National Association of Public Hospitals and Health Systems

ResearchBrief

FEBRUARY 2010

1301 Pennsylvania Avenue, NW, Suite 950
Washington, DC 20004

202 585 0100 tel / 202 585 0101 fax
www.naph.org

Larry S. Gage / PRESIDENT
Christine Capito Burch / EXECUTIVE DIRECTOR

Safety Net Hospitals Establish "Medical Homes"

What is a "Medical Home?"

The term "medical home" was first used by the American Academy of Pediatrics in the 1967 publication *Standards of Child Health Care* to describe a "central source of a child's pediatric records."[1] This phrase has since evolved to describe a health care delivery site where patients have a continuous relationship with a personal physician who provides patient-centered, coordinated, and high-quality care with adequate reimbursement mechanisms to cover all provided services.[2,3] The National Committee for Quality Assurance (NCQA), which accredits medical homes, defines the term as "a model for care… that seeks to strengthen the physician-patient relationship by replacing episodic care based on illnesses and patient complaints with coordinated care and a long-term healing relationship."[4]

Current health reform efforts endeavor to restructure a highly fragmented health care system by increasing integration, coordination, and access to care. The medical home model and the related notion of integrated delivery systems (IDS) are gaining traction in Washington, DC, as strategies to improve health care in the U.S. If IDS is defined as "a coordinated continuum of services [that] is held clinically and fiscally accountable for the health status of the population served,"[5] the medical home is the primary care component of such a continuum.[6]

NAPH Reviews Medical Homes at Safety Net Hospitals

Many hospitals, including members of NAPH, have implemented the medical home care model within their affiliated clinics.[7] NAPH researchers conducted a study of medical homes at safety net hospitals and health systems and found 46 such programs at 37 member facilities. They conducted telephone and email interviews with staff at 23 sites and analyzed the programs to identify common themes. This Research Brief reports on these findings, explores current trends in medical home implementation at member hospitals, and considers potential policy implications for medical homes in the future.

REASONS FOR MEDICAL HOME ADOPTION

NAPH conducted interviews with CEOs, medical directors, and/or program directors at 23 of the 46 medical

ABOUT NAPH RESEARCH BRIEFS

In 2006, the National Association of Public Hospitals and Health Systems (NAPH) began publishing Research Briefs to provide members with timely results of long-term studies on issues of critical importance to safety net hospitals. Many of these briefs have focused on health care quality and performance improvement. Most recently, NAPH released the following Research Briefs, which are available on the NAPH website in the publications section:

- *Kaiser Scholarships Help NAPH Members Reach Quality Goals* (June 2009)
- *CMS Releases Latest Quality Data: NAPH Members Outperform on Most Core Measures* (September 2009)
- *NAPH Members Embrace Transparency in Quality Performance* (December 2009)
- *2008 Annual Survey Underscores the Key Role of the Nations Safety Net Hospitals and Health Systems* (December 2009)

NAPH remains focused on quality improvement and patient safety in 2010 and beyond. In this first Research Brief of the new decade, NAPH reports the findings of its 2009 study on medical homes at member hospitals.

homes identified. In the interviews, the most commonly cited reason for developing medical homes was the desire to improve patient health and increase access to high quality health care (33 percent). Coordination of services is critical to this endeavor. Indeed, 80 percent of NAPH members' medical home programs employ case managers and/or care coordinators to manage all aspects of patient care—from chronic disease management to specialist referrals.

Another 20 percent of medical homes were established explicitly to reduce emergency department (ED) overcrowding and the inappropriate use of ED services for primary care. Some NAPH members also created these programs to address unmet medical needs of a growing uninsured and underinsured patient population. Others established programs in anticipation of proposed federal health reform legislation, which includes language emphasizing primary care and the medical home model.

COMMUNITY COLLABORATIONS

More than three-quarters (76 percent) of the surveyed programs are collaborative efforts between the hospital/health system and community partners. Some examples of such partners include: mental health providers, educational institutions, local federally-qualified health centers or community health centers, local departments of health or social services, drug rehabilitation centers, needle exchange programs, and neighborhood homeless shelters. Although hospitals initiated the majority of these collaboratives (69 percent), nearly one-third (31 percent) were created by community organizations that reached out to NAPH members to provide clinical care. In some cases, NAPH members received external funding to help establish their medical home program; approximately 28 percent received start-up grants from federal, state, or private sources.

There are currently several multi-facility and privately funded medical home pilot projects taking place across the country. One such demonstration is the Safety Net Medical Home Initiative in which two NAPH members, Denver Health and Cambridge Health Alliance, both participate. This collaborative—coordinated jointly by The Commonwealth Fund, Qualis Health, and the MacColl Institute—was created in May 2008 and helps 68 participating primary care clinics at safety net hospitals adopt the medical home model. The initiative also helps providers establish partnerships with community stakeholders and creates a "replicable and sustainable implementation model for medical home transformation."[8]

POPULATIONS SERVED

Although some NAPH member medical homes serve the general adult population, most of those responding to NAPH's survey target specific vulnerable populations. Several programs focus exclusively on a specific demographic group: pediatric patients; the elderly; the uninsured, underinsured, and Medicaid patients; patients with no primary care physician; frequent

HIGHLIGHTS OF THE NAPH STUDY

- NAPH identified 46 medical home programs at 37 member hospitals and health systems.
- Twenty percent of the medical homes identified in the NAPH study were created explicitly to reduce emergency department (ED) overcrowding and the inappropriate use of ED services for primary care.
- Although some NAPH member medical homes serve the general adult population, most of those responding to NAPH's survey target specific vulnerable populations.
- Nearly 40 percent of member hospitals in the study attributed a reduction in ED usage to the redirection of primary care-seeking patients from the ED to a medical home.

users of the ED for primary care services; and the homeless. Pediatric medical homes often target particularly at-risk subgroups, including children with chronic diseases or developmental delays, those in foster care, and those who are homeless. Figure A illustrates the vulnerable populations served by the 46 identified medical home programs.

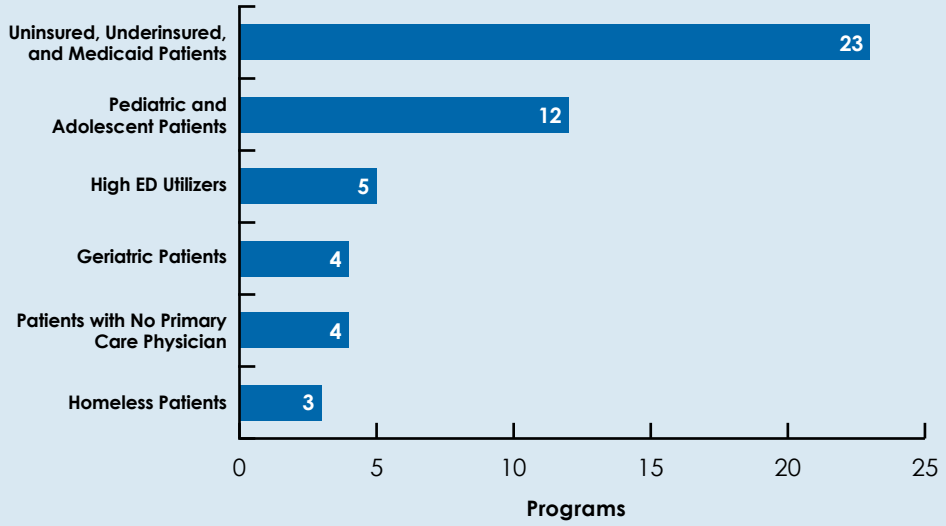
SERVICES OFFERED

Eighty percent of the medical home programs in the NAPH study offer specialty care services, either onsite or through coordinated referrals with contracted specialists. For the 63 percent of programs that self-identify as part of an integrated delivery system, patients obtain specialty services within the system, and the medical home tracks all referrals and follow-up services. Most of the medical home programs (63 percent) also offer chronic disease management programs for a wide range of conditions, such as asthma, cardiovascular disease (including hypertension and congestive heart failure), chronic renal disease, diabetes (types I and II), HIV/AIDS, hyperlipidemia, obesity, pain management, and substance abuse. To provide timely services, 39 percent of the medical homes offer "open access" scheduling, which allows patients to make appointments for the same or next day. Many also offer evening and weekend hours.

Most of the respondents (57 percent) report that the use of health information technology systems, which help coordinate care and streamline communication between providers, is "essential" to their success. However,

> "The Patient Centered Medical Home model has the potential to improve clinical quality, improve patient experience, and reduce health system costs."
>
> **Qualis Health, in partnership with The Commonwealth Fund, and the MacColl Institute[2]**

FIGURE A NAPH Member Medical Home Programs Serving Vulnerable Populations

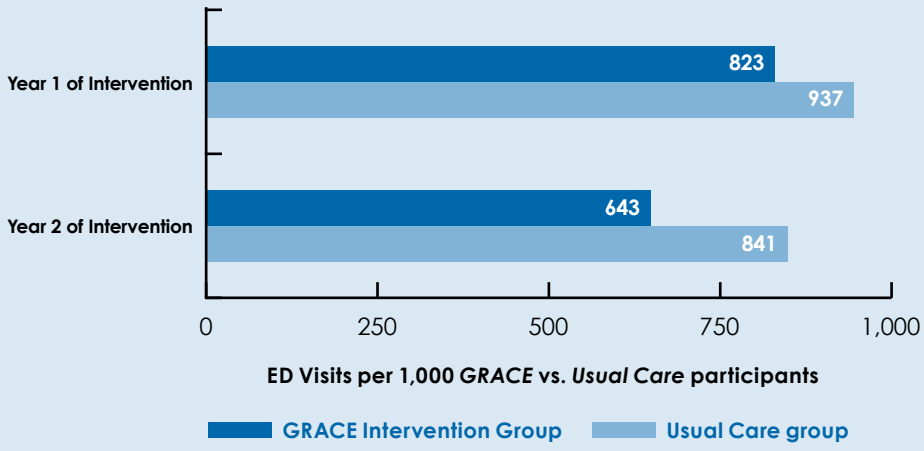


SOURCE NAPH study on medical homes, 2009. These categories are not exclusive.

the majority of these programs do not have fully-integrated electronic medical records (EMRs); only 41 percent of programs either use or are in the process of implementing EMRs or medical history repositories. Other common information technologies employed at NAPH members' medical home programs include patient tracking systems or health information exchanges (22 percent), e-referral systems (15 percent), and disease registries (17 percent).

Although all the programs share universal characteristics of a medical home, each one is tailored to the needs of its patient population. For example, the Geriatric Resources for Assessment and Care of Elders (GRACE) Program at Wishard Health Services uses social workers to help its senior citizen patients navigate the open access scheduling system. (While having same-day appointments is helpful to many patient groups, it can be challenging for seniors who must also coordinate transportation.) In Dallas, Texas, most homeless patients in need of primary care had no health care option outside of the ED. Parkland Health and Hospital System's Community Oriented Primary Care program addressed this by creating a mobile program with four medical and two dental vans and offering medical services at more than 20 local homeless shelters. Denver Health saw a need for a medical home for local foster children who often suffer from fragmented primary care. In response, the Denver Department of Human Services partnered with Denver Health to create the "Growing Connections for Kids" medical home project, which coordinates all health care regardless of a child's placement with new foster families. These are three examples of medical homes that have a unique focus on one particular at-risk demographic group.

FIGURE B **Emergency Department Visits of Patients Participating in a Randomized Clinical Trial for Wishard Health Services' GRACE Program**



SOURCE Counsel et al. (2009). Geriatric Care Management for Low-Income Seniors: A Randomized Controlled Trial. *JAMA*, 298(22), 2623-2633.

CLINICAL RESULTS OF MEDICAL HOMES

NAPH found that nearly 40 percent of programs could offer either anecdotal or quantitative evidence of reduced ED usage—attributed to the redirection of primary care-seeking patients from the ED to a medical home. For example, when Broadlawns Medical Center in Des Moines, Iowa, began diverting patients from the ED to its primary care clinic's medical home in 2003, the annual number of visits to the ED fell by 4,000 and resulted in a $190-per-patient reduction in cost of care.[9] At Carolinas Medical Center, interventions targeting high-risk patients who utilized the hospital's medical home resulted in an 80 percent decrease in hospitalizations and ED visits for the intervention group.[10] Similarly, in a randomized controlled trial, geriatric patients receiving treatment in the GRACE program at Wishard Health Services had a lower cumulative two-year ED visit rate compared with geriatric patients receiving standard primary and specialty care services as part of usual care (see Figure B).[11]

In addition to reductions in ED utilization, the medical home model has helped improve the delivery and quality of primary care and reduce costs at member hospitals. The use of open access scheduling at Carolinas Medical Center increased patient show rates at two affiliated family medicine clinics by 39 percent between 2001 and 2005.

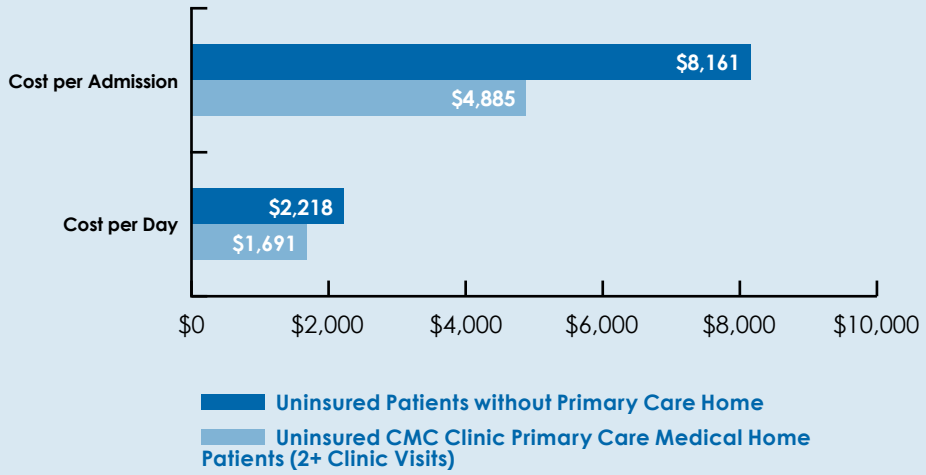
In addition, diabetic patients not participating in the Carolinas medical home model program cost the hospital 31 percent more per day and 67 percent more per admission than their counterpart medical home patients (see Figure C).[10] The Camino de Salud Network, a community-based medical home program in which LAC+USC Healthcare Network is a partner, experienced a 63 percent decrease in inpatient days for newly managed patients.[12] Meanwhile, VCU Health System's Virginia Coordinated Care for the Uninsured program, which provides a medical home for uninsured patients, experienced a 10 percent increase in the number of primary care visits at the program's medical homes.[13]

Conclusion

In an effort to make health care delivery more efficient, public hospitals and providers of all types are embracing the primary care medical home model. Medical homes have demonstrated increased primary care visits and decreased ED overuse. Collaborations between safety net hospitals and community partners (such as The Commonwealth Fund, Qualis Health and the MacColl Institute's Safety Net Medical Home Initiative) will be helpful in establishing new sustainable medical homes across the country.

Indeed, the U.S. Senate and House health reform legislation introduced in 2009 contains language, drafted by NAPH, calling for new federal financial assistance to community-based collaborative care networks that operate as medical homes. These collaborative care networks seek to reduce unnecessary ED use, strengthen care coordination for patients with chronic illness, and increase access to primary care. Given the bipartisan support for such collaboratives, it is likely that any successful health care reform package will include language encouraging medical home expansion. NAPH members' programs, therefore, can help serve as a model for the rest of the hospital industry as hospitals implement medical homes in their facilities. ■

FIGURE C **Hospital Utilization Costs of Diabetic Uninsured Patients Admitted to Carolinas Medical Center in 2005**



SOURCE Wade, K.E. Impact of a Medical Home in Addressing Health Disparity. PowerPoint presentation presented at NuHealth's First Annual Health Disparities Conference, April 18, 2009, in Garden City, NY.

Notes

1. Sia, C., Tonniges, T. F., Osterhus, E., & Taba, S. (2004). History of the Medical Home Concept. *Pediatrics*, 113, no. 5, 1473-1478.

2. Qualis Health, The Commonwealth Fund, & The MacColl Institute. (2009). A New Approach to Patient Care. The Patient-Centered Medical Home. The Safety Net Medical Home Initiative. See www.qhmedicalhome.org/index.cfm. Last accessed January 28, 2010.

3. American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, & American Osteopathic Association. (2007). Joint Principles of the Patient-Centered Medical Home. See www.acponline.org/advocacy/where_we_stand/medical_home/approve_jp.pdf. Last accessed January 28, 2010.

4. National Committee for Quality Assurance. (2009). Physician Practice Connections—Patient-Centered Medical Home (PPC-PCMH) Fact Sheet. See www.ncqa.org/tabid/631/default.aspx. Last accessed December 2, 2009.

5. Shortell, SM. Integrated Delivery Systems: Promise and Performance. [PowerPoint Slides]. See www.hks.harvard.edu/m-rcbg/hcdp/readings/Integrated%20Health%20Systems%20-%20Promise%20and%20Performance.pdf. Last accessed December 2, 2009.

6. Beck, C., Griffin, L., & Henderson, C. (2009). Integrated Care: Putting the Pieces Together for Patient Care (T. Cortez, Ed.). *The Colorado Health Foundation*. See www.coloradohealth.org/studies.aspx. Last accessed December 1, 2009.

7. In addition to the 46 medical homes identified at NAPH member facilities, the Commonwealth Fund's website notes that 31 states are piloting medical homes within their Medicaid and SCHIP programs (see www.commonwealthfund.org/Content/Program-Areas/Patient-Centered-Coordinated-Care.aspx). Last accessed January 28, 2010. In 2010, Medicare will partner with existing multi-payer medical home pilots across the country in the Multi-Payer Advanced Primary Care Demonstration (see www.cms.hhs.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=3&sortOrder=descending&itemID=CMS1230016&intNumPerPage=10). Last accessed January 28, 2010. Moreover, according to the California Association of Public Hospitals (CAPH), California and other states have coverage initiatives to establish medical homes with county-run public hospitals (see www.caph.org/policybriefs/CAPH_CoverageInitiativePolicyBrief4_2009.pdf and www.statecoverage.org). Last accessed January 28, 2010.

8. Qualis Health, The Commonwealth Fund, & The MacColl Institute. (2009). A New Approach to Patient Care. The Patient-Centered Medical Home. The Safety Net Medical Home Initiative. See www.qhmedicalhome.org/index.cfm. Last accessed January 28, 2010.

9. Geyer, S. (2004). Preserving the Dignity and Access to Care. The Broadlawns Model for the Uninsured. *Trustee*, 57, 25-6.

10. Wade, K.E., Furney, S.L., & Hall, M.N. (2009) Impact of Community-Based Patient-Centered Medical Homes on Appropriate Health Care Utilization at Carolinas Medical Center. *NC Med J*, 70(4), 341-345.

11. Counsell, S.R., Callahan, C.M., Clark, D.O., Tu, W., Buttar, A.B., Stump, T.E., Ricketts, G.D. (2007). Geriatric Care Management for Low-Income Seniors: A Randomized Controlled Trial. *JAMA*, 298(22), 2623-2633.

12. Delgado, P. (2009). Building Primary Care Capacity, PowerPoint Slides. Presented at the 2009 NAPH Annual Conference June 2009 in Seattle, Washington.

13. Retchin, S.M., Garland, S.L., & Anum, E.A. (2009). The Transfer of Uninsured Patients from Academic to Community Primary Care Settings. *Am J Manag Care*, 15(4), 245-252.