Clinical Decision Support to Achieve Compliance with Tobacco Screening

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Introduction/Background

The Massachusetts state Medicaid program requires quality metrics on screening patients for tobacco use as part of the admission to an acute care hospital. This measure, known as Tobacco 1, specifically looks to capture the adult patient's use of any tobacco product within the 30 days prior to admission to the hospital. Clinical decision support (CDS) in electronic health records (EHRs) has been used with success for tobacco cessation assessments and interventions.[1] CDS has been shown to be effective in impacting clinical care and can include alerts, reminders, order sets, drug-dose calculations, and a variety of other clinical tools that help with clinical documentation and decision making. Brigham and Women's Hospital (BWH) moved to an enterprise wide EHR in May of 2015. Prior to that time, nurses were assessing patient's tobacco use and documenting on a paper admission form with a compliance rate of 78%. After conversion to the electronic health record, documentation rates fell as low as 21%. At that time, it was determined that an electronic solution was needed to ensure nurses were screening and documenting tobacco use on all patients at every admission.

Methods

As BWH is part of the Partners Healthcare System (PHS) and all entities use the same EHR, an enterprise solution was required. Working with Partners eCare and the other Partners inpatient sites, it was decided to add the "tobacco use" data field to the EHR as an element that required admission documentation. CDS rules were written, validated and taken through the PHS CDS governance and build process. Once built and put into the production environment, nurses would be reminded with a CDS alert to complete the regulatory-required assessment documentation. Prior to implementation, a full scale education program was initiated to ensure that nurses understood the alert that they would be receiving, the reason that it existed, and their documentation responsibilities once it alerted them to the missing Tobacco 1 documentation.

Results

In November 2015, tobacco assessment fields became required documentation for nurses as part of the admission assessment. The following quarter our compliance rate jumped to 92% and has leveled out to a consistent 97% for the past two quarters.

Discussion/Conclusion

The use of a clinical decision support reminder in this situation achieved results that are consistent with what can be found in the literature. The CDS alert reminds nurses that specific documentation elements associated with a patient's tobacco use have not been completed. Documentation compliance rates have been sustained for at least two quarters since implementation. As a result of improving documentation "compliance" we have improved the quality of our tobacco use screening and health maintenance nursing interventions for our patients. While we did not measure patient outcomes, we anticipate that the interventions aimed at elimination of tobacco use for some of our patients might lead to better health outcomes over the long term. .

References

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