

The Changing Definition of a Primary Care Provider

The long-anticipated shortage of primary care physicians has arrived, and projections suggest that it will only get worse (1). Nurse practitioners (NPs) and physician assistants (PAs), 2 medical disciplines that originated in the 1960s, have been suggested as workforce members who could fill this gap. In this issue, Jackson and colleagues (2) showed that patients with diabetes who received care from NPs and PAs working within the U.S. Veterans Affairs (VA) health system had outcomes equivalent to those of patients cared for by physicians in a primary care setting. The authors included data from 568 VA primary care centers and collected information on 368 481 adults with pharmaceutically treated diabetes. The primary care providers (PCPs) included 3487 physicians, 1445 NPs, and 443 PAs.

Although the results validate that NPs and PAs can provide primary care, they are hardly surprising. The VA was the first health system in the United States to use PAs, and both NPs and PAs have been fully integrated into the VA's care structure. Other analyses have shown similar, if not better, results for these health care workers—particularly NPs—in providing primary care (3).

What does deserve mention is the role of PCPs—physicians, NPs, and PAs—in the management of patients with diabetes. In some respects, diabetes is the perfect chronic disease model to use in assessing intermediate outcomes of care. Hemoglobin A_{1c} (HbA_{1c}) and lipid levels, along with blood pressure readings, are all numeric and easily measured. However, organizations, such as the American Diabetes Association (4), recommend that diabetes management be undertaken by a team, not simply by a physician acting in isolation. When insulin therapy first became available in 1922, Eliot Joslin deployed his team of nurses (the predecessors to modern-day certified diabetes educators) to teach patients about diet, exercise, foot care, and insulin dosing (5). Without this approach, some of the amazing successes seen after insulin was introduced would not have been achieved. The same is true today, although now we have an expanded group of professionals to help persons with diabetes reach and maintain their targets and personal goals. To this end, we have certified diabetes educators (including providers from registered nurses to physicians), pharmacists, registered dietitians, therapists (of all sorts), physical and occupational therapists, exercise physiologists, and podiatrists, among others, who are part of the diabetes treatment team (6).

The VA health system is unique because it is a contained unit—members of the study cohort received their primary care through their patient-centered medical homes. Many VA centers offer access to diabetes education, nutrition classes, and a trained pharmacy staff. The cost of medications is generally not a barrier, which enhances adherence (7). Early on, the VA developed and maintained an electronic health record (EHR) system and registry, which now contains hundreds of thou-

sands of medical records (8). Some VA sites are using telehealth programs for diabetes management, which have been beneficial for patient care (9). In addition, approximately half of the PCPs in this analysis had access to endocrinology or diabetes subspecialty services. To a large degree, the success of a PCP—whether a physician, an NP, or a PA—depends on the ancillary diabetes services available to his or her patients.

Of interest, the authors state that even in the VA environment, only 45% of patients achieved an HbA_{1c} level of less than 7%, 42% reached their systolic blood pressure target of less than 130 mm Hg, and 72% attained their low-density lipoprotein cholesterol goal of less than 2.59 mmol/L (100 mg/dL). Although these results might suggest that this system—with its diabetes resources—is far from effective, numbers may not tell the whole story. Despite controversy regarding the optimum HbA_{1c} target (10), the average level of 7.6% achieved across the large number of patients in this study, regardless of their PCP type, is admirable. Approximately half the patients were younger than 65 years, so arguably they should have had an HbA_{1c} target less than 7%, given that they were younger and had a longer predicted life expectancy. The 10% of patients who were older than 80 years might have been expected to have a higher target. One of the benefits of a consistent patient-PCP relationship is the ability to individualize targets for each patient on the basis of his or her preferences, goals, targets, and needs. However, when using EHR data to analyze populations, it is difficult to discern which patients are truly reaching their individualized target HbA_{1c} level. Noting targets in the EHR would be helpful for both patients and providers, particularly now that many systems enable patient access to records.

The time has come to embrace many different approaches to providing primary care, particularly for persons with a chronic disease, such as diabetes. Given the right system—with resources to provide education and support, along with referral to an endocrinologist or a diabetes team if needed, and including more innovative programs, such as telehealth, online programs, and device-based data transfer and support—persons with diabetes can achieve their goals. Moreover, it is time to stop calling NPs and PAs “midlevel” providers, as is common in certain systems. Nurse practitioners and PAs are competent PCPs in their own right and should be fully accepted as such.

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