The Current Capabilities of Health Information Technology to Support Care Transitions

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Abstract

To determine whether HIT currently supports care transitions we interviewed clinicians from several healthcare settings. We learned about HIT tools to help nurses facilitate transitions, but discovered that there are few tools to promote high quality, safe transitions of care. We also found that HIT is rarely employed for patient-centered care coordination mechanisms. In conclusion, HIT tools are typically used within one healthcare setting to prepare for a transition, rather than across healthcare settings.

Keywords: electronic health record, meaningful use, care coordination, care transitions

Introduction/Background

In order to improve the quality and safety of care health information technology (HIT) must support care transitions, but there has been little scientific research on the mechanisms by which HIT currently supports care transitions.[1] According to the Agency for Healthcare Research and Quality (AHRQ) Care Coordination Measures Atlas, coordination is achieved through broad approaches and coordination activities.[2] Examples of broad approaches include teamwork focused on coordination and care management and examples of coordination activities include creating a proactive plan of care and aligning resources with patient and population needs. We sought to determine the current capabilities of HIT to support care transitions.

Methods

We conducted focus group style interviews to query clinicians from four healthcare settings: emergency department (ED), acute care hospital (ACH), skilled nursing facility (SNF), and home health agency (HHA). Clinicians from 24 sites within six geographic regions were enrolled in six focus groups (n = 30). The interviews were transcribed and coded by a two-person consensus approach to identify content related to the AHRQ care coordination mechanisms.

Results

HIT is used for each of the 13 AHRQ care coordination mechanisms. Medication management is facilitated by electronic health record (EHR) tools for medication reconciliation within ACHs, but a paper printout or faxed document is common for transitions. Similarly, EHR tools exist for teamwork focused on care coordination within ACHs and SNFs, but only one integrated healthcare delivery system foresees using HIT for teamwork across transitions. When health care home was discussed, few HIT tools were mentioned, and in fact, most systems have a specialized role for a nurse to maintain contact with the patient across transitions rather than using HIT for information transfer to a health care home. HIT is widely used for disease management, particularly for congestive heart failure, as well as for case management, though nurse case managers are "the glue" for information transfer across settings. Patient-centered care coordination activities such as assessing needs and goals, creating a proactive plan of care, responding to change, and supporting self-management goals were rarely mentioned in conjunction with HIT. Also, key activities such as establishing accountability, facilitating transitions, and linking patients with community resources were rarely facilitated by HIT. HIT is used for a variety of activities related to aligning resources with patient and population needs including simple programs like a spreadsheet used to track post-discharge telephone calls or a database used by an ACH to search for post-acute care facilities based on home zip code. One integrated system created questionnaires within the EHR to help case managers track key elements of the post-discharge call. Electronic information transfer across transitions is rare. One ACH had a sophisticated HIT system capable of structured data transfer but, since there was no interoperability with SNF EHRs, information was often transmitted by hand-carried paper discharge packets.

Discussion/Conclusion

We learned that HIT is currently used for disease management and other programs to align resources with population needs. However, there is little innovation in HIT for patient-centered care coordination mechanisms. There is substantial room for improvement in information transfer across settings, establishing accountability, and other key care coordination mechanisms. Thus, while, HIT is used to some extent for all 13 AHRQ coordination mechanisms, HIT tools are typically used within one healthcare setting to prepare for a transition rather than acting as a bridge across settings. There is great opportunity for improvement even within organizations.

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