Original Article

Documentation Quality of Inpatient Code Status Discussions

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Abstract

Context. Accurate documentation of inpatient code status discussions (CSDs) is important because of frequent patient care handoffs.

Objective. To examine the quality of inpatient CSD documentation and compare documentation quality across physician services.

Methods. This was a retrospective study of patients hospitalized between January 1 and June 30, 2011 with a new or canceled do-not-resuscitate (DNR) order at least 24 hours after hospital admission. We developed a chart abstraction tool to assess the documentation of five quality elements: 1) who the DNR discussion was held with, 2) patient goals/values, 3) prognosis, 4) treatment options and resuscitation outcomes, and 5) health care power of attorney (HCPOA).

Results. We identified 379 patients, of whom 235 (62%) had a note documenting a CSD. After excluding patients lacking a note from their primary service, 227 remained for analysis. Sixty-three percent of notes contained documentation of who the discussion was held with. Patient goals/values were documented in 43%, discussion of prognosis in 14%, treatment options and resuscitation outcomes in 40%, and HCPOA in 29%. Hospitalists were more likely than residents to document who the discussion was held with ($P < 0.001$) and patient goals/values ($P < 0.001$), whereas internal medicine residents were more likely to document HCPOA ($P = 0.04$). The mean number of elements documented for hospitalists was 2.40, followed by internal medicine residents at 2.07, and noninternal medicine trainees at 1.30 ($P < 0.001$).

Conclusion. Documentation quality of inpatient CSDs was poor. Our findings highlight the need to improve the quality of resident and attending CSD documentation. J Pain Symptom Manage 2014;■:■−■.

Key Words

Documentation, advance care planning, resuscitation, DNR orders

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Introduction

Cardiopulmonary resuscitation is the default treatment option for hospitalized patients with cardiac arrest. As a result, assessment and documentation of patient preferences regarding resuscitation is needed to ensure that patients receive care concordant with their preferences.[1] Previous studies have shown, however, that physicians are frequently unaware of the resuscitation preferences of their hospitalized patients.[1–3] Experts suggest that when conducting a code status discussion (CSD), physicians discuss resuscitation in the context of the patient's clinical condition, values, and goals and provide information about treatment options and expected outcomes.[4–7] Although hospitalized patients report benefit from discussing goals of care,[8] CSDs are often limited to conversations about preferences for life-sustaining technology.[9]

Most inpatient CSDs at academic medical centers are conducted by resident physicians.[10] Changes in the regulation of resident work hours in the last few years have resulted in an increasing number of patient care handoffs[11] making the quality of documentation about important patient decisions, such as resuscitation, more important than ever. However, little is known about the quality of inpatient CSD documentation and whether documentation differs across physician services.

The objectives of this study were to evaluate the quality and content of inpatient CSD documentation based on five key quality elements and to compare the quality of CSD documentation between internal medicine residents, hospitalists, and noninternal medicine trainees.

Methods

Study Design, Participants, and Setting

We conducted a retrospective medical records review of patients admitted to our 894-bed urban tertiary care hospital, between January 1, 2011 and June 30, 2011. Patients are admitted under the care of a primary service (e.g., internal medicine, hospitalist, general surgery, obstetrics, and gynecology). Patients admitted to medicine and subspecialty services are cared for by teams of resident physicians under the supervision of an attending physician. Patients admitted to the hospitalist service receive care from a hospitalist faculty member without resident physician coverage. All physician documentation is entered into the electronic medical record.

Procedure

We used the Northwestern University Enterprise Data Warehouse (EDW)[12] to search for all patients with a do-not-resuscitate (DNR) order written or canceled at least 24 hours after admission. The EDW is a computer-based system that uses structured query language syntax to obtain demographic and clinical information derived from inpatient and outpatient electronic medical record systems. We restricted our search to orders written or canceled at least 24 hours after admission to capture patients with whom an explicit CSD had likely occurred rather than those who had existing documentation of code status preferences on admission (e.g., patients who had a DNR order on a previous admission). We then used an electronic text search query through the EDW to identify all clinical notes written within 24 hours before and 24 hours after the DNR order. The EDW is able to retrieve full note text and identify the name, title, and departmental affiliation of all note authors.

One study author (A. T.) reviewed all physician notes generated from the search. Notes written by consultant physicians and medical students were excluded from analysis. If a patient had multiple notes documenting a CSD, either from the same or different physicians, we included the first note written after the DNR order. If there were primary service notes before the DNR order that referenced code status but none afterward, we included the note that occurred closest to the time of the DNR order. For patients who had a DNR order and multiple hospitalizations during the study period, we only included data from the index hospitalization.

After the final list of included notes was identified, we categorized them into three groups based on note author: 1) internal medicine intern or resident, 2) internal medicine hospitalist attending physician, and 3) noninternal medicine physician. Noninternal medicine physicians included noninternal medicine residents (e.g., anesthesiology, surgery, neurology) and subspecialty fellows. The six-month study period was deemed