

## AHA Research Question #2

What organizational characteristics, structures, and processes lead to a high-performing system of care (e.g., the implementation of specific HIT components, specific horizontal and vertically integrated system practices, and clinical and functional integration across a health system that produces benchmark outcomes)?

### Importance/Context

This research question is important because as demonstrated in the 2009 Strategic Issues Forecasting Report:

- Fifty-six percent (56%) of all community hospitals in the United States are members of a health care system,<sup>1</sup> and there is a wide range of integration at the system level.
- Not enough empirical evidence exists linking specific characteristics, structures, and processes of systems with performance in terms of quality and efficiency of care.
- As of April 2009, only 1.5% of hospitals had a comprehensive medical records system.<sup>2</sup> Facilitated by the HITECH Act that is tied to “meaningful use,” many health systems are moving toward implementation of more robust HIT systems.<sup>3</sup> Not enough evidence exists about the relative value of HIT components and their role in an integrated IT system.

### Questions/Hypotheses

Some specific questions are:

- What characteristics or organizational processes and structures lead to a health system whose clinical effectiveness and efficiency are greater than the effectiveness and efficiency of its components? What are the cost- and quality-related synergies in functioning as a health “system” as opposed to an independent health care organization?
- What are the leadership and governance practices associated with high performing health care systems?
- How can specific HIT components be adopted and bundled effectively as part of a health system’s transition to a fully developed electronic information system? Which specific HIT components yield the greatest return in improved health and reduced costs?

Some example hypotheses to test are:

- Highly-centralized health systems and systems with centralized governance structures achieve higher levels of performance on financial and quality indicators than decentralized systems and systems more autonomous subsidiary boards.
- Electronic decision support and provider order entry components of HIT systems yield the greatest relative return in terms of improved health and reduced costs for a health system.

### How Information Can Be Used

Results will help hospitals in several ways:

- Understand what characteristics and organizational processes can lead to a health system functioning with greater clinical effectiveness and efficiency than an individual hospital.
- Objectively compare and contrast different leadership and governance structures in order to determine which one is right for their own contextual environment.
- Determine which specific HIT components yield the greatest ROI.

<sup>1</sup> “Fast Facts on US Hospitals,” *AHA Resource Center*, American Hospital Association, 13 April 2009, <http://www.aha.org/aha/resource-center/Statistics-and-Studies/fast-facts.html>.

<sup>2</sup> Ashish K. Jha, Catherine M. DesRoches, Eric G. Campbell, Karen Donelan, Sowmya R. Rao, Timothy G. Ferris, Alexandra Shields, Sara Rosenbaum, and David Blumenthal, “Use of Electronic Records in U.S. Hospitals,” *N. Eng. J. Med.*, Vol. 360:1628-1638 (16 Apr. 2009), <http://content.nejm.org/cgi/reprint/360/16/1628.pdf>.

<sup>3</sup> Health Information Technology for Economic and Clinical Health (HITECH) Act, Title XIII of Division A and Title IV of Division B of the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. No. 111-5 (Feb. 17, 2009), [http://itlaw.wikia.com/wiki/HITECH\\_Act#Overview](http://itlaw.wikia.com/wiki/HITECH_Act#Overview)

