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High-Performance Healthcare: Gateway to Accountable Care

A White Paper from Carefx

A Letter from Andrew Hurd, Chairman and CEO, Carefx Corp.

Improving performance is the talk of the healthcare industry. Healthcare organizations (HCOs) are searching for fresh ways to set new goals, identify and eliminate waste, and improve processes and workflows.

While a variety of organizations have expanded data-driven management to include performance indicators, using business intelligence (BI) to improve clinical, financial and operational performance has been met with mixed results. Reasons include poor processes, indicators or data, as well as misaligned strategy and governance.

Our company, Scottsdale, Arizona-based Carefx, a leading provider of interoperable workflow solutions, created *High-Performance Healthcare: Gateway to Accountable Care* to help HCOs tackle economic realities, regulatory requirements and emerging models such as medical home and accountable care.

Carefx's expertise is unique. In 2010, it partnered with Cleveland Clinic to set a new standard for intelligence-driven enterprise performance using BI dashboards, while pioneering performance management at University HealthSystem Consortium, Hartford Hospital and University of Kansas Medical Center.

Other industries – from hospitality to public broadcasting – have already tapped data driven processes and BI to usher in the changes that lead to high performance. Healthcare can do the same – if clinical and executive leaders shift to data-driven decision making, align key performance indicators to strategic objectives and empower individuals and departments to measure and report on performance.

This white paper is a step in the right direction. It draws on the insights of national experts like Lynne A. Dunbrack, Program Director for Connected Health IT, IDC Health Insights; Barry Runyon, Research Vice President, Gartner; Jody Hoffer Gittel, Author of "High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Reliance"; and Eric Leader, Vice President, Technology Architecture, Carefx.

High-Performance Healthcare also outlines the six characteristics of high-performance HCOs, as well as essential steps in implementation and communication. Moreover, it delivers an evaluation instrument for HCOs to assess their maturity level on the dimensions of high-performance healthcare.

Sincerely,

Andrew Hurd
Chairman and CEO
Carefx Corp.

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High-Performance Healthcare: Gateway to Accountable Care

High-performance healthcare, including the development and support of high-performance healthcare organizations (HCOs), is more important now than ever before.

Healthcare organizations continue to be plagued by problems ranging from duplication, fragmentation and efficiency, to quality gaps, patient safety snafus and cost overruns. Especially troubling is lack of care coordination in which “patients are often required to sort their way through the system, receiving diagnoses and treatments from a fragmented, loosely connected set of providers,” according to Jody Hoffer Gittel, author of “High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience” (McGraw-Hill Professional, 2009).

Trusted Information for Everyone

“High-performance healthcare is about driving change in existing processes in support of a strategic goal.”

Eric Leader
Vice President
Technology Architecture
Carefx Corp.

High-performance healthcare, which relies on timely, accurate data to drive clinical, financial and operational decision-making and outcomes, offers a solution. At its core is trusted clinical, operational and financial information, which is interpreted via analytics, reported on via performance indicators and made accessible to every key clinical, financial and operational decision-maker within the HCO, according to Eric Leader, Vice President, Technology Architecture, Carefx Corp.

“High-performance healthcare is about driving change in existing processes in support of a strategic goal,” says Leader. That, in turn, means alignment with strategic goals, data-driven decisions, transparent metric analysis, reporting, and ongoing interaction with business intelligence systems, which improve decision-making by delivering metrics on progress toward a goal and comparisons with other healthcare professionals and departments.

The benefits of high-performance accrue on multiple fronts: financial, in the form of maximized revenues; clinical, in the form of higher quality care and clinical resource utilization; outcomes, in the form of healthier patients at reduced costs, and improved systems and workflow processes to manage information gaps, ensure information flow, and curtail information loss.

Physicians also stand to gain. “Physicians will naturally use this information in a competitive fashion to drive improvement in their own performance,” says Leader. “When provided with goals, an understanding of



Eric Leader, VP, Technology Architecture, Carefx

Eric Leader (VP, Technology Architecture, Carefx) brings a rich technology and engineering background to the Carefx team. Prior to joining Carefx, Mr. Leader served as Chief Technology Architect for Catholic Healthcare West (CHW), the largest non-profit healthcare provider in the southwest, where he provided strategic technology oversight for Information and Medical Technologies supporting CHW's 45,000 employees.

Previously, he held senior engineering and management roles at Digital Equipment Corporation (now Hewlett Packard) and MicroAge. Mr. Leader's current areas of research include technical architecture and social aspects affecting highly available applications, end-user engineering for clinical systems, and data-driven decision support in healthcare. He is a graduate of Arizona State University College of Engineering.

methods used and a means to measure success, physicians and other healthcare professionals will identify innovative ways to improve performance and adapt to change.”

High-performance healthcare also creates a foundation for emerging care models, including medical home and accountable care. An accountable care organization is defined by Kaiser Health News as a “network of doctors and hospitals that shares responsibility for providing care to patients.” Accountable care demands that providers and payers use information technology infrastructure and data sharing as well as performance measurement, according to Bob Kocher, M.D., Director of the McKinsey Center for U.S. Health System Reform as well as a visiting scholar at The Brookings Institution and Former Special Assistant to the President for Healthcare and Economic Policy. Addressing the Accountable Care Learning Network, Dr. Kocher advises HCOs to pose these performance metrics questions:

- What metrics (administrative, claims-based and clinically enhanced) will we track to measure performance around reducing cost and improving quality of care for patients and community?
- How and from what sources will data be collected? Do we have capacity to effectively analyze and interpret data from external sources?
- Do we have data necessary to determine or validate our perceived baseline/benchmark performance?
- Can we provide regular and timely reports to providers and the community capable of capturing total cost of care?

Dr. Kocher’s view is echoed by Stephen M. Shortell, Ph.D., Blue Cross of California Distinguished Professor of Health Policy and Management and Dean, School of Public Health, University of California-Berkeley, whose supportive framework for creating accountable care organizations (ACOs) links transparent accountability with financial incentives and regulatory flexibility with internal capabilities.

“The right technologies will help HCOs deliver on essential ACO requirements – from communication and data exchange between primary care providers, hospitals and specialists to tracking of clinical, financial and operational performance,” says Leader.

Factors Involved with High-Performance Healthcare

One thing is sure: High-performance healthcare is multi-layered with variations in health system goals, initiatives and results. No one factor is clearly associated with high performance, according to “A Guide to Achieving High Performance in Multi-Hospital Systems,” a study of more than 200 health systems from the American Hospital Association’s Health Research & Educational Trust (HRET).



Howard Dresner, President of Dresner Advisory Services, LLC

Howard Dresner (<http://www.howarddresner.com>) is President of Dresner Advisory Services, LLC, an independent advisory firm, and a recognized authority in the areas of business intelligence and performance management. He is the author of “Profiles in Performance: Business Intelligence Journeys and the Roadmap for Change.” He spent 13 years at Gartner where he was a research fellow and lead analyst for business intelligence and served as chief strategy officer at Hyperion.

Factors observed in high-performing systems don't seem to exist in lower performing systems, and high-performance success depends on multiple factors from establishing a system-wide strategic plan with measurable goals and creating alignment across the system through goals and incentives, to leveraging data and measurement across the organization and standardizing and spreading best practices across the health system.

Equally important, high-performance healthcare never occurs overnight. Organizations of all types typically move through multiple levels of maturity on the path toward a high-performance culture, according to Howard Dresner, author of "Profiles in Performance: Business Intelligence Journeys and the Roadmap for Change" (John Wiley & Sons, Inc., 2010).

Dresner's "performance culture maturity model" assists HCOs in measuring progress toward high performance along the five critical dimensions of high-performance: 1) alignment with strategy, 2) transparency and accountability, 3) action on insights, 4) single source of truth and 5) information accessibility, as well as their transition from chaos and departmental optimization to emerging and realized culture. Among the levels in the journey toward high-performance healthcare:

- **Level One – Chaos:** The HCO operates absent of a performance-driven culture. Although executives, clinicians and managers may already have selected a variety of metrics to measure performance, they haven't yet aligned them with the HCO's strategic goals, and they remain wary of the quality and timeliness of the data used in measurement.
- **Level Two – Departmental optimization:** Although some departments within the HCO rely on information and metrics to drive performance, performance-driven initiatives fail to extend across departments. While members of the C-suite may recognize and praise departments' performance-driven initiatives, they rarely view them as strategic or aligned with HCO strategy.
- **Level Three – Performance-driven culture emerging:** Performance measurement supports the HCO's mission, vision, values and strategic goals. The HCO participates in cross-organizational information sharing and builds on impromptu performance improvement initiatives. The C-suite furnishes clinicians and managers with tools and support for data-driven clinical, operational and financial decision making.
- **Level Four – Performance-driven culture realized:** With processes for data-driven decision-making in place, executives, clinicians and managers routinely rely on business intelligence dashboards and key performance indicators. Every key player within the HCO, including rank-and-file employees, understands the HCO's strategic goals. Departments freely share information and participate in collaborative cross-department initiatives.

You can determine where your organization stands on five dimensions of high-performance healthcare by taking the assessment appearing in the appendix of this white paper.

What Makes a High-Performing Healthcare Organization?

High-performing HCOs progress from chaos to departmental "islands of optimization" to high-performance culture emerging and realized, while also adopting broadened views of data exchange, observes Leader.

"The real-world value of data exchanges comes not from moving data from point A to B but in what HCOs are able to accomplish with the data," says Lynne Dunbrack, healthcare industry analyst, IDC - Health Insights. "Once HCOs figure out how to generate and aggregate data in real time, they can analyze that data to improve performance."

“By providing a common infrastructure of information, information systems can increase shared knowledge across functions, enabling participants to engage in more timely and accurate communication with each other.”

Jody Hoffer Gittell

Author of “High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Reliance”

“By providing a common infrastructure of information, information systems can increase shared knowledge across functions, enabling participants to engage in more timely and accurate communication with each other,” writes Jody Hoffer Gittell, author of “High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Reliance” (McGraw-Hill Professional, 2009). “The key is in developing information systems that are accessible to a broad array of care providers and that include both administrative and clinical information.”

The future for high-performance healthcare is far-reaching. Just as it empowers HCOs to realize their clinical, financial and operational goals, “it will make care more affordable, generate revenues, and produce more timely, accurate information and knowledge about patients,” predicts Barry Runyon, research vice president for healthcare at Gartner.

High-performing HCOs exhibit these characteristics:

The high-performing HCO aligns performance measurement, monitoring and management with strategy, empowering executives, managers and clinicians to create best practices and achieve strategic objectives. HCOs evolve from possessing a minimal grasp of strategy to an understanding and fulfilling strategy.

High-performing healthcare systems tend to build system-wide plans for quality and safety with measurable goals across multiple dimensions, according to the HRET study. HCOs set short-term annual goals as well as three-to-five year goals, anchor goals in the pursuit of perfection rather than incremental improvement and link goals related to quality, operations and finance.

A high-performing HCO delivers transparency and insists on accountability. In an ideal scenario, clinicians, executives and managers join forces to share information, generate best practices and achieve HCO strategy, according to Leader.

High-performing HCOs operate like well-oiled machines, says Dunbrack. They know how to facilitate real-time access to information, deliver unified views of clinical, financial and operational data, and monitor performance against metrics. The key is integrating data and making it both interoperable and actionable.

“Accountable care means holding HCOs accountable for the care they deliver,” says Runyon. “Performance management makes it easier for HCOs to accept accountability for streamlining handoffs between inpatient and outpatient care venues, which results in more convenient, affordable care.”

“High-performance HCOs hold healthcare professionals – clinical, financial and operational – accountable for what they do,” adds Leader. “Accountability thrives when HCOs build and reinforce a culture of accountability based on sustained performance, not just who knows who or what have you done for me lately.”



Jody Hoffer Gittell, Author of “High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Reliance”

Jody Hoffer Gittell (<http://www.jodyhoffergittell.info/>) teaches human resources management, operations management and organizational theory at Brandeis University’s Heller School for Social Policy and Management. She serves as a member of the Health Care Advisory Council and is the author of “High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Results”, “The Southwest Airlines Way” and more than a dozen articles on healthcare management. Prior to joining Brandeis, Gittell earned her Ph.D. from the MIT Sloan School of Management and taught for six years at Harvard Business School.

“High-performance HCOs always operate with some level of analytics.”

Eric Leader
Vice President
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“Comprehensive sharing of information and best practices will help ensure that patients receive consistent care across the board.”

Lynne Dunbrack
Healthcare Industry Analyst
IDC - Health Insights

A high-performing HCO takes action on insights. In an ideal scenario, executives, managers and clinicians rely on clinical, operational and financial intelligence tools to gain insight into process changes that improve performance and drive strategic goals, says Leader. Moreover, they feel empowered to act on these insights.

“High-performance HCOs always operate with some level of analytics,” says Leader. “They’re not just reporting data, but using data to guide decisions and programs.” The goal, says Dunbrack, is to “make proactive, accurate, reliable information available in real time so clinicians, executives and managers can make sound, evidence-based decisions.”

It’s one thing to collect information, but it’s quite another to do something with it, observes Runyon, who believes that acting on data and information will “squeeze the latency” out of workflow and help clinicians track patients, identify problems, clinical paths and care venues.

“Empowering clinicians at all levels of the organization will improve collaboration, produce better handoffs and facilitate transitions in care, smoothing out the movement of patients through the healthcare system,” forecasts Dunbrack. “Comprehensive sharing of information and best practices will help ensure that patients receive consistent care across the board.”

“We need to notify patients that we’re ready for them rather than continually asking them to wait,” adds Runyon. “A high-performing healthcare environment rightly sees the patient as the franchise.”

A high-performing HCO operates with a single source of truth. Ideally, HCOs develop a single source of data and information for performance management.

Key to maintaining a single source of truth is avoiding data duplication by “leaving data where it resides and where it’s maintained so clinicians, managers and executives operate with a single content reference for the patient’s clinical record,” says Leader.

Massive data warehouses facilitate analytics and reporting but fail to identify opportunities for change and improvement, he adds. HCOs are best served by turning away from database building toward HCO strategy with these questions:

- Which key performance indicators meet the needs of this HCO?
- What small subset of data does the HCO need to measure progress and improve performance?

“The goal is to create a cognitively-relevant aggregation of information from multiple sources,” says Leader. “The data is trusted because it’s original, transparent because everyone can see each other’s data and actionable because healthcare professionals can use data to manage and optimize workflow.”

This single source of truth will likely minimize physicians’ angst over pay-for-performance evaluations.



Lynne Dunbrack, Program Director, IDC Health Industry Insights

Lynne Dunbrack is a nationally recognized thought leader in the application of information technology (IT) to the business problems of the health industry. Her understanding of industry needs is grounded in experience over the last 25 years working as a consultant and in the healthcare field. Dunbrack is a frequent contributor to industry publications such as *Health Affairs*, *Managed Care Quarterly*, *Healthcare Review*, *Health Plan*, and *Healthcare Management Technology*, and has been quoted by national media outlets like *The Wall Street Journal*, *Investor’s Business Daily*, *BusinessWeek*, and *San Jose Business Journal*. She also speaks regularly at industry conferences. Dunbrack holds a B.A. from the College of the Holy Cross, and an MBA with a concentration in healthcare management and MSMIS from Boston University’s Graduate School of Management.

“Because physicians are operating from varied sets of data, it’s difficult to determine if a patient’s treatment achieved positive or negative results,” says Dunbrack. “Performance management based in sound business intelligence provides a solution.”

Leader agrees. “The goal is to build a performance-focused, data-driven HCO where every physician has access to the same information,” he says. “If executives and clinical leaders offer physicians a clear explanation of the rules, measurement tools and scorecards, physicians will figure out how to improve healthcare.”

A high-performing HCO makes information available to all involved parties. In an ideal scenario, the high-performing HCO delivers sufficient, easy-to-access information to the right person at the right time for the right patient, facilitating evidence-based decision making and measurement of key performance indicators.

“Potential HCOs typically start at level one, ‘chaos,’ where users know where information is, but don’t know how to get it; or where departments can access information, but avoid sharing it,” says Leader. “Over time HCOs can evolve to a place where they use the clinical record with business intelligence on top of it to drive performance in support of strategic goals.”

The key rests in offering clinicians access to evidence-based medicine protocols, guidelines and systems so they receive alerts on a patient who is about to experience a problem. “It does no good to identify quality problems six months after they occur when it’s too late to help the patient,” says Dunbrack.

The ideal scenario, she says, rests in providing clinicians with information so they can intervene early and make a difference in the patient’s care while the patient is still in front of the clinician.

But simply providing access to information isn’t enough. Mature high-performing HCOs align governance with the use of data and information to drive performance improvement.

“Clinicians, managers and executives bind with HCO strategy because they have access to tools that allow them to leverage information from a single source of truth, use analytics and compare their performance with others,” says Leader.

A high-performing HCO engages patients with information, insight and point-of-care conversation. In an ideal scenario, clinicians deliver information and insight to patients at the point of care, inviting them to access and review health information to manage their own care.

“Patients prefer getting information directly from a physician along with an invitation to talk and ask additional questions,” says Dunbrack. “The teachable moment is in the clinician’s office, not five weeks later when a letter finally arrives in the mail.”

Immediate access to information is especially critical to managing chronic diseases such as diabetes, which increasingly demands that clinicians engage pre-diabetics in real time to deliver support on issues like diet, nutrition, weight and hypertension.

Also relevant is the growing role of accountability in healthcare. “Physicians will be reimbursed for outcomes,” forecasts Dunbrack. “It won’t matter if you built an enterprise-class for accountable care if your patients still smoke, drink, eat junk food and fail to comply with disease management programs or actively manage their own care.”

The answer rests in HCOs making unprecedented moves to reach out to their “previously ignored constituents -- namely patients,” counsels Runyon. He suggests ongoing patient engagement, making care more comfortable and convenient and relying on interactive patient care systems, kiosks and mobile apps to avoid “the inherent latency of workflows.”

“[Business Intelligence] will help executives identify how to enhance reimbursement, evaluate the effectiveness of clinical pathways and order sets, understand the markets they serve and appreciate the role and responsibilities of clinicians.”

Barry Runyon
Research Vice President for Healthcare
Gartner

The Impact of High-Performance Healthcare

High-performance healthcare is likely to influence physician attitudes and behaviors as HCOs shift governance from following the lead of all-star doctors to “more data-driven alignment that targets top performance and strategies to move the HCO forward,” says Leader.

Physicians still aren’t yet accustomed to being measured. Typically, they meet with department chairs to review the last six month’s performance and take a political approach in deciding what to do. In the years ahead, however, physicians will participate in six-month reviews, while also participating in periodic, ongoing performance feedback.

“Physicians will know if they’re doing better, worse or above average at any point in time by comparing their performance with colleagues and departments, and acting proactively to alter care delivery,” says Leader. “The first step is providing them with the tools, rules and scores that make authentic physician accountability possible.”

High-performance healthcare is also likely to bridge the gaps between clinicians, executives and managers. Runyon sees clinicians serving as patient champions, despite the escalating costs of care, while executives work to meet the needs of stakeholders, generate revenue and avoid financial losses.

Runyon predicts that using business intelligence in real time and trending “will help executives identify how to enhance reimbursement, evaluate the effectiveness of clinical pathways and order sets, understand the markets they serve and appreciate the role and responsibilities of clinicians.”

Making High-Performance Healthcare Happen

Carefx’s Eric Leader and other high-performance experts share these recommendations for facilitating high-performance healthcare:

Analyze the HCO’s strategic objectives. Leader counsels HCOs to develop strategic objectives that reflect their most critical clinical, financial and operational priorities, including general strategic objectives such as “improve hospital throughput by 20 percent” and service-oriented strategic objectives such as “decrease gamma knife waiting list to fewer than five days.”

Investigate the potential use of “coordinating mechanisms” that predict higher levels of what Gittell labels “relational coordination” in HCOs. Mechanisms such as integrated information systems, interdisciplinary rounds and interdisciplinary clinical pathways “generate networks of communication and relationships around the coordination of patient care, as well as higher levels of satisfaction, better clinical outcomes and reduced risk-adjusted length of stay.”



Barry Runyon, Research Vice President for Healthcare, Gartner

Barry Runyon covers the Healthcare IT segment within Gartner Research. Mr. Runyon has approximately 29 years of IT experience inside and outside of healthcare. His research agenda includes the range of underlying and emerging technologies within the healthcare provider space. He joined Gartner in December of 2004 and is based in Tucson, Arizona.

Identify the HCO's core problems. Select technologies with the capability of responding to inevitable changes in technology requirements, care delivery and accountable care, advises Dunbrack. "Work to understand today's issues, but keep an eye toward the future," she says. "How well will a technology platform evolve and flex to address predicted changes?"

Select key performance indicators. "Pinpoint metrics that reflect progress toward strategic objectives," advises Leader. For example, consider the sum of unused acute care bed hours by day as a key performance indicator for throughput. Key performance indicators should provide a measurement of the effectiveness of a process relative to a strategic goal. Reporting on the average discharge time is not strategically aligned. However, reporting on the lost opportunity from late discharges is strategic. The key indicators should be divisible down to departments and individuals, allowing transparent comparisons and identification of areas for improvement.

Acquire trusted data sources. Identify and collect data from universally trusted and reliable data sources to calculate key performance indicators.

Design, then implement intelligence dashboards. Support analysis of key performance indicators with business intelligence dashboards that allow incorporation of new or modified strategic objectives and drilldowns from executive level summaries through department summaries to an individual healthcare professional's performance metrics.

"Introduce dashboards over time, taking care to validate data integrity, configure business intelligence tools and perform iterative testing to improve the dashboard report and tool," recommends Leader.

Focus on culture. Gittell recommends working on the "patterns of interaction across an organization," ideally characterized by shared goals, shared knowledge, mutual respect and frequent, timely, problem-solving communications.

Hire for teamwork and "relational competence." "Make sure clinicians have clinical skills, as well as the ability to connect with and share knowledge and goals with other disciplines," says Gittell. "You want people who aren't confined to a disciplinary silo, but who can see and appreciate 'the big picture' of care delivery."

Offer a framework for conflict resolution. Instead of assuming clinicians, executives and managers will work through conflicts on their own, Gittell advises HCOs to offer conflict resolution training as a tested structure for bringing parties together.

"Allowing conflicts to fester will inevitably undermine relationships and compromise the realization of high-performance healthcare," she says, advising HCOs to embrace the lessons learned at Southwest Airlines which "embraces conflict as a way to promote learning and strengthen relationships across groups" (Gittell is author of "The Southwest Airline Way").

Deliver training and support. Make sure that every important executive, clinician and manager develops a shared understanding of the HCO's strategic objectives, high-performance and business intelligence as well as specifics such as how to interpret dashboards and use information to change processes and improve performance. "Be sure to repeat performance improvement training on a regular basis," advises Leader.

Mobilize diverse change management strategies. Dunbrack recommends building a performance-focused culture via team building, project management, marketing and promotion engagement of clinical leaders to move programs forward, and sharing success secrets from top HCOs.

Roll out performance management. "Reset the expectations of clinicians, executives and managers, aligning changes in incentives with strategic objectives," counsels Leader. HCOs can use adoption rates and key performance indicators to measure the rollout's success, tracking and monitoring milestones using project management tools and reports.

Communicating High-Performance Healthcare

Creating a high-performance HCO and aligning strategy requires consistent, ongoing communication using tactics ranging from e-mail and websites, to forums, newsletters and posters. Among the elements of a phased communication plan for high-performance healthcare:

Build understanding, generate expectations. HCOs can promote the dimensions of high-performance through multiple communication vehicles, including websites, newsletter articles, posters and department and division meetings. “Focus early communications on how high-performance can benefit the HCO, patients and individual healthcare professionals,” advises Leader. “Make sure all clinicians, executives, managers and staff attend at least one overview session.”

Single out clinicians for special attention. Make posters, handouts and newsletters available online as well as in physicians’ lounges and clinical department offices. Leader recommends focusing on clinician convenience and ease-of-use as well as the impact of proactive measurement of performance metrics on patient care quality, safety and efficiency.

Host town hall and employee assemblies. Recruit clinical leaders and department champions to introduce the concepts of business intelligence, performance management and high-performance healthcare, including goals, strategy, likely changes, implementation and outcomes.

Leader recommends sharing stories from reigning high performers such as Cleveland Clinic, Boston Medical Center and Geisinger Health System.

Rely on training as a communications tool. Use training sessions for specific job functions or departments as channels for pre-implementation communication. Leader suggests that HCOs cover topics such as strategic objectives and key performance indicators, data collection and reporting, documentation of performance via dashboards while also tapping use cases on analyzing information and leveraging dashboards to identify areas for improvement.

Share the good news of goal adoption and performance against goals. Leader suggests using business intelligence dashboards to share comparative reviews of adoption and performance goals across departments and individuals to drive even more widespread performance improvement and innovation.

Provide oversight and insight. Use performance summary dashboards such as those implemented at top level facilities to monitor goal adoption and performance and reinforce the C-suite’s commitment to change. Leader suggests weekly online and print messages that focus on progress, expectations and exceptional achievements related to high-performance healthcare.

Next Steps

High-performance healthcare offers HCOs a solution to persistent problems in duplication, fragmentation, inefficiency, medical errors, quality and cost, as well as a platform for responding to next-generation meaningful use requirements (population health management, disease surveillance, patient engagement), and emerging care delivery models such as medical home and accountable care. To secure the benefits of high-performance, clinical leaders and executives should:

- Take advantage of healthcare business intelligence as a proven method to drive change and enhance the clinical, financial and operational performance of HCOs
- Evaluate the interrelationships between high-performance healthcare and still-evolving concepts such as medical home and accountable care
- Study the successes and lessons learned of HCOs that exhibit characteristics of high-performing healthcare
- Devise strategies to “live” high-performance factors such as alignment with strategy, single source of truth, accessibility, action on insights, transparency and accountability and patient engagement
- Track the HCO’s progress on multiple levels of maturity
- Create a disciplined implementation plan that features objectives, timelines, individual accountabilities and mechanisms for monitoring and tracking
- Empower senior leaders and champions to communicate the purpose, objectives and benefits of high-performance healthcare
- Deliver opportunities for ongoing training, support and celebration of success

Resources on High-Performance Healthcare

Brookings-Dartmouth Accountable Care Organization Learning Network

<https://xteam.brookings.edu/bdacoln/Pages/home.aspx>

Creating Accountable Care Organizations

<http://www.nejm.org/doi/full/10.1056/NEJMp1009040>

Howard Dresner. Profiles in Performance: Business Intelligence Journeys and the Roadmap for Change. Hoboken, New Jersey: John Wiley & Sons, 2010.

Greg Butler and Chip Caldwell, FACHE. What Top-Performing Healthcare Organizations Know: Seven Proven Steps for Accelerating and Achieving Change. Chicago: Health Administration Press, 2008.

"Family Medicine: Preparing for High-Performance Healthcare"

<http://www.medscape.com/viewarticle/718961>

A Guide to Accountable Care Organizations, and Their Role in the Senate's Health Reform Bill

<http://www.healthreformwatch.com/2010/03/11/a-guide-to-accountable-care-organizations-and-their-role-in-the-senates-health-reform-bill/>

Identifying Best Practices to Improve Multi-Hospital Health System Performance
(Hospital Research and Education Trust, American Hospital Association)

<http://www.hret.org/quality/projects/identifying-best-practices-to-improve-multi-hospital-health-system-performance.shtml>

Jody Hoffer Gittel, High-Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience. New York, New York: McGraw-Hill, 2009.

Leading High-Performing Healthcare Organizations

<http://www.exed.hbs.edu/programs/lhcoe/Pages/default.aspx>

Quest: High Performing Hospitals

<http://www.exed.hbs.edu/programs/lhcoe/Pages/default.aspx>

Testimony: Creating the Framework for High-Performing Healthcare Organizations

<http://www.exed.hbs.edu/programs/lhcoe/Pages/default.aspx>

"Using Business Intelligence to Improve Performance"

http://findarticles.com/p/articles/mi_m3257/is_10_63/ai_n47559622/?tag=content;col1

APPENDIX

High-Performance Healthcare Evaluation: Where Do You Stand?

Identify where your HCO stands on each of the five dimensions of high-performance healthcare, originated within Howard Dresner's "Profiles in Performance, Business Intelligence Journeys and the Roadmap for Change" (John Wiley & Sons, Inc., 2009).

How well does the HCO align performance measurement and management with HCO strategy?

- Level I – Clinicians and managers are either unaware of the HCO's strategy or misunderstand it. Department initiatives are focused on short-term goals rather than on long-term, enterprise-wide goals.
- Level II – Executives and clinical leaders communicate strategy throughout the organization, but departmental initiatives and actions aren't yet aligned with strategy. Departments may sometimes try to create their own versions of HCO goals or use overlapping goals.
- Level III – Clinicians, executives and managers understand and assimilate the HCO's clinical, financial and operational strategies. Both departments and individual healthcare professionals support performance management processes and rely on clinical, operational and financial intelligence to measure progress.
- Level IV – Executives, clinicians and managers use clinical, financial and operational intelligence tools to generate ongoing feedback and facilitate performance improvement. The HCO relies on insights generated via clinical, financial and operational intelligence tools to drive modifications in strategy.

How well does the HCO demonstrate accountability and transparency?

- Level I – Knowledge may be power, but little data, information or knowledge sharing occurs in this phase. Instead, executives, clinicians and managers rely on networking and word-of-mouth to determine how well individuals and departments perform.
- Level II – Healthcare professionals within departments may create and track performance metrics, but resist sharing their experiences and insights with non-department "outsiders."
- Level III – Departments may share information, but only in episodic, opportunistic ways. The HCO resists the use of clinical, financial and operational intelligence to track goals such as improved care quality, safety, and efficiency.
- Level IV – Information sharing is pervasive. Departments and individual healthcare professionals routinely compare their own metrics to best practice metrics across the HCO.

How well does the HCO act on insights?

- Level I – Information is rarely shared among healthcare professionals and departments. Executives, clinicians and managers are more likely to develop insights and make decisions on the basis of observation rather than data and information.

- Level II – HCO departments act upon departmental information, although their actions aren't yet aligned with the actions of other departments or broad HCO strategy.
- Level III – Departments within the HCO may share information, but departments and individual healthcare professionals typically stop short of implementing process changes.
- Level IV – The HCO not only draws on a broader base of insights to drive initiatives and actions, but also implements best practices, which typically generate even more significant insights.

How well does the HCO use a single source of reliable, accepted data for performance measurement?

- Level I – Clinicians, executives and managers find it difficult to access data. They use multiple versions of data and information sources to measure performance.
- Level II – Data is available, but only within departments. Data continues to reflect the HCO's key performance indicators.
- Level III – Reliable and trusted data is in place. The HCO relies on business intelligence tools to access and report key performance indicators. Individuals and departments sometimes still rely on supplemental data sources.
- Level IV – The business intelligence solution serves as the single source of key metrics, while the HCO uses business intelligence to measure strategic goals, departmental initiative and individual healthcare professional performance.

How well does the HCO act on business intelligence insights?

- Level I – Information is rarely shared among healthcare professionals and departments. Executives, clinicians and managers are more likely to develop insights and make decisions based on observations rather than data.
- Level II – Departments act upon department-specific information, but their actions aren't yet aligned with the actions of other departments or broad HCO strategy.
- Level III – Departments within the HCO may share information, but departments and individual healthcare professionals typically stop short of implementing changes in process.
- Level IV – The HCO not only draws on a broader base of insights to drive initiatives and actions, but also implements best practices, which generates even more significant insights.

How well does the HCO make information available and accessible to clinical, financial and operational decision makers?

- Level I – Data and information is generated in multiple ways and often surfaces in multiple versions. Clinicians, executives and managers do not have easy access to information.
- Level II – Departments generate a limited number of performance reports, but the type of information available continues to vary across departments.
- Level III - Although the HCO implements a business intelligence solution, information may still be incomplete and slow to reach clinicians, executives and managers.
- Level IV – Information within the business intelligence solution supports all key performance indicators, while business intelligence dashboards allow clinicians, executives and managers to manage every key initiative.



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