

# AHA Research Question #1

What are the most effective and efficient ways for hospitals and health systems to integrate care and improve performance (financial, clinical, service, patient and staff experience) along the continuum of care (e.g., implementing care coordination across all settings of care)?

## Importance / Context

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

- According to AHRQ data, the U.S. health care system is achieving higher performance levels on measures relating to acute care, but has not shown much improvement when it comes to measures relating to preventive care and management of chronic illness. The median annual rate of improvement in quality measures has been much higher in hospitals (2.8%), home health (2.5%), and long-term care settings (1.9%) than it has been in the ambulatory care setting (1.1%).<sup>1</sup>
- Payers are considering major changes to reimbursement in order to encourage coordination.<sup>2</sup>
- There are a wide range of approaches to care coordination, and little evidence exists establishing the most effective and efficient ways for hospitals and health systems to integrate care across the continuum and the financial impact of doing so.<sup>3</sup>

## Questions / Hypotheses

Some specific research questions are:

- How can we measure integration/coordination of care across settings? How can quality be measured across settings?
- What forms of integration/coordination are most effective for improving quality? What is the cost associated with different forms of integration/coordination?
- How can hospitals best integrate/coordinate care? What delivery and operational structures need to be in place to successfully integrate/coordinate care? How can quality improvement efforts be structured to reach across settings?

Some example hypotheses to test are:

- The care coordination areas of transitions and handoffs yield the best opportunities for better outcomes compared to other coordination practices.
- Care coordination measures are more appropriate at the group, practice, or organizational level than at the individual clinician level.

## How Information Can Be Used

Results will help hospitals in several ways:

- Compare and contrast the cost effectiveness of different integration mechanisms, including clinical integration, functional integration, and economic integration.
- Understand what delivery and operational structures must be in place before implementing care coordination strategies.
- Plan integration efforts and implement quality improvement efforts across care settings; measure progress toward integration.

<sup>1</sup> National Healthcare Quality Report 2008, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, AHRQ Publication No. 09 0001, Mar. 2009, <http://www.ahrq.gov/qual/nhq08/nhq08.pdf>

<sup>2</sup> "Payments for care coordination," Minnesota Department of Health, 13 Oct. 2009, <http://www.health.state.mn.us/healthreform/paymentcoord.html>.

<sup>3</sup> Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies: Volume 7—Care Coordination, Stanford University—UCSF Evidence-based Practice Center, Prepared for the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, AHRQ Publication No. 04(07)-0051-7, June 2007, <http://www.ahrq.gov/downloads/pub/evidence/pdf/caregap/caregap.pdf>.

## 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)

# AHA Research Question #3

What are the most promising practices and system design elements for reducing health disparities, considering all factors such as organizational elements and social determinants?

## Importance/Context

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

- The United States is becoming more diverse, with members of minority populations making up 34% of the population in 2008.<sup>1, 2</sup>
- Disparities have widened significantly across socioeconomic lines in recent years. According to the Gini Index, economic disparities have increased by 15% in the last three decades.<sup>3</sup> Racial and ethnic disparities by insurance status are significant. In 2008, 31% of Latinos, 19% of African Americans, and 18% of Asians were uninsured, compared to 11% of Whites.<sup>4</sup> Disparities also exist in health outcomes for minority patients when compared to Whites.<sup>5</sup>
- Researchers have yet to conclusively determine the best or most promising practices for reducing disparities. A major impediment to addressing this issue is the lack of race/ethnicity/language preference data at the hospital and clinic level that is the basic foundation for determining where gaps in care may exist within the population served.

## Questions/Hypotheses

Some specific questions are:

- What are the most promising practices for reducing health disparities?
- What are the determinants of disparities within hospitals and across communities? What are the relative roles of genetics, access and coverage, community and sociological factors, and systematic cultural biases?
- What are the best strategies for addressing equity at an organizational level? How can hospitals use data on race and ethnicity to examine disparities within their organizations?

Some example hypotheses to test are:

- Investments in language services and cultural competency training yield improvements in quality of care and lower overall costs of care for limited English proficient patient populations.
- Stratifying hospital quality data by race and ethnicity and using this information to identify gaps in quality is an effective strategy for identifying areas of inefficiencies in care that can be eliminated through improvement initiatives.

## How Information Can Be Used

Results will help hospitals in several ways:

- Understand the determinants of disparities within their hospitals and across their communities.
- Focus and prioritize strategies aimed at reducing disparities, including ways to use race and ethnicity data to identify and address disparities.
- Better coordinate efforts with providers and community organizations to reduce disparities.

1 Hispanic or Latino Origin By Race," 2007 *American Community Survey*, U.S. Census Bureau, Last accessed: March 2009, [http://factfinder.census.gov/servlet/DTTable?\\_bm=y&-ds\\_name=ACS\\_2007\\_1YR\\_G00\\_-CONTEXT=dt&-mt\\_name=ACS\\_2007\\_1YR\\_G2000\\_B03002&-redoLog=true&-geo\\_id=01000US&format=&-lang=en&-SubjectID=15233308](http://factfinder.census.gov/servlet/DTTable?_bm=y&-ds_name=ACS_2007_1YR_G00_-CONTEXT=dt&-mt_name=ACS_2007_1YR_G2000_B03002&-redoLog=true&-geo_id=01000US&format=&-lang=en&-SubjectID=15233308).

2 "An Older and More Diverse Nation by Midcentury," U.S. Census Bureau, 14 Aug. 2008, Last accessed: March 2009, <http://www.census.gov/Press-Release/www/releases/archives/population/012496.html>.

3 "Table H-4: Gini Ratios for Households, by Race and Hispanic Origin of Householder: 1967 to 2007," *Historical Income Tables – Households, U.S. Census Bureau*, <http://www.census.gov/hhes/www/income/histinc/h04.html>.

4 "Income, Poverty, and Health Insurance Coverage in the United States: 2008," 2009 Current Population Survey Annual Social and Economic Supplement, Consumer Income, 10 Sep. 2009, U.S. Census Bureau, [http://www.census.gov/Press-Release/www/releases/archives/income\\_wealth/014227.html](http://www.census.gov/Press-Release/www/releases/archives/income_wealth/014227.html).

5 *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Brian D. Smedley, Adrienne Y. Stith, and Alan R. Nelson, Eds., Board on Health Sciences Policy and Institute of Medicine, Washington, D.C.: National Academies Press (2003), [http://www.nap.edu/catalog.php?record\\_id=10260#orgs](http://www.nap.edu/catalog.php?record_id=10260#orgs).

## AHA Research Question #4

What is the role of the hospital in a new community environment that provides more efficient and effective health care (e.g., what are the redesigned structures and models, the role and implementation of accountable care organizations, the structures and processes needed to implement new payment models such as bundled payments, and how do organizations transition to this new role)?

### Importance/Context

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

- The United States spends approximately twice as much per capita on health care per year (\$6,347,<sup>1</sup> 20% of GDP by 2017<sup>2</sup>) and achieves poorer outcomes, such as infant mortality (6.9 deaths per 1,000 births)<sup>3</sup> and life expectancy (77.8 years)<sup>4</sup>, when compared to other economically developed countries.
- Current actuarial projections show that without significant reform, the Hospital Insurance (HI) portion of the Medicare Trust Fund (Part A) is expected to be depleted by 2017.<sup>5</sup>
- CMS and other payers are likely to continue put forward new payment models that incentivize quality, efficiency, and coordination. Not enough information is known about the structures and processes needed for hospitals to successfully adapt to new ways of organizing and paying for care that will encourage more efficient and effective care at the community level.

### Questions/Hypotheses

Some specific questions are:

- What will future accountable care organizations look like? What related services provide the best opportunities to improve the health of the population?
- What delivery and operational structures need to be in place to implement bundled payments?
- What does the future community hospital/population-based health care organization look like? What are the transitions needed to get there?

Some example hypotheses to test are:

- The most successful accountable care organizations will include public health departments, at least one hospital, numerous primary care practices, and major specialty practices.
- Owned/vertically integrated accountable care organizations are more likely to be able to successfully manage bundled payments to improve quality and efficiency.

### How Information Can Be Used

Results will help hospitals in several ways:

- Understand what future accountable care organizations may look like and what services may provide the best opportunity to improve the health of the population within these new entities.
- Be aware of what delivery and operational structures need to be in place in order to successfully implement different types of bundled payments across settings and providers of care.
- Understand what roles different hospital types (e.g., small, rural, academic, independent) may play in accountable care organizations.

1 "OECD Health Data 2005, How Does the United States Compare." Organisation for Economic Co-operation and Development, <http://www.oecd.org/dataoecd/15/23/34970246.pdf>.

2 "Facts on the Cost of Health Insurance and Health Care." National Coalition on Health Care, Sept. 2009, <http://www.nchc.org/facts/cost.shtml>.

3 "OECD Health Data 2005, How Does the United States Compare." Organisation for Economic Co-operation and Development, <http://www.oecd.org/dataoecd/15/23/34970246.pdf>.

4 "OECD Health Data 2005, How Does the United States Compare." Organisation for Economic Co-operation and Development, <http://www.oecd.org/dataoecd/15/23/34970246.pdf>.

5 "A Summary of the 2009 Annual Reports." Status of the Social Security and Medicare Programs, Social Security and Medicare Board of Trustees, Social Security Online, <http://www.ssa.gov/OACT/TRSUM/>.