



## **Innovations in the Health and Human Services Workforce:** State and Local Governments Prepare for the Future

November 2019



## **ACKNOWLEDGEMENTS**

This report was researched and written by Elizabeth Kellar and Gerald Young, Center for State and Local Government Excellence. We are grateful to Robert Lavigna, CPS HR Consulting, Jennifer Dowd, Kronos, and Joshua Franzel, Center for State and Local Government Excellence for their guidance and support of this project. The authors would like to thank Anne Phelan for copy editing this report and Rob Maguire Designs.

### **About the Center for State and Local Government Excellence**

The Center for State and Local Government Excellence (SLGE) helps local and state governments become knowledgeable and competitive employers so they can attract and retain a talented and committed workforce. SLGE identifies leading practices and conducts research on public retirement plans, health care benefits, workforce demographics and skill set needs, and labor force development. SLGE brings state and local leaders together with respected researchers. Access all SLGE publications and sign up for its newsletter at [slge.org](http://slge.org) and follow @4govtexcellence on Twitter.

777 N. Capitol Street NE | Suite 500 | Washington DC 20002-4290 | 202 682 6100 | [info@slge.org](mailto:info@slge.org)



## Contents

Executive Summary	5
An Evolving Workforce	7
Collaboration and Partnerships	9
Relationships Matter	13
Creativity and Engagement	17
Dealing with Stress and Burnout	20
Conclusion	22
Health and Human Services Workforce Data	23
Endnotes	34
Experts Interviewed	38







# Executive Summary

Many of the health and human services (HHS) workforce challenges are not new: competition with the private sector, workloads and stress, and limited or unpredictable resources to meet the needs. Yet many talented individuals remain dedicated to public health and human services careers where they can help others and strengthen their communities.

Federal, state, and local governments have long recognized the need for grants and subsidies to support the significant level of education required for many of these jobs. For example, stipends may be used to support those pursuing degrees in social work; loan forgiveness programs also have provided incentives for talented individuals to pursue demanding public health and human services careers.

These and other retention strategies are crucial, as turnover and retirement projections demonstrate. For example, according to a 2017 survey of public health employees, 47 percent planned to leave the public workforce between 2018 and 2022, with 22 percent retiring and 25 percent pursuing other career opportunities.<sup>1</sup>

This report examines HHS workforce trends, skill sets in demand, and state and local government employment projections for the 2016 to 2026 period. Two factors expected to affect future HHS employment are (1) the aging population and (2) cost constraints on government spending. Demand for lower-wage jobs, such as home health aides, is expected to grow much more than demand for jobs requiring more education and experience. That said, our research found strong employment growth for physician assistants, nurse practitioners, physical therapists, mental health counselors, health care social workers, and other careers that require considerable education and training.

In interviews with committed public service employees, we learned that some have found ways to re-energize themselves by pursuing advanced degrees and/or by building relationships with allied organizations and individuals who share their goals.

The magnitude and urgency of the challenges facing the HHS workforce are among the key drivers prompting leaders to adopt innovative management practices. Our research found several examples of

HHS personnel working in nontraditional or multi-agency teams to tackle societal problems. We also found more reliance on evidence-based strategies that require a wide range of agencies to work together to gather key data, build a database, and analyze that data regularly to track progress, adapt, and ensure that programs are effective.

The opioid crisis is one example of the difficulty in meeting the demand for staffing to assist the growing number of people struggling with a substance abuse problem. Nationwide, 70,200 Americans died of drug overdoses in 2017, with 47,600 of them dying of opioid overdoses.<sup>2</sup> Although there is projected to be a 7.4-percent growth in local government mental health counselors and substance abuse social workers through 2026, as of December 31, 2018, only 26.1 percent of the need for mental health care professionals was being met.<sup>3</sup> The share of adults with a substance abuse disorder who were receiving treatment was just 18 percent in 2016.<sup>4</sup>

This research report includes examples of innovative workforce practices, including cross-agency collaboration among multiple organizations in

Montgomery County, Ohio, and the city of Dayton, Ohio, to tackle the opioid crisis. It also examines strategies to build a qualified pipeline of HHS workers and how rural communities in California have competed for them.

Finally, this report describes leading local and state government human resources practices that support the HHS workforce, including partnership strategies, succession planning, talent management, employee engagement and professional development. State and local government leaders recognize that they need high-quality data, creativity, and a credible plan to address the aging HHS workforce and ongoing turnover.

# An Evolving Workforce

The U.S. workforce is getting younger—and older. The oldest members of the so-called millennial generation (born between 1980 and 1995) are now well established in their careers: older millennials have reached their late 30s and are likely to stay in the workforce for years to come. And many employees also are working beyond traditional retirement ages. As Deloitte economists Patricia Buckley and Daniel Bachman write, “If 70 is the new 50, we shouldn’t be surprised to find more 70-year-olds working.”<sup>5</sup>

Growth in public and private health care occupations is projected to increase 18 percent from 2016 to 2026, much faster than the average for all occupations, adding about 2.4 million new jobs. The key factors accounting for the growth in health care jobs are the aging population and a greater demand for health care services.<sup>6</sup>

The public health workforce is becoming more diverse, reflecting overall demographic shifts in the U.S. workforce. An analysis of demographic trends in 33 state agencies between 2014 and 2017 found that the percentage of staff who are people of color

increased from 29 percent to 37 percent and that the workforce was trending younger.<sup>7</sup> Diversity in the health professions remains a high priority, given the underrepresentation of some racial and ethnic groups and the potential for disparities in health outcomes for these population groups.<sup>8</sup>

Two other factors add to the challenges of recruitment and retention: a slow economic recovery following the Great Recession in some states and localities and the smaller pool of candidates interested in working in rural communities. Competition is making it harder to fill state government vacancies, with two job openings for every new hire in June 2019, according to Bureau of Labor Statistics data analyzed by *The New York Times*.<sup>9</sup>

Arizona, for example, has experienced the steepest decline in public employment between 2013 and 2018 compared with other states, despite ongoing population growth. It now has the nation’s lowest overall rate of public employment per capita. Local governments had to make deep staffing cuts following the Great Recession, with the greatest loss occurring in public hospital employees. On the other hand,

Minnesota saw more growth in its state government workforce compared with other states with the fastest growth in public welfare jobs.<sup>10</sup>

Across the nation, state and local government job growth grew by 7.4 percent among hospital workers, 5.4 percent for health workers, and 4.1 percent for public welfare workers between 2013 and 2018.<sup>11</sup>

In its 2019 survey, the Center for State and Local Government Excellence (SLGE) found that recruitment, retention, and compensation were the top concerns of human resources managers. The study identified nurses, mental health professionals, physicians, and human and social services professionals among the positions that were hardest to fill.<sup>12</sup>

Competition is another important variable in filling these jobs, given the higher salaries offered by the private sector. While both public and private sector workforces are aging, state and local public health employers have added challenges: state public sector full-time employee totals are still several hundred thousand below their peak in the 2008 to 2009 period, according to SLGE<sup>13</sup> and other sources.<sup>14</sup>

Longitudinal analysis of the public health workforce has found an increase in the number of staff members who are planning to leave their jobs, excluding retirement. In 2014, 15 percent of public health workers said they were considering leaving compared

with 26 percent in 2017. Those who were thinking about leaving their employer cited worsening workplace conditions and an inability to improve conditions. On the other hand, some of those who had considered leaving in 2014 but not in 2017 expressed improved satisfaction with their organization and supervisor.<sup>15</sup>

Because turnover has long been a problem in the health and human services workforce, these demographic challenges have prompted local and state government leaders to ramp up their efforts to attract and retain the highly educated talent they need.

They are giving greater attention to their brand, to job descriptions, and to social media as means to improve their outreach to potential candidates. They also are designing internship programs that can attract recent graduates and create opportunities for growth for current employees.

Finally, they are building on their strengths as public sector employers, offering appealing benefit packages and recognizing that people who choose a public service career want to make a difference in people's lives. Public sector leaders are adopting innovative management practices, establishing evidence-based analysis, designing effective employee engagement programs, and offering professional development and growth opportunities to their employees.



# Collaboration and Partnerships

## DAYTON AND MONTGOMERY COUNTY, OHIO EMBRACE COLLECTIVE IMPACT MODEL

Montgomery County, Ohio, was overwhelmed by a public health epidemic, experiencing the state's highest rate of overdose deaths starting in 2011. The elected leadership of the city of Dayton and Montgomery County shared a sense of urgency to address the growing crisis. Prior to the spike of 566 fatalities in 2017, Dayton had declared a state of emergency, establishing a needle exchange program and championing the use of naloxone. The Montgomery County Commission embraced the collective impact strategy championed by Jeffrey Cooper, who was appointed public health commissioner in 2015 after 24 years as a public health employee.<sup>16</sup>

Commissioner Cooper was committed to the collective impact model as a way to address the public health crisis, and that catalyzed intense conversations among the elected officials of the city and county, as well as with judges, police, business leaders, nonprofit leaders, and the sheriff's department. Dayton City Manager Shelley Dickstein recognized the importance of an

organized plan of action. "We had to put our heads and hearts around the collective impact model."<sup>17</sup>

"Everyone was taking the opioid crisis seriously and we knew we could not succeed without working with each other," noted Jonathan Parks, Montgomery County's director of Office of Management & Budget. "We've always had a collaborative culture in Montgomery County. When we need to unite, we certainly do."<sup>18</sup>

In 2016, Montgomery County launched the Community Overdose Action Team (COAT), a partnership that broke down silos and fostered productive relationships between agencies. "The question became—how can we support the collective impact model, create a sense of urgency, and broaden the membership of COAT to more effectively address the crisis," explained City Manager Dickstein.

There were many challenges in bringing together such diverse partners to address complicated public health issues, including data sharing. More than one agency had been collecting relevant data, but it often stayed within that agency.

*"The question became—how can we support the collective impact model, create a sense of urgency, and broaden the membership of COAT to more effectively address the crisis?"*

— **Shelley Dickstein**,  
City Manager, Dayton, Ohio

Two well-respected leaders from Public Health-Dayton and Montgomery County Alcohol, Drug Addiction & Mental Health Services (ADAMHS) co-led the kick-off meeting. Over 100 participants attended that first meeting, representing all of the partners: elected officials, judges, public health, hospital administrators, law enforcement, fire and emergency services, coroner's office, chamber of commerce, faith-based organizations, and nonprofit leaders.

All the partners recognized the need for a data-driven effort built on accurate, reliable data and analysis. Parks observed that the drive to collaborate came after some evidence that programs like residential treatment were expensive, not consistently effective, and had long waiting lists. Data showed that one problem with residential treatment, for example, was that too many individuals dropped out of the program.

As more data were analyzed, it became clear that other strategies were more effective, including ambulatory and outpatient treatment programs. These strategies were closely coordinated with law enforcement, jail populations, mental health services, and social workers. If an individual in a treatment program was arrested and jailed, that information was immediately available to team members, who could quickly re-engage with the individual to address the underlying addiction problem.<sup>19</sup>

Dickstein observed that it was essential to have regular progress reports. The city gets monthly updates

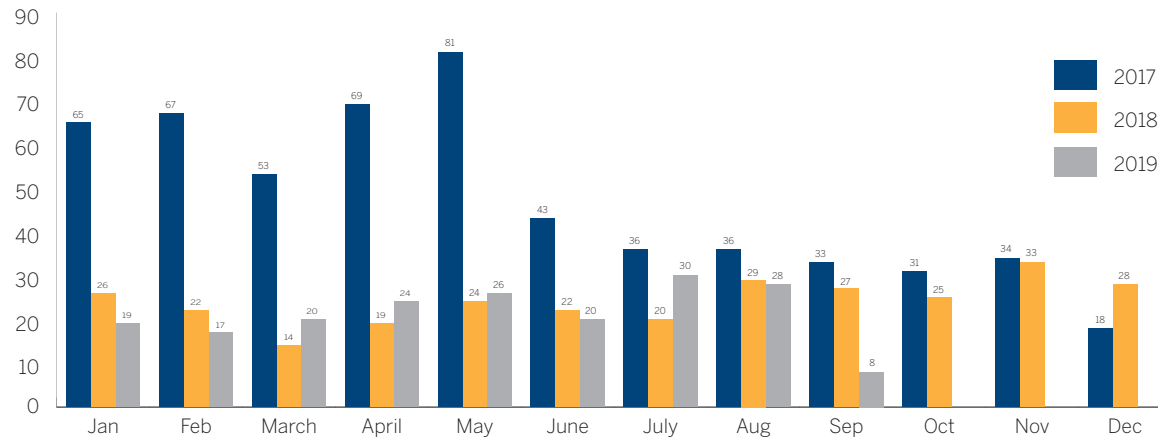
on overdoses, the needle exchange program, and demographics. In 2015, 2016, and 2017, the epidemic was largely confined to white, middle-aged males. Recent data show it now is more prevalent among African American men than it is among white men.<sup>20</sup>

Once COAT was established, the team formed a data unit that included individuals from public health, Wright State University, the Dayton Police Department, the Greater Dayton Hospital Association, the Montgomery County Coroner's Office, the Montgomery County Sheriff's Office, Montgomery County ADAMHS, the University of Dayton, and other Montgomery County offices. In 2017, the group released its first annual data report.<sup>21</sup>

Parks explained that COAT built on a data framework that had been developed by the Dayton Greater Area Hospital Association. It drew on data models like Montgomery County's JusticeWeb, which compiles crime data from courts and the jail population from 100 agencies.

"In 2016, through JusticeWeb, the County provided ADAMHS with a daily report of individuals incarcerated in the Montgomery County Jail. ADAMHS runs an automated routine against their database to determine if any of the current jail population has seen an ADAMHS service provider for substance abuse or mental health issues within the past sixty days. If so, the service provider is contacted by ADAMHS so they

## Accidental Overdose Death Totals Dayton & Montgomery County



**Source:** Dayton & Montgomery County Public Health

may continue providing services while their client is in custody, maintaining that critical connection.”<sup>22</sup>

The ADAMHS staff verify and update the COAT data weekly, relying on an app they created to collect key data from the professionals participating in the COAT effort.<sup>23</sup>

Having a wide range of sources for data has been invaluable. For example, since 2013 the Dayton Fire Department has collected comprehensive data on overdoses requiring naloxone. The data can be analyzed by neighborhood; day of the week, month, or year; sex; and race.<sup>24</sup>

Making data available to the public has been important. Dayton & Montgomery County Public Health provides monthly updates on accidental overdose death totals on its website. Those data show dramatic progress in reducing overdose deaths, from a high of 566 in 2017 to 289 in 2018 with a continuing decline in 2019. The

number of deaths is broken down by city and township so all participating jurisdictions can see where there are ongoing issues.<sup>25</sup>

The availability of a funding stream was another important element that helped drive collaboration. Public Health declared opioid addiction an epidemic and had funding to tackle it from a pre-existing tax levy. (Montgomery County’s Human Services Levy Committee makes allocation decisions for tax levy funds.<sup>26</sup>)

Working groups, meeting monthly, identified the gaps. Dickstein gave an example of the type of personnel participating in the working groups. Two community-based Dayton police officers with experience in the neighborhood where the crisis had emerged were selected to serve on a crisis mobilization unit. They had relationships with people and organizations, and credibility. They also were compassionate individuals.

*“Staying laser-focused on collaboration and making sure the right people are sitting around the table are keys to success.”*

— **Shelley Dickstein,**  
City Manager, Dayton, Ohio

The crisis mobilization unit responds whenever it receives a call. It also receives information from the police responding to an incident. The unit makes house calls, knows the resources available, and has a strong connection with the community. In many respects, unit members serve as caseworkers.<sup>27</sup>

“Staying laser-focused on collaboration and making sure the right people are sitting around the table are keys to success,” observed Dickstein. “That means having the right agencies and the on-the-ground workers, the doers, who have the experience. These people are good at identifying the gaps and needs—and the different focus areas required to advance the strategy.”

Dickstein added that it is important to have dedicated staff who are driven by data so that everyone is operating off the same page and understands the analysis. “You want people who are systematic thinkers and who have good problem-solving skills. These individuals are able to identify problems and gaps and fill them in with the right process, program, and/or response.”

The team effort has had both tangible public health benefits as well as workforce benefits. There has been little staff turnover and the leadership of COAT has not changed since it launched in 2016.<sup>28</sup>

### **Data Drives Performance Objectives**

Local and state governments are using data to achieve a range of social service performance objectives. John Kamensky, senior fellow at the IBM Center for the Business of Government, has described how the

Colorado Department of Human Services (CDHS) used a data-driven performance management structure to motivate the state’s sixty-five counties and multiple contractors to achieve a common goal: to process recipient applications for its food- and cash-assistance programs in a timely manner at least 95 percent of the time in every county for twelve consecutive months.<sup>29</sup>

Melissa Wavelet, the former head of performance and strategic outcomes for CDHS, explains that C-Stat, the data framework, creates an expectation that everyone is “engaged in dialogue that is based on the data and focused on how to get better and improve performance.”<sup>30</sup>

Building relationships that focus on learning from the data helps improve performance. Kamensky references the work of Reggie Bicha, appointed to lead CDHS in 2011, who said that county and contractor partners became consumers of their own performance data, asking how their data compared to others. Monthly C-Stat reports and an online dashboard that combined data from nine separate systems made it easier to analyze. Did the approach work? Bicha said, “As of April 2016, statewide performance exceeded the 95 percent goal across all five types of recipient applications for the first time.”<sup>31</sup>

The success of complex collaboration and partnerships depends on having a clear mission and goals, getting high-quality data that make it possible to track progress over time, and building trust among all the partner organizations.



# Relationships Matter: Put People First and Invest in Them

Whether recruiting a well-qualified social worker candidate to a rural county or striving to retain an experienced HHS professional in a metropolitan area, relationships matter.

Donna Thoreson, recently retired workforce development coordinator at the California Social Work Education Center (CalSWEC), University of California at Berkeley, describes the challenges that rural counties face in attracting and retaining employees.<sup>32</sup>

A former social worker for Contra Costa and Butte counties, Thoreson says the key to a successful recruitment is to help candidates establish good relationships. “During the recruitment process, it is a good idea to introduce candidates to people who can help them. Whether it is a rural area or a more sophisticated urban area, getting to know other people who have an interest in the social worker’s job is important. The connections may be other social workers in a large organization. In a rural area, valuable connections may be found in other people-helping jobs outside of the agency, such as the medical professions or law enforcement.”<sup>33</sup>

Professional and social connections are invaluable for

personal growth or for connecting with advisors on particular cases, she observes. These connections make individuals feel like they are part of a larger community, rather than working in isolation.

With respect to the challenges that rural counties face in recruiting and retaining employees, Thoreson says, “If people know what they are getting into in terms of the agency and culture, it works out well. They can be excited about being in a smaller pond where they have a wider range of responsibilities.”<sup>34</sup>

“It is the quality of relationships that is important, not the quantity,” Thoreson observes. “I call it the ‘friendliness’ factor and whether or not people are approachable. In a small organization, you need to know who to go to when you are unsure what to do next. It works for people who like new experiences and have a willingness to learn.

“If new hires feel like they don’t fit or can’t ask anyone for advice, it sets up an extra barrier for success.”<sup>35</sup>

The friendliness factor makes a difference in any recruitment endeavor. Three recent college graduates, Reed T. Shafer-Ray, Benya Kraus, and Joe Nail, founded Lead for America in 2018 with a mission to

*“If new hires feel like they don’t fit or can’t ask anyone for advice, it sets up an extra barrier for success.”*

— **Donna Thoreson,**  
Social work expert

place “dynamic and diverse young leaders in high-impact local government roles.”<sup>36</sup>

Although it is a brand-new organization, CEO Joe Nail reported that Lead for America attracted 1,200 registered applicants for just fifty local government fellowships in 2018. The two-year fellowship program for recent college graduates includes a modest stipend intended to cover basic living expenses and housing. Nail describes a simple application process: “Our first ask is not for a submitted application, but for the prospective candidate to simply schedule a phone call to learn more. Last fall alone, we had more than 500 one-on-one phone calls with prospective applicants.”<sup>37</sup>

Nail adds, “Assurances of a respectful, organized recruitment process, skills training, mentorship, and community of bright peers do not have to be the exclusive domain of the McKinseys, Googles, or Goldmans of the world.”<sup>38</sup>

To attract and retain the evolving workforce, many local and state government leaders are giving more attention to these strategies:

1. Building a great brand and using social media to reach candidates
2. Effective onboarding
3. Providing learning and growth opportunities
4. Offering flexibility that supports work-life balance
5. Engaging employees so they have a greater say in what matters to them.

Social media, YouTube videos, and advertising are now part of the basic human resources toolkit used to reach a wider pool of candidates, particularly younger workers. To compete with the private sector, government websites and messages sound more like the private sector. The City and County of Denver, for example, showcases its employees as brand champions. “Photographs are used on billboards, posters, and light rail trains with the message, ‘Be a part of the city you love.’”<sup>39</sup>

Onboarding is gaining more attention in well-run organizations and for good reason: an estimated 33 percent of new hires look for new jobs in the first six months. It also takes the typical employee eight months to reach full productivity.<sup>40</sup>

Massachusetts uses technology as part of its onboarding process. Human resources leaders used surveys and focus groups to identify areas that needed improvement after the automated MassCareers onboarding process was implemented in 2015. As a result of that feedback from new hires and hiring managers, the onboarding process was enhanced to include just-in-time automated communications and checklists for hiring managers, streamlined forms that can be completed online, and forms that accept electronic communications on certain documents. Classroom training as well as a just-in-time e-learning option is offered to hiring managers.<sup>41</sup>

New employees quickly learn what the organization values. If the organization has a learning culture, employees likely will be asked about their career development interests shortly after they are hired and will be introduced to opportunities that can help them achieve their goals. City governments like Sunnyvale, California, and the City and County of San Francisco, also may offer employees hands-on experiences to increase their readiness to advance.<sup>42</sup>

Dayton is another city government that invests in people by offering a wide range of training and professional development opportunities. Succession planning is a priority and each department is required to identify key positions where individuals may be eligible to retire in the next five years. Departments then describe their plan to replace critical skills, including the development of candidates in the department who may be able to assume greater responsibilities.<sup>43</sup>

Growing the organization's own talent is a top strategy for state and local governments. "Employees will stay if they are building their skills," write Melissa Asher and Bob Lavigna. "Public sector organizations that invest in their employees build loyalty, as well as competencies."

- "In Riverside County, California, the 20-20 program allows employees in hard-to-fill jobs to work a reduced schedule and continue to be paid as full-time employees while completing requirements for a degree or certification.
- "Nebraska encourages state government employees to spend 15 minutes each day learning and has partnered with LinkedIn Learning to make 5000 online courses available."<sup>44</sup>

Internships are one of the most effective ways to create a pipeline of talent.

When Donna Thoreson was a social worker in Contra Costa County, she established two internship programs. They became successful recruiting tools for the county. After retiring from CalSWEC, the county hired her to help reinvigorate the programs.

The internal internship program allows ten to fifteen current employees to pursue academic studies during the school year and then work as interns in child welfare jobs in the summer. The academic experience and internship allow these individuals to be better able to compete for social services positions. Internships can be structured in a variety of ways to meet an individual's needs, including flexible work schedules.

Internships can play an important role in succession planning. Thoreson notes that many graduates

*Growing the organization's own talent is a top strategy for state and local governments.*

of the CalSWEC internship program later became supervisors or managers. Receiving an academic stipend comes with a work requirement. If a county supports an individual's education for two years, then the graduate is expected to work for that county for at least two years after receiving the degree. Her county colleagues would tell her, "Remember, Donna, you're training my future supervisors and managers."<sup>45</sup>

Thoreson adds that those who go through the program can rise through the ranks because they love the work they do and want to stay in the field. Getting the degree enhances their self-confidence about what they can do in their agency, something that Thoreson experienced herself. She grew up in a migrant farm family with a mother who encouraged her to read and learn. Those early life experiences were one reason that Thoreson wanted to pursue a career in which she could help children learn.

After college, Thoreson first worked in personnel in Butte County before applying for a job as a child welfare social worker. She was hired for the position even though her undergraduate degree was in another field. When she moved to the Bay Area, she continued to work in child welfare in Contra Costa County, though she began to feel burned out after four years. She considered changing fields but changed her mind after reading that individuals without an advanced degree were more prone to burnout. She enrolled in the UC Berkeley Title IV-E MSW Stipend Program.<sup>46</sup>

Getting her master's degree in social work gave her a broader understanding of psychopathology and mental health issues as well as more awareness of racism and oppression. "I gained cultural humility," she explains.

Programs like CalSWEC have proven to be a great source of future social services employees who may be found working in other local government departments. The programs are flexible, offer stipends, and can be pursued either full-time for two years or part time for three years. Online MSW studies are also now available at a few California universities.<sup>48</sup>

Investing in employees' education and professional development is one of the most effective retention strategies. Employees tend to stay with their organization when they have opportunities to build their skills and refresh their knowledge.



# Creativity and Engagement

Leaders need to adapt, have authentic interactions across different types of relationships, and build trust internally and externally.

Summarizing highlights of a May 2019 podcast, Lorie Martin, Center for Health Care Strategies, and Hilary Kennedy, National Association of Medicaid Directors, write that “leadership is a balance of getting things done while still keeping one’s sights on the end goal.”<sup>49</sup> In the podcast, Gretchen Hammer, former Colorado Medicaid director, explained that Medicaid directors, like many leaders in the public sector, are often in that role for a short period of time. “Forming effective habits and mindsets can help one take advantage of a short tenure and engage in relationships and activities that support oneself and teams. It can be difficult to prioritize the development of your leadership team and staff.”<sup>50</sup>

Public health leaders who see the importance of mentoring and strengthening the workforce believe that “all public health workers need to be given the opportunity to be creative, to offer suggestions for innovation, and to be actively engaged in ensuring that the health department is the best health department it can be.”<sup>51</sup>

The question becomes, how can leaders create those opportunities for their staff to have a say in how to improve their organization? One way to get credible feedback is through an employee survey.

Margaret McMahon, Bureau of Working Families, State of Wisconsin, took a “leap of faith” to conduct an employee survey as part of an employee engagement initiative after she was named director of the Bureau of Working Families, in Wisconsin’s Department of Children and Families in 2015. The leadership team committed to an ongoing effort to survey employees annually, analyze the survey results, and take action on targeted areas for improvement.<sup>52</sup>

McMahon met with her section chiefs to discuss strategies they thought would be effective in achieving the bureau’s goals: (1) to provide effective programs to increase economic security; (2) to be a good steward of the public funds; and (3) to make the bureau a place where public employees want to work. It was that third goal that prompted the development of an employee survey, especially after one team member asked, “How do you know what employees want if you don’t ask them?”

*How do you know what an employee wants if you don’t ask them?*

Members of the management team recognized their vulnerability in opening themselves up to criticism. They concluded that the benefits of having straightforward feedback outweighed the drawbacks. The bureau chose to develop and analyze the survey results in house as they had a research and analysis section with the technical capability. To get staff buy-in, it was important to protect the confidentiality of the staff. McMahon and her team explained how their identities would be protected.

The first year's survey results pointed out areas that could be improved and reinforced staff's interest in learning and having a say in their work. Before having these data, McMahon and her management team had assumed that staff knew that professional development was available.

The survey results prompted her team to be more attentive to ensure that professional development is provided equitably across the organization. Team members share information about who participates in the various programs and the financial investment that the bureau is making. They also make sure that employees are aware of all of the options available: online training, attendance at professional conferences, continuing education programs at the University of Wisconsin at Madison and Milwaukee, and a certified public manager program.

With a new governor taking office in 2019, the interest in employee engagement has grown. Now the entire Department of Children and Families wants to build on

the experience of the Bureau of Working Families.

Employee teams can be an effective strategy to address organizational culture and climate goals. The Indiana State Department of Health (ISDH) established an engagement team with twenty volunteers who committed to meet monthly for one year, starting in January 2019. The team agreed to work on issues related to job satisfaction, retention, and organizational climate and culture. They also agreed to work together in a spirit of collaboration, cooperation, and compromise. They participated in team-building exercises and shared their individual experiences with each other.<sup>53</sup>

The team discussed the data from the Public Health Workforce Interests and Needs Survey (PHWins)<sup>54</sup> and decided to seek feedback to eleven new questions to gather agency-specific data on issues like trust, respect, and communication. One of the key findings of PHWins was that a large proportion of public health workers responding to the 2017 survey indicated that they were considering leaving their organizations in the next year. Top reasons cited were pay, lack of opportunity for advancement, and the workplace environment.<sup>55</sup>

With the assistance of facilitators who run the meetings and guide sensitive conversations, the diverse ISDH team has approached its responsibilities with a "just do it" bias for action. Using the Appreciative Inquiry model,<sup>56</sup> the team has identified what is good and great in the agency and why people

stay. The team identified ISDH strengths as having: (1) employees with a public service motivation and a passion for public health; (2) positions that offer flexibility and work/life balance; and (3) a significant level of employee satisfaction with their supervisors and coworkers.

Another strategy the team has adopted is to approach organizational development through short bursts. It prioritizes incremental changes that can be achieved in short time frames and that are matched to client readiness and capacity. The team also strives to base its recommendations on data and firsthand experience; identify clear expectations and accountability; and seek measurable, sustainable results.

Data gathered over time can help organizations stay on top of potential workforce issues. When an organization takes action on employee feedback, employees are more likely to stay. “According to Gallup, high-engagement organizations have up to 65 percent less turnover than low engagement ones.”<sup>57</sup>

High-touch retention strategies have proven to be highly effective, as illustrated by the following example.

[Tennessee leaders conduct periodic] stay interviews with employees to learn what’s going well, what they like about working for the state, what has contributed to their success, challenges they are encountering, and what the manager can do to overcome those challenges. While exit interviews are conducted routinely, a stay interview can sometimes make the difference in retaining a good employee by providing an opportunity for input, demonstrating that the employer cares about them, and identifying problems or challenges that can be addressed before that employee decides to leave state government.<sup>58</sup>

### *Approach organizational development through short bursts.*

— **Eden Bezy and Eric Beers,**  
*Indiana State Department of Health*

# Dealing with Stress and Burnout

Many health and human services professionals can feel overwhelmed when they face turnover on their team due to an unrelenting workload. They can be frustrated by the lack of time to think creatively about how to tackle a high-priority issue.

Gretchen Hammer, former Colorado Medicaid director, notes that leaders need to stay emotionally stable in order to be predictable for staff and colleagues. She says that it can be lonely to be a Medicaid director, so it is important to find people in sister organizations to talk to and to maintain a kitchen cabinet for advice.<sup>59</sup>

Hammer adds that “HHS leaders have an obligation to be there on the hardest days to motivate the team and elevate the issues. Medicaid programs have been in place for fifty years and will be there in the future, so leaders and staff need to keep their eyes on the horizon.”<sup>60</sup>

Mark Larson, former Vermont Medicaid director, says he kept a list of stories to share with others about the impact that their work has on individuals, how it helped a disabled child or someone else in need. These stories helped him and others stay connected to the mission

and the value of their work. “People need us to do our work well, especially when things are hard,” he observed.<sup>61</sup>

Being strategic can help boost morale and build a high-performing workforce. “People in frontline jobs want to do well. They feel better able to do well when they have needed resources, such as sufficient numbers of capable colleagues,” says Sherrin Ashcroft, former program manager for the Jefferson County, Colorado, Division of Children, Youth, and Families.<sup>62</sup>

Jefferson County fielded surveys three years in a row to better understand employee morale issues and to implement targeted improvements. For example, the agency launched an organizational health committee to address staff concerns about consistency and flexibility in scheduling. The committee also is looking at what can be done to help child welfare staff who experience secondary trauma symptoms.<sup>63</sup>

Cuyahoga County, Ohio, sought to shrink a 10-percent vacancy rate among its HHS employees that had persisted for years. Once leaders examined monthly data on vacancies, new hires, and the number of



applicants, they found that they consistently lacked enough qualified job applicants to fill jobs. Working in partnership with human resources staff, the Cuyahoga County Division of Children and Family Services gained authorization to fund “anticipatory vacancies.” That allowed recruitment to begin before a position was vacant. Monthly hiring panels were appointed and hiring supervisors hired for the overall agency, rather than their own unit’s vacancies. In addition, paperwork was reduced in the hiring process and the respective roles of the agency and human resources were clarified.

After implementing these changes for just one year, the vacancy rate dropped to 1 percent or 2 percent, where it has remained. “To make this sea change and have it stick has not only diminished some of the daily stresses for frontline workers but it also has been instrumental in reducing our backlog to zero,” says Tammy Chapman Wagner, deputy director for intake, Cuyahoga County, who worked closely with Michael Brown, human resources manager for the county.<sup>64</sup>

In Jefferson County, the Division of Children, Youth and Families is implementing a plan based on a vision for children as well as a vision for employees. The plan addresses organizational health levers, including emotional management and social learning as well as nonviolence and open communication.

Alysse Nemecek, a Jefferson County program manager, says that the organizational health approach has made a measurable difference in the office culture as “employees are really focused on helping improve how we work together and support one another, whether by considering how onboarding can be enhanced or identifying avenues for employee appreciation and growth. It doesn’t always make a difficult job easier—but it can help staff feel supported by the agency and their colleagues.”<sup>65</sup>

# Conclusion

What does the future hold for the public health and human services workforce? The demand for workers who have specialized knowledge and skills is growing, even as turnover remains high and more individuals reach retirement age. Our research shows significant growth in almost all health

and human services jobs, with more demand for some positions than others.

Although many of the jobs these dedicated workers assume are stressful, we found that certain strategies can help combat burnout and re-energize the workforce:

## **1. PROVIDE LEARNING AND GROWTH OPPORTUNITIES.**

Not only does this give employees a chance to refresh their knowledge, it also helps build a pipeline of candidates who can take on more responsibility as vacancies occur. Professional development for current employees is, in fact, an important part of succession planning. Giving a frontline caseworker the financial support to obtain an advanced degree helps them qualify for advancement. It also gives them a new perspective on the underlying issues their clients face.

## **2. CREATE CROSS-AGENCY OR DIVERSE ENGAGEMENT TEAMS TO TACKLE PRIORITIES.**

The highly collaborative Community Overdose Action Team (COAT) in Montgomery County and Dayton, Ohio, became a partnership that broke down silos and fostered productive relationships between agencies. The partnership, which included elected officials, law enforcement, judges, and leaders from business, nonprofits, and the faith community, has demonstrated dramatic success in reducing the number of deaths from opioid overdoses.

## **3. USE DATA AND EVIDENCE TO DRIVE CHANGE AND DEMONSTRATE PROGRESS ON PRIORITIES.**

Data from employee surveys can shine a spotlight on workforce issues and give managers the opportunity to make changes that are important to employees.

## **4. DEVELOP SUPPORTIVE RELATIONSHIPS.**

Whether working in a rural community where peers can be hard to find, or in a high-level position in a large agency, it is important to develop great relationships. These may be individuals who work in similar jobs in another organization or they may be individuals who may work in entirely different jobs but share the same mission and values.

## **5. STAY FOCUSED ON THE MISSION.**

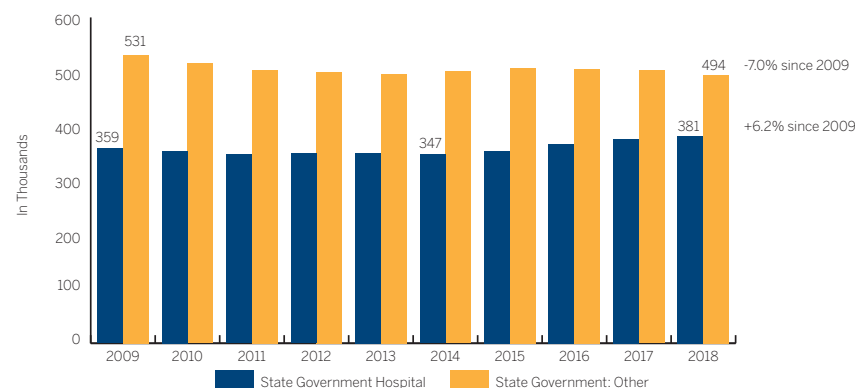
People drawn to health and human services jobs typically are passionate about their work and drawn to a public sector mission. To retain people who are motivated by a desire to help others, it is important to picture that person in need who is counting on the best possible service that can be provided.

# Health and Human Services Workforce Data

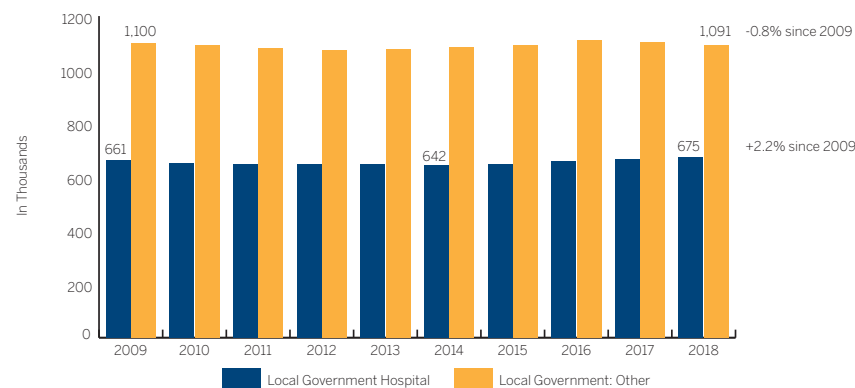
The history of general health and human services (HHS) in the public and private sectors has shown a trend toward gradually increasing employment, with the most significant growth occurring in ambulatory and outpatient care. Overall, staffing for ambulatory health care (outpatient services) has undergone a 29.4 percent increase from 2009 to 2018. In that same period, hospital and nursing care facility staffing has also increased by 10.2 and 9.1 percent, respectively. In the course of that time period, none of those sectors experienced a decline in employment.<sup>66</sup>

Within state and local government, the trends were not nearly as positive. Hospital employment dipped slightly, then increased by a net 6.2 percent in state hospitals and 2.2 percent in local government hospitals. While this was more modest than the 10.2 percent growth for all public and private hospital employment, it is a stark contrast from other government employment, which declined for other state operations by 7 percent and for other local operations by 0.8 percent (see Figures 1 and 2).

**Figure 1.** State Government Employment: Hospitals and Other Employment (excluding Education and General Administration)\*



**Figure 2.** Local Government Employment: Hospitals and Other Employment (excluding Education, Transportation, and Utilities)\*



**\*Source:** U.S. Bureau of Labor Statistics, Current Employment Statistics.

**Note:** Other state and local government employment would include non-hospital-based health care employees, such as those working in public health, as well as employees in public safety, parks, and other services.

## PROJECTED EMPLOYMENT

There are two factors that are likely to affect future HHS employment: (1) the country's aging population, and (2) cost constraints on government employment generally. These two factors will affect which types of health care positions are likely to grow the most and whether that growth will be more pronounced in the private as opposed to the public sector. Positions that tend to pay less are expected to grow much more than those that require more education and experience.

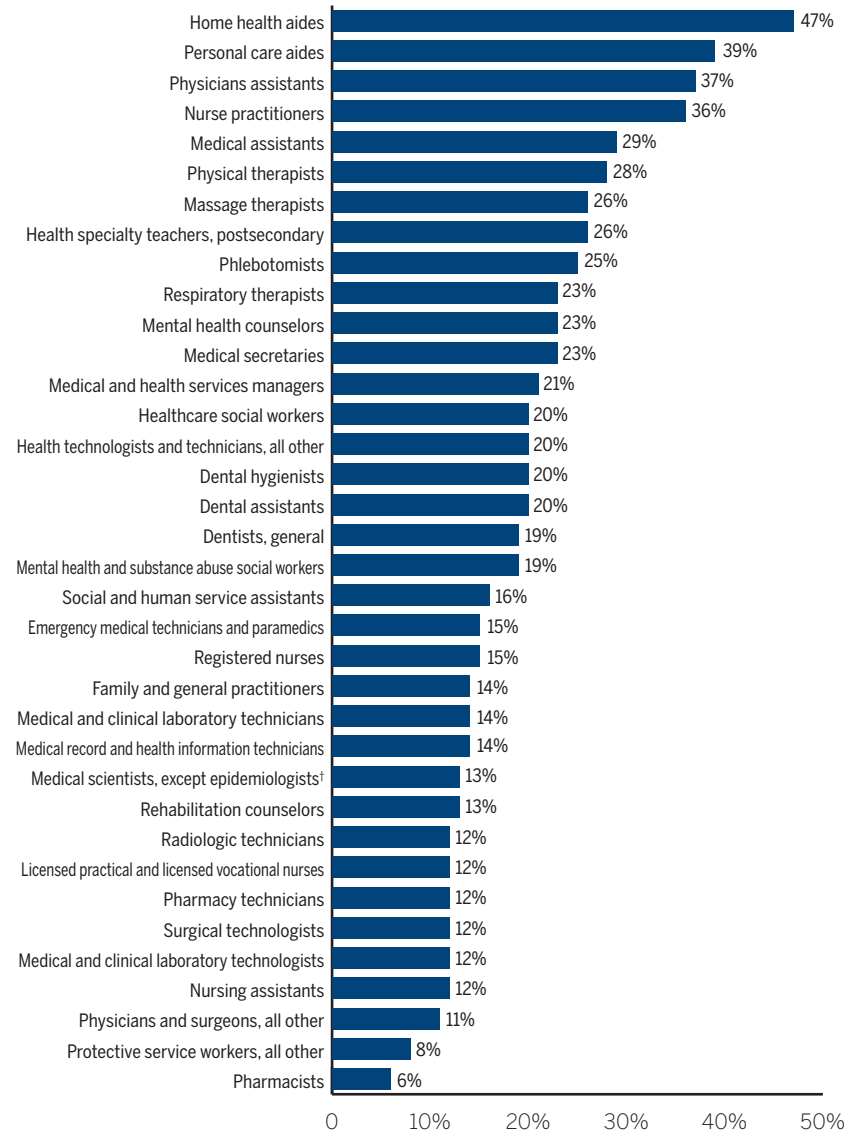
Projected employment totals from 2016 to 2026 show significant growth in overall employment for health and human services occupations.

For state government, projections vary based on the location where the staff may be assigned, with greater percentage growth projected within general hospitals than within health departments or other operations (e.g., psychiatric or substance abuse treatment facilities).<sup>67</sup>

For local government, this trend holds for some positions but not others, with employment of registered nurses in hospitals, for example, to increase by just 3.4 percent, while those in other operations within local government are projected to increase by 7.4 percent.

At the local level, the 7.4 percent projected employment growth in mental health professionals and substance abuse social workers parallels the need for nurses and may be a reflection of the ongoing focus on addiction

**Figure 3.** Employment Change Projections, Public and Private Health Care: 2016-2026\*



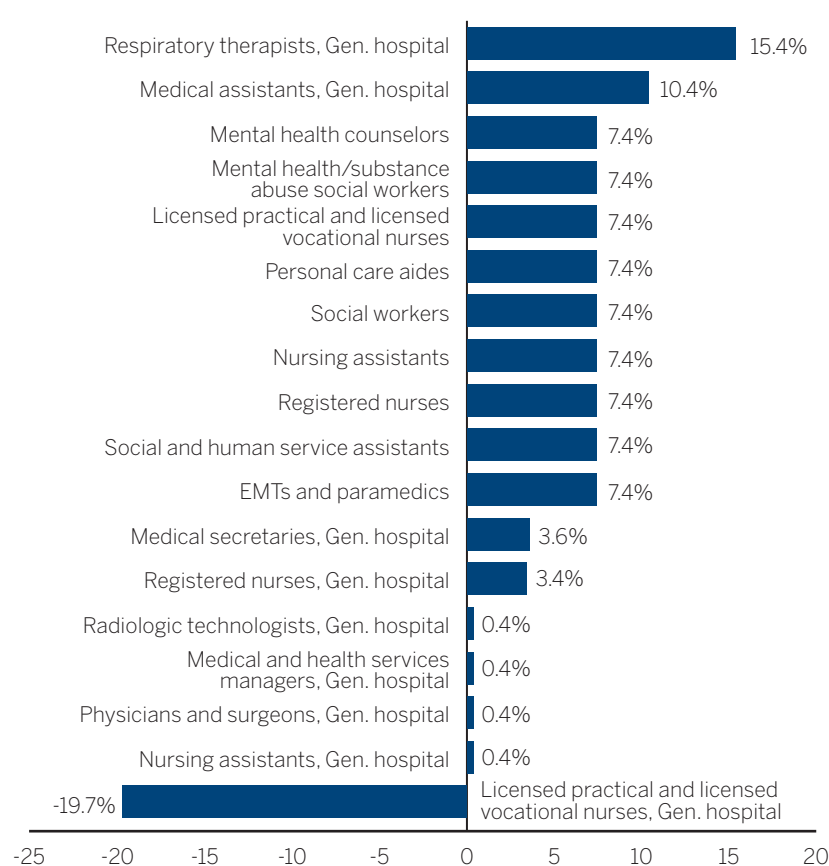
**\*Source:** Bureau of Labor Statistics Employment Projections, for positions with at least 100,000 employees as of 2016, <https://data.bls.gov/projections/occupationProj>.

**†Note:** Figure 3 shows these projected trends for positions with at least 100,000 employees. So, for instance, there are 120,000 "Medical scientists other than epidemiologists" in public or private practice, with projected employment growth of 13 percent. While the growth rate for epidemiologists (9 percent) might also be of interest, that would apply to a 2016 base of just 6,100 individuals and was thus omitted from the graph.

**Figure 4.** Employment Change Projection, State Government: 2016-2026\*



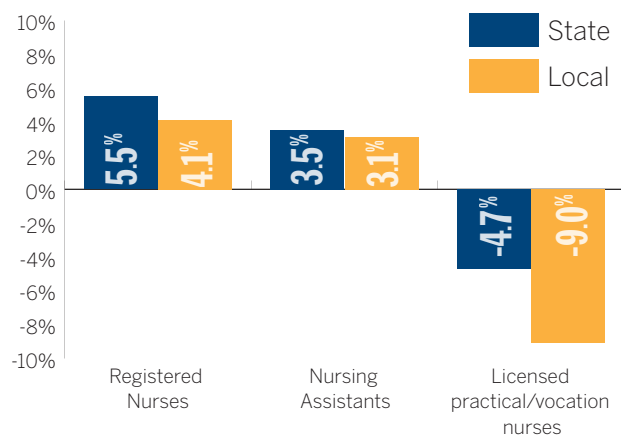
**Figure 5.** Employment Change Projections, Local Government: 2016-2026\*



\*Data is shown for occupations with at least 10,000 employees. Where a hospital type is not specified, employees are part of general government employment (e.g., a health department).

Of the data displayed, registered nurses in general-purpose hospitals represent the largest group, projected at 72,800 state government employees and 182,100 local government employees in 2026

**Figure 6.** Nursing Employment Change Projection, State and Local Government: 2016-2026



and mental health challenges, which is discussed in more detail below. Demand for nurses is also being driven by the aging of the American population, with the percentage over age 65 more than doubling between 2012 and 2050 and placing additional demands on the nursing profession.<sup>68</sup>

Taking all types of state and local government agencies and facilities together, there is clear growth projected in registered nursing and nursing assistant positions, while there is a decline in the number of licensed practical nurses or licensed vocational nurses.

Positions for licensed practical nurses or licensed vocational nurses (LPNs and LVNs) remain available, but more typically in nursing homes or other settings outside of hospitals. Within hospitals, the tasks once done by staff in such midlevel positions are often being split between lower-level staff such as technicians or

assistants and higher-level staff, such as registered nurses.<sup>69</sup>

## HIRING CHALLENGES

The Center for State and Local Government Excellence's annual survey of workforce issues includes questions regarding positions that human resources professionals in state and local governments have identified as being hard to fill. Although health care positions are not ranked as the most difficult to fill (policing positions are rated as hard to fill by 32 percent of 2019 respondents), a sizeable and growing percentage of respondents have expressed difficulty in hiring for these positions. Historically, these positions have been difficult to fill due to higher salaries in the private sector. Other factors are the continuing low level of unemployment and an aging population.

In addition, the perception among responding human resources professionals is that public sector employers are not as competitive with the salaries they offer as they are with benefits.<sup>70</sup>

While Figure 7 shows data for all state and local respondents, the challenge was most pronounced in the 2019 survey for state agencies hiring for nursing positions, with 44 percent indicating that these were hard to fill.

In the years immediately after the Great Recession, a sizeable share of jurisdictions reported that retirement-eligible employees were postponing their retirement. This was reported by 44 percent



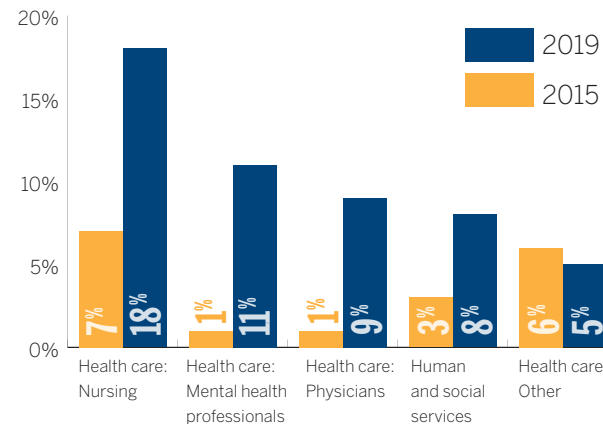
of jurisdictions in 2009 and currently stands at 32 percent.<sup>71</sup> Relatedly, 12 percent noted that employees were accelerating their retirement plans in 2009, a figure which now stands at 21 percent. Absent the recession-induced layoffs or hiring freezes, it is not surprising that the pressure to adjust retirement scheduling has waned.

According to a 2017 survey of public health employees, 47 percent planned to leave the public workforce between 2018 and 2022, with 22 percent retiring and 25 percent pursuing other career opportunities.<sup>72</sup> Most-often cited reasons to consider leaving are compensation and lack of opportunities for advancement (cited more often in large cities). Of potential concern, as the current wave of retirements among older workers continues, 34 percent of those with a degree in public health were anticipated to leave within 2018 alone.

Even with workers retiring, the overall workforce might still be stable if there were a sufficient contingent of new graduates entering the health professions. One way of assessing this is to compare the total workforce for a given position to the number of graduates in that field. If the percentage of new graduates entering the field is lower than the percentage of incumbents leaving the field, this might be cause for concern.

The most recent data on health care graduates and workforce is from 2015. Data for high-demand positions is shown in Table 1.

**Figure 7.** Hard-to-Fill Health and Human Services Positions, State and Local Government: 2015 and 2019.



**Table 1.** Ratio of 2015 graduates to total workforce

Position	Ratio of 2015 graduates to total workforce
Physicians	2.5%
Counselors	3.2%
Medical and Health Services Managers	3.3%
Dental Hygienists	4.2%
Licensed Practical and Licensed Vocational Nurses (LPNs and LVNs)	5.3%
Health Diagnosing and Treating Practitioner Support Technologists and Technicians	6.0%
Registered Nurses	6.8%
Social Workers	8.2%

**Source:** Health Resources & Services Administration, *The U.S. Health Workforce: State Profiles*, <https://bhw.hrsa.gov/health-workforce-analysis/state-profiles>; Figures shown represent the medians of each of the state-by-state ratios

As noted, the most current projection for those leaving the public health workforce is 47 percent over five years. Using the more contemporaneous figure from 2015 of 38 percent leaving between 2015 and 2019,<sup>73</sup> this would average to 7.9 percent leaving per year; this would mean in all but one of the examples shown, the graduation rate would be lower than the separation rate. Importantly, it should be noted that the percentage potentially joining the workforce has a choice of employers, both public and private. So while new graduates each year might number 6.8 percent of the workforce of RNs, only a portion of those would be joining state or local government agencies.

Some states face a more daunting challenge than others. A number of states with the lowest ratios of graduates-to-total workforce are more rural states, where it can be difficult to recruit highly trained individuals to fill available positions. Yet similar difficulty may also exist in more populous states, potentially driven by multiple factors influencing career choices and college enrollment patterns.

## MEDIAN AGE

Overall, the median age for all health care and social assistance employees is 42.7.<sup>74</sup> Some subgroups skew somewhat higher, such as home health care service providers, with a median age of 45.8.

Looking at services specific to government, social assistance employees have a median age of 41.9.

Median ages for specific occupations may vary depending on the level of education required, such as health technicians (39.8), licensed practical/vocational nurses (41.9), registered nurses (43.2), and physicians and surgeons (46.4).<sup>75</sup>

## DIVERSITY

For most health occupations, breakouts by gender and race are not available specific to government employment. For example, while such data are available for nurses, it is not separately calculated for those who work in public health or other government agencies. Among the positions that

**Table 2.** States with Low Ratios of Graduates to Total Health Workforce for Selected Positions

State	Occupation	Total Health Workforce	2015 Graduates	Ratio of 2015 graduates to total workforce
Wyoming	Medical and Health Services Managers	1,225	2	0.2%
Alabama	Dental Hygienists	3,806	38	1.0%
Virginia	Counselors	13,295	164	1.2%
California	Registered Nurses	304,332	14,058	4.6%

**Source:** Health Resources & Services Administration, *The U.S. Health Workforce: State Profiles*, <https://bhwhrsa.gov/health-workforce-analysis/state-profiles>.

**NOTE:** Wyoming and Alabama have the lowest ratios for the occupations shown. Virginia and California each represent the fourth-lowest ratio for the listed occupations; they are shown to illustrate the fact that the larger states are not immune to such workforce challenges.

more closely correspond to a governmental operation are counselors and social workers. Industry-wide statistics for those positions are shown in Table 3.

**Table 3.** Diversity in Health and Human Services Employment

	U.S. Workforce	Registered Nurses	Licensed Practical/Vocational Nurses	Counselors	Social Workers
Male	52.8%	9.6%	9.8%	30.2%	19.3%
Female	47.2%	90.4%	90.2%	69.8%	80.7%
Hispanic	16.1%	5.7%	9.4%	10.7%	12.0%
Caucasian	64.4%	73.5%	60.8%	64.6%	60.6%
African-American	11.6%	10.4%	23.1%	18.8%	21.5%
Asian-American	5.3%	8.4%	4.0%	2.8%	3.0%
American Indian/Alaska Native	0.6%	0.4%	0.7%	0.8%	0.8%
Native Hawaiian/Other Pacific Islander	0.2%	0.1%	0.1%	0.1%	0.1%
Multiple/Other Race	1.8%	1.5%	1.9%	2.2%	2.0%

By 2026, the percentage of the overall labor force that is Hispanic is projected to increase by 2.7 percent, with slightly smaller increases among Asian-Americans (2.5 percent) and African-Americans (0.9 percent). In contrast, the Caucasian share of the workforce is projected to increase by just 0.4 percent, with the Caucasian non-Hispanic share decreasing by 0.2 percent.<sup>76</sup> Diversity within the ranks of the health professions will depend in large part on efforts to recruit and retain those individuals. That goal is being pursued in recognition of the fact that there is not only

underrepresentation of some racial and ethnic groups, but also that there can be disparities in service delivery and health care outcomes for these population segments, which may in part be alleviated by a more representative and responsive workforce.<sup>77</sup>

### FINANCIAL UNCERTAINTIES

Public health financial support can be unpredictable, subject to fluctuations in interagency support, budget and program cuts, and unanticipated needs driven by epidemiological events. While federal funds

**Source:** *Sex, Race, and Ethnic Diversity of U.S. Health Occupations (2011-2015)*, August 2017, U.S. Department of Health and Human Services, <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/diversityushealthoccupations.pdf>

represent a large and growing share of state public health spending, this has been due not to increased appropriations, but rather to state budget cuts that have been deeper than the accompanying federal cuts.<sup>78</sup> Fees for service and insurance reimbursements also represent a portion of the public health revenue stream, but full recovery of related costs is unlikely, due to both the difficulty of keeping fees up-to-date as costs increase and to the administrative hurdles required to justify private insurance or Medicaid reimbursement. Given these financial challenges, the above-cited figures regarding hard-to-fill positions and the high percentage of employees considering leaving public service are unsurprising.

Another challenge public health departments face is the funding that might flow to emergency response, such as for outbreaks of influenza, Zika, or Ebola. When these extraordinary appropriations are approved, there can be a perception that the departments are well funded or are receiving the full resources they need, thus making it more difficult to convince decision makers to approve sufficient funds for non-emergency operations later.<sup>79</sup>

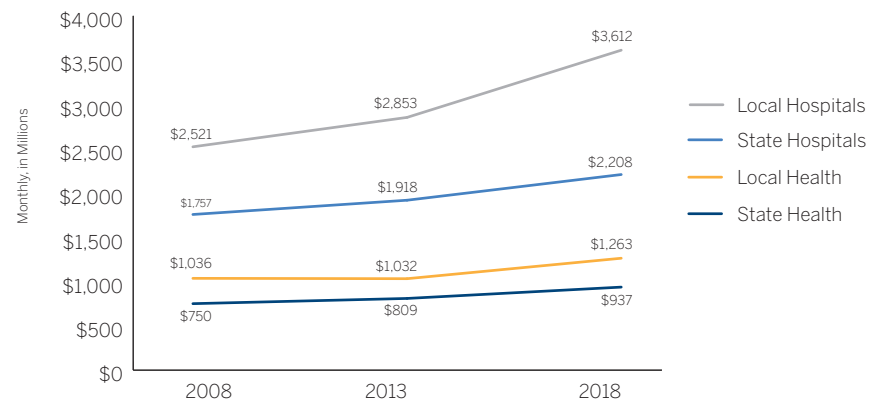
State and local hospitals and health departments saw payroll change more slowly in the 2008 to 2013 period than from 2013 to 2018. Most notably, local health payroll decreased by 0.4 percent from 2008 to 2013, but both local health and hospital payroll increased by more than 20 percent from 2013 to 2018.

**Table 4.** State and Local Government Health and Hospital Staffing, Monthly Payroll in Millions\*

	2008	2013	2018	Change 2008-2013	Change 2013-2018
<b>State Government</b>					
Health	\$750	\$809	\$937	7.8%	15.8%
Hospitals	\$1,757	\$1,918	\$2,208	9.2%	15.1%

<b>Local Government</b>					
Health	\$1,036	\$1,032	\$1,263	-0.4%	22.4%
Hospitals	\$2,521	\$2,853	\$3,612	13.2%	26.6%

**Figure 8.** State and Local Government Payroll.\*



\*Source: U.S. Census Bureau, Annual Survey of State and Local Government Employment and Payroll.

As a share of overall payroll, health and hospital operations remained fairly steady, with only local hospitals increasing relative to other local services (from 5.1 to 6.1 percent).

**Table 5.** Health and Hospital Share of Payroll, State and Local Government

	State		Local	
	2008	2018	2008	2018
Health	4.0%	4.0%	2.1%	2.1%
Hospitals	9.4%	9.3%	5.1%	6.1%

**Source:** U.S. Census Bureau, *Annual Survey of State and Local Government Employment and Payroll*.

Unlike stand-alone enterprise activities like water utilities, revenues and operating expenditures for health and hospital operations do not necessarily balance. In part this is because some operations may be provided free of charge, such as efforts to prevent or respond to infectious diseases or provide emergency care to uninsured patients.

Table 6 shows a comparison of revenue and expenditure data for hospitals. Not included in this comparison are such items as Medicare or Medicaid reimbursements, as intergovernmental transfers are not broken down by type of operation supported. Even without those transfers, the share of hospital expenditures covered by revenues has increased for both state (from 65.1 to 77.1 percent) and local governments (from 74 to 80 percent) between 2008 and 2016 (the last year for which data were available).

**Table 6.** Hospital Revenues and Expenditures, State and Local Government\* (annual, in millions)

	State		Local	
	2008	2016	2008	2016
Revenues (Hospital charges and miscellaneous general revenue)	\$37,123	\$63,764	\$60,861	\$87,518
Operating Expenditures	\$53,641	\$79,102	\$76,472	\$104,040
Capital Expenditures	\$3,350	\$3,625	\$5,765	\$5,327
Percentage of Expenditures covered by dedicated revenues	65.1%	77.1%	74.0%	80.0%

## EDUCATIONAL REQUIREMENTS

The range of positions in health care bring with them a wide range of educational requirements. The typical education levels for designated position types are presented in Table 7.

Additional education, certificates, or degrees may be options for advanced practice or career advancement regardless of minimum or typical requirements. Depending on the position or sub-specialty, a clinical phase, internship, or residency, may also be required, and licensing or board certification may include requirements for skills-based evaluations, continuing medical education (CME) credits, or exams. While some CME requirements or content standards are set by national associations of practitioners, the frequency of licensing renewal and associated regulations may be specified on a state-by-state basis.<sup>80</sup>

**\*Source:** U.S. Census Bureau, *2016 Annual Surveys of State and Local Government Finances*. Revenues do not include federal reimbursements, as the Census Bureau does not differentiate which federal reimbursements relate to specific operations.

## TRENDS IN SUBSTANCE ABUSE AND MENTAL HEALTH COUNSELING

Mental health and substance abuse disorders are among the areas where demand for staffing is far outweighed by current capacity. As of 2016, only 43 percent of adults in need of mental health treatment were receiving services, while for substance abuse, the share receiving treatment was just 11 percent.<sup>82</sup> Some of the 43 million untreated individuals may have opted not to undergo treatment. However, studies have shown that 25 percent of those not receiving services cited a shortage of drug treatment capacity as the reason, and where waiting lists exceed two weeks, about 40 percent of those waiting will lose interest in seeking treatment.<sup>83</sup>

This demand for substance abuse counseling is in part driven by the ongoing opioid crisis, which in 2017 saw more than 11 million people misusing prescription pain medication.<sup>84</sup> This follows a trend that shows the rate of drug overdose deaths involving opioids rising by 358 percent from 1999 to 2016.<sup>85</sup> In one positive development, opioid prescriptions have declined by 19.1 percent from 2006 to 2017.<sup>86</sup> As prescribing practices evolve, there is the potential for stemming the tide of new patients becoming addicted.

Considering the need for treatment, the projected growth of 7.4 percent in local government mental health counselors and substance abuse social workers should assist with meeting the demand. That growth aside, it is estimated that as of 2017,<sup>87</sup> the need for mental health professionals (via government or private providers) was only 33 percent met, and shortages are projected in 2025 in the numbers of psychiatrists,

**Table 7.** Typical Education by Position<sup>81</sup>

Position/Field	Associate's Degree or Certificate	Bachelor's Degree	Master's Degree	MD or Other Degree
Medical Assistant	X			
Diagnostic or Surgical Technician	X			
Home Health or Personal Care Aide	X			
Pharmacy Technician	X			
Dental Hygienist	X	X		
Substance Abuse Counselor	X	X		
Radiology Technician		X		
Dietician/Nutritionist		X		
Social Worker		X		
Emergency Management		X	X	
Health Informatics		X	X	
Healthcare Administration		X	X	
Speech-Language Pathologist			X	
Public Health			X	
Nurse (LPN, LVN, RN)	X	X		
Advanced Practice Nurse (Nurse Practitioner, Nurse Midwife, Nurse Anesthetist)			X	
Physician's Assistant			X	
Physician, Anesthesiologist, Surgeon				X
Dentist				X



psychologists, and social workers.<sup>88</sup> And even where those positions may be filled, agencies still need to deal with the fact that annual employee turnover among substance abuse counselors is 33 percent<sup>89</sup>—a rate which is much higher than for state and local health departments generally.

With or without treatment, mental illness and substance abuse represent a significant impact on our society. Serious mental illness (such as major depression, schizophrenia, or bipolar disorder) represents a \$193-billion cost to the U.S. economy in annual lost earnings, and those with either a mental illness or substance abuse disorder represent 16 percent of those in prison.<sup>93</sup>

## TECHNOLOGY SKILLS IN HEALTH CARE

Technology entered many fields of public service via the standard desktop applications of word processing, spreadsheets, and databases, with the Internet also contributing to connectivity via e-mail, automated data transfer, research, and workflow management. Within the health care field, technology has also followed a continuum from early analog devices such as blood pressure cuffs, x-ray machines, and stethoscopes to their more digital counterparts today. With each leap in technology, there is an improvement in efficiency or effectiveness, but also an updated training requirement.

Among the more recent developments in health care technology are telehealth, mobile or online laboratory services, electronic medical records, and automated diagnostic or pharmacy services—all of which bring

with them the need for health care workers with the informatics skills and empirical focus required to integrate those technologies and the available data into their practice and patient care.<sup>95</sup> This may be facilitated by those with health informatics education or also by committees, training programs, continuing education, computer-linked or virtual reality simulators, or other employer emphasis, as well as effectively educating patients on how to participate in their own care management with relevant technology tools.

Technology skills aside, the results achieved for the patients from the technologies deployed is of paramount importance. For example, the medical devices or procedures used may carry risks of infection.<sup>96</sup> Familiarizing oneself with the proper use of such products or technologies and the evolving standards of practice can be a matter of continuing professional education.

While telemedicine holds promise for expanding access to underserved populations and those in rural areas, the learning curve is not limited to the means of establishing a video link or obtaining test results via remote sensors or laboratory analysis by mail. It is also advisable to evaluate the likelihood that the method of service provision might impact the care provided, such as in the frequency or type of antibiotics which may be prescribed.<sup>97</sup>

Thus, while technology can contribute to greater efficiencies, it also brings with it the need for effective workforce training to integrate the various systems and for the skills necessary to communicate clearly with patients to empower them to better manage their own health before it becomes a matter of acute care.

### Turnover:

#### Local health departments<sup>90</sup>

(all positions): 10%  
(2013)

#### State health departments<sup>91</sup>

(all positions): 10.8 - 11.5%  
(2009-2011)

#### All state and local government<sup>92</sup>

(excluding education): 16.4 - 20%  
(2008-2018)

#### Substance abuse counselors

(public or private): 33%  
(2008-2009)

### Health informatics

is the interdisciplinary study and application of IT-based innovations and data systems in health care services delivery, management, planning, and decision making.<sup>94</sup>

# Endnotes

- 1 de Beaumont Foundation, Association of State and Territorial Health Officials, National Association of County & City Health Officials, Big Cities Health Coalition, *Public Health Workforce Interests and Needs Survey: 2017 National Findings*. Available at <https://www.debeaumont.org/ph-wins/>
- 2 "Overdose Death Rates," National Institute of Drug Abuse, January 2019. Available at <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>
- 3 Kaiser Family Foundation, "Mental Health Care Professional Shortage Areas (HPSAs)," December 31, 2018. Available at: <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D>.
- 4 "Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health," Substance Abuse and Mental Health Services Administration, September 2017. Available at: <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.pdf>
- 5 Patricia Buckley and Daniel Bachman, "Meet the US workforce of the future: Older, more diverse, and more educated," *Deloitte Review*, Issue 21, July 31, 2017. Available at: <https://www2.deloitte.com/us/en/insights/deloitte-review/issue-21/meet-the-us-workforce-of-the-future.html>
- 6 U.S. Department of Labor, Bureau of Labor Statistics, "Healthcare Occupations," *Occupational Outlook Handbook*, April 12, 2019. Available at: <https://www.bls.gov/ooh/healthcare/home.htm>
- 7 Kyle Bogaert, Brian C. Castrucci, Elizabeth Gould, Katie Sellers, Jonathon Leider, "Changes in State Governmental Public Health Workforce: Demographics and Perceptions, 2014-2017," *Journal of Public Health Management and Practice*, 25 (March/April 2019): S58-S66. Available at: [https://journals.lww.com/jphmp/Fulltext/2019/03001/Changes\\_in\\_the\\_State\\_Governmental\\_Public\\_Health.10.aspx](https://journals.lww.com/jphmp/Fulltext/2019/03001/Changes_in_the_State_Governmental_Public_Health.10.aspx)
- 8 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, *2012 National Healthcare Disparities Report*, 2013. Available at: <https://archive.ahrq.gov/research/findings/nhqdr/nhdr12/index.html>; Janice M. Phillips and Beverly Malone, "Increasing Racial/Ethnic Diversity in Nursing to Reduce Health Disparities and Achieve Health Equity," *Public Health Reports*, 129 (January-February 2014, Suppl 2): 45-50. Available at: <https://journals.sagepub.com/doi/pdf/10.1177/00333549141291S209>
- 9 Jeanna Smialek, "A Hot Job Market Is Causing Labor Pains for State Governments," *The New York Times*, August 30, 2019.
- 10 Mike Maciag, "Where the Government Is (and Isn't) Keeping Up with Growth," *Governing*, August 28, 2019. Available at: <https://www.governing.com/topics/mgmt/gov-state-local-government-employees-growth.html>
- 11 Ibid.
- 12 Center for State and Local Government Excellence, *State and Local Government Workforce: 2019 Survey* (Washington, D.C.: Center for State and Local Government Excellence, July 2019). Available at: <https://slge.org/assets/uploads/2019/07/slge-workforce2019.pdf>
- 13 Center for State and Local Government Excellence, *State and Local Government Workforce: 2018 Data and 10 Year Trends*, (Washington, D.C.: Center for State and Local Government Excellence, May 2018). Available at: <https://slge.org/resources/state-and-local-government-workforce-2018-data-and-10-year-trends>
- 14 U.S. Census Bureau. *Annual Survey of State and Local Government Employment and Payroll, Data, 2016*. Available at: <https://www.census.gov/programs-surveys/apes/data.html>

- 15 Kyle Bogaert, Jonathon P. Leider, Brian C. Castrucci, Katie Sellers, Christin Whang, "Considering Leaving, but Deciding to Stay: A Longitudinal Analysis of Intent to Leave in Public Health," *Journal of Public Health Management and Practice*, 25 (March/April 2019): S78-S86. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6586295/>
- 16 Interviews conducted with Jonathan Parks, Director, Office of Management and Budget, Montgomery County, Ohio on July 29, 2019 and with Shelley Dickstein, City Manager, Dayton, Ohio, on August 12, 2019.
- 17 Interview conducted with Shelley Dickstein, August 12, 2019.
- 18 Interview conducted with Jonathan Parks, July 29, 2019.
- 19 Ibid.
- 20 Interview with Shelley Dickstein, August 12, 2019.
- 21 Erin Welch, *A Community of Recovery* (Washington, D.C.: Center for American Progress, January 2019), 17-18.
- 22 *Montgomery County Human Services Planning & Development 2017 Annual Report*. Available at [https://www.mcoho.org/HSPD\\_Annual\\_Report\\_2017\\_final.pdf](https://www.mcoho.org/HSPD_Annual_Report_2017_final.pdf)
- 23 Interview with Jonathan Parks, July 29, 2019.
- 24 Welch, *A Community of Recovery*, 15.
- 25 Dayton & Montgomery County Public Health, "Accidental Overdose Deaths," as of August 2019. Available at: <https://www.phdmc.org/coat/158-accidental-overdose-death-totals>
- 26 Interview with Jonathan Parks, July 29, 2019.
- 27 Interview with Shelley Dickstein, August 12, 2019.
- 28 Ibid.
- 29 John M. Kamensky, "How Data Can Drive Performance for Social Services," *Governing*, March 13, 2019. Available at: <https://www.governing.com/blogs/bfc/col-colorado-department-human-services-performance-management-c-stat.html>
- 30 Melissa Wavelet, *A Practitioner's Framework for Measuring Results: Using "C-Stat" at the Colorado Department of Human Services* (Washington, D.C.: IBM Center for the Business of Government, 2019). Available at: <http://www.businessofgovernment.org/report/practitioner%E2%80%99s-framework-measuring-results-using-%E2%80%9Cc-stat%E2%80%9D-colorado-department-human-services>
- 31 Kamensky, "How Data Can Drive Performance for Social Services."
- 32 Interview conducted with Donna Thoreson, former social worker for Contra Costa and Butte counties and former Workforce Development Coordinator, California Social Work Education Center, University of California, Berkeley, on August 21, 2019.
- 33 Ibid.
- 34 Ibid.
- 35 Ibid.
- 36 Lead for America, "About Us." Available at: <https://www.lead4america.org/about>
- 37 Joe Nail, "Finding a Simple Way to Change Lives through Government Service," *PA Times*, Spring 2019.
- 38 Ibid.
- 39 Elizabeth Kellar and Gerald Young, *Workforce of the Future: Strategies to Manage Change* (Washington, D.C.: Center for State and Local Government Excellence and Kronos, October 2018), 8. Available at: <https://www.slge.org/assets/uploads/2018/10/workforce-of-the-future-oct-2018.pdf>
- 40 Keith Ferrazzi, "Technology Can Save Onboarding from Itself," *Harvard Business Review*, March 25, 2015. Available at: <https://hbr.org/2015/03/technology-can-save-onboarding-from-itself>
- 41 "2018 NASPEs Award Winners & Nominees," National Association of State Personnel Executives. Available at: [https://www.naspe.net/index.php?option=com\\_content&view=article&id=106:2018-naspe-awards&catid=20:site-content&Itemid=137](https://www.naspe.net/index.php?option=com_content&view=article&id=106:2018-naspe-awards&catid=20:site-content&Itemid=137)
- 42 Elizabeth Kellar, Amber Snowden, and Christine Becker, *Succession Planning*, (Washington, D.C.: Center for State and Local Government Excellence and Kronos, October 2017), 7. Available at: <https://slge.org/assets/uploads/2018/02/2017-Succession-Planning.pdf>
- 43 Interview with Shelley Dickstein, August 12, 2019.
- 44 Melissa Asher and Robert Lavigna, "Talent Strategy: Focus on Retention...and Recruitment," *PA Times*, Spring 2019, 10.
- 45 Interview with Donna Thoreson, August 21, 2019.
- 46 "Donna Thoreson," California Social Work Education Center. Available at: <https://calswec.berkeley.edu/donna-thoreson>
- 47 Interview with Donna Thoreson, August 21, 2019.
- 48 Ibid.
- 49 Lorie Martin and Hilary Kennedy, "Medicaid Leadership Exchange: A Candid Dialogue on What Works – and What Doesn't – in Leading Today's State Programs," National Association of Medicaid Directors. Available at: <https://medicaiddirectors.org/publications/medicaid-leadership-exchange-a-candid-dialogue-on-what-works-and-what-doesnt-in-leading-todays-state-programs/>
- 50 "The Art & Science of Setting the Leadership Frame," Ed O'Neil interview with Mark Larson and Gretchen Hammer, Medicaid Leadership Exchange Podcast, May 2019. Available at: <https://www.chcs.org/resource/using-leadership-lessons-to-navigate-the-medicaid-landscape/>
- 51 Kaye Bender, "Can a Public Health Department Perform Well Without a Strong Workforce?" *Journal of Public Health Management and Practice*, 25 (March/April 2019): S13-S15. Available at: [https://journals.lww.com/jphmp/Fulltext/2019/03001/Can\\_a\\_Public\\_Health\\_Department\\_Perform\\_Well.5.aspx](https://journals.lww.com/jphmp/Fulltext/2019/03001/Can_a_Public_Health_Department_Perform_Well.5.aspx)
- 52 Interview with Margaret McMahon, Director, Bureau of Working Families, Division of Family and Economic Security, State of Wisconsin, on September 4, 2019.

- 53 Eden Bez and Eric Beers, "PHWINS Driving Agency Climate and Culture Development" (webinar presentation, Association of State and Territorial Health Officials, June 26, 2019).
- 54 The Public Health Workforce and Needs Survey (PHWINS) was first launched in 2014 by the de Beaumont Foundation and the Association of State and Territorial health Officials. The survey was expanded to include the National Association of County and City health Officials and the Big Cities health Coalition in 2017.
- 55 de Beaumont Foundation, *Public Health Workforce Interests and Needs Survey: 2017 National Findings*.
- 56 "Introduction to Appreciative Inquiry," Al Commons. Available at: <https://appreciativeinquiry.champlain.edu/learn/appreciative-inquiry-introduction/>
- 57 Asher and Lavigna, "Talent Strategy: Focus on Retention...and Recruitment," 10.
- 58 Elizabeth Kellar, Amber Snowden, and Christine Becker, Kronos, IPMA-HR, and Center for State and Local Government Excellence, *Succession Planning*, 20.
- 59 "The Art and Science of Setting the Leadership Frame."
- 60 Ibid.
- 61 Ibid.
- 62 The Annie E. Casey Foundation, *Five Steps to a Stronger Child Welfare Workforce: Hiring and Retaining the Right People on the Frontline*, (Baltimore: The Annie E. Casey Foundation, 2018), 8.
- 63 The Annie E. Casey Foundation, *Five Steps to a Stronger Child Welfare Workforce*, 14.
- 64 Ibid.
- 65 The Annie E. Casey Foundation, *Five Steps to a Stronger Child Welfare Workforce*, 16.
- 66 U.S. Department of Labor, Bureau of Labor Statistics, Employment, Hours, and Earnings from the Current Employment Statistics survey (National).
- 67 Staffing models for psychiatric hospitals may vary, depending on whether they are focused on inpatient custodial care, outpatient care, or such approaches as a Nurse-Directed Care Model, which relies more heavily on professional staffing. In a 2002 study, 40.9 percent of staff in state psychiatric hospitals were nondegree para-professional staff, compared to 8.7 percent in private hospitals [See J.A. Morris and G.W. Stuart, "Training and education needs of consumers, families, and front-line staff in behavioral health practice," *Administration and Policy in Mental Health and Mental Health Research Services*, 29 (2002, no. 4/5): 377–402.]. This is not to say that state hospitals should meet the same staffing levels as what a private hospital may be able to afford, but rather to indicate that a range of staffing approaches exists. With the projected decrease in state psychiatric employment from 2016 to 2026, there is no predicted change in the share of employees who hold professional degrees (U.S. Department of Labor, Bureau of Labor Statistics National Employment Matrix).
- 68 "Nursing Shortage," American Association of Colleges of Nursing, April 1, 2019. Available at: <https://www.aacnnursing.org/News-Information/Fact-Sheets/Nursing-Shortage>.
- 69 "Semiskilled Healthcare Jobs are Disappearing," WSJ Video, April 26, 2013. Available at: <https://www.wsj.com/video/semiskilled-healthcare-jobs-are-disappearing/02129C8F-D1E3-4E43-81E4-48F33C24D436.html>.
- 70 Center for State and Local Government Excellence, *State and Local Government Workforce: 2019 Survey* (Washington, D.C.: Center for State and Local Government Excellence, July 2019). According to this report, 56 percent of state and local human resource directors indicated that their salaries were competitive, while 88 percent indicated that their benefits were competitive. Available at: <https://www.slge.org/resources/state-and-local-workforce-survey-2019>
- 71 Center for State and Local Government Excellence, *State and Local Government Workforce: 2018 Data and 10 Year Trends* (Washington, D.C.: Center for State and Local Government Excellence, May 2018), available at <https://www.slge.org/resources/state-and-local-government-workforce-2018-data-and-10-year-trends>; Center for State and Local Government Excellence, *State and Local Government Workforce: 2019 Survey* (Washington, D.C.: Center for State and Local Government Excellence, July 2019), available at <https://www.slge.org/resources/state-and-local-workforce-survey-2019>
- 72 de Beaumont Foundation, Association of State and Territorial Health Officials, National Association of County & City Health Officials, Big Cities Health Coalition, *Public Health Workforce Interests and Needs Survey: 2017 National Findings*. Available at <https://www.debeaumont.org/ph-wins/>
- 73 de Beaumont Foundation and ASTHO, "Public Health Workforce Interests and Needs Survey: Introduction." Available at: <https://www.debeaumont.org/wp-content/uploads/2019/05/PH-WINS-2014-infographic.pdf>
- 74 Includes governmental and nongovernmental employees. Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, Age by Industry, 2018.
- 75 U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, Age by Occupation, 2018.
- 76 U.S. Department of Labor, Bureau of Labor Statistics, "Career Outlook, Projections of the labor force, 2016–26," November 2017. Available at: [https://www.bls.gov/careeroutlook/2017/article/projections-laborforce.htm?view\\_full](https://www.bls.gov/careeroutlook/2017/article/projections-laborforce.htm?view_full)
- 77 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, *2012 National Healthcare Disparities Report, 2013*. Available at: <https://archive.ahrq.gov/research/findings/nhqrdr/nhdr12/index.html>; Janice M. Phillips and Beverly

- Malone, "Increasing Racial/Ethnic Diversity in Nursing to Reduce Health Disparities and Achieve Health Equity," *Public Health Reports*, 129 (January-February 2014, Suppl 2): 45-50. Available at: <https://journals.sagepub.com/doi/pdf/10.1177/00333549141291S209>
- 78 M. Meit, A. Knudson, I. Dickman, A. Brown, N. Hernandez, and J. Kronstadt, *An Examination of Public Health Financing in the United States*. Prepared by NORC at the University of Chicago. (Washington, D.C.: The Office of the Assistant Secretary for Planning and Evaluation. March 2013), 4. Available at: <https://www.norc.org/PDFs/PH%20Financing%20Report%20-%20Final.pdf>
- 79 Meit et al, 17.
- 80 "Healthcare," College Choice, available at <https://www.collegechoice.net/healthcare/>; Janet M. Torpy and Edward H. Livingston, "Health Care Professionals and Qualifications," *Journal of the American Medical Association*, 308 (2012, no. 21): 2296, available at: <https://jamanetwork.com/journals/jama/fullarticle/1475193>; and "Human Services Edu: Educating to Better the Lives of Others," HumanServicesEdu.org, available at: <https://www.humanservicesedu.org/>
- 81 Requirements vary by profession. For a summary of physician license renewal requirements by state, see "Continuing Medical Education: CME State Requirements," BoardVitals, December 17, 2018. Available at: <https://www.boardvitals.com/blog/cme-requirements-by-state/>
- 82 "TrendWatch: Increasing Access to Behavioral Health Care Advances Value for Patients, Providers and Communities," American Hospital Association, May 2019. Available at <https://www.aha.org/system/files/media/file/2019/05/aha-trendwatch-behavioral-health-2019.pdf>.
- 83 JongSerl Chun, Joseph R. Guydish, Ellen Silber and Alice Gleghorn, "Drug Treatment Outcomes for Persons on Waiting Lists," *The American Journal of Drug and Alcohol Abuse*, 34 (5): 526-533.
- 84 Substance Abuse and Mental Health Services Administration, *Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health* (HHS Publication No. SMA 18-5068, NSDUH Series H-53) (Rockville, Maryland: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, 2018). Retrieved from <https://www.samhsa.gov/data/>
- 85 U.S. Centers for Disease Control, *2018 Annual Surveillance Report of Drug-Related Risks and Outcomes – United States*, Surveillance Special Report (Washington, D.C.: U.S. Department of Health and Human Services, August 31, 2018), 88. Available at: <https://www.cdc.gov/drugoverdose/pdf/pubs/2018-cdc-drug-surveillance-report.pdf>
- 86 U.S. Centers for Disease Control, *2018 Annual Surveillance Report of Drug-Related Risks and Outcomes – United States*, 79.
- 87 "State Health Data-Mental Health Care Health Professional Shortage Areas (HPSAs)," Kaiser Family Foundation, December 31, 2018. Available at: <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/>
- 88 Health Resources and Services Administration/ National Center for Health Workforce Analysis, Substance Abuse and Mental Health Services Administration/Office of Policy, Planning, and Innovation, *National Projections of Supply and Demand for Behavioral Health Practitioners: 2013-2025* (Rockville, Maryland: Health Resources and Services Administration, 2015). Available at: <https://bhwh.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/behavioral-health2013-2025.pdf>
- 89 Lillian T. Eby, Hannah Burk, and Charleen P. Maher, "How serious of a problem is staff turnover in substance abuse treatment? A longitudinal study of actual turnover," *Journal of Substance Abuse Treatment*, 39 (3): 264-271. Available at [https://www.journalofsubstanceabusetreatment.com/article/S0740-5472\(10\)00136-4/fulltext](https://www.journalofsubstanceabusetreatment.com/article/S0740-5472(10)00136-4/fulltext)
- 90 Mean annual turnover in local health departments was 9.88 percent as of 2013, with approximately one third of that attributable to retirements. See Sarah J. Newman, Jiali Ye, and Carolyn J. Leep, "Workforce Turnover at Local Health Departments: Nature, Characteristics, and Implications," *American Journal of Preventive Medicine* 47 (5): S337-S343. Available at <https://www.sciencedirect.com/science/article/pii/S0749379714003900>
- 91 R. Liss-Levinson, Association of State and Territorial Health Officials, personal communication, 2013, as cited in Newman et al.
- 92 U.S. Department of Labor, Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.
- 93 "TrendWatch," 4.
- 94 See "Health Informatics Defined," HIMSS, available at <https://www.himss.org/health-informatics-defined>; and <https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects58.html>.
- 95 Cristina Cassano, "The Right Balance—Technology and Patient Care," *Online Journal of Nursing Informatics*, 18 (3). Available at: <https://www.himss.org/right-balance-technology-and-patient-care>
- 96 Chad Terhune, "Hospitals and device makers still struggle to rid medical scopes of infectious bacteria," *Los Angeles Times*, April 23, 2018. Available at: <https://www.latimes.com/business/la-fi-medical-scope-infections-20180423-story.html>.
- 97 Lori Uscher-Pines, Andrew Mulcahy, David Cowling, Gerald Hunter, Rachel Burns, and Ateev Mehrotra, "Antibiotic Prescribing for Acute Respiratory Infections in Direct-to-Consumer Telemedicine Visits," *JAMA Internal Medicine* 175 (7). Available at: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2296013?applied=scweb&applied=scweb>.

## **Experts Interviewed**

### **SHELLEY DICKSTEIN**

City Manager  
Dayton, Ohio

### **MARGARET MCMAHON**

Director, Bureau of Working Families  
Division of Family and Economic Security  
Department of Children and Families  
State of Wisconsin

### **JONATHAN PARKS**

Director, Office of Management & Budget  
Montgomery County, Ohio

### **DONNA THORESON**

Social work expert  
Retired Workforce Development Coordinator  
California Social Work Education Center  
University of California at Berkeley





# Innovations in the Health and Human Services Workforce:

## State and Local Governments Prepare for the Future

November 2019



### SLGE STAFF

**Joshua M. Franzel, PhD**  
President and CEO

**Rivka Liss-Levinson, PhD**  
Director of Research

**Elizabeth Kellar**  
Senior Fellow

**Gerald W. Young**  
Senior Research Associate

**Bonnie J. Faulk**  
Operations Manager

### BOARD OF DIRECTORS

**Robert J. O'Neill Jr., Chair**  
Senior Vice President, Public Finance, Davenport & Company

**Robert P. Schultze, Vice Chair**  
President and CEO Emeritus, ICMA-RC

**Donald J. Borut**  
Former Executive Director, National League of Cities

**Gregory J. Dyson**  
Chief Operating Officer, ANA Enterprise

**Jeffrey L. Esser**  
Executive Director Emeritus, Government Finance Officers Association

**The Honorable William D. Euille**  
Former Mayor, City of Alexandria, Virginia

**Alex H. Hannah**  
Managing Vice President, Chief Marketing Officer, ICMA-RC

**Peter A. Harkness**  
Founder and Publisher Emeritus, Governing Magazine

**Marc A. Ott**  
Executive Director, International City/County Management Association

**Scott D. Pattison**  
Former Executive Director and CEO, National Governors Association

**William T. Pound**  
Former Executive Director, National Conference of State Legislatures

**Antoinette A. Samuel**  
Former Deputy Executive Director, National League of Cities

**Raymond C. Scheppach, PhD**  
Professor, University of Virginia Frank Batten School of Leadership and Public Policy