

# Healthy Pregnancy and Healthy Children: Opportunities and Challenges for Employers

## Primary Care and the Medical Home: Promoting Health, Preventing Disease, and Reducing Cost

This document provides an overview of the importance of primary care services; the medical home model; and guidance on how employers can support both through beneficiary education, benefit design, and reimbursement practices.

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### Introduction

The previous issue briefs, *The Business Case for Promoting Healthy Pregnancy* and *The Business Case for Protecting and Promoting Child and Adolescent Health* provided an overview of the health problems women and children face, and the resulting employer costs. Employers have the opportunity to address these problems in a number of ways. Part 2 recommended benefit design changes, Part 3 included tools for healthcare strategy-setting, and Part 5 provides information on health promotion programs, health education campaigns, and incentives. Investing in primary care and the primary care delivery system is another proven strategy.

## The Medical Home

Many employers are focusing on preventive health in order to promote the health of beneficiaries and prevent costs that occur when beneficiaries develop chronic conditions or suffer preventable injuries. Primary care providers are essential in the prevention, detection, and management of chronic diseases and injuries: they provide continuous and comprehensive care, and are the entry point to the healthcare system.

Primary care providers are especially important in the care of children. Well-child care, the foundation of health care for children, requires multiple visits for screenings, counseling, anticipatory guidance, immunizations, and other services. The American Academy of Pediatrics (AAP) recommends that children receive 26 well-child visits from birth to age 21.<sup>2</sup> Ensuring a child is up-to-date on preventive care can be difficult, particularly when a child has special needs, complex medical conditions, or multiple providers.

**Approximately 90% of children in the United States have health coverage (public or private), yet less than 80% of insured children have a regular source of care.<sup>1</sup>**

Fragmentation in care for children is common, and often due to:

- Change in their parent's employment.
- Change in health plan options, for example a change in plan administrators or network composition.
- Change in levels of coverage, for example when a parent opts to add or eliminate dental coverage.

In these circumstances, beneficiaries may be forced to choose a different care provider. As a result, their medical records can become scattered and the helpful provider-patient rapport is truncated.

The need for continuity of care and a single source of information about a child's medical history led to the idea of the medical home. The medical home concept was pioneered by the American Academy of Pediatrics (AAP) in 1967. It was originally intended to provide children with special health care needs care that was accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective.<sup>3</sup> Over time, the concept was applied to all children and then to adults. Today, the term "**medical home**" refers to a partnership between a patient, his or her family, and their primary healthcare provider.<sup>4</sup>

**A medical home is not a building, house, or hospital, but rather an approach to providing comprehensive primary care. A medical home is defined as primary care that is accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective.<sup>5</sup>**

## Principles of the Patient-Centered Medical Home (Supported by the American Academy of Family Physicians and the American College of Physicians)<sup>6</sup>

**Personal physician** - each patient has an ongoing relationship with a personal physician trained to provide first contact, and continuous and comprehensive care.

**Physician directed medical practice** – the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

**Whole person orientation** – the personal physician is responsible for providing for all the patient's health care needs or arranging care with other qualified professionals.

**Care is coordinated and/or integrated** across all elements of the complex healthcare system (e.g., subspecialty care, hospitals, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, and health information.

**Quality and safety** are hallmarks of the medical home:

- Evidence-based medicine and clinical decision-support tools guide decision-making.
- Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement, patient feedback is obtained and used, and practices go through a voluntary recognition process to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
- Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication.

**Enhanced access** to care is available through systems such as open scheduling, expanded hours, and new options for communication between patients, their personal physician, and practice staff.

**Payment** appropriately recognizes the added value provided to patients who have a patient-centered medical home. The payment structure should be based on the following framework:

- It should reflect the value of physician and non-physician staff work that falls outside of the face-to-face visit associated with patient-centered care management.
- It should pay for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
- It should support adoption and use of health information technology for quality improvement.
- It should support provision of enhanced communication access such as secure e-mail and telephone consultation.
- It should recognize the value of physician work associated with remote monitoring of clinical data using technology.
- It should allow for separate fee-for-service payments for face-to-face visits. (Payments for care management services that fall outside of the face-to-face visit, as described above, should not result in a reduction in the payments for face-to-face visits).
- It should recognize case mix differences in the patient population being treated within the practice.
- It should allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting.
- It should allow for additional payments for achieving measurable and continuous quality improvement.

### **The Business Group Strongly Supports Primary Care**

The Board of Directors of the National Business Group on Health strongly supports:

- Primary care as foundational to a high-quality, efficient, and effective healthcare delivery system.
- Payment policies that recognize the value of primary care and primary care like services.
- The concept of an “advanced medical home”, as appropriate.
- Growth in health information technology (HIT) to support and enable efficiency, quality, and safety in practices of all sizes.
- Educational and loan programs that encourage physicians and other health professionals to work in primary care.

As a Nation, and as employers making payment decisions and pressing for needed payment reform under Medicare, Medicaid, and SCHIP, the Business Group believes we should:

- Direct resources to disease prevention, health promotion, and needed primary care;
- Ensure the availability of portable, personal health records;
- Support reforms, tools, and resources to enable and encourage people to have a medical home; and
- Target capital resources to underserved areas and truly needed facilities and equipment.

## **Why Primary Care is Important**

**Primary care** is defined as integrated and accessible care from physicians, nurse practitioners, or other qualified providers who are accountable for a wide range of personal health care needs, who have a relationship with patients, and practice in the context of the family and community.<sup>7</sup>

Despite the United States having the highest per capita health expenditures in the world, it ranks at the bottom or near bottom of a wide array of health measures.<sup>8</sup>

One reason for our low ranking is a lack of emphasis on primary care services. Countries that emphasize primary care (namely Denmark, Finland, Netherlands, Spain, and the United Kingdom) have better health outcomes, such as reduced rates of low birthweight, neonatal mortality, child mortality, and injury-related deaths.<sup>8</sup> Countries with a stronger orientation towards primary care also have fewer years of life lost (a reduced rate of premature mortality); and a lower incidence of influenza, pneumonia, asthma, bronchitis, and heart disease.<sup>9</sup> The lowered rate of illness means lower healthcare expenditures. Even in the United States, cities that have a higher-than-average proportion of primary care practices experience lower in- and out-patient care costs.<sup>10</sup>

**Despite the United States having the highest per capita health expenditures in the world, it ranks at the bottom or near bottom of a wide array of health measures. The United States spends 40% more per capita on health care than any other Western industrialized nation.<sup>11</sup>**

**Countries that support and incent primary care services have lower mortality rates, fewer years of life lost due to preventable causes, and lower per capita healthcare expenditures.**

## Case Examples

### ***Developmental Screening***

Developmental screening (conducted during routine well-child visits) is an important preventive service.<sup>12</sup> Medical homes, as compared to other types of care delivery systems, improve the delivery of screening. The American Academy of Pediatrics (AAP) released a policy statement in 2006 recommending that providers screen children for developmental delays at 9, 18, and 30 months and evaluate, diagnose, and treat children who screen positive for problems.<sup>12</sup> The identification of developmental delays allows for early intervention, which benefits children and their families.<sup>12</sup> Medical homes that utilize electronic medical records are able to (a) effectively track a child's progress over time and identify symptom patterns, (b) improve collaboration among multiple providers, and (c) aid providers and families in making future appointments and managing referrals to specialists.<sup>12</sup>

### ***Immunizations***

Ensuring that children are up-to-date on their immunizations is vital. By the age of 2 most children will require 27 immunizations, and by age 18 most children will have received 35 vaccinations.<sup>13</sup> Unfortunately, many children miss or delay immunizations leaving them vulnerable to serious disease for a period of time. Research shows that children in medical homes receive more on-time vaccinations than children seen in other care delivery models.<sup>14</sup> Medical homes promote timeliness by keeping up-to-date records and reminding parents of their children's immunization needs.

### ***Adverse Drug Events***

According to the Agency for Healthcare Research and Quality (AHRQ), over 770,000 people are injured or die each year in hospitals from adverse drug events.<sup>15</sup> Patients who experience an adverse drug reaction spend an additional 8 to 12 days longer in the hospital and cost an extra \$16,000 to \$24,000 compared to those who received high-quality care. Nationally, the hospital cost of medical errors totals between \$1.56 and \$5.6 billion each year.<sup>15</sup> Since the majority of drug-related medical errors occur in the ordering and administration stages, 28% to 95% of adverse drug events can be prevented by using computerized systems.<sup>15</sup> A computerized medical home houses a patient's information in its system and if a drug is ordered that the patient is allergic to or that might interact with another medication, the provider or pharmacist is alerted before the patient is harmed.<sup>16</sup> E-prescribing systems reduce the amount of transcription errors by eliminating illegible prescriptions; they can also calculate dosages based on the patient's weight and height (a point of particular importance for children) and pregnancy status.<sup>17</sup> Many of these systems can also help reduce drug costs and increase compliance to purchasers' preferred drug prescription programs by identifying when a prescribed medicine is covered by the patient's pharmacy plan and if a generic is available.<sup>17</sup>

## **Employer Actions**

To encourage and support the medical home concept, employers should consider changing their benefit design and reimbursement practices. Employers should also educate their beneficiaries about the benefits of care continuity.

### ***Benefit Design***

- Strive to create a stable network of primary care providers, including pediatricians, family physicians, pediatric and family nurse practitioners, and general practitioners. Also strive for continuity among providers who deliver primary care like services such as prenatal care (obstetrician-gynecologists), and mental health services. Changes in coverage and changes in a plan's provider network can interrupt continuous care.
- Direct health plan administrators to select providers for their networks who practice within the medical home model.
- Provide incentives for beneficiaries and providers to foster stable relationships.

### ***Education and Communication***

- Provide information to beneficiaries about the importance of primary care, for example:
  - Provide employees who are parents with immunization and well-child care schedules, and a list of zero-cost preventive services.
  - Instruct your health plans to provide beneficiaries with information about selecting a qualified primary care provider in their area. Ask the plan to highlight providers that offer medical-home-modeled services.
- Help beneficiaries choose quality health care, by providing tools that will allow them to:
  - Select a provider who has been given high ratings in care quality, has adequate training, values and promotes preventive services, and works with patients to make healthcare decisions.<sup>18</sup>
  - Understand how to choose treatments based on their diagnosis, the benefits and risks of the intervention, recent scientific evidence, and cost.<sup>18</sup>
  - Find a suitable hospital that is accredited, rated highly by State and local organizations, has experienced physicians and nurses, and monitors and improves the quality of care it provides.<sup>18</sup>

### ***Reimbursement***

Instruct plan administrators to provide better reimbursement for primary care services. Too few young physicians are entering the primary care field and many established physicians are retiring as the trend towards specialty care devalues their care and lowers their profits.<sup>19</sup> Improving reimbursements is one way to encourage physicians to start or continue in primary care practices. Some insurance companies and health plan administrators use the “pay for performance” system, which aims to enhance the quality of care patients receive by rewarding primary care providers for the delivery of preventive care through bonuses or reimbursements.<sup>20</sup>

## Summary Points

- Primary care providers are essential in the prevention, detection, and management of chronic diseases and injuries: they provide continuous and comprehensive care, and are the entry point to the healthcare system.
- Preventive health care is critical for children and adolescents and is best provided in a medical home. Children who receive well-child care in a medical home are more likely to receive on-time immunizations, more likely to be screened and treated for developmental problems, and less likely to suffer an adverse drug event than their peers treated in different models.
- Countries that support and incent primary care services have lower mortality rates, fewer years of life lost due to preventable causes, and lower per capita healthcare expenditures.
- To encourage and support the medical home concept, employers should consider changing their benefit design and reimbursement practices. Employers should also educate their beneficiaries about the benefits of care continuity.

## References

1. Cunningham PJ, Trude S. Does managed care enable more low income persons to identify a usual source of care? Implications for access to care. *Medical Care*. 2001;39(7):716-726.
2. Hagan JF, Shaw JS, Duncan P, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2007.
3. Medical Home Initiatives for Children With Special Needs Project Advisory Committee. The medical home. *Pediatrics*. July 1, 2002;110(1):184-186.
4. Sia C, Tonniges TF, Osterhus E, Taba S. History of the medical home concept. *Pediatrics*. 2004;113(5):1473-1478.
5. American Academy of Pediatrics. *The National Center of Medical Home Initiatives for Children with Special Needs*. Available at: <http://www.medicalhomeinfo.org/>. Accessed on July 11, 2007.
6. American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, American Osteopathic Association. *Joint Principles of the Patient-Centered Medical Home, March 2007*. Available at: <http://www.medicalhomeinfo.org/Joint%20statement.pdf>. Accessed March 23, 2010.
7. Agency for Healthcare Research and Quality. *Primary Care: Where Research and Practice Meet: Fact Sheet*. Available at: <http://www.ahrq.gov/about/cpcr/practice.htm>. Accessed on July 12, 2007.
8. Starfield B, Shi L. Policy relevant determinants of health: an international perspective. *Health Policy*. 2002;60(3):201-218.
9. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within organization for economic cooperation and development (OECD) countries, 1970-1998. *Health Services Research*. 2003;38(3):831-865.
10. Welch WP, Miller ME, Welch HG, Fisher ES, Wennberg JE. Geographic variation in expenditures for physicians' services in the United States. *N Engl J Med*. March 4, 1993;328(9):621-627.
11. McIntosh MA. The cost of healthcare to Americans. *JONAS Healthc Law Ethics Regul*. 2002;4(3):78-89.
12. Council on Children With Disabilities; Section on Developmental Behavioral Pediatrics; Bright Futures Steering Committee; Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. *Pediatrics*. 2006;118(1):405-420.
13. Centers for Disease Control and Prevention. *Recommended immunization schedule*. Available at: <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>. Accessed March 23, 2010.
14. Allred NJ, Wooten KG, Kong Y. The association of health insurance and continuous primary care in the medical home on vaccination coverage for 19- to 35-month-old children. *Pediatrics*. February 1, 2007;119(Supplement\_1):S4-11.
15. Agency for Healthcare Research and Quality. *Reducing and preventing adverse drug events to decrease hospital costs*. Available at: <http://www.ahrq.gov/qual/aderia/aderia.htm>. Accessed on June 21, 2007.
16. U.S. Congress. House Ways and Means Committee. *Testimony before the subcommittee on health of the house committee on ways and means: Rick Kellerman, M.D. May 10, 2007*. Washington, DC: Government Printing Office; 2007.
17. Council on Clinical Information and Technology. Electronic prescribing systems in pediatrics: The rationale and functionality requirements. *Pediatrics*. June 1, 2007;119(6):1229-1231.
18. Agency for Healthcare Research and Quality. *Improving Health Care Quality: A Guide for Patients and Families*. Available at: <http://www.ahrq.gov/consumer/qntlite/>. Accessed on July 5, 2007.
19. Barr M, Ginsburg J. *The Advanced Medical Home: A patient-centered, physician-guided model of health care—a policy paper*. A Policy Monograph of the American College of Physicians, 2006. Available at: [http://www.acponline.org/advocacy/events/state\\_of\\_healthcare/adv\\_med.pdf](http://www.acponline.org/advocacy/events/state_of_healthcare/adv_med.pdf). Accessed March 23, 2010.
20. Endsley S, Kirkegaard M, Baker G, Murcko AC. Getting rewards for your results: Pay-for-performance programs. *Family Practice Management*. 2004;11(3):45-50.