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Moving at the Speed of Health Care™

Intersection of Health and the Health Care Workforce

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About This Report

This report integrates current health care market research with findings from the national forum Moving at the Speed of Health Care™: "Intersection of Health and the Health Care Workforce" held in Washington DC, in July 2015. Co-sponsored by the University of Phoenix® College of Health Professions and Sodexo, in collaboration with STEMconnector®, the daylong forum convened experts from multiple segments of the health care industry to share their perspectives and best practices for keeping pace with the breakneck speed of change in the health care system. The forum's 30 speakers represented senior leadership in such diverse fields as clinical care (nonprofit and retail), pharmaceutical research and development, health care information technology, health policy and higher education. Their goal — and the goal of this report — is to shed light on how rapid shifts in the delivery and consumption of health services are influencing the educational and professional demands on the health care workforce.

As part of the Moving at the Speed of Health Care™ series published by the University of Phoenix® College of Health Professions, this report is designed to benefit those who educate, employ, manage and develop the health care workforce. By providing research-based insights, practitioner perspectives and actionable recommendations, the report is intended to help stakeholders be more effective at building and sustaining a workforce that can perform with agility, quality and efficiency while "moving at the speed of health care."

Executive Summary

Despite the vastness and complexity of the U.S. health care system, there is striking consensus among health care leaders on one key issue: the rapidity of change within the industry. The speed of change puts enormous pressure on the health care workforce to continually adapt to evolving needs.

As leaders advocate a new paradigm of care that is quality-driven, technology-infused and patient-centered, health care professionals must acquire new capabilities to accommodate:

– New delivery models
– New technologies
– New payment structures
– Growing demographic diversity
– Evolving consumer expectations
– Continuing medical discoveries

Three industry trends — the growth of retail health, the rise of telehealth and changing perceptions of quality — require the health care workforce to expand its scope of practice while demonstrating increased:
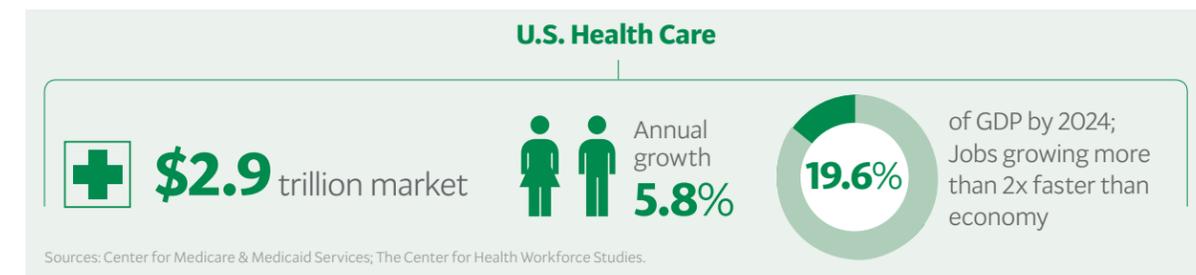
– Technological proficiency
– Analytical abilities and data management
– Communication and interpersonal skills
– Cultural competence
– Innovative thinking
– Agility and adaptability

Developing the future health care workforce requires the collaboration of many stakeholder groups, including educators, employers, credentialing organizations, industry associations and policymakers. Recommendations for action are provided as guidelines for educators and employers invested in the preparation and advancement of industry talent.

Introduction
Speed of Change and Market Growth

Although the U.S. health care system is often criticized for being fragmented and disjointed, there is striking consensus among leaders on one key issue: the rapidity of change within the industry. Technological, demographic and regulatory shifts have spurred this change for decades, but the passage of the Affordable Care Act in 2010 and its subsequent implementation have kicked change into high gear. This report sheds light on what health care experts have identified as the key trends and challenges in the industry, and how these developments are requiring a transformation of the health care workforce.

U.S. Health Care

$2.9 trillion market

Annual growth 5.8%

19.6% of GDP by 2024; Jobs growing more than 2x faster than economy

Sources: Center for Medicare & Medicaid Services; The Center for Health Workforce Studies.

A look at key market statistics helps to illustrate health care's rapid pace of growth:

– Health care spending comprised 17.4% ($2.9 trillion) of the U.S. GDP in 2013 and will grow by about 5.8% annually, to a projected 19.6% of the GDP by 2024.[1]

– Due to the Affordable Care Act, about 16.4 million previously uninsured patients are now enrolled in health insurance and have expanded access to care.[2]

– To meet the rising demand, health care job growth is expected to reach 30% for the period 2010–2020; that's more than twice the growth rate of the general economy.[3]

As the demand for health services increases, so does the proliferation of new health care technologies and delivery models. Again, a few data points illustrate these trends:

– 52% of hospitals offer some form of telehealth — the delivery of health services via telecommunications and other remote technologies; an additional 10% are preparing to use telehealth in the future.[4]

– 76% of patients would rather interact with their health care providers remotely than in person.[5]

– There are about 1,800 retail health care clinics in the U.S.; together, they accommodate more than 10 million patient visits per year.[6]

These new technologies and delivery models — and the diverse financial and staffing structures that must support them — add complexity to a health care system already struggling with enormous challenges. A summary of the industry's top challenges — as identified by leaders in multiple health care subsectors — can be found on p. 6.

[1] Centers for Medicare & Medicaid Services, "National Health Expenditure Projections 2014–2024: Forecast Summary," https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/proj2014.pdf.
[2] U.S. Department of Health and Human Services, "The Affordable Care Act is Working," June 24, 2015, http://www.hhs.gov/healthcare/facts/factsheets/2014/10/affordable-care-act-is-working.html.
[3] The Center for Health Workforce Studies, Health Care Employment Projections: An Analysis of Bureau of Labor Statistics Occupational Projections: 2010–2020, March 2012, http://www.healthit.gov/sites/default/files/chws_bls_report_2012.pdf.
[4] American Hospital Association, AHA Annual Survey, Health Information Technology Supplement, 2013, as cited in American Hospital Association, "The Promise of Telehealth for Hospitals, Health Systems, and Their Communities," TrendWatch, January 2015.
[5] Cisco, as cited in F. Pennic, "Survey: 76% of Patients Would Choose Telehealth Over Human Contact," HIT Consultant, March 8, 2013, http://hitconsultant.net/2013/03/08/survey-patients-would-choosetelehealth-over-human-contact/. Cf. Anthem survey data cited in NTT Data, Trends in Telehealth, 2014, http://americas.nttdata.com/Industries/Industries/Healthcare/~/media/Documents/White-Papers/Trends-in-Telehealth-White-Paper.pdf, which indicates that 74% of consumers would use telehealth. See also E. Wicklund, "Patients: Telehealth Tops the Doctor's Office," mHealth News, January 22, 2015, http://hitconsultant.net/2013/03/08/survey-patients-would-choose-telehealth-over-human-contact/. Citing a Harris Poll survey, Wicklund states that more than 50% of patients would use telehealth.
[6] D. Bachrach, J. Frohlich, A. Garcimonde, and K. Nevitt, Building a Culture of Health: The Value Proposition of Retail Clinics [Report by Manatt Health in partnership with the Robert Wood Johnson Foundation], April 2015, https://www.manatt.com/uploadedFiles/Content/5_Insights/White_Papers/Retail_Clinic_RWJF.pdf.

Top Health Care Challenges

Access to services

About 20% of Americans live in rural areas without local health care access. [7]

Increasingly, health care access means not just the ability to receive care when needed, but also the availability of preventive health and community wellness services that keep people healthy in the first place.[8]

Coordination of care

For optimum outcomes, health care services need to be coordinated across an ever- wider range of venues, stakeholders and technologies. The care of an elderly patient, for example, must be coordinated among points of access (doctor's office, hospital, specialty clinic, nursing home, hospice) and among types of providers (family physician, hospital staff, long-term care providers, hospice staff). In addition, patient records must be accessible to providers who use various health information systems, and relevant communication must be coordinated among additional stakeholders involved in the provision of care (family members, payers and social workers).

Balancing quality and cost

As consumers and regulatory agencies insist on higher levels of quality — whether measured in terms of patient satisfaction or clinical outcomes — the pressure to meet quality standards while containing costs remains a challenge. In addition, increased volumes of available data make measuring quality more complex — and increased patient empowerment means that quality must also be viewed through the lens of the patient's experience.

Mapping quality measures to provider pay

In addition to the complexity of measuring quality according to new standards — which may vary by community, by patient type and by level of care — health care payers are faced with the challenge of correlating quality to provider reimbursement. New financial models are required to capture these correlations consistently and equitably.

Integrating new technologies

Clinical technologies affect the immediate provision of care, but health information and communication technologies influence every aspect of the health care system — from service delivery and payment to staff administration and vendor management. The coordination of stand-alone systems places new demands on health care organizations to consolidate and manage huge volumes of information.

Managing diversity and consumer expectations

Increased demographic diversity among patients puts new pressures on the industry to customize services for specific populations. In addition, consumers have greater access to health information than ever before — and with that comes increasing health literacy and a new set of patient expectations for health care quality and service.

Adapting workforce skills

The current health care workforce must quickly learn and continually adapt an ever-wider array of professional skills — technical, clinical, interpersonal and cultural. This puts new demands not just on individual workers, but also on the educational institutions and workplaces where health care professionals must develop, refine and continually refresh their skills.

"We need to focus on providing the right care, in the right location, at the right time, with the right outcome. This requires having a workforce with new sets of analytical, relational and problem-solving skills."

— Gregory A. Adams, Group President and Regional President of Northern California, Kaiser Foundation Health Plan and Hospitals

"Data analytics requires a new breed of health care professional — one who can analyze and integrate a huge amount of unstructured data into the structured data of a clinical environment — and do this with rigor in real time."

— William H. Carson, MD, President and CEO, Otsuka Pharmaceutical Development & Commercialization, Inc.

Health Care Disruption Meets Workforce Innovation

Amid the health care industry's challenges, leaders are advocating a new paradigm of care that is quality-driven, technology-infused and patient-centered, as illustrated in the following table.

The Shifting Health Care Landscape

Shifting from …	To …
Volume-driven health systems	Quality-driven health systems
Managing individual patient conditions	Managing populations and collective health risk
A focus on hospital-based care ("heads in beds")	An emphasis on community health and wellness ("keeping people healthy where they live")
Fee-for-service delivery models	Value-based care
Concentrated financial risk	Shared financial risk
Provider-driven care	Patient-centered care
Limited consumer choice	Expanded consumer choice and expectations
Limited consumer access to health information	Greater consumer access to health information and increased health literacy

The accelerated shifts in technology, demographics, regulatory structures and delivery models have put increasing pressure on educators and employers to develop a health care workforce that can demonstrate agility and acquire a continuously evolving set of professional skills. A summary of how health care trends are influencing workforce development is shown in the table on p. 8– 9.

"We need to understand and expand the workforce skill sets that are available locally, so that we can develop a culturally competent talent pool to transform health care in the context of the community being served."

— Michael Taylor, Senior Vice President, Delivery System Transformation, Aon Hewitt

"As we shift to outcomes-based care that relies on extensive data collection and analysis, we will also need workers and systems that can safeguard the privacy and security of that data."

— Nicole Gardner, Vice President, U.S. Federal Healthcare Industry Leader, IBM Global Business Services

"Health care professionals must demonstrate not just credentials, but intangible skill sets such as ethical decision making and the ability to promote a performance-improvement culture."

— Cheryl Feldman, Executive Director, District 1199C Training & Upgrading Fund

Health Care Trends Influencing Workforce Development

Key Trends	Key Aspects	Strategic Approaches	Implications for Workforce Development
New Delivery Models	**Getting Proactive** Shifting from episodic and acute care to community wellness and population health ("keeping people healthy where they live")	– Directing patients to facilities where they can receive the most appropriate care; keeping patients out of the hospital – Serving diverse populations, including socially and economically challenged groups – Coordinating care across delivery points and areas of life — e.g., providing schools access to children's health records	– Must build capabilities to use **predictive analytics** to determine the most appropriate venue and timing to deliver care – Must build **cultural competence** and understanding of local community health needs — e.g., how violence or the inability to exercise outdoors impacts overall community health
New Technologies	**Going Digital** Expanding electronic communications and health information	– Providing telehealth services to increase access and immediacy of care – Capturing health data in real time and integrating data into service delivery	– Must have **technological proficiency** with communication and health information systems –Must demonstrate **remote customer service skills** – Must **filter and apply health data** in real time
New Payment Structures	**Sharing Risk** Spreading accountability and financial risk across stakeholder groups	– Creating equitable cost-sharing and risk-sharing models – Promoting cross-stakeholder dialogue and coordination of care	– Must develop **financial and business acumen, strategic problem solving and modeling** – Must improve **relational skills, consensus-building and negotiation abilities**; must develop more sophisticated communication skills
Growing Demographic Diversity	**Embracing Differences** Accommodating multiple generations and increasing diversity among patients and health care workers	– Focus on diversity and inclusion, respecting gender, generational, racial, ethnic and cultural differences – Integration of diverse stakeholder perspectives – Leadership across generations and cultural boundaries – Focus on continuous learning, adaptation and cultural mobility	– Leaders must have **motivational skills** to build a culture of compassion and continuous learning among providers trained in various delivery paradigms and cultures — e.g., differing levels of comfort with technology, differing expectations of work/life balance – Workers must demonstrate **cultural competence** toward co-workers and increasingly varied patient populations
Evolving Consumer Expectations	**Empowering Patients** Increasing patient responsibility and choice	– Using data to be more proactive and targeted in patient communications – Accommodating varying levels of consumer health literacy	– Must develop analytical, communication and relational skills – Must develop **skills to educate populations to improve health care literacy and food literacy**

Health Care Trends Influencing Workforce Development (continued)

Key Trends	Key Aspects	Strategic Approaches	Implications for Workforce Development
Changing Quality Standards	**Raising Quality, Lowering Cost** Focusing on improving outcomes and affordability	– Managing large amounts of data at various levels (patient, organization, community, population) – Managing professional and organizational reputations through new technologies – Shifting components of some roles to others — e.g., physicians delegating some duties to other providers such as pharmacists	– Must have mechanisms and **skills to safeguard privacy and security of data** – Must have **leadership skills** to act on the data — e.g., managing improvements, eliminating or adding services – Must be **able to use social technologies and new communication media** to build positive relationships with patients – Must be able to **work "at the top of one's license"**
Continuing Medical Discoveries	**Staying Current** Updating scopes of practice to include new techniques and protocols	– Investing in organizational infrastructures and processes that adapt to advances in the field – Setting strategic direction to accommodate medical breakthroughs and new scientific evidence – Upgrading equipment and protocols to reflect most current practice standards	– Must adopt a **mindset of continuous learning and change** – Must be willing to **embrace innovation and explain new concepts and approaches** to others – Must continually **redefine one's scope of practice** and ways of doing things

"With multiple generations in the workforce, there is a growing demand for leaders who can build a culture of inclusion while motivating diverse individuals to work toward a common mission."

— Michael Norris, Chief Operating Officer and Market President, Sodexo

"To deliver effective care, the health care workforce needs to reflect the cultural diversity of the community it serves. Cultural competence is an essential professional skill."

— Craig A. Kennedy, MPH, Executive Director, Association of Clinicians for the Underserved

Retail Health and Telehealth: Access and Convenience

Amid increasing consumer and legislative demands for expanded health care access and higher quality, new delivery methods such as retail health and telehealth are helping to improve accessibility and patient convenience while still providing the "personal touch" offered by a traditional doctor's visit.

Retail Health Snapshot

Retail health care — the provision of care at in-store clinics (e.g., within retail pharmacies) — has exploded into a more than $1 billion market. With more than 10 million patient visits to store-front clinics in the United States per year, the retail segment comprises only 2% of the U.S. health care market; yet it is expected to grow by 25%–30% annually. The national pharmacy chain CVS, with approximately 1,000 clinics, is the largest provider in the retail space, and its plan to take over the in-store pharmacies of the Target retail chain creates opportunities for expansion in the retail sector.

Despite consumer misperceptions and concerns about the quality of retail health care, early indicators point to its potential to have a positive impact on patient access, clinical quality and affordability. The evolution of the retail health model also demands a shift in workforce qualifications and readiness, as shown in the table on p. 11.

"To create maximum value from our human capital, reduce costs and improve outcomes, health care clinicians must work 'at the top of their license,' providing services that require their highest skill sets. That means greater responsibilities for caregivers in physician-support roles."

— David Betts, Principal, Strategy & Operations, Life Sciences and Health Care, Deloitte Consulting LLP

How Retail Models Influence the Health Care Workforce

Retail models focus on …	Retail clinics must …	Retail health workers must …
Convenience and lower costs	– Provide drop-in visits to reduce scheduling barriers and patient wait times. – Replace primary care physicians with physician extenders (nurse practitioners and physician assistants) to lower costs. – Balance cost with speed of service and level of support.	– Practice "at the top of their license" — e.g., nurse practitioners and physician assistants must provide primary care. – Offer the same style of customer service that consumers expect elsewhere in the retail outlet (in addition to clinical empathy and support).
Changing consumer perceptions of quality	– Use data to demonstrate outcomes over time. – Educate consumers about accessing the right venue for the right level of care.	– Create, analyze and apply metrics for quality in the retail setting. – Market and communicate new delivery models in consumer-friendly ways.
Partnering with other health care sub-sectors to coordinate services and provide seamless access	– Collaborate with hospitals, primary physicians and specialists, long-term care facilities, medical supply vendors, insurers, etc.	– Coordinate services among external organizations; communicate with patients and workers in multiple health care professions.
Offering a small suite of services that are geographically scalable	– Emphasize efficiency and quality of most commonly needed services.	– Implement standardized practices. – Provide paraprofessional services (e.g., via pharmacy technicians, medical coders, medical assistants) and take on expanded responsibilities within those roles. – Take on lower-level tasks from the highest-skilled clinicians to maximize providers' efficiency.

Telehealth Snapshot

Digital technologies are disrupting traditional modes of patient-provider interaction. Surveys show the majority of Americans would rather use telecommunications to interact with their provider than have a traditional office visit.[9] Video conferencing, live chats, emails and even crowdsourced diagnoses can facilitate care when the provider is geographically removed from the patient.

Telehealth — the provision of health services remotely via technology — offers a particular advantage in rural communities, since it both expands patients' access to care and increases providers' ability to serve a larger volume of patients. Remote monitoring of chronic conditions can improve clinical quality by enabling real-time visibility into the patient's condition, allowing a more timely clinical response.

[9]See footnote 5.

The rise of telehealth places new demands on the health care workforce to:

– Become proficient in current and emerging communication technologies, including social media platforms for professional networking and collaboration.

– Use virtual communication skills, such as teleconferencing, to replicate the "personal touch" of face-to-face contact.

– Assimilate and filter large volumes of electronic health information.

– Integrate digital data with new information provided in real time by the patient.

The field of telehealth will open up new health information technology occupations such as bio-informatics specialists, medical registrars and new types of medical coders; these emerging occupations may take years to capture in the U.S. Department of Labor's Standard Occupation Classification (SOC) codes. [10] The supply and demand for these workers is still unknown.

"Health information technology does more than tell us about a patient's health history or condition. It also contains valuable data that can help leaders make better decisions about how to manage the health care workforce — whether by shifting staff roles, adjusting staffing levels or maximizing productivity."

— Michelle M. Washko, PhD, Deputy Director, National Center for Health Workforce Analysis, Health Resources and Services Administration, U.S. Department of Health and Human Services

Ensuring Quality in a Changing Environment

Despite increasing consumer and regulatory demands for clinical quality, and the efforts by national and international groups to establish quality standards, an ongoing challenge in the health care industry is the lack of a common definition of quality. [11] A variety of stakeholders — patients, providers, payers, supply vendors and regulators — have a stake in defining and measuring it for their own purposes.

Not only do quality standards differ by stakeholder — see schematic on p. 14 — but benchmarks also vary by community. For example, reducing the rate of infant mortality in a region of largely uninsured patients may seem like a significant accomplishment, even if the local average is still too high by national standards. Increasing access to services for first-time patients in an economically challenged community may substantially drive up costs in the short term, even though long-term outcomes improve.

Establishing common metrics for quality will require the consensus of diverse stakeholders to define measures that reflect the entire health system, not just its most familiar figures (physicians) and institutions (hospitals). For example, primary care measures must account for the condition of the patient upon entry into the system, the patient's insurance status and the patient's level of health literacy.

Quality measures must also take into account "non-outcomes" as well as outcomes. Examples of non-outcomes are a lack of medical complications, a lack of adverse reactions and a lack of wasted resources. In addition, metrics must be risk-adjusted, depending on individual and community factors, without obscuring significant disparities in outcomes. Risk adjustment may affect not just how quality is rated, but also how services are reimbursed.

A comprehensive approach to quality measurement must capture service inputs as well as clinical outcomes. Service inputs such as wait times, noise level and courtesy of the provider affect the patient's immediate experience, while clinical outcomes can have a more lasting effect on the patient's quality of life, the health of the community and costs to the health system at large. Health leaders will need to reach agreement not only on what constitutes the right processes and protocols, but also what falls within an acceptable range of possible outcomes, given patient and community variances.

"Imagine a 15-year-old with a cognitive impairment, an NBA player with depression, and Stephen Hawking. They all fall under the category of someone with a disability, but their health care needs are widely diverse. Now add in women who need prenatal care, older adults and so on, and you'll find the spectrum of conditions is so broad that it is impossible to apply the same definition of quality to everyone in the system."

— Leonardo Cuello, Director, Health Policy, National Health Law Program

[10] Department of Labor, Bureau of Labor Statistics, Standard Occupational Classification, http://www.bls.gov/soc/.
[11] See National Quality Forum, http://www.qualityforum.org/what_we_do.aspx, and International Consortium for Health Outcomes Measurement (ICHOM), http://www.ichom.org/why-we-do-it/.

Examples of Differing Perceptions of Health Care Quality

Am I following standard protocols?

Am I matching the level of service to the patient's insurance coverage?

Will the clinical outcome be in acceptable range, given community benchmarks?

What is the legal risk of managing this patient in this way?

What is the financial risk of serving the patient in this way?

Provider

How am I treated?

How comfortable is the experience?

What is the noise level?

What is my pain level?

How is communication handled?

How easy is it to receive services?

How invested is the provider in my care?

Patient

Impact of Quality Measurement on the Health Care Workforce

The quality mandate affects the training and practice of the health care workforce. Providers will need to be trained to generate different quality measures in different settings, such as primary care, specialty care and long-term care. In addition, health care workers cannot rely solely on clinical data to measure quality, but must also take the patient's perception into account. Health care professionals must be able to sort through the available data to determine what is meaningful for the patient and the community, then apply that data in making decisions about service and care. The data may indicate, for example, that the patient requires the services of a mental health professional or a dietician in lieu of a primary care doctor. Finally, health care workers must understand the quality measures in the context of their impact on the overall health care system. For example, increasing the number of patients with advance directives on file may not address the patients' immediate care needs, but improves the system's ability to serve the patients in the long term.

Health Care Professionals Need New Capabilities to Ensure Quality

Generating clinical data at various points of care

Understanding patient data within the context of community health

Balancing quality and cost

Health care professional

Integrating and acting on available data

Incorporating patient perceptions of quality

Case Studies

Health Care Apprenticeship Model

The shortage of qualified health care workers has become especially acute for emerging roles such as telemedicine coordinator or data analyst. The speed at which these roles are emerging creates challenges for educational institutions and credentialing organizations to continually re-align their training to workforce demands.

To help the workforce keep pace with employers' needs, the Service Employees International Union (SEIU) and the American Federation of State, County and Municipal Employees (AFSCME) are creating the National Center for Health Care Apprenticeships in collaboration with the U.S. Department of Labor. Thirty employers and six states have signed on to participate in what will become a nationwide effort. The Center helps employers promote on-the-job learning to accelerate employee skill development; in an apprenticeship, classroom instruction is paired with on-the-job learning. Apprenticeships offer a workplace-based counterpart to the preceptor model common in health care practitioner education.

The Center is working with educational institutions and employers to define standard job titles and competency requirements and to align educational curricula with the required skill sets for job roles nationwide. For example, a frontline health care worker advancing through technical training linked to college credits and degree programs would need to demonstrate a standard set of competencies at each level. Participating employers are excited about the potential impact of standardization on improving talent recruitment and development.

"Learning Agility": North Shore-LIJ Health System

Innovation can be every employee's business. That belief helps leaders at North Shore-LIJ Health System in New York to encourage learning agility and creative problem solving at all levels of the organization.

Case in point: A hospital environmental services worker at North Shore-LIJ developed a unique way to improve the efficiency of cleaning patient rooms. The worker had been removing curtains from the rooms for sanitation purposes. However, recognizing that only the edge of the curtain tended to get dirty (from handling), the worker developed a vinyl strip that could be applied to the edge. Cleaning the curtain then required only wiping the strip, not removing the entire curtain — a solution that saved time and money while minimizing disruptions to the patient and caregivers.

This example highlights the importance of developing a culture of curiosity, accountability and innovative thinking among workers at every level.

> "Employers need to harness the skill sets of employees at all levels to innovate and come up with new solutions."
>
> — David Gill, Director, Talent Management and Engagement, North Shore-LIJ Health System

Online Communities of Practice Advance Learning at VHA

Veterans Health Administration (VHA) employees are accustomed to continuous learning and exchanging information through formal corporate training programs. Even so, the agency's 240,000 employees were finding that they needed a faster way to learn new skills to keep up with the pace of their jobs.

The chief learning officer of VHA's Employee Education System instituted the development of employee-driven online communities of practice using simulations and video technology to share knowledge throughout the organization. "Simulation champions" at multiple sites in the organization are responsible for collecting and curating employee-generated video tutorials and publishing them on the organization's internal website. Communities of interested employees discuss ideas and share best practices via online dialogue and tools. The champions serve as moderators.

"These communities are self-forming, and they atrophy over time," says Volney James Warner, Chief Learning Officer of VHA's Employee Education System. "But once you have an online vehicle for emerging communities of practice to gather and interact, you can support them with a learning system."

VHA integrates gaming technology into the online simulations to promote employee engagement in the learning. The gaming functions can also help to make learning more efficient by gauging learners' level of proficiency in real time and directing them to online activities that develop new skills rather than repeating what they already know.

Providing HIT Training Across Staff Roles

When Bellevue College began offering basic health information technology (HIT) training in an online format to affiliates of the Veterans Health Administration (VHA), only a couple hundred VHA employees were expected to enroll. Instead, 1,000 signed up, and 1,000 were waitlisted when Bellevue's enrollment system reached its maximum capacity for the training.

The overwhelming response by VHA staff to the learning opportunity demonstrates the power of employer-education partnerships to fill an urgent workforce development need while reinforcing a workplace culture of inclusiveness and learning agility.

"The training roster showed enrollees from every imaginable staff role at the VHA — from chiefs of staff to patient assistants and admitting specialists," says Patricia Dombrowski, Executive Director of the Life Science Informatics Center at Bellevue College in Washington state. VHA medical staff members participated in the training on their own time, without compensation.

> "Online education, including clinical simulation technology, will continue to play a critical role in preparing the large volume of highly qualified workers needed for the health care jobs of the future."
>
> — P. Jon White, MD, Deputy National Coordinator, Office of the National Coordinator for Health Information Technology, U.S. Department of Health and Human Services

Case Studies

The training's success reinforces the demand for health information technology skills across virtually all health care roles — and provides proof that employees have an appetite for targeted, efficient skills development, even in areas outside their specialty.

Case Study on Community Health: Sinai Health System

"Our focus on 'keeping people healthy where they live' means a huge shift in how we deliver care and who provides that care," says Karen Teitelbaum, President and Chief Executive Officer of Sinai Health System in Chicago. Sinai serves a socioeconomically challenged community with a high proportion of pediatric asthma patients. Teitelbaum and her staff are working to transform outdated community perceptions of the emergency room as a primary point of care.

"If a young boy suffers an asthma attack in the middle of the night, the mother — usually a single parent — takes the boy and all his siblings to the emergency room," says Teitelbaum. "The next day, all the children are too tired to go to school, and the mother stays home from work. Essentially, the community suffers."

Focusing on community health allows a more proactive approach to managing asthma and other chronic conditions — but also engages a different set of care providers with diverse skill sets.

"A community health worker visits the patient's home to understand what factors may be contributing to the asthma," says Teitelbaum. "Is there a smoker at home? Is there a pet? Is there a rodent infestation? The community health worker may need to work with the landlord to address environmental issues, or may need to educate the patient on how to take asthma medication properly."

Taking a community-oriented approach ultimately helps to lower overall health care costs by reducing the need for higher levels of costlier clinical care. And, says Teitelbaum, "It also leads to better outcomes and improved quality of life for patients."

Preparing Future Health Care Workers and Leaders

Developing the future health care workforce requires the collaboration of many stakeholder groups, including educators, employers, credentialing organizations, industry associations and policymakers. For the purposes of this report, we have distilled insights from representatives of all of these groups to develop recommendations for the two key constituencies listed in the table on p. 20. Although the recommendations are targeted for specific groups, leaders generally advocate a more comprehensive, collective approach that involves not just bilateral partnerships, but coordination across all affected stakeholder groups. These recommendations are offered as guidelines.

"By partnering with employers in every facet of the health care system — providers, payers, health technology firms, pharmaceutical companies, community health organizations and policymakers — we can help prepare a highly skilled workforce to bridge gaps in this often fragmented industry."

— Tamara Rozhon, EdD, Executive Dean, College of Health Professions, University of Phoenix

"Systematic collaboration is needed between educational institutions, health systems and credentialing organizations to adapt licensure requirements to reflect new scopes of practice and health care delivery systems. The goal of health care practitioners must not be simply to address episodic health care needs, but to facilitate ongoing individual and community behaviors that promote wellness and prevention."

— Roy Swift, Executive Director, Workcred, an affiliate of the American National Standards Institute (ANSI)

Recommendations

For Educators	For Employers
To improve workforce preparation and development:	**To improve workforce effectiveness:**
– Accelerate the cycle of curriculum development and delivery to accommodate the pace of industry change.	– Participate in a national effort to standardize health care roles and credentials; determine how to customize standard roles to fit the needs of the local health system or community.
– Shift the focus from training students for traditional roles (physician, nurse) to helping them develop transferrable competencies that cut across professions and health care subsectors; this will help prepare graduates for emerging occupations.	– Reduce barriers to entry for women and diverse populations in health information technology; partner with affinity groups and nonprofit organizations to increase workforce diversity at a scale that mirrors the demographics of the local community.
– Support the development of professional credentials as well as broader cultural, interpersonal and decision-making skills that promote more effective interaction with consumers.	– Advance workplace learning through online communities of practice; provide structured opportunities for employees to continually learn on the job, such as job shadowing and job rotation.
– Integrate technological proficiency into the learning process, emphasizing the development of digital communication and health information technology skills.	– Align HR strategy with business goals; have employees create and implement individual development plans aligned with organizational goals.
– Provide simulation technology to immerse students in lifelike work environments to develop or enhance job skills.	**To improve leadership development:**
– Encourage learning agility through cross-disciplinary offerings that emphasize transferrable problem-solving skills.	– Implement programs to help leaders build skills in innovation, business transformation, managing and acting on complex data, and building consensus across stakeholder groups.
– Partner with employers to provide students with apprenticeship opportunities.	– Create incentives for leaders to demonstrate change-hardiness, vision and the ability to build partnerships with external stakeholders.
– Create scalable learning offerings to help large volumes of students quickly acquire new skills or refresh existing credentials.	– Bring in talent from other industries (such as retail and pharmaceutical manufacturing) to expand internal capabilities in areas such as customer service and data analysis.
	– Set expectations for leaders to integrate governance and management.
	– Promote executive education through learning cohorts and mentoring.

Conclusion

Speed of change is a constant theme in the health care marketplace. New technologies, new delivery models and new consumer behaviors put pressure on the entire industry to continually adapt. A new breed of health care professionals is required to keep pace with the industry's rapid developments and evolving demands. Health care workers must demonstrate increasing technological proficiency, cultural competence, data management and problem-solving skills. In addition, they must understand new concepts of health care quality and be nimble enough to take on new functions as their roles transform to fit the new health care landscape. Developing current and future health care workers requires the combined efforts of multiple stakeholder groups. Educators and employers can take immediate actions to improve the preparation and development of today's health care talent while pursuing the long-term goal of building an adaptive and learning-agile workforce for the future.

Acknowledgments

Speakers at the National Forum
"Moving at the Speed of Health Care™: Intersection of Health and the Health Care Workforce"

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