Quit the Sticks!

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BACKGROUND

Lehigh Valley Hospital-Pocono currently requires all IV sites to be assessed every four hours minimally, and site rotations are required at 96 hours. Other LVHN campuses require site rotation at 72 hours. Less time between required rotation may lead to unnecessary discomfort for the patient and time wasted from a nurse's perspective.
For our project we assessed 50 random patients from our floors (10 patient per group member) and kept track of the patient's IV site at 72 hours and at 96 hours.

P I C O

- P: patients with peripheral IV sites
- I: rotating the IV site every 96 hours
- C: rotating IV site every 72 hours
- O: Infiltration and phlebitis rates and patient satisfaction

EVIDENCE

- A study conducted in 2015 found that there was no increase in phlebitis with patient's whose IVs were changed only when clinically indicated. There was no increase in catheter related blood stream infections (Webster J, Osborne S, Rickard CM, New K).
- A Study from 2016 found, "The majority of the peripheral IV sites in this study remained healthy long past 96 hours, suggesting that more frequent IV site changes may not be necessary" (Hallberg, D., Mattingly, J., 2017).
- Best, Hines and Helton looked at 89 IV sites and found, "no sites showed signs or symptoms of phlebitis and only one IV exhibited minimal infiltration (when measured on a 0-4 scale)" Best, J., Helton, J., Hines, A., 2016).
- "An estimated $2100 short peripheral catheter-related savings during the 3-month period. It also resulted in an estimated nursing time savings of 70 hours over the 3-month pilot" (Milner, K., Stevens, C., Trudeau, J., 2018).
- Overall, current evidence suggests changing an IV site within a 96 hour period will not increase chances of phlebitis if nursing staff properly and responsibly assess and document IV sites.

OUTCOMES/RESULTS

- Improve patient satisfaction by limiting the number of IV sticks needed.
- Maintain low infection rates and prevent phlebitis
- Save nursing time
- Save on hospital resources and money

- Our results found that of the 50 patients surveyed, 48 of them kept their peripheral IV sites in to the 96 hour mark.
- The two sites that needed to be changed were infiltrated at a 0-1 rating scale. Neither were cases of phlebitis. None of the IV sites were found to display signs or symptoms of infection at the 96 hour mark.
- These results support LVH-Pocono's current policy of site rotation at 96 hours and could be piloted and implemented in the other LVHN campuses safely.

IMPLEMENTATION

- We discussed these results with our educator at LVH-Pocono. We also talked with our managers on each unit and relayed our findings to them. All are in agreement with our findings and support our research.
- A couple of staff members from each unit were included in our discussions and agreed that they did not find any issues when this change occurred.

NEXT STEPS

- While we understand that there is always a risk for phlebitis development, the majority of evidence suggests that many sites could be left in until the 96 hour mark. Future research is needed to be conducted regarding IV site rotation.

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