

# HHS in Transition

*COVID crisis forces immediate changes that may bring long-term benefits.*

**T**he COVID-19 crisis is forcing dramatic modernization in the way social safety net programs operate and deliver services to citizens.

Driven by urgent social distancing requirements, health and human services (HHS) organizations virtualized an array of activities that traditionally have been performed face to face — everything from doctor visits and client intake meetings to administrative hearings and affordable housing inspections. They also adopted new data-driven technologies, such as analytics dashboards that helped public officials understand coronavirus activity in their communities and artificial intelligence (AI) tools that helped departments cope with crushing demand for unemployment insurance and other benefits.

Unlike typical HHS modernization projects, these changes happened with unprecedented speed. Often new capabilities were implemented in weeks or even days. Cloud was a key enabler, letting organizations rapidly roll out new services, scale capacity, and deploy sophisticated AI and analytics capabilities.

And although these moves were made in immediate response to the COVID pandemic, they're likely to have long-term impacts on the digital experience for HHS clients, how and where HHS staff members work, and how these organizations purchase and deploy technology.

## **Virtual Services and Work**

One obvious impact of the pandemic is a huge increase — and potential long-term mainstreaming — of virtual medical visits.

Almost 44 percent of Medicare primary care visits were provided through telehealth in April, according to the U.S. Department of Health and Human Services, compared with less than one percent before the coronavirus hit.<sup>1</sup>

**Unlike typical HHS modernization projects, COVID-driven deployments were implemented in weeks or even days, often enabled by the cloud.**

Other services are being virtualized too. For instance, the Atlanta Housing Authority, which provides affordable housing services to 23,000 families, now conducts client intake meetings and inspections of housing properties via video. Like many public agencies, the housing authority also shifted the bulk of its staff to remote work, including contact center agents who now field citizen inquiries from home.

Pandemic-driven uptake of virtual work and digital services could have long-term positive impacts on HHS workforces and the clients they serve.

These changes could improve employee satisfaction and retention within HHS organizations, particularly in high-turnover caseworker positions. Much of the public sector workforce continues to work remotely and may remain that

way into 2021. Over the longer term, many government leaders predict the pandemic experience will open the door to more workplace flexibility.

For HHS clients, a long-term shift toward virtual visits, administrative hearings and other official functions could significantly improve access to services — especially for citizens who lack transportation or can't miss work to attend in-person appointments during normal office hours.

## **Scaling Up and Getting Smarter**

The pandemic response also proved the value of cloud and AI tools. Multiple states used cloud and intelligent software to address huge spikes in unemployment insurance claims when shutdown orders forced millions of citizens out of work.

For example, the state of Rhode Island implemented new cloud-based contact center technology in less than 10 days after its existing contact center systems were overwhelmed by unprecedented numbers of citizens seeking benefits.<sup>2</sup>

Besides dramatically increasing call center capacity — the platform supported a record 61,252 calls shortly after it was implemented — the new solution includes text-to-speech and interactive voice response capabilities which now handle 96 percent of calls, according to the state. Rhode Island officials expect to expand capacity even further by adding AI-enabled chatbot technology.

Other states have made similar moves. Both Utah and Michigan launched intelligent online assistants to help answer citizen questions about COVID-19. Robin, the chatbot recently launched by Michigan's Department of

Health and Human Services, interprets natural language questions from users and gives responses drawn from a database of commonly requested information.

“Information about this outbreak is changing rapidly, and there’s a great deal of misinformation online,” Michigan HHS Director Robert Gordon said in May.<sup>3</sup> “Robin, our new chatbot, is an easy, interactive way for Michiganders to get their questions answered without frustrating wait times. Every moment counts in our fight to increase awareness and education and slow the spread of the virus.”

In addition, communities used cloud-based platforms to rapidly collect, analyze and visualize virus-related data. Officials in Eagle County, Colo. — an early COVID hotspot — spun up a web-based tracker and real-time data dashboard that let citizens report potential COVID symptoms. The self-reported data helped public health officials understand virus activity and identify at-risk patients to prioritize them for testing. It also created data visualizations that were used in daily meetings with medical providers about allocating protective equipment, adding hospital beds and maximizing other resources.<sup>4</sup>

The effectiveness and speed of these deployments are sparking greater acceptance of cloud-based approaches for broader HHS modernization.

“This put cloud technology and its transformational capabilities front and center for us,” says Joshua Spence, West Virginia’s chief technology officer and

director of the state’s Office of Technology.<sup>5</sup> “Cloud might not be the right solution for every situation, but in this case, it definitely gave us agility, flexibility and speed at a time we most needed it.”

### **A Bigger Role for AI?**

Pandemic-driven analytics and AI deployments also may become stepping stones to broader and deeper uses of AI in the HHS space.

Data shows state IT officials already viewed HHS as a primary target for AI deployment pre-COVID. State CIOs ranked HHS as the second-biggest opportunity for AI deployment — trailing only cybersecurity — in a 2019 survey conducted jointly by the Center for Digital Government, the National Association of State CIOs and IBM.<sup>6</sup>

With new use cases now under their belt, state and local HHS agencies could accelerate AI adoption — although challenges need to be confronted. Respondents in the 2019 survey cited lack of skills and organizational data silos as their two biggest barriers to AI adoption. In addition, almost 75 percent of respondents said they were only somewhat confident they can manage risks associated with emerging technologies such as AI.

But the COVID-19 response is giving HHS leaders a glimpse at what’s possible around cloud, data analytics and AI, as well as modernizing workplaces and services. And HHS organizations and their clients likely will see long-term benefits from these changes.

<sup>1</sup>HHS Issues New Report Highlighting Dramatic Trends in Medicare Beneficiary Telehealth Utilization amid COVID-19, <https://www.hhs.gov/about/news/2020/07/28/hhs-issues-new-report-highlighting-dramatic-trends-in-medicare-beneficiary-telehealth-utilization-amid-covid-19.html>

<sup>2</sup>The Cloud Helps Rhode Island Manage an Unprecedented Surge in UI Claims, <https://www.governing.com/papers/The-Cloud-Helps-Rhode-Island-Manage-an-Unprecedented-Surge-in-UI-Claims-127941.html>

<sup>3</sup>Michigan HHS Introduces Chatbot for COVID-19 Queries, <https://www.govtech.com/gov-experience/Michigan-HHS-Introduces-Chatbot-for-COVID-19-Queries.html>

<sup>4</sup>Tracking COVID-19 in Real Time with Google Cloud, <https://www.govtech.com/library/papers/Tracking-COVID-19-in-Real-Time-with-Google-Cloud-131451.html>

<sup>5</sup>The Cloud Helps Rhode Island Manage an Unprecedented Surge in UI Claims, <https://www.governing.com/papers/The-Cloud-Helps-Rhode-Island-Manage-an-Unprecedented-Surge-in-UI-Claims-127941.html>

<sup>6</sup>Delivering on Digital Government: Achieving the Promise of Artificial Intelligence, [https://media.erepublic.com/document/CDG19\\_HANDBOOK\\_SR\\_IBM\\_v.pdf](https://media.erepublic.com/document/CDG19_HANDBOOK_SR_IBM_v.pdf)

## Trending Technologies

Cloud and AI were HHS priorities last year. The COVID-19 crisis is accelerating their impact.

### Top 5 Cloud Adoption Areas for Counties

- 1 / Geospatial Services
- 2 / Application Development and Testing
- 3 / Health and Human Services (tie)
- 3 / Finance and Administration (tie)
- 4 / Public Safety/ Law Enforcement
- 5 / Transportation

2019 DIGITAL COUNTIES SURVEY

### Top 5 AI Adoption Areas for States

- 1 / Cybersecurity
- 2 / Health and Human Services
- 3 / Information Technology
- 4 / Citizen Experience and Digital Services
- 5 / Transportation and Infrastructure

2019 STATE ARTIFICIAL INTELLIGENCE SURVEY

### Where Data-Driven Technologies Can Improve City Decision-Making

- 1 / Budgeting and Contracting
- 2 / Permitting and Licensing
- 3 / Case Management
- 4 / Hiring and Retaining Government Personnel

2019 DIGITAL CITIES SURVEY