

## No IV? No Problem. Implementation of a Unit-based, Nurse-led Vascular Access Team

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Imagine this: You are a pediatric hospitalist counseling a 4-year-old patient and her family on the sequence of events that must occur for her to get the MRI that she requires to further evaluate her knee pain. Step 1- place IV. Step 2- give sedation medications. Step 3- undergo MRI. Your patient is undeniably most worried about the IV, while you have already shifted your attention to the sedation. It isn't until the team informs you that they are having trouble placing the IV that you realize the importance of this step in everything that is to follow.

Difficult vascular access is a common occurrence for pediatric patients, and most hospital-based providers have undoubtedly experienced these challenging scenarios within their practice. This week, Peters et al ([10.1542/hpeds.2021-005870](https://doi.org/10.1542/hpeds.2021-005870)) introduced a unit-based intervention that was associated with a decrease in delayed procedures related to difficult vascular access. Utilizing quality improvement methodology, the authors identified difficulty with vascular access as the leading cause for procedural delays within their center. Due to high utilization of an external venous access team (VAT) as a contributing factor to these delays, the authors hypothesized that creating a unit-based team of nurses trained in ultrasound-guided peripheral IV placement would improve the efficiency of IV placements and, in turn, decrease procedural delays. The intervention and subsequent plan-do-study-act cycles over a 10-month period were associated with a 41% reduction in delayed procedures as well as a significant decrease in utilization of an external VAT team for ultrasound-guided peripheral IV placement. These findings highlight a unit-based strategy to reduce procedural delays attributed to vascular access, opening the door for future work evaluating the potential downstream effects of costs savings and patient satisfaction.

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