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WHITE PAPER

Responding to the Pending US Health Data Crisis

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The Looming Public Health Crisis: The Suspension of Essential Health Data in the United States

Introduction

The rollback of critical federal health infrastructure threatens the health and safety of American communities. The defunding and reorganization of agencies like the Center for Disease Control (CDC), Health and Human Services (HHS), and the National Institutes of Health (NIH) interrupt preventive life-saving strategies and services. Furthermore, new executive orders are dismantling the public health data systems that enable informed, rapid decision-making. This white paper examines the potential consequences of losing access to reliable national health data and presents Fraym's innovative platform as a proven, cost-effective alternative in supporting America's public health system.

The current administration's actions to scale back federal health agencies pose a direct threat to public health across the United States. By defunding or removing national health surveys such as the NHIS, BRFSS, and ACS, the government cuts off essential information used to track chronic diseases, monitor public health crises, and plan community-level interventions. This data plays a crucial role in keeping Americans safe and healthy – it shapes effective health programs and informs equitable resource allocation. Without it, local governments, health systems, and community-based organizations (CBOs) will face delays, inaccuracies, and missed opportunities in addressing urgent health needs—especially in underserved and high-risk communities.

The Critical Threat to U.S. Health Intelligence

Recent federal decisions are destabilizing the core of American public health intelligence. Funding cuts or structural weakening are affecting key data programs across CDC, HHS, and the Census Bureau. These systems provided over 1,200 reports and alerts in 2023 alone, supporting health efforts in all 50 states. For example, the CDC produces the Social Vulnerability Index (SVI) to help communities prepare and recover from public health emergencies. Emergency planners use the SVI to determine the human resources required to respond to a crisis and public health officials estimate essential supplies needed and where to efficiently distribute them. Furthermore, state and local health departments use the SVI to guide community programming. Without community health and need-related measures; government entities, health systems, and CBOs run the risk of inefficient spending and programming with finite resources, resulting in increased health and community risk over time.

This disruption hinders local and state leaders from staying ahead of emerging health risks. It prevents communities from identifying disparities, deploying emergency resources, or planning for long-term public health improvements. Vulnerable populations, including rural residents, low-income families, and communities of color, will bear the brunt of this information gap.

Fraym: A Scalable, U.S.-Focused Alternative

Founded in 2015, Fraym empowers health leaders with neighborhood-level data that supports fast, targeted, and equitable responses to public health challenges. Our machine learning and AI-powered platform combines public and proprietary data sources to deliver hyperlocal insights across the United States. Fraym replicates, and in many areas, surpasses, the functions of federal data systems. Our platform delivers:

- **Disease Prevalence and Drivers of Health Outcomes**: Chronic illness rates, maternal health access, mental health data, housing stability, food security, school readiness, and more.
- **Early Warning Systems:** Predictive analytics for emerging disease threats, opioid overdoses, and climate-related health crises.
- **Socioeconomic Vulnerability Maps and Indices:** Real-time insights into unemployment, transportation, broadband access, and other social determinants of health.

We partner with local governments, health departments, CBOs, and hospital systems to ensure our data informs real-world interventions—at a lower cost and higher frequency than traditional systems.

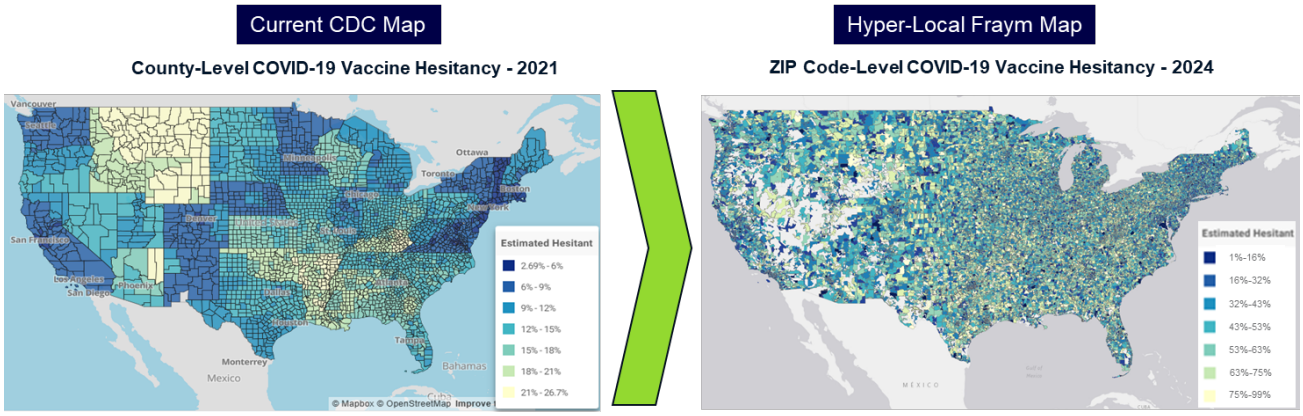
Methodology: Mapping Community Needs with Precision

Using advanced machine learning, Fraym's platform blends survey data, health records, and geospatial intelligence. This approach creates detailed maps that reflect the health and socioeconomic conditions of every neighborhood in the country. We support hundreds of indicators and deliver real-time updates, allowing responders to deploy mobile clinics, expand preventative care, and target at-risk populations. Fraym's precision helps agencies move from reactive to proactive public health planning.

Conclusion

The US domestic public health data infrastructure is under attack. Without it, leaders will struggle to respond to disease outbreaks, reduce health disparities, and protect vulnerable populations. The dismantling of the CDC and HHS data programs leaves states and communities scrambling to address active health emergencies such as the current measles outbreak. Fraym stands ready to fill this critical gap. We offer a modern, evidence-based technology solution that is cost-effective and empowers decision-makers with the insights and data they need. Now is the time to act, before delays, confusion, and preventable suffering become the standard in the American public health system.

Figure 1: CDC Capabilities Compared to Fraym Data



Fraym produced novel data to measure vaccine hesitancy and supporting measures for vaccination uptake, such as specific vaccination concerns, to monitor how household decision-making on vaccination changes over time.

Use Case Example: Barriers to Adult Vaccine Uptake

In partnership with the National Foundation for Infectious Diseases (NFID), Fraym launched a pilot initiative in 2024 to support immunization managers and public health officials in increasing vaccine uptake for flu, COVID-19, RSV, and pneumococcal disease. The data uncovers the primary barriers to vaccine access, motivating factors, and the most prevalent media channels *by community,* meaning health workers can identify the most effective message, messenger, and medium to address their target audience. Within this pilot, Fraym researchers also found that the machine learning produced estimates comparable to CDC-produced measures. This technology-enabled methodology for accessing localized data on core health measures allows city, state, and national stakeholders to efficiently optimize their reach and expedite their influence on health outcomes.