Gap Analysis of Geriatric Nursing Clinical Decision Support: An Application of the Fulmer SPICES Tool

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Keywords: Geriatrics, Nursing, Clinical Decision Support, SPICES

Introduction/Background

 Due to the rising geriatric population, hospitals such as Massachusetts General Hospital (MGH)[1] and Brigham and Women's Hospital (BWH)[2] have begun to establish a geriatric nursing specialty. One aspect of this effort has been the implementation of the Fulmer SPICES tool on nursing units. The tool is used by nursing to perform geriatric focused assessments and execute interventions to improve the quality of care among these patients. [3]The Fulmer SPICES tool is an acronym for its criteria: Sleep, Problems Eating or Feeding, Incontinence, Confusion, Evidence of Falls and Skin Breakdown.[4] At both hospitals, the assessment has been in a paper format or called out in the nursing notes. Partners Healthcare, the parent company of MGH and BWH, through the Partners eCare project (PeC) is in the process of converting to a vendor-based electronic medical record. To continue the geriatric nursing specialty efforts that have already been implemented within the clinical sites within Partners, it is necessary to discover the geriatric nursing specific criteria and interventions and use them to evaluate the current CDS intervention build using the Fulmer SPICES tool as criteria. Despite the fact that other hospitals have used data in the electronic medical record to improve the quality of care for the geriatric population,[5] there has been no published evidence that geriatric-specific nursing CDS interventions have been designed. The goal of this assessment is a gap analysis of what already exists in current state for nursing CDS and what needs to be recommended for build to meet the requirements of the SPICES tool.

Methods

The Fulmer SPICES tool was reviewed and the criteria were specified. Each category was then used to assess what CDS is present in the current build. If a patient is being assessed for incontinence then it was necessary to review the current build to see if there was a CDS available that would meet the specified incontinence criterion. JIRA, a tool utilized by Partners eCare to track CDS was searched using the key words, "Sleep", "Eating", "Feeding", "Incontinence", "Confusion", "Falls", "Breakdown" and associated synonyms such as "mental status", "nutrition" and "ulcer". The CDS specifications were then reviewed to determine if they met the criteria.

Results

Twelve Best Practice Advisories met the criteria defined in the SPICES tool. The criteria that had the highest frequency related to skin breakdown. The criteria for Sleep had no CDS interventions that met its requirements. However, the criteria and interventions were not specific to the geriatric population but general inpatient adult population.

Discussion/Conclusion

 Although the CDS that is currently built meets the criteria, it is geared towards a broader patient population. Geriatric nursing has defined certain criteria and interventions that have been proven to increase positive outcomes among hospitalized geriatric patients. [6] It is necessary to propose a set of geriatric-specific CDS interventions. Like pediatrics, geriatric patients require a different set of interventions especially when the patient suffers from multiple medical problems and dementia. Allowing a CDS focused on this population will continue the work that is already being done at Partners and allow for a more streamlined method of documentation of interventions and their outcomes.

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