

# Cooperate Response – Senate Request for Comment

Produced By: InductiveHealth



Dear Dr. Bill Cassidy and the Senate HELP Committee,

InductiveHealth writes to you as a dedicated public health surveillance company. We've been honored to partner with the CDC on the modernization of several key programs, including the National Syndromic Surveillance Program (NSSP), a leading technology investment. As one of the nation's leading Software-as-a-Service providers for disease surveillance, we have an expansive reach that covers over 25 states, cities, and territories, underscoring our considerable influence and investment in public health outcomes. With our specialized experience in the realm of public health data and surveillance, we have gained unique insights into the evolving landscape of health monitoring and the potential strategies that can enhance our nation's response to public health challenges. Given this background, we believe in the immense value of expanding and advancing the utilization of sentinel surveillance across public health practice. We present our insights and recommendations with the hope of fostering a more proactive, data-driven approach to public health, which, we believe, is paramount to modernizing the CDC and optimizing its readiness for future challenges.

#### Sentinel Surveillance: An Underutilized Solution

In the rapidly evolving landscape of public health, sentinel surveillance stands out as a potent yet underutilized tool. Its genesis is grounded in the proactive gathering of preliminary healthcare and mortality data, allowing for the discernment of health-related events even before the conventional confirmatory processes take place. This proactive approach to surveillance, by capturing and analyzing initial clinical data, can be instrumental in providing early alerts for potential outbreaks, serving as an invaluable asset, especially in the context of events akin to the COVID-19 pandemic.

Sentinel surveillance's strength lies in its ability to bridge the gap between the onset of a health event and its formal notification, thus significantly reducing the reaction time for public health interventions. This timely nature makes sentinel surveillance an indispensable tool for epidemiologists and public health professionals, providing them with granular insight into emerging health trends, anomalies, or even potential pandemics.

In the grand tapestry of public health strategies, sentinel surveillance represents a blend of innovation, agility, and proactivity. Its broader integration into our public health framework is not just a recommendation but a necessity, ensuring the CDC remains vigilant, responsive, and trusted in its mission to safeguard public health.

#### Benefits & Application in Modernizing CDC Syndromic Practice:

The integration of sentinel surveillance within the CDC's framework represents a transformative step in enhancing public health surveillance, offering multifaceted advantages particularly suited to address modernization imperatives.

Sentinel surveillance, by its inherent design, embodies a paradigm shift from traditional epidemiological methods to a real-time or near-real-time data collection and analysis approach. Such a transition is reflective of a forward-thinking public health strategy. Emphasizing sentinel surveillance can significantly catalyze innovative data-gathering, echoing trends seen in entities

like the National Institutes of Health (NIH) where stakeholder engagement has been a catalyst for innovation.

One of the cardinal virtues of sentinel surveillance is its ability to foster enhanced collaboration between the CDC and state health departments. This continual exchange, underscored by its immediacy, establishes a foundation for transparent communication channels that pave the way for iterative improvements. In this ecosystem, the CDC isn't merely a federal overseer but evolves into a collaborative partner, engaging in synchronous data-driven dialogues with state entities.

Furthermore, the richness of sentinel surveillance data, which amalgamates inputs from diverse sources such as electronic health record (EHR) systems and integrated health networks, provides a conduit for external partnerships. The very nature of sentinel surveillance encourages a confluence of insights, not just from traditional health departments but also from academic research entities, interagency collaborations, and the private sector. Such an integrative approach not only optimizes data utility but also catapults the CDC into a vanguard position in health data governance.

In terms of core public health activities, sentinel surveillance holds the potential to revolutionize epidemiological processes within the CDC. Instead of a retrospective approach, which has been the mainstay, epidemiologists armed with sentinel surveillance insights can adopt a more proactive stance. This approach, characterized by leading indicators and real-time data, offers a nuanced understanding of evolving health patterns. On the global front, the application of sentinel surveillance transcends national boundaries. Its promotion and adoption in countries with nascent health infrastructures can furnish the CDC with a panoramic view of global health trends, thus enhancing its capacity for international health diplomacy and preemptive action.

Lastly, the imperative for transparency inherent to sentinel surveillance can serve as an antidote to recent challenges in public trust. When sentinel surveillance driven data narratives underscore health advisories, the public is not just passively informed. Instead, they are empowered with a coherent understanding of evolving health scenarios. This transparency, when melded with clear communication strategies, can fortify public trust, ensuring the CDC's advisories are both respected and adhered to.

In essence, the augmentation of sentinel surveillance within the CDC's operational framework is not a mere technological or methodological upgrade. It represents a holistic shift towards a more agile, collaborative, and transparent public health paradigm, resonating with the overarching goals of modernization.

#### [Addressing the Critical Understaffing at State and Local Health Departments and the Need for Expanded R&D in SaaS Surveillance Tools:](#)

One of the most pressing challenges confronting our public health infrastructure is the pronounced understaffing at state and local health departments, compounded by the limited development and availability of Software as a Service (SaaS) surveillance tools. These departments, as the vanguard in our public health defenses, play an indispensable role in safeguarding and informing communities. Their integral function in deploying and managing surveillance systems, particularly

in sentinel surveillance, is undeniable. However, their current efficacy and agility are curtailed by both significant personnel shortages and a dearth of advanced analytical tools.

Traditionally, state and local health departments have grappled with financial restrictions, leading to a sustained lack of adequately trained staff to optimize sentinel surveillance systems. These budgetary issues have been exacerbated since the COVID-19 outbreak, with most states undergoing severe financial trims and an increased dependency on federal funds to maintain primary surveillance frameworks. This shortfall becomes particularly stark during health emergencies, as these departments, already operating on thin margins, face the herculean task of managing escalating demands from surveillance, data interpretation, reporting, and public outreach. The COVID-19 pandemic highlighted this gap, revealing departments ill-equipped to handle the deluge of cases and intricate data flows. Instead of bolstering existing sentinel systems, many jurisdictions hastily constructed makeshift COVID surveillance structures.

Additionally, the limited funding currently available for R&D in SaaS surveillance tools has inadvertently stifled the commercial market for such innovations. As a result, the analytic capabilities of state and local health departments remain constricted, inhibiting their potential to leverage cutting-edge technologies for public health benefit.

For a truly future-ready and robust public health infrastructure, it's imperative to address both the staffing and technological deficits. Adequate staffing extends beyond sheer numbers; it encompasses a cadre of competent epidemiologists, data analysts, communicators, and other experts adept at utilizing contemporary surveillance instruments, deciphering intricate data patterns, and forging meaningful community interactions. While the evolution of surveillance technologies is vital, their true potential is unlocked only when steered by a sufficiently staffed, well-trained team. Therefore, investing in the enhancement of surveillance capacity necessitates a dual approach: providing both innovative tools through expanded R&D and the skilled personnel to proficiently utilize them.

### Centralizing CDC Focus in Data Modernization

Amidst the numerous challenges and imperatives, the CDC faces in modernizing its data infrastructure and processes, one solution that holds promise is the National Syndromic Surveillance Program (NSSP). Established as a cooperative effort under the CDC's guidance, the NSSP operates with a clear vision: to advance and promote a more cohesive public health surveillance system across the nation.

The NSSP's foundational premise revolves around reducing the fragmentation and silos that have historically plagued federal data systems. By creating a unified platform where diverse health data sources converge, the NSSP presents a paradigm shift. This system not only centralizes sentinel surveillance data but also ensures its standardization, making the data more comprehensible and actionable.

What sets the NSSP apart is its proactive approach to data collection and analysis. Through the BioSense Platform, the NSSP gathers, processes, and disseminates health data in real-time or near-real-time, bridging the gap between data generation and its application. This immediacy and responsiveness are pivotal, especially when dealing with emergent public health threats where time

is of the essence. This prowess was identified by the legislative branch much too late within the COVID-19 response. Moving forward, we believe it is imperative that we position NSSP and SS as the primary reporting tool for national public health response.

Moreover, by functioning as a central hub for syndromic surveillance data from hospitals, urgent care centers, ambulatory care practices, and more, the NSSP effectively diminishes the redundancies and inefficiencies inherent to decentralized data systems. It offers a singular, comprehensive view, eliminating the need for different entities to expend resources collecting overlapping or repetitive data.

From an interagency perspective, the NSSP's role becomes even more critical. As federal agencies strive to improve collaboration and share vital health information, the NSSP can serve as a template, showcasing how data silos can be dismantled and replaced with a fluid, interconnected system. The program not only bolsters the CDC's syndromic surveillance capabilities but also fortifies its position as a central entity fostering data-driven collaboration across the federal spectrum. In recent months, CDC programs have begun to explore the utilization of data aggregated by the NSSP systems. If these programs adopt and interact with this surveillance system, a streamlined data-driven approach will follow.

#### Recommendations to the Committee:

##### 1. Incentivizing Enhanced Data Quality Through Incentivized Compliance:

The efficacy of sentinel surveillance heavily relies on the quality and granularity of data it receives. Current data streams from hospitals and EHR vendors sometimes lack the necessary granularity or consistency to make the most of this surveillance tool. InductiveHealth recommends the following:

- Mandate the adoption of enhanced data quality standards, emphasizing the capture of additional clinical measures to better capture pertinent clinical fields necessary for advanced surveillance.
- Provide financial or tax incentives for hospitals and EHR vendors who adapt to these heightened standards promptly, ensuring that the transition does not impose undue financial burdens.

##### 2. Emphasize Sentinel Surveillance Utilization Among State and Local Health Departments:

To fortify our public health infrastructure, it is essential to allocate federal funding not only towards strengthening the human resources of surveillance teams within state and local health departments but also towards significant investments in innovative public health technology. This dual-focused investment will enable these departments to recruit, train, and retain skilled professionals dedicated to public health surveillance, while also modernizing their technological capabilities. In line with this vision, the following actions are recommended:

- Increase authorized levels and collaborate with appropriators to guarantee full funding. This will facilitate investments in cutting-edge public health technology, infrastructure, and information systems that are essential for detecting, preventing, and addressing emerging infectious diseases.

- Enhance flexibility and authorization levels for the Epidemiology and Laboratory Capacity Grant Program, ensuring it remains adaptive and effective.
- Implement revisions to the Data Modernization Initiative. This is to guarantee that:
  - a) Adequate funds appropriated by Congress are channeled to the state and local territory (STL T) level.
  - b) STLs maintain the flexibility to collaborate with external entities, including commercial vendors, to achieve the program's objectives.

### 3. Incentivize Enhancement of Sentinel Surveillance Capacity Among Public Health Entities & Commercial Stakeholders:

The expansion and sophistication of sentinel surveillance are contingent not just on governmental bodies but also on the active participation of public health organizations and commercial entities that possess significant data and analytical capabilities. InductiveHealth recommends the following:

- Establishment of a Public Health Surveillance Innovation Fund, aimed at fostering partnerships between public health organizations and for-profit entities. This fund would support projects dedicated to expanding and innovating surveillance capacities.
- Provide additional grants (national and state/local), tax breaks, or other financial incentives for companies that invest in R&D aimed at enhancing surveillance technologies or methodologies, thus encouraging more private entities to contribute to the advancement of sentinel surveillance.

### 4. Expand Funding for the NSSP to Minimize Data Collection Redundancies:

One of the lingering challenges in public health surveillance is the redundant spending associated with disparate data collection and aggregation methods. The NSSP, with its integrated sentinel surveillance approach, presents an opportunity to address this inefficiency. InductiveHealth recommends the following:

- Allocate increased federal funding specifically for the NSSP, ensuring it has the necessary resources to continually modernize its systems, expand its data sources, and incorporate advanced analytical tools.
- Commission a comprehensive audit of all data collection residencies within the CDC. This exercise would identify areas where data collection overlaps or is duplicated, and then strategize on how these tasks can be more efficiently managed under the NSSP umbrella. This consolidation would lead to a more streamlined, cost-effective, and agile data collection mechanism.
- To foster transparency and public trust, establish public portals where individuals, researchers, and other stakeholders can interact with sentinel surveillance data in real-time. These portals, while adhering to all privacy and data protection standards, would allow for democratized access to health data, promoting public awareness and engagement.

In closing, the lessons from our recent experiences underscore the urgency of modernizing the CDC and reinforcing the infrastructure of our state and local health departments. The pathways to

achieving this vision are clear: investing in sentinel surveillance, providing dedicated support to the NSSP, and most crucially, bolstering the human resources that form the backbone of our public health system. By taking these deliberate and informed steps, we can ensure that our nation is not only prepared for future health threats but is also poised to lead global efforts in public health innovation and response.

InductiveHealth is grateful for the opportunity to provide these insights and recommendations. Together, by prioritizing and investing in these areas, we can forge a resilient, responsive, and trusted public health system for the benefit of all Americans.

Sincerely,

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