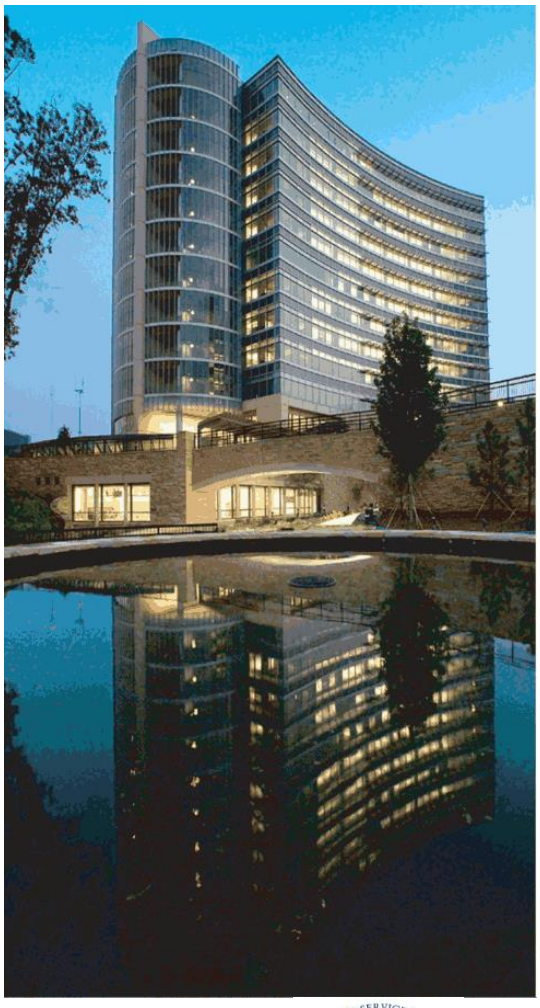

# CDC Advisory Committee to the Director (ACD) Data and Surveillance Workgroup (DSW)

*Notes from the March 13, 2023 Meeting*

## Contents

# ACD DSW: Record of the March 13, 2023 Meeting

The Centers for Disease Control and Prevention (CDC) convened a meeting of its Advisory Committee to the Director (ACD) Data and Surveillance Workgroup (DSW) on March 13, 2023 via Zoom for Government. The agenda included: 1) continued development of the outline and writing assignments for the DSW *Workforce Recommendations Report* for the ACD to address DSW's Terms of Reference (TOR) Issue #4: Workforce; and 2) a presentation from CDC representatives on the agency's Public Health Data Strategy (PHDS).

# Welcome, Roll Call, Introductions, Announcements

**Julie Morita, MD and Nirav Shah, MD, MPH (DSW Co-Chairs)** called the meeting to order at 3:00 PM Eastern Time (ET). A table is appended to the end of this document that provides a list of members present, their affiliations, and any conflicts of interest (COIs) identified.

# Continued Discussion of TOR Issue #4: Workforce

**Nirav Shah, MD, MPH (DSW Co-Chair)** reviewed the proposed outline dated 3-3-23 for the DWS's report to the ACD pertaining to Issue #4: Workforce. Feedback is included in the discussion section below within the main topics of the outline.

## Discussion Points

**General Observations**

- DSW members liked and supported the outline in general.
- The recommendations should be linear and logical.
- There must be marketing/communication strategies that make public health appealing to the workforce in terms of appealing to a higher purpose. Perhaps one of the action items could be to consider appropriate branding and marketing/communications strategies.

**Writing Assignments**

- Add Dr. Karras to "Training of the future workforce" within "supplement training through partnerships with private sector, academia, and healthcare."

**Describing The Problem**

- Given existing resource constraints, the DSW should pay close attention to what they want to recommend to CDC through the ACD and whether the items in the outline should be considered in the context of prioritizing the limited resources that are available to the highest and best uses within the categories, or if the focus should be on the 10-year multi-billion-dollar vision that may or may not ever materialize:
  - It may be both. If a full scoping exercise is done initially, the DSW can demonstrate that this is an X billion-dollar effort if it is done correctly, discuss the amount that is actually available, and make recommendations about whether they think the existing dollars should be allocated first.
  - A lot of people have spent time on this already, so there are places the DSW could go to look for ideas.
- Perhaps they are conflating the 2 issues of defining workforce needs and the need for sustained resources and funding:
  - If the focus is on the workforce, the DSW could consider modifying the problem statement. While these are related, they are distinct topics in many ways that may require different recommendations. Sustained funding goes beyond the workforce to include technology, modernization, and multiple components.
  - The full scope of the gaps remains unknown in terms of data science, technology, and the pros and cons of bringing in new talent through different mechanisms versus upscaled training.
  - Consider adding "human" to the first line in the problem statement to read, "CDC has produced a plan for data modernization that has not prioritized how existing human resources should be used."

  - While these are 2 different issues, they are not necessarily inseparable. It is critically important to develop a short-, medium-, and long-term strategic vision. Workforce is driven by all of that. The short-term strategy will determine the priorities for the workforce in the short-term. While the DSW could specify what needs to be done first because there are resources for these, they could quickly start talking about workforce for things that will not be in place because there is no money to put them in place.
  - The DSW is not charged with determining the short-, medium-, or long-term vision for data modernization and has no way of knowing the dynamics of the CDC workforce, its age structure, the level of training people have, how far along they are in their careers, what the workforce will look like in 5 years, et cetera. That is CDC's responsibility to identify. Perhaps the recommendation should be for CDC to clarify the agency's short-, medium-, and long-term vision and then address the workforce based on that vision. The DSW can then lift up some of the examples that they think are relevant. This issue is not only related to the total number of people available to do the work, but also the skills they have. Once CDC clarifies their vision, then the workforce numbers and skills needs can be determined.
  - State, tribal, local, and territorial (STLT) entities do not feel that there is a clear roadmap, especially in the context of very limited resources and they do not feel that they have had enough engagement to contribute to that roadmap.
  - Perhaps the DSW could specify the process that is needed to improve the situation to make sure that there is a clearly prioritized roadmap with progress that needs to be seen at the STLT and federal levels and the timeframes. This could reflect what could be done with current resources and what would be desired if there were more resources. This may differ at different levels of public health. A lot of major, urgent needs within the public health workforce are already known.
  - Perhaps 2 separate documents are needed. Either way, the document or documents should have a strengths-based focus rather than talking about the paltry resources that are available.

**Addressing Workforce Shortages**

- The outline mentions that the pro bono support that was provided during the pandemic is not sustainable.
- In terms of academia, any work that does not result in scholarship is not sustainable. Many faculty did a lot of work during the pandemic to help with epidemiology, data, science, et cetera with local health departments. However, these efforts are 100% not publishable pro bono or otherwise. Faculty must be productive, so this cannot continue indefinitely.
- A lot of the workforce dollars allocated to states was used for in-place workforce trainings, hiring training programs within the agency, and building curriculum with the agency:
  - States should not be "reinventing the wheel." Curriculum development and adult learning is something that academia and training partners have been engaged in for decades. Public health must figure out how to leverage existing resources rather than creating siloed pockets of training programs within state agencies.
  - Perhaps there can be some examination of the proposals that have come forward from states and a redirection of state agencies to work with their local partners and delivery mechanisms.

**Addressing Workforce Training Needs**

- Work with STLTs to define core competencies.
- In the training area, it might be helpful to think in terms of time horizons (e.g., short-term, mid-term, long-term):
  - In the short-term, a plan is needed for data modernization that exceeds the resources that are currently available by at least an order of magnitude.
  - It would be a mistake in the short-term to try to "put duct tape" on everything to try to make it work. It is important to do the work that needs to be done to understand what the actual needs are. Otherwise, the wrong message will be sent to policymakers.

  - It is important to understand that in the current environment, needs are probably going to change and evolve rapidly and could look very different 5 years from now in terms of the way that technology and data science are changing. It is important to understand what processes and infrastructure are needed in order to refresh and build upon what exists already.
  - For the long-term, it is important to think about how needs are shifting as new technologies emerge and with regard to the expectations of the public.
  - The short- and long-term are colliding at the fiscal cliff.
- Assess where the workforce is actually headed in terms of current vacancies and the vacancies that will occur because many people are on the verge of retiring. Even millennials working in government are beginning to retire.
- Perhaps core competencies should be placed before current staffing in terms of what is needed. It would be prudent to know what core competencies are needed in the workforce before trying to build up the workforce.
- Ensure that there is a clear line of admission. Private sector, academia, healthcare, and public health have clear and different missions.
- It is important not to create a homogeneous workforce with only people who can afford to obtain Master's degrees and to keep in mind mid-career professionals who need training. Perhaps there could be other fiscal drivers, such as:
  - Paid stipends to students who commit to spend 2 years in the public health workforce when they graduate. There are some CDC initiatives at the undergraduate level, so perhaps there could be graduate level equivalents in order to build skilled workforces.
  - Debt relief options.
  - Non-degree credits such as through short courses, micro-Master's, et cetera that are far less costly than a full degree program and offer an easier way for people to try public health.
  - Encourage the American Medical Informatics Association (AMIA) Health Informatics Certification (AHIC) body and other certification bodies to recognize that people with less than a Master's degree are eligible to be certified Health Information Technology (HIT) professionals. CDC leadership must understand and telegraph the importance of this type of effort in order to achieve the sea change that is needed.
  - Supplemental training for members of the workforce who were trained before the emergence of data science and epidemiology, newer technology, large datasets, et cetera so that they are better able to evolve. For instance, there may be mid-career professionals whose skills have not necessarily caught up. Perhaps a way to build a bridge for them would be through mid-career paid fellowships. This may be attractive not only to these professionals, but also to the organizations that would provide this. While the idea of public-private partnerships is appealing, this can be difficult for many organizations depending upon the economy. Healthcare organizations are currently in cost-cutting and downsizing mode. This is an opportune time to determine ways to attract professionals to public health through training, internships, fellowships, et cetera.

**Making Clear the Permissible Uses of Public Health Infrastructure Funds**

- These funds can be used for epidemiology, data science, and IT workforce.
- Compensation levels for epidemiology, data science, and IT must be evaluated. There is high demand in general society. If public health has funding but is not able to appropriately compensate, there may be difficulty with recruitment efforts.

# CDC Public Health Data Strategy

**Jennifer Layden, MD, PhD and Heather Strosnider, PhD (CDC, OPHDST)** described CDC's Public Health Data Strategy (PHDS) goals, 2-year milestones, and how CDC will execute against these goals and milestones. The PHDS outlines the data, technology, policy, and administrative actions essential to efficiently and securely exchange critical core data across healthcare and public health. Describing a path to address gaps in public health, the strategy is intended to help the nation become response-ready, promote health equity, and improve health outcomes. The PHDS goals are to: 1) strengthen the core of public health data; 2) accelerate access to analytic and automated solutions to support public health investigations and advance health equity; 3) visualize and share actionable insights to inform public health actions; and 4) advance more open and interoperable public health data. CDC will execute on these goals by: 1) increasing engagement, collaboration, and continued feedback; 2) establishing an accountable office within CDC; and ) focusing execution of Data Modernization Initiative (DMI) activities.

## Discussion Points

- DSW is supportive of and happy to see a documented plan. It also was well-received the previous week at the CDC-ONC Industry Days. Going beyond STLTs to let industry partners and the private healthcare sector know that there is a cohesive national plan is powerful and great to build on.
- In some ways, this presentation seems like the short-term focus of the DMI initiative. Perhaps the DSW should be thinking about its workforce recommendations with a focus on this 2-year plan for CDC's PHDS goals.
  - Dr. Layden indicated that CDC and the OPHDST are very much aligning their work plans to determine where there are gaps in skills and target efforts to recruit positions to fill those needs. They also are finalizing decisions and guidance on infrastructure and Epidemiology and Laboratory Capacity (ELC) grants that will go out to jurisdictions, with an effort to align these as much as possible with the PHDS. In addition, they are assessing how they can be more efficient in streamlining technical assistance (TA) to support the work that happens in the field.
  - It does not seem practical for the DSW to provide advice on anything that is happening on a 2-year timescale. It seems like this will have to work with the existing staff, given that it takes such a long time within the federal government to create new positions, fund them, and then hire staff.
  - Dr. Strosnider noted that based on the 2-year milestones, a certain percent of staff would be onboarded in 2023 and a certain percent in 2024. This speaks to within 3 to 5 years (e.g., the midterm).
- While this seems like a great plan, there is some concern about the approach of working with a small number of jurisdictions at the beginning. Historically, the jurisdictions who are worked with initially are the ones who can compete the best and have the most capacity. What is learned in pilots is not, in fact, generalizable to the country as a whole. For instance, the workforce needs that would be identified in Washington State would be very different from those in any under-resourced jurisdiction. It is important not to make the same mistake that has been made collectively in the past, to ensure that what is being developed is scalable to the country as a whole, and to work toward improving equity as opposed to the rich and more advanced getting richer and more advanced.
  - Dr. Layden indicated that there are some baseline core metrics that they think are critical to achieve to make milestones across all public health jurisdictions. The challenge in the pilot phase regards identifying the right, willing, and available participants and then identifying solutions to enable adoption more wholescale. They have to begin with a handful of jurisdictions that at least have some variety and then scale it out to another subset to widen the variety, and they are thinking through how to set up a process to help them do that.
  - Virginia and Los Angeles County are the 2 jurisdictions that have gotten the benefit of the pilot. While selection of a state and a local jurisdiction is applauded, there may be some unintended challenges in terms of rolling this out nationwide unless there is more thorough proving grounds

engagement with other jurisdictions. Some locations have built a lot of infrastructure that may or may not be compatible with the new North Star Architecture, which must be resolved. Some jurisdictions do not have any capacity, personnel, or infrastructure off of which to build. It is critical to get through the iterations and cover all of the necessary variability before interest and belief that this money is being well spent comes to a head.
  - There are some mechanisms for addressing this. For some funding streams, larger organizations have to agree to partner with peer organizations that have far less capacity in order to qualify for certain grants. For instance, priority to receive grant funding may be contingent upon partnering with Minority Serving Institutions (MSIs), Historically Black Colleges and Universities (HBCUs), or Institutional Development Awards (IDeA) Program states. For instance, Los Angeles County could partner with Imperial County or Virginia could partner with West Virginia.
  - Perhaps the minimum capacity health departments need to have should be defined in order to create a roadmap to raise all jurisdictions to that level. There are many jurisdictions in this country that could not possibly do this work without bringing new human resources on board. That might be one pathway forward for the DSW and CDC. Now that there is a plan and there are some concrete examples, CDC could begin to assess what the workforce needs are across jurisdictions in order to achieve data modernization. This gets closer to shorter-term and medium-term plans for workforce, at least related to this specific initiative.
- It would be beneficial for the DSW to hear more about the role of the Trusted Exchange Framework and Common Agreement (TEFCA) and Health Information Exchanges (HIEs) in interfacing with public health in terms of data rights, access, types of technologies that are being considered, whether those also are interoperable technologies as in other domains, et cetera.
  - Dr. Layden indicated that there is an internal CDC TEFCA Working Group and extending out to jurisdictional partners to talk through some of the various approaches such as input on the standard operating procedures (SOPs) for TEFCA, identifying priority use cases at the jurisdictional and CDC levels, et cetera. She would be happy to present more in-depth on that topic during a future DSW meeting.
- The PHDS does address the issue of prioritization and many of the goals and milestones seem achievable. However, the STLT workforce needs to achieve these goals are not yet known. It is not yet clear whether all of these goals and milestones are achievable because even though it has been shown to a fair number of people, the larger STLT community has not had an opportunity to see it and weigh in. Some of the goals are at the end of 2023 in 9 months. Many STLTs are not going to be able to hire new people with existing funds before the end of 2023. New things will have to be done with the existing workforce. Therefore, rollout and implementation of the PHDS must be discussed.
- ECL is a critical investment that has been made that has the potential to pay off, but a lot of jurisdictions are currently struggling with this. There is dire need for shared services to help manage those data, which needs to be prioritized and well-coordinated at the national level to help jurisdictions.
- Another issue is that the DMI funds for the infrastructure grant have not been distributed yet, so any efforts to hire the planned workforce have not been started.

## Closing Remarks/Adjournment

Dr. Shah noted that he incorporated the feedback from the outline review of TOR Issue #4: Workforce during this meeting and shared it with the DSW members as a Google document. He invited them to add additional bullets/edits to the document by the end of the week to ensure that there is a solid outline from which to write the various sections. The goal is to complete the report within about a month, obtain approvals, and present it to the full ACD during its May 2023 meeting in Atlanta.

With no further business posed or questions/comments raised, the meeting was officially adjourned at 4:35 PM ET.

# Certification

I hereby certify that, to the best of my knowledge and ability, the foregoing minutes of the March 13, 2023 meeting of the DSW are accurate and complete.

3/31/2023
Date

Julie Morita, MD (DSW Co-Chair)

3/31/2023
Date

Nirav Shah, MD, MPH (DSW Co-Chair)

# Attachment #1: DSW Attendance and COIs

| Name/Main Affiliation | Disclosure of Conflict |
|---|---|
| Jim Daniel, MPH<br>Amazon Web Services (AWS) | • Public Health Leader for AWS |
| Annie Fine, MD<br>Council of State and Territorial Epidemiologists (CSTE) | • No conflicts |
| David W. Fleming, MD<br>Clinical Associate Professor<br>University of Washington School of Public Health | • No conflicts |
| Cristal Gary, MPH (ACD Member)<br>Amita Health | • No conflicts |
| Lynn Goldman, MD, MS, MPH (ACD Member)<br>George Washington University (GWU) | • No conflicts |
| Bryant Karras, MD<br>Chief Medical Informatics Officer, Sr. Epidemiologist<br>State of Washington, Department of Health, Public Health Laboratories | • No conflicts<br>• Appointed a full member of the Health Information Technology Advisory Committee (HITAC) as of December 2022 |
| Abel Kho, MD<br>Center for Health Information Partnerships (CHIP)<br>Institute for Augmented Intelligence in Medicine (I.AIM) | • Advisor to Datavant |
| Kenneth Mandl, MD, MPH<br>Computational Health Informatics Program, Boston Children's Hospital<br>Harvard Medical School | • Receives funding from CDC |
| Julie Morita, MD (DSW Co-Chair/ACD Member)<br>Robert Wood Johnson Foundation (RWJF) | • No conflicts |
| Nirav R. Shah, MD, MPH (DSW Co-Chair/ACD Member)<br>Olea.Health<br>Stanford University | • Kinsa Health and STERIS |