In May 2024, the US Bureau of Labor Statistics released its April employment report showing a national unemployment rate of 3.5%, and released the monthly consumer price index report, revealing a price increase of 0.3% in April for urban consumers. These announcements, which generated headlines across the country, are part of a rhythm of timely reports that inform economic policy decisions across the nation.

Health data are not as easy to come by as economic data. Most federal health surveys are released annually, and only a few are powered to yield results at the state level. Vital statistics reports are generally reported with a lag time of months to years. For example, the US Centers for Disease Control and Prevention (CDC) recently made its most timely announcements for provisional overdose deaths and maternal mortality within a calendar year—an astounding 5 months after the end of the calendar year.

The differences between access to reports of economic data vs health data have implications for policy. Frequent health data reports could influence the perception of urgency and understanding of the severity of emerging health challenges. Knowing the status of a health problem today, rather than one that occurred months or years ago, also facilitates more effective design of programs and more-tailored management to achieve specific outcomes.

The nation glimpsed the effect of real-time public health data during the COVID-19 pandemic. The federal government used its power through the Centers for Medicare & Medicaid Services during a national emergency to capture critical data on hospitalizations throughout the country. Public pressure and collaboration between the CDC and state and local health officials led to the rapid generation of data on cases, contact tracing, and mortality. However, the CDC’s inability under the law to set national standards for testing complicated the effort. Even though the process was imperfect, these data had enormous power to capture the public’s attention and influence pandemic response policy. The COVID-19 pandemic demonstrated the potential value of real-time data to guide effective policy, but also the need for improving public health data infrastructure to ensure that the data collection is reliable and sustainable.

Restructuring the acquisition of health data based on the acquisition model for economic data would involve 3 key steps.

The first step is investment of more resources from Congress. Employment reports are based on a monthly survey of employers, solicited first through computer-assisted telephone interviews and then from a self-initiated reporting mechanism. The consumer price index requires a meticulous process of data collection and analysis, involving the dispatch of data collectors to gather price quotes from tens of thousands of retailers and service providers. The Bureau of Labor Statistics has a budget of $698 million for 2024, nearly 4 times the budget of the National Center for Health Statistics, which has a 2024 budget of $189 million. Upgrading the public health data infrastructure of state and local health departments across the country is estimated to require $36 billion over 10 years.

The second step is granting more authority to the US Department of Health and Human Services (DHHS) to set standards and collect data outside a public health emergency. Reauthorization of the Pandemic and All-Hazards Preparedness Act (now pending in Congress) would support the DHHS to work with health care organizations and public health entities to enable more rapid public health surveillance. As recommended by the Commonwealth Fund Commission...
on a National Public Health System, the DHHS should also be empowered to condition aid to state and local public health departments based on meeting key foundational capabilities, including participation in a national data infrastructure. To make sure this repository works well for states and localities, the DHHS should establish a council of state, local, tribal, and territorial officials to coordinate data releases and ensure that key data are shared back with communities on a routine schedule.

The third step is flexibility—public health officials should be flexible in considering new sources of health data. Traditional metrics take time to collect. Life expectancy data are calculated from annual mortality data, which rely on the registration and processing of death certificates. Chronic disease data draw heavily from longitudinal studies, patient registries, and surveys, all of which take time to gather and analyze.

New sources of data offer ways to accelerate access to health information and complement traditional surveillance approaches. These sources include electronic health records, which (directly and through health information exchanges) can be aggregated to provide a near real-time view of the health care system. Resulting indicators, which range from hospital bed occupancy rates and average emergency department wait times to the prevalence of preventable conditions, could become as ubiquitous as measures of employment and inflation.

Other data indicators could also be considered for routine collection and release. Consumer technology (aggregated data from social networks) and even wastewater analysis offer the potential for inclusion in routine health metrics. The CDC’s Center for Forecasting and Outbreak Analytics is leading the way in this direction, with a special focus on infectious threats. Its vision is to enable a “national weather channel” for disease outbreaks; one might imagine such an effort expanding to become a CNBC-like channel focused on health news.

A key benefit of more timely health data would be the ability to learn from and react to regional variations across the country. For example, if one state is seeing improvement in diabetes control and another is seeing a decline, health officials can quickly investigate and respond with programs and policy changes. Policymakers can similarly take note of racial, ethnic, and geographic inequities in care and outcomes, spotting gaps before they turn into chasms. Health data could also be used for more timely international comparisons on benchmark measures, including preventable diseases (an area in which the US fares particularly poorly relative to other countries).

It is important to recognize that new data sources will pose new challenges. Health data demand ironclad approaches to protect confidentiality—including deidentification of data entirely for non–case-based reporting. There should be a public process to govern the collection, dissemination, and use of aggregate health information, with attention to a framework for consent, confidentiality, data security, and transparency.

This process should highlight the benefits of deeper and more rapid understanding of the health challenges facing the nation. The US Surgeon General has found that economic prosperity and community health are inextricably linked. Closing the data gap is a path toward advancing both goals.
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