

Correlates of primary care provider type assignment in the Veterans Health Administration

P. A. Morgan¹, C. Everett², V. Smith³, S. Woolson³, D. Edelman³, C. Hendrix³, T. Berkowitz³, B. White³, G. Jackson³,

¹Duke University, Durham, NC;

²Duke University Medical School, Physician Assistant Program, Durham, NC;

³Durham Center for Health Services Research in Primary Care, Durham, NC;

Due to rising incidence of diabetes and expected physician shortfalls, physician assistants (PAs) and nurse practitioners (NPs) will be needed to care for patients with diabetes. The Veterans Health Administration (VHA) is a leader in using NPs and PAs. We analyzed factors associated with having a physician, NP, or PA as the primary care provider (PCP) for patients with diabetes in the VHA, with a focus on patient complexity.

This cohort study used the national VHA electronic health record to examine PCP type for all pharmacologically treated veterans in facilities with at least one NP and one PA who had a diabetes diagnosis and the same PCP in 2012 and 2013. Independent variables included sex, age, race, ethnicity, marital status, homelessness, poverty, disability, mental health diagnoses, the diagnostic cost group (DCG) score (an indicator of medical complexity), facility factors and state scope of practice (SOP) rankings. Generalized logit regression examined all variables simultaneously, with statistical significance set at $p < .05$.

In our sample of 139 facilities with 154,529 patients, 74% of patients with diabetes had a physician PCP, 14% had an NP, and 12% had a PA. In the adjusted model, NPs and PAs were less likely to be the PCP for older and the most medically complex patients (for $DCG > 2.0$ compared to $DCG < 0.5$, NP OR=0.84 and PA OR=0.85,). NPs were less likely to be the PCP for males (OR=0.42). Poverty, homelessness, disability, and mental health were not associated with PCP type. Regional variations existed, but state SOP had minimal relationship to PCP type.

Medically complex and older patients were more likely to have a physician PCP, but there was substantial overlap in all characteristics by PCP type. Understanding factors associated with having a particular PCP type is essential for workforce planning and is a requisite step toward conduct of studies comparing access, quality and cost outcomes across provider types.