

## Special Report 2016

A Research Report from the  
Governing Institute and  
Center for Digital Government

# HHS

## IN TRANSITION

What's Happening.  
Who's Doing It.  
Why You Care.



American Public Human Services Association



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**MULTIPLE FORCES ARE PUSHING HHS PROGRAMS TOWARD AN INTEGRATED AND DATA-DRIVEN FUTURE, THE ULTIMATE FORM WHICH REMAINS TO BE SEEN.**

**THE WAY OUR NATION DESIGNS AND RUNS HEALTH AND HUMAN SERVICES (HHS) PROGRAMS**

is in the midst of unprecedented change. Spiraling demands, evolving policies and new technologies are pushing the HHS field into uncharted waters.

For agencies in this space, the future looks like this: There will be growing pressure to interconnect separate benefits programs into something that works better and more cohesively for citizens.

**INTO THE GREAT UNKNOWN**

There will be a push to understand how factors such as where citizens live impacts their health and well-being. And there will be an expectation that agencies analyze data to measure the effectiveness of the programs they run.

Behind the scenes this will drive big changes in the technology systems that support HHS programs. Individual systems will need to integrate more tightly than ever before; they'll need to share and consume data in innovative ways; and they'll need to offer new levels of mobility and other user-friendly features. Sophisticated data analytics and visualization tools will take on more prominence, too, as agencies seek to turn mountains of information into actionable insights.

Even the way HHS systems are deployed is undergoing a seismic shift. In an effort to reduce the cost and risk that are inherent in the modernization of large computer systems, the federal government is incenting an approach known as modular development. The approach envisions breaking big complex systems into smaller logical components. In theory, this makes modernization easier since systems can be deployed one piece at a time. But it also demands that agencies develop new skills around how to plan for these upgrades and fit the pieces together.

As if that weren't enough, the looming presidential election injects

still more uncertainty into the mix. Experts say growing integration of HHS programs and greater use of data-driven decision-making are here to stay, regardless of the election's outcome. But a new administration certainly will bring its own nuances and priorities.

"I think there are a number of factors that have come together that are triggering changes across the entire sector — both in health programs and in human services," says Tracy Wareing Evans, executive director of the American Public Human Services Association (APHSA).<sup>1</sup>

"Funding available through the Affordable Care Act is helping to modernize technology on the health side and maximize the opportunity to bring integration and interoperability to human services systems," she adds. "Beyond the technology, there's also a compelling need for more evidence-based work, both from a fiscal standpoint and to simply do what's right for families that are served by these systems. We need to know what works and what doesn't."

### Feeling the Strain

Our annual health and human services survey — conducted in partnership with APHSA — reflects the pressures HHS agencies are feeling. Respondents ranked better data sharing among agencies as their top priority, followed by closer integration of services and technology systems, and adoption of analytics tools. They also told us they're busier than ever. Seventy-five percent of respondents said demand for HHS services has increased over the past year, with 20 percent estimating workloads grew anywhere from 25 to 50 percent.

Although 70 percent said their agencies are moving in the right direction, respondents were less confident in their ability to use data to drive better results.

That pessimism may stem from a couple of factors: First, HHS is still rife with clunky old computer systems that neither integrate nor share data

easily. And second, privacy and security concerns — real or imagined — tend to be a drag on innovation in this area. Almost all survey respondents told us they have technology that needs to be replaced, with 25 percent saying anywhere from a quarter to half of all their systems require modernization. Sixty percent also said increased data sharing brings with it greater security and privacy challenges.

### Seizing the Opportunity

Still, we think all of this means HHS agencies are on the cusp of great opportunity — but one that can't be realized without a massive culture shift and a great deal of hard work.

Policy innovations are driving HHS programs toward a more holistic view of citizens and more comprehensive program offerings. Funding streams are evolving as well, allowing dollars to be spent more flexibly on integrated approaches and better data tools. As our research shows, agencies are beginning to adapt their thinking, but will need to react with even more agility and innovation to make the leap.

Luckily, technology has evolved to the point where systems more easily support the development of tightly interconnected platforms that serve multiple HHS functions. And growing acceptance of off-the-shelf software packages and cloud-based services mean agencies no longer need custom developed software — or to even own software at all. However, agencies will need to think differently to exploit these changes.

Pushed by new policies and powered by modern technology, HHS is in the midst of dramatic change, the ultimate form of which remains somewhat uncertain. This report maps the forces that are driving this transformation, both to build understanding of the current environment and to push toward a markedly different — and more effective — approach to serving the people and communities that rely on these services.



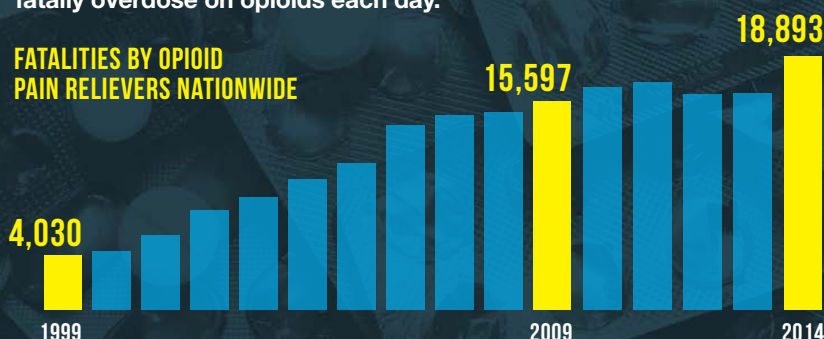
# A LOOK AT THE SOCIAL ISSUES DEMANDING YOUR ATTENTION

The shifting HHS landscape is being driven by several social issues: The U.S. population is aging, the opioid epidemic is spreading at an alarming rate and mental health issues are becoming more complex. All of these issues are causing HHS agencies to take notice and take action. As a result, governments across the country are refocusing their efforts on coordinating care and finding innovative solutions.

## THE OPIOID EPIDEMIC

What once may have been a silent epidemic is now impossible to ignore. Killing more people than automobile accidents, opioids are the leading cause of accidental death in the U.S. According to the Centers for Disease Control and Prevention (CDC), fatalities from opioids more than quadrupled between 1999 and 2014, crossing all socioeconomic groups in urban, suburban and rural areas. It is estimated now that 78 Americans fatally overdose on opioids each day.

FATALITIES BY OPIOID PAIN RELIEVERS NATIONWIDE



Source: Centers for Disease Control and Prevention, 2015

## What You're Doing:

### GETTING THE WORD OUT

Earlier this year, [Virginia](#) unveiled its “Sink or Swim” campaign with a website ([www.drugfreeva.org](http://www.drugfreeva.org)) and app. The website creates a one-stop shop for addiction resources — users can enter their ZIP code to find nearby treatment centers and support groups.



# AN AGING AMERICA

The graying of the baby-boomer generation — combined with longer lifespans — means that individuals aged 65 and older will comprise about **22 PERCENT OF THE U.S. POPULATION BY 2030**. According to the U.S. Census Bureau, the 65-and-over population is projected to double over the next three decades to about 88 million by 2050. Since the majority of older Americans express a desire to age at home, these changes will drive spending on long-term care and technologies to allow them to live independently.

## DESIGNING SENIOR-FRIENDLY COMMUNITIES

To prepare for its aging baby-boomer population (by 2030, the over-65 population is projected to double), Arlington County, Va., is making senior-friendly improvements. The county offers a door-to-door transportation service for individuals with disabilities and passed a zoning ordinance that allows some homeowners to build “granny flats.”<sup>3</sup>

## What You're Doing:

### DELAYING NURSING HOME PLACEMENT

To lower Medicaid expenses, many states are trying to delay or prevent unnecessary nursing home placements, which account for some of the highest Medicaid costs for long-term care. For example, in Nebraska, the average cost of nursing home care is \$75,000 per person. Conversely, home and community-based services (HCBS) cost significantly less — home care is roughly half the cost of a nursing facility and community-based care is roughly one-quarter of the cost. By taking advantage of federal funding and partnering with organizations such as Area Agencies on Aging, governments can offer HCBS to their communities and lower the Medicaid burden.<sup>2</sup>

### TAPPING TECHNOLOGY

States can educate their communities about available technologies to help seniors maintain their independence. For example, pill dispensers can send voice or text messages to seniors when it's time to take their medication and include alerts when pills are missed. Shoes with GPS trackers can provide real-time location mapping. If a senior leaves the pre-determined zone, the caregiver receives an alert.



### SHARING DATA

**Washington** is one of the few states that gives public agencies — including law enforcement, corrections, social services, labor and industries, and more — access to its prescription monitoring system. This allows the Department of Labor and Industries, for example, to closely monitor workers who were already chronic opioid users before filing an injury claim, and to flag doctors who may be prescribing too many drugs or potentially dangerous combinations of drugs.<sup>4</sup>

### PUTTING TECHNOLOGY TO WORK

Every state except Missouri now has a prescription monitoring database. Last year, **Ohio** became the first state to link its prescription monitoring database with the electronic medical records already maintained by doctors and pharmacists.

### LIMITING PRESCRIPTIONS

This March, **Massachusetts** began limiting initial opioid prescriptions to a seven-day supply, except those for chronic or cancer-related pain or palliative care. To prevent addicts from doctor shopping, practitioners must check the state's prescription monitoring database before prescribing certain drugs. In July, governors of 45 states signed on to “A Compact to Fight Opioid Addiction” based on the Massachusetts law.<sup>5</sup>

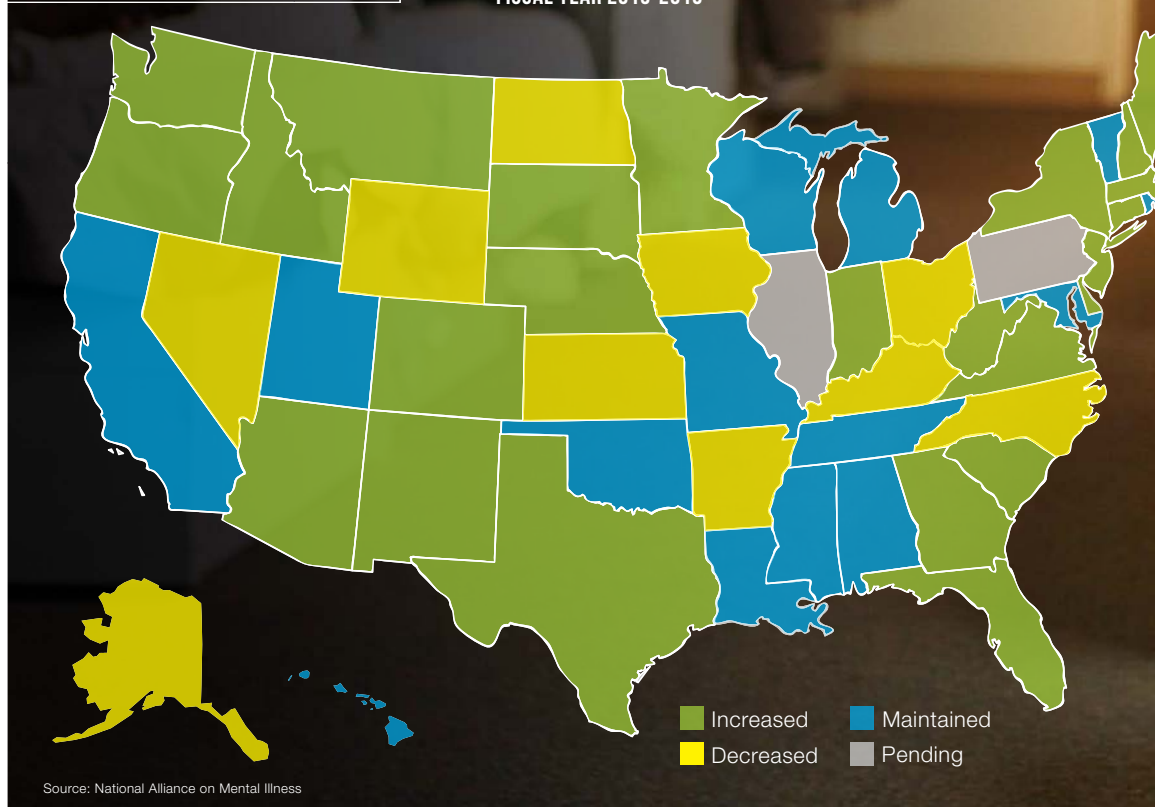
### FINDING BETTER TREATMENT

The Centers for Medicare and Medicaid Services (CMS) advocates for medication-assisted treatment (MAT), which is treatment that uses medication as well as counseling and other support. After using MAT for opioid-addicted Medicaid patients, **California** cut its medical costs by one-third over three years, including hospital, emergency room and outpatient clinic expenditures.<sup>6</sup>

# THE COMPLEXITY OF MENTAL HEALTH ISSUES

States and localities are struggling with how to address mental health issues. According to the National Alliance on Mental Illness (NAMI), 1 in 5 adults will experience a mental illness in a given year and nearly 10 million Americans live with a serious mental illness such as schizophrenia or bipolar disorder.<sup>7</sup> However, only 24 states increased mental health funding from 2015 to 2016, while 11 states and the District of Columbia cut their budgets. Mental illnesses are also taxing America's correction systems. According to a 2012 Treatment Advocacy Center report, U.S. prisons and jails housed over 356,000 inmates with severe mental illness — 10 times the number of mentally ill patients in state psychiatric hospitals in the same year.<sup>8</sup> **Incarcerating individuals with mental illnesses is not only expensive, it produces poor outcomes.**

**STATE MENTAL HEALTH CARE BUDGETS**  
FISCAL YEAR 2015-2016



## What You're Doing:

### TAKING ADVANTAGE OF FEDERAL HELP

In March 2016, the Obama Administration released its final rules for Medicaid's mental health coverage, which aim to strengthen the 2008 Mental Health Parity and Addiction Equity Act that requires health insurers to offer the same level of benefits for mental health as they do for physical health. To help states comply, the federal government offered \$94 million in new funding for community health centers and \$1.4 million for education projects in rural areas focused on health and safety.<sup>9</sup>

OFFICERS IN  
MIAMI-DADE  
COUNTY  
RESPONDED  
TO OVER  
*10,000*  
*mental*  
*health calls*  
IN 2013 — AND  
ONLY MADE  
*9 arrests.*

### DECRIMINALIZING MENTAL ILLNESS

Miami-Dade County in Florida has a mental illness rate that is approximately three times higher than the national average. To address this, the county offers a continuum of services to combat the criminalization of mental health problems. Led by Judge Steve Leifman, the county launched a post-arrest diversion program that offers individuals the option to undergo treatment instead of receiving a jail sentence. Approximately 80 percent of the individuals who are eligible to participate in the program enroll, and recidivism rates are just 20 percent. The county also trains all of its police departments in the Crisis Intervention Team (CIT) program, which teaches them to distinguish between different types of mental illness and respond accordingly. In 2013, officers responded to over 10,000 mental health calls, but only made 9 arrests, which allowed the county to close 1 of its 5 corrections facilities.<sup>10</sup>

### USING TECHNOLOGY AS A SOLUTION

Telemedicine can be a game changer for rural states such as Alaska, which has the nation's second-highest suicide rate. It can be extremely difficult to find adequate mental health care in remote areas — one study found for every 10 miles you move from a city, it becomes 3 percent more difficult to find a behavioral health worker. The use of telemedicine, however, breaks down these barriers and easily connects patients to mental health facilities despite distance. Experts do caution that telemedicine should be implemented in conjunction with initiatives to attract more mental health workers to rural areas until high-speed internet access is pervasive.<sup>11</sup>



# A Powerful Tool to Pinpoint and Prevent Prescription Drug Abuse

## Opioid Abuse: An Escalating Problem

***In 2014, nearly 19,000 people died from prescription opioid-related causes – a 16 percent increase from 2013.<sup>1</sup>***

Killing more people than automobile accidents, approximately 78 Americans are fatally overdosing on opioids each and every day, according to the CDC.

One of the most devastating aspects of opioids is their ability to cut across all socioeconomic classes and demographics. “This is not a problem that is only impacting people who have gone astray and break the law,” says Dr. Este Geraghty, chief medical officer and health solutions director at Esri. “This is a problem that affects a lot of people and it could be your neighbor, your mother — people you might not have initially expected.”

Across the country, state and local government leaders are grappling with how to get ahead of the problem, including limiting painkiller prescriptions and launching prescription drug monitoring programs. In July, President Obama signed the Comprehensive Addiction and Recovery Act of 2016 (CARA), which increases the availability of naloxone, strengthens monitoring and expands educational efforts.

But funding is an issue. While Obama had asked Congress for \$1 billion for CARA, the Act included a fraction of that at \$181 million. Advocates say funding to address prevention and early treatment of opioid abuse is critical.

“We know that public health is traditionally under-funded and resources are always limited,” says Geraghty. “And so you need to use resources in the best way possible. You need to get to smaller, neighborhood-level analysis so you are targeting your interventions where they are needed the most.”

## Raising Awareness and Targeting Resources

Geraghty points to the power of mapping to help leaders make strategic decisions regarding plans for prevention and intervention. Perhaps most importantly, visualization tools allow governments to raise awareness and make the epidemic real to their communities.

“Simple resource maps can be just the start in helping others understand addiction and find help,” says Jeremiah Lindemann, a solution engineer at Esri who lost his brother, J.T., to a prescription drug overdose and who has since become an activist for increasing awareness and using maps to help solve the problem.

“Visualizing trends provides a deeper understanding of the factors that may contribute to opioid use in a given area and the resources available to prevent and treat addiction,” says Lindemann.

Sometimes, simply putting a face to the problem makes the biggest impact in rallying a community to battle prescription drug abuse.

“Simple resource maps can be just the start in helping others understand addiction and find help.”

— Jeremiah Lindemann, Solution Engineer, Esri

1. <http://www.forbes.com/sites/cjarlotta/2016/07/23/obama-signs-opioid-legislation-despite-funding-concerns/#577fe58134e6>



# How Maps Make a Difference

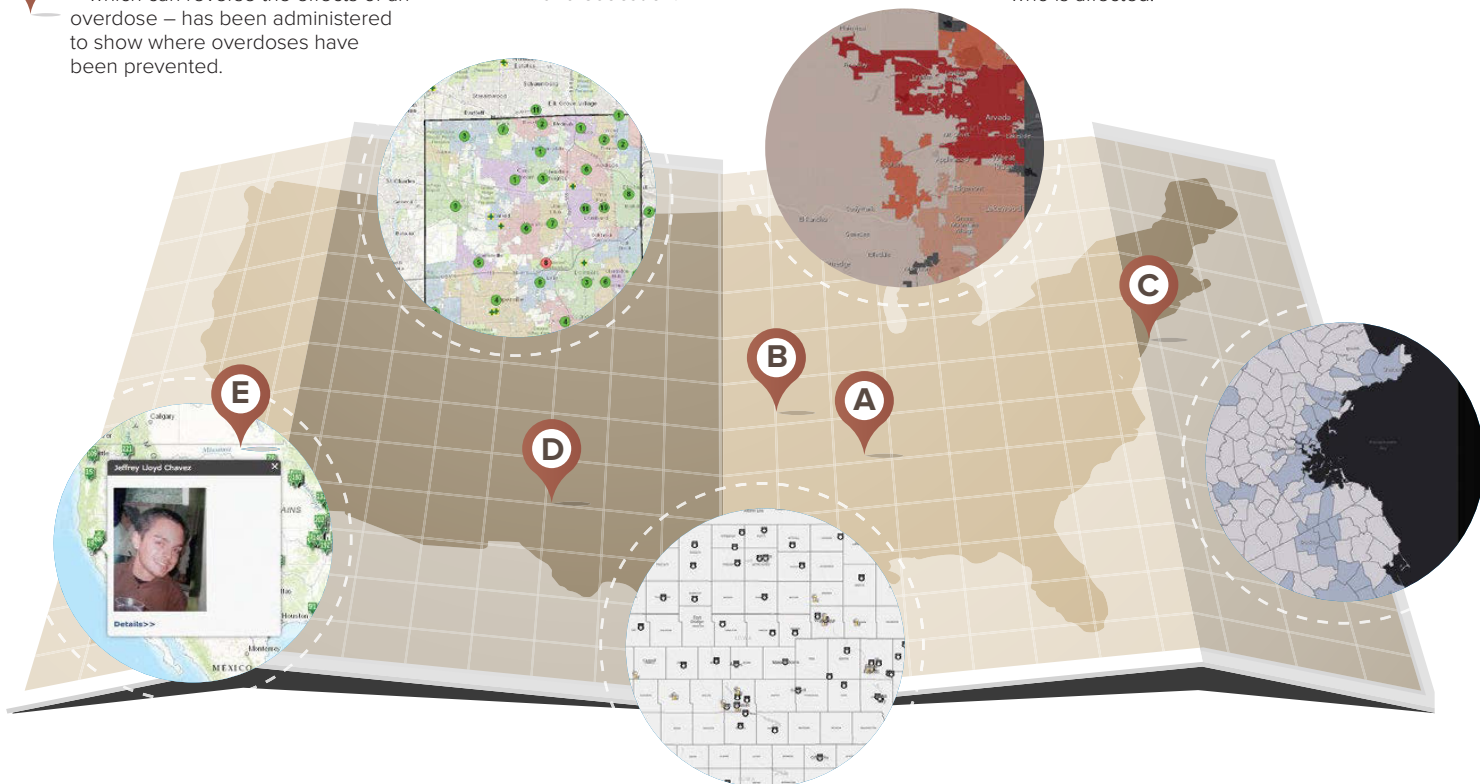
**A DuPage, Ill.,** maps out where Narcan – which can reverse the effects of an overdose – has been administered to show where overdoses have been prevented.

**B Iowa** maps out the location of drug drop boxes so residents can safely dispose of prescriptions and prevent them from getting into drinking water or the hands of others.

**D Jefferson County, Colo.,** uses a visualization map to show where prescription drug and heroin deaths have occurred to help raise awareness and stop the epidemic.

**C Massachusetts** performs spatial examinations of the opioid addiction within the state to determine where to target interventions and education.

**E Celebrating Lost Loved Ones** is a national map that aims to personalize the problem and break down perceptions of who is affected.



For more information, visit [go.esri.com/Opioid](http://go.esri.com/Opioid).



# HOW YOU'RE DRIVING DOWN COSTS — AND IMPROVING LIVES

## TRANSITIONING TO OUTCOME-BASED PAYMENTS

Medicaid has traditionally reimbursed providers based only on the services delivered, but that is changing. Increasingly, states are incenting health care providers to meet performance measures. This practice, known as **paying for performance**, focuses on producing better health outcomes for citizens, or put another way, on quality rather than quantity of services rendered. In fiscal year 2014-2015, 34 states implemented quality improvement initiatives such as adding or enhancing pay-for-performance arrangements to their managed care contracts.<sup>12</sup>

### *What You're Doing:*

#### LINKING PAYMENTS TO HEALTH OUTCOMES

##### **New York**

In the wake of the recession, New York State's Medicaid program was unsustainable, with significant cost increases as state revenues were declining. A Medicaid Redesign Team helped get costs under control, and now the state is using outcome-based payments to lock in those improvements.

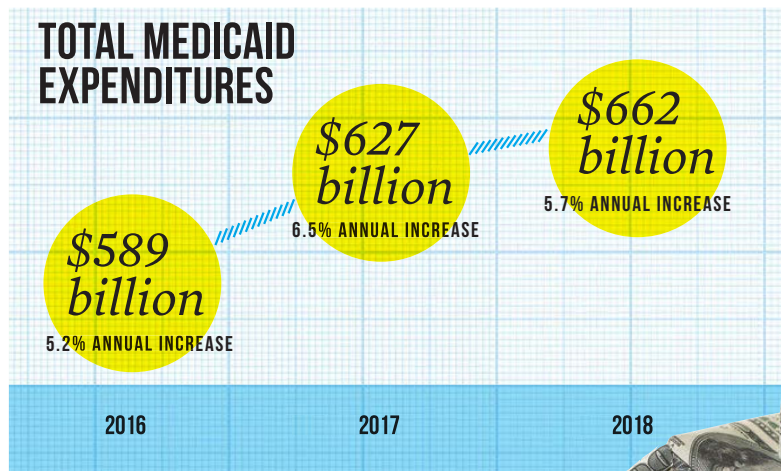
Funded with a \$7.3 billion grant from CMS, the Delivery System Reform Incentive Payment Program (DSRIP) provides incentives for hospitals and safety net providers to collaborate and form networks that promote integrated and holistic care. Approximately 90,000 providers — including hospitals, practitioners, clinics and behavioral health organizations — are split into



25 networks that have committed to reforms that link payments to the health outcomes of network members. By the end of 2019, 80 percent of provider payments will be value based.

Combining outcome-based payments and a shared-savings model for providers creates incentives for efficient, patient-centered care, says New York State Medicaid Director Jason Helgeson. He uses the example of children suffering from asthma: "If

Health and human services — and particularly health care — eat up a large portion of state and local budgets. The cost of Medicaid, which largely serves low-income individuals, is shared between states and the federal government and accounts for the biggest portion of those expenses. More than one-quarter of all state expenditures and over 15 percent of state-funded expenditures are Medicaid related — and those costs are rising (see table to the right). This section shows how governments are decreasing costs in their Medicaid and other HHS programs.



Source: Centers for Medicare and Medicaid Services

## GETTING SMARTER WITH DATA



One thing government HHS programs are not lacking is data. The challenge has always been in accessing, sharing and analyzing data to produce better outcomes. Once data is tapped, however, the results can be transformative. A lack of funding for systems investment has largely left HHS behind the curve when it comes to the use of sophisticated analytics, but that is beginning to change. CMS launched the Medicaid Innovation Accelerator Program (IAP) in July 2014 with the goal of improving health and health care for Medicaid beneficiaries by supporting states' efforts to accelerate new payment and service delivery reforms, including the use of analytics.<sup>14</sup>

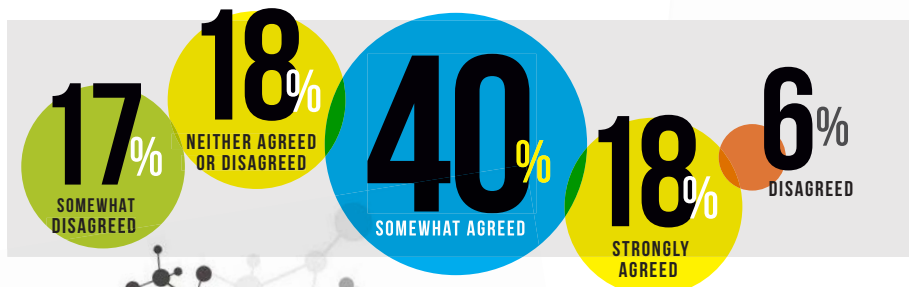
Jason Helgeson,  
New York State  
Medicaid Director

35 percent of the cost of treating them is the result of preventable complications that cost \$100 million per year, and we cut those complications by half, the provider networks share the savings. It's a win-win for patients and providers."

The initial results are encouraging. New York's Medicaid expenditures are no longer the highest in the country, and the state's average cost per beneficiary is declining.<sup>13</sup>

### What You Told Us:

We asked respondents to the CDG/Governing Institute 2016 HHS survey if their agency consistently embraces data in new and innovative ways to improve program outcomes.



## What You're Doing:

### MAKING BETTER DECISIONS

#### Colorado

Data analytics has been integral to Colorado's Medicaid reform initiative, the Accountable Care Collaborative, which uses coordinated care efforts to produce better outcomes for beneficiaries, improve population health and reduce costs. The foundation of the initiative is a statewide data and analytics contractor (SDAC) that centralizes and tracks Medicaid eligibility and claims data. An online portal allows primary care providers, regional collaborative organizations and Medicaid officials to access actionable data on utilization and spending to identify areas of high need and improve care management. In fiscal year 2013, the Accountable Care Collaborative saw a 15 percent reduction in hospital admissions and a 25 percent reduction in high-cost imaging, contributing to \$44 million in savings.<sup>15</sup>

### TARGETING INTERVENTIONS

#### Los Angeles County

In a pilot conducted from 2012 to 2014, the L.A. County Department of Children and Family Services screened youth to assess their risk of committing a crime and entering the juvenile justice system. Using an actuarial tool and predictive analytics, the department identified children as high risk by assessing them based on factors associated with criminal behaviors. Caseworkers then connected these children with drug treatment, additional schooling, therapy and other services intended to address the problem. Another group of high-risk children being monitored by the department did not receive intervention services.

An evaluation by the National Council on Crime and Delinquency found that after 6 months, the children who received services had no arrests, whereas 9 percent of the control group did. For the county, the pilot is a significant step toward keeping children out of the justice system.<sup>16</sup>

### COMBATING FRAUD

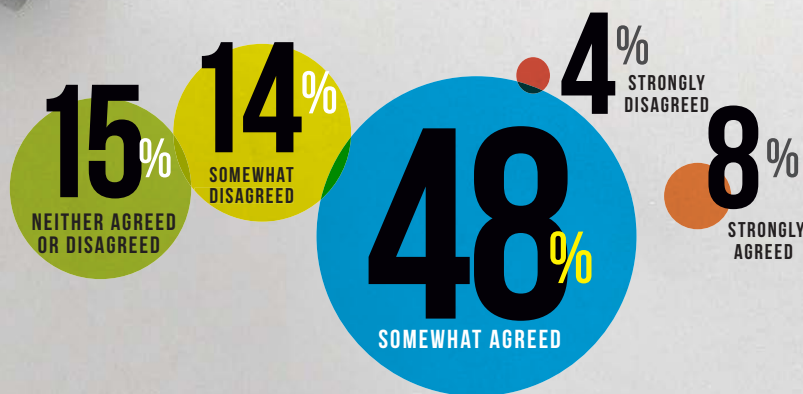
#### Florida

Florida's Department of Economic Opportunity (DEO) used a \$1.7 million grant to develop its Fraud Initiative Rules and Rating Engine (FIRRE) to help root out fraudulent unemployment insurance claims. The system can almost instantaneously process unstructured data and identify relationships that trigger early detection of fraud. So far it has helped the state stop 110,000 fraudulent claims and prevent wrongful payouts totaling \$460 million.

"Businesses pay taxes to fund Florida's unemployment program," says DEO Executive Director Cissy Proctor. "By limiting the amount of fraudulent benefits paid out, we're able to reduce how much businesses have to pay in taxes." Proctor says FIRRE could be modified to detect fraudulent applications in other benefits programs such as SNAP and TANF.<sup>17</sup>

## What You Told Us:

We asked our survey respondents if their agencies had effective ways of monitoring and abating fraud with their current systems.



# 9.8%

The percent the federal government conservatively estimates is the annual improper payment rate for the Medicaid program.<sup>18</sup>

# WHY EASY ACCESS TO DATA VISUALIZATION & SELF-SERVICE ANALYTICS IS CRUCIAL IN HHS

## HHS LEADERS KNOW DATA & ANALYTICS ARE IMPORTANT

**82%**

say analytics are critical to lowering costs and improving health outcomes

**77%**

say analytics help identify fraud

## VISUALIZATION HELPS WITH DECISION-MAKING

**83%**

say the ability to visualize data in new ways would add value to the organization

## BUT DEPARTMENTS LACK THE RIGHT TOOLS TO GAIN INSIGHTS

**74%**

still use spreadsheets to display data

**33%**

rely on IT or other departments to create reports, which can be a slow process

**47%**

say current reporting practices do not meet their needs<sup>1</sup>

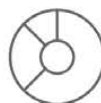
## WE LIVE IN A DATA-DRIVEN WORLD,

and health and human services (HHS) is no different. HHS agencies are more dependent on data now than ever before. Due to the Affordable Care Act (ACA) and Medicaid expansion, the number of people served by HHS is growing every day.

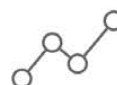
Lack of access to accurate and comprehensive data can leave vulnerable populations unserved, result in duplicative services, waste funding on fraudulent claims and decrease agency efficiency. This drain on state and local government budgets is exacerbating an already unstable financial environment. Agencies need a highly available, easy-to-use solution to glean insights — that's where Tableau comes in.

Tableau offers on-site and cloud-based solutions to help agencies visualize data — leading to faster, well-informed decisions. The ability to visualize data — and prepare and share timely reports — helps improve health care outcomes while eliminating waste and fraud.

### Tableau can help agencies:



**Put big data to work.** By optimizing resources and identifying the most effective health care programs, HHS leaders can make more informed decisions that have a direct impact on individual outcomes.



**Increase accountability and transparency.** HHS leaders can analyze data to spot trends and outliers, ultimately reducing fraud, waste and abuse, and improving transparency.



**Utilize advanced analytics.** Everyday HHS decision-makers shouldn't have to be statisticians. Visualization can help all stakeholders understand and gain insights from data.



**Have access to tools where and when they need them.** Data and visualization tools can be available via desktops, servers, cloud, web or mobile devices.



To learn more, visit: [www.tableau.com/hhs](http://www.tableau.com/hhs)

<sup>1</sup>In June 2015, the Governing Institute and the Center for Digital Government conducted a nationwide survey of 285 state and local government leaders about the status of health and human services in their jurisdictions, the challenges they face and how they are working to overcome them.

# CHANGING TACTICS

**Agencies across the U.S. are taking a new approach to serve some of the nation's most vulnerable populations. Instead of relying on historical data and previous experiences to draw insights, they are turning to factors such as geography, income and behavioral responses to identify health disparities and solutions.**

## What You're Doing:

### LOOKING AT SOCIAL DETERMINANTS OF HEALTH

While habits such as diet and exercise certainly play into a person's health, there are also a range of social, economic and environmental factors that can impact a person's well-being. Social determinants of health are the conditions in which individuals are born, grow, live, work and age, such as their physical environment, employment and social networks. Analyzing social determinants of health can help government officials determine when and where to target interventions for the greatest impact.

Used wisely, the combination of data, technology and social factors can also drive a transformation within health and human services from a system based on outputs to one that is flexible, patient-centered and responsive to each individual's needs.

## What You Told Us:

**54%**  
OF RESPONDENTS TO THE CDG/GOVERNING INSTITUTE HHS SURVEY SAID THEY HAVE OR PLAN TO INTEGRATE SOCIAL DETERMINANTS OF HEALTH INTO SERVICE DELIVERY.



### The Harlem Children's Zone (HCZ)

represents an ambitious place-based effort to support children from birth through adulthood. The program serves 13,000 children in and around a 97-block area of central Harlem that suffers from high rates of chronic diseases, infant mortality, poverty and unemployment.

It provides a range of family and social services, including training and education for expectant parents, full-day pre-kindergarten, after-school and weekend programs, nutritional education and access to healthy meals for students.

One major problem HCZ identified within its community was asthma.

Nationally, approximately 8 percent of children suffer from asthma. HCZ officials were stunned to find that about 30 percent of children in the area they cover suffered from the condition — it was the top cause of children missing school and visiting the emergency room. To solve the problem, HCZ partnered with Harlem Hospital and Columbia University to visit homes and identify asthma triggers, educate families and provide access to preventive

*“We’re not just here to identify how our community is ailing. We need to develop solutions.”*

Dr. Betina Jean-Louis,  
Harlem Children's Zone  
Director of Evaluation

medication. “We’re not just here to identify how our community is ailing,” says HCZ Director of Evaluation Dr. Betina Jean-Louis. “We need to develop solutions.”

HCZ tracks metrics across its initiatives. By asking the same questions as the CDC, HCZ leaders were able to match data and determine that their asthma efforts reduced the number of missed school days, emergency room visits and overnight hospital stays.<sup>19</sup>



# Convergence is IMPROVING HHS Outcomes

**Health and human services** is at an inflection point. Changing demographics, emerging technology and ever-growing fiscal pressures are combining to transform the nation's priorities:

- Medicaid expansion under the Affordable Care Act (ACA) is bringing in new populations, **leading to a spike in spending**. The rate of increase in total Medicaid spending from 2014 to 2015 was nearly double the previous year's increase (7.8 percent vs. 3.94 percent).
- The population is graying. **Individuals aged 65 and up will comprise about 20 percent of the U.S. population by 2030**, and the 65-and-over population is projected to double to about 72 million over the next 25 years.
- Advances in analytics and other technologies are **leading to more preventive and outcome-based care approaches**.

This convergence of economic, technological and social changes is allowing for more coordinated and data-driven service delivery that can significantly improve citizen services and ensure better outcomes. HHS agencies can take advantage of this unique environment with the following steps.

## 3 Steps to Convergence

### Step 1: Empower leaders to focus on outcomes.

Engage leadership at the top and ensure high-level decision-makers provide support for staff to leverage analytics and data-driven decision-making to improve outcomes.

**Step 2: Eliminate silos.** Remove barriers to access and break down silos. For statewide initiatives, all impacted state and local agencies should have the opportunity to provide input and collaborate during the planning phase.

**Step 3: Overcome legal challenges.** Legal hurdles can weaken a transformative effort. For example, one state looking to transform human services delivery had several antiquated and inconsistent laws that made service delivery divisive and inefficient. To resolve this issue, the state created a protocol that stipulated agencies could work together and share financial resources, data and staff with simple, not legalistic, agreements between them.

## Your Qualified Convergence Solutions Provider

A leader in helping states on the convergence path, Accenture develops strategies and solutions for coordinated, collaborative and cost-effective service delivery to improve health, social and financial outcomes. Accenture can help your agency:

- Make transaction-based processes adaptive, efficient and productive, reducing costs and improving quality fast
- Grant citizens easy access to insight-driven services customized to who they are and what they need
- Deliver outcomes that matter to people's lives, and positively impact your mission and business outcomes



### APPLYING BEHAVIORAL SCIENCE

Behavioral science — the study of activities and interactions among humans, including the analysis of relationships through aspects such as biology, geography, law and political science — is becoming increasingly popular as a solution to challenges in HHS. In 2015, President Obama ignited a newfound interest in the science with an executive order encouraging agencies to use behavioral science insights to streamline welfare programs, help citizens find better jobs, improve health care outcomes and increase educational opportunities.

Says APHSA's Wareing Evans: "People are using things like rapid-cycle evaluation and applying behavioral economics and other sciences to understand questions such as: How do you actually best engage with children and families? What works and what doesn't?"



#### Oklahoma

Thirty-nine thousand Oklahoma households receive government assistance for child care, however, only about one-third of families renew their benefits on time. Delayed renewal applications result in interrupted payments to families and redundant work for caseworkers, who must re-interview parents and re-verify income information.

With funding from the U.S. Administration for Children and Families (ACF), the Oklahoma Department of Human Services (DHS) partnered with a social policy research organization to resolve this issue through the use of behavioral science. DHS ran an experiment where providers who cared for children participating in the government subsidy program were sent a list of color-coded participants nearing their renewal deadline. Green, orange and red were used to indicate how far families were from missing their renewal deadline. Providers

were instructed to notify their clients about the upcoming deadline and offer assistance in collecting the necessary documents. This intervention resulted in a 3 percent increase of on-time renewals, when compared to a control group that did not receive the intervention. While the bump may seem small, statewide it's equal to 1,000 families per year.<sup>20</sup>



#### Indiana

Approximately one-third of families in Indiana receive childcare subsidies. However, despite a statewide ranking system to help families find high-quality care, 35 percent still pick providers who have not received the state's seal of approval. Through an ACF grant, the Indiana Office of Early Childhood and Out-of-School Learning partnered with the same policy research organization Oklahoma used to improve participation in high-quality care through behavioral science.

The 12,600 families on the childcare voucher waiting list were split into two groups — the control

group and the treatment group. Parents in the control group received a standard letter and brochure about choosing a quality care provider, which the state had already been distributing. The treatment group received a special mailing and a follow-up phone call. The special mailing identified that the majority of parents use their voucher to pay for childcare providers who participate in the state's review program, and included a map of the highest-rated providers near the family's residence. The result was a 2.1 percentage point increase in the use of high-quality providers.<sup>21</sup>

# HHS AND THE MOVE TO AN INTEGRATED ENTERPRISE

Nearly 40 percent of HHS decision-makers said they need to modernize over half of their agency's IT systems, according to the 2016 CDG/Governing Institute survey. These outdated, siloed systems are a classic example of the traditional agency-centric approach to HHS, which makes it costly and time consuming to obtain an integrated view of constituents.

To enhance the access, outcomes, accountability and quality of HHS programs and services, a new approach is

needed – one that is more person, family and population centric and takes into account social determinants, such as education and economic security, to obtain a more holistic view of a person, family or population.

Just over half of the survey respondents reported their agencies have or plan to integrate social determinants of health into service delivery to obtain this more person-centered approach, but how can they ensure they manage the transition to a more integrated enterprise successfully?

## TO ACHIEVE END-TO-END INTEGRATION, HHS AGENCIES CAN USE THE FOLLOWING ROADMAP:

### DEFINE THE HHS ENTERPRISE ARCHITECTURE.

This includes determining what outcomes you're trying to achieve (the business architecture) and the information needed to anticipate, support and validate key decisions. It also includes deciding how you will facilitate the secure exchange of that information (information architecture) and the technology investments needed (the technology & solution architectures).

### IDENTIFY AND INTEGRATE FUNDING OPPORTUNITIES.

States can take advantage of several federal funding streams and opportunities such as CMS' 90/10 funding for MMIS modernization and the State Medicaid Health Information Technology Plan and the OMB Circular A-87 Cost Allocation Waiver to integrate HHS programs on one rules engine platform.

### ESTABLISH STRONG GOVERNANCE.

Executive leadership, such as the HHS commissioner, Medicaid director and/or governor's office, should spearhead the effort. Stakeholders from across the full continuum of HHS program areas need to define and agree on the business imperatives and performance indicators.

### LOOK TO AGNOSTIC, MODULAR TECHNOLOGY.

Agnostic solutions leveraging third-party, commercial-off-the-shelf (COTS) components for gateways, master data management, rules engines, service bus information exchange capabilities and analytic capabilities allow you to build a common integrated enterprise platform. These agnostic solutions can be leveraged across multiple programs – build it once and use it many times.

### CREATE A CULTURE OF INFORMATION SHARING.

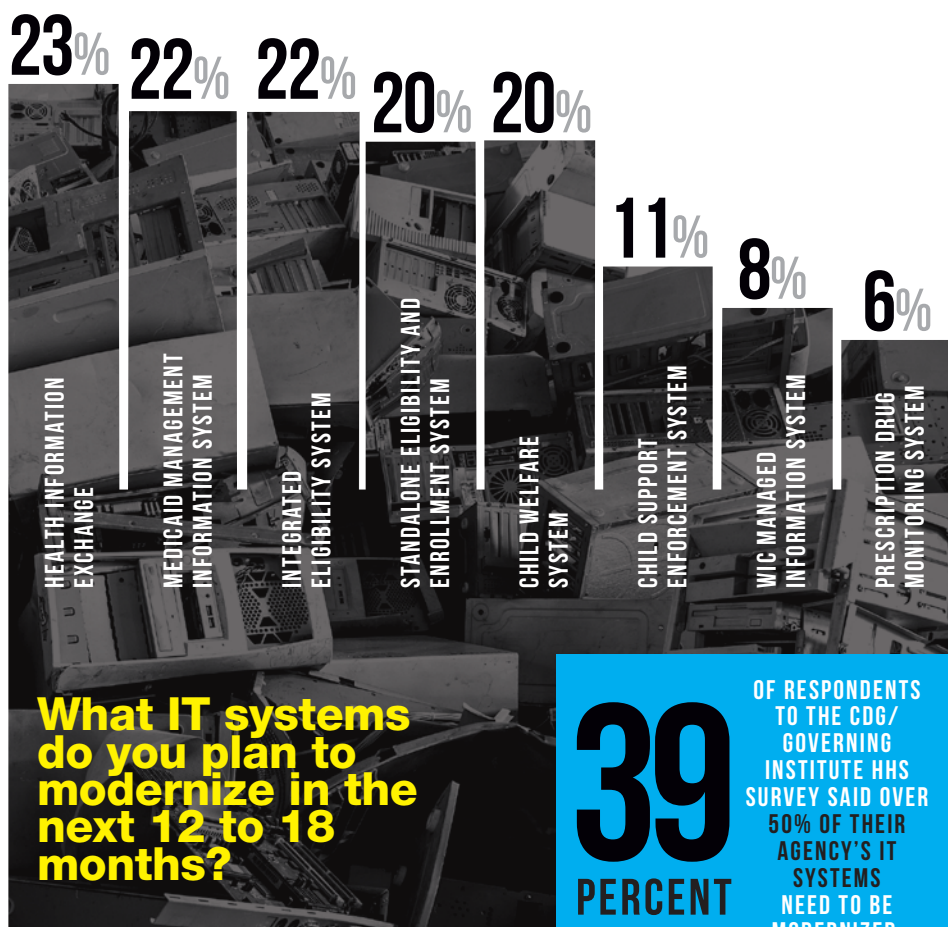
Start with the low-hanging fruit of aggregate and de-identified data to build more robust performance and trend analyses that demonstrate the benefits of data sharing. Think about how you can effectively share data without compromising privacy, and what the program advantages are for sharing that information.

# HOW YOU'LL MODERNIZE HHS SYSTEMS

According to the Government Accountability Office (GAO), the federal government spends \$80 billion a year on IT, much of which goes toward maintaining legacy IT systems. Decades-old hardware is a major problem for state and local governments as well. HHS decision-makers in our 2016 HHS survey said outdated IT systems and their corresponding issues were one of their most critical challenges — exacerbated by the fact that 75 percent of them reported that demand for their services has increased.

But there is some good news. The federal government, recognizing this urgent need for system modernization, continues to provide enhanced funding and more flexibility around how federal dollars can be used on systems that support multiple programs. It's also adjusting rules to promote modular deployments and cloud-based approaches.

## What You Told Us:





# WHY YOU'LL BUILD DIFFERENTLY

The systems used to support evolving HHS programs will look much different than the technology they replace. Legacy HHS systems typically were custom-developed to serve a single program, and they neither share data nor adapt to new processes easily. The next generation of systems will be faster to deploy, more interconnected and easier to update. Here's why.

## MODERNIZATION IS MORE FLEXIBLE

Since 2011, CMS has provided enhanced funding to states for building and maintaining Medicaid eligibility and enrollment systems. The agency will pay 90 percent of states' costs for designing and developing new systems (commonly known as 90/10 funding) as well as 75 percent of the ongoing maintenance and operation expenses. The federal government also relaxed its cost allocation rules contained in OMB Circular A-87 to promote integration between health and human services systems. Previously, the OMB required specific cost allocations for state programs that shared IT systems, which aligned with the proportion of their use of these

systems. The current A-87 waiver lets states bypass the normal cost allocation methodologies. Instead, they can charge the initial build to Medicaid — paid for with 90/10 funding — and pay for the additional cost under the A-87 exception that's required to make the system reusable for other programs.

Together, these changes give states an opportunity to not only modernize aging HHS systems, but build them in a more integrated way. The opportunity may not last forever, though. While CMS has extended 90/10 funding indefinitely, the A-87 cost allocation exception only will be in place until 2018, meaning states that want to reap significant cost savings from implementing shared IT systems have less than two years to do so.

## What You're Doing:

### Integrating HHS Programs and Systems

Washington State used a portion of its \$65 million grant from the CMS State Innovation Model Initiative — which has awarded nearly \$300 million to 25 states to design or test innovative models of service delivery and health care payment — to integrate physical and behavioral health services for its Medicaid population. This particular change effort is significant, impacting how services are administered, financed and delivered for Medicaid beneficiaries, according to Dorothy Frost Teeter, director of Washington's Health Care Authority. It also requires

deep engagement with members of the community who haven't always been at the table for health transformation efforts. Washington's approach relies on multi-sector collaborative organizations called Accountable Communities of Health for this new form of engagement.<sup>22</sup>

Ohio also is testing value-based payment models that rely on provider-specific performance reports to expand access to comprehensive primary care and reduce the incentive to overuse unnecessary services within high-cost episodes of care. Ohio has also taken advantage of enhanced federal funding to build an enterprise eligibility system for most

income-tested programs, including Medicaid, SNAP and TANF.

"One of the things we tried to do differently was focus on infrastructure changes that result in broad impacts across multiple programs," says Greg Moody, director of Ohio's Office of Health Transformation. "Broad reforms — like expanding Medicaid coverage and creating online tools to make it easier for citizens to access benefits — increase the state's capacity to deal with specific challenges, like reducing diabetes or infant mortality. Almost all of the reforms we've done are like that. They're systemic and structural."<sup>23</sup>

### BIG BANG IS OUT; MODULAR IS IN



Large, complex IT projects have a history of missed deadlines, blown budgets and poor results. Therefore, the federal government is encouraging state HHS agencies to take a modular approach where large systems are divided into smaller pieces that can be deployed one at a time.

In the Medicaid space, CMS finalized rules in late 2015 that support the modular deployment of Medicaid Management Information Systems (MMISs). These systems, which pay claims and collect data for Medicaid services, are among the largest IT investments for states with price tags ranging from \$50 to \$150 million.<sup>24</sup>

Critically, the new CMS rules include changes to the MMIS certification process to accommodate the modular deployment model. State MMIS deployments must be certified by CMS before they can begin receiving enhanced federal matching funds for operation and maintenance. MMIS projects typically have been certified once the entire system is complete, but the new rules allow certification of each module as it's finished, giving states faster access to enhanced funding levels.

"What modular certification means is that states can accumulate quick wins," says Jessica Kahn, director of the Medicaid data and systems group at CMS. "They can get the enhanced match for the operation of those pieces as they stand them up, as opposed to a five-year build where you have to wait until everything is done."<sup>25</sup>

Child welfare systems are undergoing a somewhat similar shift. In 2015, ACF issued a Comprehensive Child Welfare Information System (CCWIS) Notice of Proposed Rulemaking (NPRM), which provides funding for states to update or implement new case management systems that are more modular and interoperable.

## What You're Doing:

### Taking a New Approach to Child Welfare Systems

California's Department of Social Services (DSS), which runs one of the largest child welfare agencies in the country, has launched a project to establish what it calls "an innovative statewide 21<sup>st</sup>-century information technology application" that improves its child welfare operations. It intends to take a modular approach to procurement and work with multiple vendors. One of the state's overarching goals is to create an underlying technology platform that DSS and its other HHS departments can reuse, while continuously improving services for its end users.<sup>26</sup>

Other states, such as Pennsylvania, already have moved in this direction. While updating its existing legacy systems, Pennsylvania's Department of Human Services took the opportunity to layer on additional technology — a business rules engine — to improve data collection and automation. It shifted from a process where mainframe changes were hard-coded and took months to perform to one that was more agile and could process more than 2.6 million records in just 43 minutes. This led to improved compliance and transparency, a reduction in manual processing and better citizen services — including faster eligibility determination and more self-screening processes.<sup>27</sup>

### Building Enterprise Platforms to Support Modularity

The impact of enhanced federal funding and greater flexibility can be seen in Hawaii where the state's Department of Human Services (DHS) deployed an enterprise platform several years ago to support multiple functions. Pankaj Bhanot, deputy director of the department, sums up the approach as "buy once, use many times."

Hawaii funded the \$144 million project using the 90/10 federal match. Now the state intends to plug a growing number of modular systems into the platform to support SNAP, TANF and other programs. In addition, the department built a Medicaid application on the platform, laying the groundwork for more integrated services.

Bhanot says many of these programs have operated in silos from a technology standpoint. However, the enterprise system will allow them to function with more interoperability because the components are agnostic. "They are reusable, interoperable, extensible, scalable and easily supportable," Bhanot says.

DHS, which is focused on serving families and children concurrently, also plans to integrate data and analytics into the platform to improve service delivery and outcomes. "We want to be the agency of one, where we will be able to take care of the needs of our clients through the same system and the same processes that we will use across the board," he says.<sup>28</sup>

PENNSYLVANIA'S  
DEPARTMENT OF  
HUMAN SERVICES  
SHIFTED FROM A  
PROCESS WHERE  
MAINFRAME CHANGES  
WERE HARD-CODED  
AND TOOK MONTHS  
TO PERFORM TO ONE  
THAT WAS MORE  
AGILE AND COULD  
PROCESS MORE THAN  
2.6 MILLION RECORDS  
IN JUST

**43**  
MINUTES.



*“What modular certification means is that states can accumulate quick wins.”*

Jessica Kahn,  
CMS Medicaid  
Data and Systems  
Group Director

WITH CMS SIGNALING THAT CLOUD-BASED SERVICES CAN BE USED TO MEET MMIS REQUIREMENTS, A NUMBER OF STATES ARE INVESTIGATING THE APPROACH.

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### INNOVATION IS IN DEMAND

The federal government is trying to spark innovation within Medicaid IT. Included in the new CMS rules around MMIS modularity, for instance, is clarification that the agency encourages the use of off-the-shelf software and cloud-based services. This is a sea change for a sector that's been dominated by custom-developed software and

systems. Besides potentially lowering the cost of MMIS replacement, this shift is being driven by a desire to pull innovative ideas from other sectors into the MMIS space.

For instance, Kahn says there's potential to adopt best practices for information security from commercial health care providers or the banking industry, as well as claims processing innovations

from commercial insurers. "We think there are a lot of transferable technologies," she says. "There are things we see in other industries that are moving at light speed. We would love to benefit from that."

In another move to attract new providers for MMIS, CMS is developing a process for pre-certifying MMIS modules. The approach potentially gives states access to a suite of plug-and-play modules that are pre-tested to meet CMS requirements. That stamp of approval could be important for vendors new to the Medicaid market.

"[States] would feel more comfortable knowing that a particular set of software they might choose has already gone through a level of scrutiny to make sure it works," Kahn says. "On the vendor side, it's hard to get your foot in the door when people have never heard of you. Pre-certification, in a way, will give you some free marketing."

## What You're Doing:

### Moving MMIS to the Cloud

With CMS signaling that cloud-based services can be used to meet MMIS requirements, a number of states are investigating the approach. Wyoming may be the first to make the shift.

The state is launching procurements for services-based MMIS modules that include core benefits management; business intelligence; and fraud, waste and abuse detection. A systems integrator was hired to combine multiple services modules, share technical expertise and oversee contractor performance, and the state is using multiple vendors to avoid over-reliance on one company. Leaders there are deploying a state-owned data warehouse and leveraging what's already in the market rather than building something similar from the ground up, which can be costly and time consuming.

Wyoming also is working closely with CMS to ensure its technology investments meet the agency's standards. The state's Medicaid population is small — only 90,000 enrollees and 3 million claims processed annually — but its approach could serve as a model for other states.<sup>29</sup>

# 5 WAYS HHS AGENCIES CAN MODERNIZE FOR GREATEST ROI



In a recent Governing Institute survey of 320 health and human services (HHS) decision-makers, nearly

**1/3**

of respondents said **OUTDATED IT SYSTEMS IS ONE OF THE MOST CRITICAL CHALLENGES** their agencies will face over the next year.

According to Software AG, there are **five ways HHS agencies can modernize** for relatively quick return on investment:

## TAP REUSABLE SERVICES.

Existing mainframe and other legacy systems contain valuable information and data that can be harnessed. Smart approaches to digital business transformation can help organizations convert existing business, presentation and data logic as reusable services.

## BUILD AND MANAGE SELF-SERVICE APPS.

**72%** of respondents in the Governing Institute survey said **DEMAND FOR HHS SERVICES HAS INCREASED IN THE LAST 12 MONTHS.**

Providing self-service options for citizens can help meet this demand. HHS agencies can also benefit by letting third parties securely access government data via application programming interfaces (APIs). Private citizens or developers might then use the data to create beneficial mobile apps.

## SHARE INFORMATION.

**63%** of HHS decision-makers in the Governing Institute survey said **INCREASED DATA SHARING AMONG AGENCIES WOULD IMPROVE SERVICE DELIVERY.**

HHS agencies can also share data to gain a more holistic view of a citizen's health and detect fraud. For example, Pennsylvania's Department of Labor & Industry – which also oversees unemployment payments – leveraged the state's database of incarcerated residents to find out which prisoners were collecting unemployment, which helped uncover millions of dollars in related fraud.

## TAKE ADVANTAGE OF STREAMING ANALYTICS.

Monitoring data in real time, rather than looking for trends after the fact, allows HHS agencies to take a more preventative approach to citizens' care. For example, leveraging streaming analytics helps agencies determine health trends within their communities so they can provide more targeted services and education.

## ADD STORAGE.

Modernizing systems can help agencies take advantage of big data and analytics. By also adding "big memory," they can ensure the new functionality doesn't slow backend system performance and delay citizen services.

**software** AG

For more information, visit <http://government.softwareag.com/>

## THE ELECTION'S IMPACT

With a new president entering the White House in January, there's no certainty that the current funding landscape will remain the same. Still, experts and industry observers say the U.S. Department of Human Services' move to focus on technology as an innovation driver is the best strategy it has had in the last 20 to 30 years.

APHSA's Wareing Evans expects current trends around program integration, the use of data analytics for validating program performance and greater focus on social determinants of health to remain in place regardless of who is president next year.

"This notion that we really need to understand what works and hold ourselves accountable for ensuring that government dollars are going to programs that are effective — I don't see that as particular to one administration or one party," she says. "We have a lot more information knowledge and capacity to do that kind of thing now, and I don't think that's going away."

But states also must be prepared for changes in policy details and emphasis as a new administration implements its HHS philosophy. Perhaps the best advice comes from Washington State's Dorothy Teeter who says states need to deeply understand their own requirements and take a long-term view.

"What's most important for states, first and foremost, is to identify a five-year technology and infrastructure data and analytics plan," she says. "What are their business intelligence needs? What does this imply for the infrastructure that they need and where they stand now? Asking these questions gives them both a very clear business case and a technical solution that matches up going forward."

Teeter adds: "The work of building out this infrastructure is legacy work. Whatever we build has to last well beyond those five years, but you have to build it in a way that you can continue to enhance it and not have to throw it all away and start over again."

## THE CHALLENGES YOU'LL FACE



### ✓ **Modularity is still emerging**

Because the concept is new, there's no standard way to break MMIS into modules. Different states are taking different approaches. Arkansas, for example, broke its system development into three parts, using three different vendors. At the same time, CMS is still working out the details of modular certification. The agency is putting the finishing touches on formal guidance for how the certification process will operate. However, CMS already has released a good deal of information on how states should plan for and implement modular MMISs, including an enterprise certification toolkit published in April 2016.

### ✓ **Planning and procurement are even more important**

States will need to fully define their Medicaid ecosystem before they begin procuring MMIS modules. That will require rigorous internal review to clearly understand their business needs and the technology solutions that can address them. Agencies should consider a draft RFP that includes an extensive inventory of their available data and resources — and require input from key stakeholders — before they solicit vendors. Bottom line: Although deployment can be done module-by-module, planning cannot. Developing a clear idea of what your Medicaid enterprise will look like — both now and in the future — will be a critical first step.

### ✓ **Interoperability is critical**

As states implement modular MMISs, all of the pieces will need to fit together seamlessly. Service-

oriented architecture (SOA) will be the glue that holds modular MMISs together. SOA is the foundation for the Medicaid Information Technology Architecture, which CMS developed to serve as a pathway for implementing interoperability and service orientation across the Medicaid enterprise. SOA skills will be at a premium as modularity moves forward.

### ✓ **Agency culture must adapt**

Modularity and broader integration of programs across the HHS enterprise are big changes for agencies accustomed to traditional development techniques and siloed program models. Government leaders shouldn't underestimate the amount of change management needed to evolve HHS organizations toward these new models. Agency workforces will need to share more data, change their business processes and create new ones for shared services.

### ✓ **Stronger governance will be needed**

Rigorous IT governance processes will need to be in place, especially as more pieces are introduced into the system. This process should define responsibilities for tasks and data, policies for making changes to systems and compliance standards across the enterprise. Putting these measures into place will help ensure state agencies don't create more challenges for themselves as they move toward modularity.

# SOCIAL SERVICES, STREAMLINED

INTEGRATED ELIGIBILITY  
PROVIDES CITIZENS THE  
CUSTOMER EXPERIENCE  
THEY DESERVE.

## HHS AGENCIES

are continually pressed to modernize their systems in a way that promotes efficiency, cost effectiveness and customer service.

Optum™ Integrated Eligibility solution helps agencies meet the challenge by automating the administration of social programs, which adds client convenience and frees caseworkers to handle other important duties. Optum's integrated eligibility services can allow HHS agencies to:

**Streamline operations** — A modular integrated platform allows HHS agencies to determine client eligibility for Medicaid, SNAP, TANF, CHIP and other benefits programs based on a single client application. Client updates and changes can be applied across all programs automatically, saving time and reducing human error.

**Centralize case management** — Caseworkers across all services can see a consistent, holistic view of each client to instantly understand which programs each participant qualifies for or is enrolled in.

**Know the “truth”** — Master data management allows agencies to reconcile complex client identities – many of them with similar names – across multiple systems and databases. It can serve as a single point of truth spanning all HHS programs.

**Gain deeper insight** — Cross-program analytics assist administrators in identifying potential fraud, waste and abuse; forecasting caseloads versus actual participation; and understanding eligibility compared with enrollment. Analytics help agencies make smarter decisions to improve services and drive customer satisfaction.

## A LEADER IN LARGE SYSTEMS INTEGRATION FOR HHS

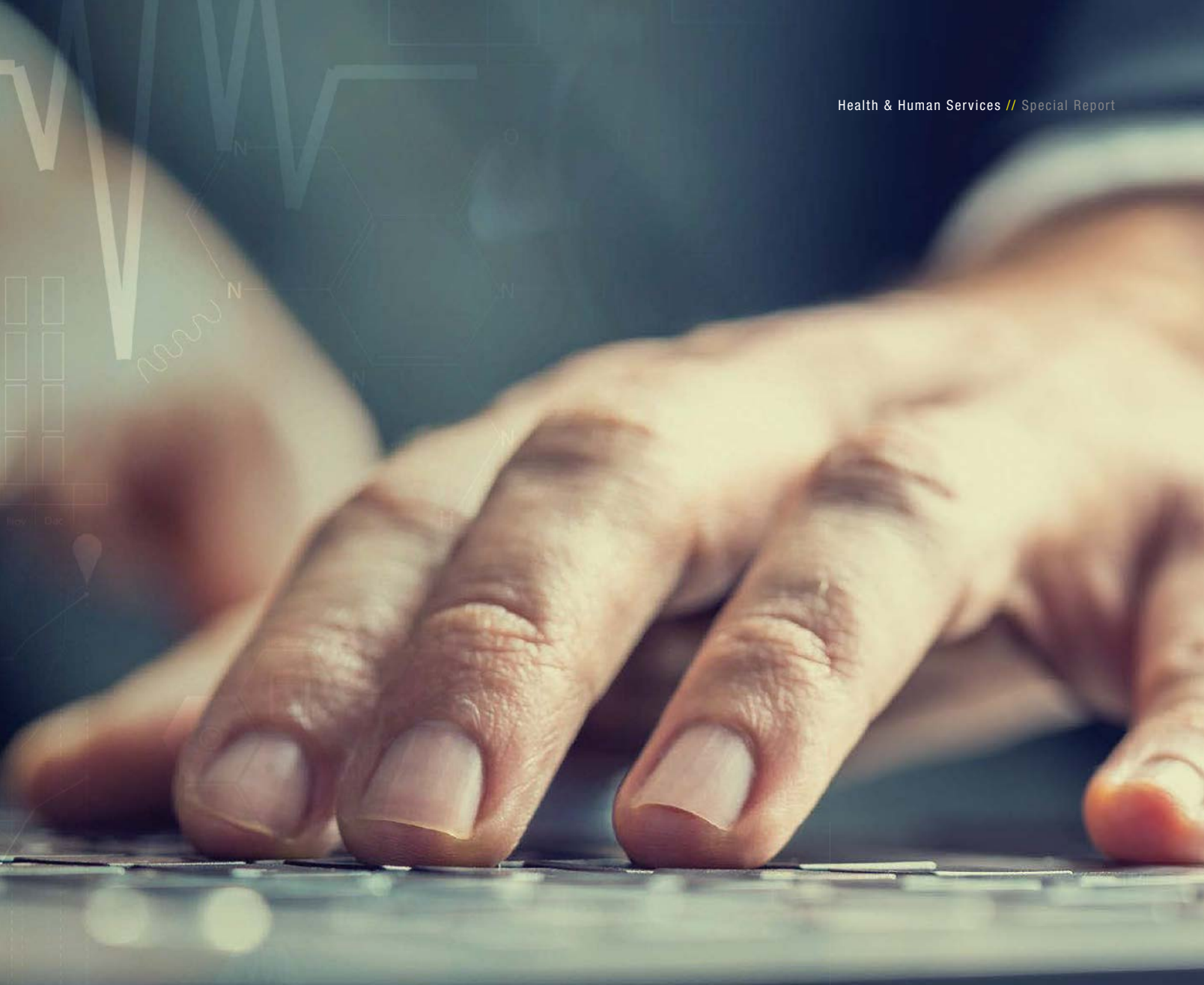
Optum is a health services and innovation company focused on making the health system work better for everyone. In addition to providing world-class analytics and systems integration, Optum offers program and policy consulting, and technology development, implementation, maintenance, operation and security — as well as hosting on the Optum cloud. It serves a majority of the nation's Medicaid agencies, and integrates data sources across many public HHS programs.

To learn more about Optum's integrated eligibility services, visit [www.optum.com/solutions/government](http://www.optum.com/solutions/government), or contact Optum at [innovate@optum.com](mailto:innovate@optum.com) or 1-800-765-6092.



**OPTUM**®

# HOW YOU'LL SHARE DATA SAFELY



The trend toward more data sharing both within and among states will drive more attention toward information security and privacy protection. The regulatory landscape around these issues is complex. The move toward mobility adds another layer of concern as HHS agencies seek to make caseworkers and others more effective by giving them access to data and decision-support tools in the field.



# SIMPLIFYING THE REGULATORY MAZE

HHS agencies must balance the need for greater data sharing with their fundamental responsibility to protect sensitive citizen information. The regulatory environment often doesn't make this easy. State officials say a patchwork of federal laws meant to protect confidential data can hinder sharing. "Federal law has all these requirements that are siloed because they run their own programs their own way," says Hawaii's Bhanot. "Food and Nutrition Service (FNS), the ACF for TANF and Child Welfare Services, and Medicaid all have their own rules."

**HIPAA adds another layer of complexity. The law is often misinterpreted to be more restrictive than it is, which prevents states from sharing data with each other — or even**

**within their own agencies. And HIPAA is impacting more agencies as HHS programs become more integrated and health data flows into social services programs that typically haven't dealt with HIPAA-protected information.**

In addition, some states have their own privacy laws that may be broader or more narrow than HIPAA. For

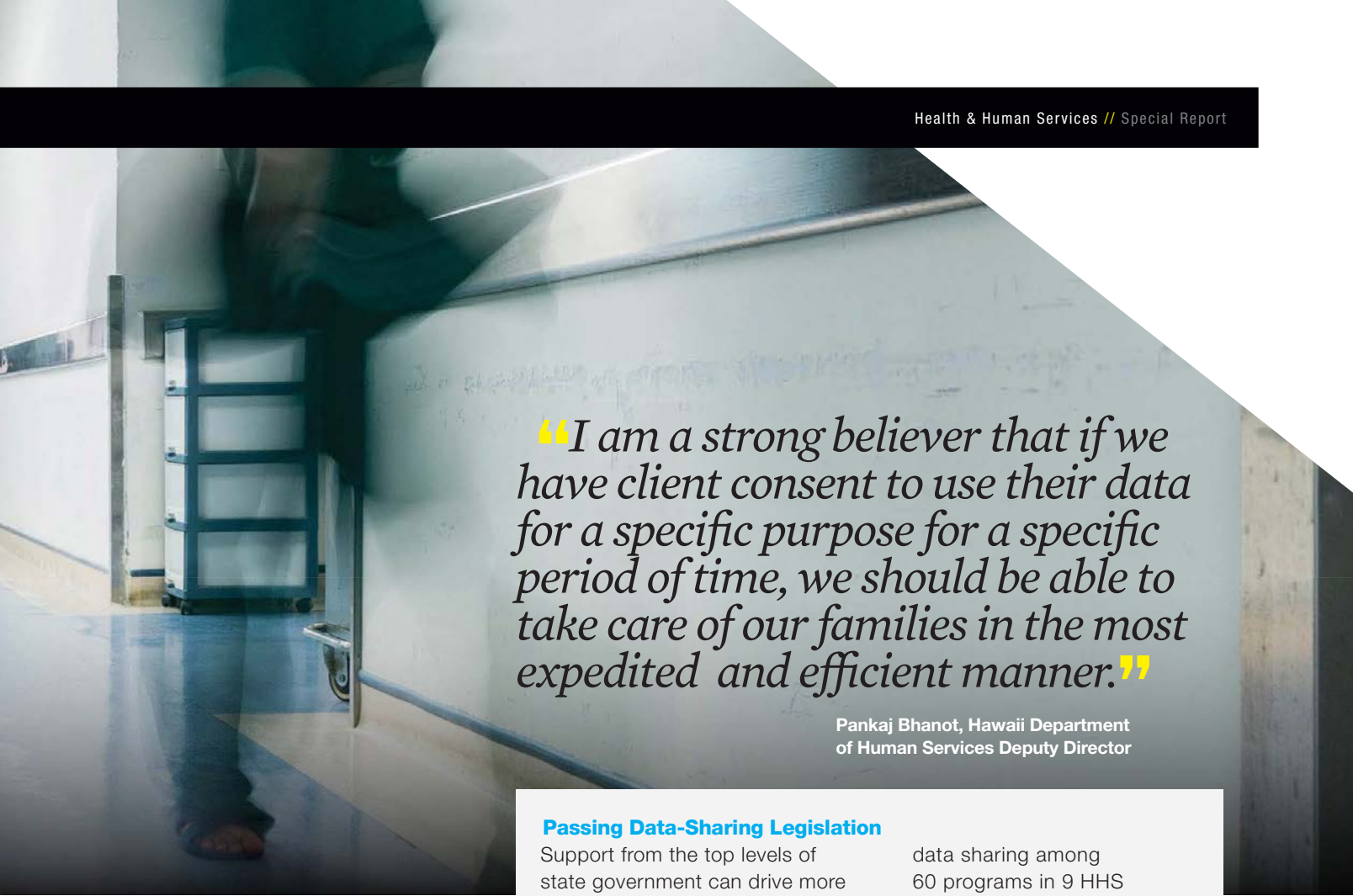
instance, the Texas Medical Records Privacy Act is broader than HIPAA and requires covered entities — health care providers, insurers, claims processors and others — to obtain patient consent for most types of information sharing.

However, states are finding ways to clarify privacy and data protection rules to facilitate safe information sharing.

## *What You're Doing:*

### **Reconciling State Laws with HIPAA**

Ohio has made state law consistent with the HIPAA privacy rule. Ohio's Moody says the state had multiple, separate privacy laws. "It created a non-standard environment where people could then say, 'We can't share because of the privacy considerations,'" he explains. In response, Ohio clarified its health-related privacy laws and adopted HIPAA as the state standard. "That single action eliminated many of those barriers to data sharing," Moody says.



*“I am a strong believer that if we have client consent to use their data for a specific purpose for a specific period of time, we should be able to take care of our families in the most expedited and efficient manner.”*

Pankaj Bhanot, Hawaii Department of Human Services Deputy Director

### Getting Smarter About Consent

Getting information to the right people at the right time is fundamental to improving care. Experts say consent is the key to giving HHS programs the information they need to take a holistic view of individuals and families. “I am a strong believer that if we have client consent to use their data for a specific purpose for a specific period of time, we should be able to take care of our families in the most expedited and efficient manner,” Hawaii’s Bhanot says.

States should consider including a consent registry in any enterprise or integrated eligibility platform they build. But consent should be for a clearly defined period and purpose. For example, agencies could ask for a 12-month period of consent to share protected health information to support population health or pay-for-performance efforts.

### Passing Data-Sharing Legislation

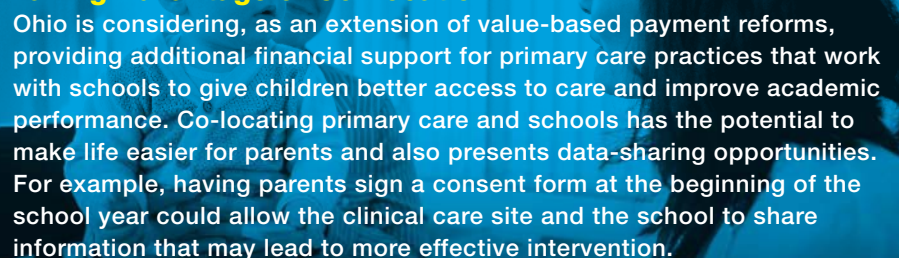
Support from the top levels of state government can drive more data sharing, too. In Washington State, the legislature passed a law that required all health plans in the state to contribute claims data with pricing information to a claims database. The move will enable more price transparency for consumers, help them make more informed health care decisions and could improve the state’s value-based payment efforts, Washington’s Teeter says.

Illinois recently launched a wide-ranging project that involved

data sharing among 60 programs in 9 HHS agencies. However, existing state regulations required identity information be stripped from the data, making the process more cumbersome and the data less useful. In response, Illinois passed a new state law that established a framework for the development of open data platforms and an architecture for regulatory compliance.<sup>30</sup>

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### Taking Advantage of Co-Location



Ohio is considering, as an extension of value-based payment reforms, providing additional financial support for primary care practices that work with schools to give children better access to care and improve academic performance. Co-locating primary care and schools has the potential to make life easier for parents and also presents data-sharing opportunities. For example, having parents sign a consent form at the beginning of the school year could allow the clinical care site and the school to share information that may lead to more effective intervention.

Florida has given its more than

**2,300**

*foster care caseworkers smartphones and laptops with built-in cameras to capture images with time and location information that they can upload to the state's online database.*

## MOBILIZING SECURELY

Mobile technology is a key tool for making field staff more effective. It's also becoming the favored communication channel for clients of HHS programs. But security and privacy will be more complex as mobility is widely deployed.

### What You're Doing:

#### Equipping Caseworkers with Mobile Devices

In health and human services, we're already seeing how agencies are leveraging this technology. New York's Office of Children and Family Services allows caseworkers and staff to use laptops and other mobile technology to access information and assist clients when conducting their field work.<sup>31</sup> Florida has given its more than 2,300 foster care caseworkers smartphones and laptops with built-in cameras to capture images with time and location information they can upload to the state's online database, along with the caseworker's notes from site visits and interviews. The new approach has led to a 30 percent increase in home visits, better reporting on child welfare cases and more compliance in Miami-Dade County.<sup>32</sup>

MORE THAN

**165**  
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MOBILE HEALTH APPS ARE AVAILABLE FOR DOWNLOAD IN THE ITUNES AND ANDROID STORES. ONE STUDY ESTIMATED THAT 500 MILLION PEOPLE WILL HAVE USED THESE APPS BY 2015.

#### THERE ARE SEVERAL RESOURCES

available for help agencies implement secure mobility. For instance, the Healthcare Information and Management Systems Society offers a mobile security toolkit at HIMSS.org. And the HHS provides extensive information on mobile privacy and security at HealthIT.gov. Both HealthIT.gov and the HIMSS Mobile Security Toolkit provide a helpful checklist that agencies should keep in mind when they deploy mobile technology. Key steps include:

- \* DETERMINE HOW YOUR ORGANIZATION WILL USE MOBILE DEVICES, WHETHER IT BE TO ACCESS, RECEIVE, TRANSMIT OR STORE HEALTH INFORMATION.
- \* ASSESS THE THREAT AND VULNERABILITIES THAT MOBILE DEVICES PRESENT TO YOUR ORGANIZATION AND ITS DATA.
- \* REQUIRE PASSWORDS, PASSCODES, PIN NUMBERS OR OTHER FORMS OF AUTHENTICATION.
- \* MAKE SURE MOBILE DEVICES LOCK AFTER A SPECIFIED PERIOD OF INACTIVITY.
- \* ENSURE MOBILE DEVICES EITHER HAVE BUILT-IN ENCRYPTION OR THAT ENCRYPTION CAPABILITIES CAN BE INSTALLED ON THE DEVICE.
- \* DISABLE OR DON'T INSTALL FILE-SHARING APPLICATIONS.
- \* INSTALL SECURITY SOFTWARE AND FIREWALLS ON ALL DEVICES AND TASK YOUR IT DEPARTMENT WITH ENSURING THIS SOFTWARE IS REGULARLY UPDATED.
- \* TRAIN EMPLOYEES, VIA REQUIRED SELF-DIRECTED LEARNING MODULES OR IN-PERSON SESSIONS, ON HOW TO PROTECT PRIVACY AND DATA SECURITY.
- \* DEVELOP A LEGAL USER AGREEMENT FOR EMPLOYEES WHO INTEND TO USE THEIR PERSONAL DEVICES FOR WORK-RELATED TASKS.

# A SMARTER WAY TO SERVE

Mediware SaaS solutions allow HHS agencies to cost effectively monitor and provide high-quality, person-centered care.

## Individuals with physical and developmental disabilities

, substance abuse issues, and/or mental illnesses will all require an increasing number of public health and human services as they age. Services to people with these special needs and older Americans are often delivered at home or within community settings. To meet this increasing demand for services, agencies must continue to stretch budgets further through IT modernization projects that drive business efficiencies and mobile solutions that support field-based caseworkers.

Mediware, an industry leader for more than 20 years, helps HHS agencies and managed care organizations work smarter with proven cloud-based software-as-a-service (SaaS) solutions that benefit caseworkers and administrators:

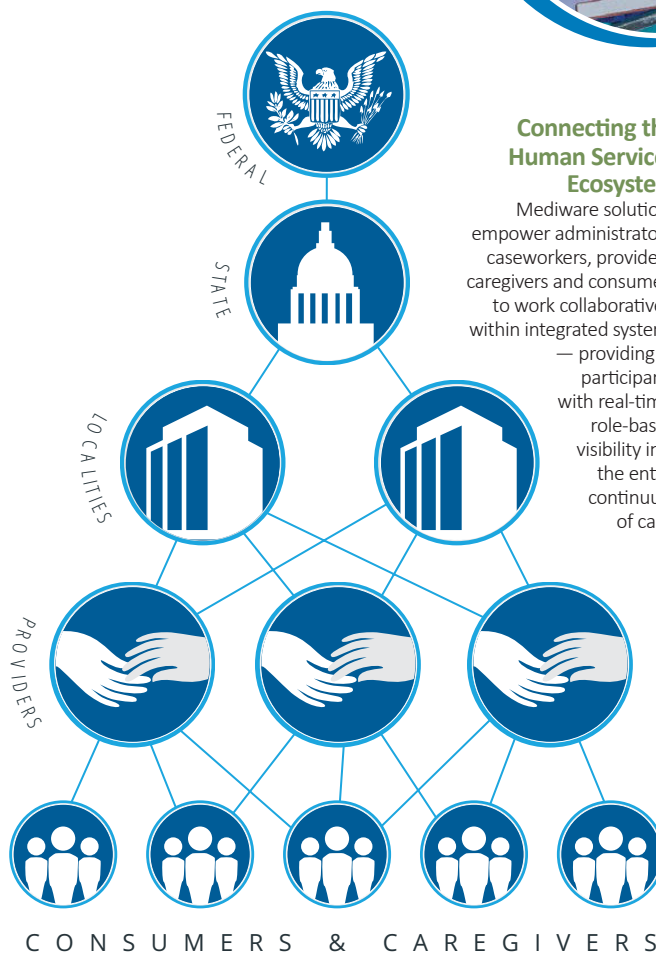
- **Connect payers, providers, caregivers and consumers** within a fully integrated system, and provide a global client record that follows each user through the continuum of care
- **Conduct remote client assessments** to reduce duplicate entry and human error, while freeing caseworkers to work with more consumers
- **Manage person-centered services** to adults, seniors, clients with disabilities and others at home and within community settings to maximize resources and improve outcomes
  - **Analyze consumer and program data** to provide insights into overall program effectiveness via powerful dashboards, and guide future service improvements and program development

Today, more than 1,000 HHS organizations across 40 states rely on Mediware solutions to better coordinate and manage delivery across the spectrum of care.

Mediware modules support programs in aging, intellectual and developmental disabilities, behavioral

## Connecting the Human Services Ecosystem

Mediware solutions empower administrators, caseworkers, providers, caregivers and consumers to work collaboratively within integrated systems — providing all participants with real-time, role-based visibility into the entire continuum of care.



health, adult protective services, homelessness and more. Mediware's SaaS options provide access anywhere, anytime via the web or mobile devices, reducing IT infrastructure costs and implementation times — and its highly configurable options let agencies apply changes across many systems as their requirements evolve.

# A TRANSFORMATION IN PROGRESS

**HHS POLICIES AND SYSTEMS MAY BE IN A STATE OF TRANSITION**, but we can see which way they are headed. Individual programs — and the technology behind them — are becoming more integrated as policymakers seek to treat individuals and families more holistically.

At the same time, the field is becoming more science- and evidence-based. Advances in neuroscience are reshaping how programs interact with clients, and better data analytics tools are giving policymakers quick feedback on the effectiveness of their efforts. In some cases, HHS programs are taking a cue from national retailers, adopting techniques developed to entice shoppers and using them to nudge citizens toward healthier choices.

“We’re talking with leaders around the country who are seriously exploring how behavioral economics can play a part in our work,” says APHSA’s Wareing Evans.

As the policy landscape evolves, technology has never been better positioned to support it. Platform-based and modular systems are

giving agencies a new option for modernization — one that reduces the risk of cost overruns and deployment delays while enhancing the flow of data among related programs.

But the technology transformation won’t stop there. Influential federal agencies like CMS are supporting greater use of standard off-the-shelf software and cloud-based services instead of traditional custom-developed systems. The goal is to help agencies reduce their focus on technology development and have the flexibility to iterate with their technology as the policies and business needs evolve.

“Looking at quality and access; that’s where we want states to be,” says CMS’ Kahn.

The push toward standardized solutions also includes efforts to deepen the pool of vendors selling to the HHS market, particularly by attracting innovative new firms into the sector. In the Medicaid space, CMS is establishing a certification process that will let vendors offer pre-tested solutions to meet the agency’s functionality requirements. It’s also trying to make the market less intimidating to newcomers.

“[New companies] have to be willing to work with government and that doesn’t always send warm

and fuzzy feelings to everyone,” says Kahn. “We need to listen to them. What are the challenges? What would make it a more hospitable business model? We need to work with the states to balance the risk.”

None of this, of course, will be easy. It will demand massive changes in how HHS agencies work internally, how they interact with other departments and programs, and how they plan and deploy critical technology systems.

“Part of the reality right now is that folks are discovering how much it takes to move the culture in these big institutional areas,” says Wareing Evans. “Even with all that’s going on with technology, how do you make it happen from a service delivery perspective? We’ve operated in these silos for so long — you cannot underestimate the scope of cultural shift required to shift long-standing approaches.”

Yet you can see the future taking shape. New York State is using outcome-based payments to incentivize hospitals and safety net providers to collaborate and provide more integrated and holistic care. Colorado is giving primary care providers, regional collaboratives and Medicaid officials online access to sophisticated data to help them identify areas of high need and improve care management. Hawaii is building a modular technology platform that will seamlessly connect multiple HHS programs and allow them to interact in new ways. And Wisconsin is pioneering the use of innovative cloud-based services to run its Medicaid program.

These are just some of the ways agencies are shifting toward a new HHS model — one that’s more integrated, data driven, modern and effective. The transformation isn’t complete, but it’s getting closer every day.

# Helping HHS Agencies **Make a Bigger Impact** with Vulnerable Populations

**M**odernizing decades-old IT systems can pose serious risks for public agencies, but also provides them with opportunities to improve their operations and service to their constituents. Health and human services (HHS) agencies increasingly realize they must make the transition to succeed in today's environment.

Microsoft can help lower the risk with flexible, easily configured software-as-a-service solutions that have key compliance, regulatory and security requirements built in. These solutions can shrink development time and capital costs, delivering quick victories to HHS agencies.

At the same time, Microsoft health analytics solutions combine diverse data types in ways never before possible, creating actionable intelligence. Together, these solutions can help HHS agencies enhance services for the most vulnerable populations and improve service delivery and outcomes.

Following are two program areas where Microsoft solutions make an impact:



**CHILD WELFARE** – A child-centric view helps agencies coordinate an integrated response. Caseworkers can automatically create and route abuse and neglect cases to supervisors, and send alerts in high-risk cases. Online maps and other resources enable supervisors to assign investigators based on experience, skills and proximity. Mobile functions may allow employees to access case materials from a laptop and easily dictate notes via a cell phone. These efficiencies can enable them to spend more time with individual at-risk children and families.



**WOMEN, INFANTS AND CHILDREN (WIC)** – Robust reporting and data-centric insights help officials better measure health outcomes as well as prevent fraud, waste and abuse. Caseworkers can gain mobility and scheduling efficiencies, which allows them to focus more on one-to-one services and nutrition education for clients.



**Microsoft**

To find out how Microsoft solutions can help HHS local, state and federal agencies reduce IT risk and improve outcomes, visit [www.microsoft.com/government](http://www.microsoft.com/government).



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to learn how Watson Health solutions are working to help Health and Human Services organizations enhance, scale and accelerate human expertise to transform their programs.



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# Transformation Without the Trauma

Complex modernization programs require leadership across many stakeholders, experience in navigating requirements and expert integration of data across multi-vendor ecosystems.

CGI's **ModernSI** approach provides for not only effective program management and governance of health and human services IT projects, but the critical work of data integration in an era of modular and agile deployments.

With deep expertise in both HHS programs and technology, agencies trust CGI to deliver modern, best-fit integrated systems — and so much more.

[cgi.com/hhs](https://cgi.com/hhs)

# CGI

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