

Optimizing Vasoactive Titration Orders to Improve Hospital Safety, Compliance, and Communication

Background: If ordered incorrectly, intravenous, titratable vasoactive medications can quickly lead to patient harm, increased length of stay, and poor patient outcomes. The optimal titration order, per the Joint Commission, contains key requirements to guide the provider on how to adjust and monitor these medications. A 10% audit was conducted for vasoactive titration medication orders placed between July 1, 2017 and December 31, 2017 at Children's Mercy Hospital – Kansas City to determine titration order compliance based on regulatory standards. A total of 195 orders were reviewed and no titration orders were found to be compliant to all parameters, indicating a need for efforts to improve order communication and patient safety.

Methods: A new titration order build was created which encouraged prescribers to input the information needed to communicate an effective care plan to providers. The build was approved in July 2018 and implemented for all intravenous vasoactive medications by through January 2019. An audit was completed between May 1 and October 31, 2019 to assess titration compliance post-intervention.

Results: Five hundred and seventy-three vasoactive titration orders were assessed; 521 (90.9%) orders were found to follow regulatory standards. Of the non-compliant orders, errors found included one or more of the following: clinical parameters (81.7%, 42), dose to titrate by (63.5%, 33), maximum titration rate (51.9%, 27), and frequency of titration modifications (1.9%, 1). Results were used to identify opportunities for front-line education and assess for continuous improvement of titration orders to achieve 100% adherence.

Conclusion: By redesigning titration orders to require specific parameters, a pediatric institution was able to improve regulatory compliance, communication, and patient safety.