# Understanding Practice Improvement for DNP Projects

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The leader in quality NP education

## Disclosures

Presenters have no disclosures to report



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# Objectives

- 1. Describe the process of assessing the need for practice improvement or practice change in a clinical site
- 2. Review steps for integrating evidence-based practice quality improvement into DNP projects
- 3. Highlight the results of a DNP project matching process at a southeastern university school of nursing



## Overview



It is well recognized that ongoing clinical practice improvement is a necessary component of ensuring high-quality, safe, and high value healthcare.

Yet, clinical teams are often challenged to implement or effectively evaluate initiatives due to competing patient care demands, time, or manpower/resources.



## Practice Improvement

Improvement methodologies are used nationally and internationally, to improve processes of care or patient outcomes.

Clinical Practice Improvement (CPI) is a commonly used methodology to address identified problems in the clinical area.





## Practice Improvement

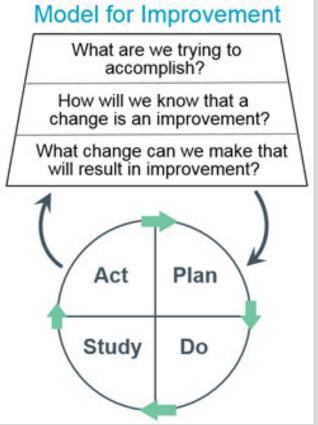
Improvement Science is a commonly used methodology to address identified problems in healthcare.

It involves identifying, defining and diagnosing the causes of a problem, before developing change ideas (interventions / possible solutions) and implementing interventions that may address the identified causes.

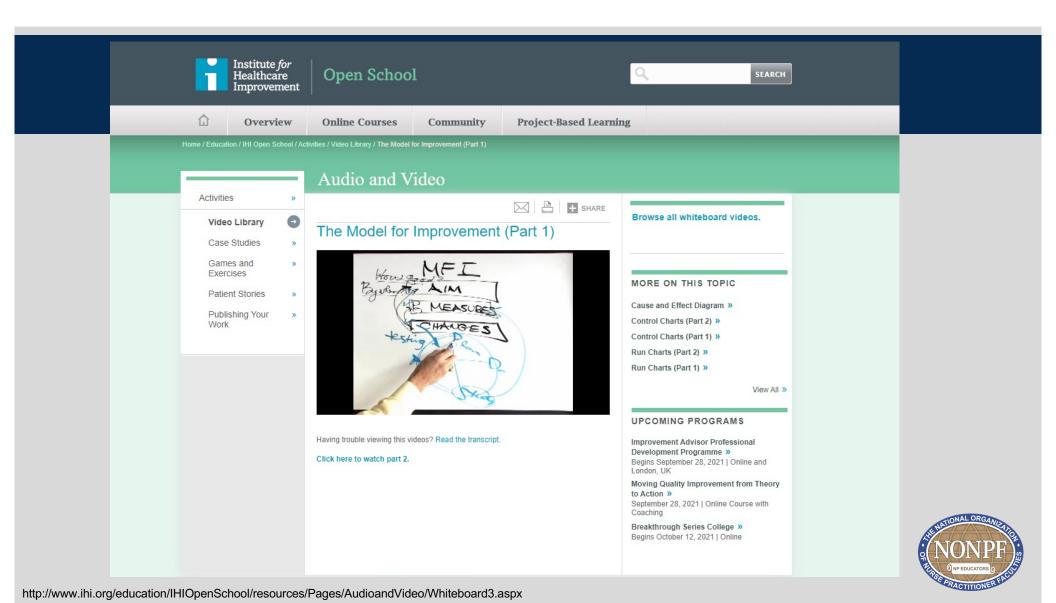
4 Act Plan 1
Study Do 2

The change ideas (possible solutions) are tested using small-cycle testing called "Plan, Do, Study, Act" (PDSA) cycles.







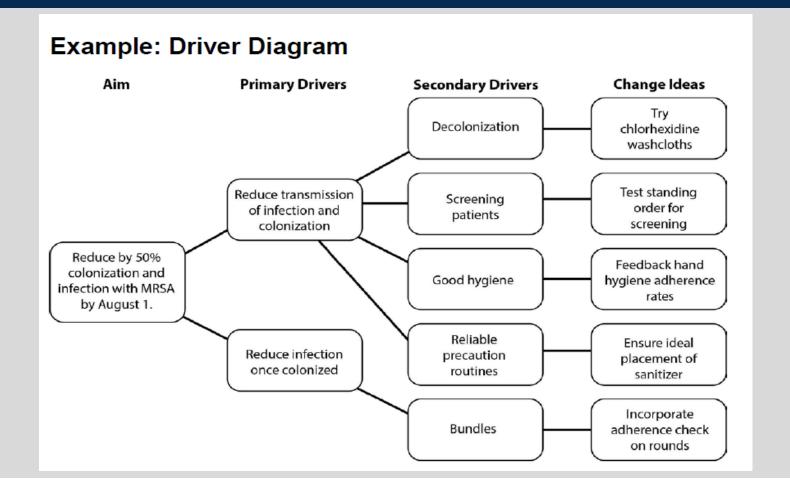




#### QI Essentials Toolkit

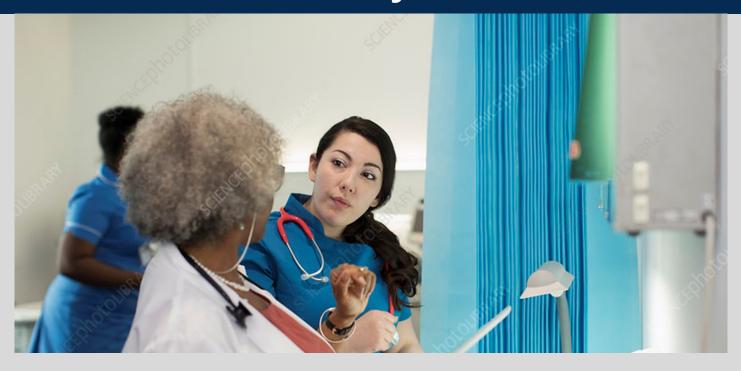
- <u>Cause and Effect Diagram</u>
- <u>Driver Diagram</u>
- Failure Modes and Effects Analysis (FMEA)
- Flowchart
- Histogram
- Pareto Chart
- PDSA Worksheet
- Project Planning Form
- Run Chart & Control Chart
- Scatter Diagram







# Practice Improvement and DNP Projects





## Overview



Achieving improvement goals

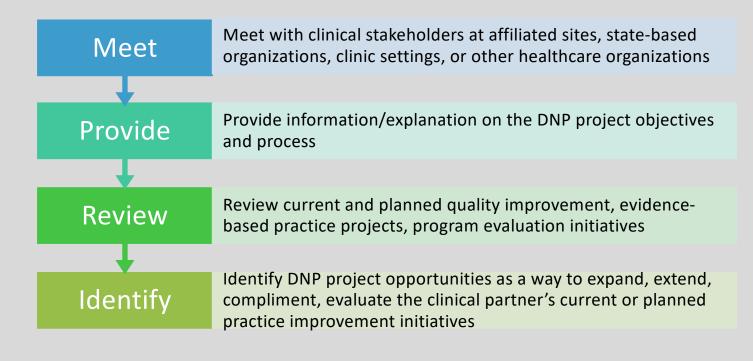
Providing exceptional learning opportunities

Partnering with clinical organizations

Identify opportunities of value

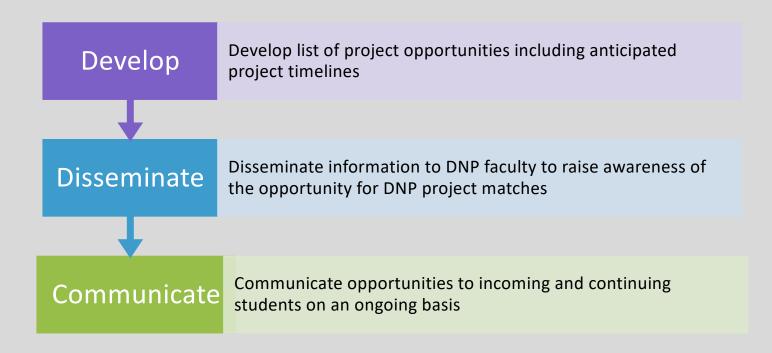


## Partnering





# Advertising





# The Process of DNP Student Project Matching

Student confers with committee chair

Student completes a project match application

Student reviews list of project opportunities

Application is reviewed

Student signs participation agreement

Student and committee meet with stakeholders

Student is referred to committee chair





# DNP Project Matching Interest Form

#### Resize font: **DNP Project Matching Interest Form H** | **G** Thank you for your interest in participating in Vanderbilt University School of Nursing's Doctor of Nursing Practice (DNP) Project matching initiative. As part of the DNP project matching opportunity with Vanderbilt University Medical Center, clinical site partner, or regional/state or national initiatives, students are linked with a project focus and participate in various aspects including data collection, data analysis, project evaluation, or project expansion work. While project data is often proprietary and not within the purview of the DNP student to independently publish, opportunities to be included as a co-author on project related presentations and publications exist, depending on the project. Additionally, DNP students often have the opportunity to submit an abstract to present a poster on their DNP project related work. VUSN faculty help to oversee the DNP student matching process and ongoing student progress, in conjunction with the DNP Project Chair. In order to best assess project match opportunities, please provide the following information: Name: \* must provide value Email: \* must provide value **DNP Program** Year of Entry to DNP program: 5 or 6 Semester Program Track: ○ 5 Semester ○ 6 Semester





# DNP Project Matching Interest Form

er of anticipated enrollment in the course 8105: D	NP Integrative Application of Evidence-Based P
Year of entry to course 8105:	
Semester of entry to course 8105	○ Fall ○ Summer ○ Spring
Prior Clinical/nursing background:	
Current clinical/nursing position, if any:	
Areas of interest related to DNP project:	



## **FAQs**



Are matched projects guaranteed?



How are matched projects different from other projects?

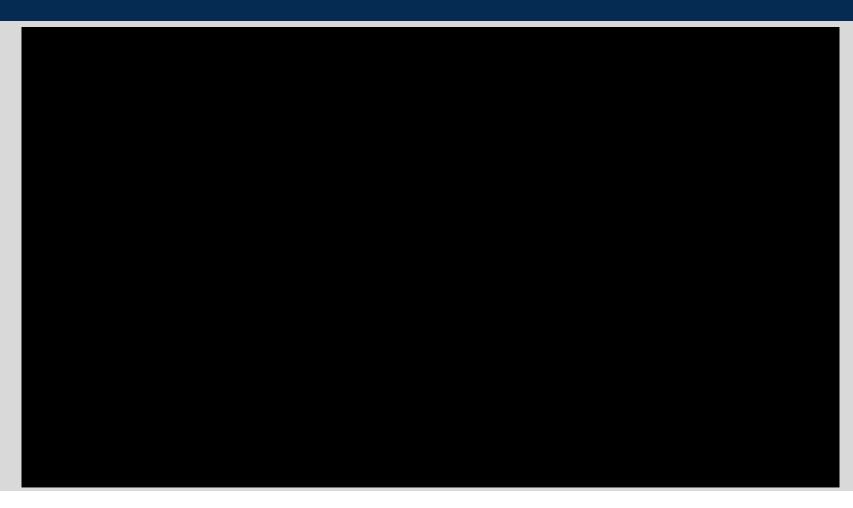


What is a student's involvement in publishing/presenting project results?



How rigid is the project timeline?







## DNP Project Opportunities

A number of VUSN students have been matched with DNP projects.

These opportunities have proven beneficial for the student, who works with an established team, to implement or evaluate an initiative.

It is also beneficial for the project teams, as they value having DNP student contributions.

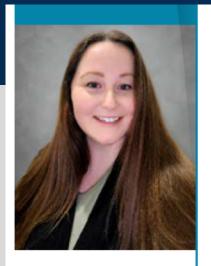




# Examples of VUSN DNP Student Project Matches







#### BREANNA BUCCO

DNP, MSN, RN, CPNP-PC

Pediatric Nurse Practitioner -Primary Care

### Evaluating the Talk with Me Baby Program in the Home Visitation Setting

#### **PURPOSE**

The present qualitative improvement study investigated and evaluated the perceptions, benefits, barriers, and if/how the care coordinators are using TWMB in the home visitation setting. Previous research shows that a child's vocabulary at age three is the strongest predictor of the child's ability to read proficiently by the end of the third grade (Zauche et al., 2017). The TWMB program is geared at improving language development, providing language-rich interactions, improving home language environments, and increasing reading ability by third grade. In 2018, Tennessee held a home visitation summit that presented the TWMB skills to 400 home health visitors. However, no follow up evaluation was conducted.

#### **METHODOLOGY**

This quality improvement project utilized a twenty-two-question virtual survey as the primary tool for collecting evidence. The survey was emailed to the 400 home visitors that attended the summit. Data analysis was conducted using descriptive statistics.

#### **RESULTS**

Results from the evaluation showed that the trainees evaluated the improvement of language development and nutrition of their patients at a 4.86 on a scale of zero to ten. The trainees evaluated the benefit of the TWMB skills at a 5.29 on a scale of zero to ten. Multiple barriers were identified. Time was a significant barrier for 42.9% of participants and 35.7% identified the

patient's culture as a barrier to implementation of the TWMB skills.

#### IMPLICATIONS FOR PRACTICE

Future implications should address the barriers identified in the evaluation for the home health setting, updates on the TWMB skills and coaching to keep the trainees active and confident with the skills. enhancement of the TWMB coach training, and creation of additional resources to help the trainees implement the TWMB skills. Future research should be conducted into home literacy environments (HLE) and how they impact language development, gender, parental involvement, and race.





#### 2021 DNP PROJECTS

#### National APRN Practice and Pandemic Survey: California Results

#### **PURPOSE**

This project aimed to describe barriers to APRN full practice authority in California and examine the effects of lifting restrictions on APRN practice due to the healthcare demands of the SARS-CoV-2 (COVID-19) pandemic.

#### METHODOLOGY

The National APRN Survey was designed to identify and evaluate the impact of some states' decision to temporarily remove practice barriers to APRN full practice authority during the pandemic. Survey participants included APRNs from California who are willing to participate. Existing quantitative and qualitative data were analyzed.

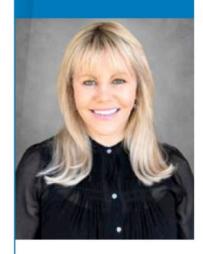
#### RESULTS

Over forty-one percent of participants reported a reduction in the outpatient visits, including new patient, preventative, chronic, and acute care visits. Over 53% of outpatient APRNs reported a reduction in revenue as a result. The utilization of telehealth in the outpatient setting during the pandemic reached 70.5%. Sixty-six APRNs (37.9%) identified difficulty in obtaining referrals/consultation and securing supplies in outpatient

and inpatient settings during the pandemic. Over 60% of participants reported inpatient reduction in revenue. Qualitative analysis of open-ended questions revealed that inpatient providers were frequently reassigned to different services. Even after the removal of practice restrictions, 53% of APRNs reported no changes in their practice authority.

#### IMPLICATIONS FOR PRACTICE

Lessons learned from survey responses during the pandemic should lead to significant changes that improve organizational performance, remove barriers to full practice authority, address staff and patient safety and well-being, and thus increase the level of preparedness for a future crisis. As health care leaders, APRNs have an essential role in affecting these changes and working with policymakers and administrators to ensure that the lessons learned from this crisis are put to good use.



#### **NELLY AGHILI**

DNP, RN, AGACNP-BC

Adult-Gerontology Acute Care Nurse Practitioner





#### 2021 DNP PROJECTS

#### Music in the Intensive Care Unit: Registered Nurses' Perceptions

#### **PURPOSE**

The purpose of this DNP project was to assess registered nurses' (RNs) perceptions of the acceptability, appropriateness, and feasibility of a therapeutic music program in the intensive care unit (ICU) and identify any barriers or facilitators to this intervention.

#### **METHODOLOGY**

The DNP project examining RNs' perceptions of music in the ICU followed a program development and evaluation model. Registered nurses' perceptions of the appropriateness, acceptability, and feasibility, as well as any facilitators and barriers, of a therapeutic music program in the medical ICU (MICU) environment were obtained through a descriptive survey using a convenience sample. The pilot was conducted in a

35-bed adult MICU at a level one trauma and academic medical center with over 65,000 annual inpatient admissions. All RNs who were exposed to the music sessions were invited to participate in an anonymous survey through workplace email.

#### RESULTS

Data collected from Likert scale responses was evaluated using descriptive statistics. A frequency chart provided a visual representation of the responses addressing facilitators and barriers. The survey was completed by 15 RN staff members who worked in the MICU, who overwhelmingly agreed that therapeutic music in the ICU is acceptable and appropriate. Respondents also felt that therapeutic music in the ICU is feasible, but responses were less positive. The survey respondents unanimously

identified a patient and familycentered care environment and ICU leadership with an open mind to new approaches to patient care as facilitators to therapeutic music in the ICU. The most significant barrier to therapeutic music in the ICU was reported to be the severity of a patient's illness.

#### IMPLICATIONS FOR PRACTICE

Findings from this survey provided information on RNs' perceptions of acceptability, appropriateness, and feasibility of therapeutic music in the MICU and identified facilitators and barriers to this intervention.

The largely positive feedback from RNs was supportive of therapeutic music in the ICU. Furthermore, the identification of barriers and facilitators will enable future programs to be developed and implemented more effectively.



#### MELISSA PEARSON

DNP, AG-ACNP, ENP, FNP

Adult-Gerontology Acute Care Nurse Practitioner FNP/Emergency Nurse Practitioner









#### ISABELL STOLTZ

DNP, RN, MN, CCNS

Clinical Nurse Specialist

#### Impact of LEAP! Mentorship Program on APPs at VUMC

#### **PURPOSE**

Leadership Excellence in Advance Practice (LEAP!) is a mentoring program at Vanderbilt University Medical Center (VUMC) that provides a dedicated forum for advanced practice providers (APPs) to network with experienced nursing leaders to facilitate the acquisition of knowledge and skills essential to leadership in the complex world of healthcare. This project evaluated the impact of the LEAP! mentorship program on APPs using the Strong Model of Advanced Practice as a framework.

#### **METHODOLOGY**

Survey respondents provide insight into the impact of LEAP! on their careers using a Likert scale. Descriptive statistics were used to report these findings. Two open-ended items were evaluated using thematic analysis to identify motifs from the program.

#### RESULTS

Of 69 surveys sent, 28 surveys were returned (40.5%). Participants reported a moderate impact of this program. The most impactful area of the LEAP! mentorship program was Support of Systems (N=25, 86%). Other areas of impact were Research (N=23, 82%), Education (N=22, 79%), Direct Patient Care (N=21, 75%), and Leadership (N=21, 75%). The thematic analysis mirrored these results and overwhelmingly APPs would recommend the LEAP! Mentorship Program to their colleagues.

#### IMPLICATIONS FOR PRACTICE

The results of this study provided insight for program directors on the impact of LEAP!. Participants reported this mentorship program had a moderate impact on their roles. VUMC now has a tool to track the impact of LEAP! mentorship program on its participants.



#### 2021 DNP PROJECTS

#### Impact of COVID-19 on Illinois APRN Practice

#### **PURPOSE**

The purpose of this study was to review data from a national survey specific to the state of Illinois including open ended survey responses regarding the influence of the COVID-19 pandemic on Advanced Practice Registered Nurse (APRN) practice and to understand the effect of the COVID-19 pandemic had on patient care and APRN practice in Illinois.

#### **METHODOLOGY**

For this DNP scholarly project, a qualitative design- thematic analysis- was utilized to evaluate Illinois APRNs, currently working, responses to open-ended questions from the national APRN survey. The data was analyzed to understand APRNs lived experiences and perceptions of the impact of the COVID-19 pandemic on Illinois APRN practice.

#### **RESULTS**

Descriptive statistics were used to describe the respondents by practice setting, education, and years in practice. Two hundred thirty-two ( N=232) provides responded including 189 (3.4%) NPs, 23 (9.9%) CNS, 8 (3.4%) CRNA and 17 (7.3%) CNM and included one hundred thirty-one (n=131)

coded Illinois APRN open responses. As a result of the pandemic 38 (29.8%) providers reported role changes, 25 (19.1%) reported having to provide care to COVID-19 patients or provided COVID-19 testing, 13(10%) responded that their workload increased, 22 (16.8%) responded that telehealth became feature of their practice. Additionally, (55.4%) reported a decrease in new patient visits and (64.3%) reported decrease in preventative health visits, (53.7%) reported a decrease in chronic care visits and (48.4%) providers reported a decrease in acute care visits.

#### IMPLICATIONS FOR PRACTICE

The results of the project demonstrate, if SOP restrictions were lifted, during the pandemic, there would have been increased healthcare access and improved health outcomes.

Specifically, implementing SOP changes could have reduced COVID-19 deaths in Illinois' hardest hit communities. Likewise, SOP changes would have reduced the death toll in Cook County by 8%. These findings support granting NPs full practice authority to ease the healthcare workforce shortage.



### CORY R. WILLIAMS

DNP, APRN, AGACNP-BC

Adult-Gerontology Acute Care Nurse Practitioner





# Examples of current VUSN DNP Student Projects



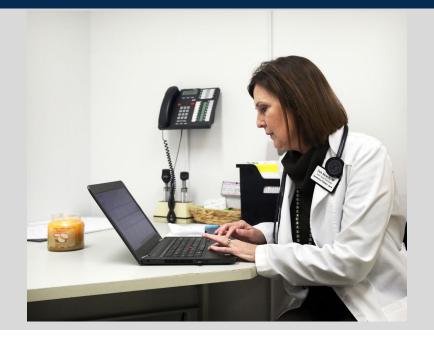


# Comparing the use of virtual sitters to in-person sitters for at-risk hospitalized patient





# Assessing the impact of a discharge care center and post discharge follow up on hospital readmissions





# Enhancing interview skills for nurse residency program applicants





# Reducing rates of primary cesarean sections with use of a national collaborative



Reducing Primary Cesareans

**Bundle Name: Intermittent Auscultation** 

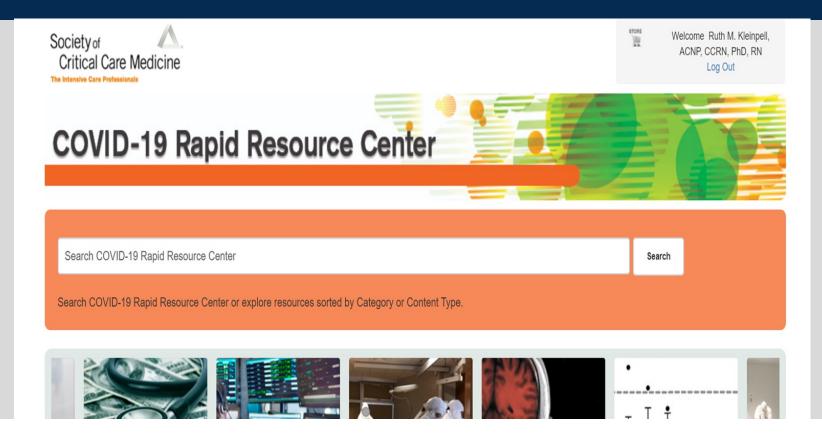
#### Readiness

Every unit

- Provides initial and ongoing training for all maternity care professionals on evidencebased approaches to fetal heart rate (FHR) assessment, including intermittent auscultation (IA) and associated standardized documentation.
- Establishes a unit culture that supports the evidence-based use of IA as the preferred method of FHR monitoring for women at no a priori risk for developing fetal acidemia during labor and/or are at low risk for uteroplacental insufficiency.<sup>2,4,6-16</sup>



# National COVID-19 Clinician Survey Review





# Examples of ongoing VUSN DNP Student Projects





Stakeholder	Topic
Vanderbilt Hospital at Home	VHaH is interested in a day in the life of VHaH nurses. Consider the experiences of VHaH nurses and how their experiences can be used to improve onboarding and interviewing/hiring. Consider the skillsets of acute care and home health nurses as they relate to home hospitalization.
Vanderbilt Hospital at Home	Patients are only eligible for HaH if there is a caregiver or someone else in the home. Consider a day in the life of a VHaH caregiver, as well as caregiver burden, and how that may be used for patient/caregiver/provider education and process improvement.
Vanderbilt Hospital at Home	VHaH is interested in the right collective dose of nursing care, considering all nursing roles in HaH. Consider the surveillance, attention, and monitoring burden, and when telehealth calls and visits become burdensome.
Vanderbilt Hospital at Home	VHaH is interested in clinical documentation related to HaH needs. The organization wants to identify these needs and consider how clinical documentation be modified and/or maximized for VHaH.



Stakeholder	Topic
Vanderbilt Psychiatric Hospital	Patients on inpatient units at VPH currently do not have access to mobile devices/cell phones. The organization wants to develop a strategy to overcome staff/provider barriers and implement a practice guideline.
Vanderbilt Psychiatric Hospital	VPH is interested in studying the use of telehealth as an intervention for caregiver burden in the ambulatory care environment.
Vanderbilt Hospital at Home	VHaH is interested in medication safety practices and is interested in exploring the role of telemonitoring in medication administration, particularly as related to safety, pain assessment, and collaboration with pharmacy.
Vanderbilt Hospital at Home	VHaH is invested in ensuring patient safety and is interested in vulnerabilities and safety risks for patients. Consider how these can be identified and mitigated.
Vanderbilt Hospital at Home	VHaH is interested in how the patient/caregiver experience compares to previous inpatient experiences. Consider locus of control as one area of interest.



# DNP Project Matching: Additional Considerations

- 1. Having a clear understanding of the organization/stakeholder goals to advance their practice improvement initiatives is important
- 2. The DNP project should be of value to the organization/stakeholder and not simply focus on the DNP student's interests
- 3. Specific project requirements should be identified:
- i.e.. requirement for VA system employment to have access to data/dashboards
- i.e.. whether the project opportunity can be conducted virtually if student lives in another state with limited onsite presence only during the DNP intensive/onsite class time

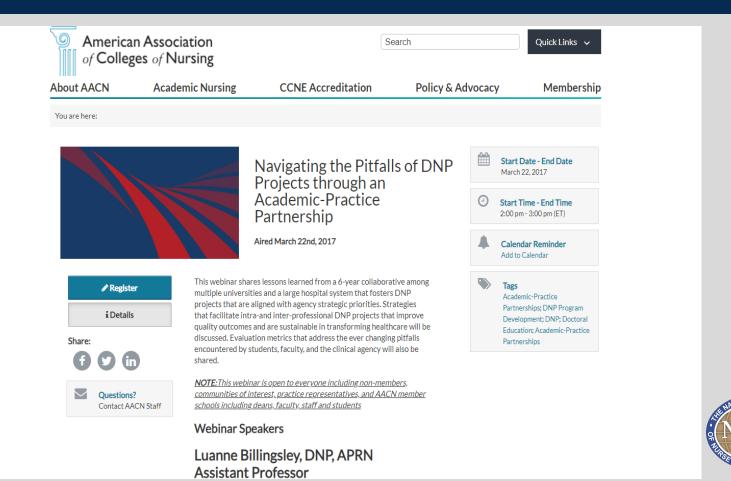


# DNP Project Matching: Additional Considerations

- 4. Provide ongoing mentorship to the DNP student to ensure that the development of the matched project is consistent with the initially identified focus
- 5. Ensure that DNP chair/committee members are aware of the DNP project matching process goals/objectives
- 6. Engaging students in matching projects before they are due to plan/implement their projects can enable them to fast-track through the process



### Resources



Journal of Professional Nursing 36 (2020) 569-578



Contents lists available at ScienceDirect

#### Journal of Professional Nursing

journal homepage: www.elsevier.com/locate/jpnu



Academic-Practice Partnerships: Building a sustainable model for Doctor of Nursing Practice (DNP) projects



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<sup>&</sup>lt;sup>b</sup> Division of Nursing, Rush University Medical Center, 1717 West Congress Parkway, Chicago, IL 60612, USA

Survey Question	DNPPOC Members (n = 11)
Improved communication across Academic- Practice Partnership	100% ( 11/11)
Improved quality of DNP projects	50% ( 5/10)
Clarify role expectations of clinical leaders	82% (9/11)
Improved identification of facilitators	100% ( 11/11)
Improved DNP student expectations	82% ( 9/11)
Improved expectations of student advisors	73% (8/11)
Improved distribution of work across clinical areas	55% ( 6/11)
Increased sustainability of DNP Projects	36% ( 4/10)



Fig. 5. Percent of respondents who Agreed or Strongly Agreed to the DNP Project Oversight Committee survey questions.

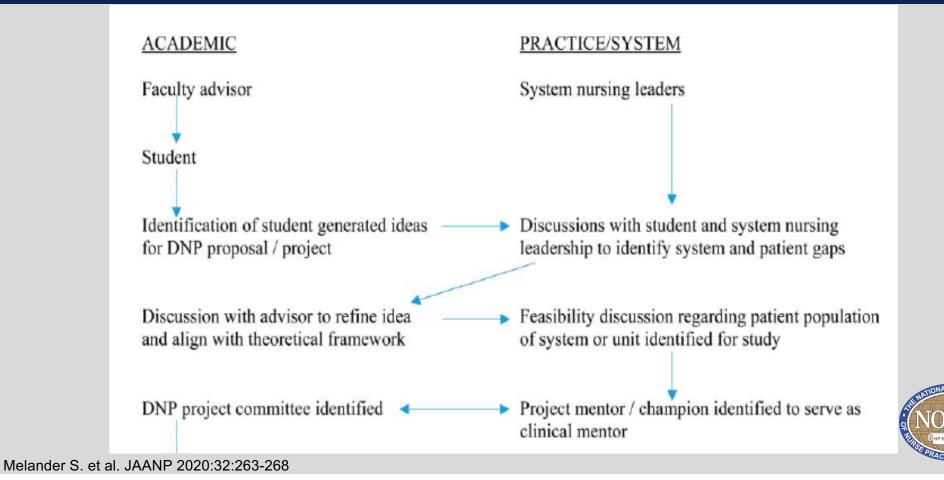
#### Education



#### Optimizing impact through the Tiered Doctor of Nursing Practice Project Model

Sheila Melander, PhD, APRN-BC, FCCM, FAANP, FAAN (Associate Dean)<sup>1</sup>, Patricia B. Howard, PhD, RN, NEA-BC, FAAN (Executive Associate Dean)<sup>1</sup>, Tracy E. Williams, DNP, RN, FNAP, FAAN (Senior Vice President and System Chief Nursing Officer)<sup>2</sup>, Kim Tharp-Barrie, DNP, RN, SANE, FNAP (Vice President)<sup>3</sup>, Peggy El-Mallakh, PhD, RN, PMHNP-BC (Associate Professor)<sup>1</sup>, & Tricia MacCallum, BA (Project Manager)<sup>4</sup>





## Summary

- Identifying, developing, and implementing practice improvement-related DNP projects that benefit patients, clinical sites, and students can be achieved with a strategic matching process.
- The process can be beneficial to organizations/healthcare systems as well as to the DNP students, who have the opportunity to work with interprofessional teams on practice improvement projects
- Students often benefit from exceptional learning opportunities obtained through the DNP project matching process



# Questions?

