



This *5 Forces for the Future* series shows a path forward to alleviate systemic disconnects and weaknesses exposed by the pandemic to prepare for a stronger future.

The response to the COVID-19 crisis has required continuous, real-time innovation that has affected the way care gets delivered on the front lines, across geographies, and across the care continuum. It took a rethinking of how we get the best evidence to clinicians, guide them through decision-making care pathways, and retrain scores of redeployed health workers — while connecting the dots between what they were seeing and what the evidence of the moment was indicating.

A terrible crisis led us here, but we have an unprecedented opportunity to seize this moment to transform what broke and **what didn't happen fast enough for enough people**. These Five Forces are critical for the future — each of them a powerful force for change. Collectively, however, they can ignite a systemwide transformation in healthcare only glimmers of which we have seen until now.

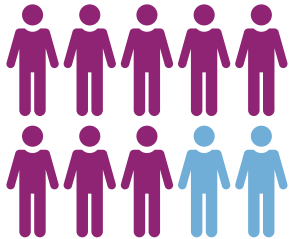


# 5 Forces for the Future

## 1

### Virtual Care Reaching the Vulnerable

The coronavirus pandemic has dramatically accelerated the expansion and adoption of virtual care. Out of necessity and a focus on what is best to keep people safe, healthcare organizations embraced models that were not bound by a facility or walled clinical process. In doing so, healthcare leaders recognize virtual care's impact on better management of chronic conditions and the way it provides broader access to care.



**80% of older adults have at least one chronic disease, and 77% have at least two.**

Four chronic diseases — heart disease, cancer, stroke, and diabetes — cause almost two-thirds of all deaths each year. These populations also account for 75% of the money the US spends on healthcare.



## 2

### Transparency and Trust Underpin Best Evidence of the Moment

Clinicians often need treatment recommendations they can trust that **don't yet exist** in peer-reviewed literature. Nothing has made that clearer than the COVID-19 pandemic, wherein retooled processes have sped information to clinicians, helped guide them through care decisions, and closed the divide between what clinicians see and what emerging research shows.

The true optimization of the best evidence-of-the-moment approach distills new research and an abundance of grey literature to harness evidence at pace, align care around best practices, and even serve as an early-warning system for public health threats.



# 140,000

**Scientific publications and preprints related to COVID-19 since the start of 2020.**



# 5 Forces for the Future



## 3 AI Powers Warp-Speed Surveillance

Clinical surveillance systems have delivered patient updates and timely, relevant clinical alerts in real time to clinicians and administrators for years — but usually with a specific focus. Fully unleashing the power of surveillance depends on expanding and refining the newest tool in our arsenal: artificial intelligence (AI).

Already proven in real-world clinical settings to predict hospital-acquired infections (HAIs), such as sepsis, AI's potential is staggering. By powering clinical surveillance with AI, health systems can proactively identify an expanding range of acute and chronic health conditions faster and with greater accuracy than ever before. This allows clinicians to identify at-risk patients earlier so they can take action, significantly impacting patient outcomes and costs of the most-deadly HAIs.

### Clinical Areas that Hold the Most Promise for AI



**Diabetes**  
66%



**Neurological Diseases**  
56%



**Heart Disease**  
63%



**Infectious Diseases**  
46%



**Cancer**  
63%



## 4 Preparing for a Transformed Healthcare Workforce

The coronavirus pandemic forced health systems to rapidly onboard newly minted, recently retired, and out-of-state clinicians — and prepare them for radical shifts in practice. Roles have expanded with more team based and less-specialized responsibilities as well as more virtual and more data-driven roles.

Future-based workforce strategies will have to keep pace. The challenge will be to architect new models that foster retention, career development, and restorative self-care — not to mention all-new areas such as teaching soft skills that are increasingly important with new delivery options and care models.

### The World Prepares for a Clinician Shortage



Estimates indicate that the US could face a shortfall of 54,100 to 139,000 physicians by 2033.



36 million nurses and midwives will be needed worldwide by 2030.



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## 5 The Key to All Change: *Complete Access to the Right Data*

COVID-19 has demonstrated that there are not only tenuous connections between public health and medical settings, but also that there is a way to quickly establish those connections. In fact, all of healthcare's change initiatives going back two decades can be traced to the optimization and coordination of health data, yet until now, so much essential data has remained siloed, unstructured, inconsistent, or proprietary.

The crisis essentially obliterated most of the arguments against tearing down the walls that keep data apart assuming that privacy, security and public health are the focus. This momentum is supported by regulations that hold stakeholders accountable for interoperability. In the US, for example, new interoperability rules from the Office of the National Coordinator for Health IT (ONC) and Centers for Medicare and Medicaid Services (CMS) go into effect in 2021. But because data functions as the brain and central nervous system for decision making, we must first expand access far outside traditional inpatient and outpatient settings. Artificial intelligence provides the path forward to rapidly incorporate new data sets. Broader access facilitates closer interactions across the health ecosystem. In turn, we can dramatically improve care coordination and get closer to a truly patient-centered care model.



Look for our next issue: *Part 1, Virtual Care Reaching the Vulnerable.*



**86% of healthcare industry stakeholders say that incorrect or bad-quality data is a source of risk to patient safety or increased costs today.**

Source: Mending Healthcare in America  
Consumers + Cost, Wolters Kluwer

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