

POSTER ABSTRACTS

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PS2 – 23

Cardiovascular Disease Surveillance to Optimize Care: Pros and Cons of a Managed Care Research Network System

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Background: With the goal of identifying where care process improvement could mitigate the impact of heart disease, we have developed a heart disease analysis model, The Perfect Care Model. Accounting for all individuals, all deaths, and all cardiac events in a population, this model estimates the number of deaths that might be prevented or postponed (DPP) with improved care. With data that are usually available in the electronic medical record or health assessment of a managed care organization (MCO), the model can calculate the potential impact of changing any risk factor level, risk factor intervention, or any evidence-based therapy.

Methods: To assess the feasibility and benefits of basing a CVD surveillance system like the one advocated by the National Forum for Heart Disease & Stroke Prevention in an MCO research network (MCORN) or state health department (SHD), we compared the data available to an MCORN to the data available to a SHD.

Results: Data available to the SHD included hospital discharges, case-fatality rates by diagnosis for hospitalized patients, counts of surgical procedures, and death certificate data. The disadvantage of organizing a surveillance system through a SHD is that hospitalizations are not linked to services provided during the hospitalization or survival after discharge. Likewise, behavioral risk factor data, medication data and data on ventricular function of patients with heart disease are not available. While MCOs have these data and data linkages, the disadvantage of organizing a surveillance system through a MCORN is that, although covering a significant segment of the US population, the surveillance system would not be strictly population-based.

Conclusions: The data required to identify clinical opportunities to prevent and postpone deaths are available to a greater extent through MCOs than a SHD. The large populations covered by MCORNs, their geographic range, the relatively stable populations, and the implementation of electronic medical records all make large MCORNs attractive alternatives to SHD surveillance systems.