

CHOICE: Coalition of Hospices Organized to Investigate Comparative Effectiveness

Principal Investigator:	Casarett, David J, M.D., M.A.
Organization:	University of Pennsylvania
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Summary: Currently, more than 1.5 million patients are cared for in hospice settings and this number is growing. Patients in hospice care have numerous symptoms and complex care needs; therefore, historically it has been extremely difficult to research end-of-life care and build an evidence base for care. Reasons for the difficulty include high costs of hospice-based randomized controlled trials and ethical concerns of hospice-based primary data collection. The Coalition of Hospices Organized to Investigate Comparative Effectiveness (CHOICE) was created to address the need for improved research methods.

The research team is assessing the feasibility of using quality measures by first identifying the proportion of patient's records from which key palliative care quality indicators can be abstracted from the electronic health record (EHR). Secondly, they are testing the validity of data abstracted from the EHR as compared to data abstracted from trained nurses. The project is also looking at whether hospice care is focused on patient and family-centered outcomes. The research team is reviewing survey data from the Family Evaluation of Hospice Care survey and associating it with clinical outcomes data. The association's analysis will look for those EHR-based quality indicators that have the strongest associations with families' perceptions of care.

The third component of this research will be identifying the EHR-based quality indicators that are the highest priority for use in performance improvement initiatives and clinical trials. The research team will host a stakeholder panel to review the EHR quality indicators and associations from the first two phases of the research.

The potential impact of the CHOICE network will be to provide rigorous end-of-life research. By establishing the feasibility and validity of CHOICE's data collection, and by defining stakeholders' priorities for performance improvement and research, the project will lay the foundation for a line of comparative effectiveness research that can drive meaningful improvements in the quality of hospice care.

Specific Aims:

- Evaluate the feasibility and validity of using quality measures abstracted from hospice electronic records. **(Ongoing)**
- Define associations between quality indicators and families' perceptions of care. **(Upcoming)**
- Identify high-priority targets for improvement. **(Upcoming)**

2012 Activities: The research team has seven hospices representing approximately 69,000 patients engaged in the CHOICE data network. In addition to these, they have 21 hospices committed to submitting data. The research team began to abstract data from the seven hospices and to explore the best ways to code the

data. The coding process included identifying data dictionaries for commonly used data and developing coding schemes for other data elements. For example, there are dictionaries for codes for standard data fields like ethnicity but not for others such as functional status. The team is also working through a coding process for the granular data and open-text field data, such as social worker notes, that are not as easily coded. They have found that important clinical data, such as insertion of a Foley catheter, may be in open text. As part of the data cleaning process, the team reconciled dates in the records that are illogical. The team has worked through solutions for this and other obvious data errors that can be applied to all the EHRs in their research database.

In addition to the clinical data coding and cleaning, the research team began merging clinical and family satisfaction data. Thus far, they have family satisfaction data from one hospice and commitments from three additional hospices.

Preliminary Impact and Findings: This project has no findings to date.

Target Population: End-of-Life Care*, Elderly*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Knowledge Creation

**This target population is one of AHRQ's priority populations.*