

Online Supplementary Material

Solberg LI, Crain AL, Tillema J, Scholle SH, Fontaine P, Whitebird R. Medical home transformation: a gradual process and a continuum of attainment. *Ann Fam Med*. 2013;11(Suppl 1):S108-S114.

http://www.annfammed.org/content/11/Suppl_1/S108

Supplemental Appendix. Context

Attributes, Actions, Culture, Motivations	Factors Affecting Transformation and This Study	What Others Need to Know to Transport Findings Elsewhere
Background changes in health care	<p>There was increasing pressure to reduce health care costs while improving quality and patient experience.</p> <p>Medical homes are seen as promising vehicle for these improvements.</p> <p>Primary care clinics face limit of financial sustainability.</p> <p>Primary care redesign is seen as both needed and the future.</p>	<p>Minnesota practices have been moving to groups and integrated systems for years.</p> <p>Public reporting of standard quality measures had been in place for 5 years.</p> <p>Most practices have developed organized quality improvement.</p> <p>Medical community leaders largely embrace the need for change.</p> <p>Most practices have or will soon have electronic records.</p>
Public policy	<p>Minnesota legislature enacted health care reform in 2008.</p> <p>MDH and Minnesota DHS were charged to establish standards and certification of HCHs to be eligible for new payments.</p> <p>Certification began in July 2010.</p>	<p>Minnesota has fewer uninsured patients than most states.</p> <p>Minnesota has only 3 large commercial insurers and 4 smaller ones.</p> <p>Minnesota law requires health plans to be nonprofit.</p> <p>Health care organizations in Minnesota are unusually collaborative.</p>
Health care system	<p>Few health plans are paying for commercial patients via the payment system established for HCHs.</p> <p>Health plans are using other financial incentives to facilitate transformation.</p> <p>Some medical groups are choosing other ways to redesign their primary care.</p>	<p>Because of the preponderance of large care systems, primary care clinics have both less ownership in their practices and less financial instability.</p> <p>Whether large or small, primary care clinics tend to be organized with identifiable leadership structures.</p>
Practice	<p>Public performance measures are not risk adjusted, so FQHC-type clinics have lower rates.</p> <p>The tiering process for HCH patients is complex.</p> <p>The payments for most HCH patients are only \$10-\$20/mo.</p> <p>The certification process is viewed as complex but fair.</p>	<p>At the time of this study, only about 20% of practices had been certified.</p> <p>Many HCH practices have chosen not to seek HCH payments.</p>

Online Supplementary Data

http://www.annfammed.org/content/11/Suppl_1/S108/suppl/DC1

Research team	MDH, Minnesota DHS, and public reporting are partners in the study. Research team members have substantial experience with primary care change and quality. Project director is well known in the medical community.	Practices were assured that no identifiable study results would affect their certification status. Reputation of MDH, Minnesota DHS, and the researchers facilitated cooperation and response rates.
Patient	Substantial diversity exists among practice populations. Patients have input to MDH and the research team.	Lack of adjustment of performance rates for patient characteristics likely affects clinic quality measures. Lack of data on patient satisfaction measures prevents their use in assessing transformation.
Other key stakeholders	Previous aggregation of research data on health care use from health plans facilitated their cooperation with this study.	Not applicable
Other factors from theoretical model	Instruments to measure priority for change, practice systems, and practice change readiness had previously been used locally.	There is a relatively high priority for practice change in most Minnesota clinics. There is an unusually high capability for managing change. Many Minnesota clinics are accustomed to thinking of practice systems as the main way to improve care.

DHS = Department of Human Services; MDH = Minnesota Departments of Health; FQHC = Federally Qualified Health Center; HCH = health care home.

Interpretation of Contextual Factors

Although Minnesota practices are under many of the same pressures to improve as practices in other parts of the country, a number of factors in the state have facilitated their readiness for that change. External factors include an unusually high degree of collaboration among practices and with payers, a long-term highly valued quality improvement collaborative, publicly reported performance measures, and various incentives from payers to improve performance. Internal factors include the highly organized and group orientation of Minnesota practices, the usual identification of an organized leadership structure, and considerable experience with a systematic approach to quality improvement. Most practices have also worked on developing an organizational culture supportive of quality and quality improvement.

These underlying conditions have become focused recently on redesign of primary care and on transformation into medical homes, based both on payer incentives and on recent changes in state law that established MDH as the body responsible for establishing standards for medical homes along with a certification and annual recertification process, and various facilitators of these changes. This program was implemented in July 2010, just as this study was being funded. The priority for certification was strengthened by establishing additional payments for complex patients of certified health care homes, although the Minnesota DHS has been the main payer to use this system to provide extra monthly payments for people covered by Medicaid and other state-supported insurance programs.

As part of its response to a legislative mandate to evaluate the impact of this new HCH certification and transformation assistance program, the Departments of Health and of Human Services were eager to participate in an Agency for Healthcare Research and Quality grant program to study the transformation process and its impacts, so a multiorganizational collaborative has supported this study team. This collaborative included the organization responsible for publicly reported standardized performance measures as well as the regional quality improvement collaborate and the 3 main large health plans that, together with the DHS, agreed to provide data on health care use for the study. The collaborative has worked well and has achieved a high degree of cooperation from the certified clinics. We have been careful to ensure that the study data about individual certified clinics would not be shared with the sponsoring regulators and payers so that unbiased data could be obtained from the clinics.

For various reasons, it took longer than expected for enough clinics to achieve certification for needs of this study, but we were able to wait until there were 132, of which 12 were limited to children. These practices were quite diverse in location, type, and patient population, although an unexpectedly large number (two-thirds) were part of 3 large multisite medical groups. We were not surprised to find, however, that performance measures within each large group varied almost as much as those within the other clinics, as despite their common ownership and organizational processes, most local observers would agree that each clinic tends to have its own culture that is shaped as much by its unique patients, health care personnel, leadership, and community as by the larger organization.