



The Office of the National Coordinator for Health Information Technology (ONC)
Health Information Technology Advisory Committee (HITAC)

Virtual Hearing
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Testimony of

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Let me first thank the Office of the National Coordinator for Health IT and Mr. Michael Berry for inviting me to participate in this important hearing. Many thanks also to Ms. Denise Webb and Mr. Aaron Miri for the humbling opportunity to appear before the distinguished members of the Health Information Technology Advisory Committee (HITAC) and for their leadership of this prestigious initiative. It is truly an honor to join these inspirational panelists today to provide my primary care provider perspective regarding missed opportunities in our national response to COVID-19, particularly those related to gaps in our public health data systems and lagging infrastructure. I am humbled by the opportunity to bring the voice of the medical profession, and please know that I took my responsibility seriously in terms of being thoughtful and sensitive to represent my colleagues in practice to the best of my ability. Most importantly, I welcome the responsibility to deliver to you the proximity I experience with the patients, families and communities we all serve. Hopefully my testimony will provide meaningful contributions to our collective response to President Biden's inspirational [Executive Order on Ensuring a Data-Driven Response to COVID-19 and Future High-Consequence Public Health Threats](#).

I'm Dr. Linda Thomas-Hemak, President and Chief Executive Officer of The Wright Center for Community Health and Graduate Medical Education, the nation's largest HRSA-funded Teaching Health Center Graduate Medical Education Safety-Net Consortium. A first-generation physician and the daughter of public educators, I was born and raised in a small borough in rural Northeastern Pennsylvania. As a Harvard-trained, allopathic physician who is triple board-certified in internal medicine, pediatrics and addiction medicine, I am incredibly proud and truly grateful to be practicing at The Wright Center's HRSA-designated Federally Qualified Health Center Look-Alike in my hometown community. Although an anomaly, I am unapologetically hard-wired as and bring all the biases of a small-town primary care doctor. My perspective has been informed, enlightened and inspired by more than 20 years of relentlessly navigating

primary health care trench-level challenges to ensure that the needs of patients and families are met. The work of primary care physicians is never done, but always inspiring, especially in light of the role we play in our communities. The challenge to coordinate and orchestrate patient care amongst disparate stakeholders without local and wide-scale health and social services information technology connectivity and interoperability imposes exhausting and expensive strains on our delivery system. The absence of free-flowing information challenges decision making and causes enormous waste of resources and duplicated efforts. Ultimately, this broken system requires heroic workarounds, undermining the leadership, performance and resiliency of our provider workforce, while causing ubiquitous frustration.

Our performance responding to the unprecedented COVID-19 pandemic raises serious concerns about suboptimal learning from seemingly lower consequence prior public health crises, and even most recently from the devastating and once again escalating opiate misuse crisis. At the mercy of outdated public health infrastructure and suboptimal staffing, we implemented reactive strategies to mitigate the ferocity of the global COVID-19 pandemic from an informationally disadvantaged position that we have failed to improve significantly over time. The resulting missed opportunities exacerbated the cross-cutting, universal trauma experienced by patients, families, communities, health care workers, and government leaders. As a country, we are in desperate need of an intentional and disciplined strategy to establish an inclusive, high-integrity, data-driven, unifying collective impact platform to ensure the health and welfare of our nation, while bolstering our emergency preparedness for ongoing and future public health threats. I believe the single greatest accelerant of this collective impact initiative could be national connectivity and health information interoperability, because what we visibly measure, we can improve together.

The co-creation of a centrally-controlled system that provides real-time, actionable data-sharing across otherwise siloed medical, mental and behavioral health, addiction and recovery, dental, social service and financial/insurance systems could powerfully unify our American healthcare system stakeholders in unprecedented collaboration. Standardizing well-articulated, specifically defined, and prioritized national health care delivery goals and public health metrics can accelerate real change that will be felt by patients, families, communities and the healthcare workforce. Healthy People 2030 already provides such shared metrics and national objectives around which our health system stakeholders can unify with mutually reinforcing action strategies to improve the health and well-being of our country.

Challenges

Although understanding the reasons why a mass vaccination approach seemed to be the most attractive responsive option given the acuity of the situation, a more intentional and disciplined, risk-stratified collective impact approach may have provided the opportunity to “slow down to go fast” in achieving herd immunity as quickly as possible. Distributing the majority of COVID-19 vaccines to stewards that lacked the infrastructure to timely and accurately report vaccine administration data and not enforcing reporting requirements negatively impacted public health efforts in countless ways. The local impact of these early decisions was overwhelming and frankly terrifying. The public was frantically reacting to what was perceived as rationing. Innumerable repeated, desperate and sometimes angry outreaches to vaccine stewards overwhelmed fundamental daily operations of most healthcare delivery systems. The lack of visibility of vaccine supply, available appointments and dose delivery created universal pandemonium. Amidst the pandemonium, the Tragedy of the Commons set in and few vaccine stewards timely satisfied reporting obligations, if at all. Allowing this accountability lapse of data reporting from primary care delivery sources compounded the total disconnect between vaccination and background health and socioeconomic data available in electronic medical records and health information exchanges. These disconnects failed to leverage notable accomplishments related to our federal government’s generous and substantial investment in the EMR Meaningful Use incentive program. Optimally connecting vaccine administration reporting with background health and socioeconomic determinants of health data available in EMRs and HIEs could accelerate provider detection and reporting of potential adverse vaccination events and the meaningful, iterative scientific assessment of causality. The beneficial impact of such connectivity can be further augmented and accelerated by actually integrating Vaccine Adverse Event Reporting functionality into the enabling information technology platform of routine care delivery workflows. This level of awesome and empowering health information technology connectivity and its proximity to the trusted and sacred space where providers and patients connect will be a crucial catalyst to collective solutions to overcome vaccine hesitancy and to achieve herd immunity, especially as we embark on vaccinating our children.

The absence of a COVID-19 national vaccine registry linked to EMRs is an enormous missed opportunity that is undermining public and even some providers’ trust in the safety and efficacy of vaccines. This will propagate and agitate vaccine hesitancy.

Because most vaccine stewards, until recently, failed to timely report COVID-19 vaccinations administered to our Pennsylvania Statewide Immunization Information System (PA-SIIS), people came to our clinic seeking a second vaccine with absolutely no information about the first - no CDC card, no second dose appointment, no

manufacturer data, no information in the vaccine registry. Chasing information in the void of a reliable, interoperable, real-time health information data system is time consuming and costly. Even more challenging is reporting possible adverse vaccine effects in systems disconnected from background health and SEDH data now generally integrated into the routine workflow and logistics of care delivery.

Clearly, the lack of nationally connected health data systems infrastructure and interoperability platform hampered the flow of information that delayed, complicated and compromised our national, state, regional and local COVID-19 responses. However, the lack of health information interoperability is not a new problem that first surfaced in the chaos of the COVID-19 health crisis.

For years, primary health providers have struggled under the weight of secondary reporting obligations, wasting time and resources chasing information living in disparate systems when the resources to support the care were invested elsewhere. The most common example is the ever-recurring problem of reporting influenza vaccines given to our patients by third-party vaccine administrators who fail to report the vaccine to the Pennsylvania Statewide Immunization Information System. Despite the payors providing the resources to third parties to administer flu shots and other vaccines, they have redirected the work of reporting the inoculation data to primary care providers. Even more exasperating are the repeated requests from multiple middle-space stakeholders and the resource authorities asking if a particular patient actually got the vaccine. In the most troubling of circumstances, even the patient cannot answer that simple question, raising far deeper ethical concerns about the informed consent process.

The void of health information interoperability is also painfully tangible in America's ongoing opioid epidemic. In 2016, Pennsylvania's opioid epidemic was raging, including in northeastern Pennsylvania where I practice. The Wright Center was one of the first Pennsylvania Opioid Use Disorder Centers of Excellence in the Commonwealth, later expanding our recovery services into the space of pregnant women and new mothers with our Healthy MOMS (Maternal Opiate Medical Support) Program. We substantially invested in a partnership with a regional HIE to co-create an electronic EMR-based HIE dashboard to track and report de-identified data with the hope of connecting the dashboard to Pennsylvania's Opioid Command Center. Pennsylvania's bifurcation of DHS and DOH rendered this hope unactualized to date. After engaging and enrolling more than 1,000 individuals in our Opioid Recovery Program at The Wright Center, I was preparing a presentation for the Penn State College of Medicine's Project ECHO Collaborative when I learned that 17 precious lives that we touched through the program had been lost. With no health information shared from other providers, hospitals or coroner offices, I tasked our team to identify the cause of every lost life. Ultimately and sadly, we learned about the unfortunate details of their deaths mostly through none other than social media which, not surprisingly, had more information available about our patients than we could access through health system platforms as the primary provider of recovery services. Similarly, in the long-standing absence of

national health information connectivity, our country could not possibly have launched and optimized an intentional, cross-agency and inter-governmental, time sensitive, risk-stratified approach to triumphantly battle the COVID-19 virus or, for that matter, any public health threat.

As a country, we also missed another critically important opportunity to save lives and promote public health. As an Essential Community Provider of comprehensive, non-discriminatory primary health services and a long-established patient-centered medical home, The Wright Center felt obliged to offer the COVID-19 vaccine in the context of a primary care visit because of the low utilization of fundamental primary health services for almost a year because of the pandemic. As a relatively small agency, we administered more than 20,000 vaccines in the first eight weeks of the vaccine roll-out. We iteratively improved the conceptual substance of our visit-based strategy, and discovered, documented and addressed various complex health challenges of vaccine recipients including, but not limited to: troubling rates of undiagnosed and/or uncontrolled hypertension; appropriate or inappropriate use of immunosuppressants or over the counter anti-inflammatory medications that can affect vaccine efficacy and blood pressure; unaddressed injuries from falls or trauma; shockingly continued inappropriate chronic prescriptions of short-acting opiates; and the need for coaching to seek overdue primary care attention related to serious health challenges including diabetes, heart disease, and cancer. These are very disturbing but unfortunately not surprising testimonies that spotlight our national health status and highlight the significance of the missed opportunities to optimize the safety, efficacy, efficiency and affordability of our national vaccination initiative. Moreover, in light of the broad awareness of silent epidemics of chronic illnesses and low utilization rates of primary and specialty health services throughout the pandemic, we missed a long overdue opportunity to gain ground on health disparities by connecting people to necessary care. We also undermined rapid but highly powered short-cycle assessments of the vaccines' adverse events and potential causality.

Solutions

As with most, if not all, challenges in healthcare and public health policy, systemic failures cause the most harm to those most in need of care. An authentically interoperable, nationally connected health data sharing system would give authorized providers of health and social services an indispensable tool in providing access to high quality care while controlling cost. However, such a system must be properly governed to be honorable and effective.

The National Academy of Science, Engineering and Medicine very recently called for primary care to be defined as a public good¹, reminiscent of The Wright Center's years-old mantra touting primary health care and health workforce development as common

¹ <https://www.nationalacademies.org/our-work/implementing-high-quality-primary-care>

pool resources. Embracing Elinor Ostrom's Nobel Prize-Winning political economic theory of collective accountability, collaboration and stewardship guides us to recognize public goods as common pool resources that can be intentionally organized and managed to avoid the Tragedy of the Commons.²

Ostrom identified eight principles in successfully managing the commons: define clear group boundaries; match rules governing use of common goods to local needs and conditions; ensure that those affected by the rules can participate in modifying the rules; make sure the rule-making rights of community members are respected by outside authorities; develop a system, carried out by community members, for monitoring members' behavior; use graduated sanctions for rule violators; provide accessible, low-cost means for dispute resolution; and build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system. Ostrom's work successfully demonstrated, through application of these eight principles, that common pool resources can be successfully governed sustainably and equitably in a community.

Ostrom's principles of common pool resource management can be integrated into the Stanford Innovations Collective Impact model³ to organize national healthcare reform powered by the achievement of health information interoperability and connectivity. Collective Impact initiatives have a logical and disciplined framework with five guiding principles. A unifying backbone establishment organizes and ensures continuous, free-flowing, effective communication amongst inclusive, vested stakeholders aligned in well-articulated shared purpose. Stakeholders execute mutually-reinforcing action strategies for the purpose of achieving a collective vision of a preferred, hopeful future as measured by agreed-upon, high-priority, well-articulated shared metrics of success.

Visioning such collective impact solutions to prevent and combat ongoing and future public health threats while emerging resiliently through adversity requires that trauma be transformed rather than transferred into repeated historical tragedies. Real change can't be incremental as previously attempted in many false starts at health information connectivity and interoperability.

Healthy People 2030 notably provides data-driven national objectives to improve the health and well-being of our country. It is a simpler but comprehensive framework of metrics that, if shared by all healthcare system stakeholders, can drive a successful well-orchestrated action strategy while illuminating the accountability schema. To be most impactful, specified shared metrics of success must not be modifiable, movable or

² <https://science.sciencemag.org/content/330/6006/923.summary>

³ https://ssir.org/articles/entry/collective_impact

subject to interpretation to avoid manipulation of the system for any one individual stakeholder's preferred outcome optics. Building the collective impact strategy around Healthy People 2030 will not only unite stakeholders around shared purpose, but will also reveal a multitude of opportunities for smaller subsets of collaborations between health systems, providers, social service agencies, private philanthropy organizations, payors, and local, state and federal government agencies. To support the success of and force-multiply the beneficial impact of this collective approach, America needs real-time health and socioeconomic determinants of health information access, connectivity and interoperability.

The concern that health information connectivity and interoperability is too controversial, too expensive or too invasive is simply a myth. Universal implementation and mandatory provider use of e-prescribing and, most notably, the Prescription Drug Monitoring Program (PDMP) dispels the fallacy of impossibility. Since the implementation of the PDMP, opioid prescriptions decreased by 44%, opioid dispensations decreased by 38%, heroin overdose rates decreased by 16%, and "doctor shopping" for opioids was virtually eliminated.

For years, many of us in direct primary care delivery have advocated for the adoption of health information connectivity and interoperability because it can cure many of the ills of our broken healthcare system. The historical absence of real-time access to actionable health and socioeconomic information has plagued our patients and families for decades; further fragmented an industry clinging to outdated business models that promote competition over collaborative and coordinated care; cost trillions of dollars in unnecessary and duplicative care and wasted resources; overburdened our providers; contributed to provider burnout, the shortage and mis-distribution of physicians and related health and healthcare disparities.

If wide-scale connectivity and health information interoperability were previously actualized, outcomes of the past fifteen months and impact of the COVID-19 catastrophe in America could potentially have been dramatically different. We are morally and fiscally obliged to truly learn from this experience, emerge through the adversity and not repeat known errors.

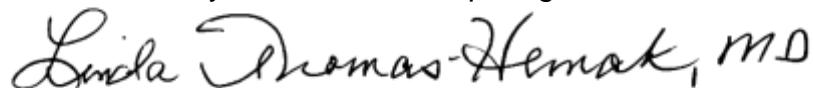
Public interest lawyer and activist Bryan Stevenson exhorts an approach of "Just Mercy"⁴ with humble acknowledgement that real transformational change requires articulation of and hope for achieving a preferred future, proximity between the problem and decision-making authorities and appreciation that real change comes with unavoidable pain. The American Rescue Plan Act provides a new opportunity for us to

⁴ <https://justmercy.eji.org/>

change our national public health narrative. Thank you for allowing me to generate proximity between you and the provider community and those we serve together.

It has been my privilege to provide my perspective as a primary care physician, medical educator, executive and Essential Community Provider. I have great faith in America and our government, and I deeply appreciate and would welcome a further opportunity to support the incredible work of the ONC and HITAC to advance national health information connectivity and interoperability.

Most sincerely and with the deepest gratitude,

A handwritten signature in black ink that reads "Linda Thomas-Hemak, MD". The signature is written in a cursive, flowing style.

Linda Thomas-Hemak, MD