Abstract Title:
Predicting Care Coordination Utilization in Minnesota Health Care Homes

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Abstract:

Introduction: In 2008, the Minnesota Legislature passed health care reform legislation that created the Health Care Homes model. This new care and payment approach encourages clinics to work with patients to provide better care coordination by providing a per-member, per-month payment based on a medical complexity tier measure for enrolled patients at certified clinics. To date, Hennepin County Medical Center (HCMC) has six certified Health Care Homes, serving over 750 patients.

This study aims to validate the current medical complexity tier measure, as well as to identify how non-medical factors influence the utilization of care coordination services.

Methods: Data were drawn from HCMC medical record and a separate social services database for 610 HIV-positive patients who had received case management services during the measurement period (2008-2010). The tier score was computed from the total number of self-reported chronic conditions (e.g., allergy, dental, eye, cardiovascular). We measured time of care coordination utilization for all care coordination services per month (minutes) and self-reported demographic and socioeconomic variables (e.g., education, housing status, literacy, language proficiency). Adjusted linear regression models were used to test our study hypothesis.

Results: On average, patients received 141 minutes of care coordination services per month (range: 2-910 minutes/month). Patients with a higher medical complexity tier generally had higher utilization, however this effect decreased after adjustment for additional demographic and socioeconomic variables. High School education status, or renting or owning a home was associated with a significant decrease in the patient's utilization. Living in an institutional setting, being illiterate, or using an interpreter was associated with a significant increase in utilization.

Discussion: As health care payment and care models evolve, it will become increasingly important to strategically use data to evaluate and predict patients' need for services. This preliminary study begins to develop the model to achieve these goals