

IBM Institute for Business Value

Collaborating beyond traditional boundaries

What convergence means for our health care systems



IBM® Institute for Business Value

IBM Global Business Services, through the IBM Institute for Business Value, develops fact-based strategic insights for senior executives around critical public and private sector issues. This executive report is based on an in-depth study by the Institute's research team. It is part of an ongoing commitment by IBM Global Business Services to provide analysis and viewpoints that help companies realize business value. You may contact the authors or send an email to <code>iibv@us.ibm.com</code> for more information. Additional studies from the IBM Institute for Business Value can be found at <code>ibm.com/iibv</code>

AHIP Foundation's Institute for Health Systems Solutions

The AHIP Foundation's Institute for Health Systems Solutions' mission is to advance solution-based, forward-looking, collaborative ideas focused on health systems change that improves the quality, affordability and availability of care and puts the health care system on more sustainable financial footing. To learn more about AHIP Foundation's Institute for Health Systems Solutions, please contact us at <code>info@healthsystemssolutions.org</code>.

For our Website please visit:

http://www.healthsystemssolutions.org/

To stay informed and receive updates from us please visit:

http://www.healthsystems solutions.org/content/stay-informed

By Barry Mason, Gary Bacher, Harry Reynolds and Heather Fraser

Perhaps for the first time, market forces, dramatic changes in regulatory rules and concerns over sustainability – combined with advances in technology and the ability to better predict and manage health care risk – are creating a unique opportunity for broad industry transformation. Innovative business models and new methods of collaboration and care coordination aimed at increasing value for consumers and patients are the product of this confluence of events.

"Convergence" is a powerful concept for understanding these changes, both in the United States and globally. Health system participants are increasingly re-evaluating their roles and differentiated value and strategically considering how the different pieces of the health care system interact and fit together. Evidence of change abounds – with providers taking on greater performance and even insurance risk, traditional retailers becoming care clinics, health plans moving more directly into care delivery, and employers and government changing rules and payment policies. Similar activity on a global basis reinforces the enduring quality of these changes (see sidebar, "Convergence on the global stage").

This accelerated level of convergence creates challenges for health system participants. However, it also creates new opportunities for organizations to reshape their business models and services; consider innovative ways of providing better, patient-centered care; and empower consumers to take greater responsibility for their health.

To study convergence is to consider the redefinition of industry boundaries with a focus on how change occurs and the resulting effects on industry structure and individual organizations, including implications for government and regulation. The study of convergence emphasizes the capabilities and relationships required to "converge" health with the local community in a way that puts patients and consumers at the center.

How this is accomplished varies widely, and there are numerous ways that health system participants can interact and organize themselves. Some health system participants will seek to acquire new capabilities by acquisition; others will build them as extensions of their pre-existing internal capabilities; yet a third group will partner with others to create vertically integrated networks of capabilities. What these approaches have in common is a focus on convening the health care community around the needs of the individual while bringing renewed focus to improving quality and simultaneously lowering costs.

As consumers and patients become more engaged and empowered in their own health and well-being, they are poised to play the role of the ultimate change agent. Along with employers, they hold substantial power to transform our health care system. Meeting their needs, in fact, is the compelling call behind convergence. It is ultimately what causes health system participants to rethink how they relate to one another and how health care must meet, complement and connect with resources at the community level to provide a more coordinated, high-value experience that consumers and patients will reward.

Convergence on the global stage

Health care as part of your daily neighborhood in the UK In the United Kingdom, the National Health Service (NHS) operates a health information service called NHS Direct. It is manned by health care professionals who offer health advice to callers either by phone or over the Internet. Benefits of this approach were evident during flu epidemics when telephone-based triage teams kept infected patients away from the doctor's office whenever possible, while providing them with the required advice and medication.²

Patient-centered care through health plan and provider collaboration in the United States

A health plan and large health system joined forces to create an entirely new organization. Carolina Advanced Health is a bold and collaborative approach that focuses on the total person. The forming parties jointly hold title and worked together on virtually every detail to design the facility around the needs of the patients. Early results from an outcomes and patient/member satisfaction standpoint are highly positive.³

More personalized care and more effective doctors in Spain The Extremadura Regional Government of Spain is improving efficiency and reducing errors with an electronic prescription system. It allows for better integrated data so doctors, pharmacists, patients and insurers can share information seamlessly and efficiently. The quality of care also improved as doctors have up to 30 percent more time for patient consultations.⁴

Coordinated care of advanced illness in the United States
A large health system in California developed an Advanced Illness
Management (AIM) program to deliver coordinated care for
patients with late-stage chronic illness. Through a nurse-led
interdisciplinary team working with hospitals, doctors and
physician groups, AIM provides home-based transitional and
palliative care and counseling that stretches across both acute
and post-acute settings.⁵

Providers meet payers in India

In India, certain private health systems are emphasizing outcomes, while others are pure fee-for-service-based systems. Leading providers such as Apollo Hospitals now own health plans (Apollo Munich) to provide private insurance that funds access to their systems for the growing middle class. In addition, Apollo is opening up neighborhood clinics in metropolitan areas such as Delhi and Mumbai. These clinics have state-of the art technology and access to the range of specialties treatment.

As such, the concept of converging around consumers and patients – and engaging them "where they are" – is an organizing principle behind much of the change occurring in health care systems around the world. The concept also provides a prism for examining the intersection of these changes with public policy.

As part of our efforts to consider convergence, the AHIP Foundation's Institute for Health Systems Solutions and the IBM Institute for Business Value developed a set of hypotheses based on interactions with health system participants. We then conducted a series of interviews with representatives from health plans, providers and life science organizations to validate our research.

This report has three goals:

- To highlight how convergence as a concept captures and categorizes events occurring today
- To provide insights into what is driving convergence and the implications for consumers and health system participants
- To frame key questions and responses for public and private organizations seeking direction in a convergent world.

Figure 1 provides a framework depicting the essential forces and enablers exhibited by organizations that appear highly engaged in convergent thinking and activities.



Business structure optimization

Source: Adapted from IBM Healthcare and Life Sciences.

Figure 1: Forces and enablers exhibited by convergent organizations.

Defining convergence: Does the definition matter?

While health system participants continue to use different terms to reflect the changes related to convergence, how an organization seeks to define such changes provides insights to its vision and strategic differentiation. The terminology used may also give a perspective of how close the relationship is among participating parties.

Our interviewees used a mix of terminology relating to the overall themes of convergence: for example, integration, affiliation, collaboration, coordination and partnering. The terminology used reflects the context of the approach pursued by the respective organization.

Convergence itself is a broader and much more comprehensive concept, in that it considers the definition and re-definition of industry boundaries. In operational terms, it entails health system participants such as payers, providers, employers and different levels of government stepping out of traditional roles and considering the jobs to be done to best meet the needs of patients and consumers. In a convergent world, each participant assesses what it can bring to the table as part of a full-fledged collaboration or otherwise considers what is necessary to convene other participants and the community at large.

"Effective convergence means that these stakeholders are all coming together in a meaningful way that has a direct, positive outcome on health systems."

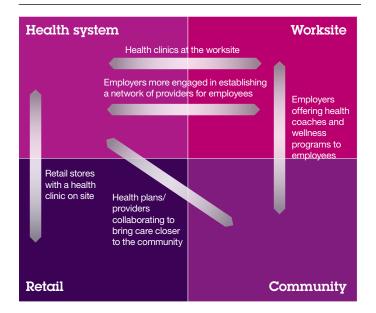
Life Sciences executive, United States

4

Convergence thus implies activity both within an organization and in each organization's interactions with other health system participants (see Figure 2).

In thinking about the trend toward convergence, it is helpful to think about both its "breadth" and "depth." Broad convergence involves a web of new forms of collaboration and combinations of effort that work across a range of health system participants to improve patient care, rather than just between two organizations or even between two industries.

Convergence is deep where organizations come together to address challenges that each faces in the broader service of meeting community needs, even if the resolution of those challenges does not directly reward or relate to the other party. Depth of convergence can be illustrated by thinking about how a hospital or health system might approach the problem of excessive readmissions. A hospital concerned about a high rate of avoidable readmissions will likely see a need to consult with other health system participants - for example, primary care providers and post-acute providers - to improve care transitions. A deep convergent relationship would involve each party internalizing the goals, mission and outcome metrics of the other. Both parties would focus on the patients they have in common, but they would also seek to put in place structures that the parties could leverage more broadly and replicate with others so as to limit overall administrative complexity.



Source: IBM Institute for Business Value and AHIP Foundation's Institute for Health Systems Solutions.

Figure 2: Examples of convergence among health system participants.

The bottom line is that definition and terminology matter most as a means of understanding an organization's specific implementation and approach, as well as the context of its activity.

What is driving convergence?

The goal of having multiple health system participants converge around consumer and patient needs is not new. This has been an important focus of health care for decades, although efforts to achieve it often have not had long-term success.

The Health Maintenance Organization (HMO) Act of 1973 intended to provide an organizational innovation that would bring the financing and delivery of care together – and in so doing, provide for more cost-effective and high-quality care. HMOs were cited as providing higher-quality care and encouraging consultation among providers. Efforts by the private sector to increase the use of HMOs, which peaked in the 1990s, had similar goals. Ultimately, however, the acceptance of HMOs was first met with resistance in the 1970s and later encountered negative public reaction in the 1990s. Thus, an important question (which we address later) is: To what extent do today's convergence efforts differ from these earlier efforts, particularly from a standpoint of social acceptance?

In addition to managed-care models, other models have attempted to encourage coordination and convergence. Beginning in the mid-1980s, many state Medicaid programs began experimenting with ideas of Primary Care Case Management (PCCM). To More recently, the Patient-Centered Medical Home (PCMH) model has gained substantial momentum with the goal of providing a dedicated care team centered on the patient's needs, as well as the emergence of "population-based" payment models aimed at more directly moving away from fee-for-service payment structures. To

While this kind of convergence around patient needs has long been recognized as important to improving patient care and efficiency, the system has struggled to find models that allow multiple health system participants to coordinate and align in the most effective way.

What is different now?

Evidence and observation suggest that the health care system is growing increasingly convergent and that the pace of activity is accelerating. An increasing level of activity crosses areas traditionally maintained by different health system participants (see Figure 2). Anecdotally, over the last eight to twelve months, article after article in the media and trade press highlights how organizations are reaching across boundaries to collaborate with each other to offer new services that are more attuned to what people value and need.

Each of our interviewees noted the degree of change occurring in the system and the strategic requirement for them to respond. Overall, they viewed this as positive change and indicated that business and care model innovation in response to changes in the industry was at the top of their agenda.

Past efforts at convergence have shown some success. However, the health system is still far from achieving the goal of enabling multiple health system participants to converge around patient needs while maintaining sustainable business models affecting access, quality and costs concurrently.

However, there are reasons to believe this current period of change holds promise. For example:

- Health system participants increasingly acknowledge that the current path is not sustainable.
- Employers and consumers are becoming more active in demanding higher quality and more efficient care.
- The public and private sectors are coming into better alignment in seeking improved health and lowering cost.
- Improved technology and ability to adjust for differences in risk have created increased ability for participants to share risk and align financial incentives.
- Data is increasing effective optimization of care processes and understanding best practice and care variations.

Considered in their totality, these changes serve to mitigate some of the past concerns associated with earlier attempts at health system reform. They provide encouraging signs that we may finally be turning the corner in efforts to remake and re-imagine operation of the health care system. A more in depth discussion of these factors is provided in Appendix A.

New levels of convergence among health system participants may be found in the formation of retail health clinics. One example is the formation of Target Clinics in North Carolina. In creating these retail health clinics, Target has convened a hospital and health insurance plan. Duke University Medical Hospital will provide medical directorship services to the clinic, while a health plan will provide insurance coverage. This arrangement reflects convergence across a range of considerations. It effectively takes a retail setting, brands the services under the Duke name and offers enrollees coverage through a health insurance plan that is well coordinated with the clinic.¹²

Employers are increasingly responding to costs and other pressures and becoming more directly involved in seeking to engage employees in choosing value-based options as they access the health care system. Defined contribution models, aided through the development of private exchanges, serve as another indication that employers are finding that the time is right to act on and implement ideas that previously were only aspirations.¹³

What potential unintended implications and new tensions may arise from the acceleration of convergence?

As health system participants seek to convene around the patient and consumer, organizations must consider implications at the community and ecosystem level.

In considering implications for ecosystems, health system participants will need to determine how they can best work together to create a common infrastructure and a platform that minimizes administrative complexity. This challenging task requires identifying which functions are best harmonized or standardized across system participants and which tasks are best left to differentiation and competition. Another challenge from an ecosystem standpoint is dealing with change itself — and the ability of health system participants to leave behind old models and re-imagine how they interact together and with consumers and patients.

Communities will also play an important role in ensuring that health care, wellness and prevention are integrated into each person's life in a holistic way to benefit both the individual and the local population. Communities can also take an active role in integrating what happens in traditional health care settings with other non-traditional settings. Ultimately, improving health and wellbeing allows for greater participation of the individual in building a thriving community.

"When we are at our very best and health care is at its very best, all stakeholders will converge around the health and wellness needs of people. Care will be designed from the population and community perspective, and resources will follow that design."

Health System Leader, United States

Managing the change and balancing tensions

Convergence also carries with it tensions for which there may be no dominant answer, requiring each organization to call on its leaders to navigate and determine the appropriate balance. A number of potential tensions are notable – and several highlight public policy issues likely to influence the direction of convergence:

- Financial tensions: The majority of health system participants will either embrace or resist the change of convergence depending on how they expect it will impact their business relative to other alternatives.
- Care model tensions: The population-based health model that convergence and other forces seek to enable can be at odds with the goals of consumer engagement. In a population-based health model, the goal is to make an entity (reflecting some consortium of health system participants) accountable for the total cost and quality of a defined patient population. If that patient population has full choice of providers and care venues, the goal of consumer and patient engagement can come into conflict with the tenets of population-based payment models, which convergence seeks to enable.
- Regulatory tensions: Some interview participants noted that a key impediment to convergence as described here are regulatory barriers related to operation of an organizational structure (whether loose or tight) capable of receiving population-based payments and sharing these payments in a way that helps align the interests of the participating system participants. A key point raised was whether our existing set of regulations applicable to this area reflects "pathologies" built on assumptions related to fee-for-service-based payment systems, as opposed to well-considered policies that have been

- adapted or modified to map to a world of alternative payment models. Key to evaluating these regulatory questions is a full understanding of the trade-offs different regulatory approaches can engender. This kind of analysis requires balancing the desire to spur innovation and change with the need to preserve and promote market forces to maintain a competitive environment.
- Market structure: Another question of interest from both a market and public policy perspective is whether new business models in an era of convergence will tend to reflect more tightly controlled end-to-end structures (vertically and horizontally) or something more interoperable and interchangeable. This question can be analogized to innovations in the technology industry and different organizational approaches to balancing end-to-end control with interoperability. A single organization retaining tight control over all elements and functions can result in a high degree of compatibility and integration. A potential risk, however, is the possibility of more limited choices and reduced opportunity for innovation compared to open architecture models.
- barrier heard in our interviews related to culture. Culture here implied a range of concepts differences in the traditional cultures of payers and providers, hospitals versus their medical staff, and home-based health versus long-term care facilities. In addition to these institution-based cultural challenges, interviewees also noted the need for the development of a strong collaborative culture build on openness and sharing of data. The dominant theme here was that leadership from the top of the organization was the most vital element in laying down the pylons for a new culture.

Capabilities for implementing a convergence strategy

As stated, convergence can have important implications for all participants in the health care system. Underlying these choices are key questions such as:

- How much formal integration in terms of business structure do I need across functions and with other organizations with which I am collaborating?
- How do I encourage the development of a deeply rooted culture of collaboration within my organization that values and thrives on openness and transparency?
- How do I ensure my organization has the tools and capacities in place to actively listen to consumers and discern their needs, and unmask hidden relationships and insights resident in data and daily interactions with the health care system?

How an organization responds to these questions and acts on its choices ultimately helps determine its capacity to implement a convergence strategy. Health system leaders in our research identified the four core elements to implementing a convergence strategy described in Figure 3.

Progression of capabilities

Our research suggests that an organization's level of maturity along these elements is a function of how it combines *business structure* with *functional competencies*. A business model, in this sense, can be conceptualized as the combination of functional and structural convergence. Figure 4 highlights how these elements combine to create different model combinations.

Business structure optimization is best understood as a continuum. It entails consideration of the choices an organization has to make to determine how it might work with other health system participants to address functions outside of its traditional boundaries. Potential business structures range from an organization entering into informal understandings with other organizations to one fully integrating certain functions into its business structure. Functional dimensions identified in our research as important to convergence center on culture, aligned incentives, technology and analytics, and operational efficiency.

Reimagining the experience

• Resetting the bar to provide the care experience patients and consumers want

Convening the community

- Organizations can support the process of convening around patient and consumer needs by playing or supporting the role of a "convener" of local organizations reflective of the community and local medical neighborhood
- · Organizing social support in connection with the local community is also key.

Developing innovative care models

• Development of care models that achieve holistic approaches across care settings.

Predictive modeling/segmenting or "hotspotting"

- Process by which predictive modeling or segmentation may be used to conduct a "Pareto" "80/20" analysis in relation to that portion of the
 population that constitutes the bulk of spending or provides the greatest opportunity for improving care
- "Hot-spotting" to help ensure resources are deployed to areas and individuals in greatest need.

Source: IBM Institute for Business Value and AHIP Foundation's Institute for Health Systems Solutions.

Figure 3: Key elements for implementing a convergence strategy.

Determine Implementation Develop core workable structure competencies • "Make or buy" decision · Aligned incentives among health · New care models system participants • What functions will be... - holistic approaches across · Culture of collaboration and sharing care settings - performed internally? • Use of predictive modeling, - openness to sharing information - "purchased" or outsourced? and data with other health segmenting performed in partnership with system participants · Convening the community other organizations? - ensuring that patients have · Technology and tools • What form will partnerships take? support from community, including non-traditional care settings Contractual Joint venture Aligned goals/ Common ownership/ Common understanding understanding **Full integration** Participants are Participants have an Participants retain Participants remain under informal relationship that separate identities, but separate ownership, but brought under common allows them to coordinate have contractual enter into a relationship that ownership and control activities relationships that define takes on its own "identity." how they will coordinate Can include creation of a separate entity owned by and converge both parties **Greater integration**

 $Source: IBM\ Institute\ for\ Business\ Value\ and\ AHIP\ Foundation's\ Institute\ for\ Health\ Systems\ Solutions.$

Figure 4: Capabilities progression.

Structural and functional dimensions are sometimes related. Those organizations that do have common ownership are likely to have a head start in achieving a high level of functional convergence over organizations that rely on contractual relationships to facilitate collaboration. However, there will be exceptions to this correlation. Culture can be equally determinative as organizational structure when it comes to achieving high levels of functional convergence.

In the past, it may have been difficult to achieve a high level of functional convergence without also having a high level of structural convergence. Technological and other barriers increased the challenges of achieving a high level of functional coordination in the absence of common control or ownership – particularly between payers and providers. However, new tools and technologies may provide ways for organizations to cooperate and converge functionally while retaining separate structural identities.

Recent instances of "co-branding" show how convergence may involve a high level of structural and functional integration but, nevertheless, allow organizations to retain separate ownership and control. For example, the Mayo Clinic recently formed the "Mayo Clinic Care Network." The care network allows the Mayo Clinic to form close relationships with community providers "through formal collaboration and information-sharing tools." Community providers gain access to expertise, training and specific tools created by Mayo – ranging from decision support tools to administrative processing. These community providers are able to brand themselves as part of the "Mayo Clinic Care Network" (albeit under a different logo than the Mayo Clinic).

Similarly, health plans have partnered with health systems to create new coverage options while the participating organizations remain independent and separate. Examples include Aetna working with Inova Health System in Virginia to jointly create a new health plan and Tufts Health Plan partnering with Steward Health Care System to create a new, affordable coverage option for Massachusetts employers. ¹⁵

How prepared is your organization for the movement toward convergence?

Getting started on your journey in a convergent world

Competencies and capabilities required to support a movement to convergence are outlined in the "maturity matrix" in Figure 5. The maturity matrix captures how an organization could consider movement between different states in readiness to implement a full convergence strategy.

Business structure - processes and systems

Every organization in these changing times of health care is facing major decisions relating to business structure. Senior executive teams, whether in the public or private sectors, for profit or not-for-profit, are focused on decisions relating to their strategic place and relevance in an undefined future state. At the same time, they are considering just how much they can change their existing organization to meet that vision. Providers, payers and others must decide if their current role as defined is sufficient for the future or if they should extend into broader collaborations, such as those involving accountable care or the bundling of services across the care continuum to care for high-risk populations. Will they seek to own all of the pieces, team with others or just contractually unite? What structures will best meet the needs of consumers and patients?

"In terms of core competencies, the biggest competency is the ability to have a conversation with the larger community – the ability to serve as an integrator of the community to bring folks together and say that this going to be best for the patient and then to figure out a way to do it."

Health Plan executive and community leader, United States

	Basic	Leading edge	Future state
Business structure – processes and systems	Processes and systems optimized to vertical business domain or function	Component-based design with limited reuse and shared services allowing for horizontal integration of business services and functions	Enterprise-wide component-based design with strong mix of strategically retained, sourced and shared services
Organizational leadership and expertise	Hierarchical organization and leadership model; expertise and management systems aligned to business domains	Ability to move resources across the organization to rapidly address new opportunities; strong crossorganizational teaming and resource sharing	Learning enterprise drawing expertise from inside and outside in dynamically formed teams to realize business vision and strategic initiatives
Data-driven enterprise	Traditional data warehouse and reporting capabilities	Expansive use of data to support decision making; near real-time access to insights and analytics	In-stream analytics including predictive and learning systems supported by wide range of structured and unstructured data
Financial alignment and transparency	In-house profit-and-loss metrics with vendor/contract management functions supporting external providers of services	Diversifying revenue streams with cost management developed in partnership with key strategic companies for project-level value creation	Shared financial model of risk and rewards with a sustainable model of governance that captures program-level and long-term value from win-win partnerships

Source: IBM Institute for Business Value and AHIP Foundation's Institute for Health Systems Solutions.

Figure 5: Maturity matrix for convergence.

At a functional level, will existing systems and processes adjust to be useful in the future state, or will they need to be replaced or supplied by a partner? Each of these basic decisions immediately affects how each organization must work through its own processes and systems reflected in this section of the maturity matrix. Retail clinics, for example, entering the health space initially are offering basic services but are looking to move into more primary care and home health services. The converging of these functions – retail with care across different settings – will affect traditional providers and payers from a teaming or competitive perspective, giving rise to new forms of contracting and ways of envisioning how care is delivered at the local community level.

Organizational leadership and expertise

Every organization has established a leadership team that supports its current brand and business model that has served them well to date. However, organizations must consider whether the team has the experience of perspective necessary to make decisions based on different potential states of the future, or whether the team's breadth of perspective can be expanded by looking outside traditional channels and making path-breaking new hires. This could include providers hiring executives from traditionally consumer-focused industries in an effort to improve patient experience or health plans hiring from providers and retailers.

Flexibility, foresight and creativity are increasingly important when traditional functions and markets converge to better meet consumer and patient needs. The direction of change is sometimes hard to predict, making it even more important for an organization to understand its core capabilities and how they can be melded to meet new market structures. For example, Ireland recently decided to align hospitals on a regional basis, while keeping the hospital entities separate. This was part of an effort to shift clinical procedures to those provider organizations viewed as best performing in relation to the procedures performed. Responding to this structural change and determining what it means for operations and competition requires flexibility in organizational leadership and expertise. ¹⁶

Data-driven enterprise

Data and, more importantly, insights from data have served as differentiators for businesses operating in the health industry. New data-driven insights into consumer behavior and the importance of the social context in which care is provided add a new dimension as outcomes and patient engagement move to the forefront. In an environment in which collaboration is increasingly important, a culture of transparency and openness in sharing data and insights to develop new standards and measures becomes key. Moreover, organizations seeking to collaborate beyond traditional boundaries will need a different set of capabilities. In particular, in a convergent word, the ability to meet consumer and patient expectations for data, mobility and real-time assistance – coordinated across the health care system – will become a core capability.

Financial alignment and transparency

In an industry where each entity has historically dealt with its own financial needs and success, new relationships will likely require new levels of transparency supported by cultural changes and new capabilities. While there may be commonalties, new necessary skills and competencies will likely need to reflect new geographies and coordination between organizations that previously operated without regard to the other's operations. Changes in payment models also place a premium on revaluating "cost" and "profit" centers in ways that promote better, more coordinated care and an organization's sustainability. The ability to demonstrate value through evidence and data will continue to intensify, given private and public sector imperatives (across commercial, Medicare and Medicaid programs in the United States, for example) to reduce health care spending growth rates.

Altogether, the maturity matrix outlines the kinds of capabilities and competencies required to realize the new definitions of value – best outcomes at best price. It is becoming clear that organizations that mature along these lines early will be best positioned to succeed.

Conclusion

Unfortunately, there are no complete roadmaps or templates from other industries that can be used to guide the health care industry through the changes it's experiencing. The industry is transforming in response to increasing demands for improved quality, costs and access, as well as an overriding focus to improve health and health care for consumers and patients. Industry convergence will accelerate over the next two to three years with clearly envisioned outcomes but many alternative paths to those outcomes. Industry change appears increasingly immutable, and the rapid introduction of new technologies only serves to accelerate innovation and business model change.

Industry leaders are rapidly establishing new business and care models through a combination of acquisitions, alliances, partnering or extensions of differentiated capabilities to create either direct or virtual converging businesses. Several constant foundation elements have become apparent:

- A culture and leaders willing to explore and establish new collaborations outside the four walls of the traditional enterprise
- An institutional capability to objectively observe the changes occurring and transform, modify or eliminate current capabilities that do not achieve future success
- Establishment of new competencies in idea, process and data sharing to create measurable transparency between health system participants
- An ability to create and manage shared financial alignment to benefit all parties
- Governance, discipline and persistence to see the new models through to maturity.

The ability of an organization, its partners and its vendors to respond and lead in a time of convergence is a function of preparedness. Pragmatic and immediate action on several strategic questions can serve as a starting point to this assessment:

- Can your organization demonstrate a culture of collaboration and transparency to support engaging with others in shared business models and approaches that benefit consumers and patients? Can you be persistent in unproven and unclear business ventures for which the final design and outcome may be uncertain?
- Are you able to identify and allocate the right expertise and resources to build new businesses, offerings or products distinct from your existing portfolio? Is your leadership team able to act broadly across many variables to create vision and roadmaps for new innovative models?

- Does your data environment introduce new sources of information, uncover insights and apply those insights to support new opportunities and collaborations?
- Are your existing business processes and systems designed for rapid innovation and introduction of new business services and offerings? Are your financial metrics and incentives aligned to create shared sustainable value across and outside your business?

Organizations that can harness these new and required constants while continuing to operate their core businesses effectively will be better positioned for success through the service of patients and consumers – regardless of the uncertainty of the final model. Those leaders understanding and embracing the industry's converging business models will also be called on for their ability to influence, design and execute the changes needed to transform the health care system. Policy makers similarly interested in encouraging change will be well served to understand these dynamics and consider the role of public policy in the context of convergence.

AHIP Foundation's Institute for Health Systems Solutions

The AHIP Foundation's Institute for Health Systems Solutions' mission is to advance solution-based, forward-looking, collaborative ideas focused on health systems change that improves the quality, affordability and availability of care and puts the health care system on more sustainable financial footing. To learn more about AHIP Foundation's Institute for Health Systems Solutions, please contact us at info@healthsystemssolutions.org.

For our Website please visit: http://www.healthsystemssolutions.org/

To stay informed and receive updates from us please visit: http://www.healthsystemssolutions.org/content/stay-informed

IBM Institute for Business Value

To learn more about this IBM Institute for Business Value study, please contact us at iibv@us.ibm.com. For a full catalog of our research, visit: ibm.com/iibv

Subscribe to IdeaWatch, our monthly e-newsletter featuring the latest executive reports based on IBM Institute for Business Value research: **ibm.com**/gbs/ideawatch/subscribe

Access IBM Institute for Business Value executive reports on your tablet by downloading the free "IBM IBV" app for iPad or Android.

About the authors

Barry Mason is the Vice President for the payer segment of the IBM Healthcare and Life Sciences Industry where he is responsible for strategy, market understanding, points-of-view, solution and technology offerings, and business partnerships. He also oversees the IBM Healthcare solution portfolio, which includes cross-IBM integrated solutions, software and services offerings, and IBM Research innovations. Barry has broad expertise in health plans and the converging health care industry and brings to his views a rich background from the retail and banking industries. He also serves on the Board of Directors for the IBM Twin Cities Habitat for Humanity project. Barry can be contacted at bkmason@us.ibm.com.

Gary Bacher serves as the Director for the AHIP Foundation's Institute for Health Systems Solutions (IHSS). In this capacity, he directs the IHSS's research agenda and its collaborative efforts. Gary focuses on public policy, legal/regulatory and strategic issues related to health system change. He brings a rich background, having worked with a range of health plan, provider, employer and governmental organizations. Gary received his Juris Doctorate degree from Stanford Law School and a Master's in Public Affairs degree from Princeton University's Woodrow Wilson School. Gary can be contacted at gebacher@healthsystemssolutions.org.

Harry Reynolds has 45 years of experience in the health care and technology industry. He is currently the Director of Health Industry Transformation for IBM Global Healthcare & Life Sciences Industry where he works with providers, payers, life sciences and governments on health policy transformation and strategy. He currently chairs the National Committee for Vital Health Statistics, is Chair on the Council for Affordable Quality Healthcare and instructs on the UNC School of Public Health PhD program. Harry has previously worked at Ohio State and UNC teaching hospitals and as a Vice President at Blue Cross and Blue Shield of North Carolina. Harry can be contacted at breynold@us.ibm.com.

Heather Fraser is a pharmacist with over 25 years of industry experience in pharma R&D, consultancy and community pharmacy. She leads the Healthcare and Life Sciences team at the IBM Institute for Business Value, where she has published extensively on the future of the healthcare and life sciences industry. She has also developed a set of viewpoints based on interviews with Life Sciences and Healthcare CxOs. Heather holds an MBA from Warwick Business School. Heather can be contacted at *bfraser@uk.ibm.com*.

Contributors

We would like to thank the following for their major contribution in development of this paper:

Sasha Simpson, Policy Consultant for Healthsperien Inspired Health Solutions

Joshua Booth, Policy Consultant for Healthsperien Inspired Health Solutions

Elizabeth Goodale, IBM Healthcare Industry Solutions Executive

Rob Merkel, IBM Global Business Services, Healthcare and Life Sciences Global Leader

Acknowledgments

We would like to express our gratitude for the many people who participated in the development of the paper including:

The research, production and distribution teams from both the AHIP Foundation and IBM

The various representatives from health plans, providers, employers and life science organizations who were interviewed for this study.

APPENDIX A: What's different now?

Acknowledgement that the current path is not sustainable

An apparent realization among health system participants that the status quo is not sustainable has sparked the full range of stakeholders to "get on board" with the idea of change. Change generally results in winners and losers, and in all cases leads to some uncertainty. Thus, in the past, even when all health system participants realized that inefficiencies existed, it has been difficult to get all necessary stakeholders to agree on the value of changes perceived as potentially disrupting the status quo. Now, however, stakeholders seem to realize the importance, or at least the inevitability, of change.

For example, the market is rejecting three major structural deficiencies that have resulted in the industry's systemic challenges:

- · The use of volume-based reimbursement models
- · A narrow focus on capacity for acute care to the detriment of wellness, prevention and population health strategies
- · An over-emphasis on expensive advances in medical technology that yield incremental improvements in outcomes with inadequate consideration to cost.

While change presents great challenge and seeking to move away from legacy models and ways of doing things can meet resistance from within and without, recognition that the status quo cannot continue appears to be a powerful agent of change creating the sense that this is a "now or never" moment. Health system participants increasingly perceive that the issue is no longer whether change will occur, but how and in what direction it will occur. The option is not between a comfortable status quo and a different future – but between different versions of the future. Some have noted that failure to succeed in meeting patient needs within the current system may inevitably result in a more centrally controlled and government-led system.

Greater activation of employers and consumers

While all health system participants seem to recognize the unsustainability of the status quo, employers, in particular, have reached the point where "push has come to shove" - where change has become an imperative. Seeing health care coverage taking up a growing portion of their budgets, employers are increasingly demanding costs be brought down. A major health system CEO noted that "employers are asking better, tougher questions and expecting better performance measures." As the primary funders of private health coverage in the United States, employers, particularly large employers, can have considerable influence on other health participants such as providers and payers. They also provide a natural locus of activity to pursue greater consumer/patient engagement.

Greater alignment across the public and the private sectors

Sustainable, system-wide change requires that both the public and the private sectors be aligned in terms of the overall goals and methods utilized.

Optimistically, the public and private sectors seem increasingly aligned about the goals and methods of convergence. In this regard, government can serve to promote change as much through its purchasing decisions and contracting methods as through regulation. For example, both governmental and private payers have shown an interest in moving away from fee-for-service, volume-based payments to population-based, outcome-driven approaches. Governmental innovations such as the Medicare Shared Savings Program and Pioneer accountable care organizations (ACOs) are running in parallel with private payer efforts to contract with ACO-type organizations on a shared savings or at risk basis.17

Increasingly, government agencies are working directly with private payers and other health system participants in implementing new initiatives. Innovations by the Center for Medicare and Medicaid Innovation (CMMI), such as the Community-based Care Transitions Program, are designed to provide models by which both public and private payers and providers can work to ensure better coordinated care. 18 Additionally, CMMI's Comprehensive Primary Care Initiative involves Medicare working with commercial health insurance plans to align the way each payer offers bonus payments to doctors for the coordination of care. 19 New approaches, such as reference pricing that focuses on converging transparency, evidence-based medicine and incentives, can give consumers greater say and control over how they access care, providing them greater satisfaction and engagement with the health care system.

Greater ability to share risk and align financial incentives

Another issue that has hampered past efforts at convergence has been difficulties that arise in attempting to align financial incentives among multiple parties. For example, past attempts to share risk between payers and providers have often involved fairly simple capitation arrangements, reflecting difficulties and technical limitations of the day in aligning payments with the underlying risk of the covered patient population and in measuring quality. While risk adjustment and related predictive modeling methodologies remain inherently imperfect, there have been significant advances in this area allowing for greater sophistication, flexibility and success in aligning the interests of payers and providers. Similarly, while there is still work to be done, significant advancements have occurred in the way quality is defined and measured, and adoption and use of quality measures has increased significantly to the point of becoming mainstream.

Improvements in technology and analytics

In the past, efforts at greater convergence were often hampered by the difficulty of sharing information across different health system participants in different care settings. While there is still a long way to go, there are signs that health information technology is to the point where it can realistically allow providers in different settings to communicate, collaborate and optimize patient care processes in real time or close to real time. By leveraging technology, care teams demonstrate the ability to reach across traditional boundaries and develop holistic care for a patient while encouraging greater patient/consumer engagement.

Similarly, in an era of rapidly advancing technology, it is recognized that organizations can gain greater understanding of their operational processes and their patient care through analytics. By turning information into insight, analytic applications can allow organizations to optimize planning processes, patient communication, workforce deployment and design.

References

- Weaver, B. "Research Proposal, Industry Convergence, Driving Forces, Factors, and Consequences." August 2007. Accessed May 24, 2013. http://www.nhh.no/Files/Filer/institutter/for/conferences/nff/papers/weaver.pdf
- NHS Direct Website. Accessed May 24, 2013. http://www.nhsdirect.nhs.uk/; "Independent Review of the UK Response to the Influenza Pandemic." NHS Direct. July 2010. Accessed June 4. http://www.nhsdirect.nhs.uk/About/MinutesOfMeetings/~/media/Files/BoardPapers/BM_papers_2010/July2010/Independent_Review_of_the_UK_Response_to_the_Influenza_Pandemic.ashx
- 3 Wolf, A. "UNC Health, BCBS Plan Joint Facility." *Raleigh News & Observer*. January 11, 2011. http://www.newsobserver.com/2011/01/11/912442/unc-health-bcbs-plan-joint-facility.html; Carolina Advanced Health Website. http://www.carolinaadvancedhealth.org/
- 4 "IBM and Spain's Regional Extremadura Government launches EPS." eHealth. Accessed May, 24, 2013. http://ehealth.eletsonline.com/2009/06/ibm-and-spains-regional-extremadura-government-launches-eps/
- Meyer, H. "Changing the Conversation in California About Care Near The End of Life." *Health Affairs*. Accessed May 24, 2013. http://content.healthaffairs.org/content/30/3/390.extract
- 6 "About Apollo Hospitals Group." Accessed May 28, 2013. http://www.apollomunichinsurance.com/apollo-hospital-group.aspx
- 7 "Apollo Hospitals to adopt retail model to expand healthcare." *Business Standard*. February 20, 2012. Accessed May 28, 2013. http://www.business-standard.com/article/companies/apollo-hospitals-to-adopt-retail-model-to-expand-healthcare-112022000050_1.html

- A 1975 article published by RAND looked critically at many of the assumptions and goals underlying the HMO Act. HMOs, it was assumed, would "control cost, assure quality of care, and assure health care access," as well as provide for "broad-based coordination" among health system participants; Uyehara, E. and M. Thomas. "Health Maintenance Organization and the HMO Act of 1973. "The RAND Corporation. 1975. Accessed May 24, 2013. http://www.rand.org/content/dam/rand/pubs/papers/2009/P5554.pdf
- 9 Robinson, J.C. "The End of managed care." The Journal of the American Medical Association. May 2001. Accessed June 4. http://jama.jamanetwork.com/article. aspx?articleid=193869
- 10 Rawlings-Sekunda, J., D. Curtis and N. Kaye. "Emerging Practices in Medicaid Primary Care Case Management Programs." National Academy for State Health Policy. June 2001. Accessed May 24, 2013. http://aspe.hhs.gov/ health/reports/pccm/report.pdf
- 11 Sia, C., T. Tonniges, E. Osterhus and S Taba. "History of the Medical Home Concept." *Pediatrics*. 2004; 113;1473 Accessed on May 24, 2013. http://pediatrics. aappublications.org/content/113/Supplement_4/1473.full. pdf
- 12 Alexander, A. "Target Clinics, Duke Medicine enter new relationship for four new clinics in N.C." *Drug Store News*. August 20, 2012. Accessed May 24, 2013. http:// drugstorenews.com/article/target-clinics-duke-medicineenter-new-relationship-four-new-clinics-nc
- 13 Fronstein, P. "Private Health Insurance Exchanges and Defined Contribution Health Plans: Is it Déjà vu All Over Again?" July 2012. http://www.ebri.org/pdf/briefspdf/ EBRI_IB_07-2012_N0373_Exchgs2.pdf

- 14 Mayo Clinic Care Network. Accessed May 24, 2013. http:// www.mayoclinic.org/care-network/
- "Aetna and Inova Health System Establish New Health Plan Partnership in Northern Virginia." Aetna News Hub. June 2012. Accessed May 24, 2013. http://newshub.aetna.com/press-release/corporate-and-financial/aetna-and-inova-health-system-establish-new-health-plan-partnership; "Steward and Tufts join on care plan." Boston.com. September 2011. Accessed May 24, 2013. http://www.boston.com/business/healthcare/articles/2011/09/17/steward_andtufts_team_up_on_a_new_insurance_plan/
- 16 Compton, J. "Transforming your care: A Review of Health and Social Care in Northern Ireland." December 2011. Accessed June 4, 2013. http://www.dhsspsni.gov.uk/ transforming-your-care-review-of-hsc-ni-final-report.pdf
- 17 Delbanco, S. "Promising Payment Reform: Risk-Sharing with Accountable Care Organiztaions." The Coomonwealth Fund. July 2011. Accessed June 4. http://www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2011/Jul/1530Delbancopromisingpaymentreformrisksharing%202.pdf
- "Community-based Care Transitions Program." CMS.gov. Accessed June 4, 2013. http://innovation.cms.gov/ initiatives/CCTP/
- 19 "Comprehensive Primary Care Initiative." CMS.gov. Accessed June 4, 2013. http://innovation.cms.gov/ initiatives/comprehensive-primary-care-initiative/



© Copyright IBM Corporation 2013

IBM Global Services Route 100 Somers, NY 10589 U.S.A.

Produced in the United States of America June 2013 All Rights Reserved

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or TM), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at **ibm.com**/legal/copytrade.shtml

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.



Please Recycle