

State: New York
Title: Using Clinically-Enhanced Claims Data to Guide Selection of Coronary Procedures
Principal Investigator: Harold Kilburn
Organization: New York State Department of Health
Project Dates: September 30, 2010, to September 29, 2013
Grant Number: R01 HS19965-01

The goal of this research program is to examine the comparative effectiveness of coronary artery bypass graft (CABG) procedures and percutaneous coronary artery interventions (PCI). This will be done by clinical enhancement of the New York State's Statewide Planning and Research Cooperative System (SPARCS) acute care hospital discharge database with hospital numerical laboratory data. Laboratory data will permit refinement of patient risk adjustment, provide full accountability of complications, and validate the accuracy of present-on-admission coding.

Complete data sets from hospitals recruited into the project will allow analyses of:

- Factors that influence whether coronary artery revascularization is performed by open surgical intervention or percutaneously.
- Short-term and long-term clinical outcomes of each chosen intervention by subsets of patients and subsets of hospitals.
- How alterations in selection of patients, procedures, and sites can improve short-term and long-term clinical outcomes of patients undergoing the different treatment options.

Clinical outcomes will employ risk adjusted mortality rates, risk-adjusted length of stay in acute hospital facilities, and readmission/emergency department visits within 30 days of the index procedure. Precise risk adjustment will allow patient-level propensity matching models to be used, and clinical outcomes assessment can then be used for evaluation of hospital effectiveness.

Year 1 will be invested in recruitment of participating hospitals and laboratory data enhancement of the SPARCS database. Year 2 will be used for refinement of protocols and initial analyses of data. Year 3 will be devoted to final analyses with published reports and presentations. Results of these analytical evaluations can then be employed to provide feedback to providers so that optimum treatment strategies can be adopted for improved patient care using the comparative effectiveness paradigm.