

EP1EOb – PROFESSIONAL PRACTICE MODEL

USING A VASCULAR CLOSURE DEVICE TO ENHANCE THE PATIENT EXPERIENCE IN THE EP LAB

Using the required empirical outcomes presentation format, provide one example, from an ambulatory care setting, of an improved outcome associated with an evidence-based change made by nurses in alignment with the organization's professional practice model (PPM).

- *Provide a schematic of the PPM*

Problem

The professional practice model (PPM) at NewYork-Presbyterian/Columbia University Irving Medical Center (NYP/Columbia) describes the role of NYP/Columbia professional nurses and how nursing is practiced. The PPM elements include advocacy, autonomy, collaboration, evidence-based practice (EBP), and professional development. The care delivery system is a part of the schematic and includes patient- and family-centered care. [EP1EOb.1—PPM Schematic](#)

Rebekah L. Wiley, MSN, MBA, RN, Patient Care Director (nurse manager), and Kenneth Taganajan, MS, BSN, RN, CCRN, Clinical Nurse Manager (clinical nurse, at the time), EP Lab (606104) [EP Lab], Cath Lab (606101) [Cath Lab], and Cardiac Services (606509) [Cardiac Services], noted that the EP Lab mean score on the Press Ganey patient satisfaction survey question, "How well staff at the surgery center worked together to care for you?" (Staff worked together care for you) was low. This was an opportunity for nurses to implement an evidence-based change to improve the patient experience in alignment with the collaboration and evidence-based practice elements of the PPM.

Pre-Intervention

September 2021:

- The mean score on the Press Ganey patient satisfaction survey question, “Staff worked together care for you” in the EP Lab was 93.18 in September 2021.
- EP Lab clinical nurses Emmyloy Rana, BSN, RN, CCRN; Jennifer Gaviola, BSN, RN, CCRN; and Michelle Tan, ASN, RN; conducted a literature review on VASCADE® use. VASCADE is a venous closure system that helps reduce the risk of vascular complications such as bleeding and hematoma post procedure. From their review, they found multiple articles demonstrating an improvement in postoperative care with early ambulation, shortened bedrest, and less utilization of urinary catheterization.

In alignment with the collaboration and evidence-based practice elements of the PPM, EP Lab clinical nurses proposed a collaborative interprofessional EBP change in post-procedure care following the application of VASCADE to include clinical nurses partnering with physicians. Current practice included providers-only applying the VASCADE venous closure system. As cited in the literature, collaboration among healthcare professionals was identified as an effective evidence-based practice and crucial in ensuring the best possible outcomes for the patient, especially in the recovery process post-VASCADE use.

- Ms. Rana, Ms. Gaviola, and Ms. Tan proposed a practice change to Ms. Wiley and Mr. Taganajan that involved revision of the current post-procedure practice. The proposal included:
 - Attending MD determines appropriateness of VASCADE and informs the procedure clinical nurse.
 - Procedure clinical nurses prepare VASCADE as part of the room setup and informs the provider if it is unavailable.
 - Procedure clinical nurses document hemostasis time, successful deployment, and patient response. These are then communicated to the post-procedure clinical nurses.
 - Post-procedure clinical nurses monitor the sheath site for bleeding and hematoma and performs distal pulse checks.
 - Post-procedure clinical nurses check the access site post-ambulation and escalates any bleeding or hematoma to the physician assistant. Patients must ambulate, if able, before discharge to ascertain that the access site is stable.

Goal Statement

To increase the mean score on the Press Ganey patient satisfaction survey question, “Staff worked together care for you” in the EP Lab

Participants

Name/Credentials	Discipline	Title	Department/Unit
Emmyloy Rana, BSN, RN, CCRN	Nursing	Clinical Nurse	EP Lab
Jennifer Gaviola, BSN, RN, CCRN	Nursing	Clinical Nurse	EP Lab
Michelle Tan, ASN, RN	Nursing	Clinical Nurse	EP Lab
Kenneth Taganajan, MS, BSN, RN, CCRN	Nursing	Clinical Nurse Manager (clinical nurse, at the time)	EP Lab, Cath Lab, Cardiac Services
Rebekah L. Wiley, MSN, MBA, RN	Nursing	Patient Care Director (Nurse Manager, at the time)	EP Lab, Cath Lab, Cardiac Services
Hirad Yarmohammadi, MD	Medicine	Attending	Cardiology
Alessandra Capizzi, PA-C	Medicine	Physician Assistant	Cath Lab
Louis Lopez	Supply Chain	Supply Chain Supervisor	Supply Chain

Intervention

October 2021:

- Ms. Wiley and Mr. Taganajan collaborated with the VASCADE vendor for an in-service geared towards EP Lab clinical nurses. The vendor in-service was completed on October 21, 2021.

Impact Statement: The content of the vendor in-service supported the multidisciplinary collaborative revision proposed by the clinical nurses, which enabled nurses and providers to work together in the care of patients after VASCADE use.

November – December 2021:

- During daily interdisciplinary rounds, Ms. Rana, Ms. Gaviola, and Ms. Tan participated in discussions among the interprofessional team including Attendings and Physician Assistants on the benefits of a vascular access closure device.

Impact Statement: Interdisciplinary rounds facilitate collaborative communication among healthcare team members including providers and nurses. Through these discussions, clinical nurses were able to recognize multidisciplinary perspectives, gain buy-in, and minimize gaps and redundancies in post-procedure care.

- Ms. Rana, Ms. Gaviola, Ms. Tan, and Mr. Taganajan revised the post-care guidelines to include the interprofessional collaboration evidence-based change related to the use of VASCADE.

Impact Statement: Collaboration among professionals promotes an exchange of information and improves patient safety during the patient's post-procedure recovery. Nurses observed and assessed the patient for any signs of complications, while providers adjusted treatment plans based on these observations. Collaboration ensured nurses and providers worked together to promptly and safely address complications and issues.

January 2022;

- Alessandra Capizzi, PA-C, reviewed the revised post-care guidelines and provided feedback from the provider standpoint.

Impact Statement: Obtaining the provider's perspective fostered collaboration and contributed to provider buy-in.

- Ms. Wiley finalized and approved the revised guidelines for implementation.

Impact Statement: Manager oversight on unit-level guidelines ensured nurses, physicians, and physician assistants worked together to identify signs of complications and implement appropriate interventions promptly. Written guidelines served as a resource for the team and guided practice responsibilities.

- Ms. Wiley and Mr. Taganajan collaborated with Louis Lopez, Supply Chain Supervisor, to increase the par level of VASCADE.

Impact Statement: As nurses collaborated with the supply chain leaders to monitor supply and demands, they worked together to adjust the par levels based on actual and anticipated use. Securing a supply process enabled the nurses and providers to work together and provide the best care through the use of VASCADE.

February 2022:

Ms. Rana, Ms. Gaviola, and Ms. Tan conducted peer education on the revised post-care guidelines. After educating 80 percent of EP Lab clinical nurses, the clinical nurses fully implemented the revised guidelines by the end of February 2022.

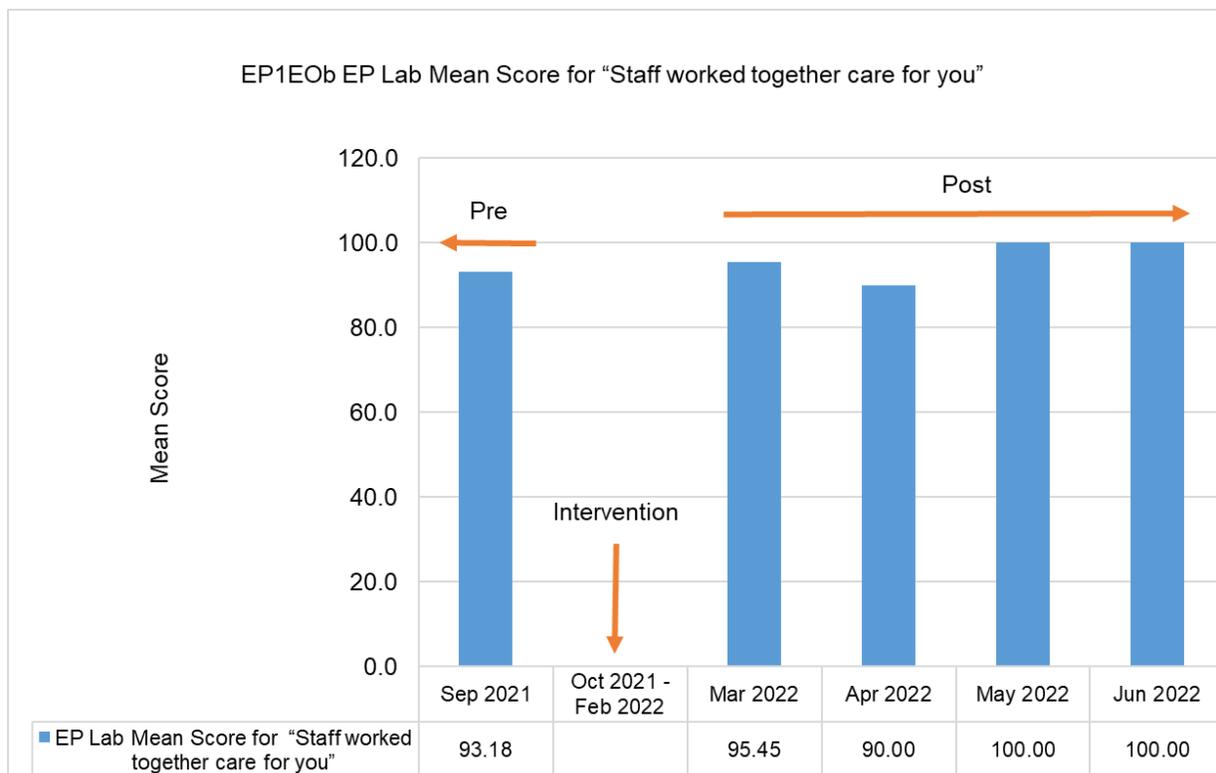
Impact Statement: Peer education reinforced team roles and expectations so nurses and providers worked together in providing post-procedure care.

○ **Key references:**

Mohanty, S., Trivedi, C., Beheiry, S., Al-Ahmad, A., Horton, R., Della Rocca, D. G., Gianni, C., Gasperetti, A., Abdl-Moheeth, M., Turakhia, M. P., & Natale, A. (2019). Venous access-site closure with vascular closure device vs. manual compression in patients undergoing catheter ablation or left atrial appendage occlusion under uninterrupted anticoagulation: a multicentre experience on efficacy and complications. *EP Europace*, 21(7), 1048-1054. <https://doi.org/10.1093/europace/euz004>

Natale, A., Mohanty, S., Liu, P., Mittal, S., Al-Ahmad, A., De Lurgio, D. B., Horton, R., Spear, W., Bailey, S., Bunch, J., Musat, D., O'Neill, P. G., Compton, S. J., Turakhia, M. P., & AMBULATE Trial Investigators. (2020). Venous Vascular Closure System Versus Manual Compression Following Multiple Access Electrophysiology Procedures: The AMBULATE Trial. *JACC: Clinical Electrophysiology*, 6(1), 111-124. <https://doi.org/10.1016/j.jacep.2019.08.013>

Outcome



NYP/Columbia Professional Practice Model (PPM) 2020-2024

STAY
AMAZING

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- Advocacy:** Empower patients, families, communities and colleagues to ensure culturally competent and compassionate care
- Autonomy:** Foster self-directed practice through critical thinking and accountability
- Collaboration:** Promote interprofessional communication and coordination of patient/family centered care
- Evidence-Based Practice:** Integrate clinical expertise, scientific findings and patient preference to improve outcomes
- Professional Development:** Commit to personal, clinical, and scholarly growth to optimize the patient experience