Patient-Centered Medical Home Cyberinfrastructure

The following is a synopsis of “Patient-Centered Medical Home Cyberinfrastructure: Current and Future Landscape,” published in the May 2011 supplemental issue of the *American Journal of Preventive Medicine*.

**What is already known on this topic?**

The patient-centered medical home (PCMH) approach originated from a model introduced in 1967 by the American Academy of Pediatrics. This approach is currently defined as the provision of comprehensive primary care that brings together the clinical team with well-informed patients and their families. Since a group of medical professional societies released the Joint Principles of the Patient-Centered Medical Home in 2007, numerous activities have taken place, including demonstration projects and publications. These activities have shown how instrumental health information technology (HIT) has been in the implementation of the PCMH model.

**What is added by this article?**

This article focuses on HIT and its role in PCMH, summarizing the discussion of an expert panel convened by the Agency for Healthcare Research and Quality at the Informatics for Consumer Health Summit in November 2009. Building on the panel discussions, the authors highlighted the advantages of having a comprehensive HIT infrastructure to ensure the successful implementation of the PCMH model. The capabilities and functionalities of HIT—such as an electronic health record (EHR), appointment scheduling and reminders, online prescription refills, secure remote access, and electronic registries—are vital to building a cyberinfrastructure that will support PCMH. Challenges to a solid HIT infrastructure include EHR adoption barriers, functionality of information in a practice-based EHR, cost-effectiveness issues, technical implementation problems, and access to and exchange of information.

**What are the implications for public health practice?**

The federal government supports the development of a PCMH cyberinfrastructure, an example of which can be seen in the Health Information Technology for Economic and Clinical
Health (HITECH) provisions of the American Recovery and Reinvestment Act. These provisions encourage the adoption and meaningful use of EHR systems, provide clinicians with assistance and technical support, facilitate coordination among states, create and enhance connections to public health agencies, and focus on workforce training in meaningful use of EHRs.

What are the applications for these findings?

- Development and implementation of a national HIT infrastructure is needed. This infrastructure would provide a platform for the quick, secure exchange of information between the health care team and patient.
- On a health care organization level, a cyberinfrastructure would enable different HIT components with common standards to connect among institutions.
- A fully integrated HIT system would allow providers to share patient information with other members of the health care team.
- HIT tools can empower the patient by enhancing patient-provider information exchange, self-management, and health education.

Resources

Patient-Centered Primary Care Collaborative
www.pcpcc.net

*Joint Principles of the Patient-Centered Medical Home*
www.pcpcc.net/content/joint-principles-patient-centered-medical-home

Agency for Healthcare Research and Quality
*National Resource Center for Health IT*
www.healthit.ahrq.gov

Centers for Disease Control and Prevention
*Health Information Technology Use among US Adults*
www.cdc.gov/Features/dsHealthInfo

*EHR Meaningful Use FAQ*
www.cdc.gov/EHRmeaningfuluse/faq.html

Citation


The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.