Promoting the Retention of Novice Primary Care Nurse Practitioners Through Mentorship

and Wellness

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Abstract

While the COVID-19 pandemic continues to evolve, America's nursing work force continue to work in the most challenging of circumstances. While expected to hold the fort and continue on, deep inside, they bury an unprecedented level of acute stress, anxiety and depression. Peer support groups have been posed as a possible coping behavior. This cross-sectional designed project was developed to assess the worth and feasibility of a virtual peer support group with a focus on healthcare provider wellness during a period of surge of the COVID-19 pandemic. Overwhelmed staff, technology/documentation changes and challenges, competing clinical demands, short-staffing and Zoom fatigue were identified as the limiting factors for this project's completion within its given timeframe. These findings informed of current barriers, providing a basis for future program development to mitigate the impact of psychological distress among healthcare providers. Evolving literature on this topic supports recommendations for further study and action by individual health care providers, organizations and at the state and national levels.

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The United States (U.S.) Healthcare System is struggling to meet the increasing demand for primary care providers to care for its growing and aging population. It is estimated that by 2034, there will be more older adults than children (United States Census Bureau, 2018). Furthermore, while the passage of the Affordable Care Act provided opportunity to thousands of uninsured Americans, this overburdened healthcare system became stretched even further (H.R. 3590: Patient Protection and Affordable Care Act, 2010). By the year 2025, the American Association of Medical Colleges estimates than an additional 60,700 to 94,700 physicians will be needed to meet the U.S. healthcare demands (Corso & Larochelle, 2018). Although Arizona leads the nation as fourth in population growth, the state ranks 42nd of the 50 states in total active primary care providers (PCPs) at 77.9 per 100,000, meeting just 40% of its PCP need (The University of Arizona Mel & Enid Zuckerman College of Public Health, 2020).

To help address this primary care provider shortage, nurse practitioners (NPs) who are entering the workforce are being trained in primary care. According to the American Academy of Nurse Practitioners, there are over 290,000 NPs licensed in the U.S. with 88.9% certified in primacy care. Primary care certification is obtained by certifying as a nurse practitioner in Family, Adult, Adult-Gerontology, Pediatrics-Primary Care or Women's Health. Of those certified in primary care, 70.2% deliver primary care (American Academy of Nurse Practitioners, April 2021). As of 2019, the number of primary care NPs in Arizona (11,585) was just over two times the number of primary care physicians (5,362) (The University of Arizona Mel & Enid Zuckerman College of Public Health, 2020). As Arizona is a full practice authority

state, primary care nurse practitioners are a vital component to address its current and future health care delivery needs.

New NPs face significant challenges. The responsibility and workload of being a new PCP with an assigned patient panel and a complex electronic health record (EHR) system is accompanied by the stress factors of role transition from registered nurse (RN) to NP. This drives NPs to leave the PCP role for a different position, such as urgent care, same day or specialty care. The PCP NP turnover rate is twice that of physicians (Barnes, 2015), with the NP attrition rate from the PCP role cited at 21% (Mahoney & Fox, 2018). As provider turnover occurs, employers incur the costs involved with recruitment, hiring and training of PCP replacements. According to a survey by SullivanCotter, "The total direct cost for a single advanced practice provider (APP) ranges between $85,832 and $114,929, which is consistent with data from both physician and nursing turnover research" (Hartsell & Noecker, 2020, p.3). While difficult to estimate, the indirect costs, such as: loss of productivity, vacancy length, canceled patient visits and interview time are likely to be significantly higher (Hartsell & Noecker, 2020). During this transition, additional demands are placed upon the remaining providers in the practice to care for the departed NP's patients. This can lead to provider dissatisfaction and burnout, which can manifest into an additional indirect cost.

Transition shock has been described in the literature as "disorienting, confusing, and doubt-ridden chaos which can lead to anxiety, insecurity and exhaustion" (Fitzpatrick, 2016, e419). In comparison to physician training programs, nurse practitioner programs currently lack a standardized residency program, which includes support through mentoring and socialization that bridges the gap between formal education and independent practice. A mentoring program

designed to encourage and support the novice NP would help fill this current gap, thereby, promoting a positive, healthy work environment.

Purpose and Rationale

To achieve a successful primary care provider role transition, new nurse practitioners require support from all members within their chosen organization. Furthermore, a thorough understanding of the NP's professional grown and development stages along with their unique needs are essential to increase the numbers of confident and competent primary care NPs within an organization. Four stages of NP transition into practice have been identified in the literature. The first stage, "laying the foundation", includes post-graduate activities, such as taking/passing the certification exam, obtaining licensure and finding employment (Owens, 2018; Brown & Olshansky, 1998). The second stage, "launching", includes the first year of employment, which has been identified as the most difficult as new NPs are challenged with role identification, the development of time and patient management skills, and combatting the anxiety related to their new role (Owens, 2018; Brown & Olshansky, 1998). The third stage, "meeting the challenge", is the period where the new NP begins to feel a sense of clinical competence and confidence (Owens, 2018; Brown & Olshansky, 1998). The fourth stage, "broadening the perspective", includes the NP's development of a sense of legitimacy and can take on greater responsibilities (Owens, 2018; Brown & Olshansky, 1998).

While the intent of a novice NP mentoring program is to support the new NP's "launch" into independent practice, it is anticipated that the NPs who are in the fourth stage, "broadening the perspective" (Owens, 2018; Brown & Olshansky, 1998) would also be retained. According to Hartsell & Noecker, 2020), advanced practice providers (APPs) are 22% less likely to leave an

organization within the next year and will recommend their organization to others as a good place to work if they are feel maximally utilized (i.e., mentorship).

The benefits of mentoring are two-fold. During the mentoring process, as the mentor watches their mentee(s) grow professionally, their own nursing practice progresses. A positive mentor-mentee relationship contributes to a healthy work environment and joy in work which leads to less provider burnout. According to the Institute for Healthcare Improvement, "The most joyful, productive, engaged staff feel both physically and psychologically safe, appreciate the meaning and purpose of their work, have some choice and control over their time, experience camaraderie with others at work, and perceive their work life to be fair and equitable" (Institute for Healthcare Improvement, 2021, p.1).

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Epidemiological Data to Support Significance

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While the evolution of the PCP role to include APPs, is a valid and partial solution to the PCP shortage, a large part of the reason for this shortage is due to the enormous workload that accompanies the PCP's role. According to Rabatin et al. (2016), primary care burnout is associated with a chaotic work environment, with women twice as likely to report burnout. Additionally, burnout is related to the complicated EHR systems which implicates the need for a total EHR system redesign (Babbott, et al., 2014).

Professional Isolation

Currently, most new graduate PCP NPs that are hired into primary care positions are expected to begin building their patient panels (a group of patients that are assigned to an individual health care provider) shortly after a brief orientation to the organization/practice that usually includes minimal computer (EHR) training. During their career, the NP may feel a sense of professional isolation, especially if working solo or within an all-physician practice which has

been correlated to stress and burnout. If an NP experiences this sense of social isolation, job dissatisfaction and feelings of failure will ensue.

According to Fitzpatrick & Gripshover (2016), "Professional isolation, a lack of precedent for a new role, and workplace negativity are strongly linked to high stress levels and job dissatisfaction." (p. e419). Physical isolation from other physicians or APPs is common as many clinics are designed in "pods" that contain patient rooms, and two workstations: one for the medical assistant (MA) and another for the provider. In such cases, the logistics alone, create a barrier for new NPs to interact or consult with their experienced provider colleagues. The lack of time for socialization due to the heavy workflow and administrative demands associated with the PCP role are other barriers to a smooth transition into the PCP workforce (Faraz, 2019). The role of a PCP requires an immense time commitment, which the new NP may not fully realize prior to the commencement of their first job. According to a retrospective cohort study of 142 family physicians who utilize Epic for their EHR, nearly two hours of additional time working within the EHR is required per hour spent for direct patient care (Arndt et al., 2017). As Arizona is a full practice authority state (American Association of Nurse Practitioners, 2021), meaning that "licensure laws permit all NPs to evaluate patients; diagnose, order and interpret diagnostic tests; and initiate and manage treatments, including prescribing medications and controlled substances, under the exclusive licensure authority of the state board of nursing" (p.1-2), the findings from the Arndt et al. study (2017) that pertain to the amount of time spent providing primary care apply to PCP NPs who work in Arizona as these roles (physician PCP and NP PCP) are similar. In spite of the demands placed on PCP providers, many novice NPs choose this role when they enter into practice.

Residency Programs

The 2010 Institute of Medicine Report, *'The future of nursing: Leading change, advancing health'* recommends residency programs following the completion of an advanced practice degree (Institute of Medicine, 2011). According to Wiltse Nicely & Fairman (2015), "the rationale for this very ambitious recommendation rests in the need to improve nurse retention, to expand nursing competencies, and to improve patient outcomes across all settings and levels of practice." (p.707).

Medical residencies with an established curriculum and paid faculty are mandatory before physician PCPs become independent practitioners. As stated previously, there is no reported equivalent for NPs who are fulfilling the same role. According to the literature, there is not a consensus on the essential elements of a NP residency program. This is attributed to the lack of agreement as to the financial and quality measures needed to make the case for NP residency implementation (Brown, et al., 2015).

On a national level, healthcare policy change is warranted. Until a standardized NP residency program is implemented within the U.S., healthcare networks and independent practices will continue to be challenged with designing and incorporating orientation/mentoring programs that will attract and retain primary care NPs, especially in consideration of the looming threat of primary care burnout.

Mentorship

The actions of a good mentor have been shown to positively influence and increase the success of socialization of novice nurse leaders. While research is lacking among PCP NPs, five mentor actions have been identified (Gazaway et al., 2019) that led to increased socialization of novice C clinical nurse leaders. These actions: "answer questions, explain rationale, ask for

patient care experiences, show information resources and discuss decision-making" (Gazaway et al., 2019, p.1186) are also fitting to the novice PCP NP role. These attributes lead to the promotion of confidence, comfort and competence within mentees. The work by Gazaway et al. (2019) concluded that the emotional support provided by a mentor(s) had a positive influence, significantly increasing the success of socialization of novice nurse leaders. This, in turn, leads to the sense of acceptance as a colleague into the work group which helps the novice "manage their negative feelings of frustration and uncertainty" (p.1186), thereby securing their foundation to begin their professional practice.

Internal Evidence/Setting Generated Data

This project was designed for an out-patient provider group affiliated with a locally governed, nonprofit regional hospital in the Southwestern region of the United States. This medical center averages about 30,000 inpatient and 120,000 outpatient visits annually. As this network of outpatient clinics continues to grow to meet the expanding healthcare needs of the community, more NP positions have been created. At the same time, several primary care providers (including NPs) have left the organization, with some, citing increased workload and burnout as reasons for leaving (anonymous informants #1, #2, 2019).

As of Spring 2020, the human resource-provider recruitment department of the site reported that 94 NPs had been hired into primary care positions within the last five years. Of these, 28 have since left the organization and 19 have transitioned into non-primary care provider roles, representing a 50% turnover rate in primary care.

NP students have expressed their interest in joining this organization as a new graduate NP. Recently, the organization has undergone a paradigm shift, foregoing the two-year NP experience requirement and offering employment to NP new graduates and those with less than

two years of experience. To respond to this shift, this provider group has been exploring changes within the organization (and/or within the EHR) to support a better work-life balance to support provider retention. One strategy was the formation of a physician and NP-lead provider wellness committee to further investigate this question and propose a plan of action, including launching a novice NP orientation/mentoring program. A primary goal of a NP orientation/mentoring program would be that of increased NP retention within primary care.

PICOT Question

This inquiry has led to the clinically relevant PICOT question, "Among novice primary care nurse practitioners, does a new employee orientation/mentoring program as compared to no new employee orientation/mentoring program affect retention rate?"

Search Strategy

To understand the aspects related to mentoring novice nurse primary care nurse practitioners, an extensive literature search was performed. The search strategy was designed to capture evidence that supported mentoring of novice staff members in the healthcare and professional career arenas. The search databases included The Cochrane Library, Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed, EBSCOhost, and ProQuest. Inclusion criteria were studies that focused on mentoring, retention, new graduate primary care nurse practitioners and original research. Exclusion criteria for each data base included non-research articles, and studies with a focus other than mentoring.

A search of these five data bases, using the terms *new graduate primary care nurse practitioners* AND *retention* AND *mentoring* was conducted for all years. There were no articles produced for the initial yield from The Cochrane Library (Appendix A) CINAHL (Appendix B), PubMed (Appendix C) and EBSCOhost (Appendix D). The search was then adjusted to produce

a broader range of articles. This second search used the terms *mentor* AND *novice* AND *professional employee*. Again, there were no articles produced for this yield in The Cochrane Library, CINAHL and PubMed. The yield in EBSCOhost was 48 articles (Appendix E). This search was further refined with the limitations of scholarly (peer reviewed) journals, publication between January 1, 2015-December 31, 2020, and the English language. This produced a yield of 23 articles (Appendix F).

This search was then adjusted utilizing the terms *nurse practitioner* AND *workforce transition* AND *primary care*. The initial yield produced 29 articles in PubMed. The search was further refined by limiting the search to full text articles. This produced a yield of 26 articles. This search was again refined by limiting the search to a publication date between January 1, 2015-December 31, 2020. This produced a yield of 11 articles. Additional refinement was the English language, which again produced a yield of 11 articles (Appendix G).

Due to the lack of articles pertaining to NPs, a search of the ProQuest database utilizing the Boolean connectors and the terms, mentor AND novice AND professional employee. The initial yield result was 55,372 articles. The search was refined to include scholarly journals, publication between January 1, 2015-December 31, 2020 and the English language. This produced a yield of 424 articles (Appendix H). These results were then filtered by relevance order to bring cited references containing all search items to the top of the list.

The initial screening of articles was done by a scan of the abstracts. A total of 124 articles were reviewed during this process, leading to the elimination of 109 articles that were duplicates or irrelevant to the topic. Ten articles were then selected for this literature review.

Critical Appraisal and Synthesis

The selected studies for this literature review were analyzed using Fineout-Overhold and

Melnyk's (2009) Rapid Critical Appraisal Checklists and placed into an evaluation table (Appendix I). Due to the multiple aspects addressed in the clinical practice inquiry, the PICOT question is best answered using varied study designs. The levels of evidence were evaluated using grades I-VI (Melnyk & Fineout-Overholt, 2015). The ten studies included one meta-synthesis (Level V), one cross-sectional, mixed methods study (Level VI), one descriptive cross-sectional study (Level VI), one qualitative longitudinal approach study (Level VI), and six narrative or qualitative inquiries (Level VI). Common measurement tools included interviews and questionnaires. Tool validity was under reported. However, two of the studies (Faraz, 2019; Horner, 2017) utilized the Misner Nurse Practitioner Job Satisfaction Survey (MNPSS) with demonstrated questionnaire validity with a Cronbach's alpha score of 0.96 (whole scale) and 0.79 to 0.94 (subscales). Despite the missing information, the methodology of these studies contained enough rigor to inform practice. The conceptual frameworks included the Successful Transition Concept Model, Kram's Theory of Mentoring Roles and Responsibilities, Watson's Caring Model, Benner's Novice to Expert, Mezirow's Transformative Theory & Bridge's Transition Model, revealing some homogeneity. Study design methods were heterogenous. Six studies used focus groups or interviews to obtain qualitative data related to the role of a mentor, effective mentoring/mentoring programs, NP job satisfaction/dissatisfaction, NP role preparation, the positive aspects of the NP role transition, the experience of being a novice early-career teacher and the influence of mentoring on novice engineers. Other study designs included surveys and written diaries. Although the methods differed, these studies all addressed a component of either the mentoring, role preparation or role/career satisfaction which can then be applied to the PICO.

All studies pertained to working professionals and were female gender dominated. While there wasn't mention of the female to male ratio of the studies that were analyzed, Wong et al. (2018) identified a research gap of company resource utilization that would lead to successful mentoring of both female and male engineers. Common themes among the studies supported mentoring/mentorship, the positive aspects of professional growth and autonomy, the positive aspects of social support/collaboration, organizational commitment/support, and job/career satisfaction. The common negative aspects among the studies were role ambiguity, workload and the challenge of work-life balance (Appendix J).

Conclusions From the Evidence

The evidence suggests that a novice nurse practitioner mentoring program can positively impact the retention rate in primary care. As advanced practice providers, NPs, have the ability to fill the increasing gap in primary care, but in order to do this, they need to be set up for success. The PCP role is already stressful and requires dedication to patient care. The long hours spent interacting with patients/families and the often less than optimal EHR systems along with having to meet the increasing demands of administrative tasks is contributing to burnout. Although there were no studies found (to date) pertaining to PCP NPs, the evidence supports a physician burnout rate exceeding 50% (Arndt et al, 2017). As the evidence speaks of mentoring as a means to provide support, encouragement and camaraderie to novice NPs, a mentoring program would help ease the transition from formal NP training to independent NP practice. As mentoring is beneficial to the development of professional working relationships, it is expected that these relationships would continue beyond the mentoring period to provide the needed support from others within the challenging primary care environment.

The COVID-19 Pandemic: The Pivotal Point

On January 21, 2020, the Centers for Disease Control and Prevention confirmed the first case of the COVID-19 virus in the Unites States. Six days later, the first confirmed COVID-19 case in Arizona was announced, a 20-year-old college student who had traveled to Wuhan, China, the 5th reported cause in the U.S. On March 17, 2020, the Centers for Medicare and Medicaid Services (CMS) temporarily expanded the use of telehealth for health care delivery as the country closed many businesses and in-dining at restaurants ceased. As the COVID-19 pandemic resulted in our nation's economic downturn, out-patient health care clinics experienced significant financial losses related to the conversion of telemedicine set-ups, decreased patient volume and reimbursement. Prior to March of 2020, the purpose of this project was to develop a mentoring program for new graduate NPs who are hired into the PCP role within an out-patient provider group affiliated with a locally governed, nonprofit regional hospital in the Southwestern United States. Due to this unprecedented pandemic, the rapid organizational growth and new provider NP onboarding that had been planned by this organization for Fall of 2020 had to be postponed.

While the focus turned to keeping everyone "safe" from the COVID-19 virus, the health care providers and staff who are currently affiliated with this organization have become isolated from each other, working in small dictation rooms providing patient care via telehealth on laptops. As the COVID-19 virus has continued to spread, each health care provider now has their multiple COVID-19 patient stories, many of which are etched deep into their minds. As tragic events continue to occur, health care providers are being left to deal with their feelings (i.e., helplessness and uncertainty) on their own. During this unprecedented time, studies related to the impact of the caregiving burden during the COVID-19 pandemic in relation to provider burnout

and turnover are yet to be realized. In the meantime, the evidence supports peer support as a strategy to increase an individual's coping ability during stressful events, thereby, promoting well-being, which in turn, creates a sense of "connectedness" to an organization, resulting in decreased turnover (Hamama et al. 2018; Kelly et al. 2015). In a review of the literature, peer support formats have included: an online support group (Webster et al. 2019), wellness staff debriefing rounds (Calder-Speackman et al. 2018), a 1:1 support session with a colleague after a traumatic event (Kerkman et al. 2019), a three-tiered network (Wahl et al. 2018) and the distribution of "Code Lavender Kits" as an act of kindness to clinicians who are experiencing a stressful event (Davidson et al. 2017).

In response to the pandemic, this project's implementation shifted from focusing on mentorship for the novice NP to determining if a peer support network that is formed within a community-based healthcare network has the potential to improve health care provider wellness and increase the retention rate during the COVID-19 pandemic.

The Contributing Theoretical Framework

The Transtheoretical Model of Health Behavior Change (Velicer et al. 2013; Melnyk & Fineout-Overholt, 2019) has been selected to guide the intervention of this project which focuses on the promotion of wellness through nutrition, exercise, sleep, finding the "why" in what we do as health care providers within our day-to-day activities, developing an attitude of gratitude and supporting each other through this pandemic. This model's five stages: Precontemplation, Contemplation, Preparation, Action and Maintenance (Appendix K) provide a framework to understand the process of how individuals adopt and sustain health behaviors that lead to optimal health and wellbeing. One of the primary reasons for this model's selection is its circular format. Due to the expected diversity of health promotion practices among the peer support group

participants, not all attendees will be at the same level of wellness and can "enter" this model at any of the change process stages. As health care providers' schedules and wellness promotion routines change to accommodate workload, family obligations, and stress levels, this model's allowance of relapse to an earlier stage is very fitting. For example, an after-hours on-call provider's sleep can be disrupted multiple times during the night for a week, inevitably, causing regression to an earlier stage of wellness. The model also accommodates the "fluidness" of health care provider wellness, allowing the opportunity to cycle through the process repeatedly and for shorter stages as participant need dictates. An example of this would be the experience of a bad day at work, or a disagreement with a colleague.

Evidence Based Practice Model to Guide Project Development

The Iowa Model for Evidence-Based Practice Change (University of Iowa Hospitals & Clinics, 2021) has been chosen as the implementation framework for this project due to the straightforward approach to guide change within a health care setting. The first step, problem identification (provider isolation and burnout), has occurred through the evolution of "the new way" of healthcare delivery that has been triggered by the COVID-19 pandemic, with social distancing at the forefront. This "new normal" has caused a barrier to a "Culture of Connectedness" that this organization valued before COVID-19. All group face-to-face meetings, including the Provider Wellness Committee, and social after-hour events were suspended with the alternative to "connect" being Zoom. What attention was given to provider and staff wellness pre-pandemic has now shifted to keeping everyone "safe from the virus". Through the literature review process, the author of this project then located the evidence pertaining to the benefits of peer support groups and evidence-based practices to maintain physical, emotional, spiritual and intellectual health, which completed the second step of locating

the best evidence. The third step, is to state the project's purpose, to develop a peer support network to promote health care provider wellness and increase retention rate during the COVID-19 pandemic. The group of NPs will then convene and consider evidence-based practices related to their physical, emotional, spiritual and intellectual wellbeing presented and design/implement their desired health promotion practice change(s), steps four and five of the model. At the end of this project, each NP will be given the opportunity to evaluate their implemented changes and determine change sustainability, step six of the model. The progression of the Iowa Model from pilot testing to a larger group setting is very fitting for this project's interventions. If a peer support group is proven to be successful among this organization's NP group, other peer support groups can be formed.

Project Methods

Ethical Considerations

Permission to conduct this EBP improvement project was granted by the project's site Office of Clinical Research on November 2, 2020, followed by the Arizona State University Institutional Review Board for one year beginning November 10, 2020 (Appendix L). There were no foreseeable risks to project participants. The identities of the individual target population were known to the project lead in order to invite them to join the project. The email addresses used contained participant identification and were exclusively known to the project lead.

Setting

This EBP improvement project took place within an out-patient provider group affiliated with a locally governed, nonprofit regional community hospital in Tucson, Arizona. This medical center averages about 30,000 inpatient and 120,000 outpatient visits annually. The 11 out-patient clinics are composed of both physician and NP care providers.

Population and Sampling Strategy

All providers across 11 out-patient clinic sites were recruited for participation in the project. Inclusion criteria were that participants must 18 years of age or older, able to provide electronic consent, employed as a nurse practitioner by chosen organization and working as a primary care, same day or urgent care provider.

Upon receipt of IRB approval, the selected organization's administrative office was contacted for a current listing of all practicing providers (N=65). NPs who worked in the areas of Primary, Same Day and Urgent Care were then identified from this listing. The recruitment flier/invitation to participate was sent to all NPs within the selected organizational areas (n=31). Due to email security restrictions, interested participants were asked to reply to the project lead with their personal email address. A consent form was then sent to the participant's personal email address to be signed and returned by email.

Data Collection

This EBP project was scheduled to take place between the weeks of December 13, 2020 and January 31, 2021. Interested participants consented to participate by completing the pre-intervention Linear Analog Self-Assessment (LASA) using Survey Monkey (Appendix M). At the end of the 4-week project period, the LASA would again be repeated by each participant.

The LASA is a five-item tool that specifically targets the domains of: physical (i.e., fatigue, activity level), emotional (i.e., depression, anxiety, stress), spiritual (i.e., sense of meaning and purpose, relationship with God), intellectual (i.e., ability to think clearly, concentrate) and overall wellness quality of life within the past week. This 10-point Likert Scale assesses each domain from 1 (as bad as it can be) to 10 (as good as it can be). Each of the five items measured are intended to stand alone. As Cronbach's alpha, a calculation of reliability for

internal consistency, is typically provided as a total sum of the items measured, this measurement is not applicable to the measurement tool selected for this project. However, the LASA has been used in a multitude of settings and has been validated as a broad measure of quality of life (Kang et al. 2013; Locke et al. 2007; Singh et al. 2014). Kermott et al. (2019) reported a positive correlation between a higher level of resilience and the overall LASA scores and quality of life ($P<.001$).

Intervention

Three 45-minute wellness sessions containing content regarding physical (nutrition, exercise and sleep), emotional & spiritual and intellectual wellbeing & stress management were planned between December 29, 2020 and January 26, 2021. The content of the first evidence-based wellness session (Iddir et al. 2020; Minich & Hanaway, 2020; Yousfi et al, 2020) was designed to focus on the physical aspects of wellness: nutrition, exercise and sleep. The second evidence-based wellness session (Cartwright & Thompson, 2020; Hamtak, 2020; Hertel, 2020) was designed to focus on the emotional and spiritual aspects of wellbeing. During this session, each individual's personal core values and the "why" of being a healthcare provider were to be defined and focused upon. The third evidence-based wellness session was designed to focus on intellectual wellbeing and stress management. The dissemination of Code Lavender (Davidson et al. 2017) concludes this session. The receipt of Code Lavender from a co-worker after a stressful event(s) is meant to signify/promote the feeling of being cared for.

Budget

The proposed project budget included class materials and an incentive for each participant for a total estimated cost of $1,962.00 (Appendix N). Class materials included, wellness journals, paint kits, thank you cards and a "code lavender" bag filled with an

inspirational magnet, chocolate and a bottle of lavender essential oil. A $15.00 Amazon gift card for each participant as a thank you for their participation was also budgeted for.

Results

This project was designed with the intention of creating a platform for nurse practitioners to virtually come together within an organization and to participate in 3, 45-minute sessions that pertained to physical, emotional, intellectual and spiritual wellness. While the evidence supports, workplace wellness interventions consisting of diet, physical activity and stress reduction (Torquati et al. 2015; Ross et al. 2017), there was an evidence gap as to provider wellness support preferences in the midst of a pandemic (Shechter et al. 2020).

During the height of the second COVID-19 surge in Arizona, over the 2020 winter holiday months, the invitation to participate in this project was sent to the 31 nurse practitioners who met the project's criteria. During recruitment, the Chief of Staff-Elect sent out an email to announce that patients who had the COVID-19 virus were being turned away and elective hospital procedures were to be canceled because there were not enough staff to provide the needed care. It was at this point that this project, as designed, was put on an indefinite hold.

Four main factors were identified as limitations for this project's timely completion: overwhelmed staff, technology/documentation changes and challenges, competing clinical demands and short-staffing. First, as providers have struggled to keep up with the unprecedented challenge of caring for their patients stricken with "the virus", they have had to sift through the daily surge of information (and misinformation) to safely care for their patients. At the time of this writing, the demand of added provider work time continues, with frequent updates to the patient care algorithms for covid-19. The care providers were faced with concern for their own and their family's wellbeing, the unknown possibility of becoming ill and infecting others which

amplified this sense of being overwhelmed. During this time, another potential source of added provider stress was related to the conversion from in-office visits to telehealth. Technology, charting templates/documentation, and billing & coding procedures were changing simultaneously, requiring provider attention and adaptation. Secondly, while in the midst of the COVID-19 pandemic, primary care providers continued to care for patients with other illnesses or health care maintenance needs. An additional component of "routine" primary care provider practice is completing in-basket duties throughout the day: prescription refills, lab and test results interpretation, review of patient visit notes from hospitalization, urgent care and specialty care providers and responding to patient messages. During this pandemic, providers have seen an increase in in-basket tasks, especially in regard to patient messages during periods of pandemic surge and quarantine. Third, during the timeframe of this project's implementation period, the primary care practice offices within the selected organization experienced short-staffing for multiple reasons: deployment of some of their staff to the hospital to help care for the growing number of COVID-19 patients, staff turnover and the need for staff to either care for ill family members or quarantine themselves. Of note, one invited project participant expressed concern pertaining to the ethics of conducting this project during this time of crisis.

As the covid-19 pandemic continues, most (if not all) health care organizations continue to grapple with how to sustain provider wellness during this time of crisis. Some organizations have responded by reducing the number of patients seen per day to free up additional time for in-basket tasks while others have provided access to wellness apps or have hosted a day of socially distanced wellness activities. At the time of this writing, the organization that was chosen for this project recently distributed a provider satisfaction survey asking for suggestions on how to improve this situation.

Discussion

Although this project did not reach the implementation phase, these major barriers that were identified provide a basis for future program development to help mitigate the impact of psychological distress among healthcare providers during a time of crisis. During this project's design, it was thought that the development of a nurse practitioner peer support network that would meet virtually using the Zoom platform would be ideal as the need for social distancing was paramount. However, evidence is emerging regarding the phenomenon of Zoom fatigue (Callahan, 2020; Nadler, 2020), which is adding to the physical and emotional exhaustion of its participants. Zoom fatigue has been defined as "a feeling of exhaustion from participating in video conference calls" (p.2) Fauville, et al. (2021), has since created the Zoom Exhaustion & Fatigue Scale (ZEF Scale) to measure video conference associated fatigue. The conclusions from this validated tool's preliminary testing were twofold: those who participate in multiple, longer video meetings have a greater tendency to feel more fatigued when compare with participants in fewer and shorter video meetings and that individuals who are more negative toward video conferencing have more fatigue (Fauville, et al. 2021). Since primary care providers have had to transition from in-office visits to full days of multiple, closely scheduled patient video visits, the findings by Fauville, et al. (2021) support the lack of enthusiasm for multiple Zoom-based wellness interventions.

Furthermore, during this timeframe of a covid surge, overwhelmed staff, technology/documentation changes and challenges, competing clinical demands and short-staffing left little time for providers to gather to practice self-care and promote their well-being. Having to use their own personal time for work-related wellness promotion activities was also seen as a barrier to participating in this project.

Recommendations for Further Study or Action

According to Albert Einstein, "In the middle of every difficulty lies opportunity" (Riker, 2018). In spite of trying to accomplish this DNP Project during a pandemic, opportunities for further study and action have been identified at four different levels: personal, organizational, state and national.

The Personal Level

In order to not sacrifice one's values and/or the ability to practice self-care, the NP needs to know oneself and develop an awareness of when caregiving becomes toxic. In her work with healthcare providers, certified NP and wellness coach, Eileen T. O'Grady (2021) recommends establishing "bedrock behaviors", which are routine, non-negotiable self-care habits. Examples of such habits include, prioritizing sleep, healthy eating, exercise, and meaningful interactions with significant others. The implementation of "bedrock behaviors" will not only promote personal resilience during the COVID-19 pandemic, but will continue to impact health and wellness thereafter.

The awareness of and protection against moral injury is another NP call to action, especially in the midst of this pandemic. According to Haefner (2021), "Moral injury comes from the psychological distress when someone violates his or her personal moral or ethical code either from one's own personal actions or from regret of nonactions. It occurs when people find themselves in highly challenging situations that can trigger feelings of guilt or shame when carrying out the orders of a superior or leader" (p.280). While the magnitude of moral injury among healthcare workers during this pandemic is yet to be realized, each NP should be challenged to resiliency by growing into self-authorship. "The self-authored person becomes the authority of his or her own life by doing what he or she thinks is right, not what will please,

placate, appease, or influence others; they un-fuse from others" (O'Grady, 2021, p.4). This awareness of self and the ability of self-authorship allows the NP to mentor others on their journey to wellness.

The Organizational Level

While personal resiliency is an important piece to prevent healthcare provider burnout, thereby, increasing the likelihood that the provider will chose to remain in healthcare, this attribute alone is not enough to remedy the problem. According to a study from the New England Journal of Medicine, "two thirds of the responsibility for provider well-being rests with how the system and culture functions" (Bohman, et al. 2017 as cited by O'Grady, 2021, p.3). In health care, the "norm" of excessive work hours which lead to sleep deprivation is set during medical school and residency. "Once established, these unhealthy habits are perpetuated in practice, and they communicate the expectation to physicians (and advanced practice providers, i.e., NPs) that they must somehow be impervious to normal human limitations" (Shanafelt, et al. 2018, p.365). Poor practice environments in which excessive clerical tasks, dysfunctional work-flow patterns, suboptimal teamwork, role ambiguity, ineffective leadership and/or with a sole focus on company profit and meeting all quality metrics further undermines the promise of health care provider wellness. Therefore, "it is counterproductive to ask providers to 'heal themselves' through superhuman level of resilience even as the practice deteriorates" (O'Grady, 2021, p.3).

The call to action on the organizational level is to "go beyond the eradication of burnout, and embrace the broader vision, that of cultivating an engaged, productive, and professionally fulfilled team of healthcare professionals" (Shanffelt, et al. 2018, p.365). There are multiple suggestions on how to get there: As healthcare provider breaks are usually insufficient, this author suggests scheduling a short mid-morning and mid-afternoon "provider pause" between

patient visits to allow time for a drink of water, a short walk or a few deep breathing exercises that are often skipped due to packed schedules and the next waiting patient. Approachable leadership members who round on providers and staff promote dialogue as to what is working well or not working well within their day-to-day practice. Encouraging and empowering health care provider staff to speak confidentially regarding their stressors would allow them to not only advocate for their own well-being, but for that of their patients. A proactive and transparent response process by leadership would be essential for validation of such concerns (Abraham et al. 2021; Kapu et al. 2021; Rosa et al. 2020).

Prior to the COVID-19 pandemic, this organization had a provider wellness officer and committee. The reinstatement of the Chief Wellness Officer and Provider Wellness Committee is also recommended to design or evaluate existing clinician well-being programs for implementation within the organization. Another wellness committee project could be the planning and coordinating of an annual staff/provider wellness day with an agenda that would begin with activities focusing on personal wellness and later transition into team-building exercises. Team-building exercises are often an avenue to create joy in the workplace as team members come along side of each other to develop/strengthen relationships. "Anything that builds relationships between and among other people will build well-being." (O'Grady, 2020, p.3). Paid time away from patient care to attend a retreat, such as this, along with an added benefit of paid mental health days would send the clear message to staff that their well-being is necessary and valued.

The State Level

The call to action on the state level is for every state to mandate Full Practice Authority

for NPs. Currently, there are three state regulated levels of NP practice: Restricted Practice Authority, Reduced Practice Authority and Full Practice Authority. When NPs who have been practicing in Restrictive or Reduced Practice Authority states relocate to a Full Practice Authority state, it is likely that they will experience an additional layer of work stress. As with many practices, the chosen practice sites within this project's selected organization expect all Primary Care, Same Day and Urgent Care practice NPs to work independently, including patient paneling by the PCP NPs. While a collaborating physician is provided, he/she may be working in an off-site location. Not having close supervision may result in additional hours of patient care responsibilities. This added work coincides with the need for the timely completion of patient encounters, to respond to patient messages, to refill prescriptions and review specialist, urgent care and hospital notes. The unification of NP practice at the Full Practice Authority level may initially seem counterproductive, however, it would eventually lead to less stress and overwhelm as NPs could move throughout the U.S. assured that practice expectations would be the same. This hallmark change would advance the profession by increasing NP autonomy. A practice environment which promotes NP autonomy has been shown to increase NP retention (Abraham et al., 2021; Faraz, 2017; Rosa et al., 2020).

The National Level

As the COVID-19 pandemic has continued to evolve, a recent source of healthcare provider burnout has been the added burden of combatting misinformation. Healthcare providers, including NPs, are increasingly called upon to educate their patients on a variety of topics due to the proliferation of misinformation. While online platforms, such as Facebook and YouTube have introduced policies limiting COVID-19 information to sources such as the World Health Organization (Satariano, 2020) the work of myth busting on the healthcare provider level will

continue. Information campaigns will need further development and expansion to inform and educate the public. "In the face of high levels of community distrust in many places, active engagement of key trusted community stakeholders and organizations in information campaigns will also be essential for success" (McKay, et al. 2020). Herein lies a great opportunity for DNP-prepared leaders to stay up-to-date on the current evidence pertaining to COVID-19 and actively engage in evidence dissemination.

In conclusion, as additional pandemic-related funding is considered, it is paramount that DNP leaders advocate to support those healthcare providers who have been deeply wounded by this pandemic and for those that may lie ahead. "We have a brief opportunity to get ahead of two pandemics, the spread of the virus today and the harm to clinician well-being tomorrow" (Dzau, et al. 2020).

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Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

Appendix G

Appendix H

Appendix I

Table 1

Evaluation Table

Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Results	Quality/LOE Decision/ Application for Practice
Clark et al. (2020) Being a research mentor **Country:** USA **Funding:** NS **Bias:** NS	NS	**Method:** Narrative Interview, focus groups **Purpose:** To describe experiences of nsg. research mentors	n=8 **Demographics:** mentors from a nsg. research fellowship; all RNs or APRNs, white female, all with doctoral degrees- nsg. or related fields. CNS=5, nsg. faculty=3 **Setting:** Magnet-designated, acute care, academic health center	**DV1**: "Why did you become a mentor?" **DV2**: "What did you hope to accomplish?" **DV3:** "What were your concerns?" **DV4:** "How did you develop the skills you needed to be effective?" **DV5:** "What did	Open-ended, semi-structured interview guide; focus groups moderated by 2 nurse researchers. Audiotaped with transcripts verbatim	Qualitative Analysis: recorded narratives were transcribed verbatim and analyzed. Credibility confirmed by direct quotes. Participants confirmed data	**DV1:** *Identifying* Responding to the Call- new role, time needed to self-identify; expanding expertise to influence practice, new opportunities to learn, work with frontline nurses to expand practice **DV2:** *Acclimating* key people & resources for role success had to be learned, strong source of support found via interpersonal relationships with other M **DV3:** *Balancing*	**LOE:** VI **S:** Findings support the importance of organizational support: (coaching, workload balance and mentoring); understanding of mentor's perspective gained **W:** Low level of evidence **IFFR:** To under- stand the know- ledge, skills, and

Key: **A**=autonomy, **abx**=antibiotic, **ANP**=adult nurse practitioner, **APP**=advanced practice providers, **APRN**=advanced practice registered nurse, **ATP**: application to practice, **ATS**=anticipated turnover scale, **BNP**=baccalaureate nursing program, **BSN**=Bachelor of Science in Nursing, **CASP**=Critical Appraisal Skills Program, **CC**=career commitment, **CS**=career satisfaction, **CN**=communication networks, **CCS**=cross sectional survey, **CNS**=clinical nurse specialist, **CS**=convenience sample, **DV**=dependent variable, **ECT**=early career teachers, **EKA**=extent of knowledge acquisition, **ES**=English speaking, **FM**=formal mentoring, **FNP**=family nurse practitioner, **FT**=full -time, **H**=Hospital, **IFFR**=Implications for future research, **ITQ**=intention to quit, **IV**=independent variable, **JS**=job satisfaction, **L**=limitations, **LOE**: level of evidence, **M**=Mentor/Mentorship, **MC/O**=mentoring contacts/opportunities, **MM**=mentoring methods, **MNPSS**=Misner Nurse Practitioners Job Satisfaction Survey, **MQ**=Mentorship Quality, **MP**=mentorship program(s), **M&S**=mentoring and support, **MR**=mentoring relationship, **MS**=mentoring support, **MTS**=mentoring tie strength, **n**=number of actual participants, **N**=number in sample size, **NE**=northeastern, **NN**=novice nurse, **NEng.**=novice engineers, **NNE**=novice nurse educators, **NNP**=novice nurse practitioner, **NP**=nurse practitioner, **NPP**=nurse practitioner program, **NS**=not stated, **nsg.**=nursing, **NTTL**=novice tenure-track librarians, **OC**=occupational commitment, **Org.C**=organizational commitment, **PC**=Primary Care, **PE**=practicing engineers, **PCP**=primary care provider, **P**=power, **PFP**=pay-for-performance, **PPE**=perceived program effectiveness, **PMS**=psychological mentoring support, **POS**=perceived organizational support, **PSN**=professional staff nurse, **RA**=role ambiguity, **RAS**=role ambiguity scale, **RN**=registered nurse, **RR**=retention rate, **RRS**=work-related stress, **RQ**=research question, **S**=Strengths, **SC**=selection criteria, **SCM**=supervisory career mentoring, **SP**=supervisor's promotion, **SSQ6**=Social Support Questionnaire Short Version, **SLR**=systematic literature review, **TI**=turnover intent, **USA**=Unites States of America, **US**=United States.
W=weaknesses, **w/i**=within, **yrs**=years

Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Results	Quality/LOE Decision/ Application for Practice
			Inclusion: nsg. research followship mentors, current employees **Exclusion:** NS **Attrition:** 0	you enjoy most about the experience?" **DV6:** "What would you advise new mentors?"			M had to clarify role, organize time commitments **DV4:** *Evolving/Mentoring* skill development **DV5:** *Celebrating* **DV6:** *Helping mentee skill development* to share with others	strategies used by effective mentors
Faraz (2019) Facilitators and barriers to the novice nurse practitioner transition in primary care Country: USA	Successful Transition Concept Model: Individual Character- istics, Job Satisfaction & Role Acquisition	**Method:** Descriptive CSS, question- naire via online survey	N=293 n=177 **Demographics:** NP graduates from an accredited NP program, practicing in a PC setting x 3-12 months 92.9% (n=158) women μ=35 years of age	**DV1:** Most influential factor in job satisfaction/ Dissatisfaction **DV2:** Other Important issue in relation to JS (not included in survey) **DV3:** Further comments about role transition	Survey Open-ended Questions	Krippendorff Content Analysis Method SPSS (descriptive Statistics analysis)	**DV1-DV4 Facilitators of transition:** Support & M Autonomy Learning & Professional Growth/Development Work-Life Balance Finding Meaning in Work **Barriers to transition:** Lack of Respect Role Ambiguity	**LOE:** VI **S:** Study focused on population of interest for this project; validated the gaps in role transition and need for formal orientation/MP **W:** Study limited to NNPs in PC

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Funding: NS Bias: NS			(SD=8.2); 79.9% (n=141) with master's degree in nsg. **Setting:** PC **Inclusion:** NNP, graduate of selected NP or residency program, employed 3-12 months, at least 18 years old. **Exclusion:** NS **Attrition:** 0	**DV4:** Additional information to help understand responses			Lack of Support Lack of Resources (M and formal training) Workload	setting; researcher could not control which programs sent out the request to participate to their alumni; possible participant overlap Inaccurate NPP alumni contact information-not all could be invited to participate IFFR: Need for measurement tool specific to NNP transition into practice
Faraz (2016) Novice nurse practitioner	Successful Transition Concept Model:	**Method:** Descriptive CSS, question-	N=293 n=177 **Demographics:** NP graduates	**IV:** JS, A, RA **DV:** TI **Variables:**	**MNPSS** Cronbach's *a* 0.96 (whole scale)	Hierarchical multiple regression analysis	IV - A *p=.001* IV – RA *p=.03* R^2=0.476	**LOE:** VI S: Adequate sample size Balance of M+A

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workforce transition and turnover in primary care **Country:** USA **Funding:** NS **Bias:** NS	Individual Characteristics, Job Satisfaction & Role Acquisition	naire via online survey software Qualtrics **Purpose:** Describe the relation-ships between NNP individual character-istics, role acquisition and JS	from an accredited NP program, practicing in a PC setting x 3-12 months 92.9% (n=158) women μ=35 years of age (SD=8.2); 79.9% (n=141) with master's degree in nsg. P=80% w/5% significant=131 **Setting:** PC **Inclusion:** NNP, graduate of selected NP or residency program, employed 3-12 months, at least 18 years old. **Exclusion:** NS	YRN, Degree, M, gender, specialty	0.79 to 0.94 (subscales) ATS Cronbach's *a* per developer 0.84, per 2010 meta-analysis w/RN 0.89 per DeMilt study 0.68 SSQ6 Cronbach's *a* 0.90-0.93 RAS Cronbach's *a* 0.84		MNPJSS= $\bar{x}$ 4.43 Moderate JS M-no significant impact on TI and JS 77% desired M or a residency program	needed. RA requires M. Study focused on population of interest for project. **W:** State distribution not reported which could impact A as well as JS and TI.

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			Attrition: 0					
Goodsett & Walsh (2015) Building a strong foundation: Mentoring programs for novice tenure-track librarians in academic libraries **Country:** USA **Funding:** NS **Bias:** NS	Kram's Theory of Mentoring Roles and Responsibilities	**Method:** Narrative Web-based survey, phone interviews **Purpose:** 1) To examine the effective-ness of mentoring programs for NTTL 2) Identify critical elements for successful mentoring programs for NTTL in various academic library settings	N=283 **n**=156 **Demographics:** academic librarians >1/3 (n=100) had 2+ years of experience at current institution; 12% (n=34) newly hired librarian at current institution with professional experience at another library; 7% (n=19) newly hired librarian-first professional library position; 3% (n=7) library school student, unemployed library school graduate or	**DV1:** Traits of an effective mentor **DV2:** Configuration of mentoring programs **DV3:** Elements of effective MP **DV4:** Mentoring partnerships: within or beyond the library **DV5:** Role and training of mentors and mentees **DV6:** MR	19 survey questions, 7 open-ended; recorded phone interviews via Pamela call recording application, Google Voice or digital voice recorder	Data was transcribed, anonymized, coded, common themes identified	**DV1:** Mentors who are: published, conduct research, invest in the mentoring relationship, willing to give constructive feedback, have a strong personality, take mentoring relationship very seriously. **DV2:** Traditional one-on-one models. **DV3:** Strong programs have-clear goals and expectations; training in how the mentor/mentee should contribute to the relationship. Formal MP: M orientation and regular meetings, a stated # of required mentor/mentee meetings, lists of topics or articles to guide	**LOE:** VI **S:** Used data from 2 sources-surveys and interviews. Study is two-fold: Highlights successful MP and provides suggestions for MP improvements. **W:** Limited sample diversity. **ATP:** MP needs to be formally structured, flexible **IFFR:** How MP benefit(s) M

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			retired; 43% (n=122) with no response. 18% identified as new librarians. 60% (n=96) Library did not have formal MP beyond new librarian training. New librarians, 38% (n=20) had formal or informal MP 88% (n=59) participated in program. 80% (n=47) were tenured or TTL; 61% (n=36) first TTL position. **Setting:** library (academic & non-academic setting) **Inclusion:**				discussion for mentor/mentee. **DV4:** Responses varied +/- responses to pairing new librarians with non-librarian faculty. + response-proximity **DV5:** Little to no data about training content M attitude that MR is mutually beneficial=stronger MP **DV6:** MR is dependent upon the success of the MR A good MP provides a way for mentees/mentors to find a new partner if relationship is not beneficial. M attitude that MR is mutually	

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			professional e-mail listings **Exclusion:** none **Attrition: NS**				beneficial=stronger MP	
Hoeve et al. (2018) The voice of nurses: Novice nurses' first experiences in a clinical setting. A longitudinal diary study **Country:** Netherlands **Funding:** NS **Bias:** None	NS	**Method:** Qualitative Longitudinal Approach **Purpose:** To gain a greater understand-ing of the personal/ professional demands faced by NN; to understand what can be done to improve NN to PSN transition.	N=24 n=19 **Demographics:** Female NN within their first 2 years after graduation; NN from multiple hospital wards **Setting:** University Hospital. **Inclusion:** BSN, age <30 yrs., <1 yrs. work exp. **Exclusion:** NS **Attrition:** 1	**DV1:** Personal or work-related experience form the past week that was really important. **DV2:** Reflection of experience and effect on work. **DV3:** Was experience shared with colleague and/or supervisor?	Written diaries (580 entries) from 18 participants Data Collection-Qualtrics pkg.	Interpretative Phenomenal Analysis	**8 Major Themes:** *Relatedness Competence Development Organizational Context Existential Events Goals Autonomy Fit* **Study findings:** support + feedback from colleagues is crucial for NN in a highly complex working environment. NN coping strategy-sharing experiences with colleagues.	**LOE:** VI **S:** Longitudinal design and # of diary entries collected. **W:** One hospital site **ATP:** Working environment needs to be "safe" for sharing. Presence/ support from supervisors/M & positive work experiences are essential for NN motivation and engagement
Horner	Watson's	**Method:**	N=69	**IV-1**: M	**MNPSS**	One-Way	M= +JS	**LOE:** VI

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(2017). Mentoring: Positively influencing job satisfaction and retention of new hire nurse practitioners	Caring Model	CCS Non-experimental Mixed-methods CS **Purpose:** Does mentoring Positively influence NP job satisfaction?	n=37 Power-NS **Setting:** PC, H **Inclusion:** Certified NP, English speaking **Exclusion:** other APPS **Attrition:** 0	**IV-2**: MQ **DV:** JS **Variables:** Years of practice (NP, RN), specialty, gender, degree/ education	Cronbach's a 0.96-(whole Scale) 0.79 to 0.94 (subscales)	ANOVA Cross Tabulation	4.4 vs 4.39 27%=M when hired 100% of the 73% w/o M desired M M is beneficial=100% **Themes (M)** *constructive feedback shared knowledge encouraged availability* **Non-M reasons:** *productivity concerns too many residents specialty practice*	**S:** Applies to NPs, not other APPs. Study focused on population of interest for project. M is valuable-not dependent on length of time **W:** Small, regional study, recall based RR-poor (2/3 left job over a 3-year period)
Jones et al. (2015) Nurse practitioner graduates "Speak Out" about the adequacy of their educational	Benner's Novice to Expert	**Method:** Qualitative Inquiry **Purpose:** To describe the success and limitations of NPP in preparing graduates to	N=280 n=23 **Demographics:** Graduates from three NP options (ANP, FNP & WHCNP) **Setting:** Two universities in the western USA.	**DV1:** How well prepared were you for your role as an NP? What was your first appointment or job? **DV2:** How well prepared were	Interview/ focus group discussion by principal investigator (PI); digitally recorded 1:1 phone interview; field notes	Recorded interviews transcribed verbatim. Analysis by general inductive approach; themes focused on general NP	**DV1:** "Getting your boots on and getting into the role" An overwhelming sense that NPP provided NNP with critical thinking skills, but there was a "need to be prepared to hit the ground running".	**LOE:** VI **S:** Findings can be generalized to other NNP groups. **W:** Small, regional study. Varied geographic and types of practice.

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preparation to care for older adults: A qualitative study **Country:** USA **Funding:** U.S. Dept. of Health and Human Services (HRSA) Advanced Education in Nursing grant D09 HP18968. **Bias:** Sample suggested a positive bias of interested and accessible NPs.		care for older adults; to identify strategies and direction to enhance gerontologic curriculum in NP programs.	**Inclusion:** No additional criteria used **Exclusion:** NS **Attrition:** 0	you as an NP to care for older adults? What specific aspects of care/ context are important in your role? **DV3:** How ill-prepared were you for your role to care for older adults? What strategies did you use to get up to speed? **DV4:** What improvements could you suggest to your preparation? What would you do differently?	related to idea building and iterative contextual connections between interviewees.	role & specific aspects associated with caring for older adults. Commonal-ities and differences noted; broad domains identified and then linked to subthemes.	**DV2:** NNP felt NPP did not adequately prepare them to care for the complexity of the comorbidities experienced by older adults. Additional instruction needed in elder pathophysiology, abx prescribing, medication safety and reduction in older adults, elder mental health issues, end of life care, and family dynamics. **DV3:** Prior nsg experience and knowledge helped fill the NPP gaps. Those without prior nsg experience were less prepared/confident. **DV4:** more procedural skills preparation	**ATP:** NNP who were able to establish MR found MR vital to successful NP role integration and progression. NP education needs more emphasis on older adult care (multi-morbidity polypharmacy and complex conditions). NP education needs more emphasis on older adult care (multi-morbidity polypharmacy and complex conditions). **IFFR:** A larger replicated study for validation of

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Results	Quality/LOE Decision/ Application for Practice
Respondents were self-selected.								authenticity of the NNP experiences.
Kutsyuruba et al. (2019) Developing resilience and promoting well-being in early career teaching: Advice from the Canadian Beginning Teachers **Country:** Canada **Funding:** NS **Bias:** NS	NS	**Method:** Qualitative Inquiry **Purpose:** To examine the impact of induction and MP on retention of ECTs	N=1,343 n=36 **Demographics:** ECTs with 1-5 yrs. of employment **Setting:** Publicly funded schools, within 9 Canadian provinces and 3 territories **Inclusion:** Online listing of ECTs from earlier research who volunteered to participate in f/u interviews **Exclusion:** NS **Attrition:**	The lived experiences of novice professionals during their first yrs of teaching.	Phone Interviews Recorded verbatim	Data was deidentified, analyzed deductively and inductively	**Common Themes:** *Cultivating a work-life balance* *Nurturing a positive mindset* *Reflective inquiry* *The 3 C's: Consult, connect, and collaborate*	**LOE:** VI **S:** Characteristics of teacher distress (class size, heavy workloads, unsupportive parents), often manifested as stress and burnout are similar to PCP NP burnout (patient panel size, heavy workloads, demanding patients, unsupportive administration)**W**: Small Study. **ATP:** ECT's stories included the benefit of

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Results	Quality/LOE Decision/ Application for Practice
			NS					informal MR **IFFR:** Would responsive MP benefit ECTs?
Milner (2019) Transition to Nursing Academia: A positive experience **Country:** USA **Funding:** NS **Bias:** Personal experience with nurse educator role transition by researcher could have led to bias,	Mezirow's Transform-ative Theory & Bridge's Transition Model	**Method:** Purposive Sampling **Purpose:** To describe the positive aspects of the NNE transition experience	**n**=8 **Demographics:** age 26-60 yrs. clinical nsg experience 4-32 yrs. **Inclusion:** FT faculty teaching in BNP with masters or doctorate degree, Employment in academic setting ≤3 yrs. Participant location w/I driving distance of researcher in NE US, ES **Exclusion:** employed by researcher's	How do FT NNE who have transitioned to a BNP w/i the past 3 yrs from clinical practice describe the positive experiences of their transition period?	Researcher interviewed participants; semi-structured questions developed as guidelines during interview process.	Interviews transcribed verbatim by researcher. Constant comparative method used for categories/ Themes	**Major Themes:** MS-(100% identified as + influence in successful transition; support shown by other faculty also + influence) Collaboration (co-teaching for at least the first year) Camaraderie (participation in faculty and/or student events) Positive aspects of the faculty role (flexible schedule, salary, "feelings of importance" when guiding the next generation of nurses) All participants had a positive transition experience.	**LOE:** VI **S:** Findings can be transferred to the NP role. Positive transition=M&Sw hich implies value for orientation/formal MP development. **W:** Purposive sampling limited population diversity. Regional study. Events were self-described. **ATP:** Main support of NNE came from MR Focusing on the positive aspects of

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therefore, a reflexivity journal was kept; data verification by audio recording.			institution. **Attrition:** 0					transitioning may help RR
Wong et al. (2018) Impact of mentoring on practicing engineers: A meta-synthesis **Country:** USA **Funding:** NS **Bias:** NS	NS	**Method:** Qualitative Meta-Synthesis & SLR **Purpose:** To examine career development outcomes of practicing NEng. who are being mentored at work. 2) To determine the most influential	9 databases (EBSCO, Compendex, SAGE-Journals, IEEE Explore, JSTOR, ProQuest Dissertations & Theses and Scopus, Web of Science 12 articles **SC:** 1) Effects of career M on PE working in a non-academic setting. 2) Quantitative, Qualitative or empirical Study. 3) Study prior to	**RQ1:** Job Characteristics? (Career development M&S, PMS, MM) **RQ2:** What are the career development outcomes of mentoring for PE? **RQ3:** What are the relationships between contributing factors and career	CASP checklist	Noblit and Hare's 7-step approach	**RQ1:** Career development, M&S, Contacts in other functions, Design of formal MP, Gatekeeper's promotion(s), Job characteristics, Learning Methods, MC/O, MM, MR, MS. MTS, Network density, PFP, PPE, PMS, Stressors, SCM, SP, CC, CS, CN, EKA, Intent to participate in FM, ITQ, JS, Mentoring Satisfaction, OC, Org. C, POS, Promotion, Salary/compensation, Self-esteem, source used	**LOE:** V **S:** Multiple study review, rigorous study selection process **W:** Search possibly not exhaustive, some studies contained other occupations, M forms not differentiated **ATP:** Incorporation of study's findings that influence outcomes in MP development. **IFFR:** Suggested

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis	Findings/ Results	Quality/LOE Decision/ Application for Practice
		factors con-tributing to these outcomes.	March 2017 4) Peer Reviewed 5) Study accessibility	development outcomes? **RQ4:** What research recommendations can be formulated for the development of MP and the PE field?			for obtaining information, WRS. **RQ2 &RQ3:** Studies conflicted in regard to M and career satisfaction; between PMS & JS, Org. C. Consistent Outcomes: CS &Promotion **RQ4:** How does M affect task variety and job A.	by Atuhor: "Can M change one's personality so that they become agreeable and conscientious over time?" "How can companies best use their available resources to successfully M both female and male engineers?"

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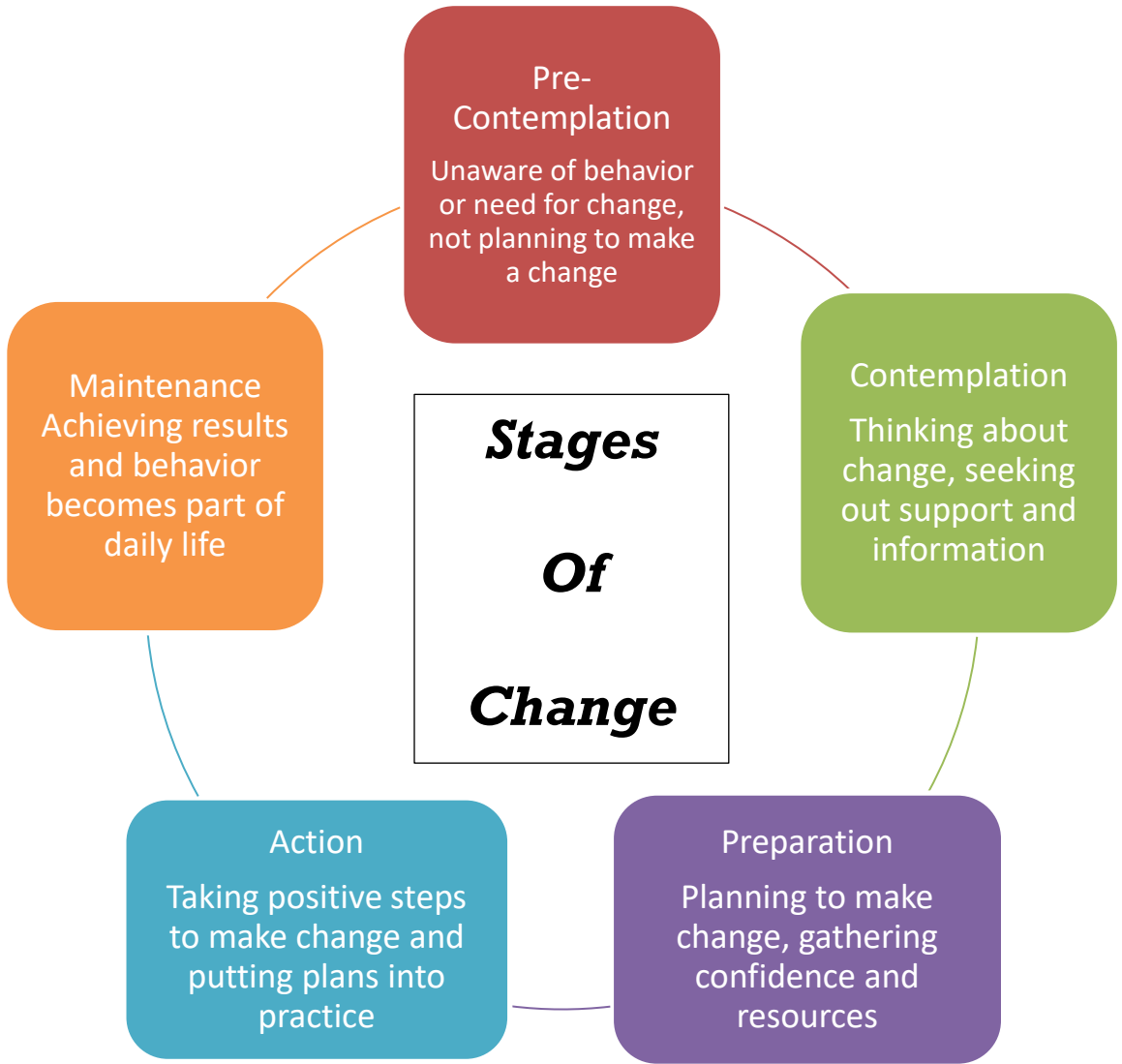**W**=weaknesses, **w/i**=within, **yrs**=years

Appendix J

Table 1

Evidence Synthesis Table

	Clark	Faraz (A)	Faraz (B)	Goodsett	Hoeve	Horner	Jones	Kutsyuruba	Milner	Wong
Year										
	2020	2019	2017	2015	2018	2017	2015	2019	2019	2018
Level of Evidence										
	VI	VI	VI	VI	VI	VI	VI	VI	VI	V
Data and Measurement										
Study Design										
Quantitative			X							
Qualitative	X	X		X	X		X	X	X	X
Mixed Methods						X				
Use of Validated Tool			X			X				
Estimate of external reliability			X			X				
Estimate of internal reliability						X				
Identified bias	-	-	-	-	-	-	-	-	-	-
Population										
Non-Nurses				X				X		X
Nurses	X				X				X	
APRNs	X									
Nurse Practitioners		X	X				X	X		
Setting										
U.S.	X	X	X	X		X	X		X	X
Other					X			X		X
Level of Experience										
Exp. ≤1 year		X	X		X		X			
Exp. ≤3 years									X	
Exp. ≤5 years								X		
Study Design										
Focus Group/Interview	X			X			X	X	X	X
Survey		X	X	X		X				X
Written diaries					X					
Sudy Outcomes										
Outcome type										
Mentoring-not beneficial										X
Mentoring-beneficial		X		X	X	X	X	X	X	X
Mentors Need Support	X									
Variables of Interest										
Organizational Commitment	X	X							X	X
Mentor/Mentee Relationship	X			X		X				X
Professional Autonomy		X	X	X	X	X			X	X
Professional Growth				X	X	X				
Turnover Intention			X						X	
Social Support/Collaboration		X	X		X	X		X	X	X
Role Ambiguity		X	X							
Meaning in Work		X								
Work-Life Balance		X				X		X	X	
Workload	X	X				X		X		
Job Satisfaction		X	X			X				X
Applicability										
Feasibility to replicate	X	X	X	-	X	X	X	X	X	X
Goodness of fit for this project	X	X	-	-	X	X	X	-	X	-

Appendix K

The Transtheoretical Model of Health Behavior Change

Pre-Contemplation
Unaware of behavior or need for change, not planning to make a change

Contemplation
Thinking about change, seeking out support and information

Maintenance
Achieving results and behavior becomes part of daily life

Stages

Of

Change

Action
Taking positive steps to make change and putting plans into practice

Preparation
Planning to make change, gathering confidence and resources

,

Appendix L

APPROVAL: EXPEDITED REVIEW

Heidi Sanborn
EDSON: RN BSN
602/496-6791
hsanborn@asu.edu

Dear Heidi Sanborn:

On 11/10/2020 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Implementing a Peer Support Network to Promote Wellness During the COVD-19 Pandemic
Investigator:	Heidi Sanborn
IRB ID:	STUDY00012783
Category of review:	
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• IRB Social Behavioral 2019_final 03262020_updated-08-11-2020.docx, Category: IRB Protocol; • Linear Analog Self-Assessment Survey_16-10-2020-Appendix D.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • NP Connection-Project Announcement_16-10-2020-Appendix B.pdf, Category: Recruitment Materials; • SAZAPN Society Annual Award Winners-08-11-2020, Appendix E.pdf, Category: Other; • TMC One agency support letter_05-10-2020-Appendix A.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Voluntary Disclosure Consent Document 06-11-2020-Appendix C.pdf, Category: Consent Form;

The IRB approved the protocol from 11/10/2020 to 11/9/2021 inclusive. Three weeks before 11/9/2021 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 11/9/2021 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Janna Clark-Deuel

Appendix M

By completing this survey, you are agreeing to participate in this project

<u>Linear Analog Self-Assessment</u>

Participant ID:_____   **Date:**_____

Directions: Please circle the number (0-10) best reflecting your response to the following that

describes your feelings during the past week, including today.

1. How would you rate your physical wellbeing over the past week?
   (This question refers to such things as fatigue, activity, etc.)

   0   1   2   3   4   5   6   7   8   9   10

   as bad   as good

   as it can be   as it can be

2. How would you rate your emotional wellbeing over the past week?
   (This question refers to such things as depression, anxiety, stress, etc.)

   0   1   2   3   4   5   6   7   8   9   10
   as bad   as good

   as it can be   as it can be

3. How would you rate your spiritual wellbeing over the past week?
   (This question refers to such things as a sense of meaning and purpose, relationship with God,
   etc.)

   0   1   2   3   4   5   6   7   8   9   10
   as bad   as good

   as it can be   as it can be

4. How would you rate your intellectual wellbeing over the past week?

(This question refers to such things as the ability to think clearly, to concentrate, to remember, etc.)

0   1   2   3   4   5   6   7   8   9   10
as bad   as good

as it can be   as it can be

5. How would you rate your overall wellbeing over the past week?

0   1   2   3   4   5   6   7   8   9   10
as bad   as good

as it can be   as it can be

Locke, D. E. C., Decker, P.A., Sloan, J. A., Brown, P.D., Malec, J. F., Clark, M. M., Rummans, T. A., Ballman, K.V., Schaefer, P. L. & Buckner, J. C. (2007). Validation of single-item Linear Analog Scale Assessment of quality of life in Neuro-Oncology patients. Journal of Pain and Symptom Management, 34(6), 628-638.

Appendix N

NP Connection Budget

Activities	Cost	Subtotal	Running Total
ZOOM Communication (all providers have been given ZOOM access through the organization).	$0.	$0.	**$0.**
Each participant will be asked to complete the Linear Analog Self-Assessment via Survey Monkey or Google Forms.	$0.	$0.	**$0.**
Meeting 1 "Are you Tired?" Nutrition, Exercise and Sleep Class materials: Each participant (N=20) will be given a Wellness Journal.	$15.	$465.	**$465.**
Meeting # 2 "Paint the Patient" Mindfulness and the "Why" Class materials: Each participant (N=20) will be given a paint kit and thank you cards for use during this session.			
Paint Kits	$18.	$558.	**$1,023.**
Thank You cards (Boxed)	$40.	$40.	**$1,063.**

Meeting # 3 "Code Lavender" Team support during tough times			
Class Materials: Each participant (N=40) will be given a Code Lavender Bag filled with an inspirational magnet, chocolate and lavender essential oil.	$14.	$434.	**$1,497.**
Amazon gift card will be given to each participant who completes the Linear Analog Self-Assessment Survey pre and post intervention.	$15.	$465.	**$1,962.**

Budget Justification:

1) Mental health of providers and support staff.
(The burnout and suicide rate of health care providers is at an all-time high, especially given the world-wide pandemic.)

2) Staff appreciation of each other, team building has slipped, not intentionally but because the work environment has created isolation (social distancing) during this unprecedented time.

3) Retention of NP work force, thereby advancing our profession.