Title: Continuity of Care and Health Outcomes among Florida Medicaid Enrollees with Sickle Cell Disease (SCD)

Abstract:

Continuity of care is defined as a longitudinal relationship between a patient and a physician that allows the physician to accumulate knowledge of a patient’s health status, attitudes and behaviors. The premise of continuity of care is to promote the delivery of comprehensive care to the patient, thereby improving both health outcomes and efficiency. Previous studies of continuity of care have been positive, but have been subject to serious limitations. Additionally, the impact of continuity of care on SCD outcomes has not been studied. This study proposes to examine the continuity of care among SCD patients, estimate the relationship between continuity of care and the risk of SCD-related hospitalization, and explore the cost-benefit of interventions to improve continuity of care on this group of patients from the Medicaid perspective.

A retrospective cohort study will be conducted using Florida Medicaid claims data from 2001-2005. Patients with claims containing SCD-related ICD-9 codes (282.41-282.42, 282.6- 282.64, 282.68-282.69) will be selected. To be eligible, individuals must be aged <65 years, continuously enrolled in Medicaid for more than 6 months, and have ≥3 ambulatory visit claims. Modified modified continuity index (MMCI) scores will be calculated to quantify continuity of care. Patients will be followed to time of first SCD-related hospitalization, the end of the database, or age 65, whichever comes first. Time-dependent cox proportional hazard modeling will be used to examine the relationship between MMCI and SCD-related hospitalization controlling for basic demographics, disease severity, SCD treatments and complications. To address the issue of residual confounding, a sensitivity analysis using an array approach will be conducted to quantitatively assess the magnitude of the bias. Cost-benefit analysis will be utilized to assess the efficiency of programs to improve continuity of care among SCD patients.