Reducing Disparities in Diabetes Care: Using a Positive Deviance Approach in a Regional Health Improvement Collaborative.

Research Objective: Positive deviance (PD) is an approach to social change based on the observation that in any community there are subgroups whose successful strategies enable them to find better solutions to a problem than their peers, despite facing similar challenges. These individuals are referred to as positive deviants. In the context of a primary care-based regional health improvement collaborative (RHIC) called Better Health Partnership (BHP), we use a data-driven PD approach with public reporting to identify and disseminate best practices and examine changes in racial/ethnic disparities in diabetes (DM) care.

Study Design: This is an observational study of changes in disparities in DM care by race (white, black) and ethnicity (Hispanic) among patients of BHP’s diverse primary care clinics in a large urban community. Clinic-based achievement and improvement on four nationally endorsed and locally vetted measures were publicly reported biannually between 2008-2014. PD “best practice” protocols were identified by BHP’s data center and interviews with relevant providers, and they were disseminated using BHP practice coaching, twice yearly Learning Collaboratives, and reports to BHP’s membership. Regression models, weighted by each clinic’s sample size, estimated annualized regionwide changes in gaps (highest minus lowest performing race/ethnicity category) over the 7-year period.

Population Studied: Over 500 providers in 53 BHP clinics were included if they publicly reported their patient-level diabetes achievement at least 7 times between 2008-2014, inclusive. In 2014, there 34,185 DM patients reported by the 53 clinics. Of these, 15,825 (46.3%) were black or Hispanic; 5,980 (17.5%) were uninsured or covered by Medicaid, and over 30% were in the region’s lowest tertile for census-derived estimates of household income and high school graduation rates. Of the 34,185 patients in 2014, 15,409 (45.1%) received care in BHP’s 28 safety net clinics that include all of the region’s federally qualified health centers.

Principal Findings: In 2008, there was a 16.3 percentage point gap between white and Hispanic patients in meeting a four measure composite DM care standard (50.4% white, 47% black, 34.1% Hispanic achievement, respectively). In 2014, the disparities gap was reduced to 4.4 points (52.5%, 50.5%, and 48.2% achievement by blacks, whites, and Hispanics, respectively), a gap reduction of 11.9 points. In the weighted regression model, reduction in the disparities gap was 1.72 percentage points per year over the 7-year study period (95% CI: -2.74, -0.71; p=0.002). Significant disparities reductions also were observed for three of the four individual measures, including A1c obtained, eye examination obtained, and pneumococcal vaccination received (all p values < 0.002).

Conclusions: A positive deviance approach, applied in a primary care-based regional health improvement collaborative with common quality goals and challenges, was associated with community-wide improvement and reductions in racial and ethnic disparities in quality of care for patients with diabetes. Implications for Policy or Practice: In a primary care-centered regional health improvement collaborative, providers' explicit recognition of their shared quality goals, challenges, and accountability can reduce disparities and improve population health. These community-based collaboratives should be fostered by federal and state policies for care delivery and payment transformation.