Targeting Medication Reconciliation Completion Rates via Resident Education

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Background

- Medication reconciliation is a National Patient Safety Goal\(^1\) and a WHO High 5 standard\(^2\)
- 50% of medication errors occur at admission, transitions, or discharge\(^3\)
- Review of potential adverse drug events in pediatric ICUs show:
  - 45% were made in admission history\(^4\)
  - 55% were errors in order reconciliation\(^4\)
  - 45% were dosing errors\(^4\)
- Best Possible Medication History → Best strategy\(^5\)
  - Outside pharmacy, hospital and patient records reconciled against one another\(^5\)
  - Involvement of EMR programs, physicians, nurse practitioners, RNs, pharmacy staff and the patient\(^6\)
- Vanderbilt tracks rates of 100% reconciliation within 24 hrs of admission to the PICU in EPIC

Aim

- Improve rates of complete medication reconciliations for new patients admitted to the PICU from the current 80% to 90% by March 2020 by providing education on EPIC functions and medication reconciliation to residents.

Interventions and Measures

Results

Completion rate data was collected weekly. ‘Successful’ week = med rec completion at 90% goal

- **August 4, 2019 - November 24, 2019**
  - 11.8% of weeks were ‘successful’
  - Intervention initiated November 20, 2019
- **November 24, 2019 - March 15, 2020**
  - 41.2% of weeks were ‘successful’

Barriers

- EPIC functionality - some data did not carry over into subsequent reconciliation forms
- Holiday schedule - some residents working in this time did not receive med rec training
- Potentially missed long term patients
- VPIL cohort missed one orientation session
- COVID-19 clinic withdrawal

Conclusions

- **Successes**
  - Medication Reconciliation completion rate increased over time
  - PICU rate increase > VCH rate increase
- **Future plans**
  - All monthly orientations with rotating PICU residents will include Med Rec education
  - Encourage future VPIL cohort to continue

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References

1. Critical access hospital national patient safety goals: NPSG.03.06.01. The Joint Commission. 2020.