hospitals in
pursuit of excellence™
Accelerating Performance Improvement

Signature Leadership Series

HPOE:
A Compendium
of Action Guides

2014

July 2014

Dear Colleague:

To support hospitals during this time of important change, we are pleased to release the 2014 edition of **Hospitals in Pursuit of Excellence: A Compendium of Action Guides**.

This collection of action-oriented resources highlights the strong work hospitals and care systems are doing to design and implement strategies to deliver care that is safe, timely, equitable, effective, efficient and patient-centered. It will also assist health care leaders operating in the present volume-based environment to shift to a performance-based system that is focused on delivering value.

This compendium includes the executive summaries from resources created this year to help meet these new and ongoing challenges:

- Use a step-by-step financial planning process to move toward **value-based care and payment**.

- Move from the **first curve to the second**. Priority strategies are identified for hospitals and health care organizations moving from the volume-based first curve to the value-based second curve. In addition, a road map assists hospital leaders in evaluating their progress toward the second curve.

- Commit to **environmental sustainability** that provides hospitals with lower operational costs that free up resources for patient care.

- Learn how the **second curve is affecting the leadership skills**, talent, strategic priorities and organizational models of health care organizations.

- Review tactics for the **second curve of population health** to prepare for the significant shift toward population health.

- Understand the importance of **integrating physical and behavioral health services**, using a list of strategic questions to move forward.

- Develop a plan on how to work with an **intergenerational workforce** and the impact it has on hospitals.

- Make the business case for providing **equitable care.**

- Create a plan and understand the **use of REAL data** (race, ethnicity, age and language preference) in a hospital or care system to improve patient care.

- Understand **successful improvement approaches across a continuum**, including the topic or microsystem, care coordination, defined population and community health level, along with the skills, tools and teams that will lead to success in each of these four categories.

The American Hospital Association will continue to support your efforts in performance improvement and care delivery transformation through *Hospitals in Pursuit of Excellence* and our ongoing policy work. Be sure to visit www.hpoe.org for the full set of improvement resources. The AHA website (www.aha.org), *AHA News* and *AHA NewsNow*, along with *H&HN Daily* and *H&HN,* will keep you apprised of overall developments and offer access to new resources and insights from *Hospitals in Pursuit of Excellence*. Educational programs such as the Health Forum and AHA Leadership Summit and HPOE webinars will help bring to life the lessons learned and practices from the guides and reports.

Thank you for all you do every day to pursue excellence in America's hospitals and health systems.

Sincerely,

Rich Umbdenstock
President and CEO

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American Hospital Association
2013 Committee on Research

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Acknowledgments

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Executive Summary

Environmental factors—economic climate, evolving payment models, shifting patient and workforce demographics, political and regulatory pressures and the Affordable Care Act—build the impetus for dramatic change in the health care field. They challenge hospitals and care systems to accelerate organizational transformation to provide better, more efficient and integrated care for patients and communities, while assuming more financial risk and increased accountability.

The health care field will ultimately shift from the "first curve," where hospitals operate in a volume-based environment, to the "second curve" where they will be building value-based care systems and business models. Many hospitals are in a period of transition known as "life in the gap." While this transition may generate fear, it provides health care organizations with an incredible leadership opportunity to play a critical role in reducing the total cost of care.

Hospital leaders need to proactively develop strategies to achieve the second curve; waiting is dangerous. If a fundamental shift in health care happens in three to five years, the time is now for hospital and care system leaders to make strategic, yet swift, movement toward achieving health care's Triple Aim—improve care quality and patient experience, improve population health and reduce per capita costs. Leaders must heed the best practices and lessons learned in the first-curve environment and apply them to the second-curve environment.

When and how to move from the first curve to the second curve are difficult decisions. To survive life in the gap, leaders need to develop the capacity to take risks, and getting to the second curve requires greater clinical, financial, operational and cultural integration. Additionally, redesigning care is essential to any future health care state.

This resource, a product of the 2013 American Hospital Association Committee on Research, outlines several potential paths to manage life in the gap and achieve the Triple Aim. It highlights several successful, integrated delivery programs, as well as different forms of integration, all designed to provide opportunities to accelerate organizational transformation.

Key issues that hospital leaders need to consider in their transformational journey are:

- Health care is moving to new performance models in which organizations are integrating financial risk and care delivery.
- There is no "one-size-fits-all" model, as provider capabilities and community needs are different everywhere.
- The status quo is not a viable strategy because the environment is changing rapidly.
- Each hospital and care system can consider multiple paths.
- Each path has its own distinct risks and rewards.

The figure "Your Hospital's Path to the Second-Curve Framework" lists the environmental factors impacting all hospitals and offers strategies to implement and capabilities to master for the future. It also provides an overview of potential paths—partner, redefine, specialize, integrate, experiment—and describes several steps toward transformation, with key strategic questions and assessments.

Hospital and care system leaders are being called upon to set the course for the nation's health care system. While paths to future success may be different, hospitals can use the framework in this report to dramatically improve care delivery and population health and reduce the total cost of care over the next five years by up to 25 percent.

Figure: Your Hospital's Path to the Second-Curve Framework

Environmental Factors
Increasing focus on improving quality and efficiency, greater clinical integration, assuming more financial risk and accountability

H

Critical access hospital
Small/rural hospital
Safety-net health care system
Independent community hospital
Academic medical center
Multifacility health system
Specialty hospital

IMPLEMENT
Must-Do Strategies
1. Aligning hospitals, physicians and other providers across the continuum of care
2. Utilizing evidence-based practices to improve quality and patient safety
3. Improving efficiency through productivity and financial management
4. Developing integrated information systems

MASTER
Organizational Capabilities
Accept financial risk
Conduct information exchange
Expand reach
Deliver core performance (quality and efficiency)

All hospitals — Fewer hospitals

ANSWER
Top 10 Strategic Questions
1. What are the primary community health needs?
2. What are the long-term financial and clinical goals for the organization?
3. Would the organization be included in a narrow/preferred network by a health insurer, based on cost and quality outcomes?
4. Is there a healthy physician–hospital organization?
5. How much financial risk is the organization willing or able to take?
6. What sustainable factors differentiate the organization from current and future competitors?
7. Are the organization's data systems robust enough to provide actionable information for clinical decision making?
8. Does the organization have sufficient capital to test and implement new payment and care delivery models?
9. Does the organization have strong capabilities to deliver team-based, integrated care?
10. Is the organization proficient in program implementation and quality improvement?

IDENTIFY
Potential Paths
- **Redefine:** To a different care delivery system
- **Partner:** With a care delivery system or health plan
- **Integrate:** By developing a health insurance function or services across the continuum of care
- **Experiment:** With new payment and care delivery models
- **Specialize:** To become a high-performing and essential provider

Integrate

Partner
All hospitals

Experiment
Small/rural hospitals, independent community hospitals, academic medical centers, multifacility health systems, specialty hospitals

Multifacility health systems with health insurance function

Specialize
Specialty hospitals, centers of excellence, service lines within all hospitals

Redefine
All hospitals

Source: AHA COR, 2014.

Introduction

Strategic Issues in the Current Health Care Environment

The current health care system in the United States is fragmented and costly. To improve the quality, value and outcomes of care, incentives need to be better aligned and coordination needs to improve.[1]

Environmental pressures are driving hospitals and care systems toward greater clinical integration, financial risk and increased accountability (see Figure 1). The _2013 AHA Environmental Scan_ identified some of these environmental pressures:

1. Patient demographics will shift significantly throughout the next decade.
2. Enhancing care coordination during hospital-to-home transitions has consistently shown beneficial effects on cost and care quality, requiring hospital leaders to focus on care after patients leave the hospital.
3. Political and regulatory pressures are compelling hospitals and care systems to provide efficient and optimal patient care and address market volatility.
4. Hospitals need to serve multiple patient populations effectively—e.g., dual eligibles, Medicaid beneficiaries and chronically ill patients.

To help with health care transformation, in 2010 the AHA Committee on Research released _Strategic Issues Forecast 2015_, which identified five strategic issues for hospitals and care systems:

1. There is increasing pressure on all health care organizations to become more efficient.
2. New payment models are critical to health care system improvement.
3. Bending the cost curve is essential for long-term financial sustainability at the national level and maintaining global competitiveness.
4. New models of care emphasizing care coordination across hospitals and care systems, other providers and the community are critical for quality improvement.
5. Quality is improving but must be further accelerated.

The Future of Hospitals and Care Systems

The 2011 AHA Committee on Performance Improvement released _Hospitals and Care Systems of the Future_, a report that outlined 10 must-do strategies for hospitals and care systems to succeed in a rapidly changing environment. Four of these strategies were identified as major priorities (see Figure 1).

1. **Aligning hospitals, physicians and other providers across the continuum of care**
2. **Utilizing evidence-based practices to improve quality and patient safety**
3. **Improving efficiency through productivity and financial management**
4. **Developing integrated information systems**
5. Joining and growing integrated provider networks and care systems
6. Educating and engaging employees and physicians to create leaders
7. Strengthening finances to facilitate reinvestment and innovation
8. Partnering with payers
9. Advancing an organization through scenario-based strategic, financial and operational planning
10. Seeking population health improvement through pursuit of the Triple Aim

Figure 1: The Future of Hospitals and Care Systems

Environmental Factors
Increasing focus on improving quality and efficiency, greater clinical integration, assuming more financial risk and accountability

H

Critical access hospital
Small/rural hospital
Safety-net health care system
Independent community hospital
Academic medical center
Multifacility health system
Specialty hospital

Must-Do Strategies for Hospitals of the Future
1. Aligning hospitals, physicians and other providers across the continuum of care
2. Utilizing evidence-based practices to improve quality and patient safety
3. Improving efficiency through productivity and financial management
4. Developing integrated information systems

Source: AHA COR, 2014.

The Affordable Care Act, signed into law in 2010, is fundamentally changing the way health care is delivered. It has pressured and encouraged health organizations to innovate and redefine payment and care delivery. Because of the Great Recession that began in December 2007 and rising health care expenditures, there is a growing interest in integrated delivery systems to improve quality and outcomes and reduce health care costs. Pioneering health care systems have tested various IDS models and improved care coordination, physician alignment, performance measures and patient outcomes— accomplishing the four top priorities presented in the *Hospitals and Care Systems of the Future* report. Other health care organizations are testing new payment and service delivery models. The Center for Medicare and Medicaid Innovation, a provision of the Affordable Care Act, funds some of these developments. (See Appendix 2: Current Value-Driven Programs)

Aside from political and regulatory pressures, the health care industry will face a shift in patient and workforce demographics. Over the next decade, the demand for health care services will rise when baby boomers retire—most of them are projected to live longer as a result of new treatments and technology. Future health care demands will not be met by the current and projected labor supply. Nursing and physician shortages alone will continue to get worst. Hospitals and care systems will need to evolve into organizations that are more team oriented and patient centered to adapt to the new workforce culture.

As hospitals and care systems move to different potential paths presented in this report, it is paramount that they focus on how care is delivered. Hospitals and care systems have the opportunity to redefine the industry. Starting with redesigning care delivery, hospitals and care systems can eliminate inefficiencies within the system that will lead to better, integrated care and lower total cost of care.

Redesigning how care is delivered—through greater use of teams and leveraging the skills and capabilities of all care providers in different settings—is essential to achieving patient-centered care. This requires new workforce planning models both locally and nationally, educating and engaging the workforce toward second-curve environment attributes and redeploying the current workforce toward new models of care. All will markedly improve the culture of health care organizations. Redesigning care provides a foundation for any organization embarking on potential paths.

Defining Integrated Delivery Systems

Although there is no current consensus, integrated delivery systems typically are described as collaborative networks linked to various health care providers that offer a coordinated and vertical continuum of services.[2] For this report, a modified definition of IDSs from *Remaking Health Care in America: Building Organized Delivery Systems* is used: **"a network of organizations that provides or arranges to provide a coordinated continuum of services to a define[d] population and is...held accountable for the outcomes[,] health status and financial risk of the population served."[3]**

Characteristics of IDSs

The Essential Hospitals Institute identified seven characteristics of a fully integrated health care delivery system:[4]

1. **Value-driven governance and leadership:** The delivery system's governing body and administrative leadership are committed to and focused on achieving the benefits of integration. Organizational structure supports integration. Strategic, financial and operational planning toward integration is clear. Data are transparent throughout the organization and to the community.
2. **Hospital/physician alignment:** IDSs engage health care providers in developing an integrated model. For example, organizations incorporate feedback from medical providers when making administrative decisions. Clinicians and administrators also work together to make many decisions.
3. **Financial integration:** IDSs are well prepared to assume risk-based payments. With payers, supported by staff, resources and IT infrastructure, they are able to manage contractual relationships.
4. **Clinical integration/care coordination:** IDSs provide a full range of services in their own facilities or on an outsourced or contracted basis. Care transitions and handoffs in IDSs are effectively managed between settings, a result of strong collaborative relationships and accountability among teams and other stakeholders.[5]
5. **Information continuity:** IDSs utilize electronic health records to track patient visits and health outcomes, and these records are accessible to providers within and outside the system.
6. **Patient-centered and population health-focused:** IDSs align their resources with needs of the patient population and provide significant support through social services and convenient access to care. Nearly all staff in IDSs are trained in cultural and behavioral competencies to better serve patients.
7. **Continuous quality improvement and innovation:** IDSs foster an environment that encourages professional growth and empowers employees to innovate. Strategic activities are often tested through pilot projects, and medical providers employ evidenced-based practices.

Impact of IDSs

By improving the performance of health care organizations, IDSs ultimately improve patient care. For example, IDSs:

- Kept health care costs down by working under fixed-price contracts to deliver health services.[6]
- Managed operational costs by developing disease-management programs to train other health care professionals in duties previously performed only by a physician.[7]
- Improved the quality of care by compiling comprehensive medical records and allowing physicians to share and access a patient's complete medical history.[8, 9, 10, 11, 12]
- Supported medication adherence and made tracking medications easier using EHRs.[13, 14, 15, 16, 17, 18]
- Reported greater job satisfaction among staff due to blending of professional cultures and increased cooperation, teamwork and communication with other agencies.[19, 20]
- Improved quality of care, in terms of clinical effectiveness.[21, 22, 23, 24, 25, 26, 27, 28, 29]

Your Hospital's Path to the Second-Curve Framework

Hospitals and care systems can evolve to varying levels of integration and find value in integration from their own vantage points, or organizational lenses (Figure 2).

Figure 2: Strategies for Health Care Transformation
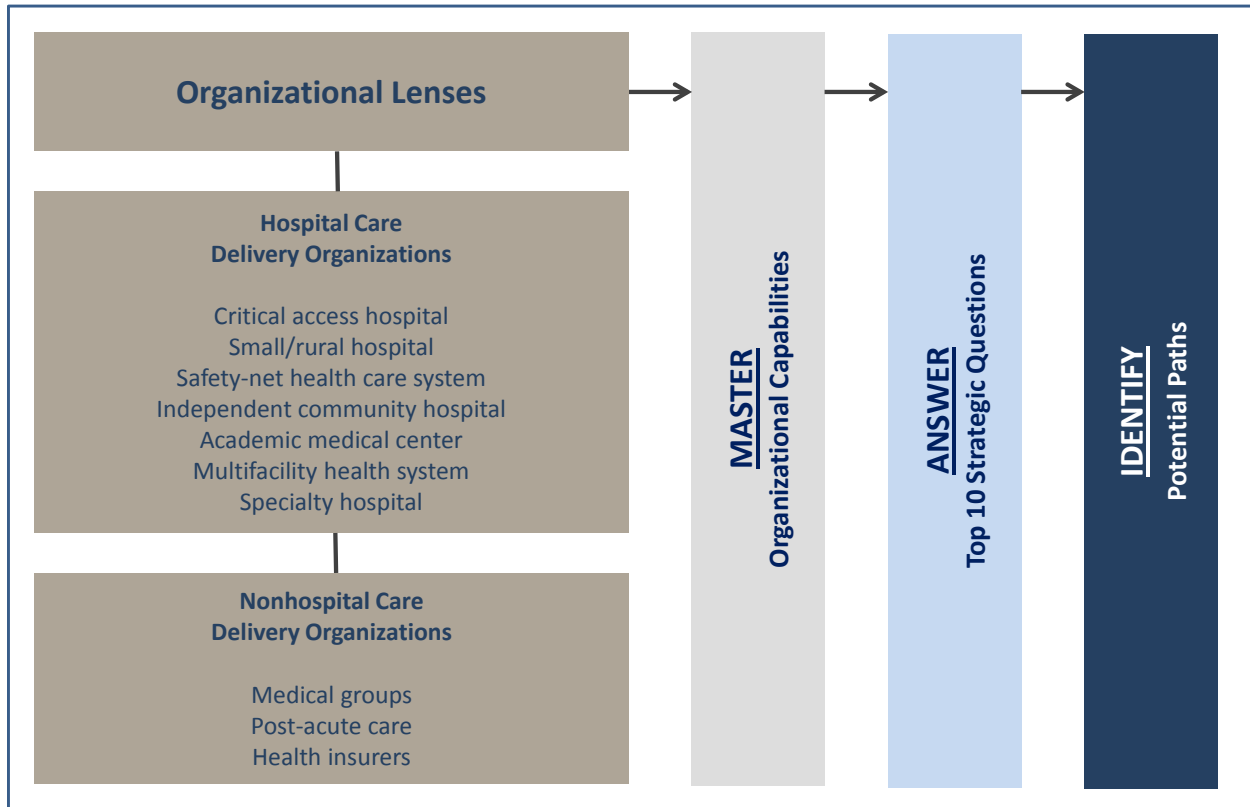
Source: AHA COR, 2014.

Hospital care delivery organizations include services traditionally offered within the four walls of the hospital, while nonhospital care delivery organizations include services delivered by ambulatory facilities, post-acute care organizations and health insurers. This report focuses on the potential paths for hospital care delivery but recognizes that many of today's hospitals also operate nonhospital care delivery components.

The following descriptions provide a broad brush in considering different hospital types, not to serve as a limiting factor but for dialogue regarding general hospital types.

Hospital Care Delivery Organizations

Critical access hospital
Critical access hospitals are Medicare-participating hospitals located more than 35 miles from the nearest hospital or more than 15 miles from areas with mountainous terrain or secondary roads, or they were certified as a critical access hospital before January 1, 2006, based on state designation as a "necessary provider" of health care services to residents in the area.[30] Critical access hospitals have no more than 25 beds for either inpatient or swing bed services. They provide 24/7 service with either on-site or on-call staff.

Small/rural hospital
The AHA identifies small and rural hospitals as having 100 or fewer beds, 4,000 or fewer admissions, or located outside a metropolitan statistical area. Rural hospitals provide essential health care services to nearly 54 million people, including 9 million Medicare beneficiaries.

Safety-net health care system
Safety-net health care systems provide care to low-income, uninsured and vulnerable populations.[31] They are not distinguished by ownership and may be publicly owned, operated by local or state governments or nonprofit entities.[32] In some cases, they are for-profit organizations. These health care systems rely on Medicaid, and to a lesser extent Medicare, as well as state and local government grants as variable sources of revenue for most of their providers.

Independent community hospital
Independent community hospitals are freestanding health care providers typically located in market areas with 50,000 or more residents.[33] They operate between 100 and 350 beds.

Academic medical center
An academic medical center is an accredited, degree-granting institution of higher education and can include hospitals with major or minor teaching programs.[34]

Multifacility health system
A multifacility health system is formed when hospitals undertake an organizational restructuring such as network affiliation or partnership with other hospitals.[35] These care systems have two or more general acute care hospitals and are the most common organizational structure in the hospital field; in fact, almost 200 hospital systems account for half of all hospitals and hospital admissions in the United States.[36]

Specialty hospital
Specialty hospitals are centers of care that are built for certain patient populations, such as children, or that provide a particular set of services, such as rehabilitation or psychiatric services.
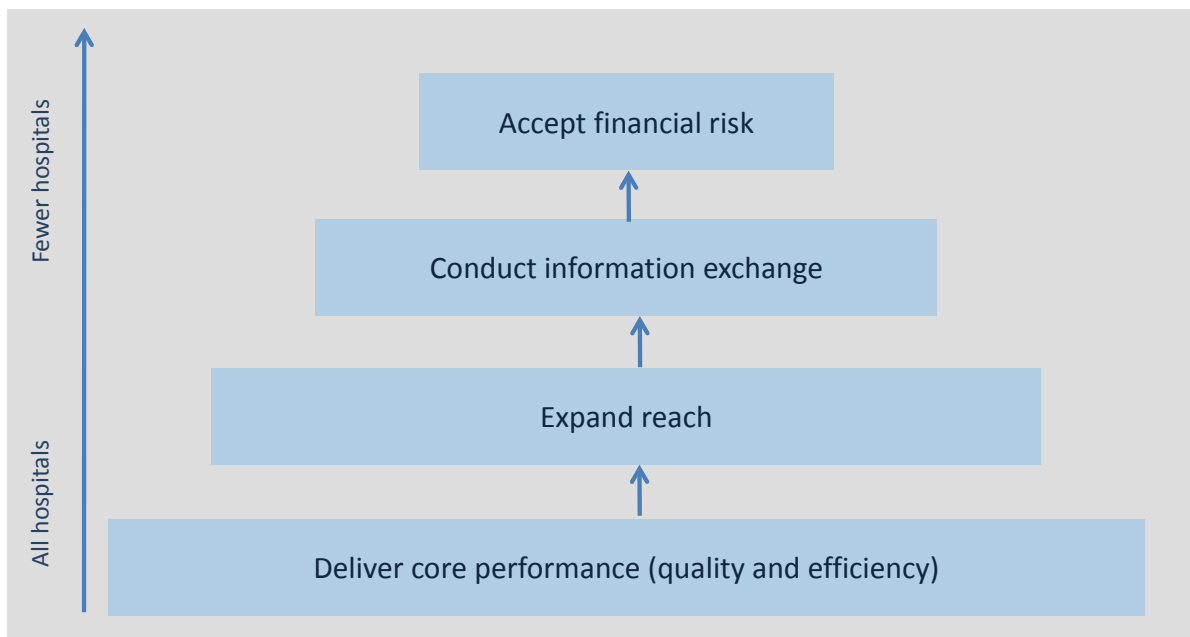
Nonhospital Care Delivery Organizations

Nonhospital care delivery organizations, such as post-acute providers, physician groups, home health agencies, hospice providers and alternate-site companies including ambulatory surgery centers, urgent care centers and dialysis companies, play an important role in the transformation of the health care field.

Organizational Capabilities

Assessing current organizational capabilities is key to understanding a health care organization's current level of integration and potential for further integration (see Appendix 1). This requires exploring and evaluating the current financial, clinical and operational risk tolerance, along with the organization's cultural underpinnings.

Regardless of a hospital's or care system's current or future level of integration, the organization needs to link its activities to its mission and value statement. To do this, hospitals and care systems need to deliver core performance and assess their potential for further capabilities, such as expanding reach, conducting information exchange and accepting financial risk (Figure 3).

Figure 3: Organizational Capabilities to Fully Integrate Care

Source: AHA COR, 2014.

Organizational capabilities are dependent on the type of integration model the hospital hopes to achieve. All hospitals and care systems must be able to deliver core performance—quality and efficiency. It is a foundational capability in order to succeed in the second curve of health care delivery. Few hospitals and care systems, because of size and scope, have the capability to expand their reach with populations and services and go beyond conducting information exchange as an additional capability. And even fewer can accept financial risk to deliver the best value to the patient population. Following are some specific examples needed for each capability.

Deliver Core Performance (Quality and Efficiency)

Develop strong organizational leaders
- Align executive leadership with the organization's mission and vision
- Empower staff for organizational change
- Identify transformational leaders

Increase organizational transparency
- Engage all stakeholders (i.e., employees, physicians, the community)
- Improve internal communication
- Report meaningful information to consumers
- Implement shared decision-making programs

Focus on performance and quality improvement
- Use clinical quality performance tools for outcome measures
- Develop quality improvement skills among clinical staff
- Measure clinical performance with evidenced-based tools
- Use consistent and thorough personnel performance measurement

Redesign care process
- Provide more team-based care throughout the continuum of care
- Leverage technology in all services

Expand Reach

Expand availability of health care services
- Engage and educate health care users by implementing patient and family engagement practices (Refer to the 2012 AHA Committee on Research report *Engaging Health Care Users: A Framework for Healthy Individuals and Communities* for strategies to engage health care users.)
- Implement outreach programs
- Promote patient accountability
- Deploy preventive health intervention
- Use evidenced-based practices
- Connect with community resources

Conduct Information Exchange

Use information systems
- Implement electronic health records
- Enhance health information system interoperability across sites of care
- Use existing data to facilitate analysis and reporting for process improvement and behavioral change
- Use predictive modeling for population health management
- Use data analytics for care management and operational management

Accept Financial Risk

Manage financial risk and use actuarial science for risk management
- Conduct health-risk assessments on defined populations
- Conduct a thorough due diligence process
- Expand financial planning and modeling

Experiment
- Use value-based payment
- Test care delivery models
- Assess risk tolerance

Top 10 Strategic Questions

To determine desired paths, hospital care delivery organizations need to address 10 strategic questions. Responses to each question provide an organizational assessment that leaders can use to choose an optimal path or a series of paths for transformation.

1. What are the primary community health needs?
2. What are the long-term financial and clinical goals for the organization?
3. Would the organization be included in a narrow/preferred network by a health insurer, based on cost and quality outcomes?
4. Is there a healthy physician-hospital organization (a business model that aligns physicians in private practice with hospitals and hospital-employed physicians)?
5. How much financial risk is the organization willing or able to take?
6. What sustainable factors differentiate the organization from current and future competitors?
7. Are the organization's data systems robust enough to provide actionable information for clinical decision making?
8. Does the organization have sufficient capital to test and implement new payment and care delivery models?
9. Does the organization have strong capabilities to deliver team-based, integrated care?
10. Is the organization proficient in program implementation and quality improvement?
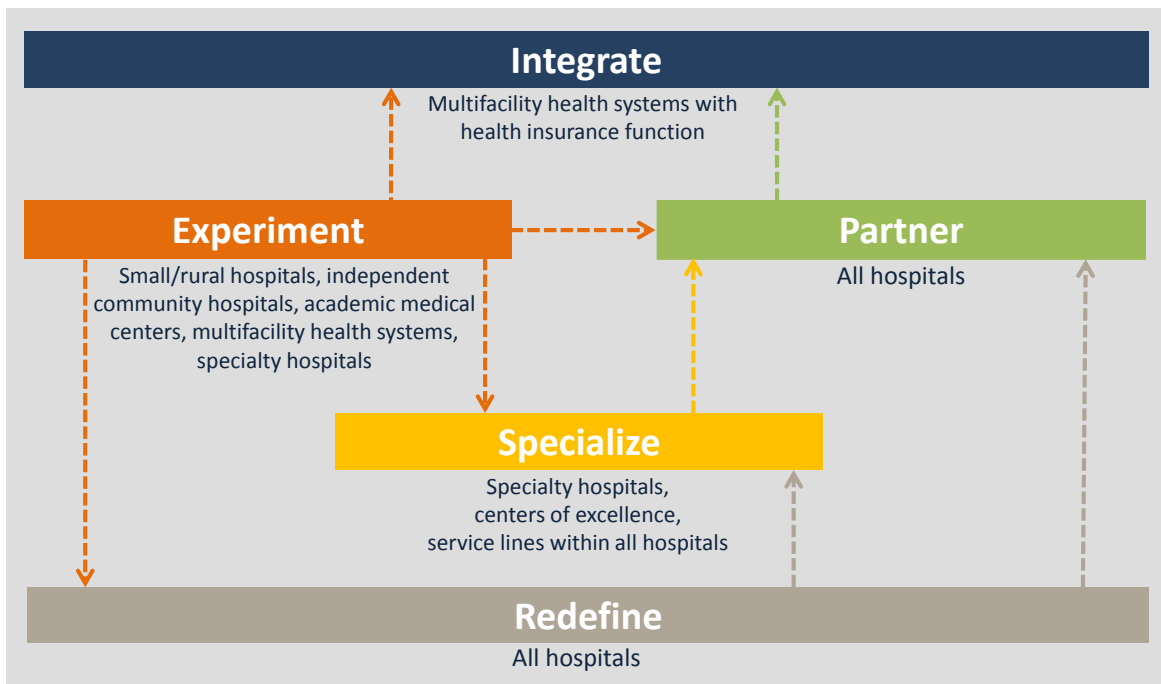
Potential Paths

Paths toward Health Care Transformation

Assessing integration capabilities and answering strategic questions will help hospital and care system leaders determine potential paths that provide high-quality, affordable care. Depending on the value an organization seeks to create, one or more or a combination of these paths can be pursued:

1. **Redefine** to a different care delivery system (i.e., more ambulatory or long-term care oriented)
2. **Partner** with a care delivery system or health plan for greater horizontal or vertical reach, efficiency and resources for at-risk contracting (i.e., through a strategic alliance, merger or acquisition)
3. **Integrate** by developing a health insurance function or services across the continuum (e.g., behavioral health, home health, post-acute care, long-term care, ambulatory care)
4. **Experiment** with new payment and care delivery models (e.g., bundled payment, accountable care organization or medical home)
5. **Specialize** to become a high-performing and essential provider (e.g., children's hospital, rehabilitation center)

As Figure 4 illustrates, there is not a single transformational journey for hospitals. A comprehensive assessment may suggest a customized path or series of paths. For example, hospitals that choose to experiment with new payment and care delivery models have the option to later redefine, specialize, partner or integrate. Hospitals that choose to redefine after experimenting with new payment and care delivery models can either specialize or partner. Hospitals that choose to specialize can partner, and those who already chose to partner can integrate. The ultimate goal is not to fully integrate but to select one or more paths that best fit the goals and objectives of the organization.

Figure 4: Determining Paths toward Health Care Transformation

Integrate
Multifacility health systems with health insurance function

Experiment
Small/rural hospitals, independent community hospitals, academic medical centers, multifacility health systems, specialty hospitals

Partner
All hospitals

Specialize
Specialty hospitals, centers of excellence, service lines within all hospitals

Redefine
All hospitals

Source: AHA COR, 2014.

Guiding Questions

Once a path or series of paths has been identified, hospital or care systems must evaluate the viability of the desired transformation. This requires an honest assessment of organizational goals and needs, current capabilities and the ability to support and sustain the transformation.

The guiding questions in Table 1 facilitate organizational change across multiple dimensions. The goal of these questions is for hospital and care system leaders to reflect and gain new perspectives on the benefits and value of integration, study available options and set realistic and manageable expectations when considering organizational transformations. The last section of the table has guiding questions for each specific path.

Table 1: Guiding Questions for Health Care Transformation

Setting goals and establishing intent	
	What does the hospital or care system want to achieve in the long term for care delivery and operational performance? (e.g., revisit mission and vision, dramatically improve performance outcomes, significantly reduce operational costs)
Recognizing the realities of the health care environment	
	What is the impact of national health care reform on the organization? (e.g., emerging payment models such as bundled payments and accountable care organizations)
	Does the hospital or care system understand which efficiency and quality criteria are necessary to join a network or partner with another organization?
	What federal and state level impediments exist? (e.g., antitrust)
	What is the organization's contribution to reducing the total cost of care for the community?
Determining market needs	
	What are the current admission and ambulatory utilization trends? (i.e., are they decreasing, stable or growing?)
	Who are the current and future competitors and how are they evolving?
	What is the economic health of the hospital in relation to the community? (e.g., current market dynamics, patient demographics, long-term needs and available partners)
Determining community needs	
	What are the weaknesses of the existing data system to analyze population health?
	What are the community's population health needs?
	Is the community aware of the hospital's or care system's intent to transform?
	What assets can the hospital bring to improve the health of the population?
	What other community organizations can the hospital or care system collaborate with?
	How should the hospital portion out the limited funds dedicated to population health?
	How much should the hospital allocate to unfunded areas of need? (e.g., behavioral or mental health)

Assessing financial status
	What are the organization's overhead expenses and how are they trending?
	Does the organization have a large amount of debt? (i.e., debt-to-equity ratio)
	Does the organization have debt agreements that affect organizational and corporate flexibility?
	What amount of financial dilution is acceptable in return for new organizational capability?
	What are the current and projected sources of revenue, profitability and cash flow, and how are these projected to change over time?
	What are the implications of the changing financial picture and market competition for the organization's mission, vision and strategy?
	What impact will declining inpatient utilization have on the organization?
Assessing internal capabilities	
	What are the organizational strengths (that can be utilized) and weaknesses (that can provide opportunities for growth)?
	What are the available assets and resources to the organization? (e.g., leadership, financial capital, workforce, etc.)
	How will the hospital cross-train employees and prepare them for future jobs?
Assessing corporate culture	
	Is the organization's workforce team oriented with a demonstrated history of collegial relationships?
	What is the relationship between the medical staff, management and other members of the care team?
	What is the organization's ability to resolve sensitive issues that affect clinical strategy? (e.g., credentialing, recruitment, hospital-based physician contracts)
	What is the organization's history with implementing change?
Assessing facilities	
	Are the current facilities designed for the future in terms of expansion or reconfiguration for different services?
Managing risks	
	How much risk is the organization willing to take? (e.g., financial, care delivery, operational and organizational culture risks)
	Is there tolerance for lower satisfaction and quality ratings?
Developing a structure and process for implementation	
	What is the time frame for implementing a potential path?
	Who is responsible for managing the process? (e.g., work group, independent consulting firm)
	Who will conduct and execute due diligence?
Developing a measurement process	
	How will the hospital or care system measure revenues and expenses for each clinical service?
	What are the organization's critical success factors?
	What are the organization's measurable milestones for the next one to three to five years?
	How will the hospital or care system measure the impact of integration? (e.g., use of assessment tools, scorecards and staff and patient evaluations)
	How will the hospital or care system monitor and adjust to environmental changes?

Guiding Questions for Specific Paths

Redefine to a different care delivery system that may be more ambulatory or long-term care oriented

Determining need

	Is inpatient care the primary community health care need?
	Under what conditions will inpatient care be available and where?
	What discussions are needed with the community and its leaders?

Creating ambulatory or long-term care-oriented facilities

	How will the hospital further develop ambulatory services?
	How will the hospital economically design a facility that not only enhances patient experience but also creates brand recognition and customer loyalty?
	How will the hospital develop satellite and neighborhood clinics that improve, support and sustain population health?

Building an infrastructure

	Does the hospital have access to capital needed to expand or transform physical spaces?

Partner with a care delivery system

Organizational objective

	Are there compelling reasons to partner?
	What does the organization hope to achieve from the partnership?

Organizational advantages

	What value does the organization provide to prospective partners? (e.g., opportunity for market extension, greater availability of primary care physicians)
	What value does the prospective partner bring to the organization? (e.g., proportion of the patient population being served by the prospective partner)

Organizational impediments

	What organizational issues need to be addressed before approaching a potential partner? (e.g., quality, safety, capital)
	What board discussions need to take place for partnership consideration?

Criteria for selection

	What services does a partnering organization bring to the table and how do they benefit the community?
	What is the desired level of experience from a prospective partner? (e.g., number of hospitals in the current system, years of operation as a system)
	What discussions are needed with the community and its leaders?

Identifying prospective partners

	Are there attributes of a larger delivery system that the organization can benefit from? (e.g., financial health, brand, access to group purchasing and resources, financial stability, ability to access capital, refinancing of long-term debts with lower rates)
	Is there a cultural fit with a potential partner organization?
	Is there an agreed-upon business model that facilitates better health care outcomes and services?

Preparing to merge with the larger, regional delivery system

	Have the regulatory risks been assessed?[37]
	How will the workforce be managed?

	Partner with a health plan for more at-risk contracting (shared savings, capitation)
	Determining need
	What board discussions need to take place for partnership consideration?
	Does the organization have the scale and population size for greater at-risk payments?
	Exploring options
	Does the organization want to partner with payers or take on more financial risk?
	Which payer organizations are candidates based on services most attractive to patients, employers, the payer and organization?
	What are the attributes of the prospective health plan partner? (e.g., financial, brand, etc.)
	How does the prospective health plan partner compare to other insurers in the market?
	Is there an agreed-upon business model that facilitates better health care outcomes and services?
	Experiment—medical home initiatives
	Determining capacity
	Does the organization have strong physician affiliation to provide primary care?
	Is the current practice equipped to become a medical home? (e.g., sophistication of health information technology)
	Does the organization have the capability to deliver continuous, accessible, high-quality primary care? (e.g., multidisciplinary teams that actively participate in the continuum of care)
	Experiment—bundled payment
	Determining need
	Under what conditions should a bundled-payment model be applied?
	What data are needed to support bundled payment?
	What capabilities are needed to develop bundling inpatient and ambulatory payment and care delivery?
	What capabilities are needed to develop and manage a shared-savings ACO?
	Exploring options
	Should the hospital or care system contract with or acquire physician practices?
	What providers and services should be included in the bundled payment?
	Setting up bundled payment
	How will payments be risk-adjusted and set?
	How will expenses be measured and funds allotted?
	What expenses will constitute success and how will success be recognized?
	Integrate to develop a health insurance function
	Determining capacity
	What health insurance capabilities is the organization lacking? Is there opportunity to develop these capabilities or should partners be sought?
	Is there sufficient capital to meet infrastructure demands? (e.g., IT capabilities to manage financial transactions)
	Does the care system have a network of providers to attract enough employers and individual customers?
	Assessing the market
	What other health insurers are in the market and how do they compare?

Creating a health plan	
	How will the health plan develop competitive pricing?
	What are the goals of developing a health plan versus contracting with a health plan?
	How will claims be processed efficiently?
	How will the care system utilize direct access to clinical, claims and pharmaceutical data and lab results (that provide a full picture of patients and their incurred costs) to continually improve its health plan function and health care outcomes?
	What services does the organization need to provide a continuum of care?
	How will the hospital or care system align provider behavior to optimize financial and clinical care?
Specialize to become a high-performing and essential provider	
Evaluating clinical performance strengths and weaknesses	
	Can the hospital or care system provide higher quality, more efficient specialized services than currently offered in the community?
	Does the hospital or care system have enough data and infrastructure support to assess physician quality and efficiency?
	Is there a shared commitment to standardize practices among physicians in the hospital?
Assessing viability for expansion	
	What scale and efficiency can the hospital or care system provide for specialized services?
	How does the hospital or care system compare to benchmark goals for quality, service and financial performance?

Source: AHA COR, 2014.

Factors Influencing Path Progression

Multiple factors contribute to how soon and how quickly hospitals and care systems can select a path and move forward.[38] Every market is different and there are many forces to consider, including:

- Changing payment system—Increasing pay for value by payers will necessitate a quicker move down the paths for hospitals and care systems.
- Degree of physician alignment—Communities with greater physician alignment with hospitals and care systems will mean a quicker move on the path(s).
- Health care needs of the community—Factors such as changing demographics can have a significant effect on health services of the community; more changes in services will push hospitals to move down path(s) quicker.
- Purchasers moving to new models—The focus and desire of purchasers to move to new payment models, such as direct contracting or narrow networks, will influence hospitals and care systems to move down path(s) faster.
- Providers in the market moving to new models—If there are a number of payment models being tested, such as bundled payments, shared savings and accountable care, hospitals and care systems will move faster down the path(s).

Regardless of the path chosen, providing safe, effective and high-quality care for patients is always the primary goal. Hospitals and care systems play a critical role in bending the cost curve and must actively engage in efforts to drive down costs by eliminating inefficiencies within the system, particularly health care services that do not benefit patient care. Making health care more affordable during this time of transformation presents challenges. Hospital leaders must aggressively pursue opportunities to reduce costs, while implementing changes that cater to patient and community needs.

Examples of Potential Paths

There are different paths and levels of integration, and many hospitals and care systems have moved or are moving toward them.

Redefine
Hospital care delivery organizations moving toward more ambulatory or long-term care

In May 2009, *Harrington Memorial Hospital,* based in Southbridge, Massachusetts, signed an agreement to take over the administration of *Hubbard Regional Hospital* (now Harrington HealthCare at Hubbard) in Webster, Massachusetts. Harrington Memorial Hospital eliminated the unprofitable inpatient department and transformed Hubbard Regional Hospital into a comprehensive outpatient facility that includes a full service emergency room, one of only two facilities in the state to successfully operate an ER without inpatient beds on site.[39, 40]

The emergency department at *St. Andrews Hospital* (now St. Andrews campus of LincolnHealth), Boothbay Harbor, Maine, had low patient volume, and the majority of patients admitted could be treated in an urgent-care center or by primary physicians more efficiently. To remain financially viable, in October 2013 the hospital closed its 24-hour emergency room and replaced it with an urgent-care center that is open for 12 hours each day of the week.[41]

Partner
Hospital care delivery organizations that have partnered with a care delivery system or health plan for greater horizontal and vertical reach, efficiency and resources for at-risk contracting

Advocate Physician Partners and *Blue Cross Blue Shield of Illinois* established a shared-savings contract to achieve the Triple Aim. The partnership led to the development of AdvocateCare.[42] AdvocateCare is an enterprisewide program that incorporates population health strategies across Advocate Health Care.

In October 2013, *Scottsdale Healthcare* and *John C. Lincoln Health Network* in Arizona formed a systemwide affiliation to create a new nonprofit health system, *Scottsdale Lincoln Health Network*.[43] The partnership is aimed at expanding acute and preventive services, improving care coordination, integrating health information technology and sharing best practices without merging assets that could implicate individual debt and obligated group.[44]

In Georgia, 29 hospitals, 14 health systems and approximately 2,000 physicians formed an alliance called *Stratus Healthcare*, the largest network in the southeastern United States. The alliance allows providers to collaborate while remaining independent and retaining local leadership.

In 2010, *O'Bleness Health System* and *OhioHealth System*, a larger care delivery system, signed a managed affiliate agreement. In June 2013, a memorandum of understanding was signed to begin the due diligence process for membership, which was completed in October. At the time of publication, O'Bleness Health System was in the final stage of becoming a full member of OhioHealth System.

McCullough-Hyde Memorial Hospital, a small, independent community hospital in Oxford, Ohio, is looking to partner with a major health system in Cincinnati. As the hospital explores potential partners, UC Health, Mercy Health Partners, TriHealth and the Christ Hospital were asked to formally outline affiliation options.[45, 46]

In June 2013, *Ohio State University Wexner Medical Center* formed an affiliation with *Mount Carmel Health System* to strengthen care delivery in central Ohio.[47] The agreement expands on an existing partnership between the two organizations and aims to explore opportunities to collaborate in clinical care, research and medical education.

In September 2013, seven health systems in New Jersey and Pennsylvania—consisting of more than 25 hospitals—formed an interstate alliance called *AllSpire Health Partners*.[48] The health consortium has a combined net worth of $10.5 billion. The alliance allows hospitals to pool their spending power, share expertise and innovative approaches, and pursue research projects.

Integrate
Hospital care delivery organizations that have integrated by developing a health insurance function or services across the continuum of care

Inova Health System, a nonprofit health care system in Northern Virginia, and *Aetna,* a health insurer, collaborated to establish the Innovation Health Plan.[49] The goal of the partnership is to improve the quality of care through expanded care coordination. Aetna supports Innovation Health Plan by providing the operational, sales, marketing, underwriting, care management and quality assurance and finance functions needed to operate the health plan. Meanwhile, Inova Health System provides care management, wellness and health prevention programs and the Signature Partners Network, a physician-led, clinically integrated provider network under development, which will be launched in 2014. Signature Partners Network is comprised of a select network of primary care physicians and specialists—all employed by Inova and community-based organizations—who serve as the value-based provider network for Innovation Health.

Rather than developing its own health plan, the *Florida Hospital Healthcare System*, based in Orlando, has partnered with *Health First of Rockledge* in Rockledge, Florida, to offer insurance products. The partners anticipate Florida Hospital will eventually acquire 49 percent of Health First Health Plans. This relationship gives Florida Hospital immediate expertise to sell health insurance and access data needed to identify treatment gaps.[50, 51]

In September 2013, *Catholic Health Partners* acquired *Kaiser Foundation Health Plan of Ohio* and its 200-person medical group practice and care delivery operations with *Ohio Permanente Medical Group, Inc.* in Northeast Ohio.[52]

Experiment
Hospital care delivery organization that has experimented with new payment and care delivery models

Hospital Sisters Health System in Springfield, Ill., launched its Care Integration Strategy in 2008. The strategy focuses on physician alignment using pluralistic models, including direct physician employment and clinical integration. The strategy also emphasizes the development of competencies. This facilitates evolution to more integrated care and population management using care delivery models, such as advanced medical home and chronic disease management, that encourage quality outcomes for patients.

Specialize
Hospital care delivery organization that has specialized to become a high-performing and essential provider

In 2012, *DaVita*, a provider of kidney care services, purchased *HealthCare Partners*, a physician practice.[53] DaVita's integration of the physician practice is a move toward an integrated delivery network that contracts a full spectrum of care and receives global capitation.[54, 55] This transaction positioned DaVita to participate in accountable care organizations and population health. It also allows DaVita to manage the care of kidney patients before reaching the end stage of the disease.

Case Studies

Several health care organizations have implemented and tested various integrated delivery care programs to improve care coordination, physician alignment, performance measures and patient outcomes. The case studies in this section describe successful integrated delivery programs that can be replicated by hospitals and care systems, regardless of their financial, clinical, operational or cultural level of integration.

- CareMore
- Health Quality Partners
- Hospital-at-Home Program (Presbyterian Healthcare Services)
- Program of All-Inclusive Care for the Elderly (PACE)
- ProvenCare (Geisinger Health System)

CareMore

CareMore is a health care provider that specializes in caring for Medicare Advantage patients. It has headquarters in Cerritos, Calif., and centers across the Southwest United States, with new facilities in Brooklyn, N.Y., and Richmond, Va. It is a wholly owned operating division of WellPoint.

Background
CareMore was established to improve the quality of geriatric care and eliminate the costs associated with lower quality. Frail and at-risk elderly patients represent a big portion of health care spending. CareMore focuses on its most at-risk patients to change the course of their disease. Its network of clinics monitors and treats chronically ill older patients to improve their health and reduce the need for costly medical care. Early interventions and preventive care, such as wireless scales and free rides to medical appointments, save long-term costs and reduce hospitalizations and surgeries.[56]

Intervention
CareMore founders developed the model with several elements of care coordination.[57] First, patients are assigned a nurse practioner who assists in managing chronic conditions and solving social/environmental factors that contribute to poor health outcomes. Second, CareMore employs internal medicine physicians called "extensivists" who serve as hospital physicians, post-acute care providers and primary care physicians for the most at-risk members. Extensivists coordinate care and monitor individual patients throughout the care continuum. Third, to improve care and treatment compliance, CareMore provides free transportation service to get patients to and from their appointments. Health care professionals also conduct home visits to monitor a patient's weight, assess home accessibility and safety, ensure patients are taking their medications, etc. Fourth, CareMore promotes wellness through wireless monitoring of patients with congestive heart failure or hypertension. Patients are provided with wireless scales and wireless blood-pressure cuffs that transmit information back to the CareMore care center team.

Results
The approach at CareMore improved care and quality outcomes without increasing total cost: Hospitalization is 24 percent below Medicare average, hospital stays are 38 percent shorter, and amputations among diabetics are 60 percent below average.[58] While CareMore employs more staff members per patient than other companies, this preventive approach yields savings that reduce member costs, which are 18 percent below industry average.[59] Patient satisfaction for CareMore services is also high. According to a company survey, 97 percent of patients were very satisfied or somewhat satisfied with the health plan, and 80 percent of patients indicated that they would recommend CareMore to a friend.[60]

Lessons Learned
The success of the program is attributed to the physician-led culture and top-to-bottom commitment to patients. Physicians are provided with proper tools to effectively execute coordinated care, such as a unified electronic health record system.

The challenge for CareMore was financing replicas of the program model in local communities. Each replica has produced health outcomes similar to those at the original CareMore locations. However, the start-up costs of new locations required extensive investment, which has been curtailed in light of new CMS payment changes.

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Health Quality Partners

Health Quality Partners is a nonprofit health care quality research and development organization in Doylestown, Pa. Its aim is to improve population health outcomes through care system redesign and advanced care coordination.

Background
Studies show that 95 percent of Medicare costs are spent on patients with one or more chronic conditions; 78 percent of those costs are for patients with five or more chronic conditions.[61] In response, Health Quality Partners participated in a national demonstration project sponsored by CMS in 2002, and it developed a care management program that redefined care for the elderly and chronically ill. Because of the successes of the program, Aetna contracted with Health Quality Partners in 2009 to work with its members and primary care providers.

Intervention
Health Quality Partners enrolls elderly patients that have at least one chronic illness (from among: coronary artery disease, heart failure, diabetes or chronic lung disease) and hospitalization in the past year. Patients in the program are connected with a nurse case manager who monitors the patient's overall health, supports medication adherence, provides education and self-management coaching and follows up during care transitions from other health facilities. The type and frequency of contact from the nurse case manager varies according to changing patient needs and ranges from weekly to monthly. Most interactions (more than 60 percent) occur in person either as a one-to-one encounter or group program. This care management model uses a broad portfolio of evidenced-based interventions designed to reduce cardiovascular and geriatric risks for Medicare patients with chronic conditions.[62] For example, nurses promote physical activity, weight management, healthy diet, vaccinations, social engagement and home safety.[63] A data and analysis system allows rigorous monitoring of service delivery reliability per established performance specifications, which enables management staff to conduct timely root-cause analyses and take corrective actions as needed.

Results
The care management program has made a tremendous impact on care quality and cost. An independent study shows that the program reduced hospitalization by 33 percent and Medicare costs by 22 percent.[64] All-cause mortality was reduced 25 percent.[65] The CMS demonstration, from which these results were obtained, has been conducted as a long-term, prospective, randomized controlled trial—the most rigorous method of program evaluation.

Lessons Learned
One key element contributing to the success of the Health Quality Partners model is the continuous interaction and long-term relationship between nurse case managers and patients. The broad portfolio of interventions provided by the program and the rigor applied to ensure service delivery reliability are also key to the program's effectiveness. Ongoing, active collaboration with primary care, acute care and long-term care providers, as well as community organizations, patients and their families are another core element of the program. A nonjudgmental, supportive approach and a commitment to listen, understand and honor patient preferences and choices are main values the model promotes.

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Hospital-at-Home

Hospitals and care systems that adopted the Hospital-at-Home model provide hospital-level care to patients with acute medical issues in their homes.

Background
Bruce Leff, MD, along with a team of geriatric physicians and nurses from Johns Hopkins School of Medicine and Public Health, recognized that older patients experience adverse events while hospitalized. In 1995, they developed a care model, Hospital-at-Home, that provides safe and effective care in the patient's home.

Hospital-at-Home was developed to treat older adults with acute medical issues such as community-acquired pneumonia, congestive heart failure, chronic obstructive pulmonary disease and cellulitis. Hospitals and care systems that have adopted this model offer diagnostic tests and treatment therapies. Since its inception, the Hospital-at-Home model has been implemented in numerous sites throughout the country.

Intervention
In October 2008, Presbyterian Healthcare Services, a nonprofit health care system based in Albuquerque, N.M., introduced the Hospital-at-Home program to improve clinical outcomes, increase patient satisfaction and reduce costs. The program is offered to three patient populations in the area: (1) patients who arrive at the emergency departments of either the Albuquerque and Rio Rancho Presbyterian hospitals: Kaseman Hospital or Rust Medical Center; (2) patients who are referred from physician offices, urgent care and the health system's home health agency; and (3) patients who are transferred to the program from one of the hospitals.[66]

Patients with community-acquired pneumonia, chronic heart failure, chronic obstructive pulmonary disease, cellulitis and conditions such as nausea/vomiting/dehydration, complicated urinary tract infections and thrombosis and pulmonary embolism, are evaluated by physicians to determine eligibility for participation in the Hospital-at-Home program. Those who meet the criteria are given the option to be hospitalized or receive comparable care in the comfort of their homes. The program provides a range of medical care such as lab tests, ECGs, ultrasounds and X-rays at the patient's residence. From the program's inception to August 2013, 806 patients participated in the program.[67]

Results
In 2012, 348 patients were offered the option to receive care at home, and 323, or 93 percent of them, chose to participate in the Hospital-at-Home program.[68]

Patients enrolled in the program were more satisfied with their care. Patient satisfaction scores were 6.8 percent higher in comparison to similar patients who were receiving inpatient care at Presbyterian Healthcare Services (the comparison group consisted of 1,048 individuals).[69] As of July 2013, patient satisfaction scores for Hospital-at-Home patients were 97.9 percent.

Hospital-at-Home patients also had better or comparable clinical outcomes than the comparison group. They experienced zero falls versus 0.8 percent falls in the comparison group.[70] Hospital readmission within 30 days of discharge was also 0.3 percent lower and mortality rate was 2.57 percent lower for patients in the program.[71] Between 2011 and 2012, readmission rates were about 5 percent. Among Medicare Advantage and Medicaid patients with common acute care diagnoses, the Hospital-at-Home program achieved a 19 percent cost savings.[72]

Lessons Learned

Several critical factors contributed to the success of the Hospital-at-Home program at Presbyterian Healthcare Services.

First, the program has an integrated health plan, delivery system and medical group. This level of integration has allowed for interoperability of information systems and the ability to compare cost data across the health system.

Second, key players collaborated and were involved in the development and implementation process. This includes "clinical standards and orders for care delivery (from physicians), emergency department interfaces, billing and reimbursement process, coding, documentation, support-process development (such as intake, scheduling, medical records, auditing, and pharmacy), clinical quality and outcomes, communications and marketing, human resources and staffing model development, orientation and education, and policy development." [73] The ongoing support of high-level administration also contributed to the program's success.

Third, technical assistance from the Johns Hopkins School of Medicine and Public Health proved to be beneficial by shortening the implementation process.[74]

Lessons learned from implementing the Hospital-at-Home model led to the rapid development and implementation of a house-call program in April 2011.[75] Like the Hospital-at-Home model, the house-call program prevents avoidable hospitalizations and provides ongoing care to older adults with complex chronic illnesses in the comfort of their homes.

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Program of All-Inclusive Care for the Elderly (PACE)

PACE is a managed care program for dual eligibles that provides comprehensive long-term services and support for elderly patients throughout the United States. As of February 2013, there are 94 PACE programs operating in 31 states.[76]

Background

For 26 years, the PACE model has delivered a full spectrum of care to dual eligible patients, a complex and costly group of patients. It is also cost effective to both government payers and health care providers.

Intervention

The PACE program focuses on providing preventive care to help elderly patients live in their communities. The program serves individuals who are age 55 and over and is certified by their state to provide nursing home care. Organizations that participate in the PACE program partner with specialists and other providers to offer health care services in the home or community and PACE centers. The interdisciplinary team of health care professionals provides coordinated care and offers comprehensive services in the patient's home. In addition, patients have access to transportation services to and from a PACE center that offers adult day programs, medical clinics, occupational and physical therapies or medical appointments.[77]

Results

Across all PACE programs, studies show that there have been fewer hospitalizations and nursing home admissions, more contact with primary care providers, better health outcomes, higher quality of life and greater satisfaction with care providers.[78, 79, 80, 81, 82, 83, 84] These significant outcomes have enticed many hospitals and care systems to adopt the model, evidenced by its continued expansion throughout the country.

Lessons Learned

Three factors contributed to the success of PACE programs.[85] First, Medicare and Medicaid pay a fixed, combined, monthly amount to participating organizations regardless of services used by their patients. Therefore, participating organizations have flexibility to offer needed services. Second, PACE organizations partner with primary care providers and other health providers, such as nurses and physical therapists, to provide comprehensive and coordinated care in the home and community. Third, because participating organizations are responsible for the complete continuum of care and cost of services provided, there is a financial incentive to prevent hospitalization, unnecessary emergency room visits and premature nursing placements.

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ProvenCare

Geisinger Health System in Danville, Pa., is a physician-led system that is part of the 2010 Premier Health Care Alliance's Accountable Care Collaborative.

Background
Geisinger Health System began looking for innovative ways to improve patient outcomes, service quality and care value to adapt to the changing health care environment. In 2006, the health system launched ProvenCare, a program that standardizes care in specific clinical areas and offers participating hospitals a flat rate for each procedure, motivating them to provide quality care.

Intervention
ProvenCare provides fixed pricing for certain procedures, with a 90-day care warranty for participating payers.[86] The fee is calculated at initial cost of the procedure plus 50 percent of follow-up costs over a three-month period.[87] ProvenCare also uses and enforces evidence-based standards in various procedures. For example, cardiac surgeons must follow a set of 40 guidelines. If there are reasons to deviate from the guidelines, surgeons are required to justify clinical decisions from an agreed-upon list of acceptable reasons.[88] This process provides doctors with flexibility in their practice. In addition, ProvenCare offers disease management. Patients with congestive heart failure, diabetes, hypertension and other chronic conditions are closely monitored and given goals to manage their disease.[89]

Results
The evidence-based standards of ProvenCare improved patient outcomes and reduced health care costs. In its first year of operation, hospital readmissions fell by 44 percent, complications decreased by 21 percent, and average hospital stays were reduced from 6.2 to 5.7 days for coronary artery bypass graft surgeries alone.[90] The program has been applied to other clinical areas, including elective percutaneous angioplasty, perinatal care and bariatric surgery.

Lessons Learned
The success of ProvenCare is attributed to three factors.[91] First, physicians are salaried and rewarded for performance. Second, electronic medical record systems have integrated physician, nursing and administrative services at Geisinger, which has reduced treatment duplication and improved care coordination. For instance, emergency room doctors that have access to a patient's EMR are able to better determine whether a patient should be admitted to the hospital. Meanwhile, a rheumatologist can use the EMR to identify patients who are at risk of osteoporosis and to initiate preventive measures. Third, doctors are required to follow evidence-based standards. The treatment pathways in place are designed to ensure the best patient outcomes while reducing treatment costs.

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Appendix 1: Assessment of Integration Capability

Assessing capabilities is key to understanding a health care organization's current level of and potential for integration. This requires exploring and evaluating the current financial, clinical and operational risk tolerance along with the cultural underpinnings of the organization.

Determining Current Level of Risks

Assessing Financial Risk

To assess the degree of financial risk, hospitals and care systems should evaluate arrangements with other providers and payers (Figure 5). Contractual agreements between providers and payers range from transactional costs with minimal financial risk to full accountability for all risk, such as capitation.

Figure 5: Degree of Financial Risk

Low	Moderate	High
Transactional costs	Risks within components	Full accountability to cost

Financial Risk

Source: AHA COR, 2014.

Transactional costs (low risk): A hospital or care system develops contractual agreements with payers to provide specific health care services at set costs.

Risks within components (moderate risk): A hospital or care system takes financial risk for specific components of care delivery, such as hospitals taking DRG payments.

Full accountability to cost (high risk): A hospital or care system has its own health plan or partners with a health plan to take accountability for the full cost of care for a defined population.

Assessing Care Delivery Risk

Assessing the degree of care delivery risk involves exploring relationships with internal and external health care providers (Figure 6). These relationships can range from hospitals and care systems that contract with various providers for pieces of the care continuum to hospitals and care systems that own and provide full service in the continuum of care.

Figure 6: Degree of Care Delivery Risk

Low	Moderate	High
A component of the continuum of care	Partnerships to deliver care	Full care accountability

Care Delivery Risk

Source: AHA COR, 2014

A component of the continuum of care (low risk): A hospital or care system subcontracts particular services and is not responsible for those services.

Partnerships to deliver care (moderate risk): A hospital or care system establishes partnerships with delivery organizations to provide services and share responsibility across the continuum of care (home health, post-acute, long-term, ambulatory, etc.).

Full care accountability (high risk): A hospital or care system provides services across the continuum of care through their own providers and is responsible for all services.

Assessing Operational Risk

To determine the degree of operational risk, hospitals and care systems can identify themselves as isolated systems that manage their own entity's performance objectives, as integrated systems that have shared performance goals across all system components or as someplace in between (Figure 7).

Figure 7: Degree of Operational Risk

Low	Moderate	High
Isolated systems	Emerging common systems	Integrated systems and standardization

Operational Risk

Source: AHA COR, 2014.

Isolated systems (low risk): Hospitals have operational systems—financial, human resources, information technology—that may be reliable but independent from other systems.

Emerging common systems (moderate risk): Hospitals operate systems that support their interconnectivity with partners.

Integrated systems and standardization (high risk): Hospitals have integrated systems that function across organizational components and partners, which reflect standardization and reduces variation.

Assessing Organizational Culture

The culture of a hospital or care system determines its ability to meet the challenges of evolving health care demands (Figure 8). Degrees of organizational culture can range from hospitals and care systems that are still developing a common culture to those that have defined their organizational culture and are highly reliable at delivering care efficiently. Leadership and governance complement organizational culture, ranging from an independent approach with multiple governance structures to systemwide governance aligned with the health care system's goals.

Figure 8: Degree of Organizational Culture

Low	Moderate	High
Developing common culture/ independent governance entities	Quality improvement culture/ developing systemwide governance	Adaptable, high-reliability culture/ system-based governance model

Organizational Culture

Source: AHA COR, 2014.

Developing common culture/independent governance entities (low risk): A hospital or care system is still defining its own common organizational culture and needs to experience multiple cycles of learning to become prepared in accepting and adapting to change. Organizational governance occurs at multiple levels and/or entities, with a loose structure and little communication between the levels or entities.

Quality improvement culture/developing systemwide governance approach (moderate risk): Hospitals and care systems have a disciplined quality improvement culture that is continuously focused on improving clinical outcomes, efficiency and patient experience. Governance is evolving to an aligned structure that is systemwide or streamlined in the organization.

Adaptable, high-reliability culture/system-based governance model (high risk): Hospitals and care systems exhibit a highly reliable culture focused on care that is safe, timely, efficient, effective, equitable and patient-centered. The governance structure is systemwide and strategically aligned with the health care organization's goals.

Appendix 2: Current Value-Driven Programs

The following is a list of current value-driven programs and models that are being tested and supported by CMS' Center for Medicare and Medicaid Innovation.

Primary Care Transformation
- Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration: Care coordination payments to FQHCs in support of team-led care, improved access and enhanced primary care services
- Multipayer Advanced Primary Care Practice Demonstration: State-led, multipayer collaborations to help primary care practices transform into medical homes

Bundled Payments
- Bundled Payments for Care Improvement initiative: Organizations will enter into payment arrangements that include financial and performance accountability for episodes of care. These models may lead to higher-quality, better-coordinated care at a lower cost to Medicare.

Accountable Care Organizations
- Pioneer Accountable Care Organization Model: Experienced provider organizations taking on financial risk for improving quality and lowering costs for all of their Medicare patients
- Advanced Payment Accountable Care Organization Model: Prepayment of expected shared savings to support ACO infrastructure and care coordination

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Signature Leadership Series

Focus on Population Health

The Second Curve of Population Health

March 2014

Table of Contents

Executive Summary

As hospitals and care systems transform, they are increasingly prioritizing population health as a platform to improve the health of patients and communities. Myriad forces are driving these health care organizations to actively address a broad array of socioeconomic and environmental factors and provide preventive care, particularly for populations who lack access to care or engage the system at the wrong place and time. Building on health care futurist Ian Morrison's idea of health care transformation as a shift from a fee-for-service first curve to a value-based second curve, the second curve of population health depicts an integrated approach to improving patient and community health. For many hospitals, thriving in the second-curve environment will necessitate making challenging organizational and cultural changes to support new goals and initiatives.

This guide builds upon prior American Hospital Association reports that outline a road map for hospitals and care systems to use as they transition to the second curve of population health. Though the rate and extent to which hospitals and care systems engage in population health initiatives may vary, a significant shift toward population health is anticipated in the next three to five years. The tactics described in this guide provide a framework for initiatives that hospitals and care systems could pursue to develop an institutional infrastructure that supports population health. These tactics are:

- Value-based reimbursement
- Seamless care across all settings
- Proactive and systematic patient education
- Workplace competencies and education on population health
- Integrated, comprehensive HIT that supports risk stratification of patients with real-time accessibility
- Mature community partnerships to collaborate on community-based solutions

Hospitals and care systems transitioning to the second curve of population health evaluate process and outcomes metrics to measure their progress in improving patient and community health. Aligning the needs and assets of the hospital and community with metrics allows for meaningful and significant analysis. Possible metrics include but are not limited to:

- Summary measures
- Inequality measures
- Health status
- Psychological state
- Ability to function
- Access to health care
- Clinical preventive services
- Cost of care

As established community stakeholders with extensive knowledge and resources, hospitals are in a unique position to lead population health transformation. Hospitals should challenge themselves to reach beyond their walls and partner with community organizations to implement innovative approaches that sustainably improve total population health.

Driving the Change

As the U.S. health care system transforms, hospitals are expanding their scope to include population health as a model to improve the health of their patients and surrounding communities. Though population health is not traditionally considered a major focus of hospitals and care systems, myriad forces are driving these organizations to address both the medical and nonmedical factors that determine health status. Driving forces include:

- Shift in financial arrangements away from fee-for-service to value-based payments that incentivize positive outcomes

- Increase in provider accountability for the cost and quality of health care

- Increased access to care for underserved and vulnerable populations through the Affordable Care Act

- Constant demand to reduce fragmentation and improve efficiency by redesigning care delivery

- Increased transparency of financial, quality and community benefit data

- Economic and legislative pressures to curb increases in health care spending

- Demographic changes in the patient population that will increase demand for health care services, along with projected shortages of primary care providers

- Recognition that acute medical care is only one aspect of maintaining and improving health

Population health is commonly described as "the health outcomes of a group of individuals including the distribution of outcomes within the group."[1] By integrating preventive principles into care delivery, the ultimate goal of population health is to improve the overall health of a given population while also reducing health disparities.[2] A population health approach aims to improve health outcomes, particularly for individuals who lack access to care or engage the system at the wrong place and time, and complements the Triple Aim goals of improving the patient experience of care, improving population health and reducing per capita cost.

The American Hospital Association published two guides, "Managing Population Health: The Hospital's Role" (available at http://www.hpoe.org/population-health) and "The Role of Small and Rural Hospitals and Care Systems in Effective Population Health Partnerships" (available at http://www.hpoe.org/small-rural-partnerships), that outline how population health can serve as a strategic platform to improve health outcomes by focusing on three interrelated approaches:

1. Identifying and analyzing the distribution of specific health statuses and outcomes within a population

2. Identifying and evaluating factors that cause the health outcomes

3. Identifying and implementing interventions that modify determinants of health outcomes

Population health resides at the intersection of three distinct health care mechanisms: (1) increasing the prevalence of evidence-based preventive health services and behaviors, (2) improving care quality and patient safety and (3) advancing care coordination across the health care continuum. Health status is influenced by personal behaviors, environmental and social forces, and family history and genetics, while only a small percentage of health status is attributable to medical care.[3] This ecological model of health points to the importance of proactively addressing the upstream factors that affect health to sustainably improve the health of any population. Achieving improved population health will ultimately decrease medical costs and allow hospitals to invest in prevention.

First and Second Curves of Health Care

Economic futurist Ian Morrison suggests that as payment incentives shift, health care providers will modify their core models for business and service delivery. He calls this a first curve to second curve shift.[4] Morrison describes the *first curve* as an economic paradigm driven by the volume of services provided and fee-for-service reimbursement. The *second curve* is concerned with value: the cost and quantity of care necessary to produce desired health outcomes within a particular population. Figure 1 details the first and second curves of health care.

Figure 1. First Curve to Second Curve of Health Care
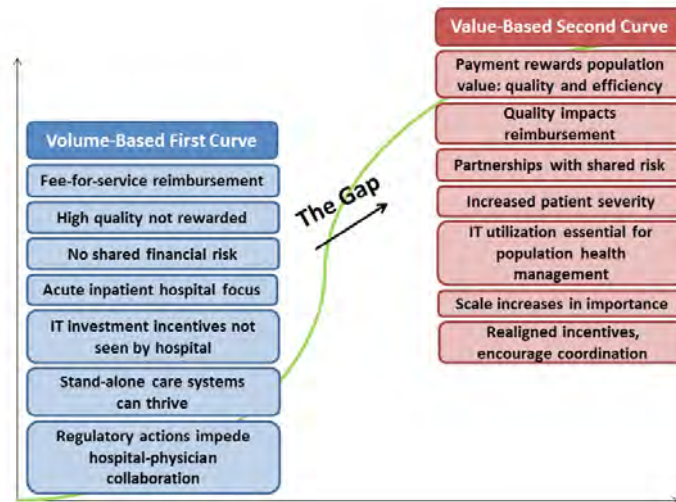
Source: Adapted from Ian Morrison, 2011.

As hospitals and care systems shift from the volume-based first curve to the value-based second curve, they must transform their business and health care delivery models to balance quality, cost, patient preferences and health status to achieve real value and improved health outcomes. Hospitals and care systems moving to the second curve use performance metrics to identify clinical, financial and process improvements; incorporate the appropriate incentives; and evaluate results. The AHA "Hospitals and Care Systems of the Future" report (available at http://www.aha.org/about/org/hospitals-care-systems-future.shtml) outlines 10 must-do strategies to be successful in the transformation from the first curve to the second curve:

1. Aligning hospitals, physicians and other clinical providers across the continuum of care

2. Utilizing evidence-based practices to improve quality and patient safety

3. Improving efficiency through productivity and financial management

4. Developing integrated information systems

5. Joining and growing integrated provider networks and care systems

6. Educating and engaging employees and physicians to create leaders

7. Strengthening finances to facilitate reinvestment and innovation

8. Partnering with payers

9. Advancing an organization through scenario-based strategic, financial and operational planning

10. Seeking population health improvement through pursuit of the Triple Aim

The Second Curve of Population Health

As health care organizations transition to the second curve, population health approaches must also change to align with new goals and processes aimed at improving patient and community health. Applying the curve concept to population health provides a road map to guide hospitals and care systems as they integrate population health into their organizations.

Adopting a second-curve population health approach will require hospitals and care systems to make major systemic and cultural shifts. They will need to develop a formalized care delivery system that addresses disease prevention and management of the patient population and reaches outside hospital walls to improve community health (see Figure 2).

Figure 2. Second Curve of Population Health
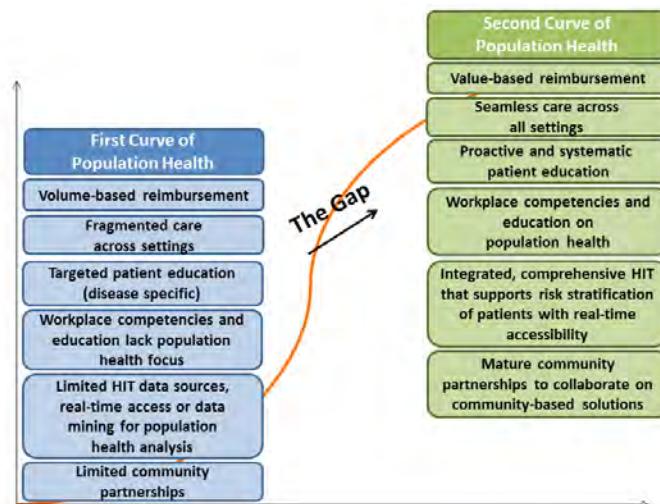
Source: Health Research & Educational Trust, 2014.

The rate and extent of transitioning to the second curve may be dependent on each hospital's or care system's marketplace and influence, other hospitals and care systems in the community, other providers and available resources. Significant transformation across the field is expected to occur in the next three to five years. Some markets are moving more quickly toward the second curve, based on payer, competitor and other market pressures, while others remain in a fee-for-service model.

The tactics described here contribute to an organizational infrastructure that supports population health and the 10 must-do strategies for transitioning to the second curve of health care. Each organization should select the tactics that are best aligned with its mission, goals and resources.

Value-based reimbursement:

- Hospitals and care systems deliver defined services to a specific population at a predetermined price and quality level.

- Large hospitals and care systems provide or contract for a full continuum of services across acuity levels for regional populations.

- Providers link payment contracts and compensation models to performance results.

- Hospitals and care systems participate in an accountable care organization or patient-centered medical home model across a significant population.

- Smaller providers deliver specified services to target populations, working under contract or in partnership within networks that are managed by larger entities functioning as population health managers.

- Care delivery systems align with the Triple Aim to improve the patient experience of care, improve population health and reduce per capita cost.

Seamless care across all settings:

- Preventive services are integrated into all care settings.

- Care transition programs support seamless patient handoffs and excellent communication to reduce readmissions or complications, ensure treatment compliance and engage patients and families as they transition to new settings of care.

- Care teams or navigators are widely used to assist in managing complicated patient cases across the care continuum.

- Hospitals and care systems provide care or develop partnerships for care delivery in a community-based setting, such as community clinics or patients' homes.

- Small and rural hospitals may utilize telemedicine to connect with remote patients and remote specialty or emergency services.

Proactive and systematic patient education:

- All patients receive holistic education about disease management and prevention.

- Education and chronic disease management initiatives target at-risk groups and include medical and behavioral approaches to preventing illness.

- Multidisciplinary teams of case managers, health coaches and nurses coordinate chronic disease cases, set goals and track progress, and follow up after transitions.

- Providers use patient-engagement strategies, such as shared decision-making aids, shift-change reports at the bedside, patient and family advisory councils, and health and wellness programs.

- Providers regularly measure or report on patient and family engagement, with positive results.

- Hospitals lead community outreach screening or health education programs.

Workplace competencies and education on population health:

- Hospitals have leadership and staff dedicated to population health.

- Existing staff and clinicians are trained in population health competencies, including working across sectors, aggregating data and identifying systemic issues, and developing policy and environmental solutions.[5]

- Staff have defined roles within the population health management process.

- Staff receive ongoing training on population health as it relates to their specific job duties.

- Hospitals employ care coordinators, community health workers and health educators and augment population health staff as necessary.

Integrated, comprehensive HIT that supports risk stratification of patients with real-time accessibility:

- HIT possesses capacity for sophisticated analytics for prospective and predictive modeling to support clinical and business decisions.

- Data warehouse is fully integrated and interoperable, incorporating multiple data types for a variety of care settings (e.g., clinical, financial, demographic, patient experience, participating and nonparticipating providers).

- Data from multiple community partners are combined in regional health information exchanges and data registries to comprehensively address the needs of patients and communities.

- Timely and local data that identify the health issues in a community are accessible by clinical staff in real time to guide the care of individuals.

Mature community partnerships to collaborate on community-based solutions:

- Hospitals and care systems engage the community by exchanging resources, sharing knowledge and developing relationships and skills to manage communitywide challenges and leverage collective advantages.

- Extensive and diverse partnerships between hospitals and local organizations use collective impact approaches to address specific and general health needs of the community.

- Hospitals and care systems partner with the community and public health departments to address gaps and limitations in health care delivery and to target community health needs.

- Hospitals and care systems provide balanced leadership that recognizes the resources and contributions of community partners, and they include community representatives in their leadership structure.

- Hospital-led initiatives address community issues such as environmental hazards, poverty, unemployment, housing and other socioeconomic factors.

- Community partners collaborate to develop relevant health metrics to measure progress and community needs.

Bridging the Gap

Every hospital and care system approaches population health differently depending on organizational priorities, resources and population needs. A survey by the American Hospital Association and the Association for Community Health Improvement confirmed anecdotal evidence that implementation of population health initiatives varies widely across hospitals.[6] To move to the second curve of population health, hospitals and care systems will need to align their mission, organizational culture and services with a population health approach that addresses the needs of the community. Each organization's alignment is unique because the hospital's or care system's structure and resources, along with the surrounding community, influence and shape the transformation.

Many hospitals and care systems are taking steps toward the second curve by incorporating population health initiatives into their operations. A common impetus for initially engaging in population health is community benefit regulations that require not-for-profit hospitals to demonstrate their positive impact. Hospitals can achieve their community benefit requirement through community health promotion, education, charity care or other activities.

Part of this regulation mandates hospitals to conduct community health needs assessments at least once every three years and develop implementation plans to address identified needs in the population. By bringing together stakeholders from across the health care system and local community, the community health needs assessment process encourages collaboration between organizations to address the health issues unique to their community.

Some hospitals and care systems take a narrow approach to population health by focusing improvement efforts on their patient population. Many are developing accountable care organizations and patient-centered medical homes to manage care across the continuum for a specific population of patients. While these pilot programs are showing promising results for patient health and cost savings, these approaches do not address the needs of the greater community, particularly those individuals who do not have access to care.

Second-curve organizations go beyond community benefit regulations and accountable care organizations to develop a culture that integrates a population health approach into all facets of the organization. Because hospitals and care systems have different care services and organizational structures, leaders should define the target population and associated health goals. As health care moves to the second curve, hospitals and care systems may be challenged to expand their defined population into the broader community to address growing health issues.

As established stakeholders and leaders, hospitals and care systems should play a significant role in population health transformation. Hospitals can leverage their clinical expertise and extensive resources to promote wellness and support a variety of external collaborative relationships to achieve their population health goals. As the public health and provider sectors become better aligned, hospitals will need to engage in challenging but necessary changes to improve the health of the patient and community population as well as the organization's financial bottom line.

Measuring Transformation to the Second Curve of Population Health

Hospitals and care systems that move toward the second curve of population health should evaluate process metrics but prioritize outcomes measures. For example, success is not the number of people who attend a wellness event; rather, success is the impact that the wellness event has on specific health outcomes.

Hospital and care system leaders can collaborate with their clinical staff and community leaders to develop metrics that are mutually acceptable and attainable. Aligning the needs and assets of the hospital and community with the metrics allows for more significant analysis. Choosing the appropriate metrics to measure transformation to the second the curve of population health involves identifying metrics that are:

- Simple, robust, credible, impartial, actionable and reflective of community values
- Valid and reliable, easily understood, and accepted by those using them and being measured by them
- Useful over time and for specific geographic, membership or demographically defined populations
- Verifiable, independently from the entity being measured
- Responsive to factors that may influence population health during the time that inducement is offered
- Sensitive to the level and distribution of disease in a population

Table 1 outlines possible outcome metrics for assessing the impact of population health initiatives. The metrics can be applied at the patient or community level.

Table 1. Sample Population Health Metrics

Metric Area	Description
Summary measures	• Health-adjusted life expectancy at birth (years) • Quality-adjusted life expectancy • Years of healthy life • Disability-adjusted life years • Quality-adjusted years
Inequality measures	• Geographic variation in age-adjusted mortality rate (AAMR) among counties in a state (standard deviation of county AAMR/state AAMR) • Mortality rate stratified by sex, ethnicity, income, education level, social class or wealth • Life expectancy stratified by sex, ethnicity, income, education level, social class or wealth
Health status	• Percentage of adults who self-report fair or poor health • Percentage of children reported by their parents to be in fair or poor health • Percentage of children aged 3–11 years exposed to secondhand smoke
Psychological state	• Percentage of adults with serious psychological distress (score ≥13 on the K6 scale) • Percentage of adults who report joint pain during the past 30 days (adults self-report) • Percentage of adults who are satisfied with their lives
Ability to function	• Percentage of adults who report a disability (for example, limitations of vision or hearing, cognitive impairment, lack of mobility) • Mean number of days in the past 30 days with limited activity due to poor mental or physical health (adults self-report)
Access to health care	• Percentage of population that is insured • Percentage of the population that has a designated primary care physician
Clinical preventive services	• Adults who receive a cancer screening based on the most recent guidelines • Adults with hypertension whose blood pressure is under control • Adult diabetic population with controlled hemoglobin A1c values • Children aged 19–35 months who receive the recommended vaccines
Cost of care	• Percentage of unnecessary ER visits • Percentage decrease in ER costs • Percentage decrease in cost of care per patient, per year

Source: Adapted from R. Gibson Parrish, 2010 and Healthy People 2020, 2013.

Conclusion

To improve the health of a population, hospitals and care systems need to provide high-quality patient care and proactively address the environmental and social factors that affect health status. Hospitals and care systems have the opportunity to redesign their care delivery models to achieve long-term outcomes and cut costs. While most hospitals and care systems do not have the resources or desire to assume all of the health needs of their community, they can leverage their resources and influence to lead community health transformation. Some hospitals are well situated to lead transformation in their communities by strengthening their mission to improve health and investing in capital and collaborations that bind them to their communities.[7]

Specific tactics to operate in the second curve of population health are:

- Value-based reimbursement

- Seamless care across all settings

- Proactive and systematic patient education

- Workplace competencies and education on population health

- Integrated, comprehensive HIT that supports risk stratification of patients with real-time accessibility

- Mature community partnerships to collaborate on community-based solutions

Measuring and evaluating the process and outcomes of population health initiatives are critical to identify gaps and opportunities for improvement. Each tactic can be measured with metrics that allow a hospital or care system to assess its progress to the second curve of population health.

Moving to the second curve of population health will require challenging cultural and systemic shifts alongside buy-in and commitment from hospital leadership. Transformation will not occur over night; forward-thinking hospitals and care systems should engage their leadership, staff and community to develop a road map to the second curve that is congruent with the hospital's and community's needs, resources and priorities. Innovative approaches can be implemented not only to address rising costs and an increased demand for health services, but also to improve the patient experience of care and improve population health.

Case Example 1: Michigan Stroke Network

Background: While many of Michigan's hospitals have neuroendovascular specialists on staff, others cannot support a dedicated stroke expert available around the clock. St. Joseph Mercy Oakland is the first Certified Primary Stroke Center in Michigan.

Intervention: Addressing the need to increase access, in October 2006 Trinity Health launched the Michigan Stroke Network, a collaborative of 30 hospitals. Member hospitals have around-the-clock access to telemedicine services and stroke specialists.

Using Remote Presence™ Robotics, a remotely controlled mobile teleconferencing system, the Michigan Stroke Network ensures that every hospital has the ability to offer all patients the most advanced stroke care available. Initially, the Michigan Stroke Network deployed nearly two dozen RP-7 robots to hospitals throughout the state. The Michigan Stroke Network is funded by SJMO, so participating hospitals received the remote presence robots at minimal cost.

Participating hospitals pay no fee to join the network and there are no additional consultation fees. Stroke patients who are transferred to SJMO receive treatment and are returned to the member hospital for further care. Along with clinical support, the Michigan Stroke Network reaches out to member hospitals and surrounding communities to educate them about identifying strokes. Network representatives visit health fairs and conduct preventive screenings.

Results: As a result of the Michigan Stroke Network, remote presence robots are deployed across Michigan. Since 2006, network staff has seen a considerable increase in calls from partner hospitals requesting a referral for treatment. Additionally, patients who are referred to SJMO for stroke intervention have seen improvement in their NIH stroke assessment score. For example, patients who are admitted with a stroke assessment score between 11–14 are transferred back to their community hospital after treatment with an assessment score of 6–9.

Lessons Learned: Key learnings from the Michigan Stroke Network's experience include:

- Set up electronic communication and reporting between member hospitals and a primary stroke center at the beginning of the project to facilitate transfer of information

- Incorporate a community-based approach to enhance outreach and preventive services

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Case Example 2: Banner Health

Background: Banner Health, a large nonprofit health care organization based in Phoenix, provides care for patients in Alaska, Arizona, California, Colorado, Nebraska, Nevada and Wyoming. Banner Health is driven by its mission: "to make a difference in people's lives through excellent patient care."

Intervention: In 2011 Banner Health redefined the aim of its care delivery process by transforming its organizational culture toward population health management. This redefinition began with formation of the Banner Health Network, an organization comprising Banner Health, Arizona Integrated Physicians, Banner Medical Group and Banner Health Physician Hospital Organization.

Banner Health Network is a comprehensive care system that is responsible for the continuum of patient care and accepts financial accountability for those served by the network. By bringing together Banner Health-affiliated physicians, 13 acute-care Banner hospitals and other Banner services in Arizona, Banner Health Network offers patients convenient access to a full range of high-quality health care services, such as acute care, home care, nursing registries and residential care through an accountable care organization model. It is one of a few networks in Arizona serving patients in a population health management model.

Results: Banner Health Network is one of the top five performing Pioneer ACOs in performance year one in terms of shared savings, with more than $19 million saved. Additionally, BHN had the following results in performance year one:

- 8.9 percent fewer hospital admissions

- 14.4 percent reduction in average length of hospital stay

- 6 percent fewer hospital readmissions

- 6.7 percent drop in use of X-rays, MRIs or other imaging services

- 2.5 percent drop in Medicare payments per beneficiary

Lessons Learned: Critical to the success of BHN were:

- Aligning incentive payments with the physicians, e.g., using a software program to determine claims data and patient volume

- Providing robust support and organization for the primary care team

- Engaging the community with a variety of methods, including community representation on BHN boards

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Case Example 3: Yale New Haven Health System

Background: Yale New Haven Health System, based in New Haven, Connecticut, comprises four delivery networks: Yale-New Haven Hospital, Bridgeport Hospital, Greenwich Hospital, and Northeast Medical Group, a physician foundation. YNHHS is an academic medical center affiliated with the Yale University School of Medicine.

Intervention: Over the last five years, YNHHS has progressed quickly in its population health approach. At first, YNHHS used clinic settings to provide basic health care services to the community. Community health needs assessments provided the data to develop targeted community health programs such as Project Access, which connects uninsured community members to local social services and health resources. An early intervention was the development of an onsite care management program for YNHHS employees living with chronic disease. This interview-based program provides care coordination, navigation, coaching and goal setting to employees and their adult dependents.

Recognizing the growing need for population health initiatives, YNHHS developed a set of core competencies for its organizational model that includes primary care access, clinical integration, care management, financial management/direct contracting and data analysis. A leadership group was formed to develop an accountable care organization to support population health initiatives. Working with a variety of health care partners, YNHHS is currently developing a clinically integrated health network.

Results: Within one year, the employee health program improved compliance with evidence-based care by 10 percent, brought risk-adjusted, per-member per-month spending in line with the general employee population, resulted in zero readmissions and avoidable admissions and consistently had 95 percent or higher participant satisfaction ratings.

Lessons Learned: As its population health approach has evolved, YNHHS identified several key factors that contributed to its success:

- An electronic medical record that provides data warehousing, actionable analytics and care management support

- Patient engagement and activation

- Local innovation when scaling small programs to the larger community

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Case Example 4: Mercy and Memorial Hospitals

Background: Mercy Hospital Downtown, Mercy Hospital Southwest and Memorial Hospital, the three Dignity Health hospitals in Bakersfield, California, are the largest health care providers in the southern San Joaquin Valley and serve a diverse population of urban and rural residents. The hospitals' missions are to provide high-quality, compassionate health care to their patients and advocate on behalf of the poor. Created in 1991, the Department of Special Needs and Community Outreach was formed to take hospital resources beyond the walls of the three hospitals and help create a healthier community.

Intervention: Mercy and Memorial Hospitals have greatly expanded their population health initiatives over the last 10 years. They coordinate more than 45 outreach programs and collaborate with several hundred different partners in the community. A central component of the population health effort has been addressing access to care, preventive care, job training, chronic disease management, nutrition services and youth interventions. The programs are expanding with increased hospital support, grant funding and donations. Mercy and Memorial Hospitals continue to coordinate their population health programs through three outreach centers located in the most vulnerable areas of Bakersfield. These centers have become the hub of resources for the underserved. Residents have come to trust the employees, who provide a variety of health- and nonhealth-related services, including:

- Art for Healing
- Breakfast Club
- Breast health program
- Car seat program
- Community fitness classes
- Community Health Initiative
- Dinner Bell program
- Emergency food baskets

- Empowerment (chronic disease self management)
- Health education seminars and classes
- Health screenings
- Healthy Kids in Healthy Homes
- Homemaker Care job training
- In-home health education
- Operation Back to School
- Referrals for basic needs

Results: Of the patients who enter the empowerment seminars for chronic disease and diabetes self-management, 93 percent avoided admissions to the hospital or emergency department for six months following their participation. In the Homemaker Care job training program, 66 percent of participants have gained employment within six months. In 2013, the Community Health Initiative of Kern County enrolled 9,519 children in health insurance programs. The Art for Healing program has become a popular destination for community caseworkers to bring clients suffering from mental illness.

Lessons Learned:

- Collaboration with other providers and partners enables Mercy and Memorial Hospitals to create a network of community members to enroll residents into health insurance programs.

- By offering evidence-based chronic disease management programs, Mercy and Memorial Hospitals are effective in avoiding hospital admissions and readmissions.

- Many program participants become volunteers, leaders and, in some cases, employees.

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Case Example 5: Sentara Healthcare

Background: Sentara Healthcare operates more than 100 sites of care, including 11 acute care hospitals in Virginia and North Carolina. Through its insurance plan, Optima Health, Sentara Healthcare provides health insurance to about 450,000 people.

Intervention: To advance its population health efforts, Sentara Healthcare developed core population health competencies for its leaders and staff from existing small-scale population health programs. To strengthen the population health model, primary care delivery was redesigned, a pilot patient-centered medical home was initiated and clinical and technological capabilities were developed. A group of Sentara senior leaders oversaw the transformation process. Sentara leveraged its insurance plan and created new care delivery processes focused on what is best for the patient. For example, care managers were introduced to focus on high-risk and high-utilization patients.

Sentara Healthcare conducted community health needs assessments, which provided a picture of the health status of community residents and helped direct Sentara in developing and providing health services. Through collaboration with community partners, such as health departments, free clinics and community health centers, Sentara works to improve the health of its community. In 2012, Sentara provided more than $282.2 million in community benefits.

Results: The pilot health programs have met their goals and showed great promise for Sentara Healthcare. Pilot programs resulted in:

- 44 percent decrease in average emergency department visits

- 46 percent decrease in hospital all-cause admissions

- 18 percent decrease in hospital all-cause 30 day readmissions

- 87 percent increase in seven day follow-up visits

- 17 percent reduction payments by Sentara's insurance company, Optima Health

Additionally, the various population health programs have reported high patient satisfaction scores.

Lessons Learned: With a more deliberate approach to the development of its population health initiatives, Sentara learned:

- Using multidisciplinary teams for the leadership group and other project groups helped create a comprehensive and flexible program.

- Taking time to determine the exact significance of the results of small-scaled programs is important before expanding programs to the greater population.

- Breaking down silos and having continuity are critical to improving patient outcomes.

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About HRET

Founded in 1944, the Health Research & Educational Trust (HRET) is the not-for-profit research and education
affiliate of the American Hospital Association (AHA). HRET's mission is to transform health care through research
and education. HRET's applied research seeks to create new knowledge, tools and assistance in improving the
delivery of health care by providers and practitioners within the communities they serve.

About HPOE

Hospitals in Pursuit of Excellence (HPOE) is the American Hospital Association's strategic platform to accelerate
performance improvement and support delivery system transformation in the nation's hospitals and health systems.
HPOE shares best practices, synthesizes evidence for application, and engages leaders in the health industry
through education, research tools and guides, leadership development programs and national engagement projects.

About ACHI

The Association for Community Health Improvement (ACHI) is a personal membership group of the American
Hospital Association. ACHI provides education, professional development, resources and engagement
opportunities to its members in the fields of population health, community health and community benefit. ACHI is
working to cultivate a society of professionals who apply their specialized knowledge and expertise to effectively
educate and collaborate with their communities in achieving the highest potential health for community residents.

hospitals in pursuit of excellence™
Accelerating Performance Improvement

SECOND CURVE OF HEALTH CARE

The American Hospital Association, through its Hospitals in Pursuit of Excellence platform, **outlined a concept for the future of health care, where hospitals are moving to the second curve of health care**. The *first curve* is driven by the volume of services provided and fee-for-service reimbursement. The *second curve* is concerned with value: the cost and quantity of care necessary to produce desired health outcomes within a particular population.
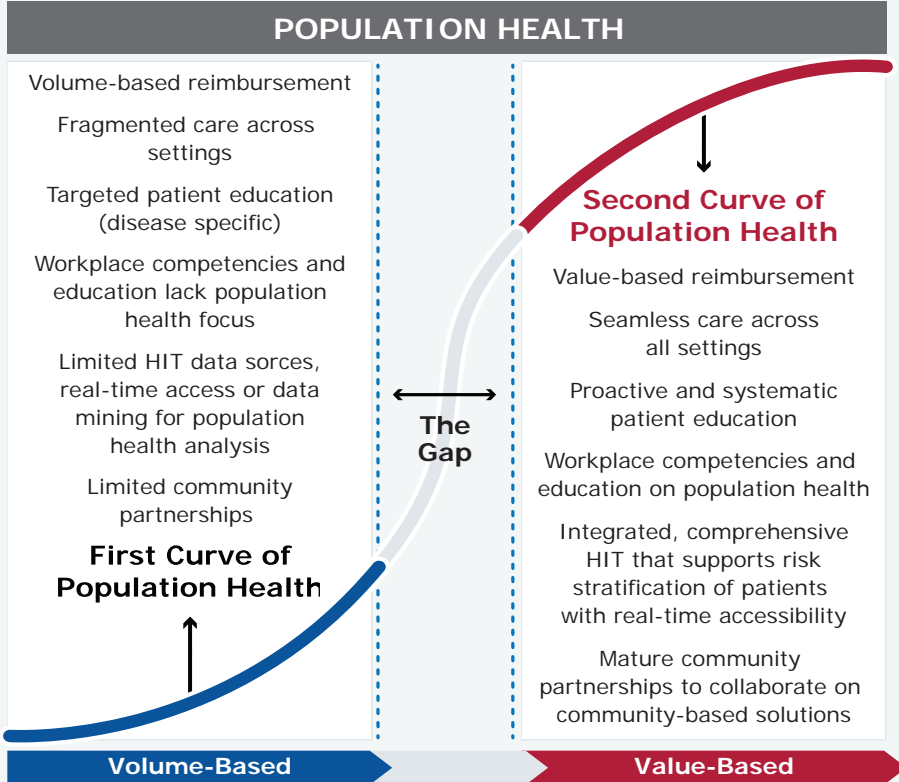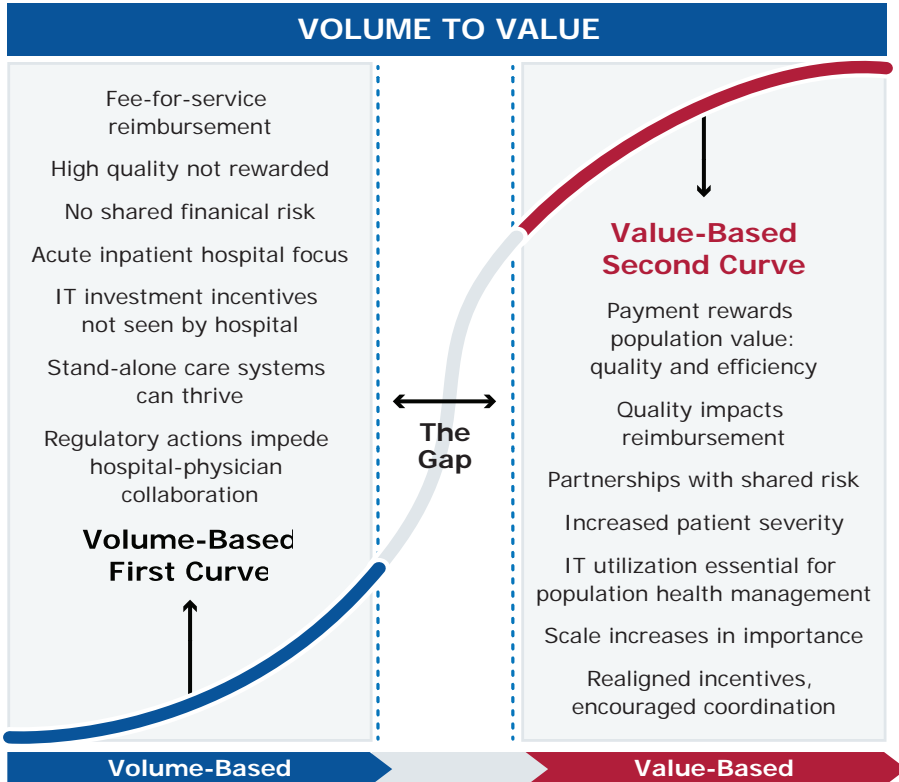
MUST-DO STRATEGIES

10 must-do strategies were identified for the hospital field to implement; however, the first 4 were identified as major priorities.

1. Aligning hospitals, physicians, and other providers across the continuum of care
2. Utilizing evidenced-based practices to improve quality and patient safety
3. Improving efficiency through productivity and financial management
4. Developing integrated information systems

5. Joining and growing integrated provider networks and care systems
6. Educating and engaging employees and physicians to create leaders
7. Strengthening finances to facilitate reinvestment and innovation
8. Partnering with payers
9. Advancing an organization through scenario-based strategic, financial, and operational planning
10. Seeking population health improvement through pursuit of the "triple aim"

VOLUME TO VALUE

Volume-Based First Curve

- Fee-for-service reimbursement
- High quality not rewarded
- No shared finanical risk
- Acute inpatient hospital focus
- IT investment incentives not seen by hospital
- Stand-alone care systems can thrive
- Regulatory actions impede hospital-physician collaboration

The Gap

Value-Based Second Curve

- Payment rewards population value: quality and efficiency
- Quality impacts reimbursement
- Partnerships with shared risk
- Increased patient severity
- IT utilization essential for population health management
- Scale increases in importance
- Realigned incentives, encouraged coordination

Volume-Based → Value-Based →

POPULATION HEALTH

First Curve of Population Health

- Volume-based reimbursement
- Fragmented care across settings
- Targeted patient education (disease specific)
- Workplace competencies and education lack population health focus
- Limited HIT data sorces, real-time access or data mining for population health analysis
- Limited community partnerships

The Gap

Second Curve of Population Health

- Value-based reimbursement
- Seamless care across all settings
- Proactive and systematic patient education
- Workplace competencies and education on population health
- Integrated, comprehensive HIT that supports risk stratification of patients with real-time accessibility
- Mature community partnerships to collaborate on community-based solutions

Volume-Based → Value-Based →

SECOND CURVE OF POPULATION HEALTH

These tactics include:

- Value-based reimbursement
- Seamless care across all settings
- Proactive and systematic patient education
- Workplace competencies and education on population health
- Integrated, comprehensive HIT that supports risk stratification of patients with real-time accessibility
- Mature community partnerships to collaborate on community-based solutions

Signature Leadership Series

Navigating the Gap Between Volume and Value

June 2014

Navigating the Gap Between Volume and Value:
Assessing the Financial Impact of Proposed Heath Care Initiatives and Reform-Related Changes

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Table of Contents

Executive Summary

The nation's health care delivery system is in the midst of a transition from a fee-for-service approach to one based on value. This transition poses numerous challenges for hospitals and health care systems, including declining utilization and the need to invest significant capital in new infrastructure and competencies. Organizations seeking to effectively navigate these challenges must be proactive in developing and implementing a comprehensive financial plan based on traditional corporate planning principles.

This guide offers hospital leadership step-by-step advice and information on the financial planning process and how it can help organizations plan for value-based care and payment.

The first step of the financial planning process **establishes the foundation** by identifying existing sources and uses of capital within an appropriate credit and risk context. A comprehensive capital position analysis includes five key assessments:

- Review of historical financial performance
- Quantification of current debt capacity
- Definition of capital requirements
- Identification of expected liquidity needs
- Determination of other key areas of cash uses and sources

The capital position analysis quantifies how much operating cash flow will be needed to maintain financial equilibrium while also supporting strategic capital needs.

The next step, preparation of sound **baseline financial projections**, allows executives to predict the organization's financial trajectory over the plan period, before factoring in major initiatives. "Status quo" baseline projections are no longer sufficient in the current health care environment. Hospital and health system leaders should be conservative in their projections, incorporating known and expected challenges.

In setting the *revenue side of the equation*, for example, health care leaders should factor in slow revenue growth, declining inpatient use rates, and flattening outpatient use rates. It is important to have a clear understanding of the organization's market position and specify realistic projected revenue increases or decreases by payer. Executives also should include both the known and unknown effects of health care reform, such as fluctuations in payment rates from different payers.

Building the *expense side of the equation* requires executives to define fixed versus variable expenses and account for inflation. Costs associated with various planned initiatives—such as acquiring physician practices and resulting operating losses—should be included. Through this process, organizations can identify the level of cost management that will be needed going forward.

To define *balance sheet and cash flow requirements*, hospital leaders need to develop assumptions for each of the major balance sheet components, including working capital, ongoing capital needs exclusive of major strategic investments, debt and/or lease financings, and pension obligations.

Finally, hospitals and health care systems should *consider risk* as a factor in developing baseline financial projections. This requires identifying strategic, financial and operational risks and quantifying the impact of various risk scenarios on organizational capital capacity over time. Sensitivities should be calculated both independently and in combination.

With a realistic baseline plan in place, organizations can incrementally **test the impact of major strategies**. These may include cost management initiatives in areas such as labor and nonlabor savings, facilities planning and information technology, cost restructuring through business/service line rationalization, and/or potential partnerships. By quantifying the implications of each initiative independently and in various groupings and timelines, hospital and health care system leaders can define an optimal portfolio of strategies for sustainable financial performance that will enable the organization to provide high-quality care to the community on a continuing basis.

After a preferred set of strategic initiatives is identified, the final and perhaps most important analytic stage of the financial planning process is **understanding and testing the impact of planned strategies** through the evaluation of risk—including conducting sensitivity and scenario analyses. Such analyses involve projecting a range of possible outcomes in order to examine the risk parameters related to assumptions. Health care leaders who understand the risks associated with their strategic financial plan can establish appropriate key performance indicators to monitor performance, as well as specific action plans to address any deviations in performance related to that risk in years to come.

Having a robust strategic financial plan is critical in ensuring high-value care in today's health care environment. By walking readers through the stages of the financial planning process, this guide demonstrates the importance of developing organizational strategies within the context of realistic projections of financial and capital capacity.

Once a solid plan is in place, executives should ensure it is routinely monitored and updated as strategies are implemented and markets shift. Hospital and health care system leaders also should use the plan as a communication tool to educate key constituents as to the expected outlook for the organization and, importantly, the range of potential outcomes given the inherent risk in the field. The numerous uncertainties facing health care require a disciplined planning process that provides a framework for flexibility and ensures long-term success in the new health care era, and thus continued delivery of critical services to patients.

Introduction

As a value-based business model replaces the volume-based model, the issues confronting hospitals and health care systems are rapidly evolving, making it difficult for their leaders to plan with any level of certainty. To succeed in the new health care era, executives must rethink how, where and to whom their organizations provide services—and which services are most appropriate—under a delivery model that focuses on consumer-focused *health* care as distinct from provider-focused *sick* care.

Health care organizations face significant challenges during the transition, including declining commercial and government payments, rising supply and service costs, increasing price sensitivity from consumers and other health care purchasers, decreasing demand for inpatient services, and a shift in focus to care provided in ambulatory and home settings. These challenges create operating pressures that are expected to intensify as the field continues to move toward value-based payment and population health management. The speed of change will vary from market to market, but hospitals and health care systems that wish to serve their communities over the long term must develop realistic plans for making the transition, and navigating the gap in between.

Because the environment in which health care organizations operate is changing (Sidebar 1), robust and disciplined financial planning must guide organizations during this transition.

Using a Back-to-Basics Plan

Developing and implementing a comprehensive financial plan are critical to ensuring long-term sustainability and success. A back-to-basics approach—one founded in traditional corporate financial planning principles, as described fully in other publications[1]—is strongly recommended. With such an approach, a health care leader can gain a deep understanding of the current position of the organization and its likely trajectory over the next five to 10 years. A disciplined process (Sidebar 2) allows leaders to re-examine their existing strategies, quantify current and future strategic initiatives, and rigorously test alternative "portfolios" of initiatives using sensitivity analysis.

Once the desired and achievable portfolio aimed at maximizing value for patients is defined, executives should use the financial plan to set expectations, assign responsibilities and establish accountability during the annual budget process and on an ongoing basis.

Sidebar 1. Characteristics of the Changing Environment for Hospitals and Health Care Systems

1. Provider revenues will be under severe pressure as payment mechanisms migrate toward value-based approaches; organizations need to do less with less.

2. Inpatient use rates are declining, and certain outpatient use rates are likely to decline as well.

3. Continuing to compete on volume and rate will be a riskier strategy than shifting to value-based reimbursement; being a rate-taker in a shrinking market is not a viable strategy.

4. A new set of core competencies will be required for success.

5. Providers will consolidate at an accelerated pace, horizontally and vertically.

6. The competitive landscape will be reshaped by existing and new competitors.

7. Regardless of what happens at any regulatory level, improving care quality and efficiency is the right thing to do.

8. Providers need to determine how they will participate in the future health care delivery system and prepare for that transformation.

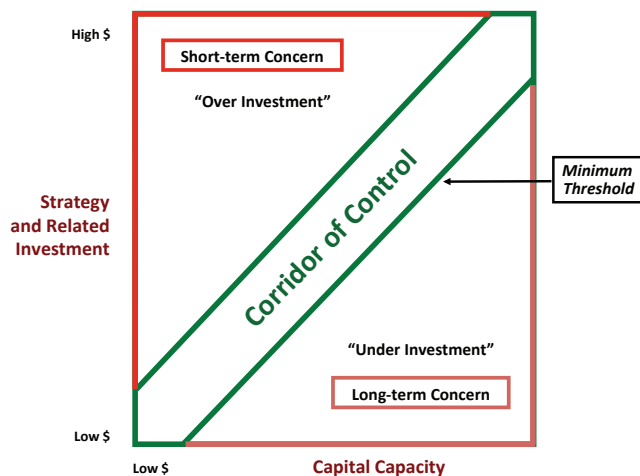*Source: Kaufman, Hall & Associates, Inc., 2014.*

Finally, the financial plan provides a means to communicate the impact of desired strategies and objectives to key constituencies. A sound financial planning process and the resultant plan will enable executive teams and boards to evaluate whether or not the hospital or health care system will remain within its "Corridor of Control." A concept conceived by Kaufman Hall more than two decades ago, the Corridor of Control represents the equilibrium point between strategic investment of capital and commitment of operating dollars, *and* protection of the organization's long-term financial integrity as measured by continued, effective access to capital.

Figure 1. Corridor of Control: Finding the Balance of Strategic Requirements and Capital Capacity

Source: Kaufman, Hall & Associates, Inc., 2014.

Figure 1 illustrates this concept. An organization whose position appears below the Corridor of Control in the "long-term concern" area may be at risk of losing market share because it is not investing sufficient capital to build new competencies required to succeed in a value-based business environment. If an organization is positioned above the Corridor of Control in the area labeled "short-term concern," its financial need or strategic capital appetite exceeds its current financial capability. In the extreme, this can cause a liquidity crisis and trigger a default on debt. More commonly, this capital position reflects an organization that—given levels of performance—is unable to respond to market opportunities and threats.

Although the current planning environment has new variables and uncertainties, the need for the time-honored, fundamental financial planning approach remains unchanged. This approach is grounded on the guiding principle that cash flow must be sufficient to meet the strategic capital needs of an organization within an acceptable risk tolerance. To provide high-value care into the future, health care organizations must establish parameters of financial performance, balance their sources and uses of capital, estimate their future financial trajectory, and assess how changes to assumptions will affect the organization's financial position. Sidebar 3 outlines key questions that should be asked as part of this planning process.

This guide describes each process component in depth. It also provides numerous examples describing the experiences of hospitals and health care systems in the current health care environment. The names of individual organizations have been blinded.

Sidebar 3. Strategic Financial Planning Must-Ask and Answer Questions

1. What must we do to ensure we remain relevant in our local health care market? Can we stand alone in the new business model? Are we big enough to handle the intellectual demands of reform and the new business model?

2. Do we have a carefully constructed physician alignment strategy that will meet reform era requirements?

3. Do we have the required infrastructure and culture to effectively manage cost and utilization? Are we making a real effort to bend the cost curve?

4. Do we have a quality initiative that recognizes the principles of care coordination, evidence-based medicine and comparative effectiveness?

5. At what level of risk are we able to participate now and at what level do we want to participate in the future?

6. Is our existing portfolio of services and locations the right portfolio for changing competitive conditions?

Source: Kaufman, Hall & Associates, Inc., 2014.

Establishing the Foundation

The guiding principle described earlier requires hospital leadership to balance the organization's funding equation—with variables including cash, capital, debt, and operating profitability—through use of a rigorous financial planning process. Each element must be optimized within an appropriate credit and risk framework that supports ongoing organizational access to external capital. No major organization can fund the full range of its capital needs solely from internally generated cash flow and remain financially viable. Capital access is a critical organizational asset and competitive differentiator in ensuring ongoing health care in communities.

In developing a realistic financial plan, health care organizations must quantify any gap that may exist between their current position and the amount of capital capacity it requires to remain fiscally stable (at a minimum) and achieve long-term capital access objectives. To do so, the organization first must define its usual sources and uses of capital within an appropriate credit and risk context. This process involves the five analyses described next.

Reviewing the Organization's Historical Financial Performance

A financial assessment establishes the context for how the health care organization has performed relative to desired credit rating medians for profitability, debt position and liquidity. As the credit medians are expanded to include assessment of volume and quality trends, objective evaluation of these aspects of the organization's operating and competitive position also should be included. This analysis should provide the foundation for the health care organization's ongoing performance targets.

Targets commonly are based on industry benchmarks and/or organizational performance to date. The organization in Figure 2 used current-year performance and rating agency medians to define targets related to key financial indicators, including liquidity (days cash on hand) and operating margin. These "minimum thresholds" reflect the level of financial performance necessary to meet the organization's ongoing strategic requirements.

Figure 2. Target Setting: Establishing the Framework for Evaluating the Organization's Expected/Required Performance

Metric	XYZ 2013	XYZ Budget 2014	'A3' Medians	XYZ Targets	XYZ Minimum Threshold
Days Cash on Hand	185.0	185.7	175.9	200.0	175.0
Operating Margin	-3.1%	0.0%	1.6%	5.0%	2.0%
Operating EBIDA Margin	5.1%	7.6%	10.0%	12.0%	10.0%
Debt Service Coverage	4.3x	6.2x	4.2x	4.5x	3.5x
Debt to Capitalization	31.7%	30.7%	41.0%	35.0%	45.0%
Cash to Debt	179.7%	181.5%	112.7%	150.0%	110.0%
Capital Expenditure Ratio	120.1%	133.0%	113.6%	120.0%	100.0%

Source: Kaufman, Hall & Associates, Inc., 2014.

Quantifying the Organization's Current Debt Capacity

Debt capacity can represent a significant source of capital to support an organization's strategic investment needs. As such, developing a thorough understanding of the magnitude of the organization's debt capacity, as well as the underlying makeup of that capacity, will directly impact the magnitude and timing of strategic initiative implementation. Debt capacity analysis should reflect the integration of three industry-standard approaches that evaluate an organization's: 1) cash flow relative to its current debt levels; 2) debt-to-total capitalization/leverage level; and 3) cash-to-debt/liquidity level. The analysis will determine the extent to which the health care organization has access to additional external capital (i.e., debt) at desired levels of risk to fund future strategic initiatives without compromising its financial goals. The debt capacity analysis should consider the organization's ability to generate not only the cash flow necessary to support additional debt, but also to avoid dilution of its balance sheet through excessive leverage and/or diminished liquidity relative to its total debt.

Defining the Organization's Capital Requirements

Development of a comprehensive inventory of capital requirements is a cornerstone to quantifying an organization's position within or outside the Corridor of Control. The identified capital requirements used in this analysis should include all ongoing facility expansion and maintenance plans, information technology (IT) needs and any costs associated with ongoing and planned strategic initiatives. To the extent that identified capital requirements are understated, the financial plan targets established will result in long-term undercapitalization of the organization. One means by which to test the relative reasonableness of an organization's capital inventory is to calculate and compare the resulting capital spending ratio to industry medians.

Establishing Expected Liquidity Needs

Establishing a liquidity target using days cash on hand as the key measure should reflect both the organization's current position and the liquidity level associated with a desired rating level (a proxy for both risk and ease of capital access). The related analysis will estimate the minimum unrestricted cash balances required to retain appropriate capital access and organizational liquidity strength. When comparing projected liquidity needs to current levels, the health care organization can effectively quantify the portion of future cash flow it will need to allocate to its balance sheet as reserves to preserve its capital access. These reserved future cash flows, which otherwise would be used to fund strategic capital expenditures and other cash needs, essentially become a use of cash rather than a source.

Determining Other Key Areas of Cash Uses and Sources

This step identifies other existing and future sources and uses of cash that should be considered as part of the financial equilibrium equation. Examples of other key impacts on a health care organization's sources and uses of capital include additional pension funding requirements, working capital needs, payment of debt principal, asset monetization and potential philanthropic dollars (e.g., capital campaigns).

By combining the results of these five analyses, an organization can complete a comprehensive capital position analysis (Figure 3). This quantifies the level of future operating cash flow necessary to support the organization's strategic capital needs to maintain high-value care for patients, while maintaining its financial equilibrium (i.e., keeping it within the Corridor of Control).

Example: Capital Position Analysis Uncovers One Organization's Need for Change

To maintain 225 days cash and implement its identified capital investment plan, the health care organization whose capital position or "gap analysis" appears in Figure 3 will need to generate approximately $1 billion in cash flow over the next five years (approximately $200 million annually). This annual level of cash-flow generation is well above its historical average performance, indicating that, at current levels of performance, the health care organization will not generate sufficient cash flow to meet its strategic needs over five years and maintain its financial position.

Figure 3. Projected Capital Position

Uses of Cash	2014 - 2018	Sources of Cash	2014 - 2018
Capital Investment			
Routine/ Ongoing	$593.3	Unrestricted Cash (2013 End Balance)	$890.5
IT Capital	149.0		
Known Strategic Initiatives	130.0		
Total Capital Investment	$872.3		
Funding of Minimum Cash Position	1,157.2	New Debt (Net Proceeds)	100.0
(End Balance, 225 days cash)			
Pension Funding	50.0		
Principal Payments on Existing Debt	32.2	Monetization, Philanthropy, Other	100.0
Working Capital (estimated)	10.0		
Total Capital Uses	**$2,121.7**	**Total Capital Sources**	**$1,090.5**

Cumulative 5-year Cash Flow Requirement :	$1,031.2 ($206.2 annually)

Historical Cash Flow:	
2013 ACTUAL:	$153.3
2012 ACTUAL:	$91.5
2011 ACTUAL:	$219.0
2010 ACTUAL:	$178.1

Source: Kaufman, Hall & Associates, Inc., 2014.

Developing Baseline Projections in Uncertain Times

Once the financial framework, operational performance targets and targeted annual cash flow required to generate financial sustainability have been established, sound baseline financial projections for the health care organization should be prepared. Whereas the capital position analysis helps quantify the gap between cash flow targets and historical performance, this step is designed to develop initial estimates of the projected gap between the baseline financial results and the capital capacity generation required to remain fiscally stable *and* achieve long-term capital access. The baseline projection depicts the organization's financial trajectory over the plan period, absent major management interventions such as the cost-restructuring or strategic-repositioning initiatives described later.

The business model change puts even more emphasis on the need for objective, conservative baseline modeling to create a valid foundation for the more uncertain modeling needed to evaluate impacts of the shift to value-based payment. Certain aspects of value-based payment are readily definable with specific expectations relative to the timing in which they will occur. Other changes, such as shifts to private exchanges, bundled payments and types of payment-for-quality arrangements, are more of a moving target. In their modeling, health care organizations should clearly identify what they "know" and what they do not know. At this time, financial modeling is more about ranges of outcomes and probabilities than it is about absolutes.

In establishing baseline financial projections, hospital and health care system executives should be aware that "status quo" baselines are no longer appropriate, especially as those projections relate to future inpatient and outpatient volumes. Initial projections must be developed conservatively, incorporating currently known values and assumptions. In today's health care environment, typical baseline financial projections should include challenges to utilization and revenue streams, and significant investment in core competencies—the result often is deteriorating financial performance.

Since fee-for-service payment continues to constitute a large portion of provider revenue, maintaining that payment structure in the baseline projections makes sense. At the same time, the projections also must incorporate anticipated changes to utilization and revenue streams, as well as necessary investment related to physician integration, sophisticated IT, care coordination, and other new, required competencies[2] that likely will challenge and diminish financial performance. Revenues and expenses should be projected using inputs from across the health care organization, including finance, strategy, clinical operations and executive management.

Setting the Revenue Side of the Equation

Hospital revenue growth has slowed considerably and is projected to continue to be very modest.[3] Inpatient use rates are declining significantly in many areas of the country and outpatient use rate growth is diminishing and is projected to flatten.[4]

Conservative revenue projections are especially essential given the impending shift to value-based payment. A realistic understanding of the health care organization's current market position is critical. Local, state and national patient utilization, as well as other patient volume-related data sources, should be accessed to determine how the organization compares to other hospitals and health care systems. Such data can provide valuable information on whether projected revenue and utilization from select payers and patient classifications should be higher or lower.
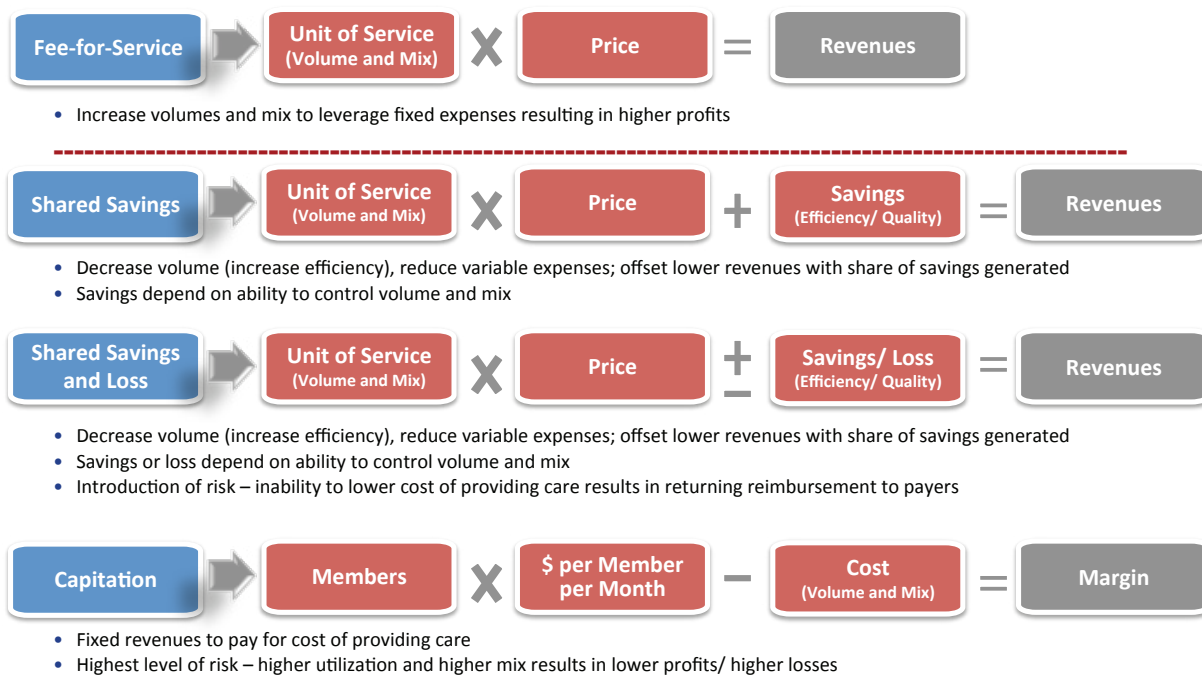
Projected revenue increases or decreases must be specified by payer. Some payers may aggressively shift to value-based payments, either in the form of lump sum or bundled payments, or percentage increases ("inflation kickers") tied to quality metrics. This "new math" for payment arrangements could have

significant implications for organizations (Figure 4) and will vary significantly by payer and by market.[5] Maintaining specificity in payer revenues will support the vital revenue-related sensitivity analysis described later.

Health care leaders also should incorporate both the known and unknown revenue effects of health care reform. These include, but are not limited to:

- Pressures on payment rates, such as a recent slowing in Medicare rate increases to about 1 percent per year, compared to approximately 3 percent per year historically

- The impact of having a larger Medicaid population in states that are expanding coverage, and the lack of Medicaid expansion in states that are not

- Changes in payer mix from public and private exchanges, accounting for uninsured individuals who may gain coverage and for the increasing number of people insured through traditional commercial plans who are anticipated to move to exchange plans

- The impact on bad debt and uncompensated care as a result of the aforementioned shifts in coverage

Figure 4. The New Math for Payment Arrangements

Fee-for-Service → **Unit of Service (Volume and Mix)** X **Price** = **Revenues**

- Increase volumes and mix to leverage fixed expenses resulting in higher profits

Shared Savings → **Unit of Service (Volume and Mix)** X **Price** + **Savings (Efficiency/ Quality)** = **Revenues**

- Decrease volume (increase efficiency), reduce variable expenses; offset lower revenues with share of savings generated
- Savings depend on ability to control volume and mix

Shared Savings and Loss → **Unit of Service (Volume and Mix)** X **Price** ± **Savings/ Loss (Efficiency/ Quality)** = **Revenues**

- Decrease volume (increase efficiency), reduce variable expenses; offset lower revenues with share of savings generated
- Savings or loss depend on ability to control volume and mix
- Introduction of risk – inability to lower cost of providing care results in returning reimbursement to payers

Capitation → **Members** X **$ per Member per Month** − **Cost (Volume and Mix)** = **Margin**

- Fixed revenues to pay for cost of providing care
- Highest level of risk – higher utilization and higher mix results in lower profits/ higher losses

Source: Kaufman, Hall & Associates, Inc., 2014.

Example: Identifying Best- and Worst-Case Scenarios

Figure 5 shows the baseline, best-case and worst-case projected impact on a sample hospital of a range of assumed changes in payer mix, resulting from a projected shift of commercially insured patients into public and private exchanges. The underlying analysis that created the range of scenarios incorporated the health care organization's specific market dynamics, including employer profiles, likelihood of employers moving employees into exchanges, and the relative sizes of the commercial and noncommercial markets. Although the impact of the shift will vary based on exchange uptake rates, market share, and contract rates for individual exchange products, this type of analysis provides a good "order of magnitude" assessment.

In this example, the best-case scenario for the hospital would result in a 16 percent shift of its commercial lives to exchange products; in the worst case, the shift would be 66 percent. Using these scenarios as bookends, the health care organization was able to evaluate the potential timing for such shifts and the impact on its payer mix. A final analysis applied a range of payment levels to the exchange-covered population to quantify the potential impact on financial performance and capital capacity. The focus of this analysis was not on a single projection, but rather on a range of potential outcomes around which proactive initiatives could be developed and implemented to address the financial impacts.

Figure 5. Anticipated Shift of Commercial Lives to Public and Private Exchanges
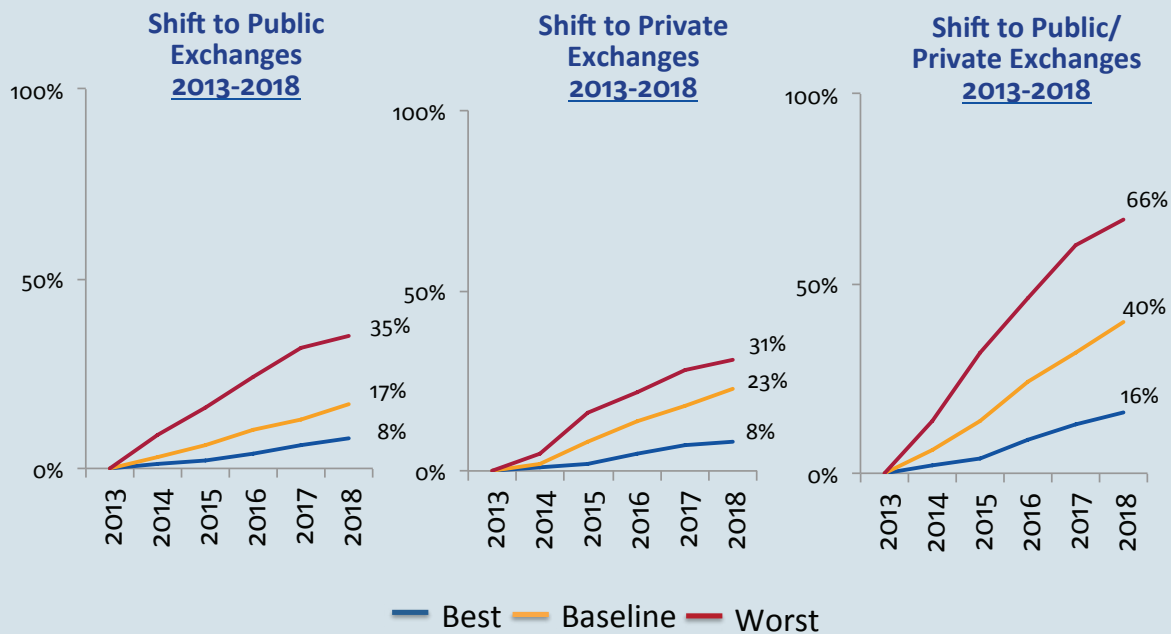
Source: Analysis by Kaufman, Hall & Associates, Inc., 2014.

Many organizations may see fluctuations in volume-based payment rates from public and private health insurance exchanges and government payers. Declines in commercial revenue likely will be particularly significant, as employers and payers negotiate and test new plan models designed to lower health care costs. In markets with more managed care penetration, volumes of emergency visits and utilization of other higher cost facilities and procedures may be expected to decline as a result of more effective population health management.

Walmart, Lowe's and other large employers joined an alliance to launch a "centers of excellence network" for employers. The network has contracted with four leading health care systems for knee- and hip-replacement surgeries for more than 1.5 million employees and their dependents. Walmart also has bundled-fee arrangements with six leading hospitals and health care systems to provide heart, spine and transplant surgeries to its employees, and Lowe's has similar arrangements with the Cleveland Clinic for employees' cardiac and spine-related surgeries.[6]

The potential impact of these types of national initiatives on an individual organization that does or does not participate in such arrangements must be fully evaluated, factoring in employers in the market area and the organization's service-line focus.

Building the Expense Side of the Equation

Building expense assumptions into the baseline projections is the foundation upon which health care leaders can identify the level of ongoing cost management necessary to maintain competitive financial performance. This process includes defining appropriate assumptions related to the fixed versus variable component of each expense category and applying inflation assumptions to the underlying unit costs.

For example, an organization would want to create separate assumptions for merit and cost-of-living increases in its salary and wage assumptions, the rising cost of benefits such as health insurance, or decreased maintenance costs from an ongoing initiative to lower energy expenses. This in-depth exercise allows executives to develop a clearer picture of the effect of cost pressures on the organization's ability to operate at sustainable financial levels. A more specific assumption set also supports more directed quantification of organizational expense reduction targets—a current management imperative.

To position themselves for managing the health of a specific population, many organizations are employing physicians and acquiring physician practices.[7] Many of those organizations also are experiencing substantial operating losses associated with these physician strategies. Losses may result from poor contract terms, disproportionately high compensation or practice expenses, decreasing payment for physician services, insufficient provider productivity or rising technology costs. According to data from the Medical Group Management Association, the median loss to a health system per full-time equivalent employed physician is about $176,000 per year.[8]

As hospitals and health care systems plan for future growth and move toward population health management for their communities, the effect on revenue of a shift to value-based payment under partial or full capitation arrangements must be an area of financial planning focus. As such arrangements are undertaken, services provided will represent an expense rather than revenue. Major strategic initiatives related to cost restructuring are described later.

Building the Balance Sheet and Cash Flow Requirements

To develop balance sheet and other cash flow requirement projections, finance executives at hospitals and health care systems need to develop different assumptions for the major components of the balance sheet. For the working capital components, specific historic ratios—which describe the timing for the organization to convert its working capital into revenue or expense—can be applied and ongoing or planned initiatives incorporated (i.e., revenue cycle improvement) to reflect how those efforts may affect these ratios. For instance, a hospital may anticipate that its days in accounts receivable will decline in future years due to an initiative to speed up collections by offering patients multiple payment options. To reflect this initiative, a specific change to assumed levels of days in accounts receivable can be made.

The baseline projections also should incorporate basic, ongoing capital needs exclusive of major strategic investments (which will be quantified and built into the financial plan in a later phase), and include the cash flow and balance sheet effects of known debt and/or lease financings. Many health care organizations also need to account for additional pension obligations not already included in benefits expenses. Other known factors that could impact the balance sheet moving forward, such as pending legal or transaction costs or use of restricted assets, also should be integrated.

Considering Risk

Given high uncertainty in the field, health care executives should comprehensively identify elements of strategic, financial and operational risk, and incorporate in their planning risk scenarios related to alternative income statement, balance sheet and cash flow metrics. This will allow them to quantify the impact each risk scenario would have on organizational capital capacity over time, and further support development of contingency plans to address the identified risks and ensure continued high-value patient care.

Figure 6 illustrates the results of scenario testing at one health care organization showing the impact on EBIDA (Earnings Before Interest, Depreciation and Amortization) dollars and margin, and on days cash on hand, of alternative assumptions including lower Medicaid and commercial payment increases, stable salary inflation, flat market share, and revenue from exchanges. Each of these sensitivities is calculated independently of the others, so additional scenario testing that combines variables might be valuable as well.

Figure 6. Scenario Analysis with Independent Variables
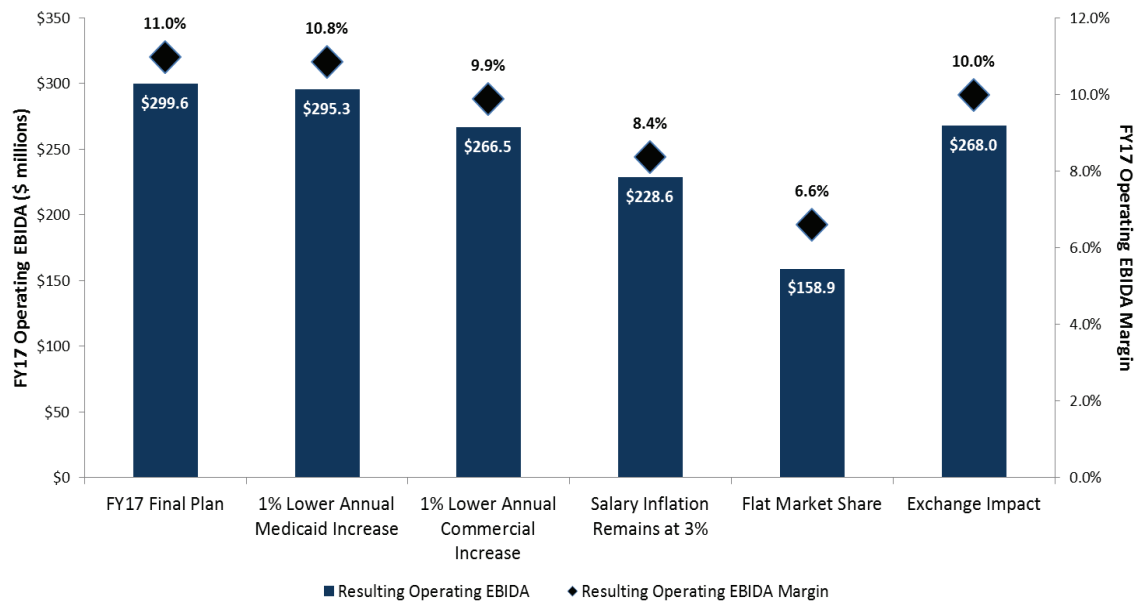
FY2017 Days Cash	179.5	177.6	164.5	144.5	137.6	165.3

Note[(A)]: All sensitives are calculated independently of each other.

Source: Analysis by Kaufman, Hall & Associates, Inc., 2014.

Figure 7 illustrates worst- and best-case scenarios related to the net revenue impact of a projected shift of commercial lives to health care exchanges, as shown in Figure 5. After completing the steps outlined here, most organizational analyses indicate that the baseline is indeed no longer status quo and that any solution set must include some or all of the types of major strategic initiatives described next to create long-term sustainability.

Figure 7. 2018 Net Revenue Impact by Scenario
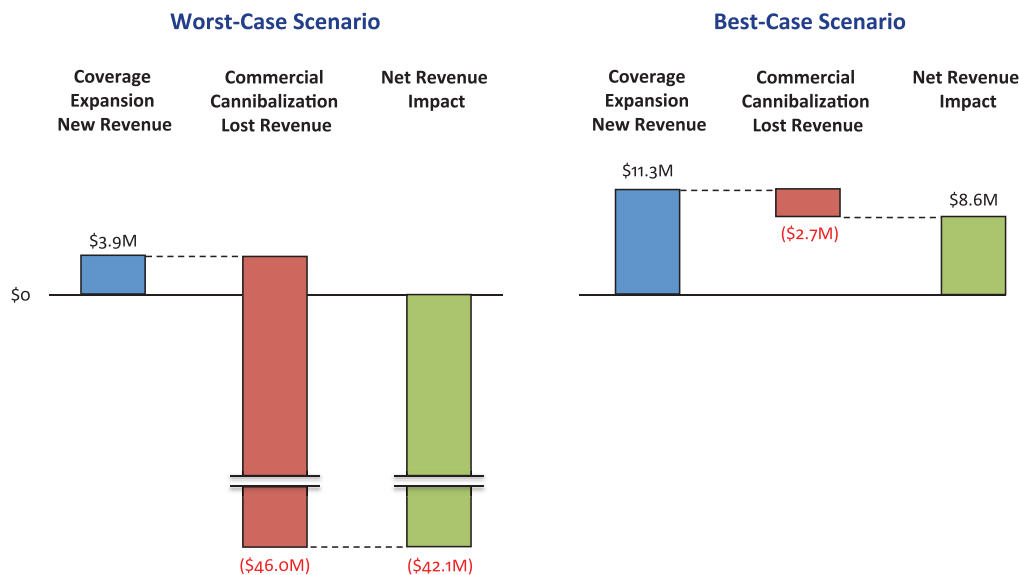
Source: Analysis by Kaufman, Hall & Associates, Inc., 2014.

Hospitals and health care systems face four key sources of risk in preparing for a value-based business model. Descriptions of each category and examples follow.

Strategic and operational risk involves an organization's ability to build the competencies for the new business model, such as a robust and high-performing delivery network for patients and risk-management infrastructure. The ability to generate sufficient capital and effectively manage risk allocation is critical.

Examples:
• Unexpected competition from new market entrants
• Performance of care-continuum partners
• Known and unknown impacts of health care reform

Actuarial or insurance risk is the ability to properly estimate use rates and costs for serving a defined population under a value-based contract, and mitigating risk of inaccurate projections. Health care organizations should be able to meet capital reserve requirements for assuming risk.

Examples:
• Fluctuations in patient utilization
• Impact of public and private health insurance exchanges (i.e., changes in payer mix and/or shift in composition of patient population)

Financial/asset and liability risk is incurred due to the significant capital required to build the infrastructure for value-based care, including technology, physician networks and care-management resources. As health care organizations invest in such areas, their ability to invest in other traditional uses is restricted.

Examples:
• Cost of building capital structure
• Credit-enhancement initiatives

Comprehensive risk refers to the combination of all the component risks listed here, and their aggregate effect on the organization. Such risk can undermine a hospital or health care system's strategies, market position, financial performance and, ultimately, its ability to serve its community.

Examples:
• Declining or flat market share
• Failure to make appropriate investments in needed competencies/resources

Health care leaders must understand how their organization's single and comprehensive risk profiles stack up to its ability to handle that risk, and make necessary adjustments to balance these components.

Source: Kaufman, Hall & Associates, Inc., 2014.

Incorporating the Impact of Cost Restructuring and Other Major Strategic Repositioning Initiatives

Baseline projections typically reveal sizable performance gaps relative to an organization's strategic capital requirements. Working from a realistic baseline plan, leaders therefore must incrementally test the impact of specific major strategies or changes on the organization's ability to bridge the gap between projected results and target performance goals. This iterative process quantifies the implications of each strategy or combination of strategies, ultimately enabling executives to define an optimal portfolio of strategies that moves from baseline projections to a sustainable financial plan.

To continue meeting community health care needs in the new delivery and payment environment, hospital and health care system leaders will need to think and act strategically about managing cost. A completely new cost curve will be required of hospitals in the rapidly developing environment of lower utilization, payment and revenue.[9] Bending the cost curve through traditional cost management approaches that remove 5 to 10 percent of costs likely will not suffice. Substantially more operating costs must be removed and removed permanently, driving down present and future expenditures to lower health care spending. This will require identification, quantification and implementation of much broader and more difficult operating initiatives affecting service offerings and market positioning.

To close the gap identified through the analyses described up to this point, health care leaders should focus on a potential solution set that includes:

1. Traditional cost management initiatives, plus:
2. Facilities planning and IT initiatives
3. Business/service line rationalization
4. Potential partnership synergies

A description of each follows.

Cost Management Initiatives

A first step in addressing the performance gap should focus on opportunities to improve the efficiency of existing operations or services, including both labor and nonlabor expenses. While these areas historically have been the emphasis of performance improvement efforts, health care organizations must continue to engage in regular evaluation and monitoring of these costs.

Labor Savings

Labor costs typically constitute more than half of a hospital or health care system's operating expenses. Benchmarking against both external sources and internal historical data provides a valid starting point for health care leaders to identify opportunities to reduce labor expenses. This type of evaluation is especially effective using compensation ratios, staffing metrics and productivity drivers. In addition to benchmarking to other organizations, it is important that a health care organization benchmark against itself as a means to maintain its highest levels of productivity.

Staffing metrics can be evaluated to identify opportunities to reduce labor costs in multiple areas. Measuring the difference between operating efficiency at peak patient volumes versus average volumes often leads to a finding of excess staff capacity. Significant savings can be realized by realigning staffing to better correspond to patient demand, thereby ensuring maximum efficiencies at various volume levels.

Another area of frequently identified cost-reduction opportunity is excessive or duplicative departmental overhead. Health care organizations may reduce labor expenses through initiatives to better target workloads and assignments, minimize the use of overtime and premium labor through cross-training, or reduce functional redundancies across facilities.

Example: Regional Health System Eliminates HR Redundancies

As part of its cost management efforts, a five-hospital health care system evaluated administrative services systemwide and found significant duplication within its human resources functions. By eliminating such duplication and reducing excess capacity, including relocating several human resources functions to regional or system-level offices, the health care system realized full-time equivalent savings of $6 million.

Source: Kaufman, Hall & Associates, Inc., 2014.

Nonlabor Savings

Initiatives to improve nonlabor costs should include goods, supplies, physician preference items, purchased services and logistics, among other items. Again, benchmarks can be used to compare costs as a percentage of revenues to standards in the field. Health care organizations can analyze their purchase order and accounts payable files to assess where and how money is being spent and identify potential savings. This might indicate opportunities to renegotiate a food or cleaning service contract, for example, or eliminate costly physician preference items. In one case, a southeastern academic medical center saved enough money by addressing usage of contrast media to buy a new MRI every other year.

Engaging clinicians in product and service line decisions is essential. Using solid outcomes research to guide the decision-making process also is helpful, as the case for making a change in products and services should be based on both financial and clinical outcomes criteria and data.

Example: Community Hospital Cuts Cost by Reducing Device Variation

Based on a review of its cardiac surgery program, a Midwestern community hospital identified wide variations in the costs of devices preferred by different cardiologists for electrophysiology tracking. By getting the cardiologists to agree to use a common device, the hospital was able to save an estimated $665,000 annually.

Source: Kaufman, Hall & Associates, Inc., 2014.

Facilities Planning and IT Initiatives

Operating and functional inefficiencies commonly exist due to age and design of facilities. Once facility deficits are identified, the strategic focus should be on quantifying the costs associated with improving the existing space, converting unneeded capacity to new functions, and/or creating new space to allow the health care organization to meet new patient needs.

IT initiatives, which can require significant capital, also should be scrutinized to ensure that assumed or proposed levels of expenditures are appropriate. Each proposed project should undergo standardized and thorough business planning analyses and then be evaluated comparatively as part of a portfolio through a comprehensive capital allocation process.

Example: Opportunity Found in Converting Old Facility to Meet New Needs

In evaluating its facilities, one health care system determined that it could save at least $6 million annually in fixed costs by converting an aged, under-used inpatient facility into an ambulatory surgery center with an emergency department and some observation beds.

The facility was located relatively close to the health care system's tertiary hospital, so there was some concern that the converted facility would draw patients away from the main hospital. But additional scenario modeling showed that repurposing the facility would benefit the organization and the community overall. A negative impact would occur only if the outpatient center drew more than 50 percent of the hospital's patient volumes—a scenario that was deemed highly unlikely.

Source: Kaufman, Hall & Associates, Inc., 2014.

Cost Restructuring Through Business/Service Line Rationalization

With an increasing emphasis on value versus volume, a health care organization's inpatient and outpatient service delivery network must be much more efficient and effective, and its cost platform much lower.

To generate viable bottom-line results and competitive financial performance, health care organizations must reassess the scope of their businesses and services to determine how best to distribute them to meet community needs. Within the strategic financial planning process, this involves quantifying the impact of strategies related to maintaining or divesting of noncore businesses—including the associated savings or costs (both direct and indirect) and the incremental effect on operations.

Applying a standard and rigorous framework is helpful in analyzing how each business or service line fits into the organization's overall mission, operations and future strategic needs. Health care leaders must consider the total value of the business or service line, whether it represents the best use of resources, and how it effects the organization's competitive position and financial performance.

Health care organizations also should thoroughly evaluate potential investments in specific services, quantifying the net incremental impact of hiring more physicians in order to capture additional market share. One health care organization assessed the net operating impact of each of its service lines, quantifying the expense and revenue effect of achieving increased market share through defined strategies over a five-year period. Figure 8 indicates the high degree of variation in net operating impact by service line.

Figure 8. Quantifying the Financial Impact of Service Line Strategies (millions)

Service Line Analysis	Total Market Cases	Current Market Share	Contribution Margin Impact of 1% Move in Market Share	Expected increase in share over 5 yrs in %	Estimated Contribution Margin (Incremental to Baseline)	New Physicians Needed to Support Case Growth	Annual Subsidy Per Doc	Total Annual New Physician Cost to Support	Net Operating Impact
	A	B	C	D	F (CxDx100)	H	I	J(HxI)	(F-J)
Interventional Cardiology	890	64.2%	$ 61,989	6%	$ 371,931	-	$ -	$ -	$ 371,931
Cardiology Medical	5,153	73.2%	$ 137,585	7%	$ 963,096	-	$ -	$ -	$ 963,096
General Medicine	3,384	68.0%	$ 132,484	7%	$ 927,385	-	$ -	$ -	$ 927,385
Vascular Surgery	1,117	61.6%	$ 63,032	14%	$ 857,239	2	$ 200,000	$ 400,000	$ 457,239
Cardiac Electrophysiology	517	52.0%	$ 26,439	18%	$ 475,909	1	$ 100,000	$ 100,000	$ 375,909
Psychiatry	3,176	59.6%	$ 67,490	10%	$ 701,896	1	$ 50,000	$ 50,000	$ 651,896
Urology	739	60.4%	$ 31,873	10%	$ 318,731	1	$ 100,000	$ 100,000	$ 218,731
Otolaryngology	562	56.6%	$ 14,230	13%	$ 190,680	1	$ 100,000	$ 100,000	$ 90,680
General Surgery	3,028	50.8%	$ 205,753	19%	$ 3,909,299	2	$ 150,000	$ 300,000	$ 3,609,299
Cardiac Surgery	514	41.1%	$ 87,401	29%	$ 2,525,876	1	$ 100,000	$ 100,000	$ 2,425,876
Orthopedic Surgery	3,305	49.7%	$ 224,905	20%	$ 4,498,105	1	$ 200,000	$ 200,000	$ 4,298,105
Gynecology	884	46.6%	$ 28,624	15%	$ 429,359	1	$ 100,000	$ 100,000	$ 329,359
Thoracic Surgery	624	48.6%	$ 73,869	21%	$ 1,551,252	1	$ 100,000	$ 100,000	$ 1,451,252
Spine	1,031	28.1%	$ 72,768	42%	$ 3,056,255	2	$ 200,000	$ 400,000	$ 2,656,255
Neurosurgery	292	6.5%	$ 33,113	23%	$ 761,594	1	$ 200,000	$ 200,000	$ 561,594
Total Estimated Annualized Impact of Strategy									$ 19,388,607

Source: Kaufman, Hall & Associates, Inc., 2014.

Hospitals play a critical role in providing a variety of services for communities that other entities cannot, but finding the best balance of services for the organization and access for patients is essential. Strategies to redistribute existing services and evaluate a health care organization's overall assets portfolio are increasingly important elements of comprehensive financial planning. In both cases, the analytics should be targeted at quantifying the impact of consolidating services and/or establishing centers of excellence meant to generate increased efficiency (lower cost) and more appropriate care access (improved quality).

Example: Divestitures Allow AMC to Refocus on Primary Goals

An academic medical center evaluated the financial performance of each of its service lines and business units, including projections of volumes, revenue, expenses and contribution margins. Sensitivity and scenario analyses, which were focused on identifying and evaluating the key performance drivers, generated a range of possible future trajectories.

Through this process, the academic medical center determined that it could not sustain high service quality at its home health business given the economics of the business as operated under its auspices. Management decided to divest the home health business to a specialty company that could maintain quality service on a profitable basis, allowing the academic medical center to redirect capital capacity to other vital initiatives.

Source: Kaufman, Hall & Associates, Inc., 2014.

Identifying and Quantifying the Impact of Potential Partnership Synergies

For many health care organizations, the financial planning process also should include evaluation of the impact of alternative strategic affiliation options, including acquisitions, mergers, divestitures, shared-service arrangements or partnering with a payer to move toward value-based payment. This additional layer of analysis typically is necessary when an organization has analyzed all scenarios and initiatives aimed at "navigating the gap" on its own, and determined that it cannot resolve the challenges without strategic and/or financial assistance.

Identifying the appropriate affiliation strategy is an in-depth process that must be grounded in traditional strategic and financial planning principles. Careful and comprehensive evaluation and execution planning are required to ensure realization of anticipated benefits and synergies. Synergies can include operating cost savings, improved capital access, enhanced clinical alignment, improved market position, and the ability to share best practices to improve quality metrics.

A high-level assessment of the benefits offered by multiple potential partnerships (Figure 9) can provide a good starting point.

Figure 9. A High-Level Assessment of Partnership Options

		Strategic Alternatives			
Key Success Requirements	Stand Alone	Option 1	Option 2	Option 3	Option 4
Integrated service delivery and care coordination	○	●	○	◐	●
Risk sharing and management	○	●	○	○	●
Physician engagement and leadership	◐	●	○	◐	●
Primary care network development	◐	●	○	○	●
Process re-engineering and sustainable cost structure	◐	●	○	○	●
IT connectivity and platform development	◐	●	○	○	●
Sustainable financial performance and access to capital	○	◐	○	○	●

Ability to advance critical success factor: ○ Limited ◐ Fair ● Good

Source: Kaufman, Hall & Associates, Inc., 2014.

If a preferred potential partner is identified, the organization(s) can pursue more detailed analyses and develop a business case for the partnership. This typically will include:

- A thorough analysis of each organization's current financial position based on market and industry realities
- The pro forma financial and market impacts of a combined, new entity
- Quantification of the potential incremental improvement to be achieved by a combined organization

For example, a small stand-alone hospital in the Northeast developed an integrated strategic-financial plan that indicated that remaining independent was not a sustainable option due to the magnitude of cost reductions required and lack of available, realistic strategies to support long-term financial strength. As a result, the hospital sought a partnership with a larger health care organization that would provide the necessary capital and cost infrastructure support, putting it on solid footing to continue serving the community through various joint strategic initiatives.

Alternatively, one health care system's strategic financial plan indicated significant challenges related to retaining market share and growing volume. While the financial planning analytics clearly indicated that the system did not require capital support, it would benefit significantly from an affiliation that could enhance public perception of the value and quality it provided to the community. As a result, the organization sought a partner with a strong clinical brand to bolster its market position.

By conducting multiple analyses incorporating different variables, potential partners can begin to quantify the anticipated pros and cons of the proposed combination. From that point, baseline projected performance for each organization—including creditworthiness and debt capacity—on an independent basis can be developed to assess the long-term financial trajectory of the combined entity. Finally, the potential for improved performance and capital access as a combined system can be quantified and assessed to ensure the highest value care, and access to services for the communities they serve.

Example: Projecting Financial Synergies of a Proposed Merger

Figure 10 illustrates the potential synergies that could be achieved through the merger of two health care systems. Independently, each health system was projected in fiscal year (FY) 2016 to achieve operating margins of only 2.2 percent and 2.0 percent, resulting in capital access of $299 million and $40 million, respectively.

Under a merged scenario in which targeted baseline savings of $83 million were achieved, the combined, pro forma operating margin would increase to 3.7 percent, and capital access would increase significantly to $864.1 million. If the newly joined organization met higher identified savings, its operating margin and capital access would increase further.

Figure 10. Financial Impact of Potential Merger

	Fiscal Year 2016				
Key Target	**System #1 Independent**	**System #2 Independent**	**Combined Systems at Baseline Savings ($83M)**	**Combined Systems at High Savings ($147M)**	**Moody's 'A2' Level**
Operating Margin	2.2%	2.0%	3.7%	5.5%	3.1%
Op. EBIDA Margin	9.9%	10.1%	12.1%	13.9%	9.7%
Days Cash on Hand	172.6	151.8	201.6	222.4	168.8
Debt to Capitalization	38.5%	45.9%	40.6%	38.7%	37.9%
Capital Access	$299M	$40M	$864.1M	$1.2B	----

Source: Kaufman, Hall & Associates, Inc., 2014.

Understanding and Testing the Impact of Planned Strategies

The financial planning process next should shift focus to assess the impact of alternative portfolios of the identified strategic initiatives on the organization's financial outlook. This is accomplished by integrating the strategies—both one at a time and in a number of groupings and timelines—to test whether the projected net impact would create sufficient incremental financial benefit to support organizational sustainability. Health care leaders should be mindful that there may be some overlap in the benefits of alternative strategies and strive not to double-count such benefits.

This planning process enables health care leaders to determine the risks associated with moving to strategies at various levels and speeds. The timing of when to move forward with a specific initiative will be based on numerous factors, including the organization's capabilities, priorities, financial position and risk tolerance, and what is happening in its respective market. The faster the market is moving toward value-based care, the faster health care organizations will want to implement initiatives aimed at adapting to the new business model. Figure 11 summarizes, in credit profile format, one health care organization's consolidated outlook with the inclusion of its preferred strategic portfolio.

Once the organization settles on its preferred strategic solution set (including operating, capital and market initiatives) designed to ensure sustainability and high-value patient care, the final and perhaps most important analytic component of the financial planning process begins—evaluation of risk. Thorough risk evaluation requires developing analyses to identify "vulnerable variables" driving projected outcomes, and to inform the various constituencies of the quantified risk parameters inherent in the plan.

Figure 11. Financial Profile Incorporating Major Strategic Initiatives

Ratio / Statistic	Moody's (A)			Historical			Projected				
	A3	Target	Minimum	2012	2013P	2014B	2015	2016	2017	2018	2019
Net Patient Service Revenue	$391.9	---	---	$456.0	$441.3	$449.3	$456.1	$464.7	$473.2	$481.7	$490.2
Cash Operating Expenses*	---	---	---	$441.4	$447.3	$454.5	$453.1	$457.1	$463.3	$469.6	$476.1
Operating Income	$8.2	---	---	$3.5	($14.5)	($0.0)	$4.5	$4.9	$6.0	$6.9	$8.0
Operating EBIDA	$41.2	---	---	$37.5	$23.8	$37.0	$44.0	$45.7	$48.5	$51.0	$53.4
Net Income	$17.7	---	---	$7.9	($9.2)	$16.1	$16.7	$16.3	$17.1	$17.8	$19.4
Cash Flow (Net Inc + Depr)	$40.5	---	---	$38.6	$25.7	$49.8	$51.5	$52.5	$55.1	$57.7	$60.8
Unrestricted Cash	$194.2	---	---	$234.1	$226.1	$231.3	$198.2	$200.2	$186.2	$194.1	$204.4
Total Debt	$158.3	---	---	$114.7	$125.8	$127.4	$83.7	$79.9	$75.9	$71.7	$67.3
Capital Expenditures	$29.1	---	---	$58.3	$41.3	$44.7	$38.0	$44.0	$60.0	$40.0	$42.0
Profitability											
Operating Margin	1.9%	5.0%	2.0%	0.7%	(3.1%)	(0.0%)	0.9%	1.0%	1.2%	1.3%	1.5%
Operating EBIDA Margin	10.0%	12.0%	10.0%	7.9%	5.1%	7.6%	8.9%	9.2%	9.6%	9.9%	10.2%
Debt Position											
Debt Service Coverage (x)	4.2	4.5	3.5	12.8	4.3	6.2	1.2	6.7	7.0	7.3	7.6
Total Debt to Capitalization	41.0%	35.0%	45.0%	31.7%	31.7%	30.7%	21.6%	20.0%	18.4%	16.8%	15.2%
Liquidity											
Cash to Total Debt	112.7%	150.0%	110.0%	204.1%	179.7%	181.5%	236.8%	250.7%	245.4%	270.8%	303.6%
Days Cash on Hand (days)	175.9	200.0	175.0	193.6	185.0	185.7	159.7	159.9	147.1	150.9	156.7
Other											
Capital Spending Ratio	113.6%	120.0%	100.0%	189.6%	120.1%	133.0%	109.0%	121.6%	157.9%	100.4%	101.5%
Compensation Ratio	---			59.7%	63.2%	62.7%	61.4%	60.9%	60.8%	60.8%	60.8%

Source: Kaufman, Hall & Associates, Inc., 2014.

The foundation for the risk assessment is sensitivity and scenario analyses, performed to generate results—including impacts on the organization's ability to achieve targets—that can be compared directly to the plan results. Figure 12 indicates the potential risks over a three-year period under different scenarios assuming that the health care organization achieved only 50 percent of the desired benefits of its cost management, facility reconfiguration, service line redistribution and affiliation strategies. Clearly, this represents broad-brush sensitivity, but it is indicative of the range, specificity and intensity of risk analysis that can be performed. Even this high-level approach to risk analysis provides important and actionable information for management decision making. Given these results, management likely will want to focus the analysis more specifically on individual aspects of the plan.

Understanding the risk associated with a strategic financial plan enables leadership to establish appropriate key performance indicators and develop specific action plans to mitigate the impact of actual performance that is materially different than has been projected.

Figure 12. Testing the Strategies Through Risk Analysis

Sensitivity/Risk Analysis	Target Goal	Minimum Threshold	Year 1	Year 2	Year 3	Variance from Year 3
Strategic Plan						
Operating Margin	5.0%	2.0%	0.9%	1.0%	1.2%	**N/A**
Operating EBIDA Margin	12.0%	10.0%	8.9%	9.2%	9.6%	**N/A**
Debt to Capitalization	35.0%	45.0%	21.6%	20.0%	18.4%	**N/A**
Days Cash on Hand	200.0	175.0	159.7	159.9	147.1	**N/A**
Cost Management Initiative at 50%						
Operating Margin	5.0%	2.0%	0.7%	0.8%	0.9%	**(0.3%)**
Operating EBIDA Margin	12.0%	10.0%	8.5%	8.7%	8.9%	**(0.7%)**
Debt to Capitalization	35.0%	45.0%	21.7%	20.1%	18.5%	**0.1%**
Days Cash on Hand	200.0	175.0	155.7	155.9	143.1	**(4.0)**
Facility Reconfiguration at 50%						
Operating Margin	5.0%	2.0%	(1.1%)	(1.0%)	(0.8%)	**(2.0%)**
Operating EBIDA Margin	12.0%	10.0%	6.4%	6.7%	7.1%	**(2.5%)**
Debt to Capitalization	35.0%	45.0%	24.6%	23.0%	21.4%	**3.0%**
Days Cash on Hand	200.0	175.0	139.7	139.9	127.1	**(20.0)**
Service Line Strategy at 50%						
Operating Margin	5.0%	2.0%	(0.1%)	(0.0%)	0.2%	**(0.7%)**
Operating EBIDA Margin	12.0%	10.0%	7.4%	7.7%	8.1%	**(0.8%)**
Debt to Capitalization	35.0%	45.0%	22.1%	20.5%	18.9%	**0.5%**
Days Cash on Hand	200.0	175.0	149.7	149.9	137.1	**(6.0)**
Partnership Evaluation at 50%						
Operating Margin	5.0%	2.0%	0.8%	0.9%	1.1%	**(0.1%)**
Operating EBIDA Margin	12.0%	10.0%	8.9%	9.2%	9.6%	**0.0%**
Debt to Capitalization	35.0%	45.0%	27.5%	25.9%	24.3%	**5.9%**
Days Cash on Hand	200.0	175.0	185.4	185.6	172.8	**25.7**

Source: Kaufman, Hall & Associates, Inc., 2014.

Conclusion

A robust strategic financial planning process is imperative for hospitals and health care systems in the current environment. The planning process links operational strategies to the reality of organizational financial and capital capacity. Identifying a baseline financial trajectory and layering on the projected impacts of core strategies provides leadership with an objective means to determine the most fiscally responsible approach going forward. Strategies and results, performance targets and risk analyses developed as part of the financial plan enable health care organizations to maximize strategic and financial goals within the context of maintaining ongoing access to external capital and ensuring the continued provision of high-value care to the communities they serve.

Developing a strategic financial plan is not a "one-and-done" process. The process requires vigilant monitoring, flexibility and updating as markets evolve and strategies are implemented. To support this organic process, health care organizations should develop mechanisms to continually revisit and monitor performance compared to plan projections. Monthly or quarterly review is recommended to keep pace with changes in the field.

Uncertainty is prevalent in the current environment, and unforeseen circumstances—such as the emergence of a new market competitor or an economic downturn—may intervene to disrupt even the best laid plans. As outlined in this guide, using a disciplined decision-making platform that applies core corporate planning fundamentals provides hospitals and health care systems with the ability to measure continuing performance, anticipate potential problem areas, and make informed decisions to change course as needed to ensure sustainability and success into the future.

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About Kaufman, Hall & Associates, Inc.

Kaufman, Hall & Associates, Inc., provides management consulting services and enterprise performance management software to enable data-driven analysis and transform financial, operational and strategic planning and results. Since 1985, Kaufman Hall has been a leading advisor to senior management teams and boards in health care organizations, helping them to incorporate proven methods into their strategic planning and financial management, quantify the financial impact of their plans and actions, and consistently achieve their goals.

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Hospitals in Pursuit of Excellence is the American Hospital Association's strategic platform to accelerate performance improvement and support delivery system transformation in the nation's hospitals and health care systems. Working in collaboration with allied hospital associations and national partners, HPOE synthesizes and disseminates knowledge, shares proven practices, and spreads innovation to support care improvement at the local level. For further information, visit www.hpoe.org.

Building a Leadership Team for the Health Care Organization of the Future

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Executive Summary

As a follow-up to the American Hospital Association's reports "Hospitals and Care Systems of the Future" and "Metrics for the Second Curve of Health Care," Spencer Stuart and the AHA examined how the shift toward health care's "second curve" is impacting the leadership, talent and organizational models of hospitals and care systems. A survey of senior hospital and care system executives and additional interviews with more than two dozen leaders in the field reveal the ways health care organizations are responding to changes within the field and building the teams needed to achieve their strategic priorities.

Identifying capability gaps and evolving the executive team to address them

- Nearly 70 percent of hospital and care system leaders surveyed expressed confidence that their current senior management team has the experience and skill sets to help the organization achieve its strategic priorities.

- Experience in leading nontraditional health partnerships and population health management was seen as the most common capability gap, followed by change management experience, advanced financial expertise and data analytics.

- Sixty percent of health care leadership teams are larger than they were three years ago.

- Physicians and nurses are being tapped more often for leadership roles, including many of the new senior executive positions that organizations are creating to address specific strategic areas, or to participate in management dyads or triads and co-lead with administrators newly established or existing service lines.

- Traditional hospital roles are changing and becoming more strategic and larger in scope, to respond to the changing demands of the field. CMOs, CNOs, CFOs and COOs are being asked to develop a broader set of leadership and technical skills and increase their understanding of health care delivery beyond the hospital setting.

Experimenting with different organizational approaches

- Hospitals and care systems are experimenting with different organizational models, with the goal of identifying best practices, promoting innovation and collaboration, improving patient outcomes, increasing operational efficiency and standardization, and ensuring that care is coordinated across the continuum of services.

- Management dyads and triads, in which clinical leaders are paired with administrators to jointly oversee service lines or clinical areas, are intended to encourage systems thinking and align clinical and operational resources to improve outcomes and efficiency.

- Matrix organizations and multiple reporting relationships also are becoming more common, as are system-level leadership roles charged with standardizing practices and purchasing across the entire organization.

- Some health care organizations are creating physician strategy groups, executive strategy committees or councils on clinical innovation to encourage broader clinician participation in strategic initiatives.

Building teams through selective hiring and training

- Executives with experience in community and population health management and experts in change management will be hardest to find within the health care sector, according to survey respondents.

- As they seek leaders in new disciplines, some health care organizations today are more willing to consider candidates from outside the sector for certain capabilities; these capabilities include retail and customer insight experience, analytics, enterprise risk management and insurance expertise.

- Organizations can improve their success hiring executives from outside health care or promoting internal candidates into first-time leadership roles by carefully defining the technical knowledge and leadership skills that are required and consistently assessing candidates against those capabilities.

- Cultural fit is an important consideration; ideally, organizations will define the cultural traits that need to be developed in the organization and select leaders with traits that match the direction in which the culture needs to move.

- Seventy-nine percent of survey respondents said their organization has established in-house customized training programs for senior management during the past three years, and nearly 80 percent said training programs are focused on developing leadership skills.

Evaluating the composition of the board and whether it includes representatives with the most relevant experience

- Many boards, especially those of regional health care systems and corporate health care entities, are adding expertise in new areas.

- Board members with expertise in consumer businesses, marketing, social media, change management and the payer side of the business all are in demand.

- Boards of national and larger regional health care organizations with sophisticated governance practices and procedures are best positioned to attract members with these profiles. However, all boards can benefit from adopting best-in-class governance processes and practices that allow members to contribute at a higher level.

Introduction

Health care reform is presenting unprecedented challenges and opportunities for U.S. health care organizations. Health care delivery is moving away from the traditional fee-for-service system, designed around "sick care" and hospital stays, toward a population health management system with value-based reimbursement and a focus on improving the quality, safety and efficiency of patient care. As the American Hospital Association detailed in two reports, "Hospitals and Care Systems of the Future" and "Metrics for the Second Curve of Health Care," success in health care's "second curve" will require developing and executing new business and service models, forging new partnerships and alliances, and developing new capabilities and approaches to organize effectively around these new models.[1,2] See Figure 1.

Figure 1. First Curve to Second Curve
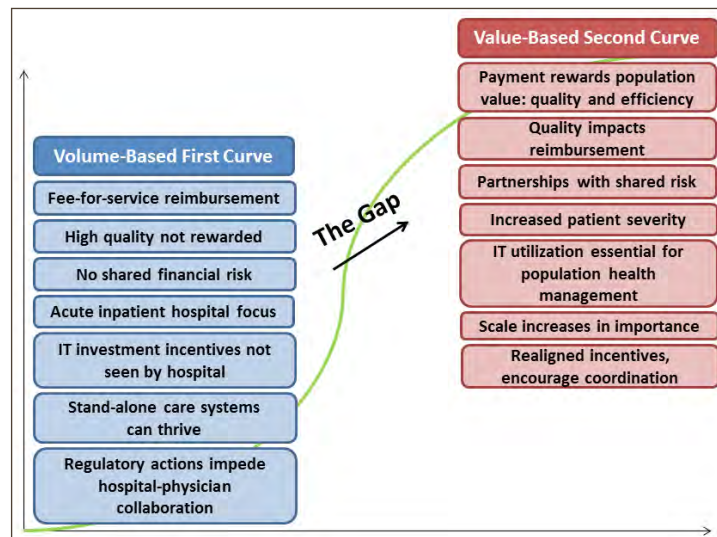
Source: Adapted from Ian Morrison, 2011.

Such a far-reaching shift in the field of health care must drive similarly dramatic changes in the leadership, talent and organizational models of hospitals and care systems. Inspired by the AHA reports, Spencer Stuart, a leading senior executive search and leadership advisory firm, explored the talent, leadership and organizational implications of health care reform to answer questions such as:

- What leadership capabilities will become more important for health care organizations transitioning to new care delivery, financial risk and population health management models?

- How are traditional roles, such as the chief financial officer, chief medical officer and chief nursing officer, evolving in response to changing business needs?

- How might physician and nurse leaders be tapped to play a larger role in the future?

- What new roles and titles are emerging?

- How is the structure of the executive team evolving?

- What new capabilities will health care organizations need to develop or acquire?

- From where will executives with newly required leadership skills and competencies come? Within the health care system or from other industries? Or through recruitment or training?

- Do hospital and care system boards have the expertise needed to provide valuable guidance and perspective to management teams?
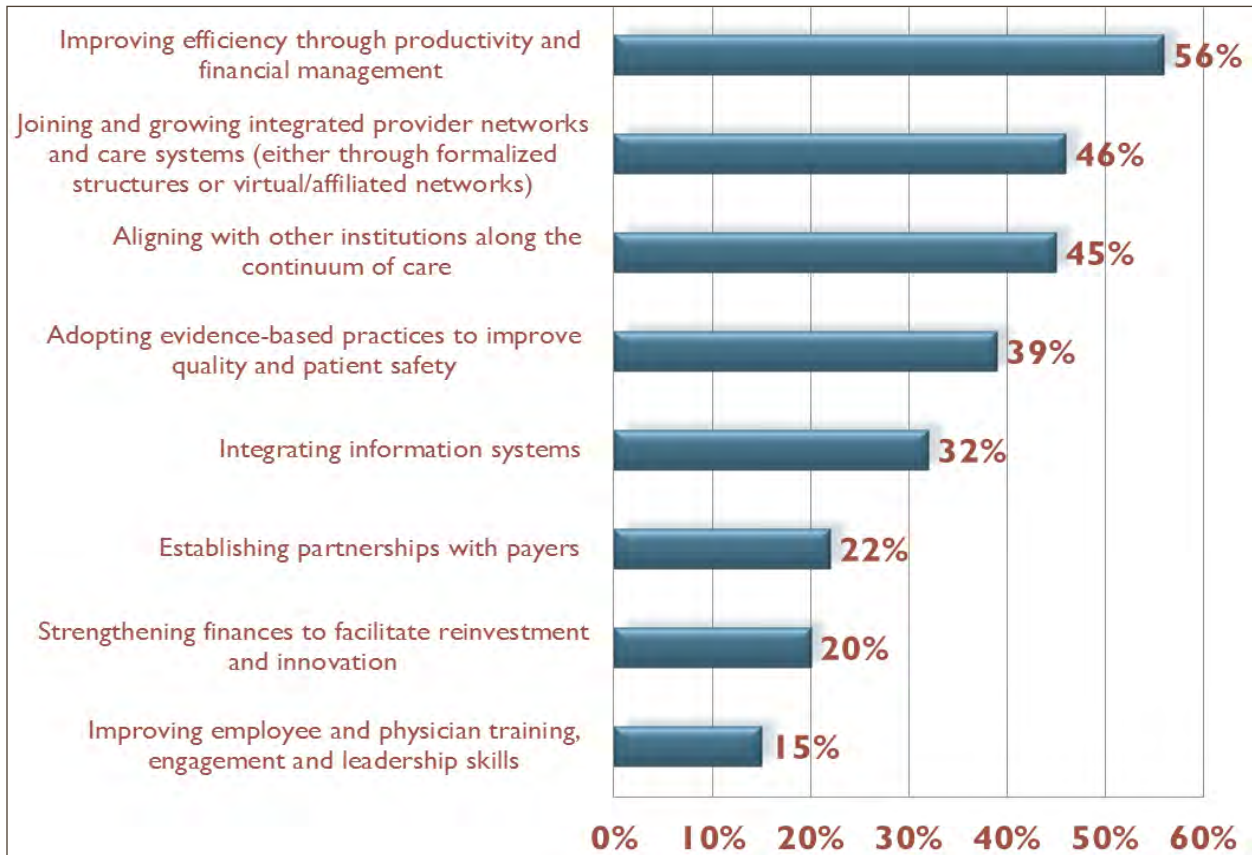
To address these questions, Spencer Stuart and the AHA conducted an online survey of more than 1,100 executives, primarily from large health care systems across the United States. In addition, follow-up, one-on-one conversations were conducted with a group of more than 25 senior health care leaders, including chief executive officers, chief medical officers, chief nursing officers and chief human resources leaders, to understand how they are responding to these questions and structuring their leadership teams for a dramatically changing health care marketplace. (See the appendix for survey methodology and respondent breakdown.)

Strategic Priorities and Capabilities for the Second Curve of Health Care

As health care organizations focus on the Triple Aim — better care, better health, lower costs — and shift toward value-based contracting and away from fee-for-service plans, top priorities are: improving the quality and efficiency of health care delivery, providing better patient care, and aligning with partners to share risk and provide services along the continuum of care. In the survey of hospital and care system leaders about their priorities, one strategic imperative rose to the top: Improving efficiency through productivity and financial management was cited by more than half of respondents. See Figure 2.

Figure 2. Key Strategic Priorities

What are the key strategic priorities for your organization over the next three years?

Priority	Percentage
Improving efficiency through productivity and financial management	56%
Joining and growing integrated provider networks and care systems (either through formalized structures or virtual/affiliated networks)	46%
Aligning with other institutions along the continuum of care	45%
Adopting evidence-based practices to improve quality and patient safety	39%
Integrating information systems	32%
Establishing partnerships with payers	22%
Strengthening finances to facilitate reinvestment and innovation	20%
Improving employee and physician training, engagement and leadership skills	15%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Discussions with executives largely reinforced the survey findings, as summarized below. In many cases, implementing these strategies will require organizations to build new capabilities.

- *Improving cost management and efficiency.* Clinical and operational efficiency will be critical in an environment in which health care organizations expect to serve more patients with lower reimbursements. Indeed, 56 percent of survey respondents said improving efficiency through productivity and financial management is a key strategic priority for the next three years. Since hospitals and care systems will have to be prepared to manage costs very effectively and accept more financial risk, they will need leaders who understand changing risk models and can manage care from a total-cost-of-care perspective. Clinician engagement and support will be critical for the success of cost-management initiatives, including pharmacy and supply chain management. With change on the horizon, many health care organizations have spent the past several years putting in place the infrastructure, processes and people to operate in a value-based model ahead of market demand. In the years ahead, these organizations will have to make difficult decisions about when to shift to the new value-based payment model.

- *Increasing clinical integration and expanding coordinated care.* The movement toward population health management models requires health care organizations to expand their focus beyond the inpatient setting to the entire continuum of care. To that end, organizations are making acquisitions and forging partnerships with physician groups, rehabilitation services and other post-acute providers, and freestanding emergency care organizations to create a unified enterprise with complete systems of care. These activities will continue to be a priority: 46 percent of respondents cited joining and growing integrated provider networks and care systems as a top strategic priority for the next three years, and 45 percent said aligning with other organizations across the continuum of care will be a key strategy. Hospitals and care systems will need deal-savvy executives who are well versed in due diligence, deal structures and finance, and administrators will have to partner with physicians and other clinicians to manage the clinical enterprise together. To ensure that patients receive the right care in the right setting and at the lowest cost, health care systems will need to improve quality, service and efficiency across the system and be able to coordinate care across these services. Collaboration and partnership development will be critical to clinical management and improving patient care.

- *Improving quality and patient safety.* The whole structure of health care payments is changing, and this has enormous implications for how care is delivered, the incentives that physicians receive and the infrastructure and capabilities that are needed. In a value-based environment, payment models will shift toward compensation based on patient health outcomes, efficiency and quality across specific populations. In short, quality will have an impact on reimbursement. More than one-third of survey respondents, 39 percent, said a key priority for their organizations over the next three years will be to adopt evidence-based practices to improve quality and patient safety. In addition to improving quality amid greater transparency, organizations will need to adopt a more holistic approach to health care and prevention, requiring capabilities in care management, chronic disease management, and data analytics.

- *Integrating information systems and becoming more data savvy.* To improve efficiency, organizations are building capabilities in data analytics, population health management and process improvement. Enhanced data analytics capabilities and integrated information systems will support risk-bearing activities and provide real-time financial and clinical information to help health care organizations establish benchmarks and understand their performance against quality and efficiency targets. For that reason, 32 percent of survey respondents said integrating information systems will be a top strategic priority. In addition, the ability to interpret data and apply it to the most important issues for the organization is a growing expectation for all senior health care executives.

- *Ongoing innovation and change management*. The sheer magnitude and velocity of change is challenging many health care organizations, as they try to keep pace and manage amid many competing priorities. Not only are changes in reimbursement and care delivery testing organizations, traditional health care organizations also have to keep an eye on new competitors emerging from the retail and technology sectors — and evaluate whether and how to compete or collaborate with these recent entrants. As they rethink and build strategy, health care organizations need to address many more scenarios and be prepared to respond to changing assumptions. For some, responsibility for innovation and strategic thinking is dispersed across the leadership team, while other organizations place primary responsibility for innovation with committees or specific senior leadership roles. Change management also will need to be a core competency.

- *Increasing patient engagement.* In a changing competitive landscape, hospitals and care systems are looking for ways to provide more convenient access to services and a smoother, more engaging patient experience. Expertise in customer insight and retail will be increasingly valuable as organizations strive to truly understand the patient (customer) and apply those insights to patient experience innovations, especially providing more personal and memorable customer service. Many health care organizations are hiring experts in retail, marketing and communications to improve their ability to reach and communicate with current and potential patients, develop pricing strategies and provide new technology-based services.

Challenges to Achieving Strategic Priorities

As health care organizations pursue these strategic priorities, what potential challenges do they face? Among survey respondents, financial constraints and physician buy-in and engagement are seen as the most significant hurdles to achieving their organizations' strategic priorities, each cited by more than one-quarter of respondents. Other challenges include organizational barriers to collaboration, lack of the necessary capabilities for key roles and cultural impediments to change. See Figure 3.

Figure 3. Strategic Challenges

What do you anticipate will be the primary hurdle to achieving the organization's strategic priorities?

26%	**26%**	**15%**
Physician buy-in and engagement	Financial constraints	Organizational barriers to collaboration

14%	**14%**
Lack of talent/skill sets for key roles	Cultural impediments within organization
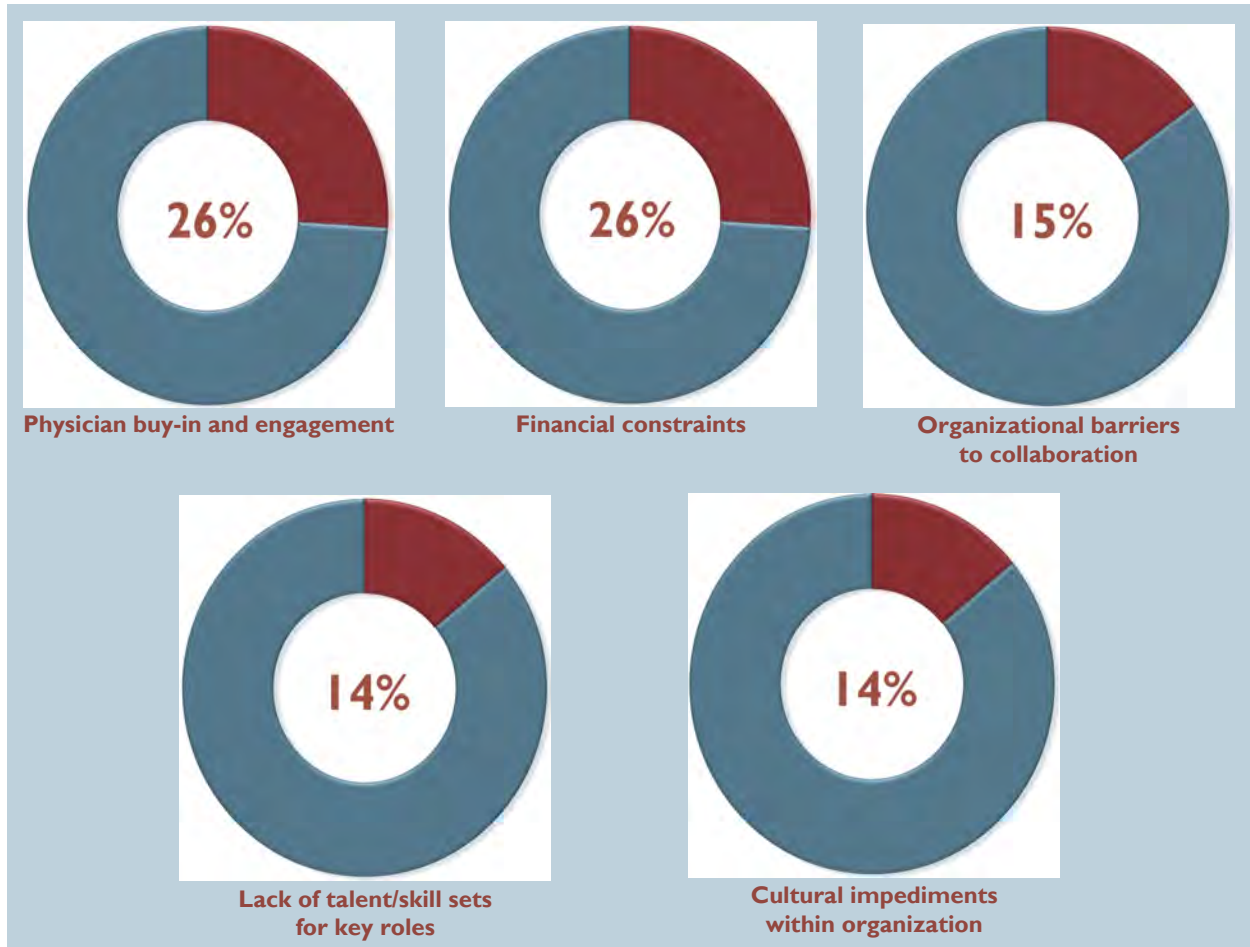
Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

New Leadership Roles, New Capabilities:
The Emerging Health Care Organization

Despite the breadth of capabilities health care organizations need to build, the hospital and care system executives who responded to the survey were largely confident in their senior management team. In fact, nearly 70 percent expressed confidence that their current senior management team has the experience and skill sets to help the organization achieve its strategic priorities.

Do you feel your current senior management team has members with the right experience, skill sets and talent needed to achieve these strategic priorities?	Yes 68% No 32%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

The interviews revealed that building the leadership team and organizational capabilities to respond to changes in the field has been a major priority for many health care organizations during the past several years. Specifically, health care organizations have been focusing on six primary areas:

- Identifying capability gaps and evolving the executive team to address them

- Expanding the management team by creating new executive roles with a broader set of experience and perspectives, including more clinicians and executives bringing new functional expertise

- Updating the expectations for and responsibilities of traditional hospital leaders to reflect changing organizational priorities

- Experimenting with different organizational approaches to stimulate collaboration, improve operational efficiency and promote standardization

- Establishing mechanisms to promote clinician engagement in quality, efficiency and innovation initiatives

- Evaluating the composition of the board and whether it includes representatives with the most relevant experience

New Perspectives on the Management Team

Despite expressing confidence in their senior executive team, survey respondents pointed to a number of gaps in their organizations' capabilities. More than half, 54 percent, identified experience in leading nontraditional health partnerships, such as joint ventures or strategic partnerships with payers and retailers, as a primary capability gap for their organizations. In addition, 48 percent of respondents identified community and population health management experience as a talent gap. Experience in transformational change and change management was cited as a gap by 41 percent of respondents, and 37 percent said their organization lacked advanced financial expertise. Innovative thinking and creativity and data analytics experience were cited as talent gaps by 34 percent and 29 percent of respondents, respectively. See Figure 4.

Figure 4. Talent Gaps

Where are the primary talent gaps within your organization? (Choose the top three)

Talent Gap	Percentage
Nontraditional health partnerships (e.g., joint ventures, strategic partnerships)	54%
Community and population health management experience	48%
Transformational change/change management	41%
Advanced financial expertise (e.g., new payment and risk models)	37%
Innovative thinking/creativity	34%
Data analytics	29%
Critical thinking/strategic planning	25%
Information technology strategy and management	18%
Service and patient focus	9%
Internal constituency relationship-building experience	6%
Clinical experience	6%
Quality/patient safety expertise	5%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Health care organizations are working to close these gaps on several fronts. Some talent gaps are being addressed by training or by expanding the roles of current executives. However, some of these gaps are being addressed through the addition of new executive team positions to lead and galvanize support for initiatives in top strategic areas. Indeed, 60 percent of survey respondents said the senior-management team of their organization is larger today than it was three years ago.

> "We're spending a lot of capital building the infrastructure so that, when the day does come, we can make gigantic strides forward in getting these covered lives and managing the associated financial risk of having those lives and premium dollars."
> —Health system CEO

Population health management is an area some organizations are filling through the addition of senior-level positions and teams — for example, insurance and risk management experts who can help the organization manage nontraditional risk and risk related to chronic disease management, and quality experts who can identify ways to improve the quality and consistency of health care delivery. Thirty percent of respondents said their senior management team includes a risk officer, and 10 percent have a chief population health manager.

A related priority for many health care organizations is expanding their capabilities in data analytics to understand how the organization is performing against quality and efficiency targets and identify new opportunities for improving patient care and the patient experience. Leadership roles in knowledge management, technology innovation, medical informatics and analytics are becoming more common. Thirty percent of survey respondents said their senior management teams include a chief medical informatics officer. "We're spending a lot of capital building the infrastructure

so that, when the day does come, we can make gigantic strides forward in getting these covered lives and managing the associated financial risk of having those lives and premium dollars," one health system CEO commented.

To bolster their ability to drive innovation in health care delivery and business models, some health care organizations have created leadership positions in strategy and innovation. In the survey, 44 percent of respondents said their senior management team includes a chief strategy officer, and 8 percent have a chief innovation officer. It is not unusual for health care organizations creating strategy or innovation roles to look for candidates from digital or e-commerce businesses who are creative, out-of-the-box thinkers.

Many organizations diffuse responsibility for strategy and innovation across the leadership team. While this approach has the benefit of placing responsibility for these activities closer to those who can execute them, it can be challenging for clinical and functional leaders to devote sufficient time to these efforts.

> "The day-to-day management is so hard that to ask those same people to think about how they can put themselves out of work and be that kind of 'creative' is almost impossible."
> —Health system CEO

"The day-to-day management is so hard that to ask those same people to think about how they can put themselves out of work and be that kind of 'creative' is almost impossible," explained the CEO of one health care system. Senior-level strategy and innovation executives bring new ideas to the organization, work with the management team to implement initiatives, track and communicate performance metrics, and engage the front-line staff to identify and remove barriers to change. Some organizations also are establishing executive roles in patient experience — 15 percent of survey respondents said their senior leadership team includes a patient engagement officer — to make sure they innovate on the customer service side as well.

Another priority area is operational excellence and clinical efficiency. Executives with titles such as vice president of cost containment, chief population health manager and chief clinical transformation officer are joining management teams to oversee areas such as clinical innovation, care delivery across settings and medical leadership infrastructure. See Figure 5.

Emerging titles in health care

- Chief population health manager
- Vice president of cost containment
- Chief clinical transformation officer
- Chief experience officer/patient engagement officer

- Head of technology innovation
- Chief medical informatics officer
- Vice president of clinical transformation
- Vice president of medical management
- Vice president of clinical informatics

While many of the leaders with these new job titles are considered part of the senior management team, the survey revealed significant differences in how frequently they are engaged in executive decision making. For example, 36 percent of respondents said the chief strategy officer is always involved in decision making, but only 15 percent said the quality officer is always involved. Chief medical informatics officers and patient engagement officers are more likely to be involved in decision making based on the topic. See Figure 6.

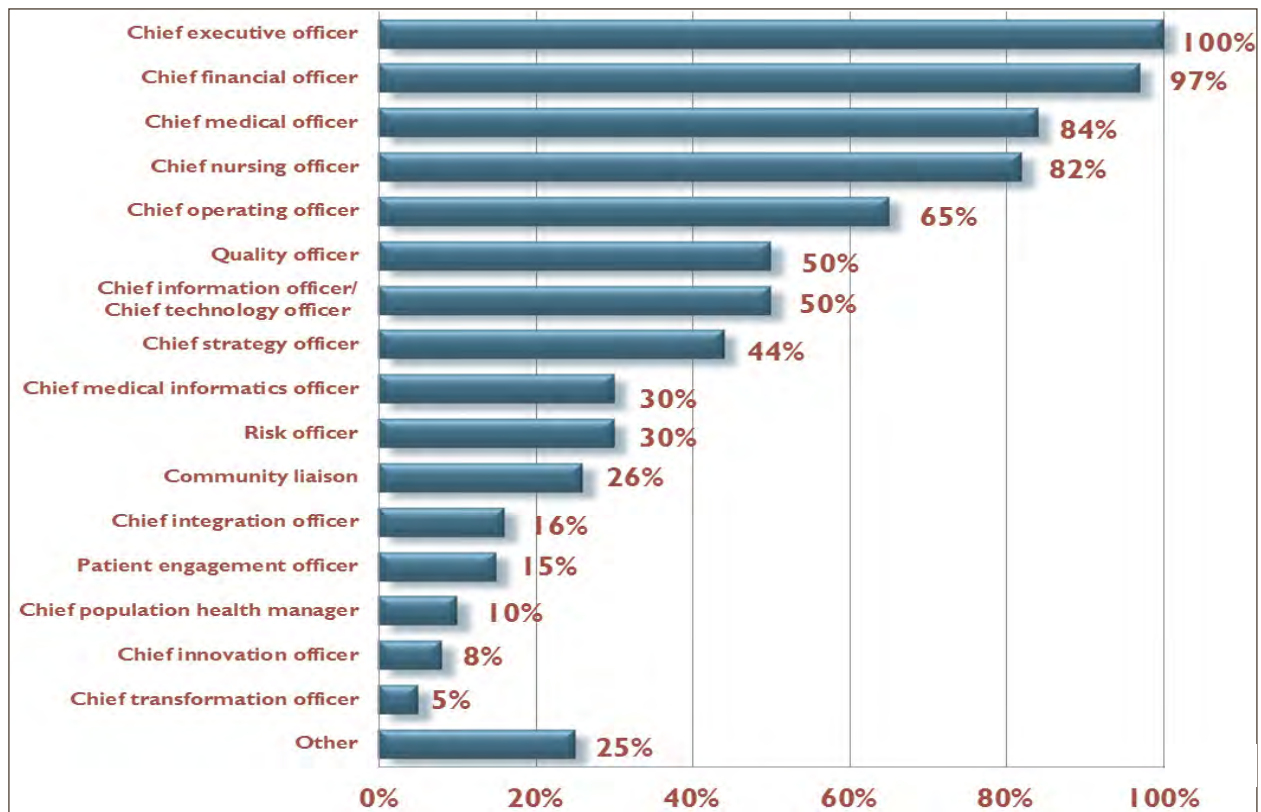| Is the senior management team of your organization bigger than it was three years ago?	Yes 60%
	No 40%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

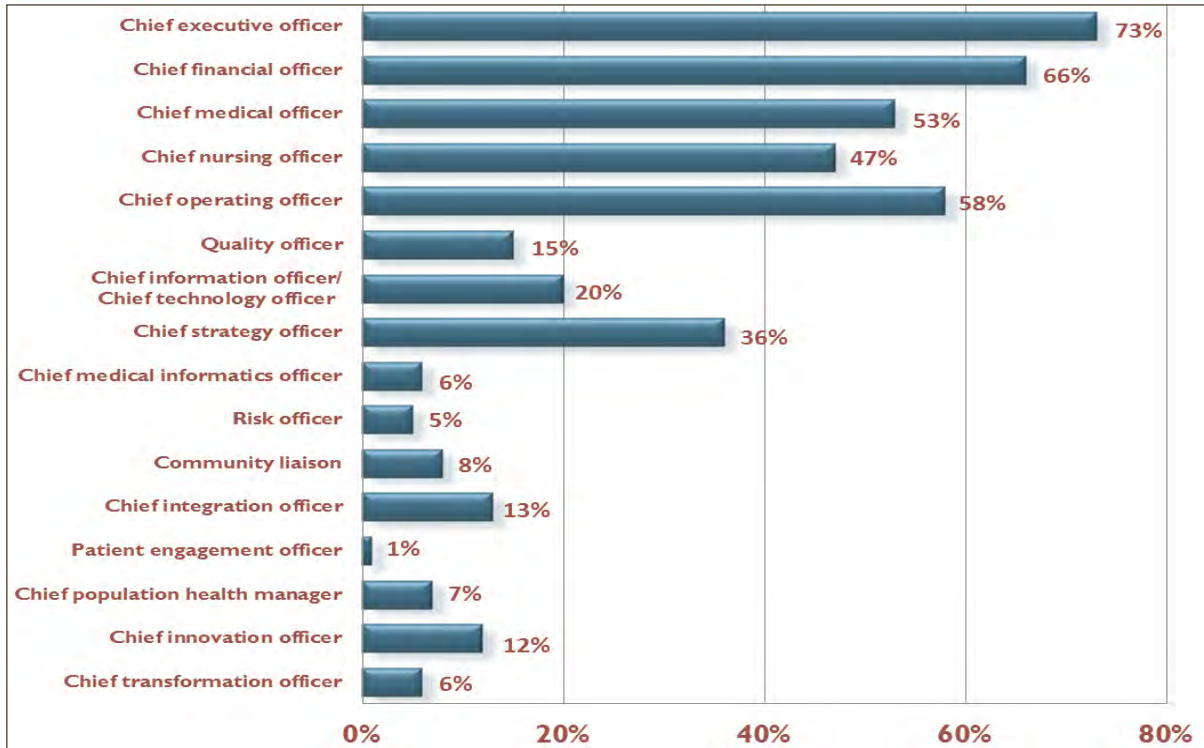*Figure 5. Roles Represented in Senior Management Team*

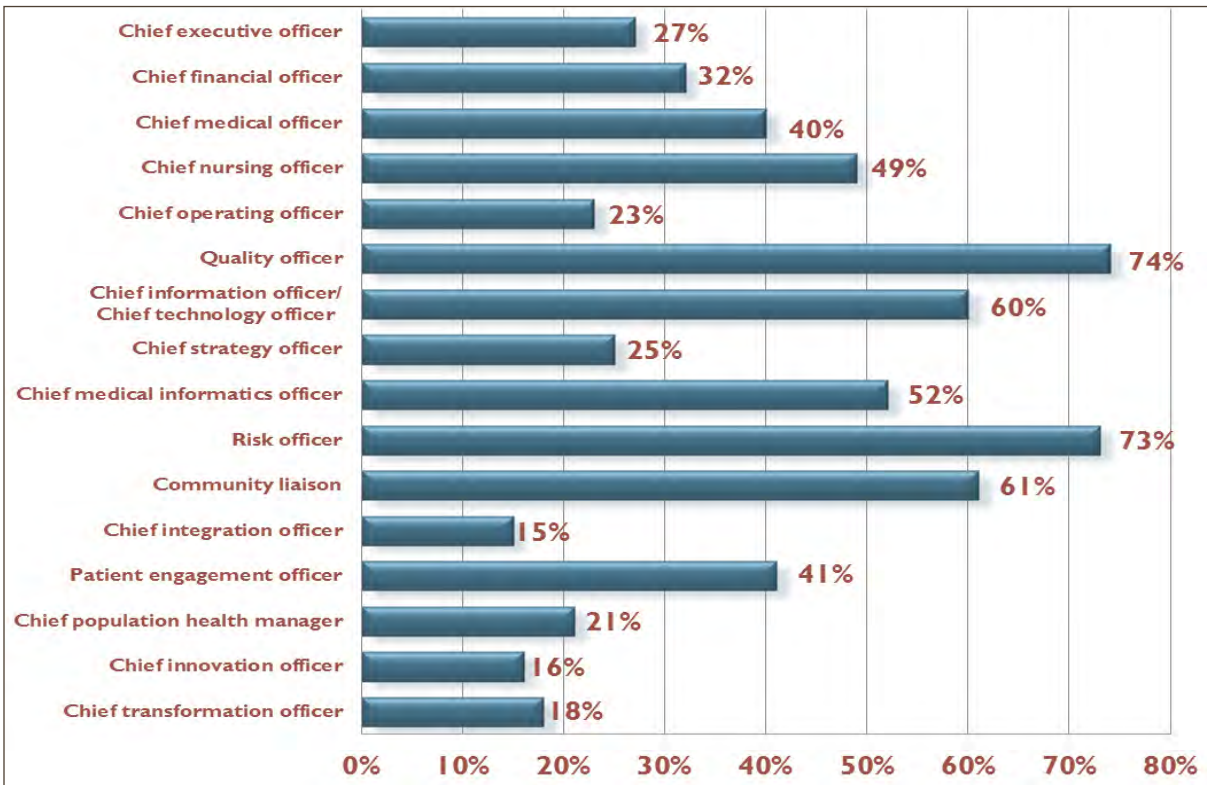**What roles are represented in today's senior management team?**

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Figure 6. Roles in Decision-Making Processes

Which of the roles below are <u>always involved</u> in the regular decision-making process?

Chief executive officer — 73%
Chief financial officer — 66%
Chief medical officer — 53%
Chief nursing officer — 47%
Chief operating officer — 58%
Quality officer — 15%
Chief information officer/Chief technology officer — 20%
Chief strategy officer — 36%
Chief medical informatics officer — 6%
Risk officer — 5%
Community liaison — 8%
Chief integration officer — 13%
Patient engagement officer — 1%
Chief population health manager — 7%
Chief innovation officer — 12%
Chief transformation officer — 6%

Which of the roles below are engaged in the decision-making process <u>when necessary by topic</u>?

Chief executive officer — 27%
Chief financial officer — 32%
Chief medical officer — 40%
Chief nursing officer — 49%
Chief operating officer — 23%
Quality officer — 74%
Chief information officer/Chief technology officer — 60%
Chief strategy officer — 25%
Chief medical informatics officer — 52%
Risk officer — 73%
Community liaison — 61%
Chief integration officer — 15%
Patient engagement officer — 41%
Chief population health manager — 21%
Chief innovation officer — 16%
Chief transformation officer — 18%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Traditional Roles Evolving

At the same time that organizations are creating leadership positions to address emerging priorities, traditional hospital roles are changing: They are becoming more strategic and larger in scope in order to respond to the changing demands of the health care field.

The chief medical officer (CMO), for example, once was responsible primarily for managing medical staff and physician leaders, often serving as a staff liaison to administrators. Today the role is more operational and strategic, focusing on quality targets and efficiency, strategic planning, long-range forecasting and decision analysis. Increasingly, the CMO drives quality, safety, patient experience, medical staff relations and the coordination of care. The CMO is regarded as a key member of the executive team in hospitals and academic medical centers, helping set strategy and drive the operational performance of the clinical enterprise. Amid the changes of health care reform, the CMO is responsible for implementing new care delivery models and analyzing evolving payment methodologies.

The CMO role also has become more outwardly focused, requiring more interaction with other organizations and more marketing savvy. CMOs increasingly need to be strong communicators and skilled collaborators with internal and external stakeholders. They need a more broad-based understanding of health care delivery beyond the hospital setting, as well as an appreciation for the field's changing economics. They must have an orientation toward customer service and patient satisfaction and the emotional intelligence to work effectively with various constituencies — including the ability to influence other physicians.

Similarly, the responsibilities of the chief nursing officer (CNO) are also broader in scope and more operational. Once viewed largely as an advocate for the nursing staff, the CNO has emerged in some organizations as a chief clinician and patient advocate, with a matrix of relationships and responsibilities across the broader organization. Like CMOs, CNOs must increase their knowledge of health care delivery across the continuum of care, including pharmacy and care management, and develop relationships across the continuum. "It's time to get out of the nursing box and take the lead on hospital initiatives and create further relationships across the continuum of care," according to one chief nursing officer interviewed. "Nurse executives are more widely understanding of the strategies, approaches and collaboration and are beginning to be seen more as equals." Nurse leaders also will play a critical role in building a team- and patient-centered mindset among nursing professionals.

Traditionally viewed as a financial gatekeeper and scorekeeper, the hospital chief financial officer (CFO) is something altogether different today. CEOs are looking to CFOs to be true business partners who not only understand the finances but also can bring perspectives on risk, insurance and clinical issues to strategic decisions. Against a backdrop of market consolidation and growing numbers of mergers, acquisitions and strategic partnerships, CFOs need to help the management team evaluate the upside potential and risks of new business models and opportunities. In a capital-constrained environment, CFOs will need to find creative solutions for financing new initiatives and better managing the overall operations of the organization. They have to understand the clinical side of the health care business and possess the analytical and interpersonal skills to collaborate with clinicians and other administrators to evaluate and manage the organization's risk.

> "It's time to get out of the nursing box and take the lead on hospital initiatives and create further relationships across the continuum of care. Nurse executives are more widely understanding of the strategies, approaches and collaboration and are beginning to be seen more as equals."
>
> —Chief nursing officer

The chief operating officer (COO) is becoming the "integrator in chief," as noted by the AHA's *Hospitals & Health Networks* magazine.[3] The COO is responsible for overseeing the coordination of a range of operational activities, including managing population health outcomes and financial risk and coordinating inpatient care with physician offices and nonacute services. In addition, the COO's command of operational issues frees more time for the CEO to devote to strategic and external responsibilities, including advocacy, philanthropy and partnerships.

Figure 7. Changing Roles for Health Care Leaders

	Historical	**Today**
Chief medical officer	Medical staff management	More operational and strategic, focusing on quality and efficiency targets, strategic planning, partnerships, long-range forecasting and decision analysis
Chief nursing officer	Advocate for nursing and patient care	Broader and more operational role; integral member of the management team in many organizations
Chief financial officer	Scorekeeper, financial gatekeeper	Business partner to the enterprise, advising on risk, insurance and strategic decisions
Chief operating officer	Focused internally	"Integrator in chief," overseeing a range of operational activities across continuum, e.g., population health outcomes, coordination of inpatient care with physician offices and nonacute services

Source: Spencer Stuart / AHA Interviews, 2013.

More Clinicians in Leadership Roles

Physician Engagement

Physician buy-in and engagement were cited as the primary hurdle to achieving strategic priorities by 26 percent of respondents, the most of all the responses. Engaging physicians and other clinical staff in change is critical to improving quality and consistency and reducing the cost of care — the underpinnings of successful population health strategies.

Organizations are involving physicians in the change process on multiple fronts. At most organizations, physicians have a voice at the highest levels of decision making, with senior physician leaders serving on the management team and strategy committees. More broadly, hospitals and care systems are identifying ways to incentivize and involve physicians, both employed and contracted.

Involving physicians early in strategic and operational planning and in a meaningful capacity is critical, health care executives told us. "What physicians want is to be part of the leadership effort. They need to be the architects," said one CEO. "People who say that they are the resistors just don't get it."

Physician leaders can be very influential in encouraging support for changes among the broader clinical population. Mechanisms such as performance improvement committees and medical executive committees have proved to be powerful tools for involving clinical leaders in decision making and communicating to the broader organization. "Our change management model is very physician-leadership-centric. That is to say, we're very reliant on our physicians and the physician chain of command to secure physician buy-in and then drive physician change," said one health care system CEO.

Health care systems also work closely with physician independent practice associations, which may take the lead on quality and patient safety initiatives and participate in strategic and operational planning. One health care system created a new board committee with physicians across the system — not just hospital-based physicians — that meets quarterly with the board to discuss strategy and solicit input on policies and plans.

Hospital and health care system leadership once was viewed largely as the purview of nonphysician administrators and, even more recently, administrators have been seen as the primary drivers of strategy and change. That perspective is quickly evolving, as hospitals and care systems alter care delivery models, evaluate clinical design and reorganize into service lines. In this changing environment, clinical thinking must be integrated into operational decisions. "It will be critical for clinical leaders to be involved at the top so that change can occur more quickly," one executive noted.

More physicians and nurses are being tapped for leadership roles, including many of the new senior executive positions that organizations are creating to address specific strategic areas. New management team roles, such as vice president of clinical transformation, vice president of medical management and vice president of clinical informatics, are being filled by physician leaders. In addition, physicians increasingly are leading or co-leading newly established or existing service lines and participating in management dyads or triads. Organizations are also creating health system CNO roles to align responsibility for nursing under one person throughout the system, making it easier to escalate standardization and centralize resources across services.

"I just added four physicians to my senior leadership meetings, which expanded our group by about 25 percent," said one health care system CEO. "That is a lot of people, but I felt it was important to have the physician's voice heard at the senior leadership table. [Physicians] represent private practice. They represent faculty. They represent chairs. It's a broad cross section of people who are going to be at the table now every week when we talk about operational issues."

> "It will be critical for clinical leaders to be involved at the top so that change can occur more quickly."
>
> —Hospital CEO

> "It's a broad cross section of people who are going to be at the table now every week when we talk about operational issues."
> —Health system CEO

In addition to these roles at the top, many health care organizations are establishing a new layer of clinical leadership positions to facilitate the buy-in and engagement of physicians and nurses for care delivery redesign and organizational alignment initiatives.

The physicians and nurses who will be most effective in these leadership roles have the ability to work with a variety of constituencies, including their clinical colleagues, the public, external partners and patients in a more patient-centric model. This requires a set of skills that physicians and nurses may not have needed in the past: exceptional interpersonal skills, team-management and team-building skills, an understanding of health care economics, analytical skills and the ability to influence and drive change. For some clinicians, developing a more collaborative mindset may require overcoming deeply ingrained perceptions; as one physician noted, "In medical school, teamwork was called cheating."

Broad Leadership Skills Needed

Over and over again, in the survey and in one-on-one discussions, health care executives emphasized the need to develop broad leadership skills at all levels of the organization. In this era of unprecedented change in the field, organizations need executives and managers who are up to the task of identifying new opportunities, executing these initiatives at a high level, collaborating with different stakeholders and inspiring new behaviors. Change management is a hugely complex task that requires a very broad skill set, including business judgment and strategic insight, social intelligence, self-awareness and excellent people management skills. Health care leaders need to be able to execute plans, hold people accountable and be comfortable with uncertainty and a rapid pace of change. As shown in Figure 8, survey respondents identified critical thinking/strategic planning, innovative thinking/creativity, and transformational change/ change management as the most critical skills for the future.

> "Increasingly, leaders of hospitals or academic medical centers need to make sure the talent is chosen for their overall leadership skills."
> —Health system executive

As one health system executive explained, "Increasingly, leaders of hospitals or academic medical centers need to make sure the talent is chosen for their overall leadership skills, not because they were the best physician or the best accountant or the best IT person. These are complex businesses in a fast-changing environment."

Many health care organizations have formally identified the critical competencies that will be needed in senior leaders. One CEO, for example, identified a list of 12, ranging from personal integrity and passion for results to quiet courage and the ability to collaborate effectively with colleagues to get things done — and not just to be the loudest voice in the room.

Not surprisingly, communication and interpersonal skills regularly came up as important leadership skills in interviews. Others included: multidisciplinary orientation; a solid understanding of the broader business of health care; excellent facilitator skills; strong analytical skills; flexibility and resourcefulness; resilience; and financial management skills.

Figure 8. Critical Skills for Future Health Care Leaders

Skills that will be most critical in the next three years
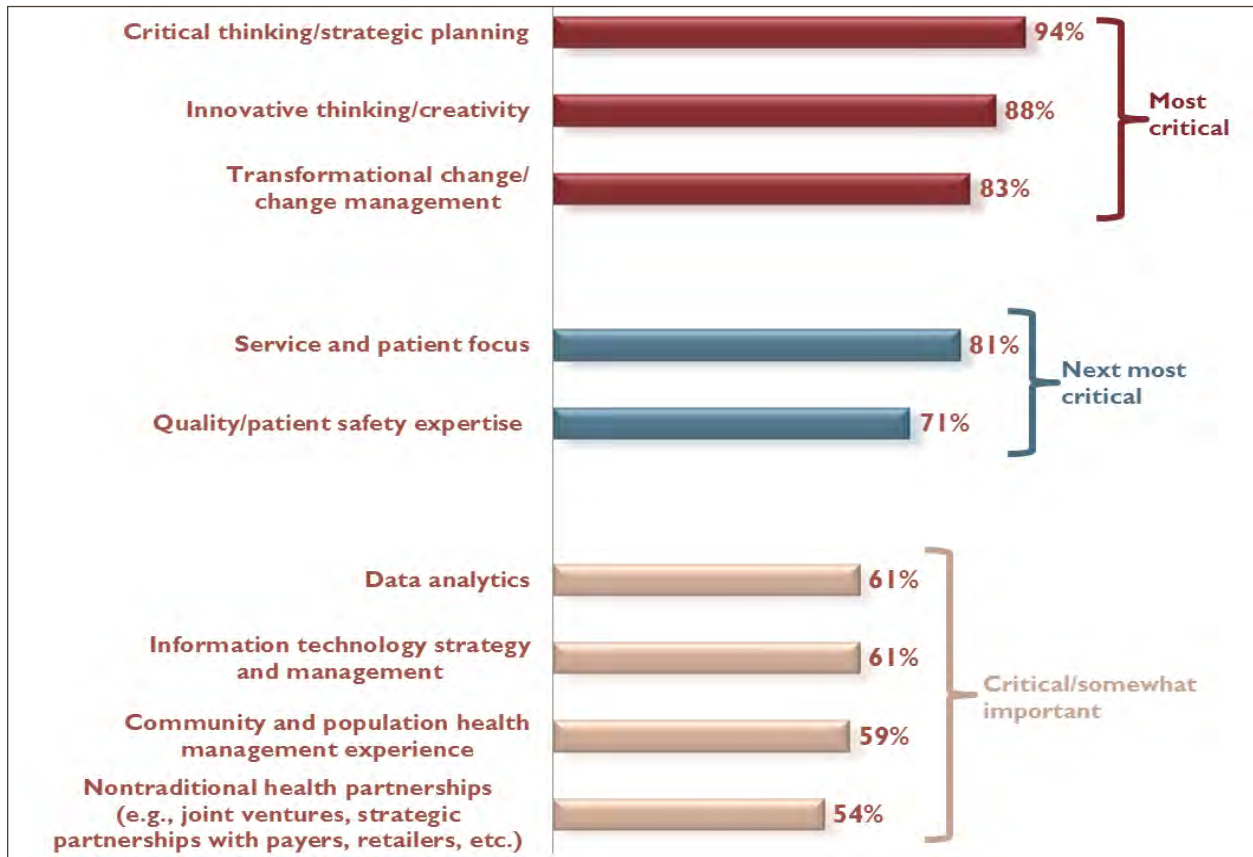
Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Overcoming Organizational Barriers

Breaking down functional silos to improve collaboration and information sharing is a top goal for health care organizations that increasingly need to provide coordinated care for their patients. As a result, hospitals and care systems are changing the way they work and experimenting with different organizational models, with the goal of sharing best practices, promoting innovation, improving patient outcomes, increasing efficiency and ensuring that care is coordinated across the continuum of services.

> "We have added and subtracted to our executive team. We have significantly whittled down senior management and added to the responsibilities of the senior team members to break down the silos that were in place."
> —Health system executive

The creation of management dyads and triads, in which clinical leaders are paired with administrators to jointly oversee service lines or clinical areas, is one organizational approach. Such models are intended to encourage systems thinking and align clinical and operational resources to improve outcomes and work more efficiently. Matrix organizations and multiple reporting relationships also are becoming more common, as are system-level leadership roles charged with standardizing practices and purchasing across the entire organization.

CEOs are enlarging their executive teams with new members to inject diverse perspectives and inviting leaders with various roles to join committees focused on specific directives. For example, to ensure a senior-level and coordinated approach to strategy development, some organizations are establishing new physician strategy groups or executive strategy committees, which bring together leaders such as the chief information officer, innovation officer and nursing officer, in addition to the traditional management team, to tackle strategy. Similarly, many organizations are establishing structures for developing innovation initiatives, including creating councils on clinical innovation charged with looking for service delivery improvement opportunities and innovation labs for testing new ideas.

Even as they are adding new leadership roles, many health care organizations are consolidating or eliminating positions to reduce overlap, streamline operations or uncover synergies across functional areas. "We have added and subtracted to our executive team. We have significantly whittled down senior management and added to the responsibilities of the senior team members to break down the silos that were in place," according to one health system executive. "For example, what was three positions originally — vice president of physician practices, vice president of acute care and vice president of behavioral health — has been re-formed as one position. We were seeing acute care patients presenting with behavioral issues and vice versa, so streamlining these roles made sense to uncover the synergies. There have definitely been advantages to this strategically, but it makes for a big job and a lot of responsibility for one person."

Building the Leadership Team for the Future Health Care Organization

How are health care organizations building leadership teams with the capabilities that they need today and for the future? Typically, hospitals and care systems are relying on a combination of external recruiting — including executives from outside the health care field — and leadership development and training.

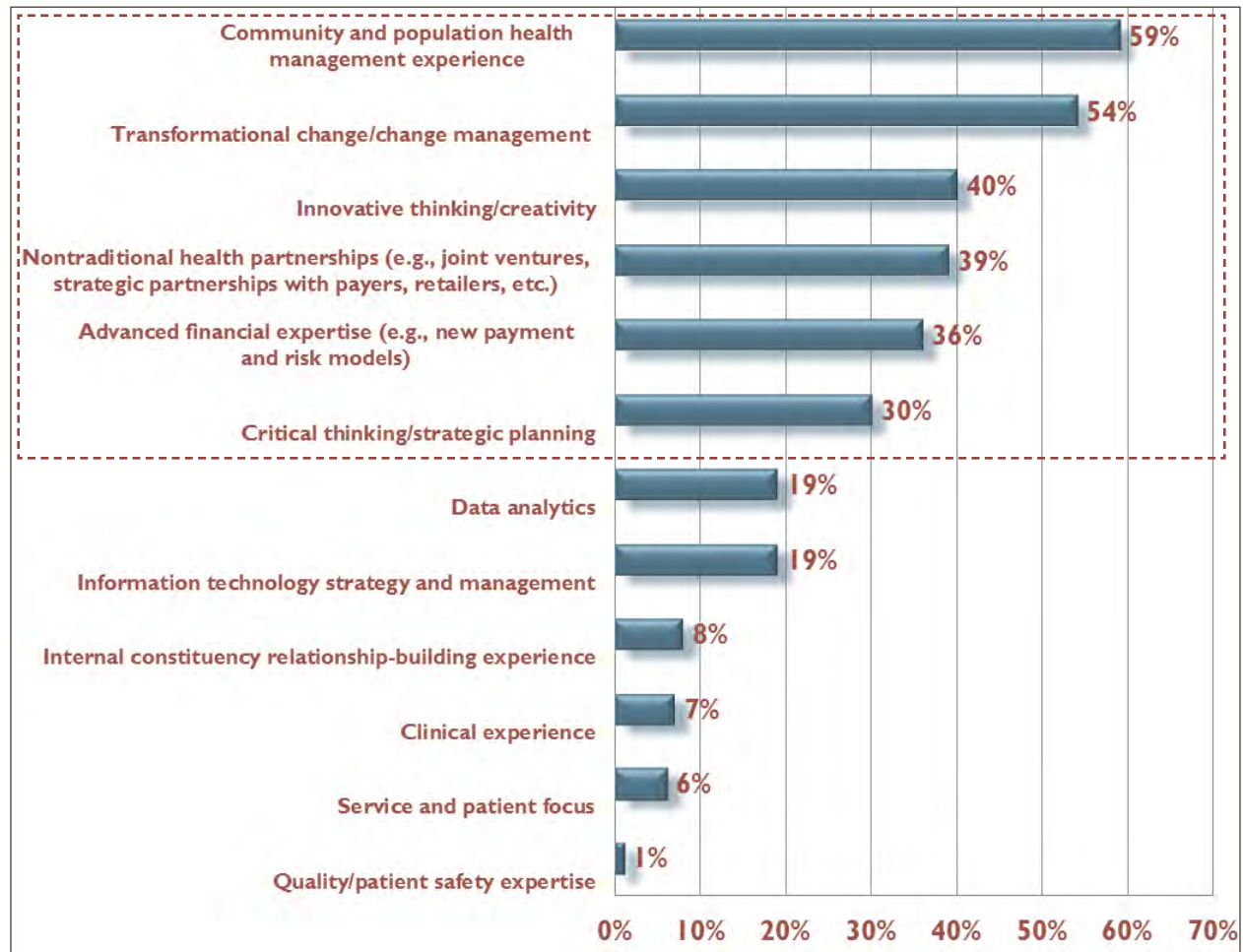## *Recruiting and Promoting Senior Leaders*

Because of the health care field's complexity, including the regulatory framework that organizations operate within, hospitals and care systems traditionally have recruited from within the sector for senior-level roles. As they seek leaders in new disciplines, some organizations have become more willing to consider candidates from outside the field for certain roles that require skills that have been less developed within health care.

Nearly 60 percent of respondents said community and population health management experience will be hard to find within the broader health care field, and more than half said transformational change and change management capabilities will be the hardest to find. Innovative thinking and creativity, nontraditional health partnerships and advanced financial expertise were other capabilities that respondents said they find lacking in the health care sector.

In the interviews, retail and customer insight experience, enterprise risk management and insurance expertise emerged as capabilities for which organizations may have to look outside the field. Senior positions in data analytics, "lean" operations, customer engagement, and supply chain and logistics may need to be filled by candidates from outside health care, for example. Even clinical innovation leaders need not come from a hospital setting if they are focused on research in the field; for example, a physician from a pharmaceutical background or from the medical device business may be considered.

Figure 9. Skill Sets Within the Health Care Field

Which skill sets will be the <u>hardest</u> to find within the broader health care field?

Skill Set	Percentage
Community and population health management experience	59%
Transformational change/change management	54%
Innovative thinking/creativity	40%
Nontraditional health partnerships (e.g., joint ventures, strategic partnerships with payers, retailers, etc.)	39%
Advanced financial expertise (e.g., new payment and risk models)	36%
Critical thinking/strategic planning	30%
Data analytics	19%
Information technology strategy and management	19%
Internal constituency relationship-building experience	8%
Clinical experience	7%
Service and patient focus	6%
Quality/patient safety expertise	1%

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Executives from outside health care may bring much-needed skills and a fresh perspective on the business, and many hospital and care system leaders express a preference for executives from outside the sector for marketing, strategy and innovation roles, for which creativity and innovative thinking are critical. But there are risks to these hires — namely, that health care is a complicated and regulated field that can represent too steep of a learning curve for newcomers, particularly for hospital operations and finance roles. Frequently, health care leaders gravitate toward job candidates with at least some health care experience. Spencer Stuart continues to see a preference for nonhealth care candidates for certain roles, especially marketing, innovation and strategy leadership roles, when candidates with pure health care backgrounds do not seem as fresh by comparison. Meanwhile, hospitals and care systems are becoming a more attractive career option for some executives outside the sector, some of whom are interested in being part of a field undergoing a major transformation.

Similar risk calculations have to be made when considering internal candidates moving into a senior leadership role for the first time. By definition, these executives do not have experience in the specific role for which they are being considered, and many roles are evolving to include new skill sets. For example, it is not unusual for physician leaders to be tapped for new roles for which clinical experience is critical, but many such roles are now broader in scope with more responsibility.

Organizations can minimize the risk when promoting internally or hiring from outside the sector by carefully defining the technical knowledge and leadership skills that are required and consistently assessing candidates against those capabilities. Given the pace of change in health care, both external and internal candidates should have a track record of working in environments of change and ambiguity. Another important consideration is cultural fit, both with the leadership team and the broader organization; ideally, organizations will define the cultural traits that need to be developed in the organization and select leaders with traits that match the direction the culture needs to move.

The route to the top of organizations is less structured than in the past, and new paths to the CEO role are emerging. More hospitals and care systems are developing succession plans so that high-performing executives can grow professionally without needing to leave to find new opportunities. However, executives with strong track records are in great demand and have many opportunities available to them.

Also in high demand are physician leaders, executives who have a successful track record of managing risk and those with experience working in pre- and post-hospital environments as well as acute care. One challenge in recruiting is a growing cautiousness among candidates about relocating during this tumultuous time for the field. Opportunities need to be particularly exciting to draw top performers out of good situations. As a result, the price to attract top talent continues to escalate against a backdrop of growing tension over executive compensation across all industries.

Leadership Development and Training

Most senior- and mid-level hospital leaders now being confronted with the dramatic shifts in health care payment and delivery grew up in the fee-for-service environment. As a result, training and leadership development are priorities for many organizations. Seventy-nine percent of survey respondents said their organization has established in-house, customized training programs for senior management during the past three years, and 76 percent said they offer access to conferences.

Much of the focus of these efforts is on developing leadership skills. Nearly 80 percent of survey respondents said training programs are focused on developing leadership skills; 65 percent said training programs are focused on building knowledge in specific functional areas. In-house, customized programs and sector-based conferences are the most common training approaches, followed by specific job-skill courses and executive coaching. Respondents said their organizations prioritize training in service and patient focus (73 percent), quality/patient safety (62 percent), data analytics (53 percent) and critical thinking/strategic planning (51 percent).

Figure 10. Management Training

What kind of training options has the organization put in place for members of the senior management team during the past three years?

In-house, customized programs — 79%
Industry-based conferences — 76%
Specific job-skill courses — 46%
Access to an executive coach — 44%
Other — 5%
We have not formally addressed training at the senior management level — 7%
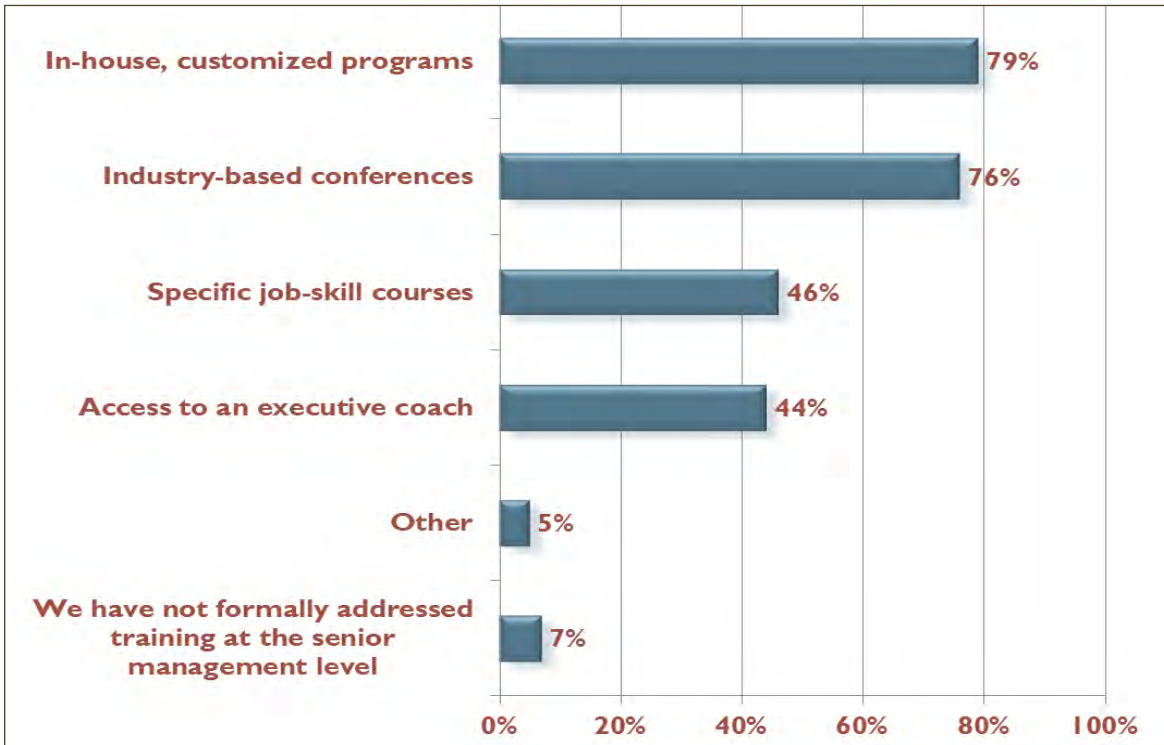
What has been the focus of these training programs?

Developing leadership skills — 80%
Building knowledge in specific functional areas — 65%
Staying abreast of industry developments — 57%
Not applicable — 5%
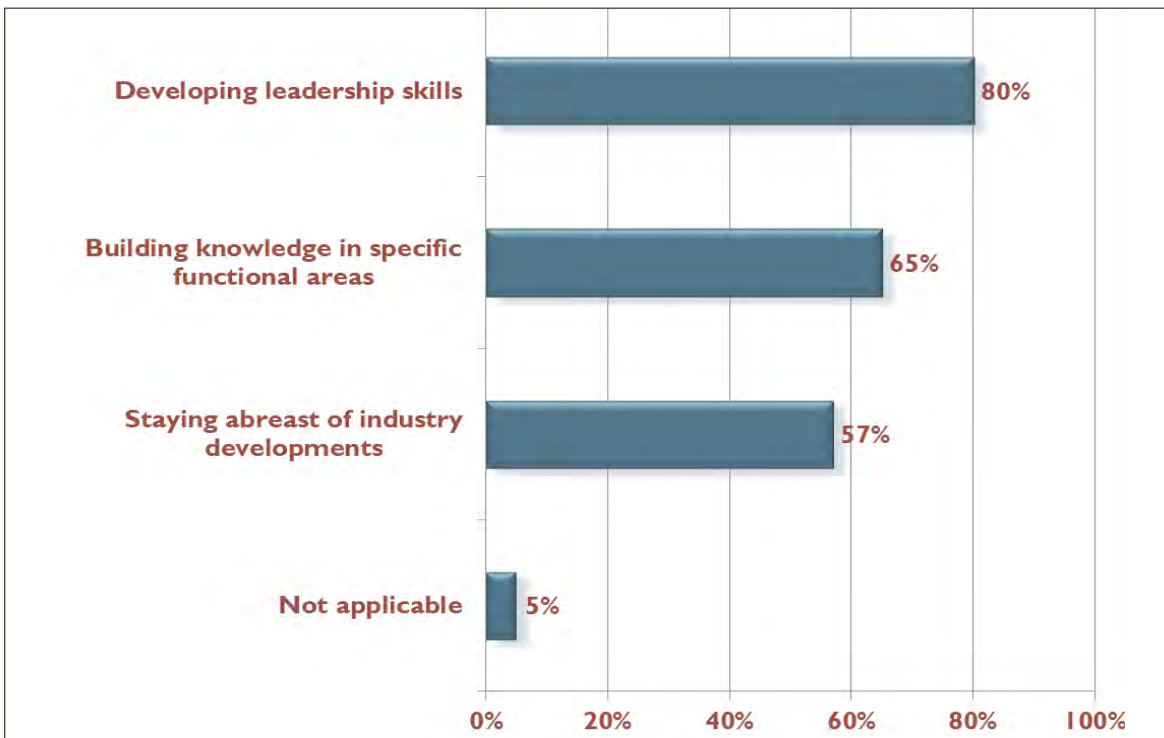
Which of the following skills will your organization develop internally with training and education?

Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

While leadership development and training are a growing priority for health care organizations, interviews revealed a wide range of training capability and sophistication. "Leadership training and development are a major emphasis for us; in the past two years, we have recruited new people in leadership development and offered new courses for internal groups," explained one human resources executive. Other executives describe leadership development as more of a "work in progress" in their organizations. One common challenge health care organizations face: getting time-strapped clinical and administrative leaders to devote time to these initiatives.

Given the growing cadre of physician and nurse leaders, some health care organizations offer programs targeted specifically to clinical leaders. Physician executive academies, mini-physician-MBA programs, skill development boot camps, and physician leadership universities are a few of the examples identified during the interviews. Many of these programs incorporate coursework and team projects and cover negotiation, basic finance, team work dynamics, communication, leading other physicians, trends in health care, and technical and soft skills. Many health care organizations also have established physician and nurse mentorship programs, which pair new clinical executives with experienced leaders to provide them with a resource to navigate relationships and answer questions.

Other leadership development programs bring together clinical leaders with administrative and business executives, with the goal of promoting integrated thinking and mutual learning, or target particular development needs, such as change management, employee engagement, service excellence and lean management techniques. One health care system, for example, sends 20 to 30 people at a time from all levels of the organization to an intermediate improvement science program. Over the past several years, this initiative has created a small army of improvement gurus scattered throughout the organization.

Evaluating Board Composition

Hospital and care system boards have a reputation for being large, regionally focused and, sometimes, unwieldy. A question for CEOs amid so much change is whether their boards have the diversity of expertise in strategic areas to truly be a valuable resource. Boards of local or regional systems, in particular, may have large representations of community leaders and lack access to national perspectives from other health care and nonhealth care entities. For many health care organizations, it may be time to take a fresh look at the composition of the board.

"As we're talking about the transformation of management, there's a similar transformation that we need to have on boards and governance," said one health care system CEO. Boards should be evaluating their composition with an eye to the expertise and skills the organization will need in the evolving health care environment: Is there a need for a director who understands health insurance and risk management? Is there anyone on the board with expertise in information technology or innovation? Does the board reflect the diversity of the populations and the health of the communities that the system is serving or the full range of system services, or is it hospital-centric?

> "As we're talking about the transformation of management, there's a similar transformation that we need to have on boards and governance."
> —Health care system CEO

When boards do not have relevant expertise, CEOs have to devote considerable time educating members about the changes to health care and cannot benefit from the probing questions and challenges to strategy or the background knowledge that can improve decision making. "I see it as a major weakness. Our board is very supportive. They strategically understand why we have to change, but they're still struggling when we have to make decisions today in the boardroom. We spend so much time trying to explain the difference between the old and new models."

One area that can be ripe for conflict, for example, is the role of the hospital in the overall health care system. Local board members can be very attached to the hospital, and conflicts can arise when management proposes selling excess hospital capacity to free up capital to invest in other parts of the organization's system.

Many boards, especially those of regional health care systems and corporate health care entities, are adding expertise in new areas. For example, board members with expertise in consumer businesses, marketing, social media, change management and the payer side of the business are in demand. Boards of national and larger regional health care organizations with sophisticated governance practices and procedures are best positioned to attract members with these profiles. However, all boards can benefit from adopting best-in-class governance processes and practices that allow members to contribute at a higher level.

While health care boards are becoming increasingly professional, compensation for members continues to be rare and controversial in the field. Even many of the largest health care organizations provide no compensation to board members. And when compensation is provided, it tends to be significantly less than the compensation for board members of public companies. Health care organization boards, especially nonprofit organizations, continue to rely on their mission to attract members.

Conclusion

As the health care field continues to move toward the second curve, hospitals and care systems are putting in place the structures, processes and teams to compete in a value-based health care model. This model focuses on quality, safety, efficiency, population health management, patient engagement and seamless care delivery across the continuum. To be successful, health care organizations will need to do the following:

- Define their value proposition to patients (customers) and develop strategies to deliver on those customer service expectations and execute at a very high level. Organizations must define long-term strategies while protecting the short-term financial picture.

- Adopt flexible organizational structures, processes and cultures that allow them to adapt quickly and efficiently to market opportunities and changes. This is a time to be nimble. Each member of the team must more than carry their own weight in a changing environment.

- Develop change management as a core competency. Executives across the organization need to have business judgment, strategic insight, comfort with uncertainty, social intelligence, self-awareness and people management skills to manage in a changing environment. Embracing change and taking prudent risks are musts in today's environment.

- Based on the strategic priorities and direction of the organization, define the capabilities that will be needed by the senior leadership team going forward. Identify talent gaps and thoughtfully consider how to best address gaps, whether through training, leadership development or targeted recruiting of leaders from outside the health care field.

- Experiment with different organizational approaches to stimulate collaboration, improve operational efficiency and promote standardization across the organization in order to provide high-quality, coordinated care for patients. Senior executives must work together as a team and realize that the organization's leadership roles and management structures must adapt to the new demands on hospitals and care systems.

The American Hospital Association and Spencer Stuart will continue to monitor the leadership and organizational changes occurring at hospitals and care systems and promote dialogue among leaders in the field as they continue on this journey.

Appendix

About the Survey

The online survey was sent to 1,140 health care executives in April 2013 and received 111 responses, a 9 percent response rate.

Figure 11. Respondent Role

What is your title or role with your company?
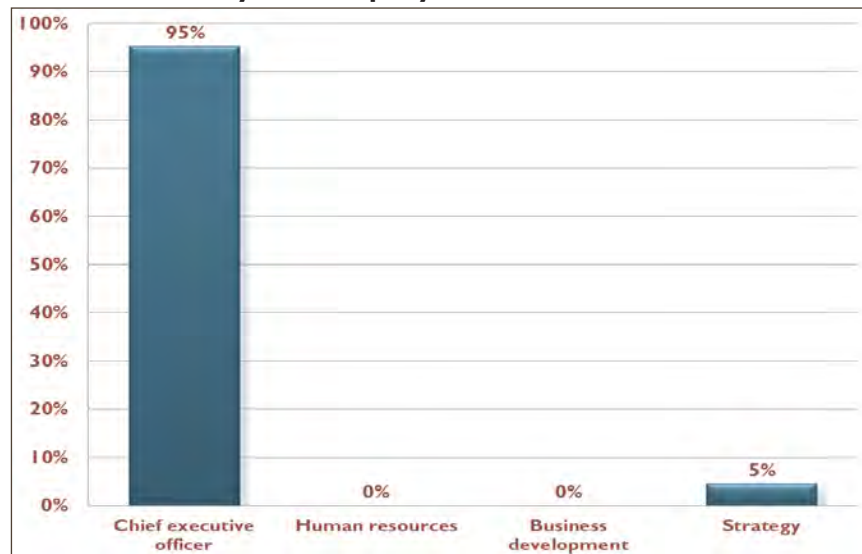
Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Figure 12. Respondent Organization

Organization type
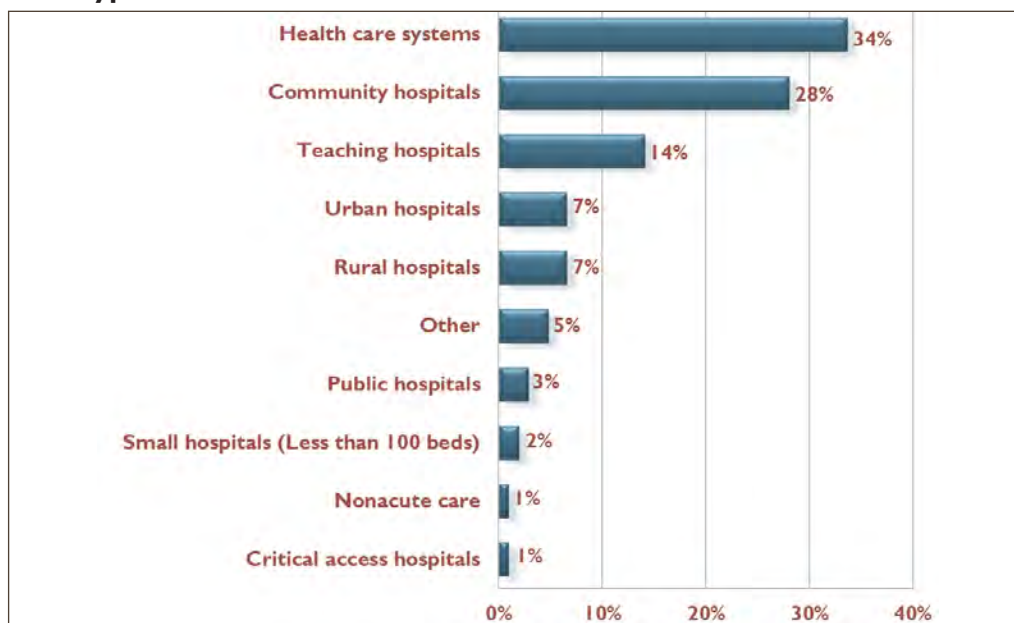
Source: Spencer Stuart / AHA Leadership Survey, 2013. (n=111 respondents)

Interviewee Organizations

Survey findings were supplemented with interviews of more than 25 senior health care executives, primarily from large health care systems, including chief executive officers, chief medical officers, chief nursing officers and senior human resources executives from the following organizations:

- Advocate Home Health Services –
  Advocate Healthcare
  Oak Brook, Illinois

- Advocate Physician Partners –
  Advocate Health Care
  Oak Brook, Illinois

- Aroostook Medical Center
  Presque Isle, Maine

- Baptist Health South Florida
  Coral Gables, Florida

- Beth Israel Deaconess
  Boston, Massachusetts

- Carolinas HealthCare System
  Charlotte, North Carolina

- Cedars-Sinai Medical Center
  Los Angeles, California

- Cincinnati Children's Hospital
  Cincinnati, Ohio

- Desert Regional Medical Center
  Palm Springs, California

- Eaton Rapids Medical Center
  Eaton Rapids, Michigan

- Franciscan Health System
  Tacoma, Washington

- Intermountain Medical Group
  Salt Lake City, Utah

- Lakeland Regional Medical Center
  Lakeland, Florida

- Medical University Hospital Authority
  Charleston, South Carolina

- Memorial Hermann Health Center
  Houston, Texas

- Mercy Hospital Springfield
  Springfield, Missouri

- Northwestern Memorial Hospital
  Chicago, Illinois

- Ochsner Clinic Foundation
  New Orleans, Louisiana

- Providence Health & Services
  Renton, Washington

- St. Mary's Health System
  Lewiston, Maine

- Texas Health Resources
  Dallas, Texas

- UCLA Health System
  Los Angeles, California

- University Hospitals Health System
  Cleveland, Ohio

- University of Wisconsin Hospitals and
  Clinics
  Madison, Wisconsin

- Wyoming Medical Center
  Casper, Wyoming

Endnotes

1 American Hospital Assocation. (2011, September). *Hospitals and care systems of the future.* Chicago, IL: American Hospital Association. Retrieved on April 23, 2014, from http://www.aha.org/content/11/hospitals-care-systems-of-future.pdf

2 American Hopsital Association. (2013, April). *Metrics for the second curve of health care.* Chicago, IL: American Hospital Association. Retrieved on April 23, 2014, from http://www.hpoe.org/Reports-HPOE/Metrics_Second_Curve_4_13.pdf

3 Larkin, H. (2012, January 1). Focus on the C-suite: Integrator in chief. *Hospitals & Health Networks.* Retrieved on April 23, 2014, from http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF_Common/NewsArticle/data/HHN/Magazine/2012/Jan/0112HHN_FEA_boardroom

About HRET

Founded in 1944, the Health Research & Educational Trust (HRET) is the not-for-profit research and education affiliate of the American Hospital Association (AHA). HRET's mission is to transform health care through research and education. HRET's applied research seeks to create new knowledge, tools and assistance in improving the delivery of health care by providers and practitioners within the communities they serve.

About HPOE

Hospitals in Pursuit of Excellence (HPOE) is the American Hospital Association's strategic platform to accelerate performance improvement and support delivery system transformation in the nation's hospitals and health systems. HPOE shares best practices, synthesizes evidence for application and engages leaders in the health industry through education, research tools and guides, leadership development programs and national engagement projects.

About Spencer Stuart

Spencer Stuart is one of the world's leading executive search consulting firms. Privately held since 1956, Spencer Stuart applies its extensive knowledge of industries, functions and talent to advise select clients — ranging from major multinationals to emerging companies to nonprofit organizations — and address their leadership requirements. Through 55 offices in 30 countries and a broad range of practice groups, Spencer Stuart consultants focus on senior-level executive search, board director appointments, succession planning and in-depth senior executive management assessments.

hospitals in pursuit of excellence™
Accelerating Performance Improvement

Signature Leadership Series

Leading Improvement Across the Continuum: Skills, Tools and Teams for Success

October 2013

HRET
HEALTH RESEARCH &
EDUCATIONAL TRUST
In Partnership with AHA

Leading Improvement Across the Continuum: Skills, Tools and Teams for Success

Contents

Executive Summary

This guide presents two new frameworks, the Improvement Continuum and the Leadership Action Model, to assist hospital leaders in executing a wide range of improvement activities. Faced with many diverse improvement opportunities—from eliminating hospital-acquired infections to reducing community asthma rates—leaders need a way to categorize improvement efforts and identify effective strategies to lead many different projects simultaneously. *As health care transforms, leaders must develop the knowledge and skill sets to move beyond single improvement efforts and engage in multiple efforts across a continuum of improvement projects*.

This report presents the Improvement Continuum. The continuum categorizes improvement efforts into four levels that build on one another:

1. Topic or microsystem improvement
2. Care coordination
3. Defined population
4. Community health

The Improvement Continuum then identifies the key skills, tools and teams that are necessary to implement projects successfully at each level. As improvement teams expand their projects across the continuum, they will add new skills, tools and people at each level. The Improvement Continuum outlines each level's key competencies.

This guide also includes a Leadership Action Model, a framework to help hospital leaders apply the Improvement Continuum. The model includes four steps:

1. Identify a strategy
2. Identify the skills, tools and teams necessary
3. Plan to sustain the improvement
4. Plan to spread the improvement

Hospital leaders should use both the Leadership Action Model and the Improvement Continuum to develop and implement improvement initiatives. The Action Model and Improvement Continuum will help leaders refine their efforts to be more effective across a wide range of improvement activities, from reducing surgical site infections to implementing community smoking cessation programs.

Introduction

Since the publication of the seminal Institute of Medicine reports *To Err is Human* and *Crossing the Quality Chasm,* efforts to improve the U.S. health care system have increased substantially. Spurred by these reports, health care professionals, leaders and policymakers launched a wide-reaching quality and patient safety movement in the early 2000s. Now, more than a decade later, escalating costs, persistent disparities in health outcomes, suboptimal patient satisfaction and the rising prevalence of chronic disease continue to pressure the U.S. health care system to improve.

With many challenges competing for limited resources, organizations must be efficient in selecting and implementing their improvement projects. Hospital leaders need a way to identify the appropriate skills, tools and teams to achieve success across a variety of projects.

To ensure high-quality care for every patient, every time, hospitals and health systems must improve across the continuum of care: in individual units, across hospitals and beyond the hospital walls and into communities. To lead improvement across these diverse settings, hospital leaders must understand the unique challenges that arise in different environments across the continuum of care. Once those unique challenges are understood, leaders will be able to implement the correct skills, tools and teams to maximize the impact of improvement efforts across a variety of practice settings.

The Improvement Continuum

Many excellent toolkits and models for improvement already exist, such as the Model for Improvement (Plan-Do-Study-Act) developed by the Associates in Process Improvement.[1] But different challenges require different skill sets, different tools and different teams. The Improvement Continuum is meant to be a supplement to those existing resources to help leaders choose the appropriate tools, skills and teams for many projects across the continuum.

The Improvement Continuum identifies four levels of improvement—topic or microsystem, care coordination, defined population and community health—and outlines the key skills, tools and teams necessary for success at each level (see Figure 1). As organizations engage in multiple projects across the continuum, moving from microsystem projects and eventually to community health projects, they will need to increase the number of skills, tools and people to be successful. Therefore, at each level, the Improvement Continuum outlines the key skills, tools and people that will be necessary, in addition to all of those identified in previous levels of the continuum.

The Improvement Continuum presents a way for leaders to think strategically about their improvement efforts across many dimensions and can become an integral tool for maximizing project impact. To demonstrate how the Improvement Continuum can be effectively integrated into the larger improvement planning process, the Leadership Action Model for Improvement clearly shows how the continuum informs the planning process (see Figure 2). Additionally, four case studies in Appendix A demonstrate how successful projects have incorporated the elements of the Improvement Continuum into their work.

Sustain and Spread

Implementing multiple projects simultaneously can lead to improvement fatigue and a feeling that the extra projects interfere with primary work roles. As a result, many projects may not prove sustainable, even if they are initially effective.
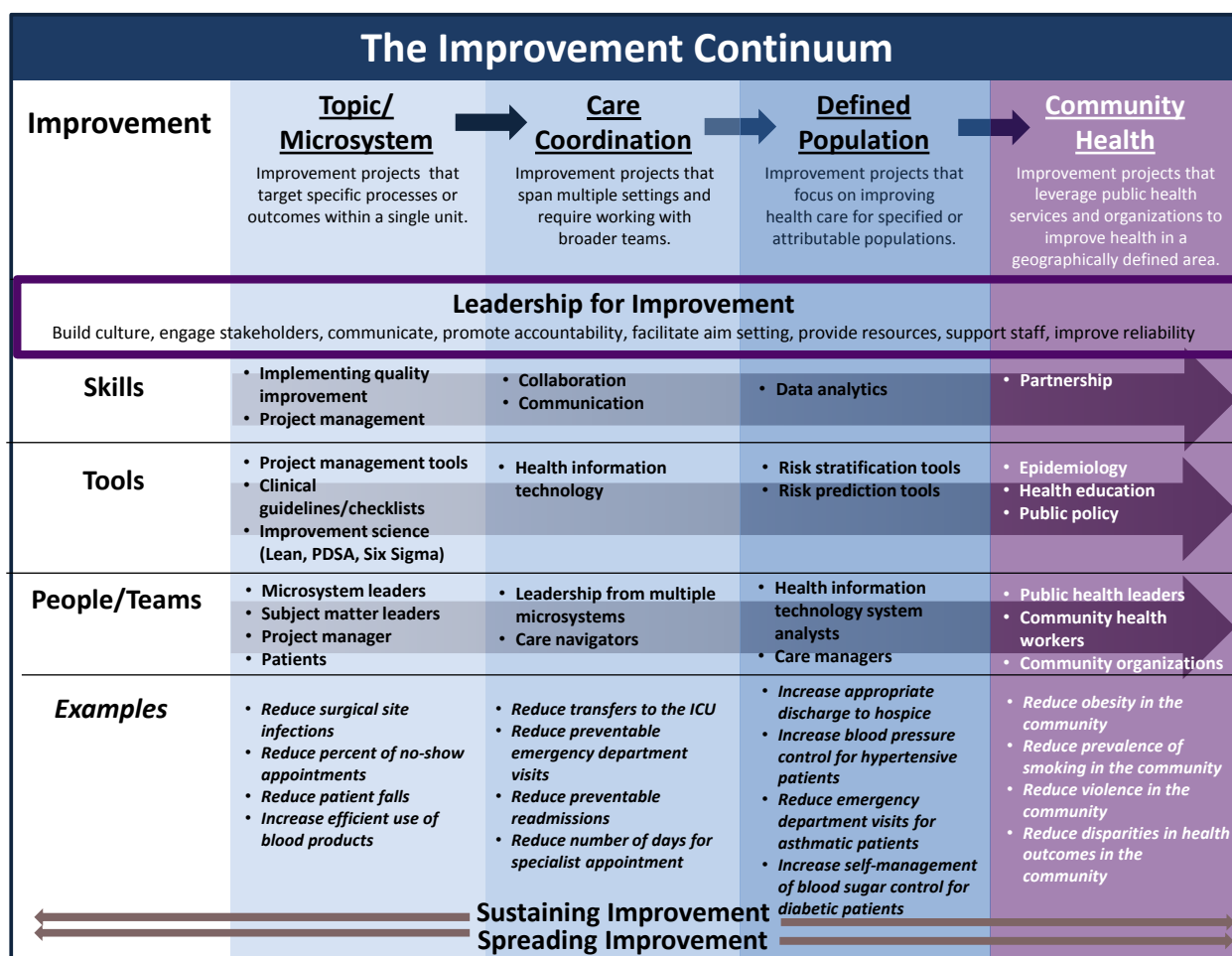
To avert that outcome, the Leadership Action Model includes four key items to consider when planning for sustainability: creating a strategy to engage both leadership and front-line staff; celebrating

success with rewards and recognition; incorporating changes into daily workflows; and building strong partnerships. Appendix B includes resources that describe how to plan for sustainability in greater detail.

In health care, innovative ideas and successful strategies are plentiful. However, leaders and staff often do not have the mechanisms to effectively spread those successes to all hospitals and care facilities. When designing and implementing any improvement activity, special care should be devoted to identifying the mechanisms that will allow the innovation to spread so that other systems and patients may benefit.

The Institute for Healthcare Improvement and HRET have developed a number of useful frameworks and tools to help leaders plan for and execute spread, including: Planning for Scale: A Guide for Designing Large-Scale Improvement Initiatives, A Framework for Spread: From Local Improvements to System-wide Change and the HRET Spread Assessment Tool. Additionally, the Leadership Action Model in this guide contains three key items to consider when planning for spread: engaging both leadership and front-line staff; developing an effective communication plan; and establishing systems for ongoing measurement and reporting.

Figure 1. The Improvement Continuum

The Improvement Continuum

Improvement	Topic/Microsystem	Care Coordination	Defined Population	Community Health
	Improvement projects that target specific processes or outcomes within a single unit.	Improvement projects that span multiple settings and require working with broader teams.	Improvement projects that focus on improving health care for specified or attributable populations.	Improvement projects that leverage public health services and organizations to improve health in a geographically defined area.

Leadership for Improvement
Build culture, engage stakeholders, communicate, promote accountability, facilitate aim setting, provide resources, support staff, improve reliability

Skills	• Implementing quality improvement • Project management	• Collaboration • Communication	• Data analytics	• Partnership
Tools	• Project management tools • Clinical guidelines/checklists • Improvement science (Lean, PDSA, Six Sigma)	• Health information technology	• Risk stratification tools • Risk prediction tools	• Epidemiology • Health education • Public policy
People/Teams	• Microsystem leaders • Subject matter leaders • Project manager • Patients	• Leadership from multiple microsystems • Care navigators	• Health information technology system analysts • Care managers	• Public health leaders • Community health workers • Community organizations
Examples	• *Reduce surgical site infections* • *Reduce percent of no-show appointments* • *Reduce patient falls* • *Increase efficient use of blood products*	• *Reduce transfers to the ICU* • *Reduce preventable emergency department visits* • *Reduce preventable readmissions* • *Reduce number of days for specialist appointment*	• *Increase appropriate discharge to hospice* • *Increase blood pressure control for hypertensive patients* • *Reduce emergency department visits for asthmatic patients* • *Increase self-management of blood sugar control for diabetic patients*	• *Reduce obesity in the community* • *Reduce prevalence of smoking in the community* • *Reduce violence in the community* • *Reduce disparities in health outcomes in the community*

Sustaining Improvement
Spreading Improvement

Source: American Hospital Association, 2013

Figure 2. Leadership Action Model for Improvement Across the Continuum

1. Identify the level.

☐ Create **an aim statement**.
What are we trying to accomplish?

☐ Choose **measures**.
How will we know that a change is an improvement?

☐ Identify **changes**.
What change can we make that will result in improvement?

These will show where your project lies on the continuum:
☐ Topic/microsystem
☐ Care coordination
☐ Defined population
☐ Community health

2. Choose your tactics.
Identify the skills, tools and teams needed.

Based on the improvement level:

☐ Identify the members of the **improvement team**.
☐ Ensure team members have the necessary **skills**.
☐ Ensure the team has the necessary **tools**.

3. Plan for sustainability.

☐ Engage **leadership** and **front-line staff**.
☐ Celebrate success with **rewards and recognition**.
☐ Incorporate changes into **daily workflow.**
☐ Build strong **partnerships**.

4. Plan for spread.

☐ Engage **leadership** and **front-line staff**.
☐ Develop a **communication** plan.
☐ Establish systems for **measurement and reporting**.

Source: American Hospital Association, 2013

Topic or Microsystem Level

Many traditional quality and patient safety improvement efforts target the topic or microsystem level. Clinical microsystems are the small, front-line units where most people receive health care services. Projects implemented at the unit or department level often address a specific challenge that the unit has identified as an opportunity for improvement. Examples of topic/microsystem level projects include efforts to:

- Reduce surgical site infections
- Reduce the percentage of no-show appointments
- Reduce adverse drug events
- Increase the efficient use of blood products

These improvement projects engage microsystem and subject matter leaders and utilize project management and improvement science skills and tools.

Figure 3. Topic/Microsystem Tactics Checklist: Skills, Tools and People/Teams for Success

Skills	Tools	People/Teams
☐ Implementing quality improvement ☐ Project management	☐ Project management tools ☐ Clinical guidelines/checklists ☐ Improvement science (Lean, PDSA, Six Sigma, etc.)	☐ Microsystem leaders (e.g., department managers) ☐ Subject matter leaders ☐ Project manager ☐ Patients

Source: American Hospital Association, 2013

Skills

For topic/microsystem improvements, the key skill sets are those related to project management and implementation of quality improvement techniques. Organizations must ensure that a person competent in these skills facilitates the improvement effort.

Project management skills include the ability to initiate a project, convene a performance improvement team and develop an aim statement and action plan. Project managers must also be able to implement the action plan in collaboration with the improvement team, monitor the progress of the project and ensure the sustainability of the effort once the formal project ends.[2] Many resources exist to guide successful project management.

Tools

There are numerous quality improvement systems, tools and toolkits for managing an improvement effort at the topic/microsystem level. It is important to define the project goals and measures before choosing the relevant quality improvement system. Every project team also should select a toolkit that best fits its specific goals and needs.[3]

Project management tools to facilitate improvement efforts include templates for charters, communication plans, meeting agendas, task lists, checklists, methods for tracking progress toward the goal and deliverable templates. The IHI Project Tracking Tool is just one example.

Possible quality improvement systems include:

- PDSA (Plan-Do-Study-Act) cycle
- Baldrige criteria
- Lean
- Six Sigma

Each of these processes employs a variety of tools,[4] including:

- Control charts
- Histograms
- Cause-and-effect diagrams
- Pareto charts
- Affinity diagrams

- Matrix diagrams
- Priorities matrix
- Benchmarking
- Failure Mode and Effects Analysis

In addition to these improvement tools, projects may utilize toolkits such as those developed by HRET, the Agency for Healthcare Research and Quality and the Institute for Healthcare Improvement. Examples of toolkits include the Comprehensive Unit-based Safety Program (CUSP) toolkit, the TeamSTEPPS curriculum and many others available at the Hospitals in Pursuit of Excellence website at www.hpoe.org/resources. Improvement efforts also may utilize clinical guidelines, protocols and checklists as tools, which may be adopted from national recommendations or developed internally to reflect organization-specific needs and values.

People/Teams

Skills and tools are important, but an improvement effort will not succeed without the appropriate teams and people. Improvement efforts at the topic/microsystem level must engage unit leaders, including physician leaders, nurse managers and administration.[5,6,7] They also should enlist subject matter experts, including quality improvement specialists and clinicians.[8] Performance improvement teams should be multidisciplinary and led by a designated project manager to ensure the successful development and execution of an improvement plan.

All projects across the Improvement Continuum should include patients and families in their improvement teams. Patients provide important perspective and critical insight that will not only contribute to more patient-centered care but also can improve the effectiveness and efficiency of care.

Many local, state and national improvement efforts that focus on the topic/microsystem level are underway. Some of these efforts have their project content available to the public, including:

- Hospital Engagement Networks - http://partnershipforpatients.cms.gov/about-the-partnership/hospital-engagement-networks/thehospitalengagementnetworks.html
- On the CUSP: Stop HAI - http://www.onthecuspstophai.org/
- TeamSTEPPS - http://teamstepps.ahrq.gov/
- Institute for Healthcare Improvement - http://www.ihi.org/knowledge/Pages/Tools/default.aspx

Table 1 outlines the key components for successfully executing project plans.

Table 1. Project Plan Execution

PLAN COMPONENTS	DESCRIPTION
Problem	Outlines the system or process issue, challenge or failure and identifies why improvement is indicated.
Aim Statements	The aim statement(s) specifically describe(s) the system needing improvement, the population impacted, the measurable results and target date. The aim statements guide the process improvement strategies.
Tests of Change	Documents the change(s) to be tested, where and when the test(s) will be conducted and by whom, the predicted outcome of the change and the measured results of the test.
Communication Plan	Provides a framework for effectively informing stakeholders of the improvement efforts, including: rationale, goals, operational and clinical impact, progress of tests and results. Identifies the "who, what, how, when" for communication with each stakeholder group, as well as "who" is responsible for the project development, coordination, dissemination and implementation.
Measurement Plan	Identifies key metrics or measures: What will be measured? How will the data be collected and displayed? When will it be collected and analyzed and by whom? How will the data be reported and to whom?
Spread and Sustainability	Includes the following: • Knowledge transfer (i.e., training and education of new and current medical and other unit staff) • Policy and procedure development or revision • Flow diagram development and updates • Implementation and utilization of materials, equipment, forms and tools • Ongoing measurement and data analysis reporting and communication • Rewards and recognition (acknowledgment and appreciation)

Source: American Hospital Association, 2013

Care Coordination Level

The U.S. health care system is highly fragmented, which creates challenges for continuity of care and care coordination.[9] As patients move between providers and care settings, test results, care plans, documentation of patient preferences and other information are often lost, which results in both lower quality care and higher costs to the patient and the system.[10,11] Fragmentation and lack of coordination create a frustrating and confusing experience for the patient and his or her family.[12]

Improvement efforts at this level aim to correct the consequences of this highly fragmented system. For example, projects to reduce readmission rates and improve discharge planning require coordination and partnership across multiple settings and among multiple teams of care providers.[13,14] These projects not only address quality of care, but also patient experience and costs.[15,16]

The care coordination level builds on the skills developed at the topic/microsystem level and engages team members from multiple microsystems to address challenges that span the wider continuum of care. Examples of improvement projects that require a care coordination strategy include efforts to:

- Reduce transfers to the ICU
- Reduce preventable emergency department visits
- Reduce preventable readmissions
- Reduce the number of days for a specialist appointment

Figure 4. Care Coordination Tactics Checklist: Skills, Tools and People/Teams for Success

Skills	Tools	People/Teams
☐ Collaboration ☐ Communication	☐ Health information technology	☐ Leadership from multiple microsystems ☐ Care navigators

Source: American Hospital Association, 2013

Skills

Projects at the care coordination level will continue to utilize project management and improvement science skill sets but will do so in a way that engages stakeholders from multiple microsystems.[17] In addition to those quality improvement skill sets, collaboration and communication should be a focus. In care coordination projects, it becomes increasingly important to build multidisciplinary teams and to develop aims and strategies that reflect a consensus among diverse stakeholders. Teams must work across units, departments and sometimes with outside organizations to achieve their goals.

Tools

While project management and quality improvement tools remain important, health information technology and other communication systems are essential for coordinating effectively across many units, departments and organizations. HIT tools may include electronic health records, computerized physician order entry, health information exchanges and others.

These technologies create opportunities to collect and share data across partners. With greater access to data and information sharing, improvement teams can work more effectively to identify the root causes of problems and design appropriate interventions to improve care.[18,19] Even without sophisticated HIT systems, however, hospitals can take steps to improve communication and data sharing.

People/Teams

Care coordination improvement projects must engage leaders from multiple microsystems[20] and continue to include patients. As at the microsystem level, teams should be multidisciplinary and involve representatives from all points in the care process. Involvement of all levels of leadership is essential to create buy-in among front-line workers and to gain access to financial and human resources to achieve success. Patients and family members are important to help identify gaps in care.

Defined Population Level

The next level on the Improvement Continuum includes projects that target defined populations. Many of the quality improvement initiatives and payment reform models put forth in the Patient Protection and Affordable Care Act require health care organizations to begin moving away from a model of care that focuses solely on individual interactions with the medical system and toward a model of accountability for population and community health.[21,22] This shift will begin with improvement targeted at defined populations, whether in an accountable care organization, patient-centered medical home, employer group or other.[23,24]

Many projects are underway nationally to improve the health of defined populations. One example is the development of accountable care organizations. Over the past few years, many hospitals and health care systems have organized into ACOs, entities that are held financially accountable for the health outcomes of a defined population. Through increasingly formalized partnerships and models of integration, these organizations are able to undertake improvement projects that focus on defined patient populations.

Figure 5. Defined Population Tactics Checklist: Skills, Tools and People/Teams for Success

Skills	Tools	People/Teams
☐ Data analytics	☐ Risk stratification tools ☐ Risk prediction tools	☐ Health information technology system analysts ☐ Care managers

Source: American Hospital Association, 2013

Other examples include numerous payer initiatives. Health plans have long focused efforts on defined populations—their policy holders—and now are entering into partnerships with providers, employers and other stakeholders to achieve greater impact.[25]

Examples of improvement projects that focus on improving health for defined or attributable populations include efforts to:

- Increase appropriate discharge to hospice
- Increase blood pressure control for hypertensive patients
- Reduce emergency department visits for asthmatic patients
- Increase self-management of blood sugar control for diabetic patients

These projects require all of the skills used in topic/microsystem and care coordination efforts, but the expanded scope of these projects and the added accountability also requires new skills and tools.

Skills

To improve care and outcomes, providers must understand the demographics, behaviors and barriers their patient population faces. Building on the HIT competencies developed in the care coordination strategy, effective data analysis is crucial at the defined population level. Organizations that use data to define and understand specific health challenges will be able to create targeted improvement efforts that maximize impact.[26,27]

Tools

The tools necessary for success include advanced HIT capabilities, such as disease registries and risk stratification and prediction technologies. Disease registries and other analytic tools can assist in identifying populations and defining the conditions (e.g., hypertension, smoking, diabetes) that should be targets for improvement.[28,29] Risk prediction and prevention tools help determine which strategies should be used to ensure that risk is not unduly assumed. It is important that organizations define projects that are sustainable, both financially and for health outcomes.

People

While engaging leadership across multiple stakeholder groups, these projects also require sophisticated HIT analysts and care managers as part of the improvement teams. HIT analysts provide support in collecting, synthesizing and interpreting critical data. Care managers work directly with patients to ensure compliance with care plans and to ensure that patients have the resources necessary to take control of their health.[30] Patient engagement becomes increasingly important as organizations are held financially accountable for health outcomes. Improvement efforts must include patients on their teams to develop effective ways to engage patients in their care and thus improve health outcomes.

Community Health Level

The final strategy on the Improvement Continuum describes projects that address community health. These are improvement projects that leverage public health resources to improve health in a geographically defined area. Success in these broad-based, community-wide projects will become increasingly important as reimbursement models shift from rewarding providers for care provided in the hospital to rewarding providers for keeping patients out of the hospital.

Policy drivers and market forces are beginning to compel hospitals to engage in community health improvement projects.[31] Examples include projects to:

- Reduce obesity in the community
- Reduce prevalence of smoking in the community
- Reduce violence in the community
- Reduce disparities in health outcomes in the community

Many of these efforts can begin by establishing a culture of wellness at the organization. The AHA Call to Action: Creating a Culture of Health presents some ways to get started.

Figure 6. Community Health Tactics Checklist: Skills, Tools and People/Teams for Success

Skills	Tools	People/Teams
☐ Partnership	☐ Epidemiology ☐ Health education ☐ Public policy	☐ Public health leaders ☐ Community health workers ☐ Community organizations

Source: American Hospital Association, 2013

Skills

These efforts will require partnerships with diverse groups including public health agencies, other government agencies (including housing, education and economic development) and community-based organizations as well as schools, faith-based organizations and others.[32] HRET has developed a collaboration primer that describes the process for developing and sustaining strong partnerships.

Tools

These projects move beyond the traditional medical model, which focuses on individual interactions between patients and clinicians once illness or injury has already occurred, and shift the focus to meaningful prevention efforts and effecting change not only at the individual level but also at the community level. Success in these efforts will require an understanding of public health concepts and tools, including: the use of epidemiology to understand disease prevalence and trends; an understanding of the social determinants of health; an understanding of behavioral science and effective interventions for behavior change; and use of communication and education strategies to build and sustain healthy communities. Many of these tools will be accessible through the strong partnerships that will be formed with external organizations for these improvement efforts.

People/Teams

The composition of improvement teams will be diverse. Representation will depend on the needs and goals of the project, yet all teams should engage stakeholders and leadership from the many entities that impact community health. Experts in the many disciplines of public health may be included on the improvement teams. Team members also may be drawn from local government, schools, community-based organizations and the business community.

Community members, patients and families will work with teams to identify the social determinants of health that contribute to poor health outcomes. For example, patients may be able to identify sources of pollution in the community that will need to be addressed to reduce asthma rates. The inclusion of diverse stakeholders is critical for long-lasting impact at the community health level.

Sustainability and Scale

For any improvement process, the ability to both scale and sustain the intervention is crucial. As illustrated in the Leadership Action Model, planning for sustainability and planning for spread are both integral steps in the process of performance improvement.

Improvement interventions should be designed to be sustainable beyond the grant, funding or PDSA cycle. Interventions must be built into the daily workflow so that they are not an added burden or anomaly, but an integral part of the job.

Relationships, partnerships and teamwork are essential for sustainability.[33] Throughout the Improvement Continuum, the most critical skill is effective teamwork. Having a strong team involves both having the correct people at the table as well as creating an environment that promotes open collaboration, communication and problem solving. The development of strong relationships all along the improvement continuum will not only ensure the sustainability of current projects, but will also enable smooth transitions to new projects along the continuum.

To help promote the spread of improvement projects, designers should identify the key mechanisms and drivers of success for their project.[34] When these processes, protocols and systems are identified, it becomes easier to apply those frameworks and interventions to other environments and organizations. The Institute for Healthcare Improvement has developed two toolkits to help leaders facilitate the spread of successful innovations: A Framework for Spread: From Local Improvements to System-wide Change and Planning for Scale: A Guide to Designing Large-Scale Improvement Initiatives. The HRET Spread Assessment Tool can also guide spread efforts.

Action Model for Leading Across the Continuum

Informed by the Improvement Continuum, hospital leaders can guide the development of more nuanced approaches to the many improvement activities. Leadership is critical across all improvement efforts. The Improvement Continuum reflects this by showing leadership competencies extending across all levels of improvement. These competencies echo the eight steps for leading quality improvement from the Institute for Healthcare Improvement. The Leadership Action Model supplements those eight guiding steps by showing how the Improvement Continuum can be integrated into the performance improvement process.

The Leadership Action Model is a checklist of steps that leaders can take to ensure all improvement teams have the resources and skills needed for success (see Figure 7). The first step in the Action Model is to define the project through developing an aim statement and measures. Once the project goals are clear, team members can identify where the project lies on the improvement continuum. For example, if the project aim is to reduce pressure ulcers in the intensive care unit, the team would determine that the project focuses at the microsystem level. Some projects may draw from multiple levels in the continuum; they may not be restricted to one level. In this case, teams should simply consider the tools, strategies and teams from the multiple levels that the project overlaps.

Once the team identifies the project aim and the project's place along the improvement continuum, the team should use the continuum as a checklist to ensure that its efforts include the recommended skills, tools and people for success.

The Leadership Action Model includes the key strategies for the third and fourth steps, planning for sustainability and planning for spread. Appendix B has many resources that provide greater detail on how to effectively sustain and spread improvements.

Eight Steps for Leading Quality Improvement

1. Address strategic priorities, culture and infrastructure

2. Engage key stakeholders

3. Communicate and build awareness

4. Establish, oversee and communicate system-level aims

5. Track/measure performance over time, strengthen analysis

6. Support staff and patients/families impacted by medical errors

7. Align system-wide activities and incentives

8. Redesign systems and improve reliability

Source: Botwinick L, Bisognano M, Haraden C. Leadership Guide to Patient Safety. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006.

Figure 7. Leadership Action Model for Improvement Across the Continuum

1. Identify the level.

☐ Create **an aim statement**.
   What are we trying to accomplish?
☐ Choose **measures**.
   How will we know that a change is an improvement?
☐ Identify **changes**.
   What change can we make that will result in improvement?

These will show where your project lies on the continuum:
☐ Topic/microsystem
☐ Care coordination
☐ Defined population
☐ Community health

2. Choose your tactics.
Identify the skills, tools and teams needed.

The Improvement Continuum

Based on the improvement level:

☐ Identify the members of the **improvement team**.
☐ Ensure team members have the necessary **skills**.
☐ Ensure the team has the necessary **tools**.

3. Plan for sustainability.

☐ Engage **leadership** and **front-line staff**.
☐ Celebrate success with **rewards and recognition**.
☐ Incorporate changes into **daily workflow.**
☐ Build strong **partnerships**.

4. Plan for spread.

☐ Engage **leadership** and **front-line staff**.
☐ Develop a **communication** plan.
☐ Establish systems for **measurement and reporting**.

Source: American Hospital Association, 2013

Conclusion

Each day, hospitals and health care systems strive to provide the highest quality of care for all patients. That may mean preventing infections, reducing preventable readmissions, helping diabetic patients better manage their care or working to reduce smoking rates in the community. These projects all require basic skills in project management and improvement science, but each improvement strategy also utilizes additional skills, tools and teams to enable success across the improvement continuum.

The Improvement Continuum and Leadership Action Model identify the skills, tools and people necessary to be successful across many improvement projects as leaders work to transform their organizations into hospitals of the future. All of these strategies will be critical as hospitals move from focusing on microsystem challenges to community health challenges and all the points in between.

Appendix A – Case Studies Across the Improvement Continuum

Improvement at the Microsystem Level: Reducing Medication Errors at the University of Arkansas Medical Center

Problem: The University of Arkansas Medical Center, based in Little Rock, formed a pharmacist-led task force to address a high frequency of medication errors for patient-controlled analgesia (PCA) opiates.

Solution:

> **Skills:** The task force began by evaluating data to determine the specific cause of the errors. The team discovered the source—a lack of "hard" limits in the infusion pump drug library software.

> **Tools:** This improvement project built "hard" stops into the software and educated the nursing staff about the change.

> **People/Teams:** A pharmacist led a multidisciplinary task force that included both microsystem leadership and subject matter expertise, such as administrators, nurses and other pharmacists.

Result: The hospital has updated all infusion pumps and is beginning to see reductions in the reported errors related to the administration of PCAs.

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* This case study is part of the AHA/HRET Hospital Engagement Network series on improvement successes. Access more like this at: http://hret-hen.org/index.php?option=com_content&view=article&id=56&Itemid=211

Improvement through Care Coordination: Communitywide Safety Net Improves Care Transitions

Problem: Many patients who are discharged from the hospital face obstacles to maintaining their health. Queen of the Valley Medical Center in Napa, California, uses the CARE (Case Management, Advocacy, Resource/Referral, Education) Network to ensure that the health care, economic and social needs of patients are met after discharge. The CARE Network helps to establish a seamless continuum of care from hospital discharge into the community setting.

Solution:

Skills: Nurses, social workers, primary care providers and pharmacists collaborate to ensure the success of the CARE Network.

Tools: Partnerships define the CARE Network. Social workers visit patients' homes to ensure basic needs are met and work to arrange adequate housing, food and transportation to the patient's follow-up visit with a primary care provider and pharmacist. The social worker works with California Medicaid and welfare programs to arrange needed services.

People/Teams: The CARE approach utilizes a multidisciplinary team led by social workers and nurses. The focus on the patient is central throughout the process.

Result: In 2012, the CARE Network saw a 60 percent reduction in emergency department visits and a 40 percent reduction in hospitalizations for its patient population. CARE Network patients have a 21 percent lower 30-day readmission rate than QVMC's total patients—8.3 percent versus 10.5 percent.

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* This case study and others may be accessed through the Robert Wood Johnson Foundation at http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2013/02/community-wide-safety-net-improves-care-transitions.html

Improving Care for a Defined Population: Reducing Hospitalizations and Emergency Department Visits for Latino Children in New York City

Problem: New York-Presbyterian Hospital and Columbia University Medical Center partnered to address the problem of asthma control among Latino children in northern Manhattan neighborhoods. Poor asthma control had resulted in a rate of asthma-related emergency department visits four times the national average. The hospitals collaborated with Northern Manhattan Improvement Corporation, Community League of the Heights, Alianza Dominicana, and Fort George Community Enrichment Center to develop a targeted program that utilized community health workers to engage patients and their families in improving asthma control.

Solution:

> **Skills:** Using data analytics, the improvement team was able to identify and quantify the challenge they faced—a disproportionately high rate of asthma-related emergency department visits among the Latino community in northern Manhattan. The project engaged community health workers to better understand the defined population and to develop culturally competent interventions.

> **Tools:** This project utilized community health workers as care managers. Community health workers were extensively trained before and throughout the intervention. They worked with patients in many environments, including hospitals, clinics and in the community to successfully manage the disease.

> **People/Teams:** This intervention engaged hospitals, clinics and community-based organizations. The relationship with community-based organizations and community health workers was particularly important in the successful implementation of this program.

Results: The program has increased families' use of asthma management strategies and enhanced confidence in their ability to manage their child's disease, leading to significant reductions in symptom flare-ups, hospitalizations, ED visits and missed school days. The proportion of participating families with asthma action plans more than doubled—from 30 percent to 77 percent—while the proportion of children reporting asthma symptoms fell 28 percent.

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*Find details on this case study and more like it through the AHRQ Health Care Innovations Exchange: http://www.innovations.ahrq.gov/index.aspx

Improving Community Health: Reducing Childhood Obesity in Tennessee

Problem: In the past two decades, the number of U.S. children and adolescents who are either overweight or obese has tripled, making childhood obesity one of the most serious public health concerns in the United States today. Being obese or overweight is associated with numerous chronic diseases in both childhood and adulthood, including type 2 diabetes, cardiovascular disease and certain cancers.

In 2004, the Tennessee Governor's Council on Physical Fitness and Health initiated a partnership with BlueCross BlueShield of Tennessee to encourage physical activity in the state's elementary schools. The program is known as BlueCross WalkingWorks for Schools.

Solution:

> **Skills:** This improvement effort relies heavily on partnerships and coordination among diverse stakeholders, specifically the Tennessee Department of Health, BlueCross BlueShield of Tennessee and elementary schools. The program capitalized on the strengths of each stakeholder. The Tennessee Department of Health promoted the program through regional health department educators working in local communities. The Department of Education led the implementation by coordinating school health pilots, and BCBS organized demonstration days, distributed promotional t-shirts and funded the materials required for program administration.

> **Tools:** The WalkingWorks for Schools program is straightforward. The program requires teachers to incorporate a minimum of five minutes of walking into each school day for a period of 12 weeks each semester. The program uses materials developed by public health professionals, such as tracking posters, information packets and pedometers.

> **People/Teams:** The project had diverse stakeholders including the Department of Health, Department of Education, a private payer and other partners such as Belmont University, and the Tennessee Association for Health, Physical Education, Recreation, and Dance.

Results: An initial evaluation of the program tracked the percentage of teachers who reported changes in students' behavior and weight. Seventy percent of teachers reported improved classroom behavior, 54 percent reported increased energy levels and 42 percent reported increased physical endurance, among other outcomes.

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Appendix B – Resources

Process Improvement Basics

How to Improve

http://www.ihi.org/knowledge/Pages/HowtoImprove/default.aspx

Project Tracking Tool

http://www.ihi.org/knowledge/Pages/Tools/
ProjectTrackingToolProjectSummaryandStrategicQualityGoals.aspx

Improvement Toolkits

Comprehensive Unit-based Safety Program (CUSP) toolkit

http://www.ahrq.gov/professionals/education/curriculum-tools/cusptoolkit/

TeamSTEPPS

http://teamstepps.ahrq.gov/abouttoolsmaterials.htm

Hospital Engagement Networks

http://partnershipforpatients.cms.gov/about-the-partnership/hospital-engagement-
networks/thehospitalengagementnetworks.html

On the CUSP: Stop HAI

http://www.onthecuspstophai.org/

Hospitals in Pursuit of Excellence

http://www.hpoe.org/resources

Institute for Healthcare Improvement

http://www.ihi.org/knowledge/Pages/Tools/default.aspx

Planning for Sustainability and Spread

How-to Guide: Sustainability and Spread

http://www.ihi.org/knowledge/Pages/Tools/HowtoGuideSustainabilitySpread.aspx

A Sustainable Planning Guide for Healthy Communities

http://www.cdc.gov/healthycommunitiesprogram/pdf/sustainability_guide.pdf

Planning for Scale: A Guide for Designing Large-Scale Improvement Initiatives

http://www.ihi.org/knowledge/Pages/IHIWhitePapers/PlanningforScaleWhitePaper.aspx

[A Framework for Spread: From Local Improvements to System-wide Change](http://www.ihi.org/knowledge/Pages/IHIWhitePapers/AFrameworkforSpreadWhitePaper.aspx)

> http://www.ihi.org/knowledge/Pages/IHIWhitePapers/AFrameworkforSpreadWhitePaper.aspx

[HRET Spread Assessment Tool](http://www.hret.org/dissemination/projects/hret_spread_assessment_tool.shtml)

> http://www.hret.org/dissemination/projects/hret_spread_assessment_tool.shtml

Community Health

[Creating a Culture of Health](http://www.aha.org/research/cor/content/creating-a-culture-of-health.pdf)

> http://www.aha.org/research/cor/content/creating-a-culture-of-health.pdf

[Collaboration Primer](http://www.hret.org/upload/resources/collaboration-primer.pdf)

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About HRET

Founded in 1944, the Health Research & Educational Trust (HRET) is the not-for-profit research and education affiliate of the American Hospital Association (AHA). HRET's mission is to transform health care through research and education. HRET's applied research seeks to create new knowledge, tools and assistance in improving the delivery of health care by providers and practitioners within the communities they serve.

About HPOE

Hospitals in Pursuit of Excellence (HPOE) is the American Hospital Association's strategic platform to accelerate performance improvement and support delivery system transformation in the nation's hospitals and health systems. HPOE shares best practices, synthesizes evidence for application, and engages leaders in the health industry through education, research tools and guides, leadership development programs and national engagement projects.

Diversity and Disparities

A Benchmark Study of U.S. Hospitals in 2013

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Contents

Diversity and Disparities

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About the Survey

- **In 2013, the Institute for Diversity in Health Management,** an affiliate of the American Hospital Association (AHA), commissioned the Health Research & Educational Trust (HRET) of the AHA to conduct a national survey of hospitals to determine the actions that hospitals are taking to reduce health care disparities and promote diversity in leadership and governance.

- **Data for this project were collected through a national survey** of hospitals mailed to the CEOs of all 5,922 U.S. registered hospitals at the time of the survey.

- **The response rate was 19%** (1,109 hospitals), with the sample generally representative of all hospitals.

- **All data are self-reported.**

For more information on the survey, contact Matt Fenwick, AHA senior executive director of personal membership groups, at *mfenwick@aha.org* or (312) 422-2820.

Additional information on the survey and resources on this issue can be found at:
www.hret.org
www.diversityconnection.org
www.equityofcare.org

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Summary Findings

■ **Hospitals and health systems possess a great opportunity** to affect health care disparities using three core areas:

- **Increasing the collection and use** of race, ethnicity and language preference (REAL) data

- **Increasing cultural competency training**

- **Increasing diversity in leadership and governance**

■ **The survey results highlight** that, while more work needs to be done, some progress is being made in key areas that can promote equitable care, such as collecting demographic data, providing cultural competency training, and increasing diversity in leadership and governance.

■ **The survey results offer a snapshot** of some common strategies used to improve the quality of care that hospitals provide to all patients, regardless of race or ethnicity.

■ **This overview provides data** to help the health care field focus attention on areas that will have the most impact and establish a benchmark to gauge hospitals' progress in the coming years.

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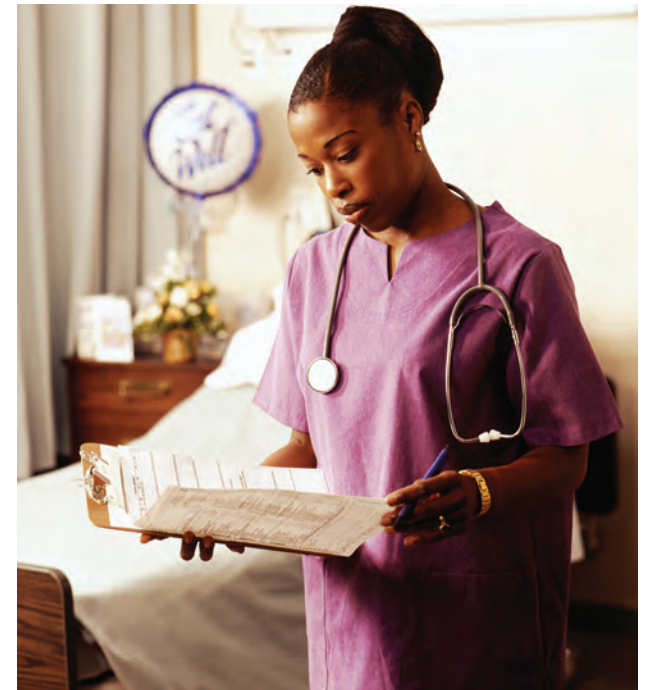
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The collection and use of patient demographic data is an important building block to identify areas of strength and opportunities for improvement in providing the highest quality of care for all patients.

- **Overall, hospitals are actively collecting patient demographic data,** including race **(97%)**; ethnicity **(94%)**; and primary language **(95%).**

- **22% of hospitals have utilized data** to identify disparities in treatment and/or outcomes between racial or ethnic groups to analyze (one or more of the following): clinical quality indicators, readmissions or CMS core measures. **This is an increase from 20% in 2011.**

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Cultural competency training ensures that caregivers have a deeper understanding of patients they care for, ensuring individualized care based upon their needs.

■ **86% of hospitals educate all clinical staff** during orientation about how to address the unique cultural and linguistic factors affecting the care of diverse patients and communities. **This is an increase from 81% in 2011.**

■ **64.5% of hospitals require all employees to attend diversity training. This is an increase from 60.5% in 2011.**

A leadership and governance team that reflects the community served encourages decision making that is conducive to best care practices.

- **The survey found that minorities represent 31% of patients nationally, up from 29% in 2011.**

- **Minorities comprise:**
  - **14%** of hospital board members, unchanged from 2011;
  - **12%** of executive leadership positions, unchanged from 12% in 2011;
  - **17%** of first- and mid-level management positions, up from 15% in 2011.

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Collection and Use of Data

■ **Overall, hospitals appear to be actively collecting patient demographic data, including:**

- Race (97%)
- Ethnicity (94%)
- Gender (99%)
- Primary language (95%)
- Religion (88%)
- Disability status (71%)
- Sexual orientation (19.5%)
- Veteran status (51%)

■ **Data used to benchmark gaps in care for:**

- Race (29.5%)
- Ethnicity (29%)
- Gender (32%)
- Primary language (28%)
- Religion (15%)
- Disability status (19%)
- Sexual orientation (7%)
- Veteran status (13%)

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Collection and Use of Data

Patient Data Collected at First Encounter

Legend: ■ 2011 ■ 2013

Category	2011	2013
Race	94%	97%
Ethnicity	87%	94%
Primary language	90%	95%
Gender		99%
Religion	88%	88%
Disability status	70%	71%
Sexual orientation	19%	19%
Veteran status	51%	51%

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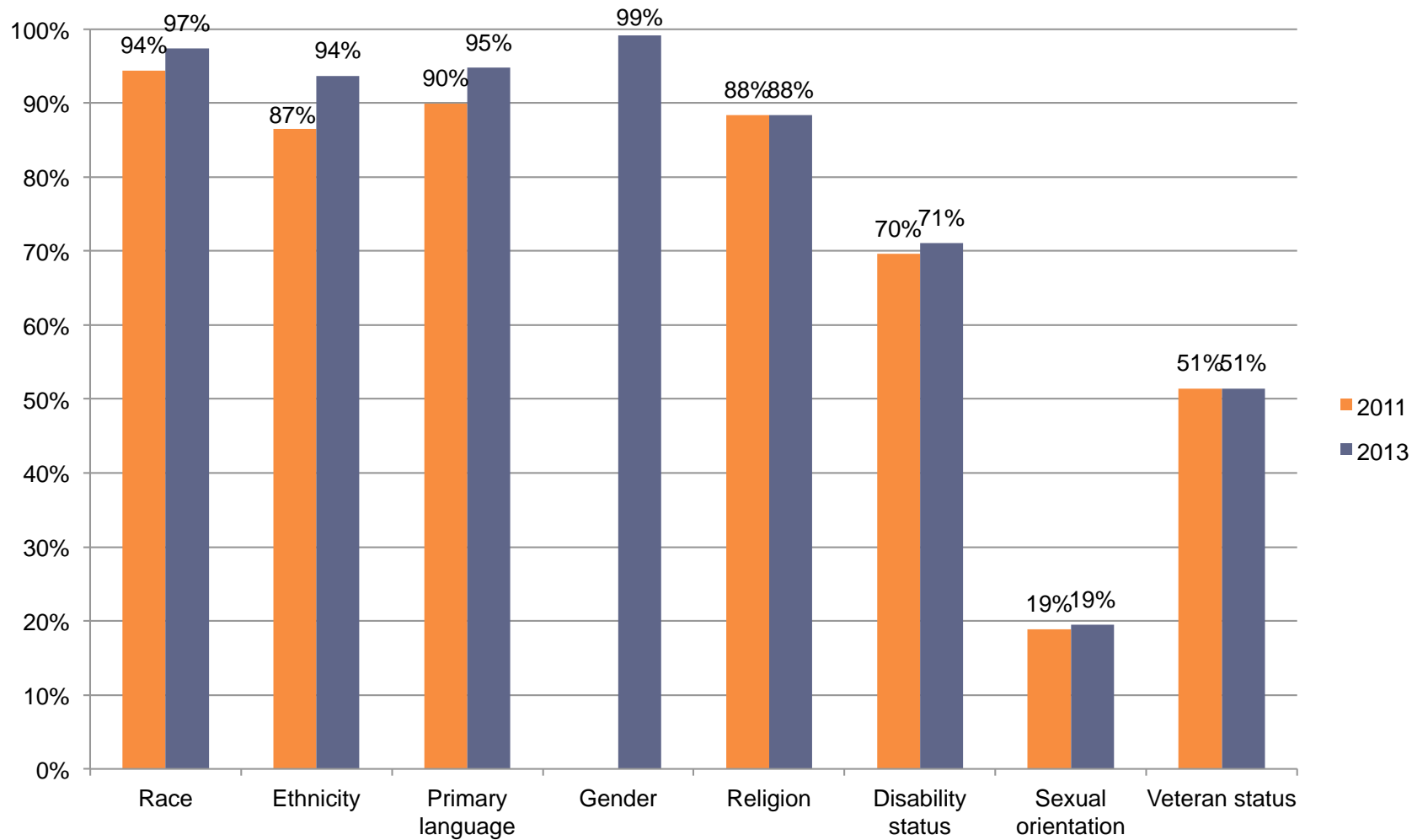
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More hospitals are using patient demographic data to benchmark gaps in care in 2013 than in 2011, but more work needs to be done.

Legend: ■ 2011 ■ 2013

Category	2011	2013
Race	26%	30%
Ethnicity	25%	29%
Primary language	28%	28%
Gender		32%
Religion	15%	15%
Disability status	17%	19%
Sexual orientation	6%	7%
Veteran status	10%	13%

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Collection and Use of Patient Demographic Data – 2013

Legend:
- Data collected at first patient encounter
- Data used to benchmark gaps in care
- Data used to analyze demographics of patient satisfaction surveys
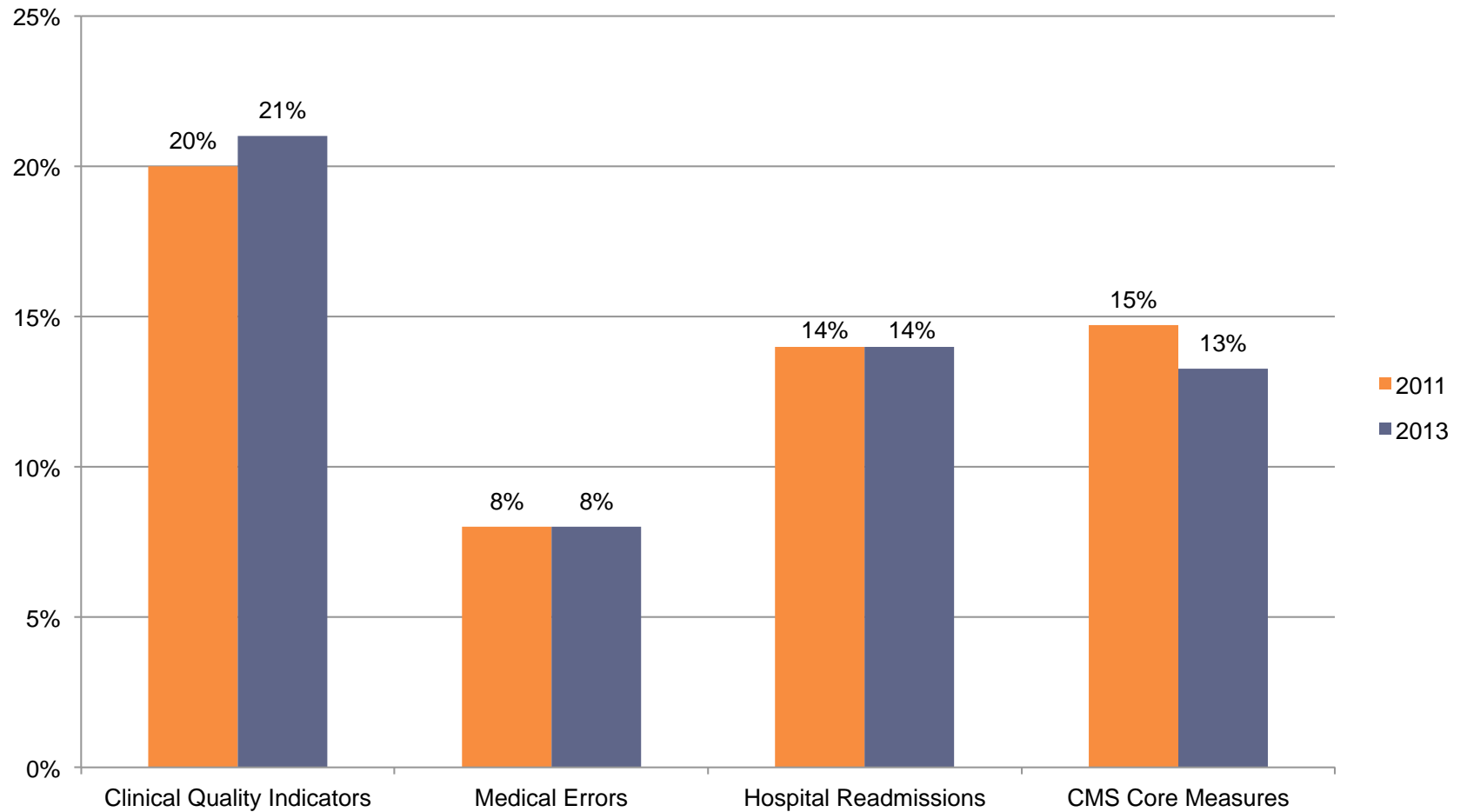
Cultural Competency Training

Cultural Content Areas Included in Hospital Orientation – 2013

Bar chart showing percentages:
- Available Language Services: 86%
- Family/Community Interactions: 70%
- Religious Beliefs Affecting Health Care: 67%
- Languages Spoken by Patients: 67%
- Diverse Health Beliefs Held by Patient Population: 65%

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Cultural Content Areas Included in Hospital Orientation

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Leadership and Governance

Minority Representation – 2013

Minority Representation in Hospital Leadership and Governance

Legend:
- Patients
- Board
- C-Suite

	Patients	Board	C-Suite
White	69%	86%	86%
Black/African American	13%	6%	6%
Hispanic or Latino	10%	3%	3%
Two or more races	2%	3%	2%
Asian	2%	2%	2%
American Indian/Alaska Native	2%	1%	1%
Native Hawaiian/Other Pacific Islander	1%	0%	0%

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Minority Representation in Executive Leadership Positions – 2013

Minority Representation in Executive Leadership Positions

Legend:
- 2011
- 2013

Position	2011	2013
Chief Executive Officer	9%	9%
Chief Operating Officer	14%	13%
Chief Financial Officer	7%	6%
Chief Medical Officer	16%	17%
Chief Nursing Officer	10%	11%
Chief Diversity Officer	60%	58%
Chief HR Officer	14%	16%

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Appendix A: Data Utilization

Hospitals' Utilization of Data to Address Health Care Disparities – 2013

Hospital has analyzed variations in clinical management of preventable and chronic diseases (n=1033)	27%
Hospital has analyzed the percentage of clinical staff trained in culturally and linguistically appropriate care (n=1034)	30%
Hospital has a mechanism for measuring the quality of cultural and linguistic services (n=1029)	36%
Hospital has analyzed the supply and demand for language services (n=1035)	59%

0% 10% 20% 30% 40% 50% 60% 70%

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Hospitals' Utilization of Data to Address Health Care Disparities

Hospital has analyzed variations in clinical management of preventable and chronic diseases
- 27% (2013)
- 26% (2011)

Hospital has analyzed the percentage of clinical staff trained in culturally and linguistically appropriate care
- 30% (2013)
- 30% (2011)

Hospital has a mechanism for measuring the quality of cultural and linguistic services
- 36% (2013)
- 32% (2011)

Hospital has analyzed the supply and demand for language services
- 59% (2013)
- 60% (2011)

Legend: ■ 2013 ■ 2011

X-axis: 0% 10% 20% 30% 40% 50% 60% 70%

Appendix B: Strategic Goals

Inclusion of Goals within Hospitals' Strategic Plans

Goal	Percentage
The use of reports for measuring progress toward addressing disparities	19%
The use of reports for measuring progress on diversity management	22%
The use of reports for measuring progress on diversity-related goals	32%
Guidelines for incorporating cultural and linguistic competence into operations	32%
Hospital recruitment and retention of minority and underrepresented groups in the workforce	39%
Collection of race, ethnicity, and language preference data for the hospital's workforce assessments	44%
Improving quality of care for culturally and linguistically diverse patient population	50%
Collection of race, ethnicity, and language preference data for community/patient population assessments	52%

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Inclusion of Goals within Hospitals' Strategic Plans

Goal	2013	2011
The use of reports for measuring progress toward addressing disparities	19%	22%
The use of reports for measuring progress on diversity management	22%	25%
The use of reports for measuring progress on diversity-related goals	32%	30%
Guidelines for incorporating cultural and linguistic competence into operations	32%	32%
Hospital recruitment and retention of minority and underrepresented groups in the workforce	39%	38%
Collection of race, ethnicity, and language preference data for the hospital's workforce assessments	44%	44%
Improving quality of care for culturally and linguistically diverse patient population	50%	57%
Collection of race, ethnicity, and language preference data for community/patient population assessments	52%	51%

Appendix C: Strategic Goals

Percent of Hospitals Having Established a Goal to Reduce Disparities According to Patient Characteristics – 2013

Percent of Hospitals Having Established a Goal to Reduce Disparities According to Patient Characteristics

Appendix D: Reducing Disparities

Hospitals' Efforts to Reduce Racial/Ethnic Health Care Disparities – 2013

Hospital has a standardized mechanism to translate hospital related documents into languages that are most prevalent among visitors and patients (n=998) — 87%

Hospital has a standardized system to collect feedback from patients with language needs (n=940) — 66%

Hospital has a standardized system to collect feedback from patients for improving services for diverse patient populations (n=968) — 64%

Hospital conducts patient interviews or surveys to obtain patient satisfaction data for improving services for diverse populations ((n=1109) — 62%

Hospital has performance improvement projects aimed at improving the quality of care provided to diverse patient populations (n=1109) — 50%

Hospital has a standardized system to collect feedback from staff for improving services for diverse patient populations (n=965) — 50%

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Hospitals' Efforts to Reduce Racial/Ethnic Health Care Disparities

Legend:
- 2011 (orange)
- 2013 (blue)

Categories and values:

Category	2011	2013
Hospital has a standardized system to collect feedback from patients for improving services for diverse patient populations	59%	64%
Hospital has a standardized system to collect feedback from staff for improving services for diverse patient populations	47%	50%
Hospital has a standardized system to collect feedback from patients with language needs	61%	66%
Hospital has a standardized mechanism to translate hospital related documents into languages that are most prevalent among visitors and patients	80%	87%
Hospital conducts patient interviews or surveys to obtain patient satisfaction data for improving services for diverse populations	62%	62%
Hospital has performance improvement projects aimed at improving the quality of care provided to diverse patient populations	54%	50%

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Appendix E: Reducing Disparities

Disease-Specific Interventions Planned or Implemented by Hospitals to Reduce Racial/Ethnic Disparities – 2013

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Disease-Specific Interventions Planned or Implemented by Hospitals to Reduce Racial/Ethnic Disparities

Legend:
- 2011 (orange)
- 2013 (blue)

Disease	2011	2013
Diabetes	27%	24%
Hypertension	21%	20%
Stroke	21%	18%
Other	29%	18%
Cancer	22%	18%
Congestive heart failure	22%	18%
Acute myocardial infarction	20%	16%
Pneumonia	19%	14%
Chronic obstructive pulmonary disease	18%	14%

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Appendix F: Reducing Disparities

Hospitals' Collaboration with External Organizations to Reduce Disparities – 2013

Organization	Percentage
Community agencies/advocacy organizations (n=1050)	47.7%
State hospital/health care associations (n=1049)	41.5%
Other community organizations (n=732)	39.4%
Relevant government agencies and organizations (n=1048)	37.1%
Homeless shelters (n=1038)	33.6%
Schools/universities (n=1049)	30.7%
National hospital/health care associations (n=1045)	28.9%
Faith-based organizations (n=1045)	25.7%
Corporate partners/collaborators (n=1035)	22.7%
Regional hospital/health care associations (n=1048)	13.4%

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Organizations with which hospitals have collaborated with to reduce disparities over the last 3 years?

Regional hospital/health care associations
- 2013: 31%
- 2011: 29%

Corporate partners/collaborators
- 2013: 29%
- 2011: 31%

Faith-based organizations
- 2013: 34%
- 2011: 40%

National hospital/health care associations
- 2013: 26%
- 2011: 25%

Schools/ universities
- 2013: 39%
- 2011: 47%

Homeless shelters
- 2013: 23%
- 2011: 25%

Relevant government agencies and organizations
- 2013: 42%
- 2011: 39%

Other community organizations
- 2013: 13%
- 2011: 47%

State hospital/health care associations
- 2013: 37%
- 2011: 36%

Community agencies/advocacy organizations
- 2013: 48%
- 2011: 55%

Legend: ■ 2013 ■ 2011

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Appendix G: Reducing Disparities

Does Your Organization Have a Community-based Diversity Advisory Council or Committee? – 2013

Does Your Organization Have a Community-based Diversity Advisory Council or Committee?

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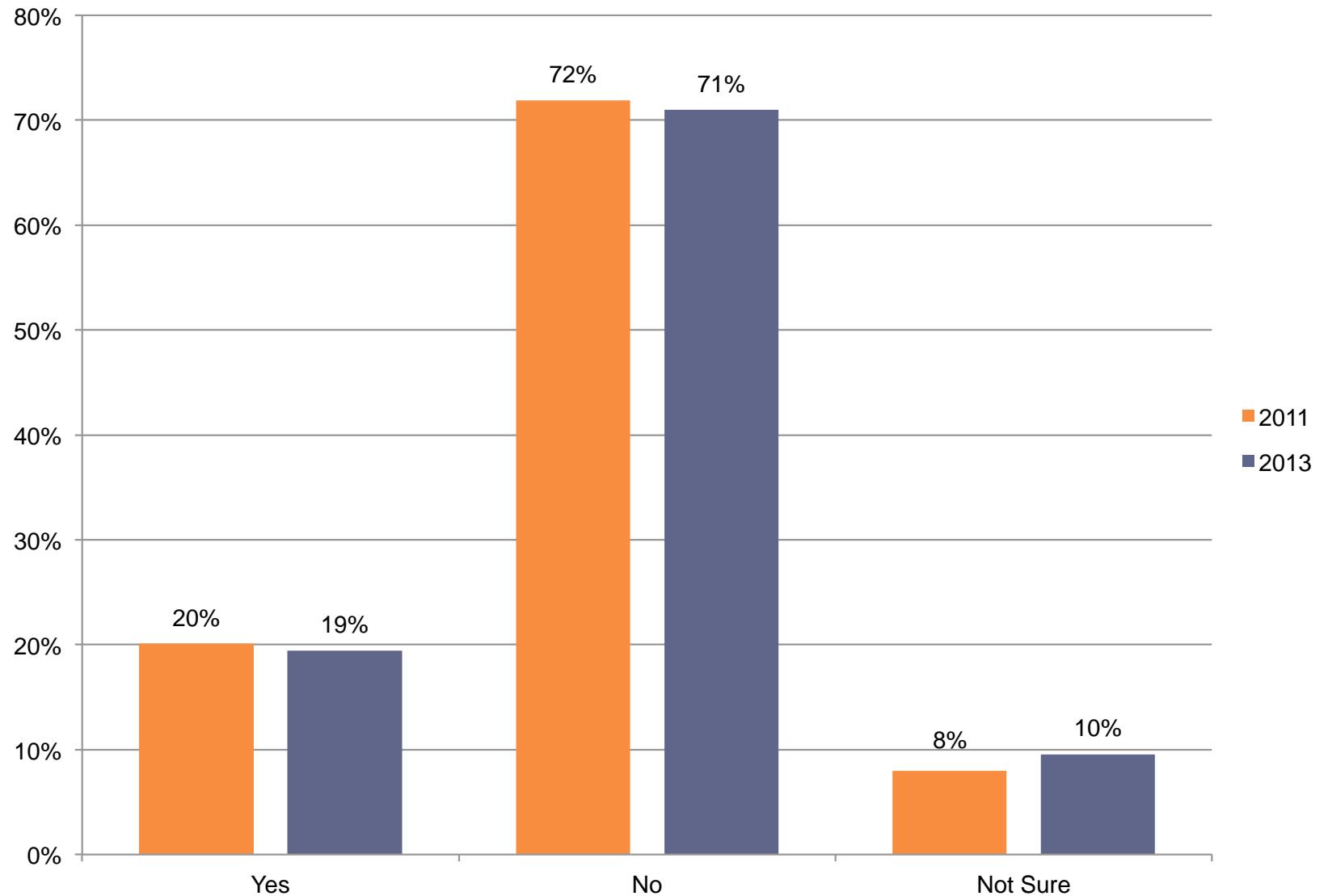
Appendix H: Cultural Competency

Has Your Hospital Conducted an Assessment of the Racial and Ethnic Demographics of Your Community in the Past Three Years – 2013

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Has Your Hospital Conducted an Assessment of the Racial and Ethnic Demographics of Your Community in the Past Three Years

Legend:
- 2011
- 2013

	Yes	No	Not Sure
2011	61%	30%	9%
2013	63%	21%	15%

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Appendix I: Cultural Competency

Types of Interpreters Used by Hospitals – 2013

Bar chart showing:
- Agency or third-party interpreters (n=957): 86%
- Formal interpreters, such as individuals on staff for whom interpretation is a primary job function (n=423): 38%
- Informal interpreters, such as multilingual staff, for whom interpretation is not a primary job function (n=717): 65%

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Types of Interpreters Used by Hospitals

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Appendix J: Cultural Competency

Hospitals' Verification of Interpreter Quality – 2013

Hospitals' Verification of Interpreter Quality

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Appendix K: Leadership

Hospitals' Leadership Goals – 2013

Goal	Percentage
Funding resources allocated for hospital cultural diversity/competency initiatives are sustainable (n=880)	50%
Hospital governing board has set goals for creating diversity within its membership that reflects the diversity of the hospital's patient population (n=896)	37%
Hospital incorporates diversity management into the organization's budgetary planning and implementation process (n=987)	37%
Hospital has a plan to specifically increase the number of ethnically, culturally, and racially diverse executives serving on the senior leadership team (n=904)	27%
Hospital governing board members are required to demonstrate that they have completed diversity training (n=1109)	18%
Hospital ties a portion of executive compensation to diversity goals (n=959)	13%

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Hospitals' Leadership Goals

Funding resources allocated for hospital cultural diversity/competency initiatives are sustainable — 2013: 50%, 2011: 45%

Hospital governing board has set goals for creating diversity within its membership that reflects the diversity of the hospital's patient population — 2013: 37%, 2011: 33%

Hospital incorporates diversity management into the organization's budgetary planning and implementation process — 2013: 37%, 2011: 30%

Hospital has a plan to specifically increase the number of ethnically, culturally, and racially diverse executives serving on the senior leadership team — 2013: 27%, 2011: 23%

Hospital governing board members are required to demonstrate that they have completed diversity training — 2013: 18%, 2011: 15%

Hospital ties a portion of executive compensation to diversity goals — 2013: 13%, 2011: 10%

Legend: 2013, 2011

Appendix L: Diversity Management

Percentage of Hospitals Participating in Diversity Improvement Plans – 2013

Category	Percentage
Hospital has a nondiscrimination policy that includes the ethnic, racial, lesbian, gay, bisexual, transgender, and transsexual communities (n=413)	93%
Hospital educates all clinical staff during orientation about how to address the unique cultural and linguistic factors affecting the care of diverse (n=516)patients and communities.	86%
Hospital collaborates with other health care organizations on improving professional and allied health care workforce training and educational (n=665)programs in the communities served.	78%
Hospital requires all employees to attend diversity training (n=215)	65%
Hospital has implemented a program that identifies diverse, talented employees within the organization for promotion (n=789)	58%
Hospital has a documented plan to recruit and retain a diverse workforce that reflects the organization's patient population (n=889)	48%
Hospital hiring managers have a diversity goal in their performance expectations (n=975)	22%

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Percentage of Hospitals Participating in Diversity Improvement Plans

Statement	2013	2011
Hospital has a nondiscrimination policy that includes the ethnic, racial, lesbian, gay, bisexual, transgender, and transsexual communities.	93%	89%
Hospital educates all clinical staff during orientation about how to address the unique cultural and linguistic factors affecting the care of diverse patients and communities.	86%	81%
Hospital collaborates with other health care organizations on improving professional and allied health care workforce training and educational programs in the communities served.	78%	75%
Hospital requires all employees to attend diversity training.	65%	61%
Hospital has implemented a program that identifies diverse, talented employees within the organization for promotion.	58%	42%
Hospital has a documented plan to recruit and retain a diverse workforce that reflects the organization's patient population.	48%	48%
Hospital hiring managers have a diversity goal in their performance expectations.	22%	16%

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National Call to Action to Eliminate Health Care Disparities

Launched in 2011, the National Call to Action is a national initiative to end health care disparities and promote diversity. The group is committed to three core areas that have the potential to most effectively impact the field.

- Increase collection and use of race, ethnicity and language preference data

- Increase cultural competency training

- Increase diversity in leadership and governance

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Call to Action Partners

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The headlines are common and the facts are known…

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Health Care Facing a Disparities Tsunami
By Fred Hobby

July 02, 2012

To achieve both quality and financial goals, hospital leaders must confront the issue of racial and ethnic disparities.

Although they represent only one-third of the total U.S. population, racial and ethnic minorities comprise more than half of the uninsured.
-U.S. Department of Health & Human Services

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Cover Story
Diversify Your Board
Charlotte Huff
Hospitals identify new ways to reach and recruit members

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Chris Dadlez wanted to tackle some of the health problems that disproportionately impact minority residents in Hartford, Conn., but the Saint Francis Hospital and Medical Center's chief executive officer acknowledges that he had some governance goals as

Diversify Your BOARD

Half of Latinos and more than a quarter of African Americans do not have a regular doctor.
-U.S. Department of Health & Human Services

American Hospital Association

Equity of Care

American Hospital Association

The Demographic Landscape

- More than 100 million people in the United States are considered minorities.

- Hispanics and Latinos remain the largest minority group with 44.3 million or 14.8% of the population.

- African Americans are the second-largest minority group with 40.2 million or 12% of the population.

- 47 million people in the United States speak a language other than English as their primary language.

- The collective purchasing power of U.S. minorities is more than $1.3 trillion and growing.

Sources: U.S. Census Bureau, 2012; Selig Center for Economic Growth, 2009.

Diversity Is a Reality in the U.S.
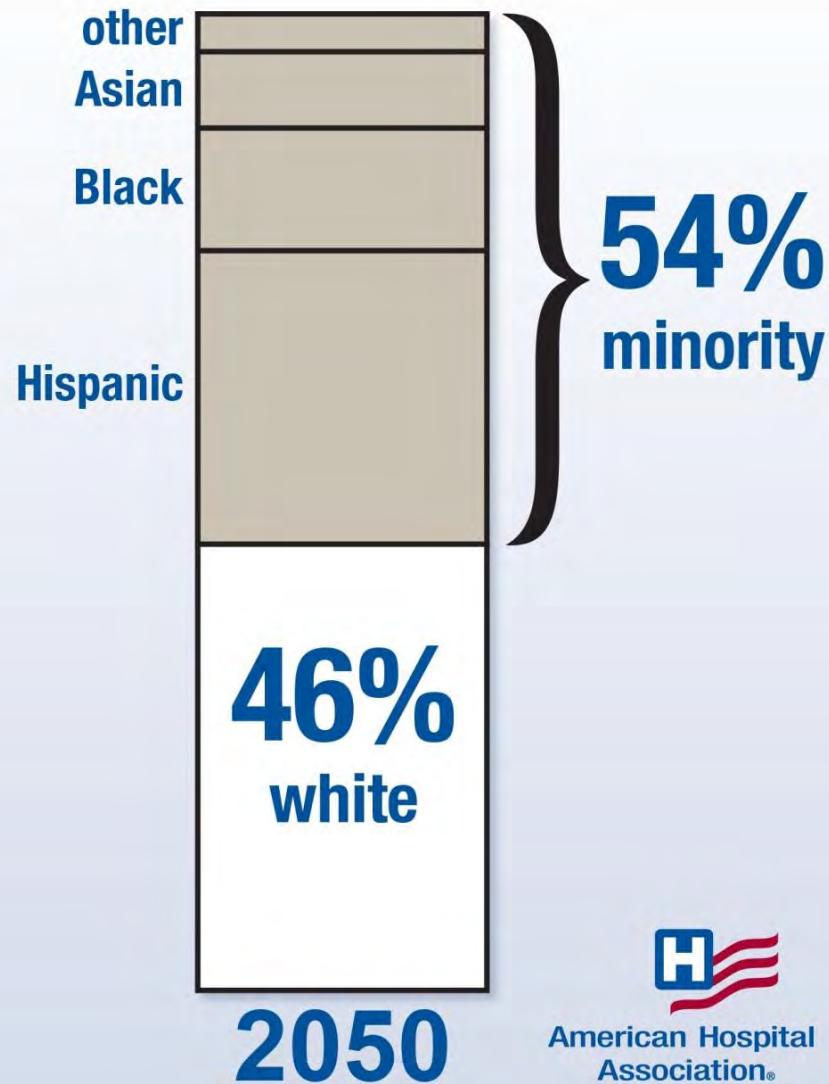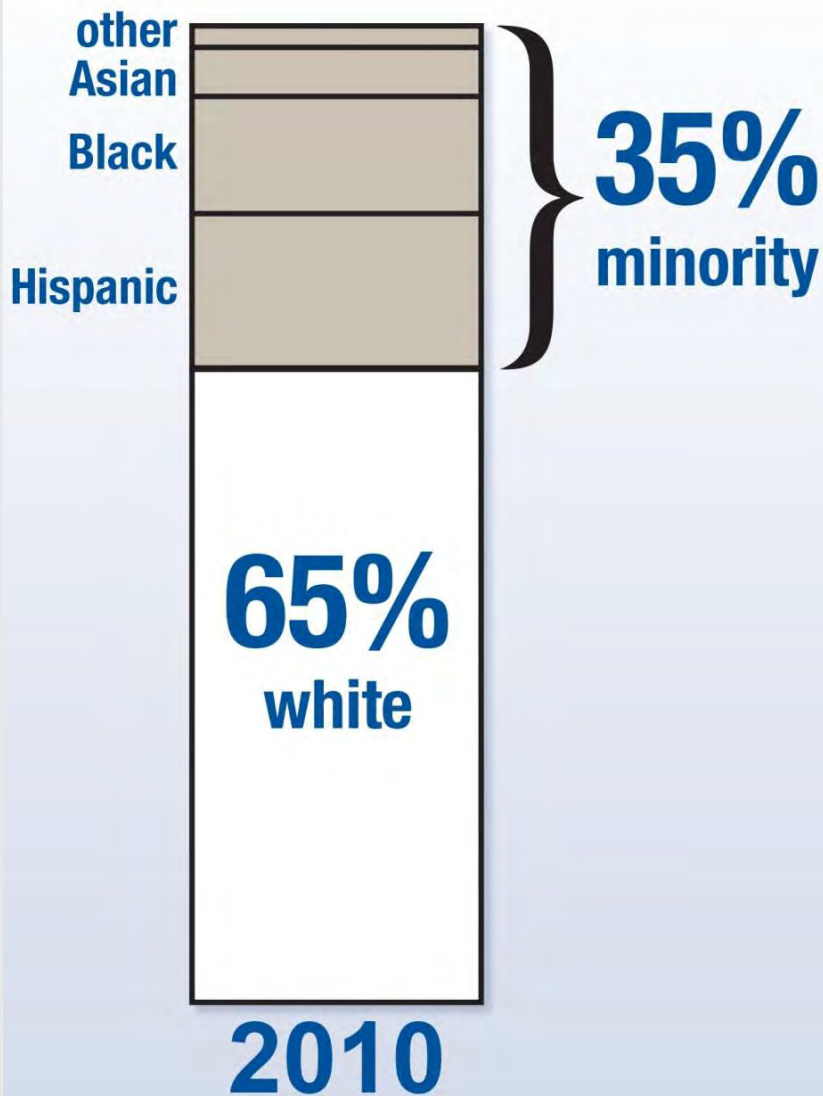
The Equity Imperative

- Disparities in health care lead to increased costs of care due to excessive testing, medical errors, increased length of stay and avoidable readmissions .

- Pay-for-performance contracts are beginning to include provisions to address racial and ethnic disparities.

- Between 2003 and 2006, 30.6% of direct medical expenditures for African Americans, Asians and Hispanics were excess costs due to health care disparities.

- Eliminating care disparities would reduce direct medical expenditures by $229.4 billion.

- Eliminating health care inequities associated with illness and premature death would reduce indirect costs by $1 trillion.

The Equity Imperative: Quality Implications

- Racial/ethnic minorities are more likely to experience medical errors, adverse outcomes, longer lengths of stay and avoidable readmissions.

- Language barriers can contribute to adverse events.

- Racial/ethnic minorities are less likely to receive evidence-based care for certain conditions.

- Helping patients access appropriate services in a timely fashion improves efficiency.

- Eliminating linguistic and cultural barriers can aid assessment of patients and reduce the need for unnecessary and potentially risky diagnostic tests.

- Eliminating care disparities and increasing diversity can lead to increased patient satisfaction scores.

- Health care disparities are unwarranted variations in care.

The Equity Imperative: Financial Implications

Eliminating disparities reduces costs and financial risk.

Lower patient safety and quality scores put payments at risk

Improved care efficiency, effectiveness and patient satisfaction

Protect value-based payments

American Hospital Association

The Equity Imperative: Regulations and Accreditation

- New disparities and cultural competence accreditation standards from the Joint Commission

- New cultural competence quality measures from the National Quality Forum

- Provisions to reduce disparities in the Affordable Care Act

- State and local laws

- IRS compliance

- MORE…

The Equity Imperative: Diversity Management

- Improves management of multicultural workforce
- Enhances communication with greater racial and ethnic concordance among patients and providers
    - Leads to greater trust and improved adherence to medical treatment plans
- Decreases employee dissatisfaction
- Ensures compliance with regulations and local, state and federal laws
- Evidence shows that underrepresented minority providers are more likely to practice in underserved communities

Equity of Care: Challenges to Implement Change

- Limited resources and access to capital

- Reduced reimbursement

- Resistance to change

- Competing regulatory issues and challenges

- Rapidly changing health care landscape

- Unconscious bias

Equity of Care Partners

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- Best practices

- Monthly newsletter

- Case studies

- Guides

- Webinars and educational opportunities

- Current research

Priority Areas

Racial and ethnic minorities currently represent one-third of the U.S. populations.
-U.S. Census Bureau

- Increase collection and use of race, ethnicity and language preference data
- Increase cultural competency training
- Increase diversity in governance and leadership

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Goals and Milestones (2013 – 2020)

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Goal 1 – Increasing collection and use of race, ethnicity and language (REAL) preference data:

- 2011 – 18 percent (baseline)

- 2015 – 25 percent

- 2017 – 50 percent

- 2020 – 75 percent

Best Practice: Race, Ethnicity and Language Preference Data

- Develop consistent processes to collect REAL data
  - Ask patients to self-report their information
  - Train staff (using scripts) to have appropriate discussions regarding patients' cultural and language preferences during the registration process
- Use quality measures to generate data reports stratified by REAL group to examine disparities. Use REAL data to:
  - Develop targeted interventions to improve quality of care (scorecards, equity dashboards)
  - Help create the case for building access to services in underserved communities

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Self-Assessment: Collection and Use of REAL Data

✓ Do you systematically collect race, ethnicity and language (REAL) preference data on all patients?

✓ Do you use REAL data to look for variations in clinical outcomes, resource utilization, length of stay and frequency of readmissions within your hospital?

✓ Do you compare patient satisfaction ratings among diverse groups and act on the information?

✓ Do you actively use REAL data for strategic and outreach planning?

Case Examples

Addressing Diabetes Among the Latino Population

Organization: Kaiser Permanente
Location: Denver, CO

Latino patients living with diabetes have a high risk for cardiac events and resulting hospitalization. Working to reduce or lessen the risk, Kaiser Permanente engaged patients in a collaborative management process placing them on an evidence-based therapy intervention that relies on a trio of drugs – Aspirin, Lisinopril and Lovastatin

At the beginning of the program, clinical data was analyzed using surname an geocoding analysis to identify which Latino patients were not achieving optimal diabetes outcomes.

Using that information, the program launched in a clinic setting that served, almost exclusively, a Spanish speaking Latino population. Using a bicultural, bilingual staff model and the evidence-based therapy method, Kaiser Permanente demonstrated improved adherence to a diabetic medical protocol.

Lessons learned: Emphasize data. Data helps make the case that improvement opportunities exist. Without data, there's no way to provide a basis for establishing interventions and involving staff.

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Quality Initiatives

▷ Accountable Care Transformation Leadership

▷ Disparity Reduction & REL Data Collection

▷ Hospital to Post Acute Transfer

▷ impACT Resources

▷ Innovative Solutions in Patient Care Award

▷ Hospital Quality Performance Measures

▷ My Heart Failure Action Plan

▷ Nursing Facility to Hospital Transfer

▷ Physician Impact Project

▷ Southwest Ohio Care Transitions Collaborative

▷ REL Data Collection Training Module for Physician Practice Registration Staff

Disparity Reduction & REL Data Collection

New Resources Available!!

Video produced by the American Hospital Association about this initiative with commentary provided by participants

White paper

Race, Ethnicity and Language Data Collection Best Practice Guidelines

Purpose
Identify and address disparities in the quality of care delivered to patients.

Description
As part of a national effort to improve the quality and equality of care provided to all patients, 19 hospitals throughout Greater Cincinnati have joined together in Cincinnati Expecting Success (CES), an initiative that will help them better serve all patients regardless of race, ethnicity or language (REL) preference.

The Health Council is leading the CES initiative on behalf of the Health Collaborative's *Cincinnati Aligning Forces for Quality* effort, and it offers area hospitals opportunities to learn from national experts and build on the success of work across the country that is addressing disparities in care and overall quality of care.

These hospitals have re-engineered their information technology systems based on a Council-led standardization process to collect REL data. Data collection began in 2011 and the effort has since expanded into primary care physician practices. Hospitals are now looking at outcomes data to analyze any disparities in care and identify areas for improvement in care delivery.

Health Council Contact
For more information, contact Nancy Strassel.

Training
Click here to learn about the REL Data Collection Training Module for Physician Practice Registration Staff.

Key Resource: HRET Disparities Toolkit

Goal 2 - Increasing cultural competency training:

- 2011 – 81 percent (baseline)

- 2015 – 90 percent

- 2017 – 95 percent

- 2020 – 100 percent

- Educate all clinical staff during orientation about how to address the unique cultural and linguistic factors affecting the care of diverse patients and communities

- Require all employees to attend diversity training

- Provide culturally and linguistically appropriate services such as:
  - Interpreter services and translators
  - Bilingual staff
  - Community health educators
  - Multilingual signage

- Have your clinicians, patient representatives, social workers, discharge planners, financial counselors and other key patient and family caregivers received special training in diversity issues?

- Has your hospital developed a "language resource" to identify qualified people, inside and outside your organization, who could help your staff communicate with patients and families from a wide variety of nationalities and ethnic backgrounds?

- Are written communications with patients and families available in a variety of languages that reflect the diversity of your community?

- Are core services in your hospital, such as signage, food service, chaplaincy services, patient information and other communications, attuned to the diversity of the patients you care for?

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Case Studies

Key Resource: National CLAS Standards

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Key Resource: National Prevention Strategy

Goal 3 - Increasing diversity in governance and leadership:

- 2011 - Governance 14 percent / Leadership 11 percent *(baseline)*

- 2015 - Governance 16 percent / Leadership 13 percent *(or reflective of community)*

- 2017 - Governance 18 percent / Leadership 15 percent *(or reflective of community)*

- 2020 - Governance 20 percent / Leadership 17 percent *(or reflective of community)*

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- Actively work to diversify your board to include voices and perspectives that reflect your community

- Incorporate specific goals into the board workplan with accountability for goals

- Engage the broader public through community-based activities and programs

- Consider creating a community-based diversity advisory committee

Best Practice: Increased Diversity in Leadership

- Regularly report on the ethnic and racial makeup of senior leaders

- Support and assist the development of mentoring programs within health care organizations

- At every opportunity, advocate the goal of achieving full representation of diverse individuals at entry, middle and senior levels

- Advocate diversity in appointing job search committee members and promote a diverse slate of candidates for senior management positions.

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- Does your organization have a mentoring program in place to help develop your best talent, regardless of gender, race or ethnicity?

- Are search firms required to present a mix of candidates reflecting your community's diversity?

- Do your recruitment efforts include strategies to reach out to the racial and ethnic minorities in your community?

- Does your human resources department have a system in place to measure diversity progress and report it to you and your board?

- Has your community relations team identified community organizations, schools, churches, businesses and publications that serve racial and ethnic minorities for outreach and educational purposes?

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Key Resource: Minority Trustee Training Program

Key Resource: American College of Healthcare Executives

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Policy Statements

Increasing and Sustaining Racial/Ethnic Diversity in Healthcare Management

July 1990
May 1995 (revised)
December 1998 (revised)
March 2002 (revised)
November 2005 (revised)
November 2010 (revised)

Statement of the Issue

One of the hallmarks of a democratic society is providing equal opportunity for all citizens regardless of race or ethnicity. In the healthcare sector, racially/ethnically diverse employees represent a growing percentage of all healthcare employees, but they hold only a modest percentage of top healthcare management positions. For example, according to the American Hospital Association, in 2010, 94 percent of all hospital CEOs were white[1] (non Hispanic or Latino) while 65 percent of the population is white[2] (non Hispanic or Latino), according to the most recent U.S. Census Bureau data.

National Call to Action to Eliminate Health Care Disparities

Launched in 2011, the National Call to Action is a national initiative to end health care disparities and promote diversity. The group is committed to three core areas that have the potential to most effectively impact the field.

Goals and Milestone (2013 – 2020)

Goal1) Increasing the collection and use of race, ethnicity and language preference (REAL),

> **2011 – 18 percent *(baseline)**
> **2015 – 25 percent**
> **2017 – 50 percent**
> **2020 – 75 percent**

Goal 2) Increasing cultural competency training,

> **2011 – 81 percent (*baseline)**
> **2015 – 90 percent**
> **2017 – 95 percent**
> **2020 – 100 percent**

Goal 3) Increasing diversity in governance and leadership.

> **2011 - Governance 14 percent / Leadership 11 percent (*baseline)**
> **2015 - Governance 16 percent / Leadership 13 percent (*or reflective of community served*)**
> **2017 - Governance 18 percent / Leadership 15 percent (*or reflective of community served*)**
> **2020 - Governance 20 percent / Leadership 17 percent (*or reflective of community served*)**

*Survey Questions:

1) Race, ethnicity and primary language data is collected at the first patient encounter and used to benchmark gaps in care.
2) Hospital educates all clinical staff during orientation about how to address the unique cultural and linguistic factors affecting the care of diverse patients and communities. 3)Racial/ethnic breakdown for each of the hospital's executive leadership positions and members of the hospital's board of trustees.

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Equity of Care:
Where are we...
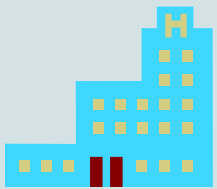
Your Organization

Your Logo

Equity of Care: Where are we...

We collect race, ethnicity and language preference data. (Yes or No)

We use this data to benchmark gaps in care. (Yes or No)
- *Describe ─ lessons learned, challenges, successes…*

We provide cultural competency training to all clinicians and staff. (Yes or No)

Minorities represent XX% of our patient population.

Minorities comprise XX% of our board.

Minorities comprise XX% of our leadership team.
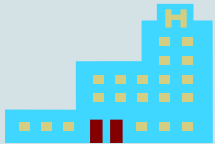
Your Organization

Your Logo

Equity of Care:
Telling our story...

Describe your current efforts as they relate to equity of care.
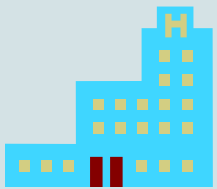
Your Organization

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American Hospital Association

Signature Leadership Series

Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data

August 2013

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Resources: For information related to equity of care, visit www.hpoe.org and www.equityofcare.org.

Suggested Citation: Health Research & Educational Trust. (2013, August). *Reducing health care disparities: Collection and use of race, ethnicity and language data.* Chicago: Health Research & Educational Trust. Retrieved from www.hpoe.org.

Accessible at: http://www.hpoe.org/EOC-real-data

Contact: hpoe@aha.org or (877) 243-0027

Background

In 2011, the American College of Healthcare Executives, American Hospital Association, Association of American Medical Colleges, Catholic Health Association of the United States and America's Essential Hospitals stood together in a call to action to eliminate health care disparities. As national partners, these groups are working together to improve quality of care for every patient by disseminating best practices and resources for equitable care.

The Institute for Diversity in Health Management, an affiliate of the AHA, conducted a national survey in 2011 and found that only 18 percent of hospitals were collecting race, ethnicity and language preference (REAL) data at the first patient encounter and using it to assess gaps in care. As a result, the first goal set forth by the national partners is to increase the collection and use of REAL data to drive the elimination of disparities in care. This guide provides a road map to achieve this goal.

Two additional goals set forth by the national partners are to increase cultural competency training and increase diversity in health care governance and leadership. All three goals and designated milestones are outlined on the Equity of Care website at www.equityofcare.org.

This guide is part of a continuing series that will support hospitals and care systems working to reduce health care disparities and promote equitable care. The partners in the national call to action intend for this series and other resources to markedly increase the percentage of hospitals committed to improving equity of health care in the coming years.

Introduction

Racial and ethnic minorities are projected to account for a majority of the U.S. population by 2043, and the future market for health care services will inevitably reflect this change.[1] In addition, this next generation of health care consumers will be increasingly empowered to differentiate providers based on publicly available quality and satisfaction measures. As such, hospitals and care systems that can accommodate the unique needs of diverse populations will be well positioned for future success. One way to achieve this goal is to collect and use race, ethnicity and language (REAL) data in a meaningful way to understand and address health care disparities among various racial and ethnic groups.

REAL data also can drive success under new payment models that require hospitals and care systems to manage costs while improving the health of their patient populations. For example, both Massachusetts and Maryland have explored distributing incentive payments to hospitals and care systems based on performance metrics stratified by race and ethnicity.[2,3] Recent analysis suggests that 30 percent of direct medical costs for African-Americans, Hispanics and Asian-Americans are excess costs due to health inequities.[4] Using REAL data, hospitals and care systems can identify high-cost drivers, develop interventions to improve care for vulnerable populations and, as a result, appropriately deploy resources.

Given changing demographics, an empowered patient population and new reimbursement models, now is the time to develop thoughtful processes around the collection and use of REAL data. While studies show that most health care providers are collecting some REAL data, significant variation exists in how the data is collected.[5] Furthermore, as few as 14 percent to 25 percent of hospitals and care systems are actually using REAL data to assess variation in quality and health outcomes.[6,7]

This guide includes two sections, which will address both collection and use of REAL data. The first section provides a four-step approach on how to obtain an accurate and usable REAL data set. The second section discusses how hospitals and care systems can use REAL data to achieve clinical, operational, financial and population health benefits.

Section 1: Optimizing REAL Data Collection

Before hospitals and care systems begin using REAL data, they first should obtain a strong data set with which to work. Hospitals and care systems can adopt the four-step approach in Figure 1 to achieve a successful data collection effort.

Figure 1: Four-Step Approach to Ensure Successful REAL Data Collection

1) Determine the appropriate data categories	2) Develop a methodology for data collection	3) Train staff members on methodology for data collection	4) Assign accountability and monitor progress of data collection efforts

Source: American Hospital Association, 2013.

Step one is to develop a locally relevant and culturally appropriate set of REAL data categories that are standardized across the organization. Steps two through four consist of adopting an organizational process to ensure data integrity, accuracy and comprehensiveness.

Step 1

Determine the appropriate data categories

To obtain a good data set, hospitals and care systems should first define the data categories that are appropriate for their patient populations. The U.S. Office of Management and Budget (OMB) originally defined standardized REAL data categories, and the Institute of Medicine (IOM) developed a 2009 report citing the need for more granular ethnicity categories. The IOM's recommendations are outlined in Figure 2.

Figure 2: IOM-Recommended REAL Data Categories

Race and Ethnicity

OMB Hispanic Ethnicity
- Hispanic or Latino
- Not Hispanic or Latino

OMB Race (Select one or more)
- Black or African American
- White
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Some other race

Granular Ethnicity
- Locally relevant choices from a national standard list of approximately 540 categories with CDC/HL7 codes
- "Other, please specify:__" response option
- Rollup to the OMB categories

Language Need

Spoken English Language Proficiency
- Very well
- Well
- Not well
- Not at all

(Limited English proficiency is defined as "less than very well")

Spoken Language Preferred for Health Care
- Locally relevant choices from a national standard list of approximately 600 categories with coding to be determined
- "Other, please specify:__" response option
- Inclusion of sign language in spoken language need list and Braille when written language is elicited

Although the IOM includes more than 500 categories for ethnicity and 600 categories for language, hospitals and care systems should tailor this list to accommodate the populations they serve. To identify the right categories:

1) Use publicly available census data

2) Conduct focus groups and/or surveys with key community organizations

3) Use existing survey data (e.g., from local schools)

For more information on selecting data categories, visit: http://www.mass.gov/eo-hhs/docs/dph/health-equity/clas-chapter3.pdf

Sources: Institute of Medicine, 2009, "Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement"; American Hospital Association, 2013.

Step 2

Develop a methodology for data collection

Next, hospitals and care systems will need to develop a methodology for collecting REAL data. Figure 3 outlines some questions to consider when designing this methodology.

Figure 3: Developing a Methodology for REAL Data Collection

Design Question	Options	Considerations / Suggested Method
Who should collect the data?	• Registration staff • Medical assistant • Registered nurse	• Using registration staff has been proven to increase collection rates, although one study found patients preferred being asked in the exam room by nursing staff.[8] Providers should assess staffing levels and determine who is best suited to collect the data. • **Suggested: Registration staff**
When should the data be collected?	• At time of check-in • Over the phone • Pre-exam	• Collecting preferred language data over the phone when a patient is scheduling an appointment can help in planning for interpretation services. • **Suggested: At check-in or over the phone**
What format should be used to collect the data?	• Paper format • Electronic kiosks / tablets • Verbal discussion	• Paper forms, kiosks and tablets allow for patient privacy, although one study has shown that collection rates are highest when patients have the option to also report REAL data verbally.[9] • Paper forms, kiosks and tablets may pose a challenge for patients with limited literacy. • Kiosks or tablets will eliminate the need for staff to transcribe data into the electronic medical record. • **Suggested: Provide options for a more private form of entry (paper form, kiosk or tablet) as well as verbal discussion**

Source: American Hospital Association, 2013.

Patient self-reporting of REAL data is the gold standard of data collection. Staff should never attempt to guess a patient's race, ethnicity or preferred language. While the suggested methods in Figure 3 have proved successful in the past, ultimately hospitals and care systems should choose the best path forward given the populations they serve. As an example, one hospital found that paper forms were often left incomplete in the waiting room, because of the low literacy rate and limited English proficiency of its patient population.[10]

Step 3

Train staff members on methodology for data collection

Once a methodology for data collection is defined, hospitals and care systems should provide training to appropriate staff members. Training on standardized processes can increase compliance, ensure data integrity and improve patient buy-in. The Health Research & Educational Trust (HRET) developed a toolkit that provides REAL data collection training materials for hospitals and care systems and can be accessed free at http://www.hretdisparities.org/.

Step

4 *Assign accountability and monitor progress of data collection efforts*

Hospital leadership should assign accountability and monitor data collection efforts to ensure processes are working as planned. For example, registration staff can be held accountable for achieving certain metrics against a baseline, such as a decrease in the number of patients reported as "unknown" for race or ethnicity. Leveraging existing processes can save time and resources. One hospital used an existing post-discharge survey to determine whether or not REAL data was collected at registration.[11] No new costs were associated with this process, and the data helped to increase compliance with collection protocols.

Proper data collection will not be a quick process: it took one hospital several years to reduce the number of patients reported as "unknown" race to less than 1 percent. However, this four-step process gives hospitals and care systems a starting point to obtaining a strong REAL data set.

Section 2: Making Good Use of REAL Data

After obtaining a robust REAL data set, hospitals and care systems will need to make several decisions, including which measures to look at, what to use as a reference point, whether any risk adjustments are needed and what sample size is appropriate. The Disparities Solution Center at Massachusetts General Hospital provides a toolkit with recommendations on how best to conduct REAL data analyses. The toolkit can be found at http://www2.massgeneral.org/disparitiessolutions/z_files/Disparities%20Commissioned%20Paper.pdf. After completing analyses, hospitals and care systems then can use the results in meaningful ways, as outlined in Figure 4.

Figure 4: Using REAL Data Effectively

How to Use REAL Data	Details
Identify the measures where the greatest disparities exist and prioritize which initiatives to pursue.	Given resource constraints, hospitals and care systems can use REAL data to prioritize their agenda for reducing disparities. For example, AnMed Health in Anderson, S.C., created a "Disparities Dashboard" and stratified patient satisfaction and inpatient quality indicators by race and ethnicity to identify disparities. The health system found that while some scores were fairly consistent across race categories, the 30-day readmission rate for acute myocardial infarction was significantly higher among African-Americans compared to other patients. In order to identify the root cause, the hospital dedicated a nurse to interview patients flagged to be at-risk for AMI readmissions.[12]
Understand the demographic makeup of the patient population at a more granular level and develop tailored care plans.	Using REAL data, clinicians can begin addressing disparities during patient visits. For example, studies have shown that breastfeeding rates vary significantly among different Asian ethnicities (91% among Indian women versus 35% among Cambodian women).[13] Using granular ethnicity data, obstetricians can include additional patient education for certain populations. As another example, clinicians at Hennepin County Medical Center in Minnesota will consider ordering vitamin D blood screens for Somali women, who are prone to vitamin D deficiencies.[14, 15]

Develop patient-centered, community-based interventions to reduce disparities.	REAL data can support the development of programs that influence behavior outside the exam room as well. Massachusetts General Hospital in Boston pursued a patient navigator program after finding a significant gap in colorectal cancer (CRC) screening rates between Latino and white populations. The hospital first interviewed a subset of Latino patients to understand common barriers to CRC screening, then trained patient navigators to provide patients with educational materials, emotional support and referral and scheduling services.[16]
Drive board-level decision making on where to invest and deploy resources.	Hospitals and care systems also can use REAL data for operational and strategic decision making. One study found that among providers using REAL data, 40% used it to "inform decisions about resource allocation (e.g., deciding where to build new clinics) and one-third used the data to look at trends in patient demographics for marketing and strategic planning."[17] For example, Vidant Health, based in North Carolina, identified 45 different languages used by its patients. As a result, the health system created a patient-centered communications task force to improve language interpretation services among its 10 hospitals and 40 physician practices.[18]

For designing interventions, it is important to receive feedback from community members to drive program success. Hospitals and care systems can use focus groups, community surveys, advisory boards or other mechanisms to ensure interventions are patient-centered and effective.

Using REAL data can result in a number of benefits to hospitals and care systems, some of which are outlined in Figure 5.

Figure 5: Benefits of Using REAL Data

Benefit	Example
Reduce costs	After discovering high readmission rates among its African-American population, Methodist Le Bonheur Healthcare, based in Memphis, Tenn., implemented a program to help these patients transition from hospital to home. As a result, total health care costs for participants were roughly $8,700 lower, on average, than for nonparticipants, and readmissions for patients with heart failure fell from 35% to 20%.[19]
Reduce disparities in health outcomes	Massachusetts General Hospital in Boston provided culturally tailored individual and group coaching sessions to Latino patients struggling with diabetes self-management. As a result, the gap in the percentage of Latinos compared with whites with uncontrolled diabetes decreased from 13% to 9%.[20]
Reduce hospital readmissions	AnMed Health, based in Anderson, S.C., used an EMR alert and patient navigator program to reduce disparities in readmission rates. The intervention reduced the 30-day AMI readmission rate among African-Americans by 20%, and the gap in readmission rates between African-Americans and other racial subgroups decreased by 16% within one year.[21]
Receive incentive payments	Hospitals and care systems may begin to receive incentive payments for reducing health care disparities. Massachusetts already has a Medicaid pay-for-performance program that provides hospital rate increases "contingent upon quality measures, including the reduction of racial and ethnic disparities in health care." The program asks hospitals and care systems to report on a Clinical Disparities Composite Measure to determine eligibility for payment.[22, 23]
Meet PCMH certification requirements	Hospitals and care systems can meet Standard 6 of NCQA certification for patient-centered medical homes if data collected "is stratified by race and ethnicity," and "the practice identifies areas of disparity among vulnerable populations, sets goals and acts to improve performance in these areas."[24, 25]

Conclusion

While the ultimate goal of collecting REAL data is to reduce health care disparities, the immediate focus for hospitals and care systems should be ensuring data is standardized and collected appropriately. By adopting a four-step approach—defining the right data categories, developing a methodology for collection, training staff, and assigning accountability / monitoring progress—hospitals and care systems will have a strong REAL data set for analysis. With this data, hospitals and care systems can stratify outcomes measures to understand where disparities exist, prioritize where to focus time and resources and develop patient-centered interventions. Effective collection and use of REAL data will position hospitals and care systems for success in an environment where regulators, payers, employers and, most importantly, patients are looking for more differentiated and individualized health care.

Case Study: The Institute for Family Health, New York

The Institute for Family Health operates 17 sites that provide primary health care services to more than 90,000 patients in New York City and the Hudson Valley. In 2006, IFH attempted to assess quality measures stratified by race and ethnicity, only to discover deficiencies in the data sets. As a result, IFH became one of the first institutions to adopt the Institute of Medicine's 2009 recommendations for REAL data collection, with four goals in mind: 1) maximize data collection rates, 2) obtain self-reported data from patients, 3) obtain granular data and 4) create new tools for identifying and addressing health care disparities. IFH embarked on a five-stage process to achieve these goals, which consisted of designing the data collection process, updating the EMR, training staff members, monitoring their progress and using the data meaningfully. During the monitoring stage, IFH saw statistically significant improvements in the proportion of patients with race and granular ethnicity recorded across several sites—an increase of 13 percent in race fields completed and 24 percent in ethnicity fields completed. IFH also was able to use the REAL data sets to identify a need for hepatitis B screening among foreign-born patients from endemic geographies. Using an EMR alert, providers now know when to administer the screening.

Contact:
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212-659-1406, dhauser@institute2000.org
http://www.institute2000.org/

Case Study: Wheaton Franciscan Healthcare, Wisconsin

Wheaton Franciscan Healthcare is a nonprofit, integrated health system serving nearly one quarter of southeast Wisconsin. WFHC recognizes the importance of attaining a strong REAL data set for analysis to reduce health care disparities. The health system not only trains staff on proper data collection techniques but also monitors progress by reviewing collection metrics on a quarterly basis. With support from the health system's executive strategy diversity team and the organization's CEO, WFHC uses REAL data to identify and reduce disparities in health outcomes. Recent analysis revealed a need to improve diabetes management for the hospital's African-American population. To develop a patient-centered intervention, the health system first conducted a series of focus groups to identify common barriers to diabetes self-management among African-Americans. The discussions revealed that traditional, structured diabetes education programs were overwhelming for patients, especially newly diagnosed diabetics. Given the findings, WFHC created an intervention program that uses a community health worker to provide diabetes education and support for participants. The CHW, who is a community member that patients can easily relate to, spends the majority of time engaging patients in both clinical and nonclinical settings. In addition, participants have the opportunity to attend peer support groups at the end of each educational session. The program started in March 2013, and WFHC is currently tracking patient progress on diabetes knowledge, A1C levels, body mass index, weight and blood pressure.

Contact:
Rosha Hamilton, RN, MSW
Director, Community and Patient Health Education Services, Wheaton Direct
414-465-3439, rosha.hamilton@wfhc.org
http://www.mywheaton.org/

Resources

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Managing an Intergenerational Workforce:
Strategies for
Health Care Transformation
January 2014

A report from the AHA Committee on Performance Improvement

hospitals in
pursuit of excellence™
Accelerating Performance Improvement

American Hospital Association

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Executive Summary

Generational diversity is rapidly changing workforce dynamics. Each generation has different priorities, attitudes, communication styles, work approaches and ways to interact with colleagues, which influence organizational culture and performance. There are also common and unifying characteristics across all generations that can be leveraged to create optimal teams, critical for future health care models.

Leveraging these generational strengths and differences will give hospital and care system leaders an edge as the health care field moves from the "first curve," where hospitals operate in a volume-based environment, to the "second curve," a value-based care system and business model. Leaders that develop robust and productive multigenerational teams, leveraging each cohort's strengths, will be well positioned to handle "life in the gap," the transition between the two curves.

In 2011, the American Hospital Association Committee on Performance Improvement (CPI) released *Hospitals and Care Systems of the Future,* identifying several must-do strategies and core competencies to help leaders manage life in the gap and achieve the Triple Aim of health care: improve the health of the population (our communities), improve the individual care experience and reduce the per capita cost of health care. Building a robust organizational culture that can adapt to change is essential to achieve these goals. To build a healthy culture, leaders need to harness all employees' potential to achieve optimal organizational performance and ensure excellent patient care.

With the workforce becoming increasingly diverse, the 2013 AHA CPI explored the effects of the intergenerational workforce on hospital organizational culture and patient outcomes. Leaders who capitalize on the commonalities and differences of each cohort can create a dynamic and engaged workforce and gain a competitive edge in attracting and retaining productive employees, even with labor shortages.

Each generation brings a different set of values, beliefs and expectations to the workplace, from the traditionalists (born before 1945), baby boomers (born 1946 to 1964), Generation X (born 1965 to 1980) to the millennials (born after 1980). Leaders need to develop strategies to engage these different groups simultaneously to achieve optimal clinical outcomes and patient experience. In contrast, organizations that fail to effectively manage a generationally diverse workforce will experience high employee turnover; pay higher costs for recruitment, training and retention; and have lower patient experience scores and worse clinical outcomes.

The figure "Strategies for Managing an Intergenerational Workforce" presents factors that influence how individuals approach work and provides strategies for hospital leaders to implement. Hospitals leaders that leverage the strategies can create high-performing teams adaptable to evolving health care needs. Of the recommended strategies, it is essential that every organization start with:

> ➢ conducting an intergenerational evaluation to determine the organization's workforce profile and develop a comprehensive plan;
> ➢ implementing targeted recruitment, segmented retention and succession planning strategies; and
> ➢ developing tailored communication strategies that cultivate generational understanding and sensitivity.

As workforce demographics shift, jobs, scope of practice, team roles and professional education in the health care field will trump current care delivery structures and necessitate innovation. Hospitals and care systems that implement intergenerational strategies and practices—critical to redesigning care delivery—will achieve second-curve outcomes. Success will elude those organizations that fail to do so.

Hospitals and care systems of the future

Strategies for managing an intergenerational workforce

Build a strong generational foundation
- Conduct an intergenerational evaluation to determine the organization's workforce profile
- Acquire intergenerational talent
- Segment retention strategies

Establish effective generational management practices
- Customize management and communication styles
- Leverage employees' strengths
- Tailor recognition and rewards
- Encourage collaboration in the workplace

Develop generational competence
- Develop generational understanding
- Participate in formal mentoring programs
- Improve communication skills and generational sensitivity

Factors of diversity that influence
the characteristics and attitudes of individuals

Environment
Race and Ethnicity
Socio-economic Status
Age Intergenerational
Education Level
Historical Events
Gender
Political
Religion
Disability

The Intergenerational Workforce

Traditionalists: Born before 1945
Baby Boomers: Born 1946–1964
Generation X: Born 1965–1980
Generation Y/Millennials: Born after 1980

Source:AHA CPI, 2014.

Introduction

By the next decade, the U.S. health care industry will face workforce shortages due to aging employees and to more patients living longer as a result of new treatments and technology. There will be a generational gap between older patients and younger health care providers that will impact the level and quality of care. Several efforts are in place to address labor shortages, such as the expansion of allied health professional careers, emerging health care occupations and expansion and acceleration of clinical education programs.

Expansion of allied health professional careers

In the last two decades, health care delivery in the United States transformed from a segmented care model into a multidisciplinary model. This development, along with managed care, the aging population and increased need for rehabilitation services, resulted in an expansion of allied health professional careers.[1]

Emerging health care occupations

Health care reform and the movement toward patient-centered care will increase employment opportunities in newer health care occupations such as community health workers, chronic illness coaches, patient advocates and home- and community-based service navigators.[2] These new members of the health care team improve patient health and support independent living, with a focus on emphasizing prevention and avoiding unnecessary hospitalization, thereby lowering costs and increasing health care access for more individuals.[3]

Expansion and acceleration of clinical education programs

In recent years, universities have increased capacities in medical and nursing schools by expanding their size and creating accelerated programs for some clinical professions.[4]

Why the Intergenerational Workforce?

For the first time in modern U.S. history, there will be four generations in the workforce. This report explores the characteristics of each generation and their impact on the health care industry. The generations are defined as follows:

- Traditionalists (born before 1945)
- Baby boomers (born 1946–1964)
- Generation X (born 1965–1980)
- Generation Y/Millennials (born after 1980)

Individuals from different generations may bring vastly different sets of values, beliefs and expectations to the workplace. They have different priorities, attitudes, communication styles and ways to engage with peers and work design that is influencing organizational culture and performance. Ignoring these differences can be detrimental for any organization. However, leaders who capitalize on these inherent differences can create a dynamic and engaged workforce needed to achieve health care's Triple Aim: improve the health of the population (our communities), improve the individual care experience and reduce or control the per capita cost of health care. Capitalizing on these differences will also give health care leaders a competitive edge in attracting and retaining productive employees, even with labor shortages. In addition, some individuals born on the cusps of generations—"cuspers"—understand and resonate with both groups. Organization may want to build strong relationships with cuspers and leverage their abilities to bridge generational commonalities and differences in areas such as communication styles and reward and recognition preferences.

Preparing Hospitals and Care Systems for the Future

The 2011 AHA Committee on Performance Improvement report, *Hospitals and Care Systems of the Future*, identified must-do strategies and core organizational competencies to help leaders achieve the Triple Aim of health care. Two must-do strategies and four core organizational competencies support building a strong organizational culture, essential to developing the future workforce.

The must-do strategies are:
1. **Align hospitals, physicians and other providers across the continuum of care**
2. Utilize evidenced-based practices to improve quality and patient safety
3. Improve efficiency through productivity and financial management
4. Develop integrated information systems
5. Join and grow integrated provider networks and care systems
6. **Educate and engage employees and physicians to create leaders**
7. Strengthen finances to facilitate reinvestment and innovation
8. Partner with payers
9. Advance an organization through scenario-based strategic, financial and operational planning
10. Seek population health improvement through pursuit of the Triple Aim

The core organizational competencies are:
1. **Design and implement patient-centered, integrated care**
2. **Create accountable governance and leadership**
3. Plan strategically in an unstable environment
4. **Promote internal and external collaboration**
5. Ensure financial stewardship and enterprise risk management
6. **Engage employees' full potential**
7. Collect and utilize electronic data for performance improvement

This report identifies approaches and initiatives to help health care leaders deploy the boldfaced strategies and competencies. Hospital leaders must focus on developing organizational culture, particularly managing the intergenerational workforce, to find success in the second-curve, value-based environment.

Figure 1 illustrates intergenerational management strategies that will ultimately lead hospitals and care systems to achieve second-curve outcomes.

Figure 1: Managing an Intergenerational Workforce to Achieve Second-Curve Outcomes

Intergenerational Management	Must-do Strategies and Competencies	Second-Curve Outcomes
• Build a strong generational foundation • Establish effective generational management practices • Develop generational competence	• Align clinicians and hospitals • Engage employees in transformation • Deliver optimal team-based, patient-centered care • Have an organizational culture to support execution	• Optimal clinical outcomes • Optimal patient experience • Reduction in total cost of care

Source: AHA CPI, 2014.

Multiple Generations in the Workplace

Generational Demographics

As people in the United States are living and working longer, the workforce composition has shifted and will continue to become more generationally diverse (see Figures 2 and 3).

Figure 2: U.S. Population by Generation

Source: U.S. Census Bureau, American Community Survey, 2007.
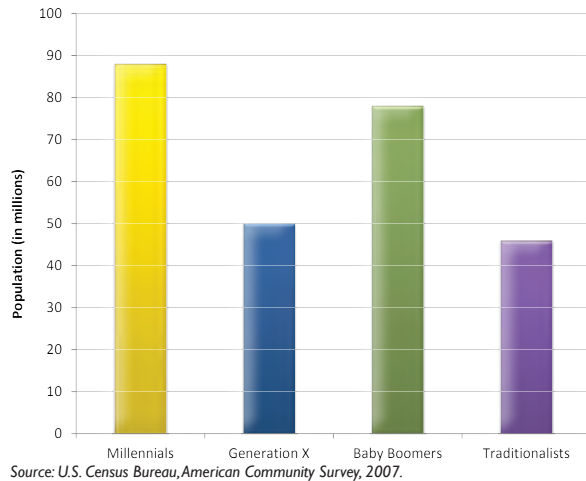
Figure 3: Estimates and Projection of Generations in the U.S. Workplace 2010–2020

Source: U.S. Census Bureau, American Community Survey, 2007.
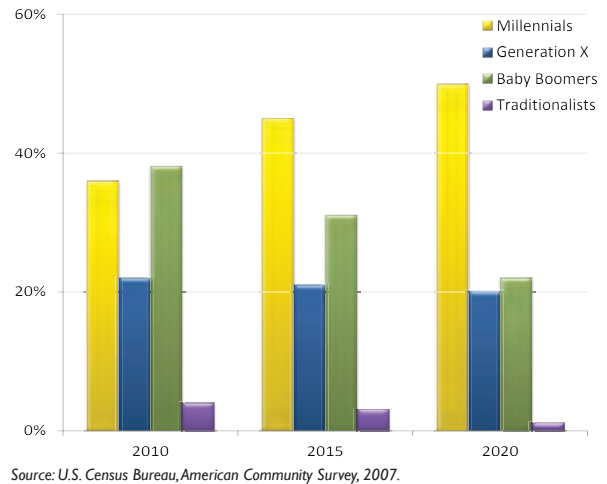
Workforce Continuum

People in each generation are in different stages of their professional careers, as illustrated in Figure 4. Millennials are slowly entering the workplace and are projected to comprise 50 percent of the workforce by 2020. Generation Xers are advancing their careers in the workforce. Most Gen Xers are middle managers, while baby boomers fill leadership roles and are approaching retirement. Due to the 2008 recession, millennials are less likely to be employed than were Generation Xers and baby boomers at their age[5], and baby boomers are delaying retirement and working longer.[6] Most traditionalists have retired, with only about 5 percent or less active in the workforce today.[7]

Figure 4: Intergenerational Workforce Continuum

Millennials	Generation X	Baby Boomers	Traditionalists	
Entering the workforce	Advancing their careers	Delaying retirement plans	95% are retired	Exit workforce
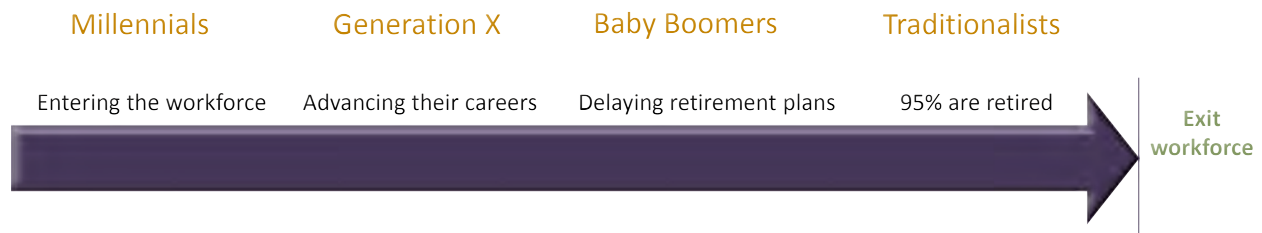
Source: AHA CPI, 2014.

Generational Interaction in the Workplace

According to a Lee Hecht Harrison survey, more than 60 percent of employers are experiencing tension between employees from different generations. The survey found that more than 70 percent of older employees are dismissive of younger workers' abilities, and nearly 50 percent of younger employees are dismissive of their older colleagues' abilities.

The generational tension is a result of different historical experiences and attitudes (Figure 5). Each generation was influenced by the same factors; however, each generation experienced these factors differently. For example, traditionalists and many baby boomers grew up before the civil rights movement while Generation X and millennials grew up after the Civil Rights Act of 1964, thereby shaping their views on race, religion and gender. How the generations experienced such events affects their perceptions of commitment, company loyalty, task management, project execution and professional development. Cultural differences also influence the characteristics and attitudes of individuals in the workplace. For example, new Americans and permanent residents may have different business etiquettes than natural-born Americans in the same generation. These groups may differ in communication styles, their attitudes toward management and organizational hierarchies, and how they value time in the workplace and cope with work volume.

Regardless of the factors impacting generational dynamics in the workplace, a standard level of professionalism in the health care industry is expected of every employee. This ranges from ethical standards of clinical practice that are embedded in licensing requirements to U.S. laws that protect patient privacy, such as the Health Insurance Portability and Accountability Act.

Figure 5: Factors of Diversity

Factors of diversity that influence
the characteristics and attitudes of individuals

The Intergenerational Workforce

Traditionalists: Born before 1945
Baby Boomers: Born 1946–1964
Generation X: Born 1965–1980
Generation Y/Millennials: Born after 1980
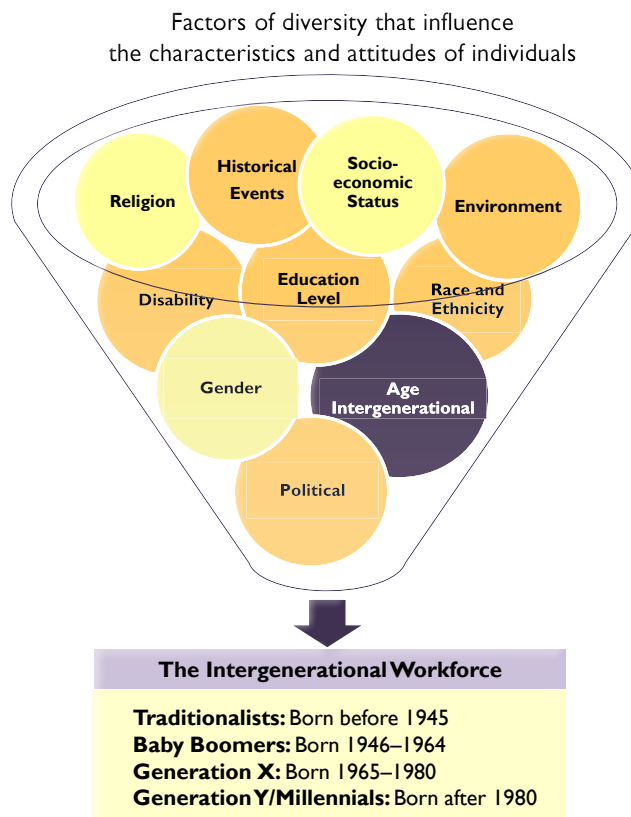
Source: AHA CPI, 2014.

To illustrate the challenges of managing a diverse workforce, health care leaders need an understanding of how each generation experienced the same factors. Table 1 highlights characteristics associated with each generation, their experiences and their views.

Table 1: Overview of Characteristics for Each Generation

	Traditionalists	**Baby Boomers**	**Generation X**	**Millennials**
Major Trait	Loyalty	Competition	Self-reliance	Immediacy
Broad Traits	Sacrifice, loyalty, discipline, respect for authority	Competitive, long work hours	Eclecticism, self-reliance, free agents, work/ life balance, independence	Community service, cyberliteracy, tolerance, diversity, confidence
Influential Events	Great Depression, World War II, Cold War, Korean War, suburban sprawl begins, first satellite launches	Watergate, women's rights, JFK assassination, civil rights and Martin Luther King Jr., Vietnam War, man walks on the moon	MTV, AIDS, Gulf War, 1987 stock market crash, fall of communism/Berlin Wall, Challenger shuttle explodes	Internet, social media, 9/11 terrorist attack, deaths of Princess Diana and Mother Teresa
Defining Invention	Fax machine, radio	Personal computer, television	Mobile phone, Walkman, computer	Internet, smart phones (text messaging), social media, instant messaging
Family	Traditional, nuclear	Disintegrating	Latchkey kids, high divorce rate	Blended families
Education	A dream	A birthright	A way to get there	An incredible expense
Money	Put it away, pay cash	Buy now, pay later	Cautious, conservative, save, save, save	Earn to spend

Source: Adapted from a compilation by "Future Workplace" found in The 2020 Workplace *by Meister, J. and Willyerd, K., 2010. New York: HarperCollins. Copyright 2010 by Jeanne C. Meister and Karie Willyerd.*

Millennials

Background
There are 80 million millennials in the United States, and they are the largest age group in American history.[8] Even with the 2008 recession, millennials are picky about work and do not take a job just to have one. According to a study conducted by Monster.com and Millennial Branding in 2013, only 26 percent of millennials would stay with their current employer and 55 percent viewed their current employers as temporary or a stepping stone in their careers.[9]

Work style and preferences
Millennials are technologically savvy. They grew up with personal computers and used the Internet for the majority of their lives. A majority also use social media on a daily basis. Their major trait includes instant gratification. According to a National Institutes of Health study, 40 percent of millennials believe they should be promoted every two years, regardless of work performance.

Working with different generations
Millennials seek mentorship to grow in their careers. Managers and supervisors can combine daily or weekly challenges with constant feedback and recognition to engage employees in this group and increase their productivity.[11]

Generation X

Background
Gen Xers are known as the latchkey kids who found themselves at home alone or taking care of siblings because both of their parents were working. As a result, Gen Xers grew up to be independent.

The prime wealth-building period of Gen Xers was affected by the 2008 recession. Without much wealth to begin with, they lost 45 percent of it—an average of about $33,000.[12] Due to this lower net worth and downward mobility in retirement, Gen Xers are the cohort least likely to exceed the wealth of baby boomers.[13]

Work style and preferences
About 77 percent of Gen Xers will pursue working for an employer that offers increased intellectual stimulation.[14] To engage this group, managers and supervisors need to present new and challenging projects since Gen Xers want to gain new skills and advance their careers. To support employees of this group, managers and supervisors can provide immediate and thoughtful feedback.

Gen Xers value flexibility and freedom in the workplace. According to a Catalyst study in 2001, among Gen Xers, 51 percent of females and 37 percent of males are willing to leave their current position for a job that allows telecommuting, and 61 percent of females and 45 percent of males would leave their current employer for a company that offers flexible work hours.

Working with different generations
Having lived in an era when corporations were failing and laying off employees, Gen Xers are mistrustful of institutions and authority and therefore cautious about investing in working relationships with their employers.[15]

Baby Boomers

Background

The 2008 recession had a detrimental effect on baby boomer's retirement accounts; individuals aged 55–64 lost 25 percent of their savings.[16] As a result, baby boomers are remaining in the workforce longer than the previous generation. According to the Employee Benefit Research Institute, many in this generation may need to work up to 13 more years to recover from their losses.

Organizations can entice this group with retirement-oriented benefits such as a 401(k) plan and medical insurance.[17] They can also continue to motivate and retain this group by offering flexible work hours or more vacation time.[18]

Work style and preferences

Baby boomers have a strong work ethic, superior communication skills and are emotionally mature.[19] They are also dedicated, loyal and committed to their organizations and professional accomplishments. In the workplace, baby boomers communicate effectively in informal settings and respond best during group meetings or in places where open dialogue is encouraged.[20]

Working with different generations

Baby boomers are currently leading companies and different generations in the workplace. Their management style is fairly authoritarian. To better motivate Generation X and millennial employees, baby boomers can incorporate an approach that is encouraging and supportive.[21]

Traditionalists

Background

Traditionalists grew up during wartime and postwar periods. They witnessed their parents struggle to make ends meet during the Great Depression of the 1930s. Having lived and adapted to an environment of scarcity, they became financially prudent and value job security. A majority of traditionalists also served in the military during the first and second World Wars. Therefore, it is no surprise that they prefer leadership styles that follow a top-down chain of command in the workplace.

Work style and preferences

Traditionalists bring institutional experience and wisdom to the workplace.[22] With a work ethic described as "command and control," this generation respects the hierarchical structure of the organization and follows rules. To leverage traditionalists' strengths, leaders should clearly identify their roles and tasks in the organization.

Unlike the other generations, this cohort prefers written forms of communication and tends to be uncomfortable communicating through the use of technology.[23]

Working with different generations

Traditionalists are loyal to their employers and consider their jobs a lifetime career. They respect authority and follow the rules and chain of command in the workplace. Traditionalists also honor professional seniority and believe that individuals should pay their dues to advance their career.

Working with Different Generations

Despite many generational differences presented in this report, there are similarities among each group that organizations should recognize. Table 2 presents each group's perceptions of workplace culture.

Table 2: Generational Perceptions of Workplace Culture

	Traditionalists	Baby Boomers	Generation X	Millennials
Most important aspects of workplace culture[24]	Fair (90%)	Fair (86%)	Fair (87%)	Fair (66%)
	Ethical (90%)	Ethical (84%)	Ethical (83%)	Ethical (66%)
	Straightforward (74%)	Straightforward (76%)	Straightforward (74%)	Straightforward (54%)
	Professional (74%)	Professional (70%)	—	Professional (48%)
	Collaborative/team attitude (65%)	Collaborative/team attitude (70%)	Collaborative/team attitude (71%)	—
	—	—	Friendly/social (66%)	Friendly/social (59%)
Top reasons for happiness in the workplace[25]	Feeling valued (88%)	Feeling valued (87%)	Feeling valued (84%)	Feeling valued (85%)
	Recognition and appreciation (84%)	Recognition and appreciation (78%)	Recognition and appreciation (74%)	Recognition and appreciation (74%)
	Supportive environment (70%)	Supportive environment (71%)	Supportive environment (69%)	Supportive environment (73%)
	Leadership I can relate to (69%)	Leadership I can relate to (71%)	Leadership I can relate to (66%)	—
	—	Capable workforce (64%)	Capable workforce (68%)	Capable workforce (72%)
Reasons for staying in an organization[26]	Opportunity to advance within the organization	Similar	Similar	Similar
	Learning and development			
	Respect and recognition			
	Better quality of life			
	Better compensation			
Attitudes toward teamwork	—	Likes teamwork	Likes teamwork	Likes teamwork

Concerns related to change[27]	Doing the same work with fewer resources	Similar	Similar	Similar
	Changes in both the internal and external environment			
	Technology changes			
	Change that is disorganized, unnecessary or both			
	Resistance to change			

Source: Adapted from "Generational differences in the workplace" by Tolbize, A., 2008.

Strategies to Support Health Care Transformation

The movement from a volume-based payment model to a value-based payment model has health care leaders looking to improve care while lowering costs. An intergenerational workforce can provide steady and able employee capital, optimal operational performance, financial solvency and excellent patient care, despite labor shortages and rising health care costs.

To create this competitive advantage, leaders should develop a culture that supports and fosters intergenerational teams using three intergenerational management strategies: build a strong generational foundation, establish effective generational management practices and develop generational competence. Each strategy influences and supports the others and must operate synergistically (Figure 6).

Figure 6: Interdependence of Three Intergenerational Management Strategies
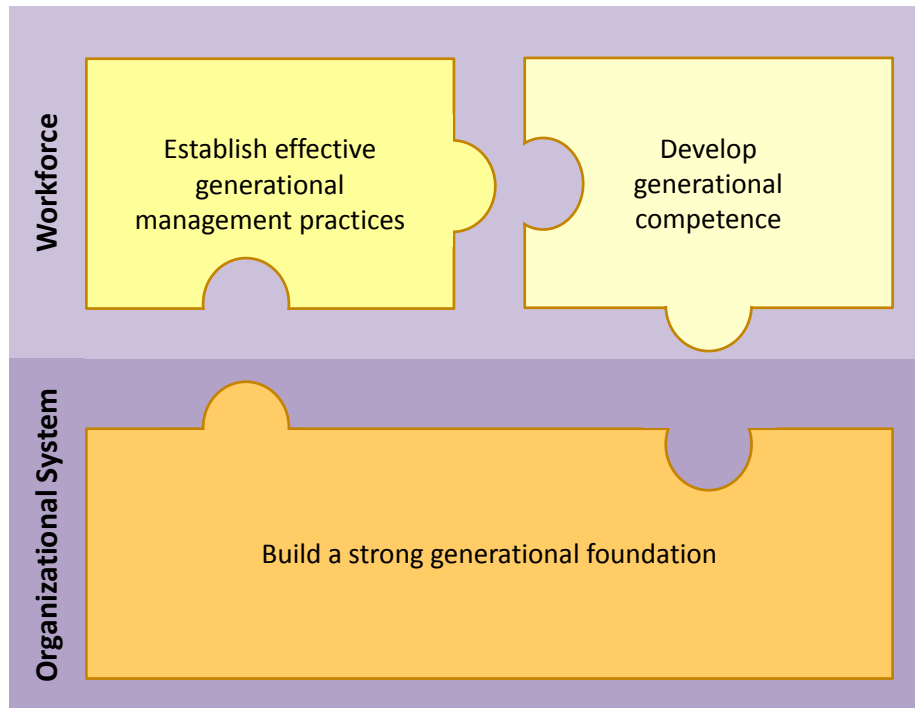
Source: AHA CPI, 2014.

To build the necessary foundation, leaders need to understand their organization's workforce profile and develop programs and policies to acquire and retain generationally diverse employees. Once these are established, leaders need to tailor their management and communication styles to effectively identify and leverage the different strengths of each generation. After identifying generational strengths and developing practices to leverage them, leaders can encourage and spread understanding and sensitivity among the entire workforce. This, in turn, positively affects retention and acquisition programs and policies. Table 3 provides a checklist of action steps for the three different strategies.

Table 3: Checklist of Strategies to Manage an Intergenerational Workforce

Build a Strong Generational Foundation	
	Conduct an intergenerational evaluation to determine the organization's workforce profile
	Acquire intergenerational talent
	Targeted recruitment efforts
	Organizational website and social media presence of company brand
	Job descriptions connecting tasks/role to organization's mission and values
	Job mobility
	Interactive employee handbook
	Segment retention strategies
	Tailored support services
	Flexible work options
	Educational and career development programs
	Supplemental income opportunities
Establish Effective Generational Management Practices	
	Customize management and communication styles
	Flexible work hours
	Orientation and development programs
	Leverage employees' strengths
	Tailor recognition and awards
	Encourage collaboration in the workplace
	Intergenerational training opportunities
	Social media platform for employee engagement
	Inclusive planning and decision-making opportunities
	Succession planning strategy
Develop Generational Competence	
	Develop generational understanding
	Participate in formal mentoring programs
	Improve communication skills and generational sensitivity

Source: AHA CPI, 2014.

Of these recommended strategies, it is essential that every organization start with:

➢ conducting an intergenerational evaluation to determine the organization's workforce profile and develop a comprehensive plan;
➢ implementing targeted recruitment, segmented retention and succession planning strategies; and
➢ developing tailored communication strategies that cultivate generational understanding and sensitivity.

This list should provide the basis for prioritizing future strategies. As a start, knowing the generational profile of the organization, customizing recruitment, retention and succession planning efforts and tailoring communication strategies and tactics to different generations all provide a foundation for future work.

Building a Strong Generational Foundation

Building a strong foundation is essential to creating a sustainable future for any organization. Organizations need to embrace and celebrate generational diversity by implementing programs and policies to support employees' growth and development.

☐ Conduct an Intergenerational Evaluation to Determine the Organization's Workforce Profile

Hospitals and care systems must first assess their current workforce. Leaders should have a clear picture of which generations are in their organization and how many employees fall into each category. Results can be used to develop a comprehensive plan that addresses generational risks factors, such as supporting employees' professional and organizational growth. Additionally, these results are useful in forecasting future workforce needs. (See Case Studies 1, 5 and 6.)

The AHA, American Organization of Nurse Executives (AONE) and the American Society for Healthcare Human Resources Administration (ASHHRA) developed a workforce planning tool to assist hospitals and care systems in creating a competent and engaged workforce to deliver quality patient care. The report *Developing an Effective Health Care Workforce Planning Model* explores the strengths and weaknesses of existing health care workforce planning models and provides an assessment tool to analyze current and future workforce data and identify organizational strengths and weaknesses.

☐ Acquire Intergenerational Talent

To build a sustainable workforce that will provide high-quality patient care and create a competitive edge for the organization, hospital leaders can apply innovative strategies to attract intergenerational talent and enhance the organization's talent pool.

- ○ **Targeted recruitment efforts**
  Organizations must expand recruitment efforts to target different generations and create a balanced distribution of employees. For example, the baby boomer generation can be targeted by posting career openings on websites and other media outlets geared toward the 50 and over population. Some agencies specialize in placement of seniors. Additionally, policies can be put in place to take advantage of employee referrals among this generation. (See Case Studies 1 and 5.)

- ○ **Organizational website and social media presence of company brand**
  The Internet provides job seekers a way to easily conduct research on a prospective employer. Therefore, a health care organization needs to be authentic, transparent and honest about any claims on its website. An organization can employ different types of websites, such as social media and video channels to target different generations. (See Case Study 6.)

- ○ **Job descriptions connecting tasks/role to organization's mission and values**
  An organization must effectively tailor communication of its mission and values to appeal to the different generations. For example, the majority of millennials value job fulfillment more than compensation and financial rewards. An organization seeking to recruit this group could present job descriptions that explain how a role will contribute to the organization's mission and values. Millennials need to know their work has purpose and feel empowered to achieve it.[28] (See Case Study 6.)

○ **Job mobility**
Successful organizations provide growth opportunities for employees, which help retain productive employees and prepare them for future leadership roles. Organizations must ensure that they do not stall the careers of baby boomers nor exclude traditionalists from participating in pivotal organizational activities due to physical limitations, and they should provide younger staff with opportunities for advancement. (See Case Study 3.)

○ **Interactive employee handbook**
Since each generation prefers different communication techniques, organizations should disseminate company policies, expectations and employee benefits information in a variety of ways. An example is using a human resource information system (HRIS) so human resources staff can conduct activities and handle processes electronically. (See Case Example 7.)

☐ Segment Retention Strategies

Once a generationally diverse and talented workforce is in place, leaders can focus on policies and procedures to retain productive employees and prevent high and costly turnover. The average turnover cost for a millennial employee can be upward to $75,000.[29] Tailoring support services to different generations, providing flexible work options, offering educational and career development programs and providing supplemental income opportunities will incentivize employees.

○ **Tailored support services**
Organizations can develop employee support services to address the evolving needs of employees, such as caring for dependents and elderly parents. (See Case Study 1.)

○ **Flexible work options**
To retain talent, especially individuals approaching retirement, organizations can provide lucrative options for continued employment, whether full-time or part-time, and a benefits package or special work accommodations that support an employee's needs. Organizations can also provide sabbatical opportunities to rejuvenate employees. (See Case Study 1.)

○ **Educational and career development programs**
Organizations will need to find innovative ways to advance the skill sets of their employees. According to a survey by McCrindle Research, 90 percent of millennials who received periodic training from their employers were motivated to stay with their companies.[30] (See Case Study Studies 5 and 6.)

○ **Supplemental income opportunities**
Organizations must offer a competitive salary that is commensurate with each employee's skills and experience. They might also offer additional income options to supplement an employee's salary. For example, baby boomers, whose retirement accounts were affected by the 2008 recession, may want additional work opportunities to boost their income. (See Case Study 6.)

Establishing Effective Generational Management Practices

Organizational leaders will need to increase their level of understanding of each cohort to better manage the workforce and relieve generational tensions in the workplace.

❏ Customize Management and Communication Styles

Hospital leaders should tailor management and communication styles for each generation (see Table 5). A one-size-fits-all approach will not effectively lead or motivate all generations. Traditionalists may be reluctant to accept change. Baby boomers want respect for their knowledge and experience. Generation X prefers independence and flexibility. Millennials like regular feedback and career coaching.[31]

○ Flexible work hours

The world is becoming more hyperconnected. Cell phones and the Internet have already blurred the lines between work and free time, making it difficult to achieve work-life balance. Managers can minimize this issue by offering more flexible work hours. In a study conducted by Future Workplace, flexible hours and generous telecommuting policies were ranked by younger employees as being more important than salary. According to author Dan Schawbel, Fortune 500 companies—which do not usually offer flexible work hours—have difficulties retaining millennials.[32]

Table 4 shows that greater flexibility in the workplace is an option that resonates across the generations. (See Case Study 4.)

Table 4: Work Hours Options that Appealed to Different Generations[33]

Traditionalists	Baby Boomers	Generation X	Millennials
Freedom to set own hours if the work gets done (76%)	Freedom to set own hours if the work gets done (74%)	Freedom to set own hours if the work gets done (73%)	Freedom to set own hours if the work gets done (63%)
Working full-time for a firm (64%)	Working full-time for a firm (64%)	Working full-time for a firm (63%)	Full-time job with extended time off as needed for personal reasons (53%)
Full-time job with extended time off as needed for personal reasons (46%)	Four-day workweek with 10-hour days (58%)	Full-time job with extended time off as needed for personal reasons (59%)	Working full-time for a firm (50%)
Four-day workweek with 10-hour days (44%)	Full-time job with extended time off as needed for personal reasons (56%)	Four-day work week with 10-hour days (52%)	Four-day work week with 10-hour days (32%)

Source: Adapted from "Generational differences in the workplace" by Tolbize, A., 2008.

○ **Orientation and development programs**
Many orientation and development programs include policies that allow employees to rotate through different departments and learn more about the organization. For example, gamification uses game design and mechanics to engage a target audience and change behaviors, teach new skills or encourage innovation.[34] Because gamification can tap into the competitive nature of individuals to reach new levels, many organizations have begun to use it to recruit, develop and motivate employees. AETNA, for example, has launched an online social game called Mindbloom that is aimed at improving the health and wellness of employees and health care customers.[35] (See Case Study 4.)

☐ Leverage Employees' Strengths

Organizational leaders and managers need to learn the characteristics of each cohort to better leverage employee strengths and effectively distribute projects for optimal performance and outcomes. For example, traditionalists and baby boomers have many years of professional experience and a robust network of connections. Generation Xers and millennials are technologically savvy and have a strong academic background—they hold more graduate degrees than traditionalists and baby boomers. (See Case Example 8.)

☐ Tailor Recognition and Awards

Each generation expects to be rewarded differently. An organization can tailor its reward programs to meet the needs of its generationally diverse workforce. For example, traditionalists want to be praised for their time and dedication; baby boomers prefer name recognition and prestige; Generation Xers prefer programs that will help them balance work and life; and millennials want career development opportunities.[36] (See Case Study 6.)

☐ Encourage Collaboration in the Workplace

Social interaction increases collaboration in the workplace and should be encouraged. Organizations need to develop strategies to bring all employees together. Health care leaders can develop intergenerational training programs and other professional development opportunities to encourage workforce collaboration. Understanding the different qualities of each generation will reduce or prevent friction in the workforce.

○ **Intergenerational training opportunities**
Organizations can take an active role in educating employees on generational issues, to improve understanding, respect and productivity among different cohorts.[37] Organizations must also foster generational understanding at the leadership level. CEOs, VPs and executive management teams that lead by example can optimize workforce productivity and prevent clashes among a diverse group of employees. (See Case Studies 3, 4 and 6.)

Health care leaders can also involve employees in adjusting workplace conditions to better cater to and support staff. This includes developing a platform for employee engagement.

○ **Social media platform for employee engagement**
Health care leaders can establish platforms for engagement to encourage interaction and information sharing among all employees. An example is setting up an organizationwide social media network that connects all staff. (See Case Study 6.)

○ **Inclusive planning and decision-making opportunities**
Health care leaders can increase participatory governance by allowing marginalized cohorts the opportunity to provide input and feedback in workplace planning and decision making. Organizations can benefit from the insights and perspectives of different generations.[38] For example, governing bodies such as the board of trustees or board of medical staff can be reorganized to have representation from each generation. (See Case Studies 2 and 4.)

○ **Succession planning strategy**
The health care field has the highest CEO turnover compared to other industries.[39] With 75 percent of health care leaders estimated to retire in the next decade,[40] health care leaders can prepare for acute talent shortages by accelerating the development of the next generation of leaders, which should include front-line management. Learning must be integrated with daily work to effectively transfer knowledge and expertise. (See Case Studies 2 and 3.)

Developing Generational Competence

While leaders play a role in relieving generational tensions, individual employees also need to understand the unique qualities of each generation. Education and professional development activities are effective in breaking down stereotypes and preventing friction between the cohorts. Experienced workers can pass skills along to new workers and vice versa. These activities and programs break down generational silos as each cohort learns from the others.

❏ Develop Generational Understanding

Every individual in the organization must recognize the different characteristics of each generation, especially how work is perceived and performed. For example, baby boomer physicians believe in building personal relationships with patients; being a doctor is a 24/7 commitment to their patients.[41] On the other hand, younger physicians like having a predictable work schedule and more work-life balance. (See Case Study 3.)

❏ Participate in Formal Mentoring Programs

Mentoring and shadowing programs enable each individual to develop tools to work effectively with all generations. Experienced workers can pass along skills to new workers and vice versa. These programs break down generational silos as each cohort learns from the others. (See Case Studies 1, 2 and 4 and Case Example 9.)

❏ Improve Communication Skills and Generational Sensitivity

Since each generation has its own style of communicating, all employees must learn the differences to work effectively with colleagues. Further, each generation brings its own ideas of what is appropriate in the workplace and how to achieve goals. Table 5 provides a summary of each generation's communication preferences. (See Case Study 3.)

Table 5: Communication Styles of Each Generation

	Traditionalists	**Baby Boomers**	**Generation X**	**Millennials**
Style	Formal	Semiformal	Not so serious; irreverent	Eye-catching, fun
Content	Detailed, prose-style writing	Chunk it down but give me everything	Get to the point (what do I need to know?)	If and when I need it, I'll find it online
Context	Relevant to my security, historical perspective	Relevant to the bottom line and my rewards	Relevant to what matters to me	Relevant to now, today and my role
Attitude	Accept and trust authority and hierarchy	Accept the "rules" as created by the traditionalists	Openly question authority, often branded as cynics and skeptics	OK with authority that earns their respect
Tactics	Print, conventional mail, face-to-face dialogue or by phone, some online information/ interaction	Print, conventional mail, face-to-face dialogue, online tools and resources	Online, some face-to-face meetings (if really needed), games, technological interaction	Online, wired, seamlessly connected through technology
Speed	Attainable within reasonable time frame	Available, handy	Immediate, when I need it	Five minutes ago
Frequency	In digestible amount	As needed	Whenever	Constant

Source: Adapted from a Deloitte Consulting and the International Association Business Communicators study found in The 2020 Workplace *by Meister, J. and Willyerd, K., 2010. New York: HarperCollins. Copyright 2010 by Jeanne C. Meister and Karie Willyerd.*

Despite the differences in communications styles, there are commonalities in the modes of communication used in the workplace (see Table 6).

Table 6: Modes of Communication Used by Each Generation[42]

Traditionalists	**Baby Boomers**	**Generation X**	**Millennials**
Desktop computer (87%)	Desktop computer (81%)	Desktop computer (75%)	Desktop computer (71%)
Landline phone (87%)	Landline phone (84%)	Landline phone (81%)	Landline phone (67%)
Fax (78%)	Fax (74%)	Fax (65%)	Fax (52%)
Mobile/cell phone (73%)	Mobile/cell phone (66%)	Mobile/cell phone (65%)	Mobile/cell phone (46%)
Laptop computer (43%)	Laptop computer (44%)	Laptop computer (44%)	Laptop computer (26%)
PDAs with phone and Internet (11%)	PDAs with phone and Internet (15%)	PDAs with phone and Internet (15%)	PDAs with phone and Internet (6%)

Source: Adapted from "Generational differences in the workplace" by Tolbize, A., 2008.

Creating High-Performing Teams

Hospital leaders can leverage the three management strategies outlined in this report to create high-performing teams that are flexible and adaptable to changing conditions.

❑ Set Goals

Hospital leaders can begin by implementing programs that address the intergenerational workforce. Leaders must identify the needs and goals of the organization and align workforce initiatives. Doing so facilitates creating a realistic and sustainable blueprint for action.

❑ Align the Workforce to the Organization's Vision of the Future

◯ Be Transparent
Hospital leaders must effectively communicate the future direction of the organization. Keeping the workforce abreast of intergenerational initiatives and programs can increase employee engagement, encourage participation and promote shared responsibility.

◯ Coordinate with human resources staff
After defining and communicating the organization's vision for the future, hospital leaders will need to coordinate and rely on human resources staff to acquire intergenerational talent that will best fit the culture of the organization.

❑ Manage Expectations when Implementing Intergenerational Workforce Initiatives

◯ Gain employee buy-in
Hospital leaders, especially in generationally diverse organizations, may face difficulty gaining employee buy-in for new organizational directions. One strategy is to give staff an opportunity to provide input on key decisions. While hospital leaders should not expect to appease everyone, employees will be more accepting of proposed organizational changes if they have input in the process.

◯ Align employee expectations
Generationally diverse employees will differ in their expectations on how to approach generational workforce initiatives. Hospital leaders must address doubts and present future and potential concerns to find common ground with employees.

◯ Hold teams and individual employees accountable
Hospital leaders must implement organizationwide strategies that hold teams and individual employees accountable for taking advantage of intergenerational learning and development opportunities. Examples include tracking staff participation in educational and team-based learning programs that focus on managing and working with an intergenerational workforce.

☐ **Develop High-Performing Teams**

○ **Design agile teams**
Hospital leaders should develop agile, intergenerational teams that are focused, fast and flexible in uncertain conditions.

○ **Create cross-functional, intergenerational teams**
Hospital leaders should develop cross-functional, intergenerational teams, which include specialists from different fields. The diversity of expertise, skills and experience found in cross-functional, intergenerational teams makes them versatile and efficient for executing projects.

☐ **Cultivate Staff through Team-Based Learning**

Through team-based learning, health care leaders can leverage one of the most valuable assets of their organization—their employees. There are five routines to team-based learning:[43]

○ **Establish rounds**
Work is delegated to the most eligible junior member of the team—that is someone who meets the minimum background to perform the job—giving them an opportunity to get early exposure and experience doing more advanced tasks.

○ **Conduct formal observation and feedback**
Constructive feedback puts emphasis on professional growth and fosters behavioral change. This process ensures that employees are assigned meaningful responsibilities early in their tenure and have the opportunity to learn and grow in their positions.

○ **Shadow**
Shadowing provides less experienced employees with the opportunity to engage and collaborate with more experienced employees and vice versa.

○ **Conduct after-action reviews**
After-action reviews can be helpful in identifying effective and ineffective practices and improving processes to provide better patient care.

○ **Develop team workshops**
Workshops can help employees become aware of new routines and understand changing practices.

Case Studies

Hospitals and care systems throughout the United States have made significant strides to address the challenges of managing an intergenerational workforce. These innovative organizations apply a combination of strategies to build a strong organizational foundation, establish generational management strategies and develop generational competence at all levels of the organization (Table 7). The case studies that follow provide examples of successful approaches currently being used in health care and other organizations.

Table 7: Successful Approaches to Manage an Intergenerational Workforce

Strategy No.	Building a Strong Generational Foundation	Case Study and Example No.
1	Conduct an intergenerational evaluation to determine the organization's workforce profile	1, 5 and 6
2	Acquire intergenerational talent	—
2-A	Targeted recruitment efforts	1 and 5
2-B	Organizational website and social media presence of company brand	6
2-C	Job descriptions connecting tasks/role to organization's mission and values	6
2-D	Job mobility	3
2-E	Interactive employee handbook	7
3	Segment retention strategies	—
3-A	Tailored support services	1
3-B	Flexible work options	1
3-C	Educational and career development programs	5 and 6
3-D	Supplemental income opportunities	6
Strategy No.	**Establishing Generational Management Practices**	**Case Study and Example No.**
4	Customize management and communication styles	-
4-A	Flexible work hours	4
4-B	Orientation and development programs	4
5	Leverage employees' strengths	8
6	Tailor recognition and awards	6
7	Encourage collaboration in the workplace	—
7-A	Intergenerational training opportunities	3, 4 and 6
7-B	Social media platform for employee engagement	6
7-C	Inclusive planning and decision-making opportunities	2 and 4
7-D	Succession planning strategy	2 and 3
Strategy No.	**Developing Generational Competence**	**Case Study and Example No.**
8	Develop generational understanding	3
9	Participate in formal mentoring programs	1, 2, 4 and 9
10	Improve communication skills and generational sensitivity	3

Source: AHA CPI, 2014.

Case Study 1: Atlantic Health System

Atlantic Health System (AHS) owns and operates Morristown Medical Center, Overlook Medical Center and Newton Medical Center, all in New Jersey. The three hospitals combined have 1,308 beds and more than 2,750 affiliated physicians.

Background

Atlantic Health System has a generationally diverse workforce population. About 4 percent are traditionalists, 46 percent are baby boomers, 33 percent are Gen Xers and 17 percent are millennials.

Strategy 1

At Atlantic Health System, employees age 50 and above have an average tenure of 16 years. To offset potential loss of organizational knowledge and professional expertise due to retiree exodus, the health system created a gap or fill analysis to better develop workforce management strategies. The organization also expanded its generational analysis report to include turnover of different age groups. Analysis findings help the organization retain and train current and new employees to best meet future staffing needs.

Interventions

Strategy 2-A

Atlantic Health System established recruiting practices that target employees 50 years and above. The health system reaches out to clubs, organizations and events for workers, posts jobs in various media outlets geared toward the 50-plus population, utilizes placement agencies geared to this group and takes advantage of employee referrals to target retirees.

Strategy 3-A

To support employees age 50 and above, Atlantic Health System allocated $2 million for its ergonomics department to install 286 ceiling track lifts—used to reposition and transfer patients up to 550 pounds—across 47 departments. The ceiling track lifts help reduce the stress and strain of moving nonmobile patients.

To support millennials and Gen Xers who are starting families and baby boomers who are supporting children, Atlantic Health System provides on-site child care centers and early childhood education to the children and grandchildren of employees. The child care centers at Morristown and Overlook Medical Centers are accredited by the National Association for the Education of Young Children and have an annual budget of $260,000. In 2013, nearly 250 children were enrolled in the two centers.

To assist employees taking care of older relatives, Atlantic Health System also offers elderly care. This service helps employees find caregivers and get resources on nursing homes and residential and assisted living facilities. In addition, the elderly care program helps employees navigate Medicare and Medicaid, emergency response, transportation, meal programs, adult day programs and home health care support services.

Strategy 3-B

To retain talent and continue to benefit from the experience and expertise of employees age 50 and above, Atlantic Health System established the 1,000 Hour Club. The program allows retirees to return to part-time and per-diem work three months after they start receiving retirement benefits.[44]

Atlantic Health System fostered generational partnerships by establishing a mentorship program that gives older employees an opportunity to work and share their knowledge and experience with younger employees.[45] In addition, employees work on temporary assignments in different departments and participate in team projects and formal job rotation programs to gain new experience.

Atlantic Health System also offers an in-house faculty academy where experienced employees and experts in their respective fields are asked to present their work in the organizationwide learning community. Of the academy's instructors, 70 percent are age 50 and over.

Results

Fortune magazine ranked Atlantic Health System as one of the 100 best companies to work for in 2013. Since 2006, AARP has honored Atlantic Health System annually as one of the best employers for individuals age 50 and over because of its progressive workplace policies and practices designed to attract and retain older employees. In 2012, the health system hired 254 workers age 50 and over. Atlantic Health System also maintained a robust employee retention rate of 97.3 percent, well above the national average.

The ceiling track lifts at Atlantic Health System helped prolong the careers of older clinical staff and provided promise to younger employees of a long and productive work life. Since these lifts were installed, injuries have been reduced, and the quality of life for more than 1,000 employees in 33 departments has improved. With nearly 320 ceiling track lifts installed, Atlantic Health System reduced lost workdays and associated costs by 40 percent to 60 percent.

Nearly 180 employees take advantage of the on-site child care center at Morristown and Overlook Medical Centers. On the 2013 annual parent satisfaction survey, 100 percent of respondents said they were "satisfied" or "very satisfied" with the program.

Atlantic Health System has successfully retained the experience and expertise of its employees age 50 and over. Between 2012 and 2013, the 1,000 Hour Club increased the number of the health system's rehires by 16 percent.

About 112 pairs of employees have participated in the mentorship program since its inception. The quarterly reports submitted by mentees showed overall satisfaction from participating in the program.

Lessons Learned

Leadership buy-in was a key to success for these programs at Atlantic Health System. For example, the installation of ceiling track lifts received full support from senior leadership even before their full implementation throughout different departments. Senior leadership allocated funding to pilot four ceiling track lifts in a Morristown Medical Center ICU unit and five portable floor lifts in five nursing units across the health system with the goal of decreasing injury rates among staff and costs associated with these injuries.

Another ingredient contributing to the success of the Atlantic Health System programs is the enthusiasm of staff. Employees take full advantage of the opportunities provided to them. Results show high participation in the programs.

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Case Study 2: Baptist Health Lexington

Baptist Health Lexington, in Lexington, Kentucky, is a 383-bed hospital that serves as a medical research and education center.

Background

To draw upon the talent of its intergenerational workforce, Baptist Health Lexington established a shared governance model that provides employees an opportunity to collaborate with colleagues and organizational leaders to shape their work environment.[46] This model empowers employees to meet patient needs and to support and enhance quality and cost effectiveness of care delivery.[47]

To prepare and develop its intergenerational workforce, Baptist Health Lexington offers leadership development opportunities. The Evolving Leaders Program provides staff at all levels with ongoing professional and personal development.

Interventions

Strategy 7-C
The Nursing Leadership Council, part of the shared governance structure, is comprised of staff nurses at the unit level. The council has 18 members and is generationally diverse with eight baby boomers, six Gen Xers and four millennials.

Council members provide recommendations in determining policies that affect patients and the nursing practice and serve as the point of communication for nursing activities.[48] For example, in 2013, the council established a program that recognizes high-performing nurses in a formal ceremony that gives patients and their families an opportunity to speak about their experiences and express gratitude.

Strategies 7-D and 9
In 2003, Baptist Health Lexington established the Evolving Leaders Program to develop current and emerging leaders. This program is open to staff from all departments and disciplines and is one criterion used when considering internal candidates for promotions.

The coordinating team of the Evolving Leaders Program sets program guidelines and evaluates the curriculum to reflect organizational needs, strategic priorities and feedback.[49] This team selects in-house subject matter experts who teach the courses and serve as mentors in the program. Currently, the faculty includes 11 baby boomers, eight Gen Xers and two millennials.

The program consists of three levels. The first level requires participants to complete a series of courses within the year. The 13 courses offered adhere to the program's four pillars: finance and performance accountability, clinical care improvement, organizational culture and customer relations, and people and workforce development. In 2013, 100 employees participated at this level. Of this cohort, 35 percent were baby boomers, 40 percent were Gen Xers and 25 percent were millennials. The second level includes a more rigorous set of the aforementioned courses.

The third level provides mentorship opportunities. The coordinating team links protégés to mentors, who serve as guides in meeting the participants' development goals for the year. The mentor and protégé relationships provide an opportunity to learn and practice new skills and gain direct feedback not available in classroom settings.

Results

In the Evolving Leaders Program, approximately 40 percent of participants are baby boomers, 30 percent are Gen Xers and 30 percent are millennials. In addition, 50 percent of new managers and department directors, as they are hired into the organization, have enrolled in the program. The other 50 percent enters the program sometime during the year as they complete leadership orientation and fully acclimate to their roles.

The Evolving Leaders Program also helps build a steady supply of highly trained and motivated nurse leaders. Over a three-year period, 75 percent of nurses who participated in the program were promoted to nurse managers and positions that were extended.[50] In addition, the hospital has a nursing vacancy rate of less than 4 percent and an overall vacancy rate of 3 percent.[51]

Lessons Learned

Baptist Health Lexington learned that employees appreciate the opportunity to participate in shared governance. For example, in collaboration with the chief nurse executive, the Nursing Leadership Council was able to set standards and policy, which in turn direct the requirements for the nursing professional practice model and help shape nursing practices at the hospital.

When Baptist Health Lexington used internal experts to serve as faculty in the Evolving Leaders Program, it was able to reduce program expenses, promote sharing of organizational wisdom and assimilate employees in the organizational culture.

A continued challenge for the Evolving Leaders Program's coordinating team has been to create a more flexible, dynamic curriculum that makes it easier for participants to attend the courses in person. There are a growing number of off-campus staff members who wish to participate in the program.

Also, as the environment of health care changes rapidly, mentors and faculty members who are committed to the Evolving Leaders Program face challenges in meeting the work demands within their own roles and departments. To show support and recognize their contributions, the coordinating team has begun holding mentor and speaker appreciation luncheons and continued to provide development opportunities for those who give of their time.

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Case Study 3: Beaumont Health System

Beaumont Health System serves the Detroit metropolitan area with hospitals in Royal Oak, Troy and Grosse Pointe, Michigan, six medical centers and four nursing facilities.

Background

Beaumont Health System has approximately 17,000 employees. To prepare its workforce for future labor shortages and intergenerational diversity, the health system provides generational diversity training to its leaders and staff, hosts an annual conference that integrates generational topics and offers all employees courses to encourage open dialogue about generational differences in staff meetings.

Interventions

Strategies 2-D and 7-D

Beaumont Health System developed a succession planning strategy designed to prepare recent graduates for hospital leadership roles. Its administrative fellowship program is open to individuals with a graduate degree in health care administration, business administration, public health, nursing or a related field. The program has three components: rotational experience, which fosters a broad understanding of operations management and leadership; project work, which allows fellows to lead specific projects to improve the organization; and leadership support, which integrates the fellow as a member of the executive team.

Strategy 7-A

In 2005, Beaumont Health System dedicated its annual leadership retreat to intergenerational diversity training. The retreat covered best practices that foster generational understanding, including leveraging employees' strengths, preventing generational clashes and maximizing teams to increase productivity.

Beaumont Health System also hosts an annual diversity conference for all staff. In 2009, the theme was "Generational Diversity in the Health Care Workforce." The half-day event was held at an off-site location so that employees were able to fully engage. The keynote speaker was Chuck Underwood, founder and principal, Generational Imperative, Inc. His presentation "Generational Imperative for Beaumont" introduced the different characteristics of each generation, the major events that shape them and how those generational experiences have manifested in the workplace. A Beaumont employee facilitated a game of "diversity jeopardy" for conference attendees, and each category of the jeopardy board included a generational diversity topic.

Strategy 8

In addition, the health system offers a course called "Generation Sensation" that is open to employees of all ages and job titles. This educational program provides a safe space for open dialogue to discuss generational differences in the workplace, whether real or perceived.[52] This approach provides individuals with a better understanding of the unique strengths, differences, perspectives and unique challenges of each generation in the workplace, which will improve communication and teamwork.

To supplement the training opportunities at Beaumont Health System, informal generational management practices are encouraged at all levels of the organization. For example, during staff meetings, employees discussed lessons learned from their participation in the generational diversity course and facilitated discussions around the keynote speech, which remains accessible on the diversity website. Employee relations representatives share generational resources with employees and managers, and managers are introduced to generational management concepts during their orientation.

Results

Since its inception, the administrative fellowship program has had five participants. As of 2013, three of the fellows hold key leadership positions at Beaumont Health System.

The health system's 2009 conference on generational diversity had the highest attendance of its annual diversity conferences to date. Approximately 300 employees participated, including physicians, organizational leaders and volunteers, and feedback about the program and speakers was overwhelmingly positive.

Through small group discussions and interactive exercises in the "Generation Sensation" course, participants have gained strategies to help combat potential conflicts that can occur because of generational differences.

Lessons Learned

The focus on generational diversity has piqued organizationwide interest on generational topics. Hospital leaders learned that employees were eager to understand generational differences and improve communication skills to enhance working relationships among the generations.

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Case Study 4: Eastern Idaho Regional Medical Center

Eastern Idaho Regional Medical Center is located in Idaho Falls, Idaho. Its service area has a population of about 350,000.

Background

Eastern Idaho Regional Medical Center has 1,373 employees. The majority of its workforce are Gen Xers, who make up 41 percent of all employees. Baby boomers make up 31 percent of the workforce, and millennials, 25 percent. Traditionalists comprise 3 percent of the medical center's workforce.

In 2005, employees at Eastern Idaho Regional Medical Center began expressing concerns about generational issues in the workplace. By 2009, it inspired organizational change. The goal was to understand the strengths and differences of each cohort and leverage those strengths to create a work environment that values generational differences. Generational initiatives were developed to engage the workforce, increase employee recruitment and retention, increase productivity and improve patient satisfaction.

Interventions

Strategy 4-A
Eastern Idaho Regional Medical Center offers self-scheduling for nursing staff. Nurses have the option to work four-, eight- or 12-hour shifts. The hospital learned that 1) baby boomers prefer shorter shifts as they found it maximizes their physical and mental capacity, 2) younger generations—millennials and Gen Xers—prefer 12-hour shifts because it gives them more personal and family time, and 3) Gen Xers prefer night shifts because it allows them to work independently and have less interaction with physicians and leadership.

Strategy 4-B
Some clinical supervisors became more lenient enforcing a policy that limited staff members from transferring to another department until a minimum of 12 months of employment was fulfilled. This change was meaningful to staff, especially millennials and Gen Xers, because it gave them the opportunity to not only gain more experience in other areas of the organization but also pursue interests outside their current departments, prior to the minimum employment requirement of 12 months.

Strategy 7-A
To transform organizational culture, Eastern Idaho Regional Medical Center educates managers and directors on intergenerational topics to help them understand the complexities of managing a diverse staff. For example, clinical supervisors and charge nurses receive educational training about generational diversity in the workplace. As part of their training, they are asked to conceptualize and put into practice what they have learned in the course and identify ways of using generational education to create a strong team.

Strategy 7-C

The Premium Pay Committee—responsible for developing employee benefits packages at Eastern Idaho Regional Medical Center—had difficulty finding common ground with employees from different generations because the majority of its members were Gen Xers. The committee was reorganized to include employees from other generations. The first task of committee members was to decrease employee overtime. Mindful of the different cohorts, the committee developed an extra shift premium, which decreased overtime in the nursing department by 25 percent. Employees were involved in the decision making and appreciated the opportunity to support organizational needs.

Strategy 9

In 2013, the hospital initiated a project, Advanced Clinical, which allows physicians to complete all patient documentation and orders on the computer and eliminates the use of paper charts. Many nurses feared the change. To help with this transition, younger employees, who were technology savvy, were assigned to serve as master trainers to acquaint older employees with the new system. Older employees learned to rely on younger cohorts and benefit from their technological proficiency.

Results

The intergenerational strategies contributed to improvement in employee retention. The nursing turnover rate decreased from 15.7 percent in 2012 to 13 percent in 2013. No other departments have more than a 10 percent turnover rate. Previously, some departments had a turnover rate as high as 33 percent.

The intergenerational training and development program contributed to greater understanding and tolerance of different generations and increased collaboration. Clinical supervisors and charge nurses were better prepared to manage their generationally diverse teams. This contributed to increased staff involvement in decision making, improved patient satisfaction scores (at least a 3 percent increase at each unit but higher in others) and fewer turnovers by department.

Lessons Learned

Changing the company culture does not occur overnight. Many employees at Eastern Idaho Regional Medical Center embraced the intergenerational development opportunities, but some are still having difficulty translating what they have learned into practice.

Implementing flexible work hours is a challenging feat for the hospital industry. Hospitals need to provide care around the clock, making it difficult to align with the flexible scheduling needs of physicians, nurses and other employees.

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Case Study 5: ProMedica

ProMedica is a nonprofit health care organization based in Toledo, Ohio. The 11 hospitals in the network serve 27 counties in northwest Ohio and southwest Michigan.

Background

ProMedica has more than 14,000 employees, 400 board members and 3,000 volunteers.

Strategy 1

To determine workforce needs, ProMedica conducted an employee opinion survey. It found that employees 48 years and older were disconnected from the organizational direction and that leadership and employees under the age of 28 were focused on short-term employment and dissatisfied with their current position and pay. To complement the survey and better understand its workforce, ProMedica reviewed its internal data to assess current labor supply, forecast labor demands and develop strategies that would meet the evolving needs of the organization.

Interventions

Strategy 2-A

To meet community needs amid nationwide physician shortages, ProMedica focused on recruiting students and training physicians and allied health professionals. In 2010, ProMedica and University of Toledo formed an educational partnership to expand their residency programs. The organizations established an academic health center, designed to enhance clinical education and research in the community and prepare future health care professionals.[53, 54]

To address nursing shortages, ProMedica also established a nurse residency program. This program is available to new nursing graduates with fewer than 12 months of direct experience in acute care.[55] Intended to prepare and transition new nurses in their professional practice, the program provides 18 to 40 weeks of guided learning, focusing on areas such as critical-thinking skills, patient safety, quality care, evidence-based practice and teamwork. Throughout their first year of practice, new nurses receive continued professional and social support to help them succeed in their jobs.

In 2013, in partnership with the United Way, ProMedica expanded its summer youth program. The program—aimed at disadvantaged youth ages 16 to 21 in the Toledo area—provides participants with eight weeks of employment, working 24 hours per week. Candidates are matched to different jobs in several hospitals and business units to expose them to health care careers and provide real-world experience. The program was established to serve as a pipeline for future health care workers. Top performers are hired back into the program each summer or offered permanent positions within ProMedica, giving them tuition assistance options.

Strategy 3-C

The highest turnover in the first year of employment at ProMedica was among staff between the ages of 20 and 30. To target this group, ProMedica developed retention initiatives, such as tuition reimbursement, loan forgiveness, fellowship opportunities and a nursing residency program.

ProMedica offers two distinct programs for employees who wish to further their education: a fee waiver for students attending the University of Toledo and a tuition-assistance program that provides prepaid or reimbursed funds (depending upon degree type) to full-time employees and a prorated amount to part-time employees. The fee-waiver program provides free tuition up to eight credit hours per semester

for full-time employees and 50 percent of tuition for part-time employees. In addition, the UT-ProMedica scholarship is offered by the University of Toledo at no cost to ProMedica employees interested in any degree program. There is no employment commitment or repayment obligation for employees.

In September 2012, through a grant partnership with Owens Community College, ProMedica created a full-time, grant-funded career coach position to deliver career services offerings to employees. The intent is to improve retention for all ages, especially younger workers who are beginning their careers and require guidance as well as older workers who may require a job change to remain engaged in their work and the organization. The career coach 1) offers employees analysis and guidance through interest inventory assessments, 2) helps employees create short- and long-term career plans, 3) offers assistance with higher education selection and funding and 4) guides employees on resume writing, internal job searches and job interviews. Services are offered through one-on-one meetings and group workshops.

Results

In the first year of the academic health center, residency rotations grew from 17 to 31 in the academic year.[56] By 2016, University of Toledo students at ProMedica will increase to 63 residency rotations, of which 29 are new rotations and 26 are expanded rotations.[57] New rotations that have been developed and implemented include: anesthesiology; emergency medicine; obstetrics and gynecology; medical oncology; and ear, nose and throat.[58]

The nurse residency program continues to grow in popularity and effectiveness. From May of 2012 through August 2013, 350 nurses have been hired into the program for ProMedica's acute care facilities. In 2011, turnover within the first year of employment for registered nurses was 26 percent, and more than 30 percent of those terminated were between the ages of 20 and 30. By August 2013, turnover in the first year of employment decreased to 17 percent, and approximately a third of this reduction was a direct result of the residency program.

Utilization of career services offered by the career coach has increased every month since the position was created. Employee satisfaction survey results indicate that before the career coach was hired, employees highly valued tuition and scholarship offerings at ProMedica (the highest ranked response to a question on the survey), but they were not satisfied with their ability to utilize their strengths and skills in their current positions (among the lowest ranked responses). In September 2013, a second data point was collected to determine if an impact has been made in this area.

More than 250 youth candidates applied for the 2013 summer youth program, and 70 were hired to work 24 hours per week. Three youth employees were given permanent positions at the end of the summer. Many participants chose to pursue health care-related careers after high school and have developed deep bonds with their supervisors and co-workers, who also rate their own participation in the program as excellent and rewarding. Pre- and post-employment assessment of job readiness skills showed large gains in the skill sets of most participants.

Lessons Learned

Multifaceted approaches to recruiting and retaining workers of all ages are critical for ensuring a constant supply of quality employees. Programs targeted at addressing the needs of specific generations have been helpful in these approaches. The health system is now considering other engagement and satisfaction measures such as work-life balance and physician labor demands.

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Case Study 6: Texas Health Resources

Texas Health Resources is a health care delivery system located North Texas. Its service area consists of 16 counties with a population of 6.2 million.

Background

Strategy 1
Texas Health Resources collected data to determine the workforce composition of its hospitals, clinics and other facilities, with similar standards and methodology used for collecting patient population demographics such as language, age, ethnicity and race. In 2012, Texas Health Resources' workforce consisted of nearly 2 percent traditionalists, 36 percent baby boomers, nearly 50 percent Gen Xers and 13 percent millennials.

Interventions

Texas Health Resources uses the information from its workforce diversity profile to manage the health system's intergenerational workforce and craft meaningful human resources strategies and interventions. The health system also uses annual employee engagement surveys to assess employee dynamics and work processes and identify strategies to effectively manage and improve teams.

Strategy 2-B
Texas Health Resources created a YouTube channel featuring its facilities, programs, clinicians, employees, health care best practices and quality improvement awards. The channel is customized and maintained to draw a wide audience. Job seekers can view testimonials from current staff and volunteers and learn more about the organization and career opportunities.

Strategy 2-C
Texas Health Resources instills a culture of caring—"individuals caring for individuals, together"— through a set of values, behaviors and service standards referred to as "the promise." Employees are evaluated annually based on nine behaviors, such as treating colleagues and patients with courtesy, dignity and trust to promote teamwork and caring for the body, mind and spirit. Prior to hiring, prospective employees complete an online assessment to determine whether their values align with the organization's.

Strategy 3-C
Anticipating future nursing shortages, Texas Health Resources established a program to grow and develop its own nurses. The youth prodigy program offers educational and employment opportunities to high school graduates interested in a nursing career. The program is designed to create a pathway for students interested in earning a bachelor's degree after acquiring an associate's degree in nursing and while working for Texas Health Resources. Additionally, the health system offers tuition reimbursement to employees from any discipline to pursue a career in nursing.

Strategy 3-D
As the largest segment of the workforce at Texas Health Resources, nurses have scheduling flexibility and options to supplement their income. Through the Texas Health Central Staffing Office pool, nurses have flexible scheduling options so they can work as little or as much as they like. Those who wish to supplement their income can also work extra shifts at other hospitals in the health system. To ensure

compliance with workforce fatigue guidelines and prevent burnout, the health system runs reports tomonitor participation in the program.

Strategy 6
Texas Health Resources established a recognition program called "Applause!" Employees receive thank-you cards, financial awards and other recognition for excellent performance, length of service, retirement and more.

Strategy 7-A
Texas Health Resources offers an educational program that focuses on managing different generations. At the health system, generational awareness and education started with using a nationally recognized training program, Leading Across Generations, as a framework. Since 2011, education has evolved and now includes other courses designed for leaders and work teams to improve team interaction and dynamics. These courses also have been approved as continuing education units for nurses. Other learning and development opportunities are provided to the workforce through instructor-led, online and blended learning opportunities to meet different learning needs and styles.

Strategy 7-B
Texas Health Resources uses blogs and social networks like Facebook, Twitter, Pinterest and other portals to create and build community. For example, Yammer is a workplace-based application that encourages interaction and collaboration. Like Facebook, the application allows employees to create and view profiles. It supports file sharing and provides an opportunity for peer mentoring and knowledge exchange. At Texas Health Resources, Yammer has contributed to team dialogue, collaboration and efficiency.

Results

By providing nurses with flexible scheduling options and supplemental income opportunities, the health system reduced its reliance on nurse staffing agencies while maintaining appropriate staffing levels. Currently, there are 400 nurses in the central staffing pool. A similar concept is being piloted in other clinical areas of the health system, such as pharmacy.

Because of its robust social media presence, Texas Health Resources was able to hire a diverse workforce from a variety of online sources. For example, in the second quarter of 2013, 160 new hires were selected from the health system's career site; 47 from search engines such as Google, Bing and Yahoo; 8 from social networks such as LinkedIn, Facebook, and Twitter; 20 from job boards such as Health Callings and Career Builder; and 10 from pay-per-click sites such as Indeed. Texas Health Resources continues to expand and grow its social media presence such as increasing LinkedIn memberships and "likes" on its Facebook page.

The use of social media platforms has contributed to an increase in employee engagement. Texas Health Resources generates quarterly reports on social media activity to monitor levels of employee engagement—from number of messages posted to number of private and group messages sent.

Managing the intergenerational workforce improved employee engagement and work team interactions. The 2013 employee survey had a 92 percent participation rate, well beyond the Press Ganey national average response rate of 60 percent to 65 percent. Because of this, Texas Health Resources is ranked in the 93rd percentile in system participation, which is in the top decile of the Press Ganey National Database.

Lessons Learned

Texas Health Resources leadership realized that creating a great work environment is not a destination but a journey. Continuous improvement and learning cycles are part of the health system's process in the journey to excellence. The health system learned that managing a generational diverse workforce requires effective translation of theory into practice as one size does not fit all.

Texas Health Resources also learned that the most critical part of managing the intergenerational workforce is through thoughtful and effective planning—strategy, approach and processes. This includes incorporating the unique "cultural blueprint" of each generation, which has different needs, wants and expectations, and recognizing such diversity dimensions as culture, professional experience, acculturation, immigrant experience and education that influence generational differences.

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Additional Examples of Intergenerational Management Strategies

Case Example 7

Strategy 2-E
Zingerman's, a family of eight businesses in the food industry, developed a fun and entertaining company manual that communicates corporate policy and rules.[59] The manual serves as a staff guide and uses humorous language and entertaining graphics and games to deliver the company's vision, organizational culture and employee expectations. Because of the manual's interactive nature, many employees of all ages use it as a resource and tool.

Case Example 8

Strategy 5
dunnhumbyUSA, a customer science company, holds a semiannual event called Innovation Friday.[60, 61] The 27-hour event includes all of the company's 2,000-plus employees across the world, a generationally and ethnically diverse group. All employees are invited to come up with innovative ideas to improve customer experience, from improving internal processes to investigating new technology. In 2013, an Innovation Friday event had 800 participants who brainstormed 130 innovations, 80 of which were adopted.

Case Example 9

Strategy 10
White County Medical Center in Searcy, Arkansas, created training opportunities for older workers, regardless of their backgrounds, to learn new skills and gain experience in the health care field. Older workers were paired with younger associates who shared their technical knowledge and expertise. In return, older associates shared their professional experiences from many years of employment. Associates of all ages gained more respect for one another.

The Future Workforce

Over the next decade, many baby boomers, who are currently leading companies and managing different generations, will exit the workforce and utilize a large share of health care services as patients. After their departure, millennials will fill the majority of the labor gap, and some Gen Xers and even millennials will ascend to leadership roles. This inevitable shift in patient and workforce demographics will force hospitals and care systems to build an organizational culture that develops and nurtures willing and able employees to provide excellent patient care.

To help health care organizations meet the challenges ahead, this report provides a list of workforce management strategies to manage life in the gap. Building a strong generational foundation allows leaders to understand their organization's workforce profile and develop programs and policies to acquire and retain a generationally diverse staff. Establishing effective generational management practices helps leaders identify and leverage each generation's strengths and prevent possible conflicts among employees from different generations. Developing generational competence increases understanding and improves communication and generational sensitivity throughout the entire workforce.

These strategies are intended to jump-start intergenerational management practices in hospitals and care systems, but they may need to be augmented to be sufficient long term, particularly when the patient and workforce demographic shift occurs. New and innovative approaches and models of care will need to be implemented as values, beliefs and expectations in the workplace continue to change. Health care organizations must evolve with a changing workforce to meet and align with patient needs. Doing so may require rethinking organizational structure, rebuilding and redefining jobs and creating new ones.

Restructuring the organization

As Gen Xers and millennials rise to leadership roles, health care organizations may need to consider flattening their structure and removing departmental and management hierarchies. Gen Xers and millennials—future leaders and workforce—consider organizational hierarchies as barriers to creativity and innovation.

Rebuilding and redefining jobs for redesigned care models

Health care organizations may need to modify job requirements to cater to new and emerging roles. This includes adjusting competencies so that the workforce aligns with new population health needs. For example, some jobs will need to be redesigned as technology advances. As jobs are redefined, the workforce may transition and redeploy to different settings, roles and organizational structures.

Creating new jobs

Organizations can invent new roles to accommodate staff needs and meet work volume. For example, jobs that require one individual to perform today may require two individuals tomorrow, and vice versa. As more care is being delivered outside of such formal structures as acute care facilities, jobs will be performed in different settings and function differently.

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Table of Contents

Executive Summary

Hospital and care system leaders are pursuing a more comprehensive and integrated approach toward delivering health care. Integrating behavioral health across the care continuum helps create a seamless system of care that offers patients the services they need, when they need them, whatever setting they are in.

Consider that one in four Americans experiences a behavioral health illness or substance abuse disorder each year and that the majority of those individuals have a comorbid physical health condition. Many of these individuals enter care without having their underlying behavioral health disorder addressed. These patients typically have poorer medical outcomes and higher rates of utilization compared to the general population of patients without a comorbid behavioral health diagnosis. With an integrated, patient-centered system of care, hospitals, physician practices and payers can incorporate services that address all of the patient's needs and can work to achieve the Triple Aim—better care, better health and lower costs.

The 2014 American Hospital Association Committee on Research report, *Your Hospital's Path to the Second Curve: Integration and Transformation*, outlines multiple paths that hospitals and care systems can choose on their way to improve and transform health care delivery: redefine, partner, integrate, experiment and specialize. No particular path or model for integrating behavioral health is appropriate for every provider or hospital. The decision to be, for example, a direct provider of behavioral health services or to provide these services via collaborative partnerships, joint ventures or contractual arrangements will be driven by community needs and available resources.

The purpose of this guide is to help hospitals and care systems consider the impact of better integrating behavioral health across multiple health care delivery settings—and provide the tools to do so. Achieving integration takes time and requires the modification of administrative and operational functions. This guide includes Strategic Questions for Integrating Behavioral Health, which health care leaders can use to determine how to advance their integration efforts.

Introduction

Driven by the shift toward a value-based payment system centered on the patient, hospitals and care systems are working to integrate care delivery services. Integrating behavioral and physical health services is becoming a bigger part of providing high-quality, well-coordinated care.

Providers and patients recognize the importance of integrating behavioral health into a patient's overall treatment. One in four Americans experiences a behavioral illness or substance abuse disorder each year, and the majority of those individuals enter primary care with a comorbid physical health condition. Integrated behavioral health aligns with the Triple Aim to improve the patient experience of care, improve population health and reduce per capita cost. Evidence shows that integrating behavioral health does improve patient outcomes and decreases cost.

In the broadest use of the term, "integrated behavioral health care" can describe any setting or process in which behavioral health and physical health providers work together. At the highest stage of behavioral health integration, the focus of care is not merely improving medical outcomes but managing population health and reducing the total cost.

Each health care organization has to develop its own plan for integrating behavioral health, driven by community needs and available resources. This guide explains the value of integrating physical and behavioral health services and the importance of measuring integration efforts. It offers several frameworks to use for behavioral health integration and provides a list of strategic questions that every hospital leader should consider moving forward.

Behavioral Health Definition:

"A state of behavioral/emotional well-being and/ or actions that affect wellness. Behavioral health problems include substance use disorders; alcohol and drug addiction; and serious psychological distress, suicide, and behavioral disorders. This includes a range of problems from unhealthy stress or subclinical conditions to diagnosable and treatable diseases like serious behavioral illnesses and substance use disorders, which are often chronic in nature but from which people can and do recover with the help of a variety of interventions from medical and psychosocial treatments to self-help and mutual aid. The term is also used to describe the service systems encompassing prevention and the promotion of emotional health; the prevention of behavioral and substance use disorders, substance use, and related problems; treatments and services for behavioral and substance use disorders; and recovery support."

Source: Substance Abuse and Mental Health Services Administration, 2014.

Your Hospital's Path to Integration

As hospitals and care systems modify their care delivery systems, health care leaders can follow one or more paths in their transformation efforts: redefine, partner, integrate, experiment and specialize. The American Hospital Association Committee on Research outlined these paths in the 2014 report *Your Hospital's Path to the Second Curve: Integration and Transformation*.

Several key issues that health care leaders need to consider in their transformational journey are:

- There is no "one-size-fits-all" model, as provider capabilities and community needs are different everywhere.

- The status quo is not a viable strategy because the environment is changing rapidly.

- Each hospital and care system can consider multiple paths.

- Each path has its own distinct risks and rewards.

Each path affords challenges and opportunities for organizations working to integrate behavioral health. For example, if a hospital or care system chooses to specialize, leaders should identify the behavioral health needs of the community and how the hospital will address those needs.

Moving Toward Integration of Behavioral and Physical Health Services

For the purposes of this guide, the Agency for Healthcare Research and Quality definition for "integrated care" is used:

> *The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health, substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization.[3]*

As with many paradigm shifts, new terms have developed. The AHA supports the work of the Agency for Healthcare Research and Quality (AHRQ) in developing the 2011 Lexicon for Behavioral Health and Primary Care Integration (available at http://integrationacademy.ahrq.gov/lexicon). The AHRQ Lexicon describes three stages of the integration continuum: coordinated, co-located and integrated. The journey to achieve integration, consistent with the definition above, typically starts with initiatives that first coordinate care, then co-locate care, and eventually integrate care. Complexities likely will arise in each model along this journey and within each type of health care setting.

Figure 1. Stages of Behavioral Health Integration

Coordinated — Behavioral and physical health clinicians practice separately within their respective systems. Information regarding mutual patients may be exchanged as needed, and collaboration is limited outside of the initial referral.

Co-located — Behavioral and physical health clinicians deliver care in the same practice. Co-location is more of a description of where services are provided rather than a specific service. Patient care is often still siloed to each clinician's area of expertise.

Integrated — Behavioral and physical health clinicians work together to design and implement a patient care plan. Tightly integrated, on-site teamwork with a unified care plan. Often connotes close organizational integration as well, perhaps involving social and other services.

Source: Agency for Healthcare Research and Quality, 2011.

AHRQ's 2011 Lexicon also outlined three "functions" for integrating behavioral health: the patient-centered care team, a shared population and mission, and a systematic clinical approach.[4]

Table 1. Functions for Integrating Behavioral Health

Function	Stage of Integration		
	Coordinated	**Co-located**	**Integrated**
Patient-centered Care Team	• Care is referral-triggered with periodic exchanges between behavioral health and physical staff. Treatment plans are mostly separate. Clinic workflows usually exist without common information tools such as registries. • Most physical and behavioral care services are delivered in separate settings.	• Physical and behavioral care services are delivered in the same setting, promoting communication and spontaneous, interdependent consultations. • This model reduces barriers to patient access and follow-through but does not consistently coordinate treatment by the care team. Often, information tools such as registries or automated coordinating functions are used.	• A patient-centered care model exists, integrating the treatment plans developed by behavioral health clinicians and other medical staff. Capacity is developed by building consultations as needed for total care. Patients are tracked in a registry.
Shared Population and Mission	• Physical and behavioral health clinicians understand the concepts of the whole-person model of care and total health outcomes but take responsibility primarily for their own aspect of a patient's care.	• All clinicians embrace the goal of the whole-person care model and understand that it is their responsibility for the total health outcomes of their patients. Additionally, some systems monitor and report treatment plans and total health outcomes to providers and staff.	• All clinicians understand and embrace the whole-person care model, take responsibility for the total health outcomes—and carry out and adjust care for their entire patient population. This model has expanded connections within the community.
Systematic Clinical Approach	• There are some protocols and shared workflows, but they are mostly informal or driven differently from provider to provider.	• Many protocols and shared workflows are established, but not for all processes of integrated care, and they are not consistently implemented.	• Protocols and shared workflows are established for nearly all processes of integrated care and, in most cases, are implemented consistently.

Source: Adapted from the Agency for Healthcare Research and Quality Behavioral Health Lexicon, 2011.

Health care leaders have at their disposal a variety of integration models to advance care delivery. An effective integration model addresses clinical, administrative and financial functions of the organization. Accountable care organizations, integrated delivery systems and patient-centered medical homes are examples of integrated care models. These models raise the quality of the care and reduce costs for the organization. Integrated care models also include some form of global or capitated payment systems that allows a hospital or care system the ability to recover costs, as long as the use of expensive services decreases. Research has shown that integrated care that includes behavioral health as part of the care delivery process has a significantly positive impact on the patient's health and reduces the total cost of care.

Driving Factors for Integrating Behavioral Health

Demand for behavioral health services is increasing, and more evidence shows that integrated care with provisions to include behavioral treatment improves patient outcomes and reduces costs.[5] Table 2 highlights some of the driving factors for integrating behavioral health.

Table 2. Driving Factors for Behavioral Health Integration

Increasing Health Coverage, including Behavioral Health

- The Affordable Care Act (ACA) provides new or expanded behavioral health coverage to 60 million Americans.
- Health plans offered through state and federal marketplaces are required to offer behavioral health services and comply with the Mental Health Parity and Addiction Equity Act of 2008.
- Under the ACA, preventive screenings and routine checkups must be provided with no copays or deductibles.
- Insurers can no longer deny coverage for pre-existing conditions, including behavioral health disorders.
- Adults up to age 26 can stay on their parents' insurance plan.

Decreasing the Total Cost of Care

- Long-term cost savings are attractive to organizations that seek to achieve the Triple Aim: improved health outcomes, improved value, improved patient experience.
- People with untreated behavioral illness drive up total health care costs because they use non-psychiatric inpatient and outpatient services 3 times more than those who receive treatment.
- Individuals with comorbid physical and behavioral conditions are at heightened risk of being readmitted—particularly if their behavioral disorders remain untreated.
- Short-term disability claims for behavioral illness are growing by 10 percent annually and can account for 30 percent or more of the corporate disability experience for the typical employer.

Managing a Population's Health

- People with a serious mental illness die 25 years earlier, on average, than the general population.
- While suicide and injury account for about 30 percent to 40 percent of excess mortality, 60 percent of premature deaths in persons with schizophrenia are due to such medical conditions as cardiovascular, pulmonary and infectious diseases.
- Half of all Americans develop a behavioral illness during their lifetime.
- Mental disorders account for 23 percent of years lived with disability (YLD).
- More than 30,000 deaths occur annually in the United States as the result of suicides.
- Behavioral illness and substance abuse annually cost U.S. employers an estimated $80 to $100 billion annually in indirect costs.

Source: American Hospital Association, 2014.[6, 7, 8]

Assessing the Effectiveness of Behavioral Health Integration

When behavioral health is integrated, hospitals and care systems can use several metrics to determine the true value of the integration. Assessing the effectiveness of an integration effort allows organizations to adjust and make changes as the effort unfolds. For example, hospitals and care systems should track readmissions, patient satisfaction, health outcomes and treatment adherence.[9] Table 3 outlines how integrating behavioral health into the continuum of care aligns with the Triple Aim to improve the patient experience of care, improve population heath and reduce per capita cost.

Table 3. Behavioral Health and the Triple Aim: Case Examples

Improve Population Health	• A 2012 study with UnityPoint-Trinity, West Des Moines, Iowa, of 30-day readmissions—a Medicare quality metric that carries payment penalties—found that 79 percent of readmitted patients had a behavioral disorder complicating their physical condition. Clinicians intervened earlier to address those behavioral issues, and the readmission rate fell 8 percent in just two months. (Morrissey, 2013) • The BRIGHTEN Program (Bridging Resources of an Interdisciplinary Geriatric Health Team via Electronic Networking) demonstrated that an interdisciplinary virtual team linked with outpatient medical clinics can be an effective approach to enable older adults to access treatment for depression. A total of 2,422 patients were screened in participating clinics over a 40-month period, and significant improvements were documented in depression symptoms and general behavioral health. (Emery, 2012) • The Integrated Behavioral Health Project (IBHP) was launched in 2006 to integrate behavioral health services into primary care settings in California. IBHP-funded projects have shown statistically significant improvements in patients' physical, behavioral and general health.
Reduce Per Capita Cost	• The Improving Mood: Promoting Access to Collaborative Treatment (IMPACT) project followed 1,801 depressed, older adults from 18 diverse primary care clinics from eight health care systems across the United States for two years. The IMPACT project integrated behavioral and physical health services using a collaborative care model. The return on investment was $6 saved for each $1 spent on the program. (Unützer, 2008) • In 2009, a one-year pilot study conducted at Sanford Health Hospital in Fargo, ND, examined the integration of a clinical health psychologist on length of stay and use of resources. Medical and nursing staff satisfaction measures showed strong positive scores for the service. In a sample of patients, an estimated 108 days were saved, with a cost savings of $104,684 (Sandgren, 2010) • St. Charles Health System, located in Bend, Ore., has behavioral health specialists embedded into the NICU, where they work with families on engagement and coping skills, leading to potentially shorter length of stay and maximizing the newborn's functions. (Henderson, 2014) • Sustaining Healthcare Across Integrated Primary Care Efforts (SHAPE) in Colorado aims to understand the impact of global payment methods on the integration of behavioral health and primary care and test real-world applications to inform policy. Initial projections indicate potential savings of $656 million on a population of 1million patients who have conditions like arthritis, asthma, diabetes or hypertension in conjunction with a behavioral health condition.

Improve Patient Experience of Care	• For three years, St. Charles Health System, located in Bend, Ore., has placed psychologists in pediatric physician practices to provide screening and counseling services. By integrating behavioral health into a primary care setting, families have immediate access to intervention and support provided by highly qualified behavioral and physical health professionals. (Henderson, 2013) • At the University of Rochester Medical Center, located in Rochester, NY, a coaching program with behavioral health specialists who code the interactions between physicians and patients has shown promise of raising physician awareness of communication patterns and improving patient-centered communication. (McDaniel, 2014) • The Massachusetts Child Psychiatry Access Project (MCPAP), located in Boston, Mass., is an integration effort that assists primary care providers who treat children and adolescents for psychiatric conditions. According to MCPAP's Fiscal Year 2012 Statewide Data study, successes in each of their distinct categories have increased as much as 57 percent since 2005.

Source: American Hospital Association, 2014.[10]

Applying an Integration Framework for Behavioral Health

A significant opportunity exists for hospitals and care systems to integrate behavioral and physical health services across all care settings. Choosing the appropriate framework can lead to improved quality and better outcomes for patients and the organization. A variety of frameworks are available, so hospitals and care systems can tailor integration efforts to their own resources and community needs.

Integrating behavioral health into care delivery changes a care setting by:

- Increasing providers' knowledge, expertise and capacity
- Promoting understanding across the entire care continuum
- Providing more comprehensive and better coordinated care
- Identifying behavioral health concerns early
- Facilitating communication, collaboration and treatment between providers
- Allowing physical health providers to use the expertise of trained behavioral health specialists
- Improving patient education and satisfaction

The type, degree and nature of integration will vary by setting and should be used whenever appropriate for the care of the patient. Regardless of the setting—primary care, acute inpatient care, long-term (e.g., skilled nursing facility), outpatient, community, or emergency room—several key elements of behavioral health can be incorporated. Key elements to consider when moving toward integration are:

- Standard behavioral health screening
- Unified treatment plans
- Actionable screening results
- Protocol-based care delivery
- Common electronic health record
- Patient-centered care (treating mind and body)

Table 4 outlines several frameworks that address these key elements.

Table 4. Frameworks for Integrating Behavioral Health

Integration Framework	Description
AHRQ Framework for Primary Care	Based on nine components, this model integrates care team expertise, clinical workflow, patient identification, patient and family engagement, treatment monitoring, leadership alignment, operation reliability, business model sustainability, and data collection and use.
IMPACT	A collaborative care model designed to treat chronic diseases in older adults who also have depression. Using a team-based approach that includes care manager, primary care provider and behavioral health specialists, depression is managed from the primary care setting. The care team uses a three-step, evidence-based approach, in which consultations and care plans are jointly created and monitored by the primary care provider and the behavioral health specialist. Patients receive routine screening for depression as well as more intensive care during the acute and maintenance phases. A care manager, nurse or psychologist provides education, care management, and medication support or psychotherapy, with regular telephone follow-up for a year (weekly at first, and then less frequently as depression lessens).
Three-Component Model (TCM)	Care management is provided from a centralized location in an organization or a local practice, with a spectrum of services provided. Critical to the success of this model is patient education, counseling for treatment adherence and communication with other clinicians involved with the patient's care. The behavioral health specialist supervises and provides guidelines for the care manager, provides consultation services to the primary care physician, and facilitates appropriate use of additional behavioral health resources.
Co-located collaborative care	Behavioral health specialists are located on-site within a care setting, providing services to the patients at the clinic in a collaborative manner with the other clinicians. Co-located behavioral health specialists provide more traditional psychotherapy regimens. Another key feature of this model is triage, in which the level of care is increased depending on the patient's need, risk or severity, and ranges from behavioral health consultation, to specialty consultation, to fully integrated care.
The 6P Framework	This framework incorporates six group stakeholders: (1) patients/consumers, (2) providers, (3) practice/delivery systems, (4) plans, (5) purchasers and (6) populations/policies. This framework includes economic considerations and innovative financial incentive arrangements, which encourage the collaboration between care providers and payers. This model provides a framework for treating depression in the primary care site by outlining several care components. These components include the leadership team, decision support to enhance adherence to evidence-based treatment guidelines, delivery system redesign (e.g., use of patient registries), clinical information systems, patient self-management support, and community resources.
Reverse Integration	For patients with severe behavioral illnesses, primary care is provided within a specialty behavioral setting, through co-location or care coordination.

Source: American Hospital Association, 2014.

Most of the integration tools described in Table 4 address key elements in care delivery. Table 5 compares four of the tools, each of which addresses approaches for integrating behavioral health screening.

Table 5. Comparison of Integration Frameworks and Behavioral Health Screening

Integration Framework	Description of Behavioral Health Screening
AHRQ Framework for Primary Care	Patients receive a standardized screening upon entering the care site. A primary care physician or behavioral health specialist conducts the screening.
IMPACT	Patients receive routine screening for depression as well as more intensive care during the acute and maintenance phases. If the hospital or care system has decided to target depression, IMPACT specifically addresses screening for this illness.
Three-Component Model (TCM)	The physician conducts screening based on a referral provided to a behavioral health specialist. Screening may be standard or catered to the setting.
Co-located collaborative care	Patients may receive standardized screening upon entering the care site. A primary care physician or behavioral health specialist conducts the screening. Another key feature of this model is triage, in which the level of care is increased depending on patient need, risk or severity and ranges from behavioral health consultation, to specialty consultation, to fully integrated care.

Source: American Hospital Association, 2014.

AHRQ's *Atlas of Integrated Behavioral Health Care Quality Measures* provides an integration framework and core measures for assessing behavioral health care. This framework can serve as a checklist during an integration effort. Figure 2 presents an example of one of the eleven functional domains—care team expertise—and the corresponding measurement constructs are specific characteristics, actions and outcomes that can be observed during integrated behavioral health. Additionally, the framework provides measures that comprise each domain. The complete framework can be found at http://integrationacademy.ahrq.gov/sites/default/files/framework_and_measures.pdf.

Figure 2. Integration Framework and Core Measures for Assessing Behavioral Health Delivery: Care Team Expertise

FUNCTIONAL DOMAIN		MEASUREMENT CONSTRUCTS		MEASURES
Functional domains divide and organize the integration framework into functions or actions.	→	**Measurement constructs** describe specific characteristics (i.e., structures), actions (i.e., processes), and outcomes that can be observed during integrated behavioral health care.	→	**Measures** provide details for how to define and assess measurement constructs and their sub-components.
1) Care team expertise: The team is tailored to the needs of the particular patients and populations—with a suitable range of expertise and roles.		Structure: • Health care professionals with a range of expertise and roles are available and can be tailored into a team to meet the needs of specific patients and population Process: • Conduct an individualized needs assessment for a specific patient and family. • Develop a unified care plan that builds a team—with necessary members and functions—to care for a given patient. • Train the care team to function in collaborative practice and respond as a team to an individual patient's unique needs. • If desired, select a sub-population of clinic patients with similar needs, such as geriatric care, children with special needs, or chronic illnesses and make available a range of team expertise generally needed to care for the selected sub-population.		C1. Assessment of Chronic Illness Care C2. Behavioral Health Integration Checklist C3. Competency Assessment Instrument Measures C4. Consumer Assessment of Healthcare Providers and Systems – Clinician & Group Measures C6. Level of Integration Measure C7. Mental Health Integration Programs C8. Site Self-Assessment Evaluation Tool

Source: Agency for Healthcare Research and Quality, 2013

Strategic Questions for Integrating Behavioral Health

Assessing Your Efforts Toward Integrating Behavioral Health

To begin integrating behavioral health or to enhance current efforts, health care leaders should assess their organization's current level of behavioral and physical health integration. The questions below are not exhaustive but designed to trigger discussion and promote awareness of future opportunities. These questions can be applied to variety of settings across the health care delivery continuum.

Question
1. **Does your organization align behavioral health treatment with the Triple Aim?**
The Triple Aim involves promoting the integration of physical and behavioral health services to improve patient care, improve population health and reduce cost.
2. **Does your organization screen for behavioral health disorders in the patient population?**
A system is in place in all settings and routinely used to screen patients who may need or benefit from integrated behavioral health care.
3. **Does your organization measure the cost and health outcomes resulting from the integration of physical and behavioral health services for your patient population?**
An integration effort between physical and behavioral health is measured and evaluated, and specific metrics, such as for patient satisfaction and health outcomes, are linked for continuous process improvement.
4. **Does your organization survey behavioral health needs as a consistent part of your community health needs assessment?**
A community health needs assessment includes surveying behavioral health issues in the community so that the hospital or care system incorporates care delivery processes that address the behavioral health needs of all the patients it serves.
5. **Does your organization have a process to assess the possible reorganization of care delivery to incorporate behavioral health?**
Health care leaders assess any possible reorganization of care that will be necessary to incorporate behavioral health into the care delivery process, including the creation of treatment plans and health interventions.
6. **Does your organization align resources—clinicians, space, information technology—for behavioral health across the system?**
Hospitals and care systems prioritize organizational initiatives and resources that address behavioral health and address any gaps in the care delivery process.
7. **Does your organization explore partnerships with behavioral health providers?**
Hospitals and care systems examine how to build capacity for behavioral health offerings by collaborating with other providers to address community health needs.
8. **Does your organization use a patient-centered care model in each care delivery setting that incorporates behavioral health services?**
A patient-centered approach involves using integrating behavioral health services so the patient can receive holistic care throughout the care continuum.

Question
9. **Does your organization use unified treatment plans that include input from behavioral health and physical health staff?**
Treatment plans for patients are created with input from all staff, including behavioral health specialists, to ensure planned treatments are holistic.
10. **Does your organization use behavioral health registries to track patients?**
Measuring and tracking patients in an integrated system involves data collection and analysis. Data registries will allow stratification and identification of patients who require specific interventions for both physical and behavioral health conditions.

For additional information related to integrating behavioral health:

- AHRQ Atlas of Integrated Behavioral Health Care Quality Measures (available at http://integrationacademy.ahrq.gov/atlas)

- AHRQ Lexicon for Behavioral Health and Primary Care Integration (available at http://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf)

- Integrated Care Resource Center (available at http://www.integratedcareresourcecenter.com/)

- Center for Advancing Health: Collaborative Care Teams Improve Mental Health Outcomes (available at http://www.cfah.org/hbns/2012/collaborative-care-teams-improve-mental-health-outcomes)

Conclusion

Hospitals and care systems continue to move out of their four walls and into the community to improve population health and manage the total cost of care. Integrating behavioral health and physical health services across all health care settings and in the community moves an organization toward achieving the Triple Aim, with a patient-centered care model that treats the mind and body.

No particular framework or model of integrating behavioral health is appropriate for every provider and hospital. The decision to be a direct provider of behavioral health services or to provide these services via collaborative partnerships, joint ventures or contractual arrangements will be driven by community needs and available resources. The Agency for Healthcare Research and Quality outlined the three stages of behavioral health integration—coordinated, co-located and integrated—along with the three clinical functions—patient-centered care team, shared population and mission, and systematic clinical approach—to guide hospitals and care systems in moving integration forward.

Hospitals and care systems should develop and sustain robust measurement systems that track patient satisfaction, admission rates and total cost to determine the effectiveness of their integration effort. Publicly available checklists that assess behavioral health integration are a useful tool for leaders. The strategic questions for integrating behavioral health included in this guide will help health care leaders assess strategic questions and assess their organization's current level of behavioral health integration. From there, leaders can access resources to develop an effective integration plan or further expand existing integration effort.

Innovative health care leaders are moving quickly to integrate physical and behavioral health services, to not only address rising costs and an increased demand for behavioral health services, but also to improve outcomes, reduce the total cost of care and enhance the patient experience.

Case Example 1: Geisinger Health System, Danville, Pennsylvania

Background: Geisinger is an integrated health services organization that serves more than 2.6 million residents throughout 44 counties in central and northeastern Pennsylvania. The mission of Geisinger is: "Enhancing quality of life through an integrated health service organization based on a balanced program of patient care, education, research and community service."

Primary Care Setting and Specialty Care Integration: As an accountable care organization, Geisinger has been integrating behavioral health into different care settings, including pediatric and primary care clinics. Behavioral health specialists are co-located in the care setting. For example, behavioral health specialists are embedded with primary care clinicians at 42 primary care clinic sites. The co-location of these specialists supports the health system's mission and moves toward the goal of creating a holistic care approach that makes the patient part of the care team.

To improve the collaboration between health professionals at the primary care clinics, all staff receive training on basic concepts of behavioral health and the goals for incorporating these services at the clinic. Physicians and behavioral health specialists who are hired to work at these primary care clinics should understand and want to be part of a holistic care approach. One direct benefit that resulted from having behavioral health specialists embedded were "warm handoffs," when the primary care physician introduces the patient to a behavioral health specialist almost immediately. Patients receive a standard screening that includes behavioral questions based from the PHQ-2 and PHQ-9, a standard behavioral health screening that measures depression levels. Physicians use the screening results to determine the next steps for care.

Results: Initial results from the effort to incorporate behavioral health have been positive. Through the introduction of "warm handoffs," patients have an 85 percent probability of attending their first office visit with the behavioral health specialist. Embedded behavioral specialists in the pediatric department have increased identification of at-risk patients, which has reduced the number of pediatric patients entering the emergency department.

Lessons Learned:

- A hospital or care system should explore behavioral health integration in-depth with the physician leaders, as physician buy-in is critical.

- Even with co-located care, a behavioral health practitioner can still be insulated from other practitioners, have financial barriers and experience stress that hinders effective collaboration.

- It is important to explore different payment models, such as shared savings when integrating care services.

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Case Example 2: Robert Young Center for Community Behavioral Health, Rock Island, Illinois

Background: Part of UnityPoint Health in West Des Moines, Iowa, Robert Young Center is a community mental health center with a 25-bed adult psychiatric unit, 6-bed child and adolescent unit and a 16-bed chemical dependency unit. With locations in Iowa and Illinois, Robert Young Center was the first community mental health center in Illinois as well as the first hospital-based community mental health center in Illinois or Iowa. It has 2,500 admissions each year.

Primary Care Setting Integration: Part of Robert Young Center's integration approach has been the creation of a patient-centered medical home. Co-located in the hospital, the center collaborates with providers and delivers care that is coordinated. Focused on standardization, the center ensures that each patient who is at risk for depression receives a standard depression screening. Collaborating with the Iowa Health Physicians and a federally qualified health center, a behavioral health specialist—licensed clinical social worker or licensed clinical professional counselor—is embedded into five primary care locations. Behavioral health specialists provide assessments, treatments and consultations. Additionally, primary care physicians can access a behavioral health specialist for consultations on any treatments.

Integration of physical and behavioral health services occurs across the entire care continuum including:

- Inpatient child and adult psychiatric units
- Outpatient behavioral health services
- Community treatment, including skills training and employment assistance
- Home- and school-based behavioral services
- Primary care screening and targeted case management
- Telepsychiatry for outlying emergency departments and jails

Results: Robert Young Center had the following positive health outcomes in one quarter:

- 46 percent reduction in emergency room visits
- 65 percent reduction in Medicaid payments for emergency room visits
- 50 percent reduction in psychiatric admissions
- 16.9 percent reduction in medical admissions for patients with behavioral health diagnoses
- 80 percent reduction in payments for medical admissions

Lessons Learned:

- Helping patients navigate multiple health systems and coordinating their care between providers can have a significant impact on outcomes and cost.
- It is vital to provide annual health risk assessments to identify at-risk patients with co-morbidities.
- Using evidence-based practices to determine accurate health outcomes and tracking each patient's treatment, adherence and outcomes are critical for continued process improvement.

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Case Example 3: Samaritan Health Services, Corvallis, Oregon

Background: Samaritan Health Services, located in Oregon, is a five-hospital system with eight primary care and specialty physician clinics. Serving an area of 290,000 residents, the mission of Samaritan Health Services is to build a healthier community.

Primary Care Setting and Chronic Care Integration: Samaritan Health Services created two community clinics, Corvallis Heartspring Wellness Center and Albany Heartspring Wellness Center, incorporating multiple health practitioners including allopathic, osteopathic, and naturopathic physicians as well as nurse practitioners, behavioral health specialists, massage therapists, acupuncturists, an occupational therapist and a dietician. The goal of these clinics is to provide holistic and integrated health care for patients, utilizing both conventional and complementary treatments from a variety of health practitioners. Patients are referred to the clinic for treatment from other providers or use the clinic for their primary care. Most patients who are referred to the clinic have chronic conditions or have been unresponsive to traditional medical treatments.

Initial evaluations with patients are extensive, typically lasting 90 minutes or more. Clinic practitioners develop treatment plans and monitor patient progress as a team. Collaboration between the various practitioners and the referring provider is especially important in providing the holistic approach to patient care. Creating an effective and collaborative care team starts with the provider selection process. Clinic staff and providers need to possess a basic understanding of and desire to provide holistic care. Additionally, a curiosity and desire to learn about other care modalities are important characteristics of the team providers. Clinic providers meet regularly to review patient cases, develop treatment plans and assess outcomes, providing a setting to learn and improve collaboration and each patient's care.

Results: Over time, the clinic practitioners work as one team providing holistic care. The integrative primary care providers typically create the treatment plans for the most complex patients due to their greater breadth of understanding of both conventional and complementary treatments. The clinic's mission and vision statements have been revised to reflect this new approach to holistic care, with input from all practitioners at the clinic.

Lessons Learned: Samaritan Health Services's primary lesson from this integration effort was the realization that both medical and nonmedical health care practitioners may have very little understanding of each other and their respective practices. This "silo effect" was initially evident in these two clinics, which brought together a variety of practitioners to provide care. Extensive collaboration methods were used at the clinic's inception to improve understanding and awareness between all the practitioners.

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Case Example 4: Cherokee Health Systems, Knoxville, Tennessee

Background: With 47 clinical locations in 13 counties, the Tennessee-based Cherokee Health Systems serves more than 63,800 patients. Using a care delivery philosophy that treats the body and mind, Cherokee Health provides comprehensive primary, behavioral health and preventive care.

Systemwide Integration: Cherokee Health Systems incorporated behavioral health services in the care delivery system by co-locating behavioral health professionals in primary care settings for real-time consultations. These consultations are available to all physicians, allowing focused behavioral health intervention at the primary care level. A standard medical questionnaire includes behavioral health screening questions to identify potential issues. Care managers track high-need patients for treatment adherence. The collaboration between the care managers and the physician and behavioral health staff has led to significant positive outcomes.

Results: Compared to similar area providers who have not incorporated behavioral health, Cherokee Health Systems has achieved the following outcomes for its overall patient population:

- Nearly a 20 percent increase in primary care visits for the overall patient population, which has reduced the amount of inpatient treatments, improving efficiency and saving money

- 68 percent reduction in emergency room visits

- 42 percent reduction in specialty care visits

- 37 percent reduction in hospital care

- 22 percent reduction in overall cost

Lessons Learned: Cherokee Health Systems integrated behavioral health services systemwide and determined that primary care is the best platform for its effort. Patients prefer the primary care setting for receiving behavioral health care. By using highly skilled behavioral health specialists, the health system's care team increased the efficacy of care delivery.

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Case Example 5: Council of Community Clinics, San Diego, California

Background: With 16 members and more than 100 sites, Council of Community Clinics has represented and supported community clinics and health centers for 35 years. Council of Community Clinics does not operate a public hospital or clinic yet provides care to 1 in 6 residents of San Diego.

Community Setting Integration: In December 2006, Council of Community Clinics signed a contract with the county of San Diego's Behavioral Health Administration to implement the Behavioral Health and Primary Care Integration project, which uses the IMPACT model—Improving Mood Promoting Access to Collaborative Care Treatment—to treat individuals suffering from depression. All health providers use the Patient Health Questionnaire-9, which standardizes the screening process. Additionally, training is provided to all staff on the care team.

To evaluate the integration project, a quality management committee was created. Meeting regularly, the committee provides feedback to Council of Community Clinics and participating clinics to improve care services and integration effort.

Results: During each visit, IMPACT patients complete the PHQ-9 to assess depression. From July 2006 to June 2012, scores from 1,546 patients were examined for the impact that the services had on depression levels. The average score at the time of enrollment was 16.3, indicating a significant level of depression. By the fifth session, the PHQ-9 scores were below 10 and remained low throughout the treatment. Council of Community Clinics also examined the reduction in stigma attached to receiving behavioral health services and measured patient satisfaction. Patients treated by behavioral health professionals had increased satisfaction and treatment adherence.

Lessons Learned:

- Council of Community Clinics sought out individuals who desire to work in this type of care setting.

- After their initial resistance to the embedded behavioral health specialists, the primary care physicians found they were able to treat more patients, increasing their revenue stream.

- Partnerships with local behavioral health providers were essential to Council of Community Clinics' success in integrating physical and behavioral health into the care continuum.

- Better collaboration was fostered by providing an on-staff psychiatrist to provide real-time consultations to primary care physicians.

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About HRET

Founded in 1944, the Health Research & Educational Trust (HRET) is the not-for-profit research and educational affiliate of the American Hospital Association (AHA). HRET's mission is to transform health care through research and education. HRET's applied research seeks to create new knowledge, tools and assistance in improving the delivery of health care by providers and practitioners within the communities they serve. www.hret.org

About HPOE

Hospitals in Pursuit of Excellence (HPOE) is the American Hospital Association's strategic platform to accelerate performance improvement and support delivery system transformation in the nation's hospitals and health systems. HPOE shares best practices, synthesizes and disseminates knowledge, and engages leaders in the health industry through education, research tools and guides, leadership development programs and national engagement projects. www.hpoe.org

About AHA's Section for Psychiatric and Substance Abuse Services

The American Hospital Association's Section for Psychiatric and Substance Abuse Services represents more than 1,600 behavioral health providers, across a continuum of service levels. The section is a key contributor to the AHA's behavioral health advocacy and policy initiatives and provides a forum to discuss critical health care issues. The 18-member Psychiatric and Substance Abuse Services Governing Council, which meets three times a year, leads these efforts. The AHA's Section for Psychiatric and Substance Abuse Services offers an array of member services including executive small group-facilitated discussions on current best practices and research, monthly communications on key behavioral health issues and a members-only section website: www.aha.org/psych.

Signature Leadership Series

Environmental Sustainability in Hospitals: The Value of Efficiency

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Executive Summary

Hospitals and care systems increasingly are looking for ways to improve efficiency and reduce overall costs while also improving the overall patient experience. Sustainability initiatives offer significant environmental and financial benefits for organizations—benefits that will help hospitals and care systems thrive now and in the future.

Sustainability can be defined as the ability of a system to continue doing what it is doing over time. In recent years, society has increased its focus on being "green" and becoming more environmentally friendly. To be truly sustainable, however, initiatives must stand the test of time by being fiscally sound while also helping the community and the environment.

Hospitals and care systems that pursue sustainability initiatives find benefits in multiple areas. Their efforts contribute to a healthier environment, improve the organization's public perception and can help their local communities. Environmental sustainability is also good business, as it helps lower operational costs and allows hospitals to direct more resources to patient care.

Hospitals and care systems pursue sustainability efforts for a wide range of reasons and in a variety of ways, with leaders seeking solutions that work best for their organizations. Those who commit to sustainability reap the rewards, as illustrated by examples in this guide.

- Memorial Hermann Health System saved $47 million over five years by implementing energy efficiencies.

- The University of Arkansas for Medical Sciences saved enough through efficiency efforts from one project that it was able to create 60 new beds, remodel five operating suites, build out a floor of a cancer institute, and buy seven acres of land.

- Kaiser Permanente saved $4 million a year by purchasing energy-efficient, environmentally responsible computers.

Hospital leaders should ask their management teams to assess the organization's current approach to environmental sustainability and create an action plan for finding greater efficiencies. This Hospitals in Pursuit of Excellence guide can help leaders explore options and understand the steps needed to harness the strategic power of sustainability.

This guide details the path that executives can take to set the course for their organizations:

1. Make the commitment.

2. Create a culture for supporting environmental sustainability.

3. Support and finance environmental sustainability.

4. Set goals and measure, report and evaluate change.

5. Celebrate and share successes.

6. Continue to assess and identify new opportunities.

These universal steps outline the process of creating successful long-term sustainability within an organization, but each hospital and care system must determine the best course of action based on its own goals. An approach that works for one hospital may not be an option for another. Hospital and care system leaders can consider the questions included in this guide to help determine their organization's most appropriate path toward sustainability.

This guide includes information on a variety of sustainability opportunities:

- Energy
- Water
- Supply chain
- Waste
- Commissioning and retrocommissioning

Focusing on one area or even one project can lead to substantial savings. But by combining multiple projects and taking advantage of the wide range of sustainability opportunities, hospitals and care systems can gain even more benefits.

This guide provides case studies and examples from hospitals and care systems around the country that are benefiting from sustainability efforts. Hospitals are saving significant resources every year—resources that can be used to support the mission of patient care. The examples featured in this guide are just a small fraction of the case studies available through resources like the Sustainability Roadmap for Hospitals website (www.sustainabilityroadmap.org). Additional resources found in this guide include a sample hospital sustainability statement, information on benchmarking tools and a sample energy efficiency project.

Hospital and care system leaders can use this guide as they move toward environmental sustainability. Executives can discuss the information and resources with their management teams to find an appropriate path toward sustainability that will lead to many benefits, including greater efficiencies that contribute to the mission of patient care.

Introduction

Hospitals and care systems increasingly are looking for ways to improve efficiency and reduce overall costs while also improving the overall patient experience. One often overlooked opportunity is environmental sustainability. Making an active commitment to sustainability and aggressively pursuing goals provides multiple strategic benefits that can help hospitals and care systems thrive.

Sustainability is a broad topic, but a simple definition is the ability of a system to continue doing what it's doing over time. A growing number of scientists are focusing on sustainability and global trends to make the case that business as usual is unsustainable for our planet. Many organizations and campaigns are focused on "green" initiatives and ways to become more environmental friendly. But to be continued over time—to be truly sustainable—initiatives must be fiscally sound while also helping the community and the environment.

Hospitals and care systems that accomplish truly sustainable initiatives reap benefits in multiple areas. Their efforts contribute to a healthier environment, improve the organization's public perception and can help their local communities. Environmental sustainability is also good business, as it helps lower operational costs and allows hospitals to direct more resources to patient care. These benefits can help hospitals meet the Triple Aim—improving population health, improving the patient experience and reducing per capita cost.[1]

Sustainability can improve population health by contributing to healthier communities, reducing pollution and reducing the use of community resources such as water and energy. Sustainability can contribute to a better patient experience by improving a hospital's environment and public perception and by promoting loyalty among patients concerned about the environment. Finally, sustainability can reduce the per capita cost of health care by reducing health care expenses; for example, spending less money on utilities enhances hospitals' ability to free up resources for patient care.

The benefits of sustainability are more important than ever before. Hospitals and care systems are facing incredible financial and regulatory pressures to make changes as the health care environment shifts from a volume-based market to a value-based market. In a 2011 report "Hospitals and Care Systems of the Future," the American Hospital Association outlined key strategies hospitals must use to succeed in the future, value-based environment. Achieving sustainability goals can help hospitals pursue several strategies listed in the report, including becoming more efficient and focusing on population health.[2]

Most hospital CEOs rank financial pressures as their top concern.[3] In the current health care climate, sustainability efforts must be financially viable to succeed long term. Hospitals and care systems around the country are already saving resources by adopting sustainability measures.

- PeaceHealth, a nine-hospital system serving Washington, Oregon and Alaska, created a strategic energy management plan that cut energy use by 10 percent over three years, generating $800,000 in savings annually.[4]

- Gundersen Health System, which serves Wisconsin, Iowa and Minnesota, made energy reduction a priority in 2007, and by 2009 had achieved a 25 percent improvement in energy efficiency and more than $1 million in annual savings.[5]

Implementing energy efficiency efforts—a major sustainability strategy—can help hospitals reduce costs and protect scarce resources. However, hospitals by their very nature are energy-intensive facilities, operating around the clock and using complex medical systems and equipment critical to patient care. Hospitals often house departments that use a lot of energy, such as laundry, sterilization, food service, refrigeration facilities and computer and data centers. The most recent data from the U.S. Energy Information Administration states that large hospitals make up just 2 percent of commercial floor space in the United States but use about 5.5 percent of energy delivered to the commercial sector.[6]

Rising energy costs coupled with the unique requirements of health care facilities are increasingly leading to financial challenges. Health care organizations spend more than $6.5 billion on energy costs every year.[7] That figure represents a tremendous opportunity for savings. By trimming just 5 or 10 percent from energy bills, hospitals and care systems can make a real impact on their finances. Every $1 a nonprofit hospital or care system saves on energy is equivalent to generating $20 in new hospital revenues, and for-profit hospitals can raise their earnings by a penny a share by reducing energy costs just 5 percent.[8] Energy projects are just one of many sustainability strategies. By expanding sustainability to encompass more than just energy reduction, hospitals and care systems can make even greater gains.

Many hospitals and care systems have made commitments to becoming more efficient in all aspects through performance excellence initiatives, Lean training or the Baldrige award criteria. Sustainability aligns well with all these efforts. Hospitals that can become more efficient through sustainability initiatives have more resources to direct toward their missions of patient care.

In addition to cost savings, hospitals and care systems reap other benefits from become more sustainable. CEOs of all fields most often cite the following drivers as the reasons they are pursuing environmental sustainability initiatives:

- Improving brand image and reputation

- Saving money

- Increasing employee satisfaction and retention

- Managing risk and regulatory compliance

- Improving facility operations and pursuing performance excellence

- Demonstrating corporate social responsibility[9]

In addition to these benefits, sustainability also brings a variety of other benefits specific to the health care field:

- With community health becoming a top priority for hospitals and care systems, many leaders are placing greater value on reducing pollution and creating a smaller environmental footprint.

- Health care organizations are also increasingly pursuing Lean approaches to become more efficient in various processes, a natural fit with sustainability efforts.

- Some sustainability efforts, such as retrocommissioning, can improve patient health by contributing to lower infection rates and fewer patient transfers.[10]

The multiple drivers behind sustainability initiatives often overlap. Kaiser Permanente, for example, has attracted headlines with its public commitment to respond to climate change and create a healthier environment while saving millions of dollars through efficiency measures.[11]

This guide aims to help hospital and care system leaders navigate the world of sustainability and build upon their organizations' existing efforts. Hospitals are at different points on the journey toward sustainability. Some organizations are leading the charge and developing best practices, while others are addressing the issue for the first time. Leaders should consider options and determine what is right for their organizations.

Environmental sustainability in hospitals is more than purchasing a single piece of energy-efficient equipment. Efficient hospitals create a culture of sustainability that creates lasting change. These sustainability efforts do not happen in hospitals and care systems without vision and commitment. Rather, these efforts are the result of strategic thinking from leaders who are committed to creating a culture of change.

It is important to note that reducing energy expenses and other costs through sustainability efforts is only achievable if hospitals find solutions that work in the complex hospital facility. Switching to a more environmentally friendly cleaning solution, for example, is not an option for hospitals unless it is proven to kill germs and reduce infections as effectively as traditional products. The solutions and examples included in this guide are all proven to be effective in health care facilities. More information can be found on the AHA's Sustainability Roadmap for Hospitals website (www.sustainabilityroadmap.org), an online resource that includes detailed material tailored specifically to hospital and care system needs.

Steps to Environmental Sustainability

Hospitals and care systems should make environmental sustainability a priority and create a culture of change to achieve lasting results. Health care leaders should examine the steps in Figure 1 and consider which options will work best in their organizations.

Figure 1. Six Steps to Environmental Sustainability

01	Make the commitment.
02	Create a structure for supporting environmental sustainability.
03	Support and finance environmental sustainability.
04	Set goals and measure, report and evaluate change.
05	Celebrate and share successes.
06	Continue to assess and identify new opportunities.

Source: American Society for Healthcare Engineering, 2014.

1. Make the commitment.

The first step toward any change is making a commitment. Hospital and care system executives and trustees should consider the drivers behind their decision to pursue environmental sustainability. Reasons for deciding to implement sustainability initiatives include:

- Saving money
- Demonstrating corporate social responsibility
- Contributing to community health by reducing pollution
- Making facility operations more efficient
- Increasing employee satisfaction, engagement and retention
- Fostering a positive public image
- Meeting compliance or regulatory requirements
- Improving the patient experience

Potential barriers to sustainability in a health care organization also should be considered. Leaders may be concerned about the resources needed to become more sustainable, including time and finances. By understanding an organization's goals as well as potential barriers, leaders can choose appropriate strategies. For example, a hospital concerned about investing in major sustainability initiatives may opt for low-cost efforts with short project-payback periods. A health system wanting to make fundamental change in environmental practices may embark on a wider range of long-term sustainability projects.

Once leaders determine their approach, executives and trustees should consider adopting a formal statement to document the organization's commitment to sustainability. Sustainability statements typically include the motives for change, the results the organization hopes to achieve and activities planned to reach those goals. (A sample sustainability statement is available in the Resources section of this guide.) Hospitals and care systems can announce their commitments externally through press releases, local newspaper articles and digital media platforms and internally through staff communication channels and meetings.

2. Create a structure for supporting environmental sustainability.

Implementing lasting sustainability initiatives in hospitals and care systems requires participation from multiple leaders across multiple departments, from senior executives to department-level advocates. Hospitals and care systems use various structures to integrate sustainability and may consider establishing groups such as:

- **Sustainability Leadership Council:** This group of senior leaders has the authority to approve high-level initiatives and allocate financial resources. Because this group is focused on long-term approaches, it may need to meet once a quarter or less often.

- **Sustainability Committee or Green Team:** This team consists of director-level representatives from departments responsible for implementing sustainability programs on a day-to-day basis. Some green teams are divided into subcommittees focused on energy, water, waste and purchasing.

- **Value Analysis Committee:** This group provides a systematic approach to selecting products and services and addressing supply chain performance issues such as cost, utility and effectiveness. Adding sustainability criteria to the selection of products is one way to integrate environmentally preferable purchasing principles.

- **Departmental Sustainability Coordinators:** Department-level coordinators are important for championing and implementing sustainability efforts.

Figure 2 shows how sustainability efforts can become integrated into a hospital's structure. While some groups and committees include staff members who must be involved by the nature of their roles and responsibilities—the director of environmental services should be involved in recycling, for example— the most successful groups have energetic volunteers, including clinicians, who serve simply because they are committed to environmental sustainability.

Figure 2. Integrating Environmental Sustainability into an Organization

ENVIRONMENTAL LEADERSHIP COUNCIL

EXAMPLES OF ENVIRONMENTAL LEADERSHIP COUNCIL MEMBERS

BOARD OF TRUSTEES	MEDICAL DIRECTOR
DIRECTOR EVS	VP FINANCE
VP FACILITIES	VP NURSING
DIRECTOR MATERIALS MANAGEMENT	VP MEDIA RELATIONS

SUSTAINABILITY COORDINATOR

GREEN TEAM

GREEN TEAM SUBCOMMITTEES	VALUE ANALYSIS COMMITTEE

EXAMPLES OF GREEN TEAM SUBCOMMITTEES

MATERIALS MNGT. GREEN TEAM SUBCOMMITTEE

LAB GREEN TEAM SUBCOMMITTEE	O.R. GREEN TEAM SUBCOMMITTEE

DEPARTMENTAL SUSTAINABILITY COORDINATORS

EXAMPLES OF DEPARTMENTAL SUSTAINABILITY COORDINATORS

CLINICAL	SURGERY
MEDICAL RECORDS	MEDICAL SURGERY
ADMINISTRATION	ORTHO

Source: American Society for Healthcare Engineering, 2014.

3. Support and finance environmental sustainability.

Leaders set the tone for sustainability in their hospital or care system. Sustainability often requires a cultural change supported by effective leadership, appropriate policies, adequate resources and a clearly communicated vision.

It takes more than leadership to accomplish sustainability goals however. To succeed long term, sustainability efforts must be financially viable. Many executives see cost as the primary barrier to undertaking sustainability efforts, and some sustainability projects can be expensive. However, some well-planned programs can be implemented at no cost, and many projects have short payback periods. Calculators such as the business case cost-benefit worksheet available on the Sustainability Roadmap for Hospitals (www.sustainabilityroadmap.org) can help organizations determine life cycle costs and payback periods.

For projects that require a lot of up-front investment, hospitals and care systems are increasingly turning to alternative funding sources. These include:

- Grants, rebates and donations: Many utilities have grant or rebate programs that can help fund energy projects. Sustainability strategies are also attractive to potential donors, including individuals, organizations and businesses.

- Shared-savings agreements: Under shared-savings agreements, a third party agrees to finance, design and install energy projects, with the costs paid from energy savings that result from the projects.

- Power purchase agreements: Under power purchase agreements, a third party owns, installs and operates a power-producing asset such as a renewable energy source. In turn, the hospital agrees to purchase the power generated from the plant.

- Carbon-emission offsets: A number of voluntary markets are available to sell carbon offsets and renewable energy credits.

Hospitals can combine these various methods and other strategies to find creative ways to implement sustainability initiatives. Many hospitals and care systems have foundation departments that can help write grant applications or solicit donations for sustainability projects. Leaders should explore various options and determine the appropriate solutions for their organization.

4. Set goals and measure, report and evaluate change.

Using their organization's sustainability statement as a blueprint, health care leaders can set measurable goals for sustainability efforts. Hospitals and care systems should begin by measuring baseline levels of energy use, water consumption and the waste stream. Several resources are available to track this data over time, including the Environmental Protection Agency's ENERGY STAR Portfolio Manager. (See the Resources section for more information on benchmarking and tracking.)

Once hospitals and care systems are collecting data, it is important to analyze performance and track progress toward sustainability goals. Facility managers and other facility professionals can monitor and report trends to leadership to evaluate progress toward goals.

5. Celebrate and share successes.

Celebrating successes is a key motivator that helps keep sustainability efforts moving forward over time. Rewards and celebrations for employees can inspire renewed focus on sustainability initiatives. External recognition shines a spotlight on the good work being done by hospitals and care systems. High-performing hospitals, for example, can earn the ENERGY STAR designation, created by the U.S. Environmental Protection Agency. The Energy to Care program from the American Society for Healthcare Engineering recognizes hospitals that cut energy consumption by 10 percent over baseline numbers—another visible way to celebrate sustainability efforts in health care. Sharing success stories and case studies on platforms such as the Sustainability Roadmap can help other hospitals find similar results. Hospitals and care systems can work with their public relations departments to announce successes.

6. Continue to assess and identify new opportunities.

Sustainability is a journey of continuous performance improvement. Many hospitals and care systems start with simpler projects before moving on to more complex sustainability projects. Even hospitals leading the sustainability movement seek additional opportunities to become more efficient. With technological advancements providing new opportunities to be efficient, hospitals should continue to assess their progress on the path to sustainability and find ways to advance toward their goals.

Guiding Questions

Health care executives should consider and answer several questions as they explore the strategic power of environmental sustainability. These questions can be integrated into strategic planning discussions and will help hospital leaders find the appropriate path toward sustainability.

- What environmental sustainability efforts has our organization already undertaken?

- Why are we pursuing sustainability efforts? What factors are driving our choices?

- What do we hope to gain by implementing environmental sustainability measures?

- What do we consider our greatest barriers to implementing sustainability measures?

- What approach to environmental sustainability will be the most effective in our organization?

- What resources will be needed to accomplish our goals?

- Who should be involved in our organization's sustainability efforts?

- How can we create a long-lasting culture of environmental sustainability?

Sustainability Opportunities

Health care leaders should consider the following opportunities for becoming more sustainable, though this is not an exhaustive list. Focusing on one area or even one project can have a substantial effect on the ability to free up resources for patient care. By combining multiple projects and taking advantage of the wide range of sustainability opportunities, hospitals can gain the most benefit.

Some sustainability projects require little time and financial investment while others are more complex. Table 1 illustrates the various investments and returns for several energy projects. More information about these and other sustainability projects, including case studies and step-by-step instructions for facility professionals, can be found on the Sustainability Roadmap for Hospitals. Health care leaders should consider what strategies they want to use and how sustainability goals align with their organizational missions.

Table 1. Investments and Returns for Selected Energy Efficiency Projects

EFFICIENCY PROJECT	TIME INVESTMENT	FINANCIAL INVESTMENT	RETURN ON INVESTMENT
Establish energy use baseline	●●○	●○○	●○○ *
Schedule preventive maintenance	●○○	●○○	●●○
Program heating and cooling to ramp up only when spaces are occupied	●○○	●○○	●●●
Install energy efficient lighting	●●○	●●○	●●○
Insulate hot water system equipment and piping	●●○	●○○	●●○
Implement operating room setbacks that reduce air changes per hour when the operating room is not in use	●●●	●○○	●●●
Install on-site renewable energy	●●●	●●●	●○○ **

*The act of establishing energy use baselines does not provide much return on investment itself, but is a critical component of other sustainability efforts.
**On-site renewable energy may have lower return on investment short term, but the potential for long-term return on investment is tremendous.

Source: American Society for Healthcare Engineering, 2014.

Energy

Energy initiatives provide multiple benefits to health care facilities. Cutting energy consumption reduces utility costs and helps the environment by reducing the amount of natural resources used. Creating alternative energy sources on site can reduce utility costs and mitigate power interruptions during disasters. Being recognized for energy savings through programs such as ENERGY STAR and the Leadership in Energy & Environmental Design, or LEED, program can showcase an organization's efforts to the public.

In addition, several state and local governments have mandated energy reductions or adopted green building codes. Other states require hospitals to comply with energy-saving programs to receive a certificate of need.

Health care leaders should ensure that energy efficiency efforts will work in the hospital setting. Using high-efficiency light bulbs in the operating room will not work unless they provide the level of lighting surgeons require.

Example: Installing new energy-efficient lighting or upgrading existing lighting systems can result in lower operation and maintenance costs while providing the type of lighting required by clinicians and preferred by patients. Lighting represents more than 10 percent of energy consumed in hospitals[12], providing an opportunity for significant savings. Replacing the light source in illuminated exit signs with LEDs, for example, can save thousands of dollars a year. For a typical 600-bed hospital with 300 exit signs, this project would cost $17,100 and save $14,755 a year, resulting in a payback period of 1.15 years.[13]

St. Mary's Hospital in Leonardtown, Maryland, evaluated its lighting in 2004 and replaced light sources with more energy-efficient options. After the project payback period of 4.35 years, the annual energy savings of $20,000 was directed back to the hospital's operating budget.[14]

Other energy projects proven to be effective in hospitals and care systems include:

- Reducing heating and cooling in unoccupied areas
- Purchasing ENERGY STAR office equipment
- Evaluating and repairing the building envelope (the physical separators between interior and exterior spaces)

Water

Large U.S. hospitals consumed an estimated 133 billion gallons of water in 2007, totaling $615 million in expenditures—about 43 million gallons and $200,000 per building.[15] Water conservation can help hospitals save operating costs and energy. Decreasing consumption also provides environmental benefits by decreasing the strain on municipal water supplies and reducing the energy needed to treat and deliver water. Hospitals using newer water technologies can also reap clinical benefits, such as better infection prevention that comes with faucets that reduce splashing in hand-washing stations.

Hospitals rely on water quality and availability to protect patient health, and should prioritize these needs while reducing wasteful or unnecessary water consumption. As with other sustainability projects, health care leaders should ensure solutions will work in a hospital setting.

Example: Water flow can be reduced by upgrading lavatory faucets to low-flow fixtures. Replacing shower heads and toilets can also save significant amounts of water and money.

The Huntington Veterans Affairs Medical Center in West Virginia implemented a faucet and shower head replacement program in 2007. The new fixtures save the 80-bed hospital more than 1.5 million gallons of water a year. The project cost less than $3,500 and saves the hospital $12,900 in water and sewer costs annually, plus an additional $7,200 in energy savings by reducing the amount of hot water used. The project payback period was just two months.[16]

Other water projects proven to be effective in hospitals and care systems include:

- Eliminating equipment and piping leaks
- Minimizing water used for laundry
- Insulating hot water system equipment and piping

Supply chain

An organization's supply chain can have a major effect on sustainability. Supply chain managers adopting a CQO (cost, quality, outcomes) approach to purchasing consider the purchase price as well as quality for patient care, facility operations and maintenance costs, disposal costs and other factors. This more holistic approach can save hospitals money while reducing the impact on the environment. Environmentally preferable purchasing can lower energy and water consumption, reduce packaging waste and minimize the amount of hazardous chemicals that enter the hospital. A sustainable purchasing policy can be used to enhance or complement other policies. In addition to cost savings and environmental benefits, promoting sustainability decisions for the supply chain can contribute to a positive public image. As with other sustainability opportunities, policies should reflect an organization's goals and expectations.

> **Example:** In 2006, Kaiser Permanente specified in a contract with a new computer supplier its strong preference for energy-efficient and environmentally responsible computers. The change led to the purchase of computer equipment manufactured with fewer toxic materials, packed with minimal materials and designed to operate using minimal energy. The up-front purchase of the computer systems was cost-neutral compared to other computers, but the energy savings for Kaiser Permanente totaled $4 million a year.[17]

Other supply chain projects proven to be effective in hospitals and care systems include:

- Reprocessing approved single-use medical devices
- Choosing reusable textiles for gowns, drapes and towels
- Recycling fluorescent lighting

Waste

The majority of the products procured by health care organizations ultimately become waste. About 80 percent of hospital waste is considered general, unregulated waste, while regulated medical waste and hazardous chemical waste make up a smaller portion of waste by volume.[18]

Waste management programs and changes in consumption trends can help a health care organization reduce the amount of waste it generates, saving on both handling and disposal costs and providing environmental benefits. Better waste management systems also can provide safety benefits to patients and staff, such as reduced needle sticks when using reusable sharps containers.

Example: By switching from disposable sharps containers to reusable containers, hospitals can decrease waste and expenses. Sacred Heart Hospital in Eau Claire, Wisconsin, switched to reusable sharps containers in 2008. The change prevents about 40,000 pounds of waste generation annually, saving the hospital about 5 percent of its sharps container costs.[19]

Other waste projects proven to be effective in hospitals and care systems include:

- Developing or enhancing an organization's recycling program
- Reducing regulated medical waste generation
- Implementing a battery recycling program

Commissioning and retrocommissioning

Commissioning is a process hospitals can use to ensure that complex buildings and equipment operate as intended. A hospital constructing a new building may purchase top-of-the-line equipment for its project. But once the equipment is installed and integrated with other complex systems, it does not always function as designed. The process of commissioning, which stems from a naval term used to describe preparing a ship for active service, ensures that a new hospital will function as designed.

While the other sustainability opportunities included in this guide focus on individual projects, the commissioning process examines a wide range of systems—including heating and cooling, fire protection, lighting, plumbing, and medical gas systems—and how they work together. Retrocommissioning, the term for applying this process to existing facilities, provides opportunities to find and correct problems by conducting a comprehensive investigation into the building and its systems.

Commissioning a project carries up-front costs; for new construction, the cost typically runs between 0.25 percent and 1.5 percent of total construction costs.[20] The return on investment can be quite large—sometimes in the hundreds of thousands of dollars or more—which is often surprising to leaders who assume that if they have purchased high-efficiency equipment the equipment will automatically function as promised when integrated with the rest of the hospital system.

> **Example:** The University of Arkansas for Medical Sciences commissioned a project that included a central energy plant. The return on investment was so significant that additional projects could be funded without lowering the financial margin. The commissioning process helped UAMS create 60 new beds, increase the capacity of preoperative and post-anesthesia care units, remodel five operating room suites, build out a floor of a cancer institute, and purchase seven acres of land.[21]

Commissioning entails a variety of projects in one process, including:

- Examining equipment to determine whether it is operating as designed
- Examining building systems, such as fire safety features, to ensure they operate as designed
- Examining medical systems, such as medical gas systems, to ensure they operate as designed

Conclusion

Hospitals and care systems can reap multiple benefits and help fulfill their missions by tapping into the tremendous power of environmental sustainability.

Before setting goals and committing to projects, health care executives should examine the organizational goals behind sustainability efforts. Each hospital and care system should find its own path on the journey to sustainability, using the information and tools in this guide, as well as the Sustainability Roadmap for Hospitals, to help plot the organization's course and stay on track.

The case examples included in this guide highlight ways that sustainability projects can make a difference. Each study and example is only focused on one particular project. Hospitals and care systems that combine initiatives across various focus areas will achieve even greater efficiencies, as shown in the Case Studies section.

By understanding the strategic importance of environmental sustainability, hospitals and care systems across the nation can improve community health, build their public image, streamline facility operations, and improve financial performance—all key aspects to thriving in the health care environment of today and tomorrow.

Case Study 1: Memorial Hermann Health System
Houston, Texas

Background: Memorial Hermann Health System is a nonprofit health care system in southeast Texas with 12 hospitals and 18 medical office buildings, comprising a total of 11 million square feet. The health system built four new campuses in 2006 and discovered that the newer hospitals had lower energy efficiency performance than the older ones. Two of the new hospitals were nearly identical in design and were located just 18 miles apart, but an energy benchmarking project found that one used 50 percent more energy than the other.

Efficiency Activities: Memorial Hermann established baseline energy consumption to measure energy use at each hospital. By investigating energy use across the system, Memorial Hermann found that construction issues, training gaps, and poor use of energy-smart technology led to the disparities. The organization set targets for energy reduction, reprogrammed air volume controls, implemented operating room airflow setbacks, and retrocommissioned all HVAC controls. In addition, Memorial Hermann adopted a new culture of healthy competition among technician teams, with staff striving to achieve the lowest level of per-square-foot energy consumption while still providing excellent customer satisfaction. The goal was to focus on sustainability to support Memorial Hermann's mission by improving existing facility operations. Memorial Hermann implemented best practices and used a performance improvement process to help meet its goals.

Results: The new hospitals near each other are now performing at the same level and are using less than half the amount of energy used by the worst performers in 2008. Memorial Hermann invested about $3.8 million from existing expense budgets and capital allocations over a five-year period and adopted a philosophy of repairing existing equipment rather than purchasing new systems. The payback period for each sustainability project was less than two years, and many had immediate payback periods. Cumulative savings to the bottom line from this initiative totaled $47 million in documented utility reductions. Between 2008 and 2012, Memorial Hermann's portfolio-wide ENERGY STAR score rose from below the 40th percentile to the 68th percentile. Memorial Hermann has earned ENERGY STAR status for eight of its 12 hospitals and nine of its 18 medical office buildings. Memorial Hermann also has been recognized by the American Society for Healthcare Engineering's Energy to Care program for reducing energy consumption and is the ENERGY STAR Healthcare Partner of the Year for both 2013 and 2014.

Lessons Learned: Setting a baseline and retrocommissioning facilities helped Memorial Hermann identify problems that would otherwise have gone unnoticed. Creating a culture of competition among facilities helped motivate the staff and create lasting success.

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Case Study 2: Wentworth-Douglass Hospital
Dover, New Hampshire

Background: Wentworth-Douglass is a 178-bed general medical and surgical center with nearly 1 million square feet of space. Hospital leaders initiated a series of sustainability projects that were completed in 2012, though sustainability and efficiency are ongoing priorities.

Efficiency Activities: Wentworth-Douglass optimized its existing energy management system, installed energy-efficient lighting, installed low-flow flush fixtures, used motion sensors to turn off vending machine lights when not in use, and completed other projects. The hospital's green team examined a wide variety of sustainability initiatives, and the facilities department largely took the lead on energy projects. The hospital's approach to sustainability was to look for places where efficiencies could reduce costs and focus on those areas.

Results: Each project brought returns. Lighting controls in conference rooms and garages led to annual savings of $45,000. Using the energy management system more effectively generated $150,000 a year in savings. Low-flow fixtures saved $200,000 a year. Using motion-sensing controls with vending machines saved $1,700 a year. In total, Wentworth-Douglass created more than $470,000 in annual energy and water savings. The payback period varied from project to project but generally was between three and five years.

Lessons Learned: Wentworth-Douglass used the Sustainability Roadmap for Hospitals to find simple projects that are easy to implement without major financial or time investments. By completing multiple projects, the results added up to major financial savings.

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Case Study 3: Carilion New River Valley Medical Center
Christiansburg, Virginia

Background: The Carilion New River Valley Medical Center is located on a 112-acre campus. The hospital, a Level III trauma center, has 146 beds and 500,000 square feet of interior space. The medical center was experiencing positive social pressure to improve energy efficiency and explored a series of energy reduction projects.

Efficiency Activities: The Carilion New River Valley Medical Center benchmarked its energy use using the Environmental Protection Agency's Portfolio Manager tool. The hospital changed its natural gas contracts and upgraded lighting in parking lots. It also made a series of HVAC improvements and insulated steam valves. The organization has made sustainability a priority and created a corporate green team that works on various initiatives. Carilion New River Valley Medical Center has created a culture of sustainability that encourages all hospital staff members to think of ways the hospital can become more sustainable.

Results: The HVAC adjustments required investments of about $35,000 and resulted in $305,000 in annual savings. The steam valve insulation cost $43,000 and provided annual savings of $24,000. Switching natural gas suppliers cost $8,500 for the installation of new meters but saved the medical center about $55,000 a year. Lighting improvements were needed to address visibility concerns in the parking lot, and the hospital decided to use sustainable options. That project cost about $175,000 and, although its primary purpose was not sustainability, the changes are estimated to save about $6,000 a year and reduce maintenance costs. The efficiency improvements resulted in a total of about $390,000 in savings each year. Even with the parking lot expenses included, the payback period was less than one year.

Lessons Learned: Benchmarking energy use over time was an important first step for Carilion New River Valley Medical Center because all of the opportunities for savings were identified from those statistics. Monitoring energy use in the future will allow the hospital to track savings and find new areas for improvement.

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Case Study 4: Sullivan County Community Hospital
Sullivan, Indiana

Background: Sullivan County Community Hospital is a 25-bed acute care hospital that includes 100,000 square feet and provides inpatient and outpatient services. In 2012, the hospital initiated a retrocommissioning process.

Efficiency Activities: Sullivan County Community Hospital hired Duke Energy consultants to perform retrocommissioning at the hospital. The process identified low-cost approaches to improving efficiency with existing equipment. For example, the hospital reevaluated its HVAC controls and created nighttime settings for unoccupied spaces such as the cafeteria.

Results: The total cost of the project, including contractor fees, was $70,000. The Sullivan County Community Hospital estimates its annual savings are more than $20,000 ($15,200 in electric costs plus $5,500 in gas savings). The project payback period is about 3.5 years.

Lessons Learned: Hiring a consultant from a utility company helped the community hospital complete multiple projects as part of a retrocommissioning process that helped increase efficiencies.

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Resources

Sample Hospital Sustainability Statement

Dartmouth-Hitchcock Medical Center

Statement of Environmental Principles

In an effort to promote healthier communities, both locally and globally, Dartmouth-Hitchcock Medical Center (DHMC) is committed to improving environmental management throughout the organization. DHMC will manage its operations in a manner demonstrably protective of environmental and human health.

DHMC will constantly seek new and innovative ways to meet its environmental goals through conservation, reduction, reuse and recycling programs, and through partnering with others in the community to safeguard the environment.

DHMC will apply these principles to achieve optimal environmental standards consistent with institutional goals and financial consideration.

In an effort to respect and protect the earth's resources, and to minimize environmental damage, DHMC will:

- Manage, minimize and eliminate, whenever possible, the use of hazardous materials.

- Use renewable natural resources and conserve nonrenewable natural resources through cost-efficient use and careful planning.

- Use pollution prevention initiatives to reduce negative environmental impacts.

- Minimize the generation of waste through source reduction, re-use and recycling programs.

- Conserve energy and improve the energy efficiency of our operations and make every effort to use and promote environmentally safe, cost-effective and sustainable energy sources.

- Ensure the health and safety of our employees by promoting safe work practices, reducing exposure, using safe technologies, and implementing effective emergency preparedness programs.

- Provide employees with safety and environmental information through training and education programs in order for them to make work/practice decisions in support of these principles.

- Monitor and evaluate our practices as they relate to these environmental principles.

(reprinted from the Sustainability Roadmap for Hospitals)

Benchmarking Tools and Other Sustainability Resources

Portfolio Manager: Facility managers and others use the Environmental Protection Agency's ENERGY STAR Portfolio Manager online benchmarking tool to securely track energy and water use over time. Access the tool and get more information at http://portfoliomanager.energystar.gov.

Energy to Care program: The free Energy to Care program helps hospitals track energy consumption and rewards progress. Participating hospitals track their energy use through the Portfolio Manager online benchmarking tool and can visualize energy trends using a robust dashboard. In addition to gaining recognition for reducing energy use, hospitals can participate in challenges that add friendly competition to the mix. Hospitals can compete against other facilities in their health systems, states or regions. The program is coordinated by the American Society for Healthcare Engineering. Information is available at www.energytocare.com.

Sustainability Roadmap for Hospitals: The Sustainability Roadmap website—accessible at www.sustainabilityroadmap.org—shows hospitals how to implement real-world sustainability projects that can enhance their existing efforts and give them a platform for sharing successes with other facilities. The website features search functions, how-to guides, tools, case studies and other technical resources. The roadmap was created by three personal membership groups of the American Hospital Association: the American Society for Healthcare Engineering (ASHE), the Association for the Healthcare Environment (AHE) and the Association for Healthcare Resource & Materials Management (AHRMM).

Energy University: Energy University, a vendor-neutral, e-learning program from Schneider Electric, offers online courses to facility managers and others involved in operations and maintenance of facilities. Members of the American Society for Healthcare Engineering can access these tools for free. Visit www.ashe.org/energyuniversity for more information.

ASHE commissioning publications: Commissioning hospital facilities is a more complex process than commissioning other types of buildings because of the unique and complex systems and equipment found in health care facilities. However, one set of commissioning guidelines is specifically tailored to health care facilities. The *Health Facility Commissioning Guidelines* book outlines the process of commissioning health care facilities. An accompanying *Health Facility Commissioning Handbook* includes step-by-step instructions on how to implement the *Guidelines*. Access both at www.ashestore.com.

ASHE, AHE, AHRMM membership: Facility managers and others involved in environmental sustainability can have free access to valuable resources and tools by becoming members of one of three personal membership groups of the American Hospital Association.

- The American Society for Healthcare Engineering (ASHE) has more than 11,000 members who rely on ASHE as a key source of professional development, industry information, and advocacy, including representation on issues that affect their work in the physical health care environment. www.ashe.org

- The Association for the Healthcare Environment (AHE) represents, defines, and advances the work of professionals responsible for care of the patient environment to ensure quality patient outcomes and healthy communities. AHE serves more than 2,000 members and provides education, networking and recognition for personal and professional achievements as well as collaboration with the AHA on public policy and advocacy issues related to the health care environment. www.ahe.org

- The Association for Healthcare Resource & Materials Management (AHRMM) is the leading national association for executives in the health care resource and supply chain profession.

AHRMM serves more than 4,200 active members. Founded in 1951, AHRMM prepares its members to contribute to the field and advance the profession through networking, education, recognition, and advocacy. www.ahrmm.org

Sample Sustainability Roadmap Performance Improvement Measure

This example is adapted from a performance improvement measure found on the Sustainability Roadmap for Hospitals. Each performance improvement measure has talking points about the project, a step-by-step guide to implementing the project, case studies demonstrating its benefits, and links to more information. As this sample performance improvement measure illustrates, the Sustainability Roadmap contains a wealth of technical information that can help hospitals and care systems achieve their efficiency goals. Facility management professionals, those responsible for completing sustainability projects and others involved in the operation of hospitals may find this resource especially useful.

Performance improvement measure: Retrocommission heating, ventilation and air conditioning controls

Description: Perform retrocommissioning of HVAC controls to fine-tune operating conditions and improve performance. Retrocommissioning is a three-stage process:

- Develop an operations plan.
- Test systems to determine whether they are meeting the plan's requirements.
- Repair or replace under-performing systems.

Talking points:

- Provides a comprehensive picture of the facility's HVAC systems and optimal operating conditions.
- Identifies opportunities for repairing or replacing equipment, which would lead to substantial savings on utility bills.
- Optimizes performance of individual pieces of equipment and of the entire facility's HVAC system.
- Extends the life and efficiency of HVAC equipment through preventive maintenance.
- Locates and addresses leaks, moisture accumulation and faulty sealants before they attract mold growth or pests.
- Sets the foundation for development of a preventive maintenance plan.

Benefits:

- Cost benefits: Energy savings result in cost savings. Retrocommissioning is an inexpensive way to adjust system controls with immediate payback. Extending the life of equipment also saves on costs.
- Environmental benefits: Reducing energy use always has an environmental benefit. Extending the life of equipment also has environmental benefits, although these are harder to quantify.
- Social benefits: Depending on the improvements made to operations during retrocommissioning, improvements to the comfort and safety of patients, visitors and staff may be significant. Track and report all benefits that result from retrocommissioning efforts.

How-to:

1. Determine who's on the team: health facility commissioning authority (HFCxA), building engineer, HVAC maintenance personnel and building automation system (BAS) manager.
2. Establish an ENERGY STAR Portfolio Manager account for the health care facility.

3. Review the whole-building energy performance baseline data gathered under Sustainability Roadmap performance improvement measure "Establish baseline for current energy consumption."

4. Document the retrocommissioning effort in a written report.

5. Perform a walk-through of the facility to identify and record the status of all meters, sensors and other building system controls. Examples of critical sensors to calibrate include:

    a. Outside air, supply air, mixed air and return air temperature sensors
    b. Chilled water and hot water temperature sensors
    c. Carbon dioxide sensor
    d. Carbon monoxide sensor

6. Develop a log of all controls and include the manufacturer's recommended calibration interval, the baseline calibration and the calibration history (if available) for each control. Consider the accuracy and reliability of the sensors.

7. Access your systems to answer the following questions:

    e. Were your sensors and actuators calibrated when originally installed?
    f. Have your sensors or actuators been calibrated since installation?
    g. Have temperature complaints come from areas that ought to be comfortable?
    h. Are any systems performing erratically?
    i. Do any areas or equipment repeatedly have comfort or operational problems?
    j. Are any systems simultaneously cooling and heating?
    k. Is there a written sequence of operations describing the control logic for air handlers and zone temperature control?
    l. How are your buildings currently being used and occupied? In particular, have former health care areas been converted to administrative uses? If so, this may present an opportunity to recommission systems accordingly.

8. If the facility is equipped with a building automation system (BAS), verify that the controls included in the log are tracked by the BAS and that the system has been programmed to issue an alarm if sensors or controls vary outside acceptable set points.

9. Calibrate controls within the manufacturer's recommended interval.

10. Integrate regular recalibration into the facility's preventive maintenance program, scheduling it every five years at minimum or in accordance with the manufacturer's recommendation (whichever is shorter).

11. Develop an HVAC systems manual with operating plan using the facility's operations and maintenance manual (if available) or manufacturer's recommendations. At minimum, include the following information:

    m. Description of all HVAC systems and narrative sequence of operations under normal and emergency scenarios
    n. Description of all controls, the manufacturer's recommended calibration interval, the baseline calibration, and the calibration history (if available)
    o. Monitored conditions (e.g., air temperature, humidity, pressure relationship, filtration, ventilation, etc.)
    p. Mode of operation (e.g., occupied/unoccupied)
    q. Time-of-day schedule for every day of the week plus holidays (include seasonal variation, if applicable)
    r. Optimal operating setpoints (stratify information by occupancy type, if applicable)

12. Use an electronic commissioning tool that interfaces with the automatic temperature control system to significantly expedite the retrocommissiong effort. Such tools use a standard communication protocol to query a massive database and quickly identify previously undetected problem areas. After the retrocommissioning effort is completed, operations and maintenance staff can use the tool to continuously monitor HVAC controls and dispatch maintenance personnel to handle problems. The retrocommissioning effort should lead toward implementation of a continuous commissioning effort that is appropriate for the specific facility.

Case studies:

- PeaceHealth, St. Joseph Hospital, Bellingham, Washington: First-year savings of $100,000 simply from modifying sequence of operations and scheduling.

- Saint Francis Care, Hartford, Connecticut: Correcting the night setback controls contributed to $9,100 energy savings per year in a 30,000 square foot area.

- St. Luke's Regional Medical Center, Boise, Idaho: Retrocommissioning process identified potential for $250,000 savings annually.

- University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania: $2 million in annual gas savings from retuning boilers.

About ASHE

The American Society for Healthcare Engineering (ASHE) is a personal membership group of the American Hospital Association. More than 11,000 members rely on ASHE as a key source of professional development, industry information, and advocacy, including representation on issues that affect their work in the physical health care environment. www.ashe.org

About HPOE

Hospitals in Pursuit of Excellence (HPOE) is the American Hospital Association's strategic platform to accelerate performance improvement and support delivery system transformation in the nation's hospitals and health systems. HPOE shares best practices, synthesizes evidence for application, and engages leaders in the health care field through education, research tools and guides, leadership development programs and national engagement projects. www.hpoe.org

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HRET/HPOE Guides & Reports

Navigating the Gap Between Volume and Value – June 2014
Building off the 2013 HPOE guide on value-based contracting guide provides additional financial resources. Hospital executives will find a step-by-step information on the financial planning process and how it can help your organization evaluate the impact of repositioning initiatives as you move toward value-based care and payment.

Diversity and Disparities - A Benchmark Study of U.S. Hospitals in 2013 – June 2014
This updated chartpack offers a snapshot of some common strategies used to improve the quality of care that hospitals provide to all patients, regardless of race or ethnicity. The survey results highlight that, while more work needs to be done, advancements are being made in key areas that can promote equitable care, such as collecting demographic data, providing cultural competency training and increasing diversity in leadership and governance.
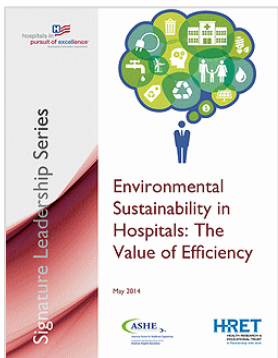
Environmental Sustainability in Hospitals: The Value of Efficiency –May 2014
This guide was produced in collaboration with ASHE and aims to help hospital and care system leaders navigate the world of sustainability and build upon their organizations' existing efforts. Hospitals are at different points on the journey toward sustainability. Some organizations are leading the charge and developing best practices, while others are addressing the issue for the first time. Leaders should consider options and determine what is right for their organizations.

Building a Leadership Team for the Health Care Organization of the Future –April 2014

The AHA and Spencer Stuart conducted a survey of hospital and care system senior executives that examined how the shift toward the second curve is affecting the leadership, talent, strategic priorities and organizational models of health care organizations. This guide builds upon prior American Hospital Association reports that outline the value-based second curve of health care by surveying senior leaders on their transition. Included in this guide are results of the survey on how health care leaders are approaching new management roles, recruiting, promoting senior leaders and overcoming gaps in skills.

The Second Curve of Population Health – March 2014

This guide builds upon prior American Hospital Association reports that outlined a road map for hospitals and care systems to use as they transition to the second curve of population health. Though the rate and extent to which hospitals and care systems engage in population health may vary, a significant shift toward population health is anticipated in the next three to five years. The tactics described in this guide provide a framework for initiatives that hospitals and care systems could pursue to develop an institutional infrastructure that supports population health.

Integrating Behavioral Health Across the Continuum of Care – February 2014

Integrating behavioral health and physical health services across all care settings and in the community moves an organization toward a seamless system of care that offers patients the services they need, when they need them. This Hospitals in Pursuit of Excellence guide explains the value of integrating physical and behavioral health services, the importance of measuring integration efforts and strategic questions to assist leaders.

Your Hospital's Path to the Second Curve: Integration and Transformation – January 2014

Environmental pressures are driving hospitals and care systems toward greater clinical integration, more financial risk and increased accountability. This AHA Committee on Research report outlines strategies to help hospitals and care systems accelerate organizational transformation as they move from volume- to value-based systems and business models. The report also provides guiding questions and a comprehensive assessment that may lead health care organizations toward a customized path or series of paths for transformation.
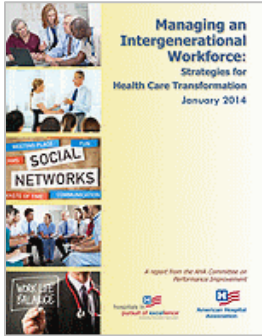
HRET/HPOE Guides & Reports

Managing an Intergenerational Workforce: Strategies for Health Care Transformation – January 2014
The workplace is becoming increasingly diverse, and generational differences are contributing to rapidly changing workforce dynamics. This AHA Committee on Performance Improvement report is a call to action for hospitals and care systems to build an organizational culture that develops and nurtures employees of all ages to provide excellent patient care. It outlines three key strategies for organizational leaders to implement: build a strong generational foundation, establish effective generational management practices and build generational competence.
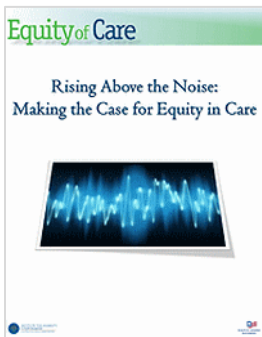
Rising Above the Noise: Making the Case for Equity in Care – November 2013
This HPOE slide presentation highlights the business imperative for equity of care. Use this presentation in conversations with hospital staff, community meetings or as part of board discussions. The information shows that achieving equity in care is imperative to improving the health of the population and the success of the hospital and health care systems.
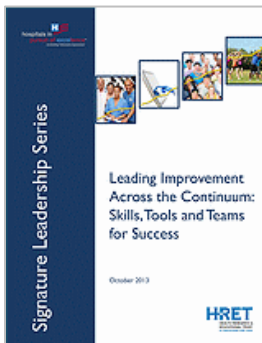
Leading Improvement Across the Continuum: Skills, Tools and Teams for Success – October 2013
This guide provides two new frameworks, the Improvement Continuum and the Leadership Action Model, for conceptualizing and planning improvement activities. It also includes a Leadership Action Model, a framework for how to use the Improvement Continuum. Equipped with these frameworks, leaders will be better able to design and implement improvement efforts of varying scope across diverse topics.
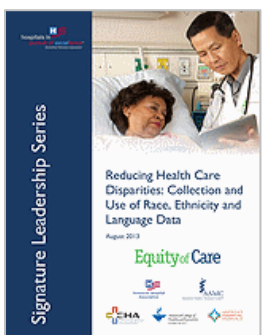
Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data – August 2013
This guide "Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data," provides a four step approach on how to obtain an accurate REAL data set and discusses how hospitals and care systems can use this data to reduce health care disparities. Additionally, this guide is part of a continuing series of resources offered by the partners in the National Call to Action to Eliminate Health Care Disparities that support hospitals and care systems working to promote equitable care.

Value-Based Contracting – July 2013
The nation's health care system is undergoing dramatic change as the country shifts to a value-base business model. The pace of the transition varies by market, but hospitals, care systems and other providers must be proactive. This guide provides specific guidance related to assessment, and financial, operational and implementation issues organizations should examine as they consider value-based contracting arrangements.

A Leadership Resource for Patient and Family Engagement Strategies – July 2013
This resource gives hospital and health system leaders concrete, practical steps grounded on evidence-based research to improve patient and family engagement in their organizations by: assessing how well the organization is doing; identifying processes and systems to support patient engagement; ensuring staff obtain training for effectively using these systems and processes; intervening to overcome specific obstacles that may emerge; and monitoring progress toward achieving patient and family engagement goals.

2013 Hospitals in Pursuit of Excellence: A Compendium of Implementation Guides – July 2013
The compendium is a collection of action-oriented resources that can help design and implement strategies that will assist in delivering care that is safe, timely, equitable, effective, efficient and patient-centered.

Eliminating Catheter-Associated Urinary Tract Infection – July 2013
This guide describes a three-step action plan from the On the CUSP: Stop CAUTI project, which helps hospitals and care systems achieve and sustain reductions in CAUTI infection rates. 1. Communicate that infection reduction is an organizational priority 2. Provide implementation support 3. Celebrate success, and support sustainability and spread.

Becoming a Culturally Competent Health Care Organization – June 2013
It is imperative hospitals and health care systems not only understand the diverse patients and communities they serve but the benefits of becoming a culturally competent organization. This guide describes the benefits, steps and educational techniques of becoming a culturally competent health care organization.
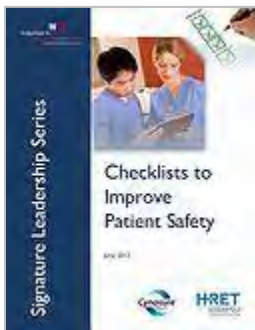
Checklists to Improve Patient Safety – June 2013
To improve patient safety and quality outcomes, health care professionals are using multiple methods to reduce patient harm and eliminate medical errors. One method being implemented more and more is the checklist. This Hospitals in Pursuit of Excellence guide includes a checklist, developed by Cynosure Health, for each of the 10 areas in The Partnership for Patients Hospital Engagement Network.

The Role of Small and Rural Hospitals and Care Systems in Effective Population Health Partnerships – June 2013
To become an effective population health manager, a hospital must create effective partnerships. This guide describes how small and rural hospitals and care systems can develop effective population health partnerships that balance the challenges and opportunities encountered in providing health management.

Second Curve Road Map for Health Care – April 2013
This road map is intended to assist leaders trying to implement major strategies and assess their progress on meeting the second curve that is explained in the Metrics for the Second Curve of Health Care report.

Metrics for the Second Curve of Health Care – April 2013
Building off of health care futurist Ian Morrison's first curve to second curve shift, CPI identified characteristics of the first curve (the volume-based curve) and the second curve (the value-based curve). Of the ten must-do strategies, four were identified as major priorities for health care leaders and are expanded on in this guide.

Engaging Health Care Users: A Framework for Healthy Individuals and Communities – January 2013
This guide focuses on actively engaging health care users to improve outcomes and reduce health care costs. This report introduces a continuum for engagement from information sharing to partnerships and recommends entry points for user engagement occurring at different levels of the health care system. Aimed to help hospitals and health care systems become more "activist" in their orientation and move "upstream"—that is, to do more to engage patients and intervene earlier in the disease states.

Advanced Illness Management Strategies: Engaging the Community and a Ready, Willing and Able Workforce Part 2 – December 2012
This report expands upon part 1 and explains all three strategies and focuses on patient and community **awareness** and engagement and a ready, willing and able **workforce**. The first CPI report released August 2012, *Advanced Illness Management Strategies Part 1*, examined in depth how hospitals can increase **access** to AIM programs. To access this report http://www.aha.org/aim-strategies

Palliative Care Services: Solutions for Better Patient Care and Today's Health Care Delivery Challenges
November 2012
Palliative care specializes in taking care of patients with serious illness and focuses on providing relief from symptoms, pain and stress in order to improve the quality of life for patients and their families.

A Guide to Physician Integration Models for Sustainable Success – September 2012
This guide is authored by Kaufman Hall executives, describes the groundwork and prerequisites required for successful hospital-physician integration. It provides an overview of integration models currently deployed at hospitals and health systems nationwide and offers 12 strategies hospitals and health systems will find useful in navigating the physician-integration pathway. Also included are examples of physician integration initiatives at organizations of different types and sizes, including a hospital, health system, regional medical center, integrated delivery system and university health system.

Advanced Illness Management Strategies - August 2012
Effectively integrating AIM into the continuum of care will position the hospital and health system to manage the gap between the first and second curve and support the transition to the second-curve business, care and service delivery model.

The Commonwealth Fund Issue Brief - Hospitals on the Path to Accountable Care: Highlights from a 2011 National Survey of Hospital Readiness to Participate in an Accountable Care Organization – August 2012
Accountable care organizations (ACOs) are forming in communities across the country. In ACOs, health care providers take responsibility for a defined patient population, coordinate their care across settings, and are held jointly accountable for the quality and cost of care.

2012 Hospitals in Pursuit of Excellence: A Compendium of Implementation Guides – July 2012
The compendium is a collection of action-oriented resources that can help design and implement strategies that will assist in delivering care that is safe, timely, equitable, effective, efficient and patient-centered.
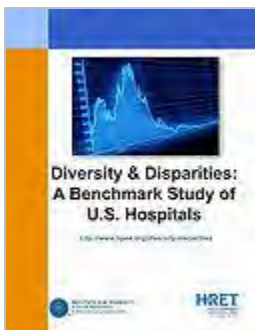
Diversity and Disparities: A Benchmark Study of U.S. Hospitals –June 2012
This chartpack offers a snapshot of some common strategies used to improve the quality of care that hospitals provide to all patients, regardless of race or ethnicity. The survey results highlight that, while more work needs to be done, advancements are being made in key areas that can promote equitable care, such as collecting demographic data, providing cultural competency training, and increasing diversity in leadership and governance.

Hospital Readiness for Population-based Accountable Care – May 2012
This report provides hospital leaders with a snapshot of hospitals' current readiness to participate in an ACO, as well as a tool with which to gauge their own organizations' relative preparedness for ACO participation.

Managing Population Health: The Role of the Hospital – April 2012
To meet patient needs in the current market, hospitals have traditionally focused their efforts on caring for individuals and personalizing care for each person admitted to their facility. Common community health initiatives, such as mobile vans and health screening and education fairs, are sometimes delivered apart from an overall strategy or impact analysis. However, external forces to simultaneously reduce cost, improve quality, and implement value-based payment programs command that organizations examine how to manage the health of their patient populations to improve outcomes.
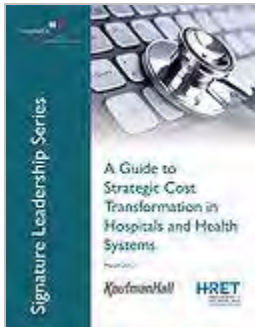
A Guide to Strategic Cost Transformation in Hospitals and Health Systems – March 2012
As health care moves to a value-based business model, health care payments will likely be reduced, while care efficiency, quality, outcomes and access will be expected to improve. To continue meeting community health care needs in the new delivery and payment environment, hospitals and health system leaders need to think strategically about managing cost.
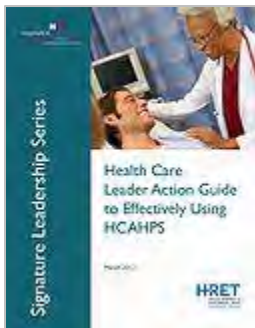
Health Care Leaders Action Guide to Effectively Using HCAHPS – March 2012
This guide describes how HCAHPS data should be used in context with other information about organizational performance. It highlights cultural elements necessary to build a firm foundation for HCAHPS success. Once these foundational elements have been considered, the guide outlines a 5-step approach to using HCAHPS effectively to improve the patient experience, quality and safety.

Improving Perinatal Safety – February 2012
Early elective deliveries have been proven to increase the risk of adverse health outcomes post delivery for both mother and child. As a result, many hospitals and health systems are trying to eliminate elective deliveries before 39 weeks. This guide provides a framework for the quality improvement project, metrics to measure progress and leading case examples.

Eliminating Health Care Disparities: Implementing the National Call to Action Using Lessons Learned
February 2012
This guide looks at nine hospitals and health systems and summarizes each organization's key successes toward providing equity in care in one of the three areas: increasing the collection of race, ethnicity, and language preference data, increasing cultural competency training for clinicians and support staff, or increasing diversity in governance and management.
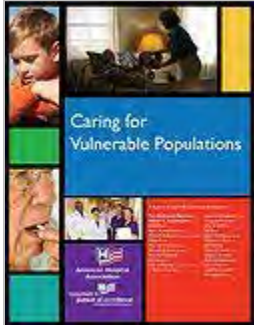
Caring for Vulnerable Populations – January 2012
In 2011, The AHA Committee on Research examined emerging hospital-centered practices in effective care coordination for vulnerable populations, focusing the examples on the critical "dual eligible" population – individuals eligible for both Medicare and Medicaid. The report explores the necessity for organizations to pursue improved care coordination strategies for dual eligibles and other vulnerable populations.

Principles and Guidelines for Changes in Hospital Ownership – January 2012
Market forces are driving renewed interest in integration that may result in changes in the ownership or control of hospitals, such as through mergers with or acquisitions by other hospitals, the formation of integrated delivery networks or the development of accountable care organizations.

Hospitals and Care Systems of the Future – September 2011
Analyzing the results of exploratory interviews, this inaugural publication from AHA's Committee on Performance Improvement identifies must-do, priority strategies and core competencies that hospitals and care systems should establish to remain successful in this era of sweeping change throughout the industry.

2011 Hospitals in Pursuit of Excellence: A Compendium of Implementation Guides – July 2011
The compendium includes the latest HPOE guides on equity, variation, health and wellness, patient safety, and financing. Together with the AHA's recent series of Research Synthesis Reports and the executive summaries of the 2010 HPOE guides, this collection provides a wealth of resources that can help you design and implement the strategies that will take your organization to the next level of performance and achieve new heights in delivering care that is safe, timely, equitable, effective, efficient and patient-centered.

Allied Hospital Association Leadership for Quality – July 2011
Using examples from the applicants for the American Hospital Association's inaugural Dick Davidson Quality Milestone Award for Allied Association Leadership, this guide describes the common elements of implementing successful performance improvement initiatives among hospitals and health systems.
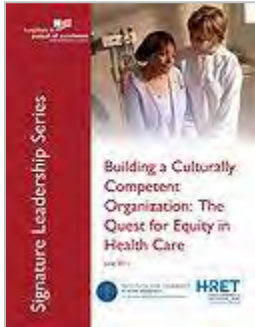
Building a Culturally Competent Organization: The Quest for Equity in Health Care – June 2011
This guide explores how hospitals and health systems can increase their cultural competency in order to provide care that is respectful of patients' diverse values, beliefs and behaviors.

Striving for Top Box: Hospitals Increasing Quality and Efficiency – April 2011
This guide was created to share best practices and key lessons from innovative organizations on a variety of topics including care coordination, health and wellness, equity of care, and new payment and care delivery models.
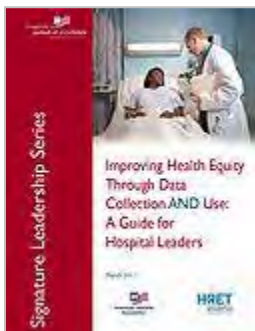
Improving Health Equity Through Data Collection AND Use: A Guide for Hospital Leaders – March 2011
This guide explores key strategies that hospitals have adopted to collect race, ethnicity, and primary language data about their patients and use the data in efforts to overcome disparities in care.
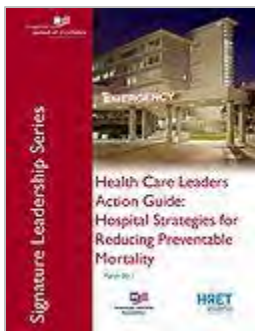
A Health Care Leader Action Guide: Hospital Strategies for Reducing Preventable Mortality – February 2011
This guide is designed to assist hospital leaders in improving quality and performance by outlining eight steps for reducing preventable mortality.

A Health Care Leader Action Guide: Understanding and Managing Variation – February 2011
The guide includes practical steps to understanding and managing variation and a list of best practices and case studies as examples and resources for hospital leaders to use for implementing key interventions.
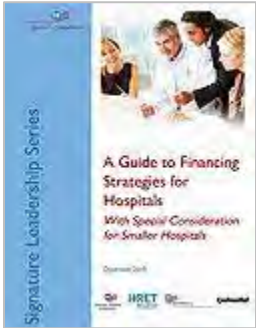
HRET/HPOE Guides & Reports

Call to Action: Creating a Culture of Health – January 2011
This comprehensive report highlights current practices that hospitals use today with their own employees, gives examples of promising practices, and provides how-to recommendations to the field to be leaders of health in their communities.

A Guide to Financing Strategies for Hospitals - With Special Consideration for Smaller Hospitals – December 2010
This guide explores seven strategies that can help hospitals achieve the best possible capital access.

AHA Committee on Research: Strategic Issue Forecast Report – November 2010
The purpose of the Strategic Issues Forecast 2015 is to look beyond the 2010-2012 AHA Research Agenda and to focus on long-term strategic issues affecting hospitals and health systems in the 2011 to 2015 horizon. By doing so, the Strategic Issues Forecast 2015 is meant to help drive transformation in health care.

Hand Hygiene Project: Best Practices from Hospitals Participating in the Joint Commission Center for Transforming Healthcare Project – November 2010
This multi-case study describes how eight hospitals used Lean Six Sigma to examine and improve work processes and identify causes and targeted solutions for failure to clean hands.

AHA Research Synthesis Report: Patient-Centered Medical Home (PCMH) – September 2010
This synthesis report presents an overview of the Patient-Centered Medical Home (PCMH), including key features, discussion of federal, state, and private sector medical home models, and considerations for hospitals interested in developing a PCMH.

For more information on HRET/HPOE guides and reports contact:
P: (312) 422-2600 | E: hpoe@aha.org | W: www.hret.org/guides-reports or www.hpoe.org
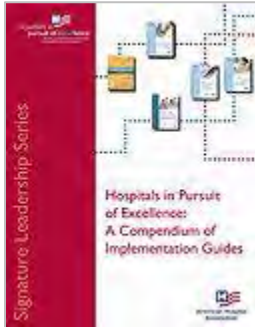
2010 Hospitals in Pursuit of Excellence: A Compendium of Implementation Guides – July 2010
This compendium of guides, reports, and toolkits provides a wealth of actionable resources to help you design and implement strategies as you take your hospital to the next level of performance and address the challenges and opportunities of implementing health care reform.

Early Learnings from the Bundled Payment Acute Care Episode Demonstration Project –July 2010
An overview and summary of lessons learned from the CMS Acute Care Episode Demonstration Project, which tested the effect of bundling Part A and B payments for episodes of care improve coordination, quality and efficiency of care.

Health Care Leader Action Guide on Implementation of Electronic Health Records – July 2010
This report provides a roadmap to help senior executives develop a strategy to use EHRs that advances the organization's ability to deliver care that is safer, effective and efficient.

AHA Research Synthesis Report: Accountable Care Organizations – June 2010
This guide presents ideas to consider in developing an ACO and reviews the key competencies that are needed in order to be an accountable ACO.
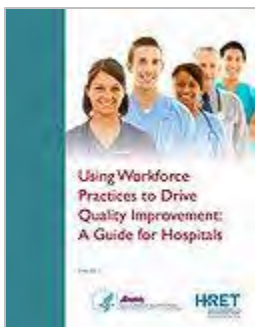
Using Workforce Practices to Drive Quality Improvement: A Guide for Hospitals – June 2010
This guide provides practical advice on workforce practices that hospitals can adopt to develop a high-performing workforce that can deliver safe, high quality and efficient health care.

AHA Research Synthesis Report: Bundled Payment – March 2010
The report presents an overview of bundled payment, including evidence of its impact in the public and private sector, as well as questions that must be considered.

A Guide to Achieving High Performance in Multi-Hospital Health Systems – March 2010
The guide provides numerous tools that leaders can use to help drive performance improvement regardless of whether they are part of a health system; the lessons are transferrable to all hospitals.

Health Care Leader Action Guide to Reduce Avoidable Readmissions – January 2010
This guide helps hospital leaders assess, prioritize, implement and monitor strategies to reduce avoidable readmissions during hospitalization, as well as at discharge and post-discharge.

HRET Disparities Toolkit – updated in 2010
This toolkit provides a comprehensive approach to the collection of race, ethnicity and primary language data and offers guidance on how to improve quality of care and reduce health disparities.