Interpersonal continuity of primary care of Veterans Health Administration patients with diabetes

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Continuity of care is a cornerstone of primary care and may be particularly important for patients with chronic diseases such as diabetes. A goal of patient-centered medical home models, such as the Veteran's Health Administration (VHA) PACT model, is to provide strong continuity of care. This paper examines patient and provider factors associated with interpersonal continuity of care among VHA primary care patients with diabetes.

This is a patient-level cohort study using the VHA electronic health record with a national sample of pharmaceutically treated VHA primary care patients with a diabetes diagnosis in fiscal years 2012 and 2013 (N=686,621). For both 2012 and 2013, each patient was assigned a "home" VA facility as the clinic most frequently visited for PC during the year, and an "assigned" PCP within that home clinic who was most often seen. We then examined whether patients maintained the same PCP from 2012 to 2013. The main medical complexity explanatory variable examined was the diagnostic cost group (DCG) score, a commonly used indicator of patient complexity that is normalized to equal 1 for the average Medicare patient. Demographic and social complexity variables examined included sex, age, race, ethnicity, marital status, homelessness, poverty, disability, and presence of mental health diagnoses. We examined the association of care continuity, measured as maintaining the same PCP across both years, with all variables simultaneously using logistic regression fit with generalized estimating equations and an exchangeable correlation structure to account for clustering within clinics.

Approximately (22.2%) of VA patients with diabetes switched providers between 2012 and 2013. Provider switching occurred in 20.8% of patients assigned to physicians, 24.8% of patients assigned to PAs, 24.4% of patients assigned to NPs, and 58.6% of patients assigned to resident physicians. Patients with higher odds of switching providers had residents (OR=5.06, 95% CI=4.26-6.01), PAs (OR= 1.22, 95% CI=1.04-1.44) or NPs (OR= 1.16, 95% CI=1.04-1.30) as usual providers compared to physicians, were younger (reference 80 : age less than 40 OR= 1.52, 95% CI=1.44-1.61); homeless (OR=1.55, 95% CI=1.47-1.62), were more likely to be women (OR=1.10, 95% CI=1.02-1.21), had more comorbidities (reference DCG 0-0.5: DCG 0.5-1 OR=1.04 95% CI=1.02-1.06; DCG 1-1.5 OR=1.07 95% CI=1.04-1.09;DCG 1.5-2 OR=1.11 95% CI=1.08-1.14; DCG 2 OR=1.16, 95% CI=1.13-1.18) and were more likely to have mental health diagnoses such as mood disorders (OR= 1.05, 95% CI=1.03-1.07), substance abuse (OR=1.08, 95% CI=1.06-1.10) or dementia (OR=1.10, 95% CI=1.07-1.14).

Patient characteristics associated with disruptions in interpersonal continuity include those with more medical and psychosocial challenges, women and younger ages. Similarly, disruption in interpersonal continuity was more likely for patients with providers other than attending physicians. Identification of patient and provider factors associated with interpersonal continuity of care can assist with development of interventions to improve chronic illness care. These findings point to the importance of understanding the impact of switching providers on sicker, potentially more vulnerable patients (i.e., those who are homeless) as well as how to best serve all groups of patients (e.g., women and younger veterans).