

Multi-disciplinary approach to infusion tracking for novel investigational drug protocols

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Introduction/Background

Novel therapeutic approaches in pediatric hematology and oncology introduce new complexities in medication administration, monitoring and documentation. Accuracy in the administration of investigational medications is of vital importance both in the clinical care of the patient as well as ensuring protocol integrity and compliance¹. The goal of this practice and education project was to develop a tool to assist in the nursing documentation of a prolonged infusion of an investigational drug.

Methods

A multidisciplinary group consisting of an oncology pharmacist, a research nurse and an inpatient staff nurse collaborated to develop an infusion calculator that supports hour by hour assessment of the dose and volume infused. The calculator allows for real time assessment of the dose delivered and provides a method by which infusion accuracy can be confirmed. The intent is to have the calculator integrated into EMAR to reflect actual drug amounts administered for specific time periods. The calculator has the ability to reflect the volume and account for slight modifications due to intentional interruptions by the medical staff, rate changes and possible pump malfunctions.

Results

This tool allowed real-time tracking of the drug which was being administered for this protocol. The tool also helped with the early detection of additional dosing which needed to be ordered and prepared. It helped the patient and family better anticipate the duration of the inpatient stay increasing patient satisfaction. The tool also encouraged increased collaboration of the health care team ensuring the safe delivery of a new investigational drug.

Discussion/Conclusion

Continuous quality improvement and evaluation of the effectiveness of this tool has been completed on a subject by subject basis. Overall, positive feedback has been solicited relating to ease of use and functionality. All members of the team found the tool to be easy to use, especially when preparing for additional dosing to allow the patient to receive their goal dose. Having the exact dose amounts calculated out in real time was beneficial to all members of the team.

References

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