled trial															
Level III: Controlled trial without randomization					X										
Level IV: Case-control or cohort study															
Level V: Systematic review or meta-synthesis of Descriptive or Qualitative Studies															
Level VI: Descriptive or Qualitative study, clinical practice guideline, literature review, QI or EBP Project	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Level VII: Expert opinion															

Legend: EBP=evidence-based practice; QI=quality improvement; RCT=randomized controlled trial

1=Applequist et al. 2017; 2=Cervera-Gasch et al., 2018; 3=French-Bravo & Crow, 2015; 4=French-Bravo et al., 2020; 5=Jones et al., 2017; 6=Knott et al., 2020; 7=Macey et al., 2021; 8=Miura et al., 2020 , 9=Morgan et al., 2017; 10=Mulherin et al., 2018; 11=Norris et al., 2017, "Development"; 12=Norris et al., 2017, "Having"; 13=Nunes D'Aquila et al., 2019; 14=O'Donoghue et al., 2021; 15=Ryan & McAllister, 2017

Appendix A.4

Table 9

Intervention Synthesis of Evidence_Preceptor Buy-In

Intervention	1	2	3	4	5	6
Communication						
Weekly communication	↑					
Clearly defining & justifying OC	↑	↑				
Clearly answering the *what, how, & why* of OC	↑					
Accentuation of positive efforts made by staff (i.e., positive reinforcement, making a "big deal", public recognition; rewards)	↑					
Sharing/displaying of metrics	↑		↑			
Strong communicative relationships between leadership and staff			↑			
Leadership						
Transparent & involved leadership	↑					
Leadership allowing time for initiative success		↑				
Leadership serving as a role model to influence change			↑			
Leadership's demonstration of characteristics desired by staff			↑			
Promotion of different work, not harder work	↑					
CI (Champion/Leader)	↑					
Promotion of psychological meaningfulness	↑					
Support of staff's initial engagement	↑					
Building mutual trust between leadership and staff		↑				
Development						
Properly preparing staff for new way of working	↑					
Preceptor development/training				↑		
Preceptor training video						↔
Preceptor confidence level in ability to precept					↑	
Process						
Gradual OC	↑					
Stakeholder input/shared governance/shared decision making	↑		↑			
Other						
Remuneration					↑	

Legend: ↑ =Increased preceptor buy-in; ↔ =No change in preceptor buy-in; CI=change implementer; OC=organizational change

1=Applequist et al. 2017; 2=French-Bravo & Crow, 2015; 3=French-Bravo et al., 2020; 4=Miura et al., 2020; 5=Morgan et al., 2017; 6=Nunes D'Aquila et al., 2019

Appendix A.5

Table 10

Intervention Synthesis of Evidence_Preceptor Engagement

Intervention	1	2	3	4	5	6	7	8	9
Preceptorship development/training	↑	↑	↑	↑	↑	D	D	↑	D
Fixed staff as preceptors	↑								
Gamification of PDP leaning platform					↑				
Dedicated time away from the bedside								↑	
Bidirectional leadership between senior leadership and frontline staff								↑	
Staff involvement throughout all processes of initiatives								↑	
Contests/rewards for preceptors								↑	
Time constraints									D
Role conflict									D

Legend: ↑ Increased preceptor engagement; ↔ =No change in preceptor engagement; CI=initiatives; D=Descriptive evidence about *barriers* to preceptor engagement provided without reference to directional outcomes; D=Descriptive evidence about *facilitators* to preceptor engagement provided without reference to directional outcomes

1=Cervera-Gasch et al., 2018; 2=Jones et al., 2017; 3=Macey et al, 2021; 4=Morgan et al., 2017; 5=Mulherin et al., 2018; 6=Norris et al., 2017, "Development"; 7=Norris et al., 2017, Having"; 8=O'Donoghue et al., 2021; 9=Ryan & McAllister, 2017

Appendix A.6

Table 11

Outcomes Synthesis of Evidence _Preceptor Buy-in and Engagement

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Buy-In	↑		↑	↑				↑	↑				↔		
Engagement		↑								↑	D	D		↑	
Disengagement															D
Internal work motivation					↑										
Commitment							↑								
Changes to behavior and attitudes					↑										
Confidence						↑									
Satisfaction						↑				↑					
Self-efficacy								↑		↑					
Perceived knowledge										↑					

Legend: ↑ =Outcome changed in a positive way; ↔ =No change; D=Descriptive evidence provided without reference to directional outcomes; OC=organizational change
1=Applequist et al. 2017; 2=Cervera-Gasch et al., 2018; 3= French-Bravo & Crow, 2015; 4=French-Bravo et al., 2020; 5=Jones et al., 2017; 6=Knott et al., 2020; 7=Macey et al., 2021; 8=Miura et al., 2020; 9=Morgan, 2017; 10= Mulherin et al., 2018; 11=Norris et al., 2017, "Development"; 12=Norris et al., 2017, "Having"; 13=Nunes D'Aquila et al., 2019; 14=O'Donoghue et al., 2021; 15=Ryan & McAllister, 2017

Appendix B.1: Preceptor-Focused Assessment
The Preceptor Questionnaire

Please consider each statement with reference to your experience as a preceptor. Using the scale below, please mark the number which best describes your response to the statement.

1	2	3	4	5	6
Strongly disagree	Moderately disagree	Disagree	Agree	Moderately agree	Strongly agree

Part I: Preceptor's Perception of Benefits and Rewards Scale*

I am a preceptor because as a preceptor I have the opportunity to:

1. Teach new staff nurses and nursing students. 1 2 3 4 5 6
2. Assist new staff nurses and nursing students to integrate into the nursing unit 1 2 3 4 5 6
3. Increase my own knowledge base. 1 2 3 4 5 6

Part II: Preceptor's Perception of Support Scale*

1. I feel I have had adequate preparation for my role as a preceptor. 1 2 3 4 5 6
2. My goals as a preceptor are clearly defined. 1 2 3 4 5 6
3. The nursing staff do not understand the goals of the preceptor program. 1 2 3 4 5 6
4. My workload is appropriate when I function as a preceptor. 1 2 3 4 5 6

Part III: Commitment to the Preceptor Role Scale**

1. I am willing to put in a great deal of effort beyond what is normally expected in order to help the preceptee be successful	1	2	3	4	5	6
2. I am enthusiastic about the preceptor program when I talk to my nursing colleagues.	1	2	3	4	5	6
3. I feel very little loyalty to the preceptor program.	1	2	3	4	5	6
4. I find that my values and the values of the preceptor program are very similar.	1	2	3	4	5	6

*****Adopted from the Preceptor Questionnaire developed by Dibert & Goldenberg (1995).
Dibert, C., & Goldenberg, D. (1995). Preceptors' perceptions of benefits, rewards, supports and commitment to the preceptor role. *Journal of Advanced Nursing, 21*(6), 1144–1151. https://doi.org/10.1046/j.1365-2648.1995.21061144.x

**Adapted by Dibert & Goldenberg (1995) from the Organizational Commitment Questionnaire developed by Mowday et al. (1979). Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of Vocational Commitment, 14*. 224-227.

Appendix B.2: Preceptor-Focused Assessment
Utrecht Work Engagement Scale (UWES)

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, select the "0" (zero). If you have had this feeling, indicate how often you felt it by selecting the number (from 1 to 6) that best describes how frequently you feel that way.

1. At my work, I feel bursting with energy. [a] (VI1)
2. I find the work that I do full of meaning and purpose. (DE1)
3. Time flies when I am working. (AB1)
4. At my job, I feel strong and vigorous.[a] (VI2)
5. I am enthusiastic about my job.[a] (DE2)
6. When I am working, I forget everything else around me. (AB2)
7. My job inspires me.[a] (DE2)
8. When I get up in the morning, I feel like going to work.a (V13)
9. I feel happy when I am working intensely.a (AB3)
10. I am proud of the work that I do.a (DE4)
11. I am immersed in my work.a (AB4)
12. I can continue working for very long periods at a time. (VI4)
13. To me, my job is challenging. (DE5)
14. I get carried away when I am working.a (AB5)
15. At my job, I am very resilient, mentally. (VI5)
16. It is difficulty to detach myself from my job. (AB6)
17. At my work, I always persevere, even when things do not go well. (VI6)

Source: Schaufeli and Bakker (2003).

Note: Responses to each item are measured on a 7 point scale with scale point anchors labeled: 0-Never; 1-Almost Never (A few times or less); 2-Rarely (Once a month or less); 3-Sometimes (A few times a month); 4-Often (Once a week); 5-Very often (A few times a week); 6-Always (Everyday); VI=Vigor scale; DE=Dedication scale; AB=Absorption scale

*****Adopted from the Utrecht Work Engagement Scale developed by Schaufeli & Bakker (2006).

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701–716. https://doi.org/10.1177/0013164405282471

Appendix B.3: Preceptor-Focused Assessment

Open-Ended Questions/Comments

1. **What factors may have influenced you to give any ratings of less than a 4 or 5 on the Preceptor Questionnaire and UWES? Please feel free to give examples/scenarios to support your concerns.**

2. **What is going well with the NRP?**

3. **What could be improved with the NRP?**

4. **What is most important about the NRP to you?**

Appendix C

Table 12

Follow-Up Session Sign-Up Sheet

Follow-Up Session Sign-Up Sheet			
Please enter your name, position, department, and email address. Check one date/time to attend a Follow-Up Session. Each Follow-Up Session is expected to last 2-3 hours. Pizza or doughnuts and refreshments will be provided, depending on the time of day.			
Preceptor Name	**Position/ Dept./ Email**	**Selected Date/Time**	**Appointment Reminder Sent**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**
	Position: **Department:** **Email:**	□___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___ □___/___/___, ___:___	**Date:** **Method:**

Appendix D

Table 13

Follow-Up Session Agenda

Follow-Up Session Agenda		
Date: _____	**Time: _____**	
Time	**Content**	**Method**
5 minutes	Session/facilitator introduction	Printed/displayed PowerPoint Presentation
20 minutes	Brief summary of literature review and results from the Preceptor-Focused Assessment	Printed/displayed PowerPoint Presentation
10 minutes	Explanation of purpose and process of creating the Preceptor SWOT Analysis	Printed/displayed PowerPoint Presentation
15-20 minutes	Open discussion	Q&A and commentary
10-15 minutes	Preceptor SWOT Analysis Brainstorming	Printed handouts of blank Preceptor SWOT Analysis, pencils
50-80 minutes	• Share, summarize, and digitally record/display the strengths, weaknesses, opportunities, and threats that preceptors recorded during brainstorming • Share Preceptor SWOT Analyses from preceding Follow-Up Sessions • Additions/changes made to current session's Preceptor SWOT Analysis	Printed Preceptor SWOT Analyses Electronic Preceptor SWOT Analysis displayed via PowerPoint

Appendix E

Table 14

Follow-Up Session Attendance Sheet

Attendance

Date: ________________________ Time: ___________________________

Name	Position	Department
	Facilitator	
	Facilitator	

Appendix F

Table 15

Blank Preceptor SWOT Analysis for Brainstorming

Preceptor SWOT Analysis	
Strengths: List any strengths from within the NRP that you believe support preceptor buy-in and engagement.	**Weaknesses**: List any weaknesses from within the NRP that you believe endanger preceptor buy-in and engagement.
Opportunities: List any opportunities from outside of the NRP that you believe may support preceptor buy-in and engagement.	**Threats**: List any threats from outside of the NRP that you believe may endanger preceptor buy-in and engagement.

Appendix G

Table 16

Preceptor SWOT Analysis

Preceptor SWOT Analysis	
Strengths: • Being able to have time to help mold new nurses into great co-workers.	**Weaknesses**: • Excessive charting • Disconnect from resident due to excessive charting, classes pulling student away from preceptor, preceptor not knowing what student is learning in classes to help preceptor apply to floor experience, switching preceptors, preceptor not aware of where the preceptee is in the training when switching preceptors) • Better management. The coordinator of the program needs to be more involved with the assignments that the preceptor/residents are given, so the coordinator understands what the resident needs and what opportunities are currently available within the unit to meet those needs. • Blaming the preceptor for their resident's failure. • Having to do extra computer work. Lots of check offs.
Opportunities: • Increased administrative support • Increased program support of preceptor concerns/recommendation (address issues and fix them, or at least explain why they are not.) • A preceptor class would be helpful. A class was promised at the beginning but never given. • Consistency would be great. Making sure that the preceptors are always with the sum resident and have the same schedules. • Excited students that want to become a part of our program because they learn about it while here as a student.	**Threats**: • Negativity from non-Versant staff • Lack of understanding about what the resident is being taught away from the preceptor/floor • Preceptor not fully understanding/aware of program/hospital/administration's expectations for the preceptor/resident/program • The untruthfulness that continues from administration may deter preceptors from taking residents in the future. • Being mandated to do the program and not have the option to stop are huge factors that keep the program undesirable. • People talk down about the program even when they aren't involved in it.

Table 16

Blank Leadership SWOT Analysis for Brainstorming

Leadership SWOT Analysis	
Strengths: List any strengths from within the NRP that you believe support preceptor buy-in and engagement.	**Weaknesses**: List any weaknesses from within the NRP that you believe endanger preceptor buy-in and engagement.
Opportunities: List any opportunities from outside of the NRP that you believe may support preceptor buy-in and engagement.	**Threats**: List any threats from outside of the NRP that you believe may endanger preceptor buy-in and engagement.

Table 17

Leadership SWOT Analysis

Leadership SWOT Analysis	
Strengths: • Preceptor perceived benefit for residents • Preceptor willingness to go above and beyond	**Weaknesses**: • Aggressive stance from preceptors when they're explaining dissatisfaction rather than constructive criticism to enhance growth and change
Opportunities: • Leadership engagement and unified support	**Threats**: • The preceptors with negative feelings that are strongly verbalizing their thoughts to those who are not of the same mind set

Appendix H
Organization Letter of Support

835 Sweitzer Street • Greenville, OH 45331
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October 12, 2021

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Kimberlee Freeman, DNP, MS, RN, NEA-BC, FACHE

Kimberlee Freeman, DNP, MS, RN, NEA-BC, FACHE
Vice President of Patient Care Services/CNO
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Appendix I.1

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