

Awareness to Action: Closing Care Gaps in Vascular Access

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In Musical Collaboration with:

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Understanding PIVC Facts

1 Peripheral IV Catheter insertion is the most frequently performed invasive procedure

2 350 Million Peripheral IV Catheters are purchased in the USA annually

3 Range of complications associated with PIVCs

4 PIV failure rates range between 33-69%



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One Good Study (emphasis on ONE)

161,122

Total ED Encounters
Included in the Study

4,961 (3.1%)

Difficult IV Access

Difficult IV Access
were more likely:

- Female
- Black
- High acuity
- <1yo

A Black woman is lying in a hospital bed, looking towards the camera. She has an IV line inserted into her nose. She is wearing a blue hospital gown. The background is a blurred hospital room.

DIVA

Black patients 58% more likely than whites to be Difficult IV Access (DIVA)¹

Shokoohi et al. (2020). Difficult intravenous access as an independent predictor of delayed care and prolonged length of stay in the emergency department. *The Practice of Emergency Medicine*. Doi: 10.1002/emp2.12222



SCARCITY OF EDUCATIONAL MATERIALS

B

CLABSI DISPARITIES

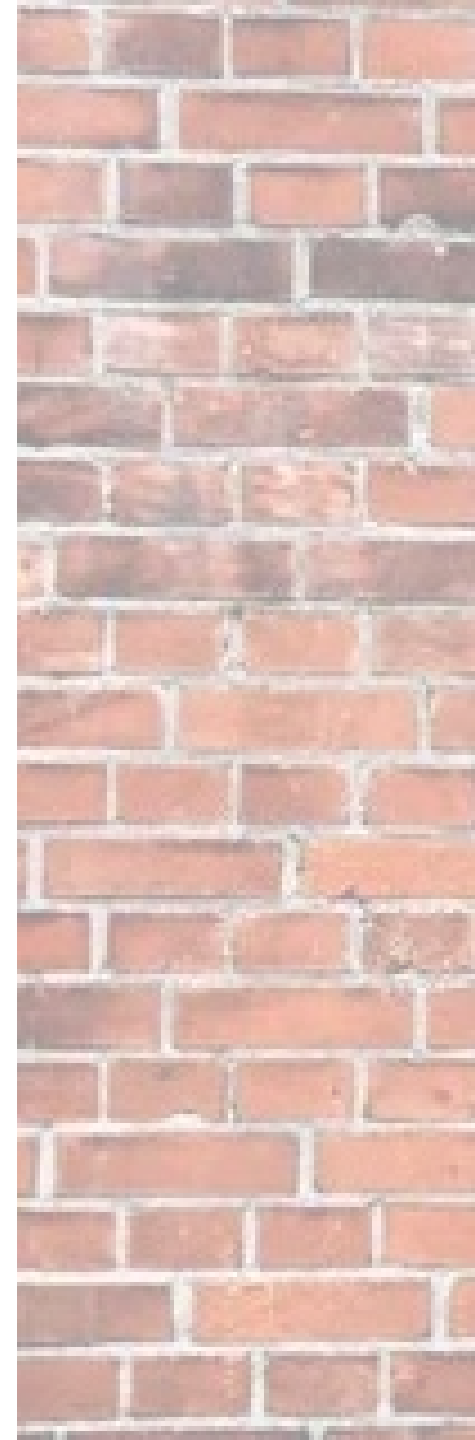




HOW WE TRAIN

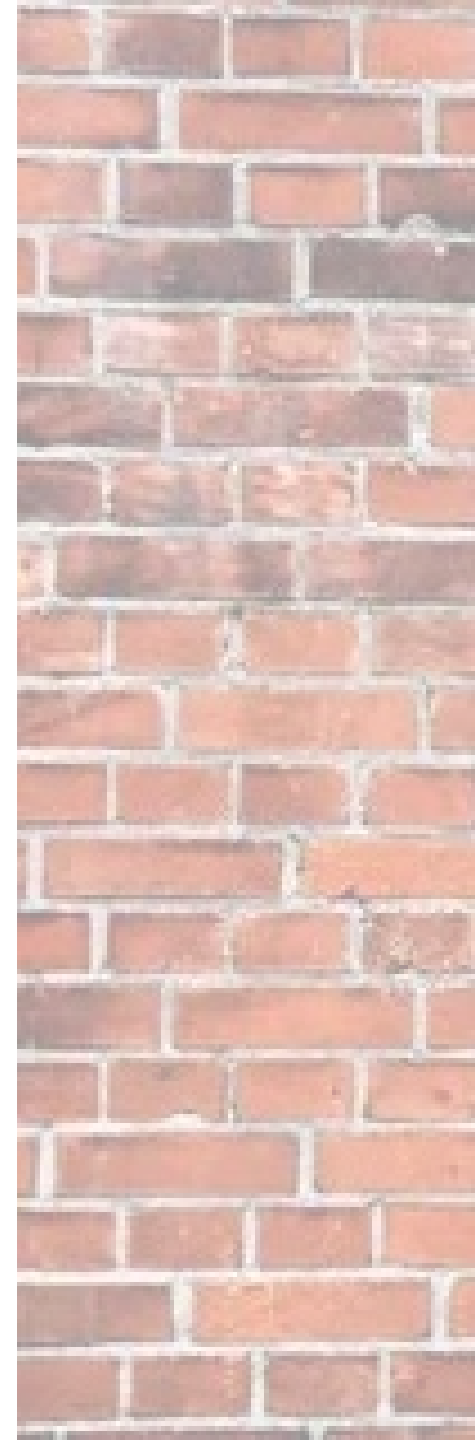
Addressing inequities in vascular
access must be understood &
improved to advance care over
the next decade.

Presented by Pitts at the 2022 Association for Vascular Access Conference.



Research Purpose

To understand the **experiences** of **patients** that have received a peripheral intravenous catheter (PIVC) and **healthcare providers** that insert them to determine if skin tone, race or other health variables impact experiences.



Getting Stuck? Actionable Solutions to Address Health Equity

Stephanie Pitts, DNP, RN, CPN, VA-BC, NEA-BC | Judy Thompson, MSNEd, RN, VA-BC | Katie Boston-Leary, PhD, MBA, MHA, RN, NEA-BC

PURPOSE

- > To understand the experiences of patients that received a peripheral intravenous catheter (PIVC) and healthcare providers that insert them to determine if skin tone, race or other health variable impacts experiences.

INTRODUCTION

- > The Association for Vascular Access (AVA), in collaboration with other organizations, thought leaders, and a patient advocate, are leading research to better understand patient and healthcare perceptions related to PIVC insertion and care.
- > PIVCs are the most frequently performed invasive procedure in healthcare with up to 90% of hospitalized patients requiring a PIVC.¹

BACKGROUND

- > 57% or less of nursing students receive PIVC instruction.²
- > There are inconsistencies in PIVC education and competencies in healthcare institutions.³
- > There is a scarcity of nursing literature, studies, and educational materials on the assessment and early recognition of both common and serious general health issues in people with dark skin tones.⁴
- > Difficult IV Access patients are more likely to be black, female, infants or patients with a high acuity.⁵
- > Black patients are 58% more likely than whites to be identified as Difficult IV Access.⁵
- > Inequities in care related to vascular access include unnecessary needle sticks, delays in diagnosis, delays in care and longer times spent in hospital beds.⁵
- > 47% of US Health care workers said they witnessed discrimination against patients.⁶

METHODS

The collaborative team developed two surveys to capture patient and healthcare providers experiences. Surveys were launched in the summer of 2023 across the USA and Canada using a multi-media approach leveraging emails distributed by professional organizations, patient organizations, social media campaigns and word of mouth. Qualitative and quantitative results are being analyzed.

EARLY OUTCOMES



Patients express pain and fear related to PIVC insertion.



Patients have concern over lack of clinician skill and knowledge related to PIVC insertion.



Many respondents expressed they didn't feel heard when they speak up about PIVC concerns/care.



Complete/final results pending statistical analysis and publication. For more information click the QR code.



IMPLICATIONS

- > Raise awareness of health inequities related to vascular access, specifically PIVCs.
- > Identify specific areas where future research is needed.
- > Considering the Quintuple Aim, National Patient Safety Goal focused on health equity, The Joint Commission Assessment focus on application of health equity initiatives, and it's the right thing to do for patients, there is a lot of work to do to improve PIVC experiences for all patients.

REFERENCES

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2. Glover KR, et al. (2017). A simulation-based blended curriculum for short peripheral intravenous catheter insertion: An industry-practice collaboration. *Journal of Continuing Education in Nursing*, 48(3), 1-34.
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5. Shekoff et al. (2020). Difficult intravenous access as an independent predictor of delayed care and prolonged length of stay in the emergency department. *The Practitioner of Emergency Medicine*. Doi: 10.1002/erag2.12222
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AONL 2024
INSPIRING LEADERS



Image of VeinViewer™ near-infrared vascular imaging technology. Photo provided by B. Braun Medical Inc.



Many respondents expressed they **didn't feel heard** when they speak up about PIVC concerns/care.



Patients express **pain and fear** related to PIVC insertion.



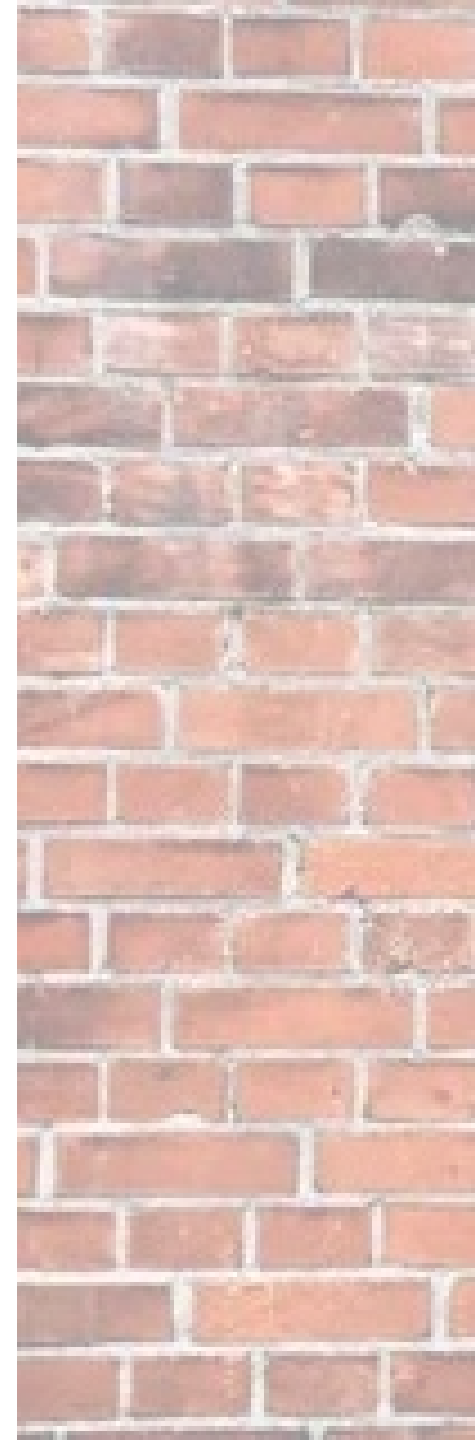
Patients have concern over **lack of clinician skill and knowledge** related to PIVC insertion.



Significance of this Work

- A lesson in how to reach diverse populations in research
- Understanding of patient and healthcare provider **PERCEPTIONS**
- Identify opportunities for improvement
- “Spring-board” for additional research and POLICY
- Growth in understanding health equity by the members of the research team

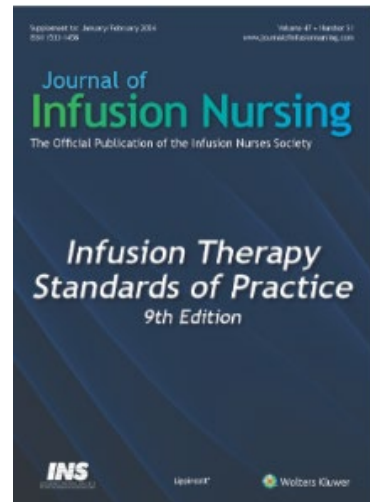
*Full results pending publication



Policy Change



1



1.5 Ethical principles are used as a foundation for decision-making. The clinician acts as a patient advocate; maintains patient confidentiality, safety, and security; and respects, promotes, and preserves human autonomy, dignity, rights, diversity, equity, inclusion, and accessibility.



2



Health Equity and Social Determinants of Health

16. Improved education, research and awareness of the impact on PIVC insertion and care related to health inequities, social determinants of health, skin tone, and comorbidities are needed.⁴⁵

a) Healthcare organizations should consider analyzing quality and safety data to identify disparities related to PIVCs (e.g., first-attempt success, dwell time), develop an action plan, and inform key stakeholders about progress to improve healthcare equity.^{45,62,63}

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The New York Times

Black Prisoners Face Higher Rate of Botched Executions, Study Finds

Lethal injections of Black people in the United States were botched more than twice as often as those of white people, according to a report from an anti-death-penalty group.

As Clayton Lockett lay on an execution table in Oklahoma in 2014 awaiting his death, medical officials struggled to gain access to a vein to administer a lethal injection. They inserted needles in his arms, his neck, his chest and eventually his groin, where they mistakenly struck an artery. The prison warden later described it as “a bloody mess.”





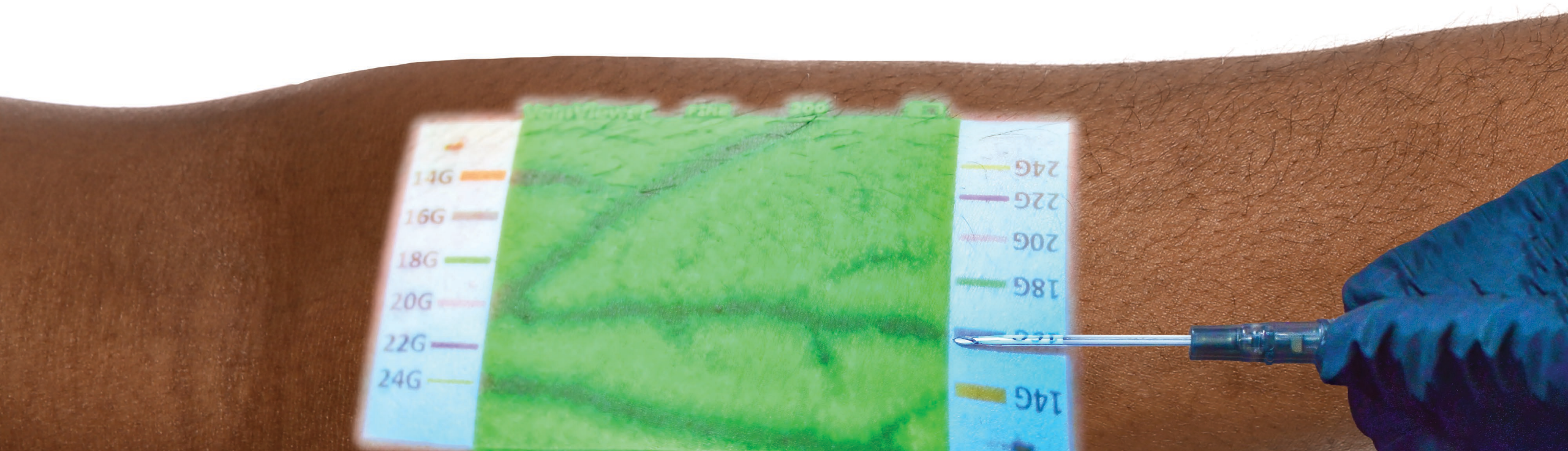


A Retrospective Look at Peripheral Intravenous Catheter (PIVC) Dwell Times in Pediatric Population ^{CE}

Kacey M. Wiseman, MSN, RN, CPN, VA-BC ; Laura Berbert, MS; Michele DeGrazia, PhD, RN, NNP-BC, FAAN;
John Pilcher, MSN, RN, VA-BC, CRNI, CPN; Peter W. Forbes, MA; Mary Poyner Reed, PhD, ANP, CNRN, NEA-BC

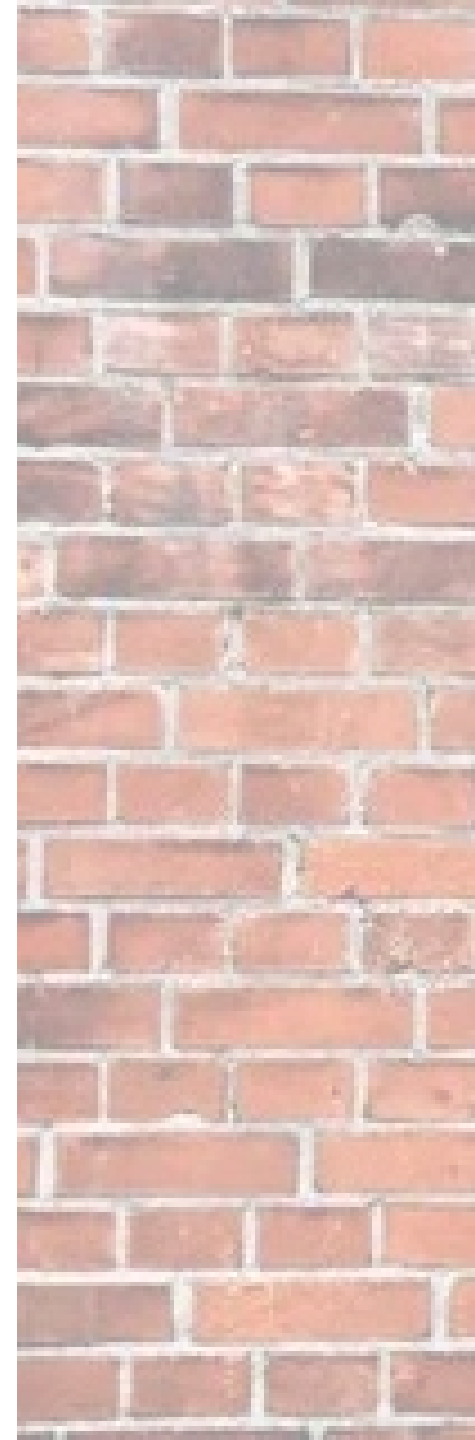
“Factors predictive of dwell time were insertion modality, race, and patient care setting...Odds of catheter failure are 1.76 times more likely in Black/African American patients than a White patient. Odds of patients in an intensive care unit or emergency department setting are 1.34 times more likely to have catheter failure than in a floor/nonemergency unit.”

Eliminate Blind Sticking!



Reimagine. Enlighten. Disrupt.

- Provide **basic foundational PIVC education** and training
- Implement tools to identify **Difficult IV Access** patients
- Vascular Access **Specialists** available
- **Policies** in place to support the elimination of 'Blind Sticking' and proper management of DIVA patients – **One stick should be the standard for all patients!**
- Education/Understanding on **Health Equity** for healthcare providers
- Accountability so we know how we are doing through **patient outcomes**



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