

Enhancing the Usage of Evidence-Based Order Sets on the Pediatric Hospital Medicine Service

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BACKGROUND

Pediatric residents and fellows admit a large number of patients with a vast array of clinical diagnoses that require acute care.

Guidelines exist for a variety of these health conditions but inappropriate practice variation still exists, potentially resulting in increased hospital resource utilization and prolonged lengths of stay.

The Pediatric Hospital Medicine (PHM) partnered with the Value Institute to create evidence-based order sets (EBOS) for common pediatric conditions requiring hospitalization with a goal of improving evidence-based care on the PHM service.

Given high rates of resident turnover, it is important to track frequency of usage of these order sets.

AIM STATEMENT

To increase relative usage of evidence-based order sets on the Pediatric Hospital Medicine service by 30% by February 28th, 2023.

The assessed order sets include pediatric bronchiolitis, pediatric asthma, pediatric seizure, pediatric hyperbilirubinemia, and the febrile neonate.

METHODS / INTERVENTION

Obtained baseline evidence-based order set usage and performed education of providers beginning in January of 2023.

Educational Interventions

- Resident, PHM fellow, and PHM faculty global education on evidence-based order sets
- Targeted education of residents on PHM rotation per block: Order set flyers posted in each workroom
- Encouraged adding evidence-based order sets to “Favorites” list in EPIC
- Utilized run charts to inform residents of progress at housestaff meetings and morning reports

RESULTS

Overall, the relative EBOS utilization increased by 78%.

Metrics	Baseline	Target	Current	Comment
Pediatric bronchiolitis order set usage	36%	~48%	14%	Diagnosis documentation can be challenging
Febrile neonate order set usage	2%	~3%	37%	Significant improvement noted
Hyperbilirubinemia order set usage	26%	~33%	21%	Exploring potential reasons for slight decline
Pediatric seizure order set usage	13%	~17%	17%	Solid overall improvement
Asthma order set usage	11%	~15%	23%	Solid overall improvement

CONCLUSIONS

Baseline usage of evidence-based order sets for common pediatric diagnoses on PHM is low.

A multi-tiered approach to enhancing the usage of five evidence-based order sets was successful in enhancing their relative usage.

BARRIERS

Finding alternate ways to engage off-service residents since they play a significant role in this project.

Improvement in ease of data capture and reporting of EBOS use within the EHR.

NEXT STEPS

Update outdated material in order sets utilized, update based on new guidelines

Work with clinical experts to identify clinical outcomes that could be impacted by interventions focused on increasing EBOS usage.

Engaging IT solutions experts earlier in the process to improve the quality of data capture.