



# In the Literature

## IMPROVING THE MANAGEMENT OF CHRONIC DISEASE AT COMMUNITY HEALTH CENTERS

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A large federal initiative to improve chronic disease care for community health center (CHC) patients has “significantly improved” processes of care for asthma and diabetes, say researchers at Harvard Medical School.

The study, “[Improving the Management of Chronic Disease at Community Health Centers](#)” (*New England Journal of Medicine*, Mar. 1, 2007), was conducted by Bruce E. Landon, M.D., M.B.A., LeRoi S. Hicks, M.D., M.P.H., A. James O'Malley, Ph.D., and colleagues.

Disparities in quality of care associated with patients' race, ethnicity, or socioeconomic status are of particular concern to CHCs, which provide care to more than 15 million Americans, many of whom lack health insurance and are members of minority groups.

### Narrowing the Disparities Gap

Historically, initiatives to reduce disparities have either focused on care for a particular group—black patients with hypertension, for example—or have worked to improve quality more broadly, with the expectation that across-the-board improvements in quality will narrow the disparities gap. These broader programs may focus on settings that serve large proportions of disadvantaged populations.

One of the most important initiatives of this latter type is the Health Disparities Collaboratives, sponsored by the Health Resources and Services Administration (HRSA). This program brings CHCs together to learn quality improvement techniques developed by the Institute for

Healthcare Improvement. Each CHC tests interventions at one or more of its practice sites and then implements successful interventions throughout the entire center.

Since 1998, two-thirds of CHCs have voluntarily participated to improve care for patients with chronic medical conditions. Until the Harvard study, however, there had been no controlled evaluation on the effect of the collaborative on quality of care, the authors say.

### Interventions Yield Care Improvements

The Harvard researchers enrolled 9,658 patients being treated for diabetes, hypertension, or asthma at CHCs. Forty-four centers participated in initiatives. Care provided at these “intervention centers” was compared with care at 20 non-participating centers, known as “external control centers,” as well centers that had participated in a collaborative for a different condition (“internal control centers”).

Quality-of-care measures studied included preventive care and screening indicators, like annual foot examinations for diabetics; disease monitoring indicators, like blood pressure measurement for hypertensive patients, and health outcomes, like urgent care or emergency room visits for asthma patients. The study is based on data from care delivered from January 1, 1999, to August 1, 2003.

Overall, the intervention centers showed considerably greater improvement than did the control centers in quality of care for patients with asthma and diabetes, but not

for those with hypertension. For example, at intervention CHCs, the rate of foot exams for diabetics increased from 25 percent to 49 percent and the use of anti-inflammatory medications for asthma increased from 61 percent to 75 percent. For all three conditions studied, the intervention centers improved care by an additional 4.9 percentage points compared with the internal control centers and by 4.5 percentage points compared with external control centers.

### Conclusions

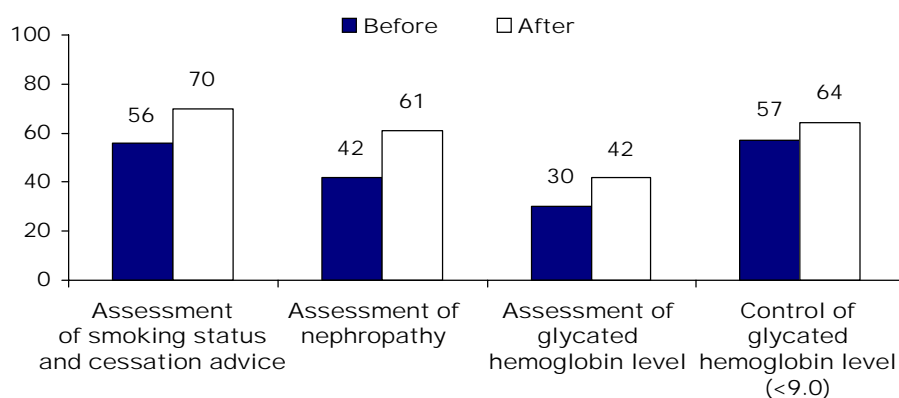
The importance of studying chronic disease management in CHCs is clear and compelling. Diabetes, asthma, and hypertension affect more than 25 percent of the adult population in the United States. In addition, CHCs play a crucial role in providing care for members of minority groups and other disadvantaged populations. These centers have grown substantially over the past decade, and there are federal goals to expand their numbers even more.

The targeted interventions improved quality of care for patients with asthma and diabetes. In terms of outcomes, the intervention centers did see improvements, but not more than were observed at the control centers. Observing longer-term health improvement may require a longer study period and larger sample than was used in this study, the authors say. In addition, achieving improvements in outcomes may require more intensive interventions to overcome the serious challenges CHC patients typically face.

“The HRSA Health Disparities Collaboratives are an important national initiative to improve the quality of care for underserved populations at community health centers,” the researchers conclude. “Our study showed that these collaboratives significantly improved several processes of care without any observed improvement in intermediate outcomes. The substantial room for improvement in the post-intervention period suggests the need for continued refinement of these methods.”

## Improving Quality at Community Health Centers

Performance on adjusted quality-of-care diabetes scores at intervention centers



Note: Measures were adjusted for age, sex, race or ethnic group, insurance status, and presence or absence of coexisting conditions. Some numbers were affected by rounding.

Source: Adapted from B. E. Landon et al., “Improving the Management of Chronic Disease at Community Health Centers,” *New England Journal of Medicine*, Mar. 1, 2007 356(9):921–34.