

# PREPARING THE HEALTH CARE WORKFORCE FOR AI

A HEALTH CARE HUMAN RESOURCES  
THOUGHT LEADER FORUM  
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Artificial intelligence (AI) is already becoming part of the health care landscape, and its role will continue to grow. The 2019 Thought Leader Forum, held on September 23 in Chicago at the ASHHRA Annual Conference, focused on the impact of AI on the health care workforce – now and in the future. This executive summary shares expert insights on the strategic challenges and opportunities AI presents, plus practical recommendations on how to best prepare your organizational culture and workforce to capitalize on AI.

# EXECUTIVE SUMMARY

The American Society for Health Care Human Resources Administration (ASHHRA), a professional membership group of the American Hospital Association (AHA), held its 13<sup>th</sup> Thought Leader Forum on Monday, Sept. 23, 2019, in Chicago. The discussion was moderated by Greg Maras, vice president of human resources at Meadville Medical Center, with guest speakers Kristen Hines, managing director at Accenture, and Andy Shin, chief operating officer for the Center for Health Innovation of the American Hospital Association.

Titled, "Preparing the Health Care Workforce for AI," the discussion focused on how AI will affect the workforce in various ways, and as HR professionals that fact can be a source of concern. Thought leaders discussed and strategized how to train and prepare the workforce to meet that challenge. Human resources professionals can begin tailoring positions that align with AI instead of being replaced with AI.

This executive summary shares expert insights on the strategic challenges and opportunities AI presents, plus practical recommendations on how to best prepare your organizational culture and workforce to capitalize on AI.

## 2019 THOUGHT LEADER FORUM SPEAKERS



### Kristen Hines

*Managing Director  
Accenture*

Kristen leads the Accenture Talent & Organization business in the Midwest. She advises clients on the development and implementation of enterprise and strategic transformations across industries. Kristen focuses on complex large-scale change within operating models, organizational design, HR strategy, M&A integration, journey management, and employee experience.

Prior to joining Accenture, Kristen worked in the Corporate Strategy and Transformation group for RSM Robson Rhodes, a professional services firm based in London. In addition, Kristen worked as an investment banker with CIBC World Markets in New York, serving clients in the Consumer Products industry.



### Andy Shin

*Chief Operating Officer  
Center for Health Innovation, American Hospital Association (AHA)*

Andy Shin, J.D., MPH, is Chief Operating Officer for the AHA Center for Health Innovation, the American Hospital Association's new endeavor created to enhance hospital/health system transformation and accelerate health innovation at-scale. In his role leading day-to-day management and strategy for the Center, he oversees initiatives spanning commercial partnerships, applied research and data analytics, value and affordability, performance improvement, market intelligence and leadership development. Previously, he was COO of the Health Research and Educational Trust (HRET), the AHA's non-profit affiliate focused on quality improvement, patient safety and population health. Andy's prior experience includes leadership of an international non-profit, working to advance clinician resiliency and patient experience, based at Massachusetts General Hospital with a focus on organizational behavior and neuroscience-based pathways to improve inter-personal interactions and culture. His background also includes experience as a consultant for bio-pharmaceutical companies and payers, a health care analyst on behalf of institutional investors and various roles in the federal government including the Energy and Commerce Committee during drafting of the ACA and helping to launch the CMS Innovation Center (CMMI) where he led stakeholder engagement and intergovernmental affairs. Andy was selected as a Reynolds Foundation Fellow in Social Entrepreneurship at Harvard University and is currently a MBA candidate in the MIT Sloan School of Management, Executive MBA program.

At the 2019 Thought Leader Forum, panelists explored these key issues:

- How will artificial intelligence (AI) affect the health care workforce, now and in the future?
- How can HR leaders prepare and train the health care workforce to most effectively interact with and integrate AI?
- How can HR professionals help their organizations optimize the strategic value of AI?

## Setting the stage

Let's face facts. Although there have been notable individual and organizational exceptions, the health care field as a whole hasn't typically raced to the forefront of technology adoption. Digital transformation has been, and continues to be, a marathon not a sprint.

As just one example, even though EHRs have finally become ubiquitous, realizing their full promise continues

to be a struggle for many clinicians and health care organizations. And while health care is making strides when it comes to adopting and integrating SMAC – social, mobile, analytics and cloud – technologies considered essential for digital transformation in business, health care still lags behind numerous other industries.

So it's no great surprise that many in health care remain

wary of AI's highly touted ability to transform. Yet there are plenty of reasons for the health care field, in general, and HR professionals, in particular, to enthusiastically embrace AI.

Along with a host of other so-called "post-digital" technologies such as blockchain, virtual and augmented

reality, and quantum computing, AI is expected to help drive better outcomes and patient experiences by dramatically altering the way the health care workforce interacts and intersects with technology over the next three to five years.

The overriding goal of using AI in the health care environment is to enable humans and machines to work together to optimize performance, productivity, satisfaction and outcomes.

## Understanding what AI can – and can't – do

AI's powerful potential to transform how work is done in hospitals and health systems can have a positive impact on providers and patients alike. But first and foremost, it is critical to understand what AI can and can't do. The thought leaders noted that all too often, the "movie mentality" takes over at the mere mention of AI, instilling fear that robots will soon replace humans.

However, the panelists cautioned against thinking about AI as "one-to-one human replacement," pointing out that AI is about tasks, not jobs. Since humans are without question much more than a set of half a dozen tasks, AI's most immediate impact from a talent perspective is proving to be its ability to eliminate or streamline the transactional pieces of many job functions.

Especially when used in conjunction with robotic process automation (RPA), AI can automate certain high volume, repetitive tasks that are typically time-consuming, frustrating and/or boring for humans, and don't require insights or analysis. Take patient scheduling, for example – possibly the number one reason patients are dissatisfied with hospitals, health care systems and physician offices. Introducing an AI-enabled scheduling

### All in the AI Family

AI is often used as an umbrella term that encompasses machine learning and robotic process automation. However, it's important to understand the difference between the three technologies:

- **Artificial intelligence (AI)** mimics the human thought process.
- **Machine learning (ML)** is a type of AI that learns and improves as it processes more data.
- **Robotic process automation (RPA)** involves using software to handle high volume, repetitive tasks that humans performed previously.

solution can reduce friction, boost efficiency and improve the experience for everyone involved.

AI can also be a game-changer in operational challenges such as capacity utilization. Many hospitals struggle to fully utilize expensive operating room space, still relying on manually working out schedules by juggling clinician availability and other related factors. Yet, a simple algorithm that automates the process could potentially

*“I focus on the intersection of talent and technology and how that drives growth. AI, blockchain, VR, quantum computing and all of these super-charged capabilities are increasing our ability to change how we drive experiences.”*

*Kristen Hines*

generate significant cost savings while also improving safety, accuracy, outcomes and quality. In addition, the resulting scheduling predictability would boost workforce satisfaction.

On the clinical side, there’s certainly substantial buzz about numerous emerging AI solutions. These range from virtual assistants that can theoretically do everything from diagnose and triage patients without a doctor’s visit, then order recommended medication for home delivery, all the way through to predictive and interventional technologies that will aid clinical

decision-making or improve treatment. Less dramatically, AI and RPA might also be able to help remove some transactional tasks, such as charting, from care providers, gifting them valuable time they could instead devote to direct patient care.

However, even though numerous clinical AI tools are in the development and testing phases, most of them have yet to come to fruition at scale due to a lack of sufficient data. The AI applications making the biggest impact right now are

most likely to be found in administrative, financial and operational areas, addressing labor-intensive tasks such as appointment scheduling and patient check-in, license verification, revenue cycle management and supply chain management.

<sup>1,2</sup>Source: AHA Center for Health Innovation “AI and the Health Care Workforce” September 2019

## What AI can do for HR

### *Streamline talent acquisition*

In HR, AI is starting to make inroads in the talent acquisition process. Relying on avatars to interview job candidates remains aspirational, but there’s no doubt AI can speed initial screening. What often isn’t talked about enough, however, is the extensive work required from HR professionals beforehand. To ensure the algorithms are designed to properly filter applicants to get the select group of candidates desired for next-stage interviews, talent strategy professionals need to carefully identify and detail the sought-after capabilities and experience.

AI’s value lies in its ability to handle the transactional pieces of identifying initial candidates faster and more efficiently, and to minimize the human

error involved. This allows HR professionals to devote more time and energy to capability analysis, empathy cultivation, self-reflection and all the other aspects of the talent acquisition process that require substantial human judgment – and that AI cannot currently do, nor is it likely to be able to do anytime soon.

### *Boost engagement*

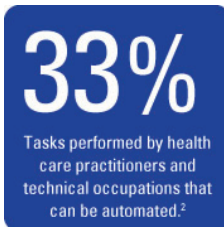
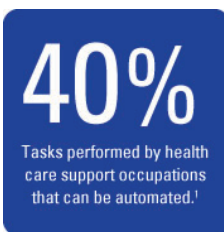
For employees already onboard, AI can be a proverbial shot in the arm for boosting satisfaction and engagement, always a top HR priority. Removing rote tasks involved in administrative or clinical jobs frees employees to take on higher-level tasks or spend more time on direct patient care. It also creates opportunities for employees to develop new skills that take them to the next level of capability or opportunity. The result is happier, more engaged, more productive employees.

### *Strengthen strategic value*

As health care HR leaders continue to move into more strategic roles in their organizations, AI helps enhance their value as business partners. By removing the transactional aspects traditionally associated with HR,

*“AI is being most effectively applied today in the buckets other than clinical, away from where a lot of human judgment is required.”*

*Andy Shin*



AI allows HR leaders to shift their primary focus to critical big picture issues such as:

- Organizational priorities and goals
- Future work and workforce requirements
- Providing the right talent and support to drive the organization forward

HR leaders will be better able to leverage the insights gained from their knowledge and experience to offer

C-suite guidance in anticipating and meeting fast-evolving workforce requirements. At the same time, they can be more laser-focused on “moments that matter” and employee needs throughout the employee lifecycle, thus enhancing engagement, growth and retention.

“AI will never be able to offer leadership, self-reflection, collaboration, empathy cultivation and compassion.”

*Andy Shin*

## Managing Change

### *Nurturing a culture of innovation*

Change management goes hand-in-hand with using AI to reshape workforce responsibilities and experience. Nurturing a culture of innovation that welcomes change is critical to all digital transformation initiatives, including AI. No one knows better than HR leaders how difficult culture can be to change. This underscores the importance of a well-planned approach to integrating AI into a particular department or area, taking into account its impact on processes, systems and, of course, people.

Helping employees understand how they can benefit from AI instills enthusiasm and mitigates fear, building

a sense of partnership moving forward. Involving employees who will be affected in the process, and providing opportunities for them to imagine and design what an AI-supported future might look like, should be part of the

process. Encourage them to start with their pain points – what are things that they don’t like about their job

“The change and talent strategy part of this really starts upfront. It’s a long journey, not a switch that we flip.”

*Kristen Hines*

that they’d love to get rid of so they can do more of the things that excite them? Once they start getting excited about what’s possible, and how their work life might change for the better, a willingness to embrace adoption and change will follow.

### *New roles, new skills*

HR leaders will need to develop strategies to build and equip their workforce with skills that match changing expectations. While it may be obvious it will be necessary to retrain and upskill some staff, especially those

in the lower-level positions most easily automated, that’s just the beginning. HR professionals also must evaluate which roles will need to be performed differently in the future as well as identify what new roles need to be created.

“AI is helping HR elevate its role as a partner in the business of hospitals. When we allow technology to take away some of the transactional pieces, it allows us to be more strategic about putting people first, about the outcomes we’re driving to and about delivering a consistent experience. It frees up capacity to focus on things that really matter.”

*Kristen Hines*

New positions will run the gamut from data scientists and AI engineers who build the AI models, to data governance and data entry experts who ensure the models get the necessary data, to chief AI officers. Chief AI officers lead the charge to explore, develop and deploy effective AI strategies. In essence, they’re responsible for translating to leadership and the workforce across the organization how AI will enable them to work differently – and better.

# THOUGHT LEADERS' RECOMMENDED ACTIONS

## PREPARING THE HEALTH CARE WORKFORCE FOR AI

### 1. Clearly define your goal.

How can AI solve problems or change processes and roles so that employees work more productively, efficiently and happily? Are you trying to improve patient scheduling? Are you looking for ways to free up clinicians to have more time with patients and achieve better patient outcomes? Keep in mind that the AI applications making the biggest impact today are in areas such as scheduling, revenue cycle management and supply chain.

### 2. Eliminate the fear factor.

AI is all about humans *plus* machines, not humans *vs.* machines. To minimize fear, it is important to emphasize that AI involves humans and machines working together. Rather than replacing humans, the objective is to take advantage of AI's potential to work better, faster or differently.

### 3. Distinguish between reality and “movie mentality.”

Laying the groundwork for introducing AI requires consistent demystifying, educating, and distinguishing what's in movies and what's real. For one thing, AI in health care is less about robots than robotics. It's also about tasks, not about jobs. The robots replacing humans, let alone taking over the world, remain comfortably in the realm of science fiction.

### 4. Entice employees to join the journey.

Creating a “what's in it for me?” strategy can go a long way toward earning that all-important employee buy-in for AI. Explain what's possible

and how their lives might change – for the better. Encouraging employees to actively participate in the journey will also help smooth the inevitable bumps in the road.

### 5. Know your motivation.

Think long and hard about what you want your team to be able to do differently tomorrow than today. After all, if they aren't going to be working differently, why are you introducing AI? How will AI add to the workforce or patient experience?

### 6. Put AI in proper context.

Does your organization have a chief transformation officer and/or a broader strategy for exploring the intersection and relationship with technology? Health care organizations pushing the edge of the digital frontier are thinking about AI from an organizational point of view, not as a departmental IT solution. AI is most valuable if used as part of an end-to-end digital transformation, rather than used in isolation. It is A solution, not THE solution that's going to make everything better.

### 7. Generate excitement!

Create a culture of innovation and enthusiasm that encourages your workforce to think about how to use AI – and other technologies – to work smarter and faster, with greater joy and satisfaction. Build enthusiasm for what's possible and the ways in which their work lives can improve when they embrace AI.



Founded in 1964, the American Society for Health Care Human Resources Administration (ASHHRA) is a professional membership group of the American Hospital Association (AHA) and has approximately 2,000 members nationwide.

ASHHRA leads the way to advance health care HR professionals to become more effective, valued and credible leaders in health care human resources. As the foremost resource for health care human resources, ASHHRA provides timely and critical support through research, learning and knowledge sharing, professional development, products and resources, and opportunities for networking and collaboration. ASHHRA offers the only certification distinguishing health care human resources professionals, the Certified in Healthcare Human Resources (CHHR).

### MISSION

To advance health care through the support and development of a knowledgeable and connected network of human resources professionals by providing innovative resources, tools, and strategies.

### VISION

An inspired community of health care human resources professionals that reaches its highest potential as a catalyst for positive change in an evolving health care landscape.

### VALUES

#### INTEGRITY:

Evidenced in earned trust and pride with a reputation for accountability.

#### LEADERSHIP:

Evidenced in visionary thinking, innovative programs and services, and a passion for excellence

#### COLLABORATION:

Evidenced in mutual respect and multiple insights exchanged in an inclusive professional environment.