Difficult IV Access Solution in an Ambulatory Surgery Center
Primary Investigator: Jess Berding-Wheat MSN RN
Co-Investigators: Benjamin Mirr BSN RN, Aimee Cusic BSN RN, Sheri Parman RN,
Lauri Riss BSN RN
Iowa Healthcare, Iowa City, IA

Introduction: The purpose of this project was to use evidence-based recommendations to improve clinical outcomes and patient satisfaction in intravenous (IV) placement in ambulatory surgical patients.

Identification of the Problem: Obtaining peripheral IV access (PIV) is a necessary but often challenging procedure, especially for patients who have non-visible and non-palpable veins, history of difficult vascular access, and certain medical conditions.

QI Question/Purpose of the Study: An opportunity in a local Ambulatory Surgery Center (ASC) existed to optimize the PIV insertion processes, enhance efficiency, and reduce patient discomfort, while empowering nursing staff to practice at their full their scope.

Methods: Five ASC nurses were initially trained until they demonstrated competence in USG PIV insertion. Following which, mini-lab time was available several times a month for trained nurses to use US on phantom arm and maintain skills.

Outcomes/Results: Interrater reliability between USG PIV skill evaluators was practiced and achieved in order to sustain future staff training endeavors. The use of group messages ensures that trained nurse is promptly informed and can assist in starting IVs.

Discussion: To evaluate this project, the use of USG for PIV placement was monitored, as well as reviewing Press Ganey satisfaction score related to nurse IV insertion. Moreover, patient input during USG PIV placement was used to provide real-time feedback and assess satisfaction with the practice change. Overall, Press Ganey patient satisfaction scores improved for from 82% to 85% in the first month. The number of patients requiring more than two PIV attempts, surgical case delays, cancellations, anesthesia consults for assistance with PIV placement, and patient complaints related to PIV placement issues are being trended and will be presented.

Conclusion: Nurses are now able to quickly identify patients who would benefit from USG PIV insertion. The ASC has successfully trained an additional nine nurses, with plans for another cohort, indicating a commitment to ongoing education and skill development.

Implications for perianesthesia nurses and future research: With more perianesthesia nurses trained in USG for PIV insertions, patients may experience fewer complications and improved overall outcomes. Continuous training and the addition of new cohorts ensures that the practice remains sustainable and scalable