astho™

Mapping Workforce and Artificial Intelligence Legislation

2024

An essential tool for promoting public health, state law has a huge impact on public health agencies, their workforce, and the broader healthcare workforce. ASTHO staff are tracking state legislation related to public health infrastructure, including efforts to address public health and healthcare workforce shortages and state government use of artificial intelligence (AI), and have developed an interactive resource visualizing the lifecycle of these bills from Jan. 1, 2023 through April 1, 2024.

Addressing Public Health and Healthcare Workforce Shortages

While nationally, unemployment has fallen to pre-pandemic levels, the public health and healthcare workforces face considerable employment shortages. Between 2017 and 2021, state and local public health agencies lost nearly half of their workforce, and approximately 75% of employees under age 35 with less than five years of agency experience left during that time. This high attrition rate, which has been attributed to low pay, limited career advancement opportunities, work overload, and burnout, drains agencies of critical institutional knowledge and experience. A shrinking public health workforce makes it more difficult for public health agencies to deliver foundational public health services like controlling communicable disease, preventing injury, and linking people to clinical care. One analysis estimates that state and local health departments need to hire at least 80,000 more full-time equivalent positions nationwide to adequately deliver foundational public health services in their communities.

Workforce shortages particularly impact communities' ability to provide access and linkages to clinical care, and healthcare labor shortages are highest in rural and under-resourced communities. The Bureau of Labor Statistics also notes that current employment in the healthcare sector is below both its projections and pre-2020 employment levels. The absence of healthcare workers is increasingly felt in areas with shortages of primary, dental, or mental health providers (such as rural areas or within medically underserved populations), where a lack of access to care can lead to increased health disparities such as heart disease, respiratory disease, cancer, stroke, and higher risk of maternal illness and death.

State legislatures are using a multitude of solutions to recruit and retain public health and healthcare workers, such as providing telework options, joining interstate licensing compacts, and addressing workforce burnout. ASTHO's Public Health Infrastructure Legislation Map highlights two strategies to address workforce shortages: creating and supporting pipeline programs and establishing workforce commissions to provide recommendations to improve the public health and/or healthcare workforces.

Promoting Public Health and Healthcare Careers Through Pipeline Programs

Pipeline programs provide pathways for both students and current healthcare professionals to begin or advance their careers in healthcare and public health. For students, these programs provide opportunities such as training, mentoring, internships, and exam preparation that allow students to begin a career in healthcare immediately after graduation or allow them to move on to further education in college or medical school. For current healthcare professionals, pipeline programs provide the opportunity to further their education and training to gain further certifications (such as a certified nursing assistant entering a pipeline program to ultimately become a licensed professional nurse).

These programs have demonstrated success in addressing workforce shortages in rural areas and increasing the number of underrepresented healthcare providers and leaders, resulting in a more diverse healthcare workforce (which has been shown to reduce health disparities).

Since Jan. 1, 2023, at least nine state legislatures considered bills to create or enhance a workforce pipeline program. Many of these efforts focused on the healthcare workforce, creating career pathways for nurses and nursing assistants by partnering with community colleges and universities. Additionally, some legislatures considered bills creating alternative pathways to licensure for internationally trained healthcare workers (including doctors and dentists) wishing to work in the United States.

Public Health and Healthcare Workforce Commissions

Legislatures convene commissions and councils on a wide range of topics, often asking the commission to provide recommendations on ways to address a particular challenge or issue within the state. Often temporary in nature, these commissions can include members of the legislature, state agency leaders, subject matter experts, and community members, and are provided specific authorities to guide their work (e.g., collecting and analyzing data). With ongoing public health and healthcare workforce shortages, at least 17 states considered legislation creating commissions, councils, or task forces to address public health or healthcare workforce shortages between Jan. 1, 2023, and April 1, 2024.

The Role of Artificial Intelligence in State Government

AI has the potential to benefit state agencies in many ways by supporting their operations, including by automating routine tasks. Some state agencies have already integrated AI technology into their work; for example, the Texas Workforce Commission uses chatbots to help residents apply for unemployment benefits. Other states have begun pilot programs using AI to improve access to behavioral healthcare resources for children, help businesses understand their tax requirements, and improve road safety. Public health agencies are also engaging with AI by using chatbots for screening purposes, scanning death certificates to identify potential overdose deaths, and combatting misinformation about COVID-19. However, there are risks to governmental use of AI, including concerns that algorithms used in certain AI tools (such as those that assist in making employment decisions) may discriminate based on race, gender, disability status, or other protected classes due to implicit bias or systemic racism. State agencies are also aware of the potential for data breaches to allow unauthorized access to health data and aim to protect against any invasions of individual privacy.

State legislatures across the country are currently considering the general impact of AI, and are reviewing the current use of AI in governmental agencies and considering safeguards to mitigate the potential negative impacts of state agencies using AI. These efforts include bills to require state agencies to inventory AI tools currently in use, proposed for use, or in development within the state as well as bills to assess whether using AI tools could result in algorithmic discrimination. Additionally, state legislatures are establishing AI taskforces or councils to develop policies, procedures, and recommendations on the appropriate use of AI by state agencies. From Jan. 1, 2023, through April 1, 2024, at least 29 states considered legislation related to the role of AI in state government.