Special Report 2017

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

TAKING THE LONG VIEW

Smart HHS strategies for uncertain times

A supplement to Government Technology/Governing

APHSA
American Public Human Services Association

APHSA

American Public Human Services Association

AAHHSA · AAICPC · AASD · ISM · NAPCWA · NAPIPM · NASCCA · NASTA · NSDTA

INFLUENCE BUILD CONNECT

Association of Administrators of the Interstate Compact on the Placement of Children (AAICPC)

Establishing uniform legal and administrative procedures governing the interstate placement of children

IT Solutions Management for Human Services (ISM)

Promoting collaboration and innovation in Health and Human Services Information Technology systems

National Association for Program Information and Performance Measurement (NAPIPM)

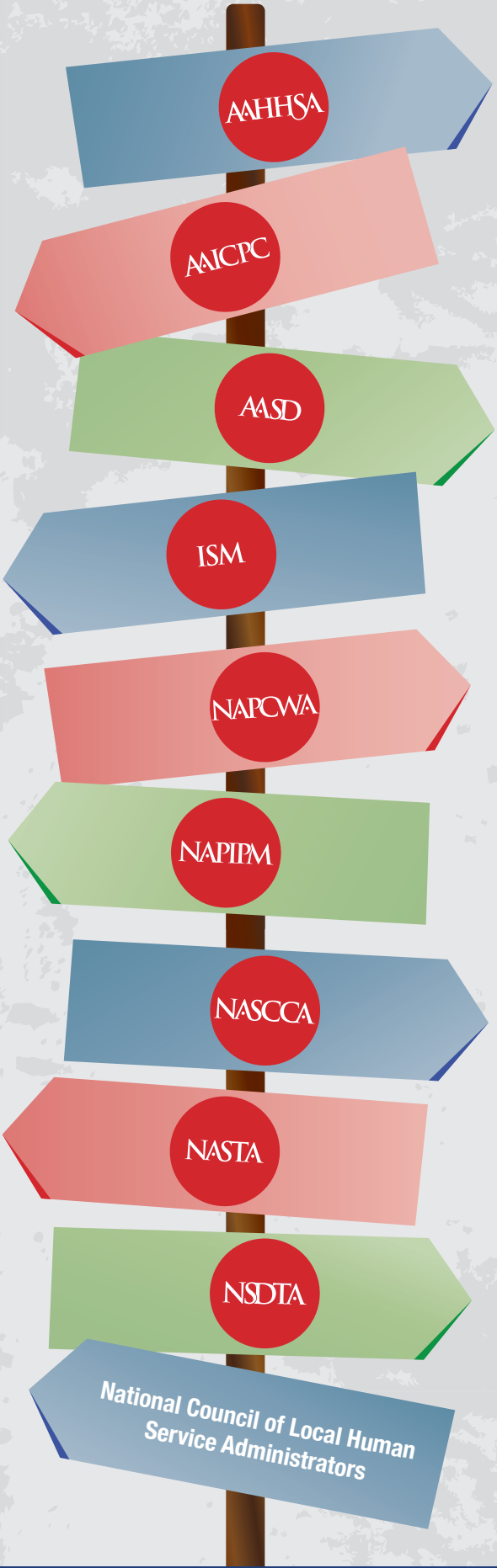
Achieving better outcomes for children, families and communities by strengthening program integrity, accountability, data analysis, and measurement

National Association of State TANF Administrators (NASTA)

Helping families obtain temporary cash assistance and skills for gainful employment leading to self-sufficiency

National Council of Local Human Service Administrators (Local Council)

Creating strong, thriving communities that enable individuals and families to live to their fullest potential



American Association of Health and Human Services Attorneys (AAHHSA)

Facilitating the exchange of information between government attorneys to promote collaboration and innovation in representing agencies administering health and human services

American Association of SNAP Directors (AASD)

Providing expert leadership and consultation on SNAP, nutrition and/or income assistance issues

National Association of Public Child Welfare Administrators (NAPCWA)

Developing and influencing national policy, strengthening leaders, and advancing innovative practices to build capacity, resilience and protective factors, healthy child development and strengthen communities

National Association of State Child Care Administrators (NASCCA)

Advancing federal, state, and local policies and programs that improve access to and quality of child care and support families in today's rapidly changing environment

National Staff Development and Training Association (NSDTA)

Improving the well-being of children, families and communities through innovations in staff and organizational development

Creating Strategic Directions in the Transformation of Health and Human Services

www.APHSA.org @APHSA1

CONTENTS

100 BLUE RAVINE ROAD, FOLSOM, CA 95630
916.932.1300 PHONE | 916.932.1470 FAX

WHERE DO WE GO FROM HERE?

The election of President Donald Trump — coupled with Republican control of the House and Senate — creates the potential for significant changes to federal health and human services policies. Although initial efforts to repeal and replace the Affordable Care Act (ACA) failed, discussions continue about eliminating or modifying the landmark health care legislation. Administration officials also have raised the possibility of Medicaid block grants, expanded employment requirements for aid recipients and other significant shifts.

After nearly a decade of relative certitude around the federal government's approach to HHS programs, state and local leaders now are coping with the unknown.

"We're spending a fair amount of time on contingency planning," says Eric Beane, secretary of Health and Human Services for the state of Rhode Island. "The uncertainty at the federal level just gives us more things we have to juggle at the same time."

> *"(We have) big looming question marks, and they scare the hell out of us. But we have a lot of smart people, and we'll do what we need to do to take care of our residents."*
>
> **Kurt Larrick, Communications Manager, Arlington County Department of Health Services**

Beane's comments were typical of what we heard from multiple HHS officials contacted and interviewed for this report. Many are bracing for policy changes and potentially tighter federal funding for the programs they run.

Against this backdrop of uncertainty, how should states and localities make critical decisions around improving HHS systems and programs to meet the needs of their citizens and communities?

The answer is to take the long view. Federal politics surrounding the ACA and social programs may evolve rapidly and swing wildly before an equilibrium is reached. But we believe there are fundamental strategies to improve the efficiency and performance of HHS programs regardless of where the political debate leads.

First, integrating and analyzing data will take on growing importance as state and local leaders gauge the performance and value of HHS initiatives. These efforts will be vital to ensure programs get the biggest impact from increasingly scarce dollars.

"Whether you're implementing programs on the ground or you're a policymaker responsible for designing them, I think this resolute focus on 'show me outcomes' is going to continue," says Tracy Wareing Evans, president and CEO of the American Public Human Services Association (APHSA).

This data-driven emphasis on outcomes is validating two other HHS strategies: preventing behaviors that lead to chronic and debilitating conditions, and addressing the broad array of socio-economic factors that dictate health and wellbeing. Evidence that these strategies work can be seen in Tennessee, where efforts to prevent tobacco use among pregnant women are significantly decreasing the number of low birth-weight deliveries.

In an era of tighter resources, these strategies are not just more cost effective, they're simply better for the long-term health and welfare of our citizens.

Finally, the systems that manage and deliver HHS programs must evolve, as well, to support new data integration and service delivery needs. These demands are driving modular and iterative development approaches that more closely match technology tools to user requirements.

Implementing all of this takes perseverance and vision, of course. Current funding streams often aren't designed to support innovative and integrated programs, and they typically favor treatment over prevention. In addition, agency workforces will need support and training to navigate the changing HHS landscape.

Still, Wareing says the HHS community is up to the challenge. "I am constantly amazed and inspired by how leadership across all sectors in the HHS space — in both the public and nonprofit sectors — is committed to realizing the potential of all people and to modernizing how we do the work," she says.

That commitment comes through loud and clear from agencies such as the Arlington County, Va., Department of Health Services.

"If federal and state money dries up, there's absolutely going to be an impact on us," says Communications Manager Kurt Larrick. "Are we going to be able to serve everyone who needs help? Can nonprofits working in our space still care for uninsured people? Those are big looming question marks, and they scare the hell out of us. But we have a lot of smart people, and we'll do what we need to do to take care of our residents." ✓

Improving HHS Outcomes to Build Strong and Healthy Communities

Health and human services agencies are leaning forward to the cloud to update legacy systems and improve customer engagement, harness big data analytics and AI, and measure program effectiveness. Until now, finding a solution to help achieve their most pressing mission — improving the quality of life for citizens in an accelerated fashion and within limited budgets — has been elusive if not impossible.

Salesforce's highly flexible open platform for customer relationship management (CRM) and case management can help HHS organizations modernize incrementally and deliver improved outcomes faster.

An Emerging Voice in the HHS Market

As the global innovator in CRM, case management, AI and analytics, and with the introduction of the Salesforce open platform for HHS, Salesforce has revolutionized how agencies engage with their customers to drive better outcomes. Currently, over a thousand government agencies rely on Salesforce to achieve digital transformation. Salesforce's proven cloud-based, pre-built modules for HHS, as well as program-specific accelerators, provide out-of-the box capabilities that greatly reduce or eliminate the need to write custom code. Its "clicks not code" approach to configuration lets agencies deploy applications securely in the cloud, lowering the risk and cost associated with custom code development.

Government Should Be in the Business of Innovation — Not in the Business of Building and Maintaining IT Infrastructure.

Salesforce's unique approach to modernization provides a superior, less risky path to unlock the value of the cloud and deliver improved customer service and outcomes. With Salesforce, agencies can avoid vendor lock-in or unsustainable open source, in-house custom development dependencies.

Salesforce customers benefit from seamless updates, real-time analytics and access to HHS industry apps. Salesforce's ease of use also allows IT staff to configure applications rapidly, reducing deployment time from months and years to just days or weeks.

Salesforce Government Cloud FedRAMP-Approved Solutions

Salesforce has developed solutions in the following areas: intake and integrated eligibility for Medicaid programs, Child Welfare, Workforce Development and Unemployment Insurance. These solutions:

- Help agencies capture valuable information about client interactions to measure progress, track milestones and provide a 360-degree customer view. Analytics can quickly reveal which combination of services deliver the best results.
- Provide agile, easy-to-use systems that support continuous improvement. As caseworkers and program supervisors learn how to best serve targeted populations, platform administrators can adjust and reconfigure their application, workflows and service plans as needed.
- Create smarter workflows that can greatly reduce paperwork, reporting and compliance, so caseworkers and others can spend more time with clients.

To learn more about Salesforce's case management, innovative analytics and AI, CRM solutions, and consultation for HHS agencies, visit **HTTP://SFORCE.CO/2WV5QMC.**

salesforce

USING DATA TO MONITOR PROGRAM OUTCOMES AND EFFECTIVENESS

SHUTTERSTOCK

The Tennessee Department of Health recently hired a team of data scientists, and it's analyzing and releasing a rapidly growing amount of health data. Arlington County, Va., created performance measurement plans for 85 different HHS programs to understand their effectiveness. And the Allegheny County Health Department in Pennsylvania is scouring data in an effort to improve outcomes for residents with chronic health conditions.

These and other initiatives show the significance of data analytics in health and human services. HHS leaders say analytics are crucial to justify current programs and target new initiatives. And, should already tight funding for HHS programs be squeezed even further as many expect, analytics will be instrumental in deciding where to cut.

"Over the last seven or eight years we've cut away at the margins to save money, but after you do that year after year, there aren't any margins left," says Arlington County's Larrick. "This year you have to look at entire programs. What's mandated? What's nice to have? What's gonna do the most harm? What's gonna do the most good?"

The growing importance of analytics is reflected in results from a Governing Institute survey of 191 state and local HHS leaders, conducted in July 2017. More than 60 percent of respondents said they already use data analytics to track program outcomes, and many noted that analytics can positively impact HHS missions — both in terms of serving citizens more effectively and in increasing operational efficiency. For example, half of the respondents consider analytics to be a crucial component in lowering health care costs, improving outcomes and tracking the root cause of health issues. A similar percentage use analytics to identify fraud.

Analytics play a role in another key area for HHS officials: improving accountability. "We have an obligation as stewards of public dollars to be accountable," says Thomas Pristow, director of the Department of Health and Human Services in Cuyahoga County, Ohio.

Accountability is paramount as HHS leaders anticipate their budget dollars will increasingly be linked to performance. A decisive majority of survey respondents — 82 percent — said they expect future funding will be tied more closely to results.

This pay-for-success mentality can be seen in programs like the South Carolina Nurse-Family Partnership. The partnership — which serves pregnant teenagers and young women at high risk for pregnancy complications — recently expanded with $60 million in seed money from private donors, philanthropists and Medicaid. But to access an additional $7.5 million from the state, it must hit performance thresholds around reducing preterm births and emergency room visits. Analytics will help the partnership track performance to ensure it meets those thresholds.

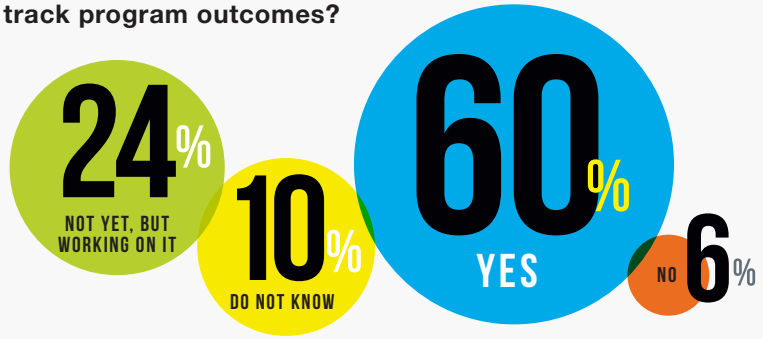
The same scenario is playing out at the local level. "When we go before our leadership, HHS managers must be able to answer three questions: What services are we offering; how well are we delivering them; and are citizens better off?" says Pristow. "The only way we can answer the third question is with outcomes-based measurements."

Analytics have also become a powerful tool for targeting urgent problems, such as opioid addiction. The Massachusetts Department of Public Health is aggregating a variety of data sets, including statistics about painkiller prescriptions and death rates, to identify regions with the highest risks of overdoses and fatalities. Officials are using the findings to better target limited resources.

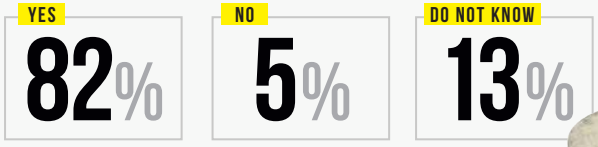
OUTCOMES TAKE CENTER STAGE

The growing importance of analytics in achieving HHS outcomes is reflected in results from the Governing Institute survey of 191 HHS leaders.

Do you use data analytics to track program outcomes?



In the near future, do you expect more pressure to tie funding to program outcomes?



OVERCOMING OBSTACLES TO LEVERAGE ANALYTICS

While a commitment to analytics is vital, it takes more than simply running large volumes of HHS information through sophisticated data models to assess and improve outcomes. Officials also must address cultural and organizational challenges. Employees may bristle at the concept of outcomes-based analyses because they fear data will be used in a game of "gotcha" to punitively uncover performance gaps.

Overcoming this challenge takes managerial finesse, Pristow says. It's a pain point he knows all too well. In a previous role in a different state, Pristow used outcomes data to evaluate the nearly $10 million

spent annually for juvenile mental health services, including programs devoted to substance abuse and schizophrenia. After reviewing performance data, he warned therapist contractors that certain poorly performing programs were at risk for budget cuts or even elimination if they didn't show better outcomes within a year. "Talk about blowback," he says.

This experience encouraged Pristow to find a way to collaborate and cultivate buy-in among stakeholders. He now gives contractors a voice when formulating new performance metrics.

"We hold them harmless for two years to give them time to make any adjustments if issues come up," he says. "This gives them a reason to believe they can work with the department and see the value in the outcomes-based approach."

Similar change management approaches can help internal staff become comfortable with analytics strategies. At first, Pristow tried to promote this attitude by more than doubling the number of employees selected to take leadership training courses.

"These people were coming out of the program excited and jazzed about the idea of doing things differently," he says.

But the change was often short lived. "In some cases, they found it oppressive once they returned to their regular work environments. The culture was saying to them, 'It doesn't matter what you learned in your training, that's not how we do things here.'"

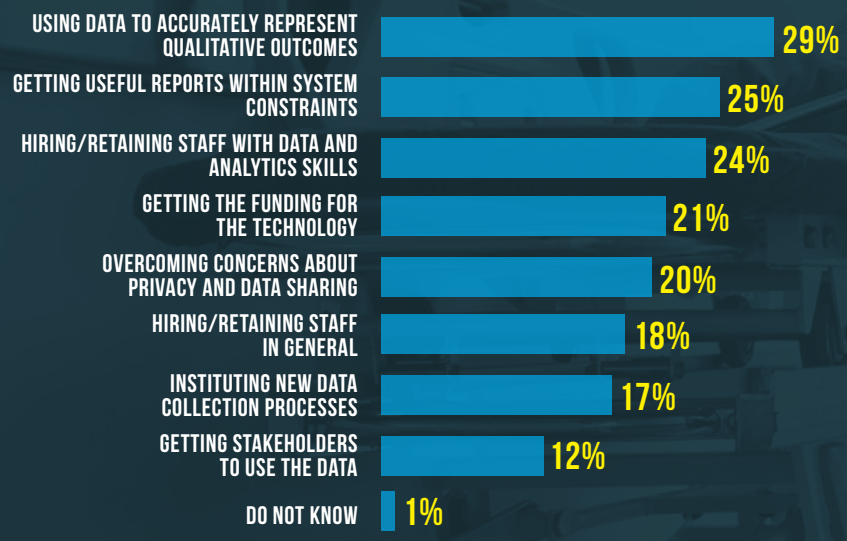
Pristow and department supervisors are now devising ways to promote a risk-taking culture and encourage people to find new ways to accomplish the agency's goals, including trying to use data more effectively. Some ideas are to require people to demonstrate creative problem solving as one of the measurements in future performance reviews, and to make the ability to generate new ideas a goal in individual professional development plans.

"People need to understand they have the opportunity to step outside of what they've been doing to try more creative options," he says. ✓

A TALENT CRUNCH IN HHS

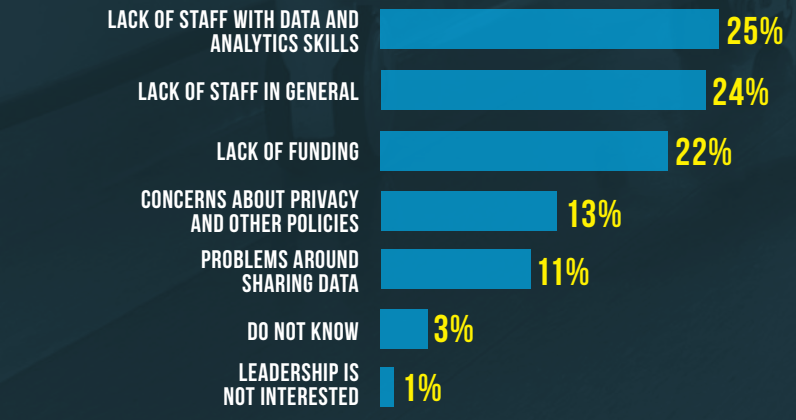
Research shows high interest in analytics-driven performance measurement among HHS leaders. But officials say they're struggling to attract and retain the data analysis experts needed to expand these programs. In the Governing Institute survey, nearly a quarter of respondents (24%) said a lack of staff skills is one of their greatest challenges when trying to use analytics to track program outcomes. The talent crunch may be an underlying cause of two other top challenges — using data to accurately represent qualitative outcomes and generating useful reports.

WHAT ARE YOUR GREATEST CHALLENGES WITH DATA ANALYTICS?



Survey respondents from agencies that aren't yet tracking program outcomes using data analytics voice similar concerns. The highest percentage (25%) also blame a shortage of staff skilled in analytics.

WHY IS YOUR AGENCY NOT USING DATA ANALYTICS?



Some HHS officials are turning to higher education to help overcome talent hurdles. For example, departments in Cuyahoga County, Ohio, and Allegheny County, Pa., are working with data scientists at local universities to develop data models and perform analyses.

Microsoft

Microsoft in Health and Human Services

Microsoft is enabling digital transformation across government priorities, while helping to ensure that government organizations have the trust, security, and compliance they need for sensitive data. We're developing intelligent cloud innovations, strengthening government cybersecurity solutions, improving government services, and reinventing productivity and business processes. Supported by an ecosystem of expert government service partners, Microsoft enables governments to expand their services through the government cloud (g cloud) and achieve more for the citizens they serve.

Learn more at www.microsoft.com/government and learn about the Microsoft Government Cloud at http://aka.ms/checkthefacts

Meet with Microsoft at APHSA-ISM to learn more.

DAVID KIDD

THE RISE OF RAPID-CYCLE EVALUATION

Health officials in Allegheny County, Pa. are using social determinant data and rapid-cycle evaluation to improve chronic disease outcomes for residents.

Officials in the Allegheny County Health Department hope that taking a deep dive into data about things that impact cardiovascular health will uncover new ways to improve outcomes for individuals with chronic diseases.

It's too soon to tell if the effort will directly save lives, but even at this early stage, HHS officials have learned a valuable lesson.

"Initially, we were hoping to find specific interventions that would have more impact than others," says Dr. Karen Hacker, director of the health department. "But now we know there aren't going to be any silver bullets."

Instead, officials will delve more deeply into social determinant data, including education, employment and the number of cigarette smokers in various areas of the county to pinpoint the blend of factors that lead to better outcomes within various community segments.

This is an example of rapid-cycle evaluation, which aims to capitalize on large volumes of information for evidence-based, iterative improvements in public health efforts.

The idea is catching on. In the Governing Institute survey of HHS leaders, 30 percent of respondents said their departments were already using these innovative improvement strategies.

The foundation for these initiatives is comprehensive, accurate and timely data. However, public health officials say this information is a challenge to amass. For example, public health departments routinely receive mortality and birth certificate data, but lack detailed information to improve chronic disease outcomes.

"The basic, bread-and-butter data we need to better understand chronic diseases would be about obesity, tobacco use, diabetes, asthma — but we're always struggling to find the best sources for that," Hacker says.

For help, Allegheny County turned to managed care organizations for anonymous claims data. "We have three major organizations that work with us, which covers about 60 percent of our county," Hacker says.

The lack of comprehensive data needed for rapid-cycle evaluation programs also stems from turf wars that make agencies protective of the data they collect and reluctant to share it with HHS departments. And even when HHS departments can collect valuable information, they're often stymied by a shortage of analytics experts who can support rapid-cycle evaluation efforts.

Outdated government IT systems create additional problems. "The data platform has to be sound," says Pristow of Cuyahoga County in Ohio. "But the legacy systems run by the state rank about 3 on a scale of 1 to 10."

Public health experts say the best hope for overcoming these challenges may be state and local government leaders.

"Government spends a lot of money both as an employer and as an insurer of employees," says Georges Benjamin, executive director of the American Public Health Association. It can use its status to promote evidence-based solutions to make sure taxpayers are getting the best value for dollars spent for public health, he says, adding that waivers available through the ACA, Medicaid and other programs can help fund efforts.

"States have historically been the engines of innovation," he points out. "So governors who want to make innovation happen are in a position to do that."

When HHS Agencies Put Analytics into Action

Health and human services agencies have a difficult mandate that is increasingly challenging as more people require their services. If HHS agencies are going to persevere in an era of tight budgets and funding uncertainty, they must not only better understand their data, but act on it.

SAS, the industry leader in data analytics software and services, helps federal, state and local HHS agencies glean insights from their data to better understand health trends, reduce costs, mitigate fraud and — most importantly — act to improve outcomes.

Examples of SAS solutions in action include:

San Bernardino County Department of Behavioral Health Services

Caseworkers at the San Bernardino County Department of Behavioral Health Services in California use SAS solutions to gain a 365-degree view of clients to better understand their needs and sharpen outreach efforts. The agency uses analytics to map its citizen populations and determine which locations will best serve them. Agency officials also use analytics to understand which outpatient services are most effective in improving clients' health to keep them out of the hospital.[1]

Virginia Department of Medical Assistance Services

Last November, the Virginia State Health Commissioner declared opioid addiction a public health emergency. But with data flooding in from across the commonwealth, it was difficult for the Virginia Department of Medical Assistance Services (DMAS) to match patients with the best providers and services. Today, DMAS speeds medical care to citizens suffering from opioid addition by analyzing massive amounts of data using SAS Analytics. DMAS can instantly see which services are available where and get addiction recovery assistance to the people who need it more quickly. DMAS also now turns around prior authorizations for prescriptions or urgent medical services in a single day, a process that previously took 30 days or more.[2]

SAS can help state and local agencies gain much more from their existing data assets in many other areas. For example, data analytics can help HHS agencies improve their existing prescription drug monitoring programs. Beyond working to simply identify "pill mills" for investigation, robust data analytics can lead to improved treatment protocols, provider education and policy decisions for all stakeholders.

1. https://www.sas.com/en_us/customers/san-bernardino-county-health.html 2. https://www.sas.com/en_us/news/press-releases/2017/may/sas-analytics-virginia-opiod-addiction.html

sas

To learn more about solutions to put analytics into action for Medicaid management, value-based care and payment reform, and population health, **visit sas.com/gov.**

ADDRESSING SOCIAL AND ENVIRONMENTAL DETERMINANTS OF HEALTH

More than a decade ago, the Rhode Island Department of Public Health was evaluating leading health indicators to gauge its progress in improving population health. In some areas the indicators were improving. Smoking rates, for example, were down. But in others — such as rates of obesity — the statistics were heading in the wrong direction. Even where the indicators had improved, there were disparities based on race, education levels, affordable housing availability, crime rates, poverty and other factors.

The data showed that where people lived made a big difference in health outcomes, says Ana Novais, executive director of the Rhode Island Department of Public Health. "It was our 'aha' moment."

It was also the genesis of an idea for a program to combat these disparities. Formally launched in 2014, the state's Health Equity Zone (HEZ) program is a bottom-up, community-based effort to improve specific conditions in specific geographic areas.

It's just one of many programs springing up across the nation designed to address social and environmental factors that impact health care outcomes and costs, says Amy Clary, policy associate at the National Academy for State Health Policy (NASHP).

"Some leading states are taking a cross-sector approach to health and trying to align their resources across agencies that support these shared goals of improved health for citizens," she says.

Indeed, in the Governing Institute's recent survey of 191 HHS officials, 25 percent said their agency was already integrating social determinants of health to improve service delivery and 14 percent were starting to do so. Another 12 percent said their agency had identified such determinants as a priority, but they had no immediate plans to integrate them.

States, counties and municipalities are experimenting with different models. Some, like Rhode Island's, focus on community-based

organizations that work with a variety of stakeholders to address specific needs. Others, like one in Kentucky, designate a community health worker who physically visits residents, identifies factors that are inhibiting good health care and then helps residents get the resources they need.

For its part, the Center for Medicare and Medicaid Innovation (CMMI) has launched a project to test various types of service delivery to see what's most effective. CMMI announced grants in April 2017 for 32 Accountable Health Communities Model pilots. These five-year pilots will zero in on gaps between clinical care and community services by identifying and addressing issues such as housing instability, food insecurity, interpersonal violence, and lack of transportation for Medicare and Medicaid beneficiaries.

While it's too early to assess the CMMI pilots, following are examples of two common models.

COMMUNITY EQUITY IN RHODE ISLAND

A key feature of Rhode Island's HEZ program, now in its second year of implementation, is its bottom-up design, says Novais. The lead organization of each zone is based in the community it serves. It could be a health center, for example, or an affordable housing organization. Working with other community groups and local residents, the organization defines the geographic boundaries of the zone (which can range from a few city blocks to an entire county) and identifies the specific disparities that contribute to poor health in that area. In one HEZ, for example, older residents found it difficult to leave their homes — especially in winter — which led to social isolation and lack of mobility that impacted their health. To address the problem, the HEZ partners created a community service program in which teens shovel snow from elderly neighbors' walks and drives.

A key challenge in implementing the program has been how to pool together silos of funding yet maintain accountability, says Novais. Funding sources include the Centers for Disease Control and Prevention, the Health Resources and Services Administration (HRSA), the Substance Abuse and Mental Health Services Administration (SAMSHA), the Environmental Protection Agency (EPA), the Department of Agriculture and the state. Certain funds that target specific diseases or health conditions — such as diabetes or obesity — can have different grant cycles and require different data in their reports. Such "braided funding" requires a different accounting infrastructure.

"We were used to an accounting system that handled single funding streams of contracts," Novais explains, "but now we had to maintain accountability for these threaded streams of funding."

The state Department of Health started combining funds on a small scale long before launching the HEZ program, producing easy wins that would demonstrate benefits and blaze a path for new accounting, she says. For example, a program on diabetes and a program on maternal and child health combined their funds to create a media campaign on healthy nutrition. "We convinced people, little by little, that the framework works," Novais says.

Another adjustment was in how communities received and spent funding. In the HEZ program, the lead organization distributes money within the community. But federal funding uses a reimbursement model, meaning an organization has to spend first, then receive the funds later. Lead organizations had to have the financial wherewithal and infrastructure to operate in that way, Novais says.

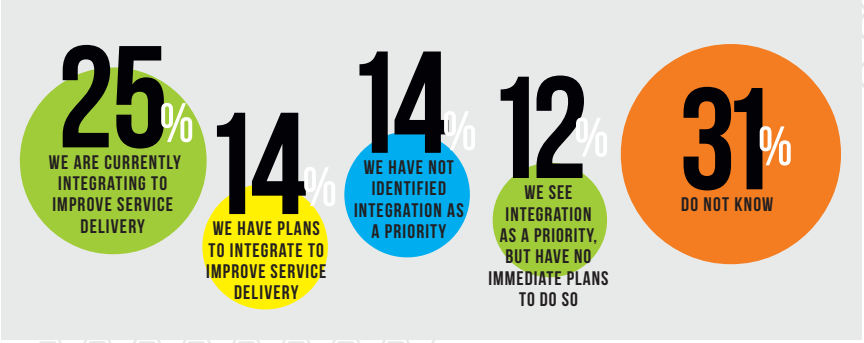
In addition, the state had to change its management style. The HEZ program requires collaboration and consensus rather than the hierarchical approach of overseeing contracts, she says.

AT HOME IN KENTUCKY

A longstanding program in Kentucky is an example of the community health worker (CHW) model. Founded in 1994, Kentucky Homeplace employs workers from the local community to reach residents in some of the poorest areas of the state, where the rates of cancer, heart disease,

What You Told Us:

Does your agency integrate social determinants of health into its service delivery model?



hypertension, asthma and diabetes are high. Homeplace currently serves 30 counties in the eastern portion of the state with 22 full-time CHWs.

Dr. Fran Feltner, director of the University of Kentucky Center of Excellence in Rural Health and principal investigator of Kentucky Homeplace, has been with the project since the beginning and has watched the CHW model catch on.

"Today, there is a lot of interest in expanding the model across the nation, because it works," says Feltner.

A key to the Kentucky program's effectiveness is the fact that CHWs live in the communities they serve and thus have the knowledge and cultural sensitivity to form trusting relationships with local residents. The CHW literally and figuratively meets them where they are, going into homes and assessing the environment. Does the resident have electricity? Running water? Access to transportation to get to medical appointments?

But funding is a constant challenge. "For CHW programs, sustainable financing is always in the forefront of everyone's minds," says Clary. Some states try to reimburse some CHW services under their Medicaid program while others work with Medicaid managed care organizations (MCOs). Michigan, for example, requires MCOs to employ one CHW for every 20,000 beneficiaries, she notes.

"They actually have a staffing ratio written into the Medicaid managed care contracts," Clary says.

Funding for Kentucky Homeplace is a collaboration of the Kentucky Cabinet for Health and Family Services, the University of Kentucky and the Center of Excellence in Rural Health. The level of funding has decreased over the years, from $1.9 million in 1994 to about $1 million today, says Feltner. Consequently, it has had to limit its geographic reach to the Appalachian counties in eastern Kentucky. (It previously served counties in the western part of the state as well.) Meanwhile, the program is seeking grants from various sources. For the last two years, for example, it has received funding from CMS's Connecting Kids to Coverage program.

Feltner says a reimbursement model seems to be a sensible, sustainable funding approach, but has mixed feelings about it.

"I'm afraid that if community health workers are reimbursed for certain services, then those services will be [the only things] they do," she says. "The beauty of a CHW program like Homeplace is that we are not beholden to any one entity."

It is not responsible to a hospital or accountable care organization, but rather to the patient. "Our main goal is to put the person at the center and focus on their needs — whether they be medical, social or environmental." ✓

ARLINGTON'S COMPREHENSIVE APPROACH TO OPIOID ADDICTION

Ten years ago, Arlington County, Va., made a commitment to end homelessness. The affluent community situated across the Potomac River from Washington, D.C., mobilized government agencies, nonprofits, churches and community groups to implement strategies and attack affordability issues triggered by some of the nation's highest housing costs. For instance, the county employs prevention and diversion strategies to keep individuals out of shelters. Housing First initiatives like rapid rehousing and permanent supportive housing ensure people are quickly back in permanent housing when homelessness occurs.

"We began our efforts a decade ago very deliberately by bringing key people to the table," says Kurt Larrick, communications manager for the county's Department of Human Services (DHS). "It was a lofty goal, but everyone was energized and committed, so we drew up a plan of what we specifically needed to do."

These efforts have cut homelessness rates by almost 70 percent so far, and the partners remain committed to ending permanent homelessness in the community, says Larrick.

Now Arlington County is using the same approach to fight opioid addiction. The initiative includes a substance abuse team within DHS, and involves public safety agencies, schools and expanded community outreach.

Law enforcement officers in the county receive crisis intervention training, which is designed to help them spot underlying mental health issues and divert appropriate cases to a DHS crisis intervention center instead of jail. The county also runs a longstanding drug court program that provides free addiction treatment under judicial supervision.

Schools are another important component. The county is ramping up early prevention efforts among students, and it already operates a Second Chance program for middle school and high school students intended to steer kids away from long-term addiction problems. The program lets students who are found to be under the influence of alcohol or drugs attend substance abuse counseling sessions in lieu of school suspension or juvenile court prosecution.

The pervasiveness of opioid addiction also drives outreach to populations that typically haven't engaged with DHS.

"There are people out there who have never reached out to social services, but now they have an 11th -grader who gets straight As and is taking opioids," Larrick says. "We want to make it as easy as possible to show them the different resources that are available to them."

Building Integrated, Value-Based Care for Medicaid Dental Programs

Nearly $66 billion of the estimated $128 billion spent in the U.S. on oral health care this year will be for the treatment of oral disease – an almost completely preventable health condition.

Why should state policymakers care?

Over the next several years, states will likely gain more autonomy over – and shoulder more of the burden for – limited Medicaid dollars. Unfortunately, nearly all state Medicaid programs encourage volume over value for oral services. To move beyond the limitations of fee-for-service structures, states must look to adopt person-centered solutions.

DentaQuest, the largest oral health company in the Medicaid space serving more than 20 million people nationwide, is leading the charge in spreading person-centered oral health models that help reduce escalating costs and health outcome disparities.

Advantage Dental, the nation's first dental accountable care organization and now part of the DentaQuest family, is a leading example of person-centered dental and oral health care. Integrating physical, mental and dental health, this model is proven to address social determinants of health, lower costs and improve health outcomes.

Using technology and expanded practice workforce, Advantage Dental reaches more people through school and community-based settings. Today, 85 percent of services provided to children and 62 percent of those provided to adults by Advantage Dental are preventive – rates markedly higher than a comparable national sample of Medicaid patients. Because of this robust preventive care, Advantage Dental patients need fewer invasive and costly restorative services. And, this approach is scalable. Advantage Dental has maintained their impressive outcomes while tripling the number of patients they serve following Medicaid expansion.

Person-centered oral health is the sustainable way to integrate care in a meaningful and cost-effective way. But these strategies require commitment from state leaders and include provider adoption of electronic records, alternative payment models, and the integration of oral health with behavioral and physical care.

Promoting value

To support integration and value, DentaQuest believes states must:

- Promote alternative financing models to support providers in addressing oral health beyond the dental chair.
- Incentivize oral disease management to avoid costly, invasive procedures.
- Improve access through expanded workforce and technology.

DentaQuest is pioneering value-driven healthcare models. To learn more about how to achieve optimal health outcomes and reduced costs, request a copy of "Climate for Change: Leveraging Accountable Care Principals to Achieve Person-Centered Oral Health" by visiting www.dentaquest.com/getwhitepaper.

DentaQuest

TRENDING IN 2017: WHAT YOU TOLD US

In July 2017, the Governing Institute, in partnership with the American Public Human Services Association (APHSA), surveyed 191 HHS professionals on the topics covered in this report. Here's an overview of the findings.

What You Told Us

HHS AGENCIES' TOP CHALLENGES

2017

- INADEQUATE BUDGET TO MEET PRESSING NEEDS — 57%
- STATE AND FEDERAL REGULATIONS AND POLICIES — 40%
- DECREASE IN FEDERAL FUNDING FOR MEDICAID EXPANSION — 30%

2016

- INADEQUATE BUDGET TO MEET PRESSING NEEDS — 48%
- WORKFORCE SHORTAGES — 35%
- STATE AND FEDERAL REGULATIONS AND POLICIES — 34%

LIVING IN AN UNCERTAIN ENVIRONMENT

While budgets are always a concern, the changing federal landscape has added pressure to HHS agencies to cut costs.

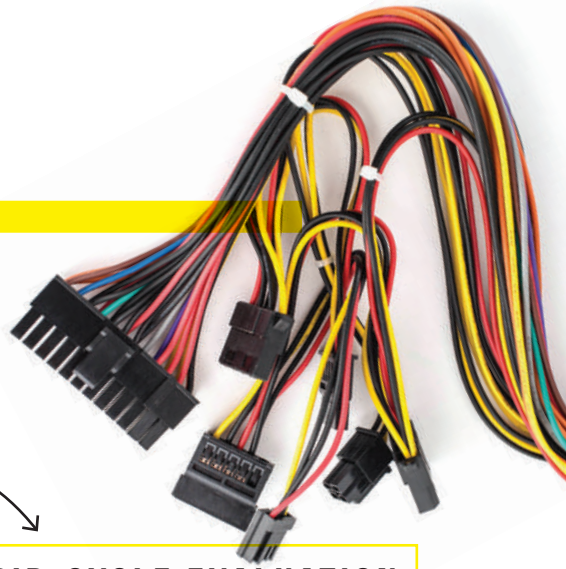
31%

said the uncertainty surrounding the ACA in the first half of 2017 **negatively impacted their ability to provide services** in the second half of 2017.

50%

said their agency **has modified or is likely to modify plans** in response to uncertainty regarding federal funding.

MOVING TOWARD MODERNIZATION



MODERNIZATION is a top priority.

1/3 OF AGENCIES SAID OVER HALF OF THEIR IT SYSTEMS NEED TO BE MODERNIZED.

GROWING TRENDS are helping agencies modernize.

MODULARITY

While only **14% are using** modular procurement strategies, nearly **16% plan to**.

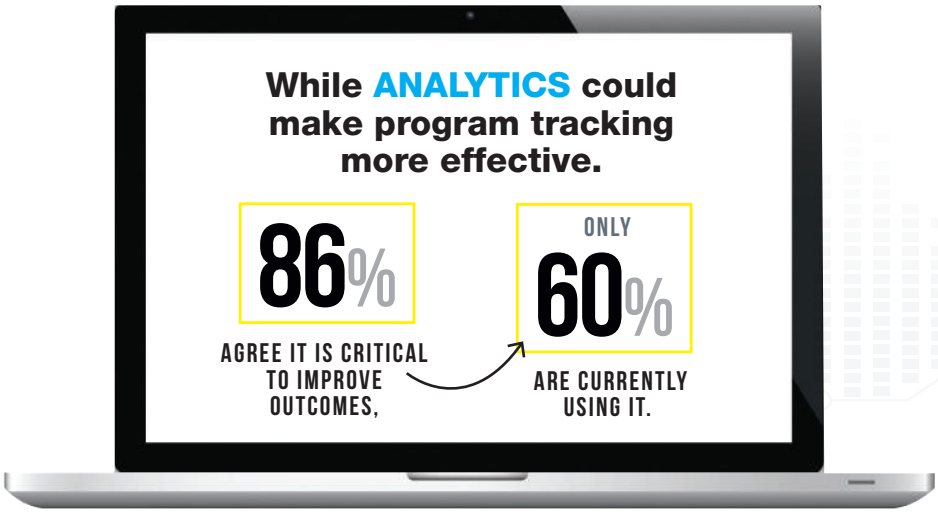
RAPID-CYCLE EVALUATION

Nearly **30% are adopting this method** to achieve improvements.

FOCUSING ON DATA-DRIVEN OUTCOMES

There is a clear shift to a focus on OUTCOMES.

85% TRACK PROGRAM OUTCOMES AND NEARLY **82%** EXPECT MORE PRESSURE TO TIE FUNDING TO OUTCOMES.



When outcomes are tracked effectively, agencies gain significant advantages:

- **52%** ARE BETTER ABLE TO MEET FUNDING REQUIREMENTS
- **47%** IMPROVE THEIR ADMINISTRATIVE PROCESSES
- **45%** ACHIEVE BETTER CLIENT/PATIENT OUTCOMES
- **32%** INCREASE STAKEHOLDER ENGAGEMENT

IMPROVING WELLNESS AND REDUCING COSTS BY COORDINATING EARLY INTERVENTION

Vons supermarket chain partners with *Live Well San Diego* to promote healthier eating.

Visit a Vons supermarket chain in San Diego, Calif., and you might notice something unique. Food is tagged as "baby friendly" in an effort to educate expectant mothers and parents about healthy food choices. Labeling foods in this way provides valuable information that promotes healthy choices for healthy babies. While this may seem like a simple approach, it guides and inspires San Diego residents to make decisions that will help reduce the number of underweight newborns and the rate of infant mortality.

Vons is one of several hundred *Live Well San Diego* partners who have made a formal commitment to support the county of San Diego's vision for a region that is "building better health, living safely and thriving."

Launched as an initiative seven years ago by San Diego County Health and Human Services Agency Director Nick Macchione, and later adopted as the vision for the county of San Diego, the *Live Well San Diego* effort is stronger than ever and has become an inspiration and model for others — including Allegheny County, Pa., and Maricopa County, Ariz. — across the nation on how to improve population health.

Although it's not directly linked to *Live Well San Diego,* the average life expectancy for San Diego citizens, at 82.3 years, is far higher than the national average. But more than just helping people live longer, the effort helps people live better.

Like the Vons initiative, many of *Live Well San Diego's* programs and events focus on early intervention and awareness — including the Love Your Heart event, which provides free blood pressure screenings to thousands of residents, the 31-Day Challenge, which sends a daily notification to participants via their smartphone to help them try new things and accomplish simple tasks each day for a month, and the Check Your Mood Day, which encourages people to be conscious of their emotional wellbeing.

Not unlike the strategy of addressing social and environmental determinants of health, focusing on early intervention and collaboration is a critical factor in improving outcomes in HHS, and one that leaders are taking to heart.

With more than 300 current *Live Well* partners, San Diego has become a powerhouse. "They say it's a fluke if you make it in the first year. It's a bigger fluke if you make it a second year," says Macchione. "But not seven years. We started with one *Live Well* partner with the city of Oceanside in 2011. We now have 316 *Live Well* partners that are helping more than three million San Diego residents build

better health, live safely and thrive."

Part of *Live Well's* success is the collaborative nature of the effort.

"The degree of buy-in that they have across San Diego County in the concept is tremendous," says Tracy Wareing Evans, president and CEO of APHSA. "It is a powerful example of what co-creating solutions can look like."

While it may seem obvious, Macchione says it's critical for leaders to start where the need is the greatest.

"You need to create something that's part of the community's DNA, versus it being imposed on them," he says.

For some communities, the greatest need may be addressing the opioid epidemic. For others it may be addressing obesity or chronic diseases. Regardless of the problem to be solved, Macchione stresses that government leaders must realize one of their most important roles is that of a convener — that it's their job to bring together government agencies, businesses and individuals to make a real impact.

"Even with all the might, and great innovation and remarkable committed men and women who work for county government, we weren't going to have measurable significant improvement in adding life expectancy," says Macchione. "We realized we needed to do this together as a community, not as a government."

WHEN AN EMERGENCY ISN'T AN EMERGENCY

Another example of the concept of early intervention is the work being done around community paramedicine (CP). Also called mobile integrated healthcare (MIH), CP is about equipping first responders to deal with patients suffering from chronic medical conditions, such

* CUTTING COSTS

In part by referring patients to services such as mental health crisis centers or drug treatment centers, a San Diego pilot cut the number of 911 calls in half and produced a net savings of more than

$45K/MONTH

as heart failure or diabetes, or with behavioral health issues like drug addiction or mental illness. The goal is to keep these individuals out of the emergency room.

After a typical 911 call, an ambulance is dispatched and emergency medical services (EMS) personnel stabilize the patient and take him or her to the emergency room of the local hospital. Unless they are bleeding or not breathing, patients often wait hours before a doctor examines them. Doctors and nurses are often overwhelmed with non-urgent cases. Health payers, hospitals and the government must absorb high, and often unnecessary, costs.

"The model has been you call, we haul, we bill you and that's all," says Matt Zavadsky, chief strategic integration officer for MedStar Mobile Healthcare, a governmental EMS agency that serves 15 municipalities in Tarrant County, Texas, including Fort Worth.

But as the focus on accountable health care intensifies, more local and state governments are exploring the concept of CP to ease overloaded emergency care systems by empowering paramedics to assess patients at the scene and then deliver them the appropriate care. For example, frequent 911 callers may be calling because they have no primary care, no way to travel or even no home. An alcoholic may need to go to a rehab or sober house rather than the emergency room.

According to numbers tallied by the National Association of Emergency Medical Technicians (NAEMT), there were 109 MIH-CP programs across the United States in 2014. That number had grown to at least 225 by mid-2017, according to Zavadsky, who is also president-elect of the association.

In 2014, California launched pilots to test six MIH-CP concepts. Last fall, an independent evaluator — the

THE POWER OF PREVENTION

Shortly after Dr. John Dreyzehner became Tennessee health commissioner in 2011 he paid a visit to every local health department in the state. What he saw were local health officials straining to keep residents from falling through gaps in the health care system, but less attention on keeping people healthy in the first place.

"As a nation, we really want health — to live long and enjoy our places, spaces and relationships — but the entire conversation is around how we're going to pay for care," he says. "We're solving for payment and access to care instead of solving for health."

So Dreyzehner began refocusing his department's vision on the upstream causes of disease and chronic health conditions. Although the health department couldn't abandon traditional safety net functions, it could begin to address the factors that lead to poor health before they trigger expensive medical treatments.

Those efforts led to Tennessee's Primary Prevention Initiative, launched in 2013, which targets tobacco use, physical inactivity, poor eating habits and addiction. These four factors drive all 10 of the leading causes of chronic illness and death in Tennessee, Dreyzehner says.

How much is primary prevention worth? An example comes from the state's partnership with Baby & Me Tobacco Free, a national program that works with states and localities to help pregnant women quit smoking. Program participants receive counseling along with vouchers for free diapers if they remain tobacco free during pregnancy and after they give birth.

The program's quit rate is around 30 percent, Dreyzehner says, significantly better than other methods. A study of 3,000 early participants showed a 50 percent reduction in low-birthweight babies. Given that a normal birth in Tennessee costs several thousand dollars versus $40,000-plus for an underweight birth, the state avoided several million dollars in costs just in the initial part of the program.

The results are so good that managed care Medicaid providers in Tennessee now pick up the program's tab.

"We showed them the data and they bought in because they're paying for more than half of the births in Tennessee," Dreyzehner says. "If we can drive the low birthweight birthrate down even several percent, we're saving a lot of money."

HHS Agencies Need to be Built for Speed and Performance

New funding realities and emphasis on results call for nimble approach made possible with Rapid Cycle Improvement

Gone are the days when health and human services (HHS) agencies could rely on the status quo. In an evolving environment with uncertain funding, innovation is the name of the game to make the most of budget dollars. Agencies need to know quickly if an initiative is working and adjust on the fly.

Optum helps agencies address this issue with an approach known as rapid cycle improvement, a fast-track method to help agencies understand what does not work, and respond nimbly with a just-in-time intervention that enables them to pivot to a better method.

Optum in Action

Hospital readmissions cost billions annually and jeopardize patients' well-being.

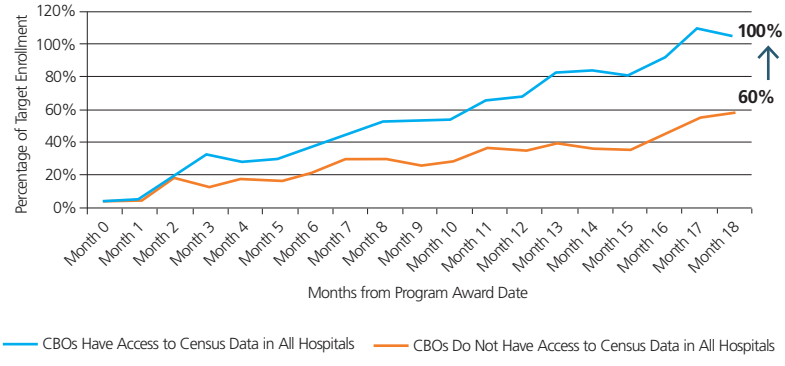
To help solve this problem that affects both Medicare and Medicaid, community-based organizations (CBOs) worked to improve care transitions and reduce hospital readmissions for Medicare beneficiaries in nearly 500 hospitals across the country. CMS contracted with Optum to support participating CBOs using rapid cycle improvement methods.

By analyzing monthly enrollment figures and 30-day readmission rates, Optum could determine which CBOs had the most success identifying appropriate patients.

The data revealed that having access to electronic health records (EHRs), rather than seeking nursing referrals or other indirect approaches to identify patients, made the difference in meeting program goals. Using webinars, online discussions, in-person meetings and other mediums to reflect this insight, Optum facilitated communications and information-sharing among all stakeholders to increase the use of EHRs from a small group to over 80 percent of partner hospitals.

Within two years, over 80 percent of partner hospitals provided CBOs access to their electronic health records, resulting in reduced hospital readmissions and related costs, while providing higher quality of life for patients.

OPTUM DEMONSTRATED THAT CBOS WITH ACCESS TO HOSPITAL DAILY CENSUS FOR PROACTIVE PATIENT IDENTIFICATION REACHED ENROLLMENT GOALS



OPTUM®

To learn more about Optum's consulting for government, including its rapid cycle efforts and its work in integrated eligibility, data analytics, and data warehousing, visit www.optum.com/stategov or contact Optum at innovate@optum.com or 1-800-765-6092.

Community paramedicine equips first responders to deal with patients suffering from chronic medical conditions or with behavioral health issues to keep them out of the emergency room.

WWW.USFA.FEMA.GOV

Healthforce Center at the University of California at San Francisco — looked at data from the first year of the California pilots' operations and found they were improving health care and cutting costs.

For example, a pilot in San Diego to reduce 911 calls cut the number of calls in half and produced a net savings of $45,607 a month, according to the center's report. Paramedics referred patients to services such as mental health crisis centers, drug/alcohol treatment, food assistance, housing assistance and domestic violence resources. In several cases, the paramedics transported the patients to these service providers.

Another pilot focused specifically on alternative destinations for behavioral health. One-third of participating patients were transported to a mental health crisis center instead of the emergency department for a net savings of about $8,913 a month.

Despite the potential for savings, one of the biggest setbacks for CP is, of course, funding. As Zavadsky's "you call, we haul" comment implies, traditionally Medicare and private payers only reimburse for EMS if the patient is taken to an emergency department. If the MIH-CP concept is to be widely adopted, that has to change.

There are several major sources of funding, says Zavadsky. A public agency such as a fire department may be willing and able to develop and pay for the program from its own budget. But more commonly, pilot programs are funded through grants from the government, private foundations or insurers. CMMI, for example, has granted nearly $40 million to EMS agencies over the last six years for these programs, according to Zavadsky. In addition, states can get a waiver to allow their Medicaid programs to reimburse for community paramedicine services.

The problem with grant money, however, is that it runs out. A more permanent and stable funding model would be to have those that benefit from the program, like health care systems, pay for it.

"The stakeholder who is financially at risk for the patient's health care utilization — whether it be a hospital, physician's practice, home health agency or insurer — should provide the funding," says Zavadsky.

But some of the stakeholders have been holding back their stakes, awaiting hard evidence of the effectiveness of community paramedicine. While individual pilots seem to be producing good results, they are small and limited to particular geographic areas, like the pilot in San Diego. And California's funding situation is complicated by the fact that community paramedicine is not currently allowed under state law. (The pilot is operating under a waiver.) Large insurers are interested but reluctant to participate until the law changes and such programs can be implemented statewide, says Lou Meyer, manager of the pilot project. "They say that once this is approved so it can happen everywhere in the state, then we'll talk."

Meanwhile, MedStar's program in Texas is on the cusp of a funding breakthrough. "We are currently negotiating with three large national third-party payers," says Zavadsky.

The ideal outcome would be an agreement under which they would pay MedStar a certain amount per insured patient per month to perform MIH-CP services. If that happens, it could lead to a broader shift from the traditional model to one that empowers and incentivizes EMS to offer the best care for the patient rather than a one-size-fits-all ride to the emergency room.

"Third-party payers are finally getting enough information and feeling comfortable enough to give this a try," he adds. ✓

The Power of PaaS

Building a path for HHS innovation

Many health and human services (HHS) agencies still operate large, legacy systems, but face increasing demand to move to the cloud — whether to improve citizen services, increase access to data or cut costs. But how can they harness the full benefits of the cloud without compromising their investments in on-premises systems?

The answer for many is Platform-as-a-Service (PaaS). PaaS allows an HHS agency to extend new capabilities to existing systems, gradually migrate on-premises systems to the cloud and build new applications faster — all while breaking down silos and integrating both cloud-based and on-premises systems.

Although PaaS can benefit almost any area of HHS, the following is an example of the impact it can make for a child welfare caseworker.

Problem:
Caseworker lacks real-time information when making in-person visits to child in need.

Step 1: Build
Create a new child welfare application using PaaS development tools.

Step 2: Integrate
Integrate existing applications (whether on-premises or cloud-based) and disparate data feeds with new application, so caseworker has access to all data needed about child.

Silos of Data

- Court proceeding history
- Child academic & Medicaid records
- Adoption & foster care records
- Child social media feeds
- Family TANF, WIC & SNAP records

Step 3: Add Mobility
Allow caseworker to remotely access data and upload notes, photos and video.

Step 4: Analyze & Innovate
Apply analytics to help caseworker make more informed decisions regarding child's case.

Result:
Caseworker gains a holistic view of the child and can work to improve outcomes for the family.

ORACLE PartnerNetwork

For more information on how the cloud can transform your agency, visit **oracle.com/publicsector** or contact **Bob.Nevins@oracle.com**.

BUILDING IT SYSTEMS IN A NEW WAY

It all started in 2015 with a whopping 1,500-page RFP. The California Department of Social Services (DSS) — along with counties throughout the state — had spent years working on it, the first crucial step in the state's $500 million effort to modernize the IT infrastructure for its child welfare system.

DSS, which is part of the California Health and Human Services Agency (CHHS), and the state Government Operations Agency had planned to procure and deploy the massive new system using a traditional waterfall approach. But with the assistance of Code for America, an organization that helps governments integrate digital into citizen services, the agencies discovered their traditional approach was going to be costly and would likely not result in the technology state caseworkers needed to do their jobs effectively.

"I've been frustrated for a long time with California's procurement process on large IT projects, as have most people in California state government, so we were looking for a different way to do things," says Michael Wilkening, undersecretary for CHHS.

Code for America connected CHHS leaders with 18F, an office within the federal General Services Administration that helps state agencies transition to a modular contracting and development model and that focuses on human-centered design, agile methods and open source solutions.

California is one of several states moving in this direction — some with the help of 18F and other agencies. These states' leaders realize they must take advantage of the efficiency and transparency digital provides to improve service delivery within their organizations.

State and local agencies are gradually moving away from a "big bang" approach to IT procurement and system development in which they hire a single vendor for a single project, and instead are shifting toward an approach where they break large IT projects into multiple modules and choose the best vendor to work on each component.

This transition has been initiated by a range of factors, including changes spurred by the ACA, a push from the Centers for Medicare & Medicaid Services (CMS), 90/10 funding for states to build new Medicaid eligibility and enrollment systems, and a 75 percent federal match for

18F, an office within the General Services Administration, is providing states with the resources and tools necessary to transition to a modular procurement and contracting process.

18F

the maintenance and operations of these systems.

Relatively new federal agencies like 18F are providing states with the resources and tools necessary to transition to modular procurement and contracting in which vendors create modules that are built independently, but that still can communicate with each other and operate cohesively under one system.

All these developments make one thing clear: Modularity is the way of the future.

In California, Colorado, Ohio and Mississippi, these efforts already are underway. This push will help drive IT transformation in areas like agile procurement, modular deployment techniques, technology and data standards, cloud-based alternatives and other innovations. However, it also will have a lasting impact on the way government delivers health and human services to citizens — and how cost effectively and efficiently it does so.

WHY MODULARITY?

As one of the seven conditions and standards CMS put forth for enhanced funding, modularity is at the forefront of efforts to modernize government technology.

Regardless of the funding match, this approach to technology makes sense for several reasons. For one, modularity drives attention on interoperability — a function that has traditionally eluded HHS IT systems.

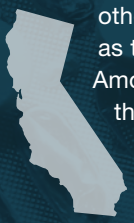
Interoperability standards haven't been commonplace in the government

WHAT DOES 18F DO?

18F provides states with resources and tools to transition to a modular procurement and contracting process where vendors are enlisted to create flexible, independently built modules that still communicate with each other.

CALIFORNIA

Over the last two years, the agency has worked with California to revamp its IT system for child welfare with modular contracting, agile procurement and open source solutions, which other agencies can access and reference as they also modernize their IT systems. Among other improvements, **18F** helped the state strip down a 1,500-page RFP, removing technical detail and instead take a user-focused approach.



MISSISSIPPI

18F helped the Department of Child Protection Services in Mississippi update its RFP for a new child welfare information system. The goal is to establish a pool of vendors that will create individual modules that will together form one integrated system.

OHIO

Ohio used **18F's** guidance to transform its RFP process, adjusting its mandatory requirements so startups and other innovative companies could compete against traditional government contractors.

IT procurement process, leading agencies to hire vendors to build one big system that facilitated a specific core function within their organization. This approach created technology silos that resulted in less efficiency, transparency and data sharing.

Technological innovations like the cloud and shared services also have pushed modularity and interoperability into becoming standard system requirements for government IT. The cloud facilitates IT consolidation and the integration of other tools like data and analytics services. What's more, government is embracing the cloud — trust for public clouds now exceeds distrust for these technologies by 2 to 1 — which should result in more cloud implementations in the future.

This implementation already has happened in Colorado, where the state's Department of Human Services (DHS) created a comprehensive system called PEAK, or Program Eligibility and Application Kit. DHS used a cloud-based platform to create PEAK and update the front end of its Medicaid, SNAP and TANF benefits and enrollment systems. The department also integrated data from Adult Protective Services into the system.

"Having a cloud-first or platform-as-a-service (PaaS) approach simplified the technology environment," says Sarah Nelson, acting director of business technology for DHS.

Before PEAK, the department's IT infrastructure was a patchwork of in-house, custom-developed and commercial-off-the-shelf solutions — having a standard architecture or standard development approach was secondary, Nelson says.

The cloud-based approach allowed DHS to "start small to meet the minimum needs of the program and then rapidly adapt to feedback about the application," Nelson says, adding that the platform allows DHS to accelerate the development process, lowers costs and gives the department access to data it can use to continuously improve the benefits process. The approach also gives the department more flexibility to meet evolving needs and supports modular system development.

"We can make more granular changes faster," Nelson says. "Designing the core application and then adding modules is an important part of our strategy of starting small and enhancing over time."

Nelson says any agency that wants to transition to a cloud-first approach needs to first consider its end goal.

"Know your performance management goals first, then design your system and data," she says. "You need to know what problems the application is going to help solve to design it effectively."

Colorado's PEAK project highlights some important changes in government IT. It illustrates how CMS's efforts help foster new collaborations with innovative vendors. It also shows how government IT procurement is changing to include vendors that can help agencies be more agile and implement a more iterative approach to system development.

This approach is critical as the deadline nears for enhanced funding and federal financial participation for system integration efforts. The Office of Management and Budget (OMB) extended the deadline to December 31, 2018, for its A87 cost allocation waiver, which provides federal funding support for states to

integrate eligibility and enrollment systems for HHS programs like SNAP and TANF into their upgraded Medicaid management information system (MMIS).

As the deadline nears, agencies need to take advantage of federal support to adopt a more integrated approach to HHS program administration and delivery. The push toward modularity will lead to more integration, but agencies must start at the beginning and modernize their approach to procurement first.

THE MOVE TOWARD AGILE PROCUREMENT

CMS has moved from certifying an entire MMIS system only after it has been implemented to a more incremental approach in which modules are certified individually based on criteria such as how well these components function with other parts of the MMIS.

This change means states don't have to fully invest in end-to-end system upgrades at one time. They also take on less risk if a specific vendor's solution doesn't meet the evolving needs of their business.

This lays the foundation for agile procurement, but for state agencies that typically have employed the traditional approach to IT, knowing where to start can be difficult. Data from the Governing Institute Survey shows that agile procurement methods are new to government. Only 14 percent of government leaders say their organizations are using modular procurement strategies for systems and system implementation.

Approximately 65 percent of those surveyed said their agency's IT systems currently require modernization, so there's a significant chasm between recognizing the problem and the willingness or resources available to put modern solutions in place to address it.

Still, some states are forging ahead. California, Ohio and Mississippi all have worked with 18F. Robin Carnahan, the head of 18F's state and local government practice, says the organization's approach is different from the typical government-vendor relationship.

"18F helps state and local governments that have federal grant money that can be used to improve digital services and implement modern software techniques, like user-centered design, agile development and modular procurement," Carnahan says.

"Our relationship with state and local partners is unique because we're all federal employees and have aligned interests. We aren't trying to sell any kind of proprietary product or service," she adds. "Instead, we help our partners prioritize what's most important and where technology improvements can best add value quickly for their customers. Once they make decisions about what they want,

65% OF STATE AND LOCAL HHS LEADERS SAY THEIR AGENCY'S IT SYSTEMS NEED MODERNIZATION,

BUT ONLY

14% SAY THEIR ORGANIZATIONS ARE USING MODULAR PROCUREMENT STRATEGIES.

18F

JESSICA MULHOLLAND

"We don't have to be agile, but everyone should consider being iterative. The opportunities to reduce the risk cycle and to take corrective actions are things all projects should do."

Peter Kelly, Chief Deputy Director, Office of Systems Integration, California Health and Human Services Agency

we help them identify vendors who can deliver on that."

This approach has helped many of 18F's state partners. Though Ohio didn't work with the agency directly, it used 18F's guidance and advice to transform its RFP process, adjusting its mandatory requirements so startups and other innovative companies could compete against traditional government contractors. The revised approach also will give Ohio's agencies access to a list of approved data analytics vendors and tools that should allow for more collaboration and data sharing across departments.

In Mississippi, 18F helped the Department of Child Protection Services move from a traditional approach focused on procuring a single vendor to an agile procurement process. 18F helped the department update its RFP to instead call for vendors to build one solution for a particular use case, allowing the department to establish a pool of vendors that will create individual modules that together form one integrated system.

Mississippi is essentially going from a one-size-fits-all approach to a specialist model. The state slowly will replace parts of its legacy system with standalone modules while keeping the old system intact to avoid disrupting core functions. Following this method will lead to smaller projects and contracts, which allows non-traditional government vendors to participate and offer innovative solutions.

But perhaps nowhere is 18F's "micro-purchasing" approach more visible — and more high stakes — than in California.

Over the last two years, the agency worked with California to revamp its IT system for child welfare with modular contracting, agile procurement and open source solutions, which other agencies can access and reference as they also modernize their IT systems.

"They helped us take that 1,500-page document and strip it down," Wilkening says. "They used a lot of the information about the broad requirements that we had and how the environment needed to work, but stripped down a lot of the technical detail and then helped put together a user-focused approach. They also helped us break it into modules, rather than procuring for a whole system."

CHHS asked vendors to build prototypes that leveraged user-centered design, so the state could more thoroughly assess vendors, evaluate the risks and create a pre-qualified vendor pool for its project.

"It was aimed at ensuring we would evaluate the ability of software development rather than the ability of proposal writing when we looked at bringing vendors on board," says Peter Kelly, chief deputy director for the agency's office of systems integration. "We liked that 18F used that process to give groups of developers a 30-day window to solve a problem and show their work, and then we could look at their ability to solve the problem and use that to determine who could help us best."

The agency's current child welfare system only has about 25 to 30 percent of the core functionality it needs to handle case management, payments to foster parents, facility management, approvals for foster parents and foster facilities, and other core functions. Most counties throughout the state have implemented ancillary systems to close this gap, but CHHS is hoping to remove many of those systems, retire the legacy system and replace it with child welfare digital services over the next few years. It already is using vendors from its qualified pool to help with this transition.

Both Wilkening and Kelly say modernization efforts are ongoing, so it's too early to call the project an unmitigated success, but the

response from CHHS staff has been overwhelmingly positive so far. They say the greatest benefit of working with 18F is that the agency has helped CHHS realize the importance of getting feedback from end users at the beginning of the IT procurement process rather than at the end after they've spent millions of dollars and are stuck with a system that may not achieve the organization's objectives. In California, nearly every step of the research and design of the new IT system has included feedback from county social workers.

"The research has led us to look at things that we perhaps would have missed with a monolithic set of requirements upfront," Kelly says. "They've found opportunities for robust improvements that we would have missed otherwise."

18F also is helping California and its other state partners avoid vendor lock-in, build knowledge capacity throughout different levels of their organizations and illuminate issues that many government agencies may have not realized — or simply ignored — before.

"Doing any big legacy modernization project using a modern design approach often requires cultural change for our agency partners," Carnahan says. "That starts with empowering cross-functional teams where everybody gets in the same room, makes decisions, identifies priorities and comes to a consensus about what is the best way to deliver for citizens and their users."

By reimagining the procurement and development process, 18F and others may open the door to a level of innovation that until now has been absent from government. What happens in California could be a testing ground for whether this approach will work long term, and the potential pitfalls other states can avoid as California adjusts to this new process and learns critical lessons along the way.

A MODULAR FUTURE

Government is undergoing an IT transformation, but for it to be successful agencies must take advantage of the current funding environment to incorporate modularity and agile procurement and development into their standard business processes.

To do this, they can leverage resources like 18F, which provides tools like an agile purchasing agreement and a micro-purchasing bidding platform that give agencies a framework for how to move from a traditional procurement process to a modern one. They also should use this opportunity to build knowledge capacity within their own organizations.

"It's really important for agencies to have technical knowledge and skill in house if they're going to be good buyers of IT services, because if you don't know what you want to buy it's hard to know whether you're getting it," Carnahan says. "Helping build institutional capacity and knowledge for our partners is a big part of what we do. Our goal is for partners to continue using human-centered, agile design and modular contracting practices long after we leave."

States also should pay attention to developments in California, Mississippi, Ohio and others that are taking big, bold steps in this new direction. Modularity won't be the sole solution to government's IT challenges, but it should lead to greater data sharing and more efficiency across the HHS ecosystem. Agencies also should keep in mind that the end goal is to create one integrated system, so any vendor they partner with should be capable of creating a module that agencies can plug into other technologies to execute their core functions and service delivery.

This current transformation is about more than technology. It will enable agencies to better address and find solutions for public health challenges, whether it's child welfare issues or achieving Triple Aim in health care. This is the promise and potential of health and human services. Moving toward modularity, as Peter Kelly of CHHS notes, will help HHS agencies make good on this promise.

"We don't have to be agile, but everyone should consider being iterative. The opportunities to reduce the risk cycle and to take corrective actions are things all projects should do," Kelly says. "You should consider user research and user-centric design rather than assuming a commercial product will meet all your needs, because having direct conversations and bringing customers into the project will get better outcomes." ✓

Colorado used a cloud-based platform to create the Program Eligibility and Application Kit (PEAK) and update the front end of its Medicaid, SNAP and TANF benefits and enrollment systems.

DAVID KIDD

A WORK IN PROGRESS

The examples in this report show a nation gradually turning toward smarter strategies to ensure the health and wellbeing of its communities and citizens. Preventing harmful behaviors, intervening earlier and comprehensively, using data to understand outcomes and model impacts, taking advantage of more flexible and sophisticated technology tools — these are all ingredients in a more effective approach to health and human services. They have the uniquely powerful ability to help HHS programs deliver better outcomes and control costs.

We looked across the nation for bright spots to demonstrate the impact of this shift in thinking, and we found plenty of progress to highlight. On the other hand, implementing these concepts more broadly demands wider and deeper commitment.

"We need to reach consensus that we want to be the healthiest nation on the planet," says Dr. Georges Benjamin, executive director of the American Public Health Association. "That needs to be stated as a national objective. Then we need to decide by what measures we're going to accomplish that goal and align our resources and activities to achieve it."

> *"We need to reach consensus that we want to be the healthiest nation on the planet. That needs to be stated as a national objective. Then we need to decide by what measures we're going to accomplish that goal and align our resources and activities to achieve it."*
>
> **Dr. Georges Benjamin, Executive Director, American Public Health Association**

Clearly, we're not there yet. "We continue to pay less attention to social determinants than we should," says Benjamin. "We spend far too much on sick care and not enough on prevention. Our system of care often is a disconnected, non-rational patchwork."

Still, APHSA's Wareing sees progress in both public health and human services. And when these strategies take hold, they can be game-changing.

"It hasn't occurred across the country yet — there are still places that are struggling — but where it is happening, the conversation becomes very different and inclusive," she says. "It's less about, 'These populations need to be served' and more about, 'What does this mean for the entire community?'" ✓

Sponsors

THE GOVERNING INSTITUTE advances better government by focusing on improved outcomes through research, decision support and executive education to help public-sector leaders govern more effectively. With an emphasis on state and local government performance, innovation, leadership and citizen engagement, the Institute oversees Governing's research efforts, the *Governing* Public Official of the Year Program, and a wide range of events to further advance the goals of good governance.
www.governing.com/gov-institute

THE CENTER FOR DIGITAL GOVERNMENT is a national research and advisory institute on information technology policies and best practices in state and local government. Through its diverse and dynamic programs and services, the Center provides public and private sector leaders with decision support, knowledge and opportunities to help them effectively incorporate new technologies in the 21st century.
www.centerdigitalgov.com

Both are divisions of e.Republic.

The Reign of Big Bang IT Deployment is Over

Long Live ModernSI

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.

Learn more
cgi.com/modernSI

CGI

Experience the commitment®