

Analysis of Nursing CDS Needs and Strategic Plan

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Introduction and Background

Clinical decision support (CDS) has been successfully integrated into electronic health records (EHRs) to enhance nursing decision-making and to drive evidence-based practice.¹ Partners eCare (PeC) is a large-scale effort at Partners Healthcare System (PHS) to replace existing systems with an integrated vendor-based EHR. PHS has a strong history of providing robust CDS solutions to clinicians. Prior to PeC, a majority of enterprise-wide nursing documentation was paper-based, which limited the opportunity to provide enterprise-wide CDS to nurses. PeC provides an opportunity to enhance nursing decision-making and evidence-based practice through CDS tools. The aim of this project is to understand enterprise-wide needs to support nursing decision-making with CDS tools and to identify a useful framework to guide short-term implementation and long-term strategic goals to meet nursing CDS needs.

Methods

We conducted a literature review to understand the current state of CDS, with a particular focus on nursing, and identified conceptual frameworks to categorize the spectrum of nursing CDS needs.² We reached out to enterprise site nursing contacts to conduct an environmental scan of high priority existing CDS and paper-based tools used in nursing practice that guide decision-making as a means to identify requests for CDS tools.

Results

Identifying paper-based decision aids that may be ripe for CDS is a challenge. We found that describing the defining characteristics of CDS facilitated nurses understanding and ability to identify opportunities for CDS. Consideration of organizational strategic aims and safety and quality measures can help guide identification of priorities. The Data-Information-Knowledge-Wisdom Conceptual Framework may be useful to understand short term goals for go-live and long term strategic goals for nursing CDS.³ Using this framework a continuum of types of nursing CDS needs is emerging: 1) facilitating data capture, 2) meeting information needs, 3) guiding knowledge-based decision making, and (future state) 4) exposing analytics for wisdom-based clinical interpretation by the nurse.

Limitations

Identification of CDS needs is an initial step in the CDS lifecycle. The implementation of identified needs is resource-dependent and must be prioritized among other competing project needs.

Conclusion

Identifying and prioritizing paper-based tools that can be modified into electronic CDS is challenging. The strategic process is evolving and relies on close collaboration and engagement with clinical sites. Due to project resource limitations, it is necessary that CDS is incorporated in a long-term strategic plan that can be optimized and achieved overtime. The Data-Information-Knowledge-Wisdom Conceptual Framework may be a useful mechanism to guide a strategic approach for meeting nursing CDS needs and aligning with the organizational strategic plan.

References

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