

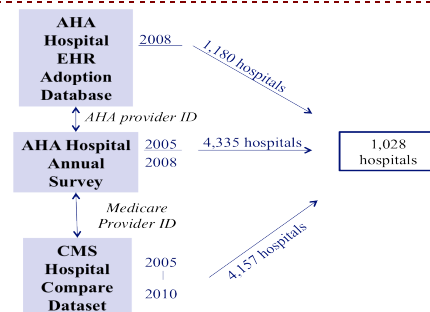
Effects of electronic health record adoption on hospital cardiac mortality rates

Objective

- To examine the effects of electronic health record (EHR) adoption on ultimate outcomes of patients with acute myocardial infarction or congestive heart failure.
- To investigate the effects of five primary EHR subsystems on outcomes.

Methods and Materials

- This study utilizes three databases.
- 969 non-federal, acute care hospitals in 12 states
⇒ Sample states: CA, IL, IN, MA, MI, MN, MO, NY, OH, PA, TX, and WA
- Adjust for major hospital characteristics using propensity scores and least squares regression



Results and Conclusions

- Benefits of an EHR adoption
- Significantly better outcomes with an increase in the number of subsystems
- AMI is more amenable to the EHR adoption than CHF
- Computerized physician order entry is the most significant functionality
- Hospitals with a subsystem adopted across all units had significantly lower mortality rates than those with a subsystem only in some units

Implications

- Realignment of the final rule
- CPOE adoption is a critical strategy- CPOE could save approximately 8,600 deaths a year

Future Research

- To investigate the different impacts of various combinations of EHR subsystems
- In different clinical settings
- With different populations

More information:

<http://pid.emory.edu/ark:/25593/92g94>

or write to Peiyin Hung at hungx068@umn.edu