Assessment of a Chief Complaint-Based Curriculum for Resident Education

STUDY QUESTION

Does a geriatric chief complaint-based didactic curriculum improve resident documentation of care for elderly patients in the emergency department (ED)?

STUDY DESIGN

Design: Before and after study
Setting: Single center, academic ED with 18 residents in a PGY1 to PGY3 EM residency program.
Patients: For each resident, a chart review was performed by a single reviewer of five charts in each of three chief complaint categories during the six months before, and six months after the intervention. Chief complaints that were investigated included the three most frequent complaints in patients over the age of 65: weakness, abdominal pain, and falls.
Description of Intervention: Prior to the intervention, residents attended chief complaint-based lectures on topics of weakness, falls, and abdominal pain in a non-age-specific manner. The intervention consisted of an age-specific chief complaint-based curriculum, with a series of three one-hour presentations, one on each of the most common geriatric chief complaints. All residents attended the three faculty lectures.
Outcomes: Quality of resident documentation before and after the intervention was evaluated. Investigators assessed for the inclusion of five components on each chart: mention of possible atypical presentation of common diseases in the differential diagnosis, such as ACS/AMI in abdominal pain, determination of baseline function through review of medical records or discussion with a caregiver, communication with the caregiver or chronic care facility, cognitive assessment, and assessment for polypharmacy. Statistically significant change in the documentation was determined by a 2-tailed z test at 0.003 by Bonferroni correction.

MAIN RESULTS

For each of the chief complaints, there was some statistically significant improvement in resident documentation. For falls, there was improvement in one of the five criteria, cognitive assessment. For abdominal pain there was improvement in documentation of cognitive assessments and the assessment for polypharmacy. For weakness, there was improvement in documentation of possible atypical presentations in the differential diagnosis, communication with the caregiver or facility, and cognitive assessment. The other criteria did not show any statistically significant improvement in documentation after the intervention.

CONCLUSION

An age-specific chief complaint-based curriculum consisting of three lectures improved resident documentation in several areas for each of the three most common chief complaints in patients over age 65.

ABSTRACTED FROM

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COMMENTARY by Christina Shenvi, MD, PhD and Kevin Biese, MD, MAT (UNC)

Didactic time during residency training is limited and trainees note insufficient exposure to geriatric EM [1]. ACGME only mandates elder abuse and trauma [2]. Geriatric-specific curricula is a potentially efficient use of didactic time. In addition, a focus on chief-complaint-based teaching rather than a curriculum organized by organ system better mimics the thought processes required by physicians when presented with elderly patients [3]. This study demonstrated improvement in resident documentation of geriatric visits following implementation of an age-specific chief-complaint-based curriculum. This finding goes beyond learner satisfaction and knowledge assessment to evaluate the impact of an educational intervention and suggests an improvement in care processes. In all three chief complaint categories the documentation of cognitive status improved as alterations in mental status are frequently unrecognized [4]. The study is limited in its before and after design, the use of a single center, as well as the reliance on chart review rather than either direct observation of the residents, or on patient outcomes. However, given the increasing proportion of geriatric patients presenting to EDs [5], residencies will strive to find effective ways to educate trainees about the aspects of ED care that are unique to or more complex in the geriatric population. Educational studies should evaluate the impact on care processes and patient outcomes.

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