

Peripheral nerve catheter troubleshooting guidelines for an APP driven acute pain service.

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BACKGROUND:
At Vanderbilt Medical Center, we have expanded our acute pain service to provide 24/7 coverage, primarily managed by advanced practice providers (APPs). A significant portion of patients under APP care have peripheral nerve catheters (PNCs) placed by residents and attending physicians. We observed considerable variability among providers in managing patients with PNCs who reported uncontrolled pain. To ensure more consistent patient care, we sought to establish a standardized care protocol.

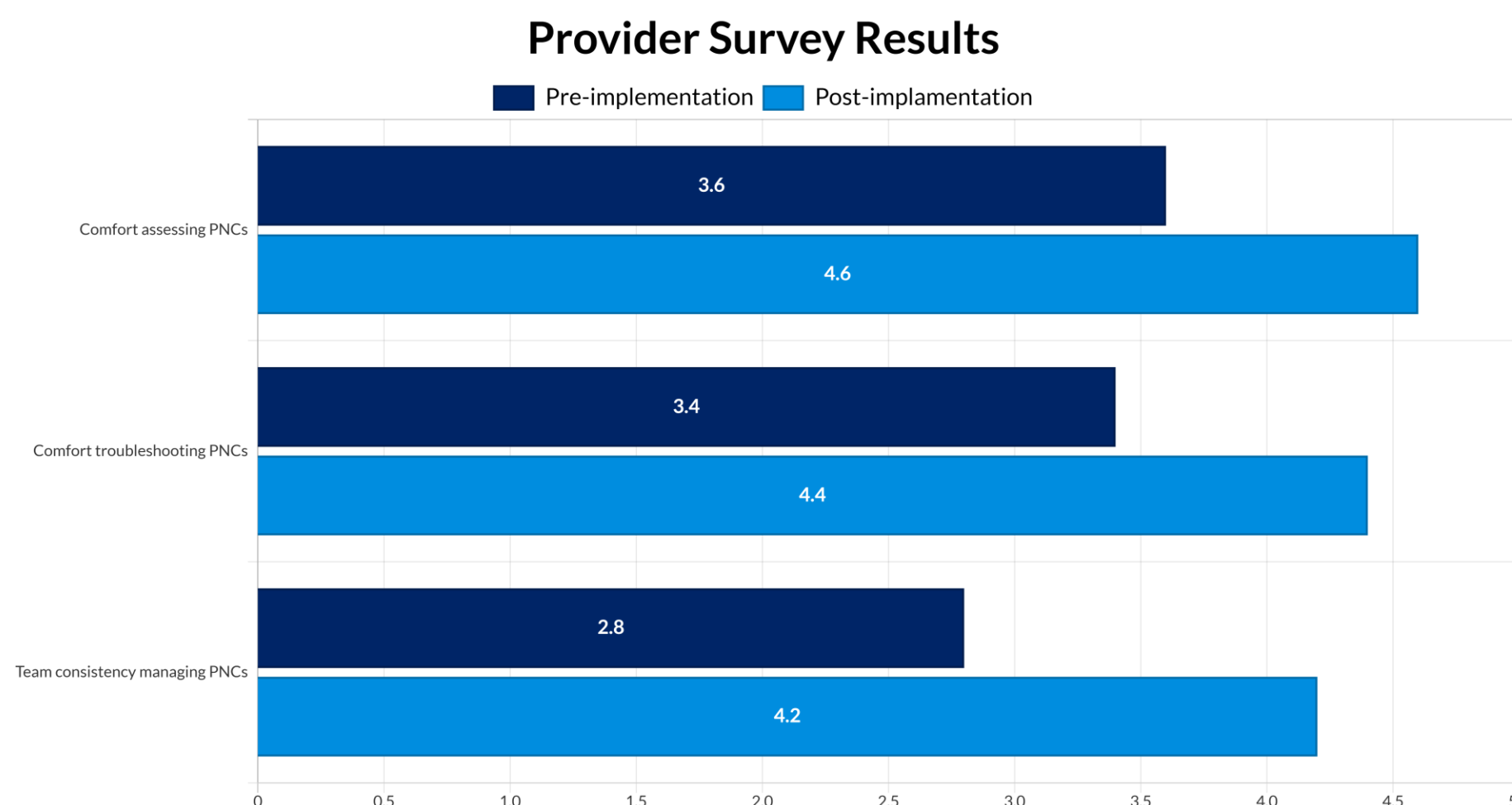
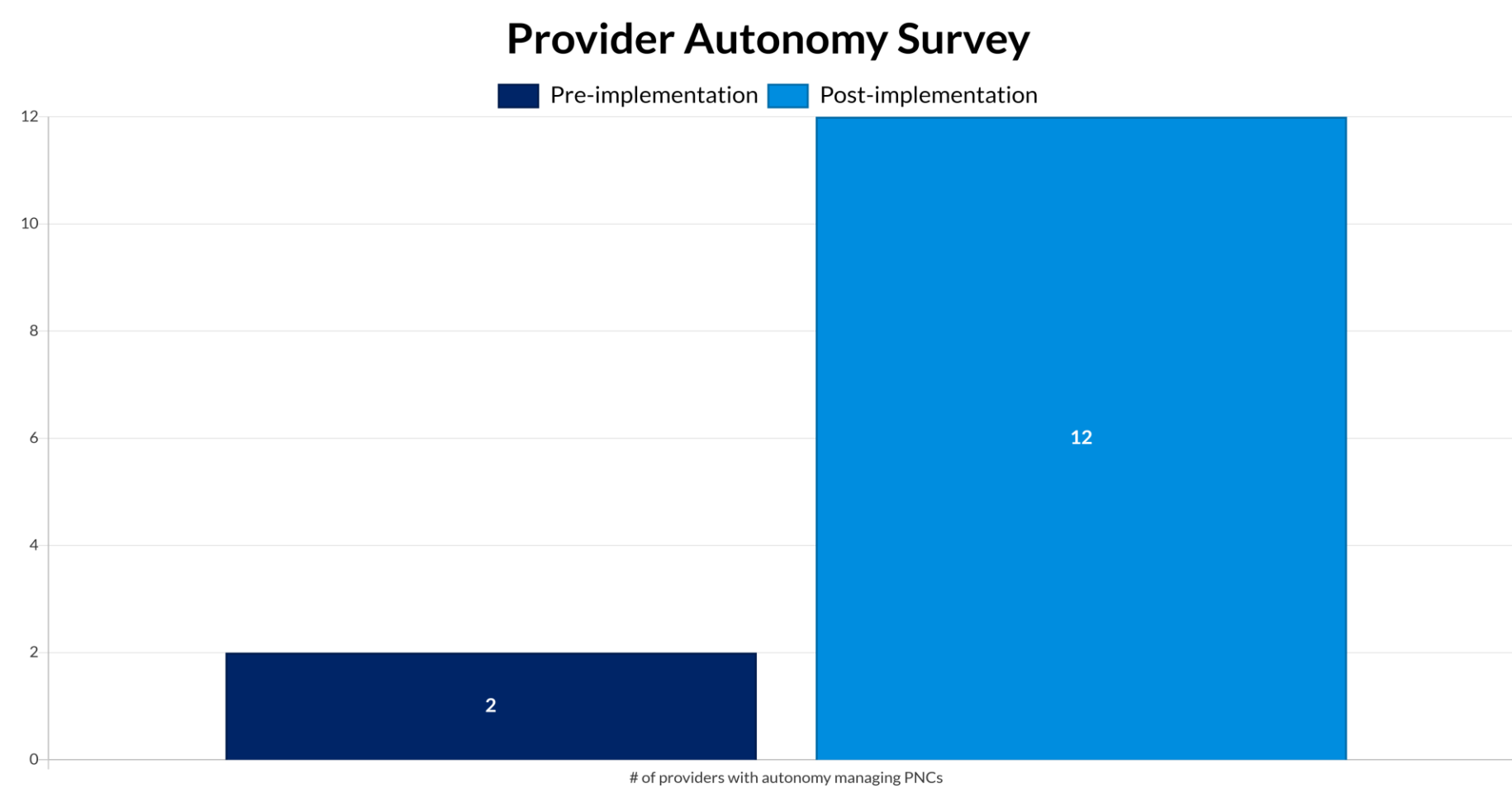
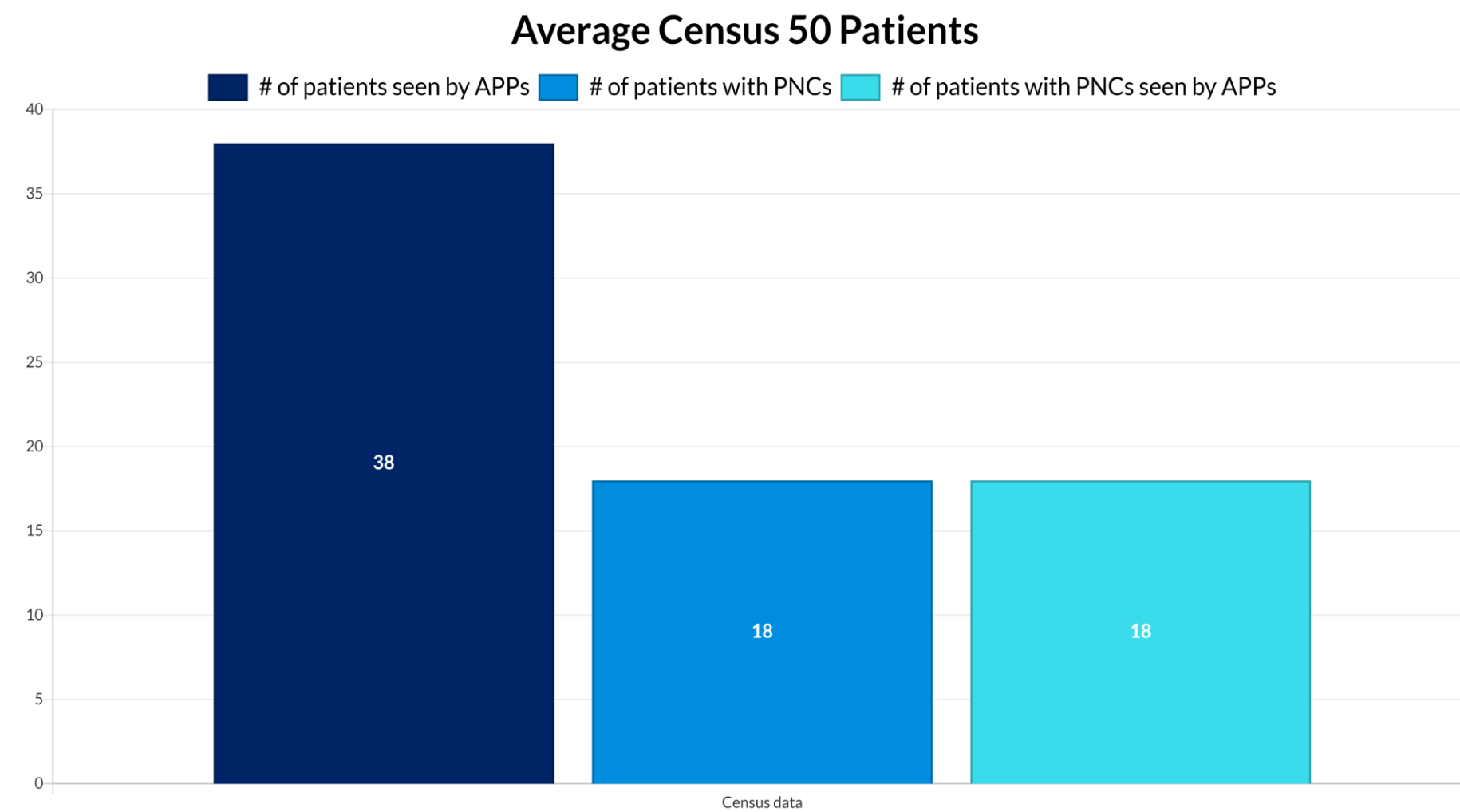
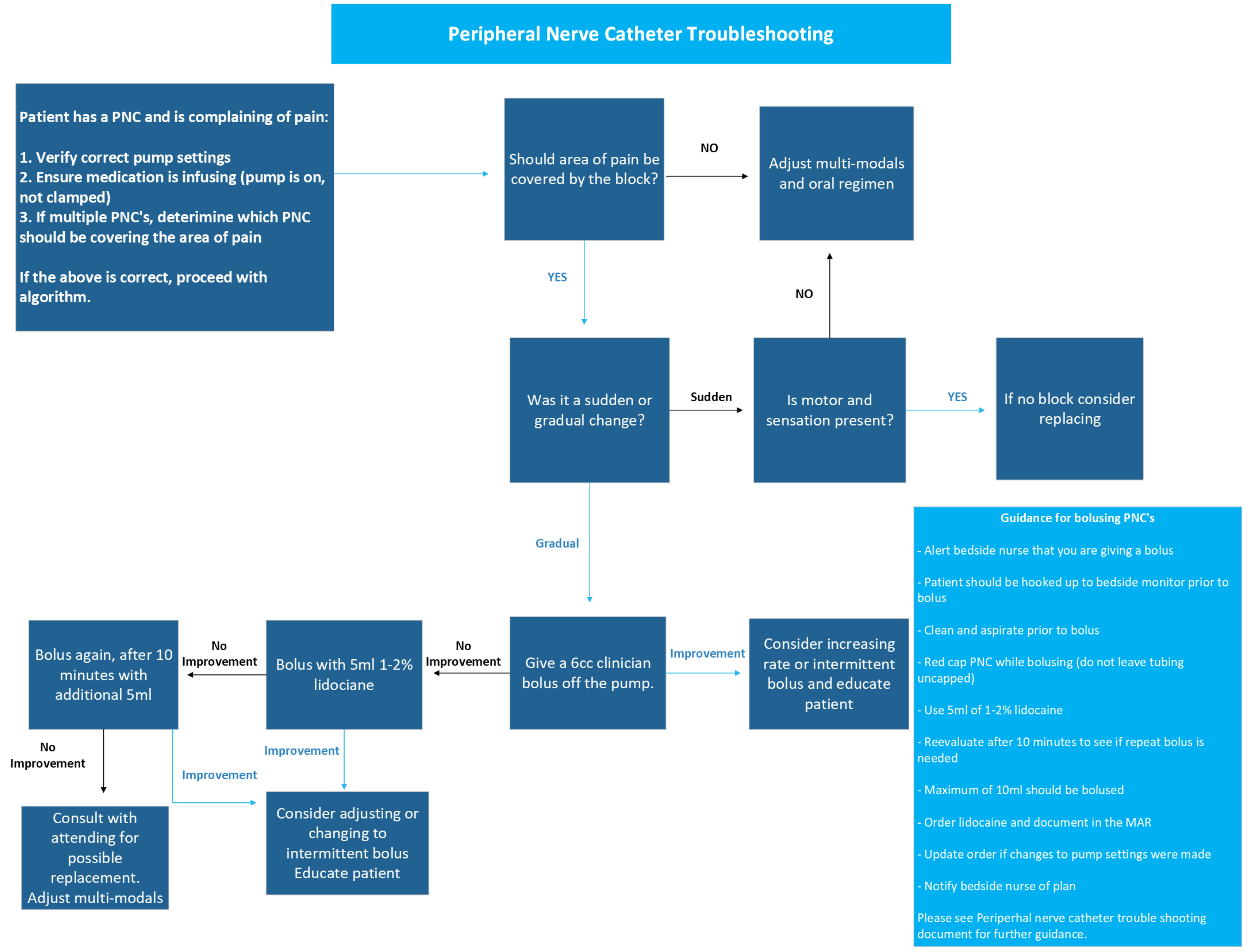
METHODS:
We conducted a literature review but found no suitable PNC guidelines. Collaborating with institutional experts, we developed standardized protocols for assessment, troubleshooting, and management of PNCs. We incorporated NYSORA references and the ASRA local toxicity checklist. A visual aid was created to supplement the guidelines. Provider confidence in PNC management was assessed pre- and post-implementation via a 1-5 scale survey.

RESULTS:
With the implementation of our PNC troubleshooting guidelines, our advanced practice providers now follow a standardized model for assessing patients with PNCs. This standardization ensures more consistent patient care, which evidence indicates improves patient outcomes. Additionally, the new guidelines enhance the autonomy and satisfaction of the advanced practice team managing these patients and reduced variability among the different attending physicians covering the service.

DISCUSSION:
The placement of peripheral nerve catheters (PNCs) aids with the management of acute pain following various surgeries, traumas, and burns, while minimizing opioid use. Managing patients with PNCs can present numerous challenges and potential side effects, making it essential for advanced practice providers to have a comprehensive understanding of these aspects in order to care for more patients safely in a growing acute pain service at an academic medical center. Establishing a standardized approach to managing patients with PNCs increases provider confidence and autonomy in caring for these patients as well as promoting more consistent practice among all providers.



Peripheral nerve catheter troubleshooting guidelines provide standardization that can improve consistency in patient care and increase provider autonomy and satisfaction.



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