TITLE: The Impact of Patient Complexity on Healthcare Utilization

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Target Audiences: Policy makers, researchers

ABSTRACT: Context: Providers caring for clinically complex and/or socially disadvantaged patients face difficulties in meeting performance targets, and the complexity of their patient panels may affect quality metrics. Study Aim: We explored the impact of adding data on social complexity to validated measures of clinical comorbidity, and whether accounting for social complexity contributes to variation in health care utilization and quality of care. Approach: We engaged stakeholders to identify the most relevant community-level social determinants of health (SDH). For primary care patients in Oregon in 2015, we also assessed how summaries of patients' clinical comorbidity (as measured by the Charlson Comorbidity Index) and community-level SDH (as measured by the Social Deprivation Index [SDI]) correlated with emergency department (ED) utilization, and HbA1c control among diabetic patients. Results: Increasing SDI score (indicating worse social deprivation) had a small, but significant association with the predicted probability of poor HbA1c control, with an odds ratio of 1.05 (95% CI 1.04-1.06). Both clinical complexity and social complexity were associated with an increased probability of ED utilization. Implications: Social complexity was associated with poorer health indicators, including ED utilization and diabetes control. Further work exploring this association in a broader range of social deprivation is ongoing.

OBJECTIVE(S): Evaluate the contribution of patient complexity, including both social and clinical components, to health care utilization and outcomes, including emergency department utilization and HbA1c control among diabetic patients.

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