

ETHNICITY, LANGUAGE, SPECIALTY CARE, AND QUALITY OF DIABETES CARE

Objective: To investigate ethnicity, language, specialty care, and quality of diabetes care in one medical center.

Methods: Retrospective review of computerized records of patients with diabetes age ≥ 50 years who were regularly cared for in general medicine, family practice, or diabetes clinics from 1997 to 2000. Measures of processes of care were tests for creatinine, cholesterol, hemoglobin A1C (HbA1C), and microalbumin; ophthalmologic care; and total visits. Intermediate outcomes were average systolic blood pressure (SBP) < 140 mm Hg and HbA1C $< 8\%$.

Results: Among 1323 patients, test rates for creatinine, cholesterol, microalbuminuria, and HbA1C were 76.6%, 54.7%, 17.2%, 78.8%, respectively. Only 31.0% had ophthalmology visits, 57.4% had SBP < 140 mm Hg, and 62.0% had HbA1C $< 8\%$. In multivariate analyses, African Americans, Asians, and Latinos received more tests and had more total visits than Whites. Intermediate outcomes were similar except that Asians were more likely (odds ratio [OR]=1.78, 95% confidence interval [CI] 1.26–2.50) to have SBP < 140 mm Hg. Limited English proficient patients had more total visits (7.0) than English speakers (6.5) ($P=.01$). Compared to patients with only primary care, patients with a diabetes specialist had more microalbuminuria (OR 3.04, 95% CI 1.87–4.95) and HbA1C (OR 1.91, 1.12–3.26) tests, while those with both types of care were more likely to have each of the five process measures but less likely to have HbA1C $< 8\%$.

Conclusions: Quality of diabetes care was suboptimal for most patients. No ethnic disparity was seen in intermediate outcomes, which may have been achieved through more tests and visits. Combined care by primary and diabetes clinicians may be optimal. (*Ethn Dis.* 2007;17:65–71)

Key Words: Diabetes, Ethnicity, Quality of Care

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INTRODUCTION

Compared to non-Latino Whites, African Americans and Latinos have a higher prevalence of diabetes, worse glycemic control, and higher rates of complications,^{1–3} while Asian Americans have a higher prevalence of diabetes after adjusting for body mass index.⁴ In a health plan setting with similar access to care, ethnic minorities with diabetes had lower risks for myocardial infarctions and amputations but higher risks for renal failure.⁵

Diabetic complications are reduced when patients have controlled hypertension, treated hypercholesterolemia, glycemic control, and early treatment for early retinopathy and kidney disease.⁶ The American Diabetes Association (ADA) guidelines include routine tests to monitor glucose control, complications, and co-morbid conditions.⁶ Most studies of diabetic quality of care use technical processes of care, such as regular receipt of tests, and measurements of intermediate outcomes, such as glucose control. Few studies have evaluated both ethnic and language differences in quality of diabetes care.^{7–10} We aimed to examine the association of language, ethnicity, and specialty care on quality of diabetes care received by older adults in general internal medicine (GIM), family practice (FP), and diabetes clinics at an academic health center. We hypothesized that limited English proficient

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METHODS

Setting

The University of California, San Francisco (UCSF) Medical Center serves a diverse population at two main sites, each with a hospital, emergency room, urgent care, and outpatient clinics; a third site provided outpatient FP and GIM care. In 2000, a total of 55,526 visits were recorded to GIM, 30,930 to FP, and 5718 to diabetes clinics. Insurance mix for these clinics was 40% managed care, 30% Medicare, 25% Medicaid, and 5% others (self-pay or fee-for-service). Clinics were connected to a computer database and received similar administrative support. Diagnostic laboratories were within a one-block walk. Ophthalmologic care was available at two sites. Attending physicians and fellows provided care at all practices. Nurse practitioners and medical residents also provided supervised care in GIM. Nearly one third of clinicians in the system were non-White, and three fourths spoke a second language.¹¹ Approximately 30% of visits required interpretation, but despite availability of professional interpreters, no request was made in approximately half of these visits.¹¹

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