Bringing Knowledge Home
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In the next 10 years, data and the ability to analyze them will do for doctors’ minds what X-ray and medical imaging have done for their vision. How? By turning data into actionable information. Take, for instance, IBM’s intelligent supercomputer, Watson. Watson can analyze the meaning and context of human language and quickly process vast amounts of information. With this information, it can suggest options targeted to a patient’s specific circumstances. This technology can help physicians and nurses identify the most effective courses of treatment for their patients, and it is an almost immediate process. In less than 3 seconds, Watson can sift through the equivalent of about 200 million pages, evaluate the information, and provide precise responses. With medical information doubling every 5 years, advanced health analytic systems technologies like this can help improve patient care through the delivery of up-to-date, evidence-based health care.

But merely having the right information will not assure delivery of the right care. If physicians still are paid per minute of time and per episode of care, and are not held accountable for the care they deliver, using this data will be of little value. So, how to make sure this actionable information flows and is held accountable at the level of a healing relationship? With this question in mind, IBM—as a buyer of care—hosted a meeting in 2006 for 47 of the Fortune 100 buyers, TRICARE, the federal Office of Personnel Management, buyers, and the whole house of primary care. These stakeholders agreed to guidelines now known as the Joint Principles of the Patient Centered Medical Home (PCMH)—a concept and standard of care that focuses on people and their families.2

PCMH is defined as “a health care setting that facilitates partnerships between individual patients and their personal providers and, when appropriate, the patient’s family.”3 It lies at the center of the effort to address population health through provision of integrated and coordinated team-based care. It is a delivery organization that fosters clinician-led primary care with comprehensive, accessible, holistic, and evidence-based coordination and management. PCMH builds the infrastructure through which data flow and is held accountable as the system integrator.4 Moreover, PCMH design allows for significant cost savings through payment models involving risk sharing among physicians, close monitoring of specialized procedures, and oversight of expensive resources. These principles of payment design have helped the health care system in Grand Junction, CO maintain per capita Medicare spending at a rate 24 percent lower than the national average.5

In the United States, PCMH is now the standard for the U.S. Department of Veterans Affairs (VA) and the U.S. Department...
of Defense (DOD). They use it as the guiding basis for enhanced incorporation of the health data infrastructure into the care process, increased patient engagement in his or her care, and improved coordination among all members of the health care team. Moreover, under the Affordable Care Act, Accountable Care Organizations (ACOs) will be created in 2012, likely increasing the importance of PCMH as the core foundation of ACOs’ design. ACOs are a combination of primary care, specialists, and hospitals tied to a defined population and accountable for the quality, outcomes, and cost of health care received by that population. The healer relationship engendered by PCMH is the care foundation that is accountable. Furthermore, it promotes and rewards effective and efficient care. The National Committee for Quality Assurance has found that PCMH patients have shorter stays in hospitals, up to 70% fewer visits to the emergency room, lower rates of imaging utilization.

Already, PCMH is the accountable care foundation for the Agency for Healthcare Research and Quality’s (AHRQ’s) PCMH Resource Center, for the Department of Defense, for the VA, for the Health Resources and Services Administration, and for the Federal Employee Health Benefits program. On December 1, 2011, Montana followed many others to become the 38th state to use PCMH as a foundation for state-based, commercial, and publicly-funded care. Health plans like WellPoint and Aetna, which together cover 52 million Americans, now also are making PCMH the foundation they build on and pay against. The implementation of PCMH in Canada now is working to bring this model to scale on the national level.

The PCMH team approach to health care delivery using data analytics has been proven to significantly reduce emergency room visits and hospital readmissions. There is a good deal of evidence that this approach results in lower hospitalization rates, better value, and lower overall health care cost as well as improved patient health. Let’s start paying for a system that provides comprehensive, integrated care for less, in which PCMH-based primary care takes on more responsibility for coordinating care and improving patients’ health.

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For additional information, visit:
- http://www.pcpcc.net/resources
- http://content.healthaffairs.org/content/30/7/1325

References:
1. IBM. 2005. Healthcare Reform and IBM.

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In his commentary, Paul Grundy’s discussion of Patient-Centered Medical Homes (PCMH) touches on several issues and lessons central to the delivery of care that is effective, efficient, and continuously improving, including the importance of:

- The integration of partnerships among providers, patients, and families for a well-coordinated and comprehensive care experience.
- Real-time access to reliable health information and data at the point of care to ensure accountable, evidence-based care.
- An accurate and complete data foundation to guide well-coordinated, patient-centered, continuously learning, higher-value care is delivered.

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