



WHITE HOUSE OFFICE OF SCIENCE &
TECHNOLOGY POLICY

COMMUNITY CONNECTED HEALTH
STAKEHOLDER ENGAGEMENT
SUMMARY REPORT

May 2022

About the Office of Science and Technology Policy

The Office of Science and Technology Policy (OSTP) was established by the National Science and Technology Policy, Organization, and Priorities Act of 1976 to provide the President and others within the Executive Office of the President with advice on the scientific, engineering, and technological aspects of the economy, national security, health, foreign relations, the environment, and the technological recovery and use of resources, among other topics. OSTP leads interagency science and technology policy coordination efforts, assists the Office of Management and Budget with an annual review and analysis of Federal research and development in budgets, and serves as a source of scientific and technological analysis and judgment for the President with respect to major policies, plans, and programs of the Federal Government. More information is available at <http://www.whitehouse.gov/ostp>.

About this Document

From January through April 2022, the Office of Science and Technology Policy (OSTP), in partnership with the Health Resources & Services Administration (HRSA), solicited stakeholder input on the proposed vision for Community Connected Health through a Request for Information (RFI) and three formal roundtables. The RFI was open to the public and published on January 5, 2022 with an extended response period until March 31, 2022 to allow for broad stakeholder input. The roundtables were composed of plenary and breakout sessions. The roundtable plenary sessions were open to the public, during which speakers provided additional context for the RFI as well as real-time question submission and response. The roundtable breakout sessions provided opportunities for more expansive discussions with invited community health stakeholders on specific themes. Additionally, stakeholders provided individual input via meetings directly with OSTP staff. This is a summary document of the major themes that arose across all engagements.

Copyright Information

This document is a work of the United States Government and is in the public domain (see 17 U.S.C. §105). Subject to the stipulations below, it may be distributed and copied with acknowledgment to OSTP. Copyrights to graphics included in this document are reserved by the original copyright holders or their assignees and are used here under the Government's license and by permission. Requests to use any images must be made to the provider identified in the image credits or to OSTP if no provider is identified. Published in the United States of America, 2022.

Table of Contents

Stakeholder Engagements: Background	4
Request for Information	4
Roundtables	5
Key Themes from All Stakeholder Engagements.....	6
Next steps.....	11
Appendix 1 – Overview of Stakeholders	12
Appendix 2 – Overview of Breakout Sessions	14

Stakeholder Engagements: Background

The COVID-19 pandemic illuminated continuing, substantial limitations in the U.S. healthcare systems, including profound disparities in access to health care and associated poorer health outcomes within certain communities. Yet the pandemic has also provided an opportunity for innovation in health care delivery across the U.S. and internationally, particularly in community-based settings.

As part of the Biden-Harris Administration's effort to address long-standing barriers to achieving health equity and OSTP's mission to maximize the benefits of science and technology to advance health and its charge to drive innovation in health care and improve health for all Americans, OSTP launched the **Community Connected Health** initiative in January 2022 with a series of stakeholder engagements.

The goal of the Community Connected Health initiative is to combine community-based approaches to health care, with the power of digital health technologies, to lower the barriers to health care access and provide healthier lives for all Americans, especially those currently underserved.

These stakeholder engagements included two primary approaches. First, OSTP issued a Request for Information (RFI) to solicit written feedback on a number of key priority areas. Second, OSTP and the Health Resources and Services Administration (HRSA) hosted a series of roundtables to directly engage stakeholders on Community Connected Health topics. Together, the RFI and Roundtables comprised the stakeholder input phase which OSTP and other government partners will use in the development of a suite of government actions that will support this goal. This document summarizes the findings of this series of stakeholder engagements on Community Connected Health conducted during January through April 2022.

Request for Information

Through a Notice in the Federal Register ([87 FR 492](#)), OSTP requested input from community health stakeholders, technology developers, and other interested parties about how digital health technologies are used, or could be used in the future, to transform community health, individual wellness, and health equity. This RFI stated a particular interest in receiving information from stakeholders from community-based health settings and about populations traditionally underserved by healthcare.

The RFI outlined eight topics of particular interest including: successful models of community health providers using technology to deliver health care within the United States; barriers faced by individuals or organizations to the use of digital health technologies in community-based settings; changes or trends in the use of digital health technology over the course of the COVID-19 pandemic; how user experience is measured in the use of health technologies; tools and training needs of community health workers and other health providers; ideas for potential government action; effects of digital health technologies on equity; and international models that

exemplify innovation at the intersection of health care delivery and technology. The RFI's breadth was intentional in order to cast as wide a net as possible to interested stakeholders at the outset of the Community Connected Health effort.

A breakdown of the types of respondents to the RFI is included in Appendix 1.

Roundtables

As a complement to the RFI, OSTP partnered with HRSA to co-host a series of three roundtables intended to provide forums for deeper conversation and engagement with community health stakeholders on the topic of Community Connected Health. These events took place virtually across several weeks in February and March 2022 and had three different focus areas.

1. Innovation with Community Health Organizations and Providers (February 3)
2. Innovation in the Community Health Workforce (February 17)
3. International Models of Innovation in Community Health (March 3)

Each roundtable began with a public webinar that was livestreamed on [HHS.gov/live](https://www.hhs.gov/live). The livestreamed webinars served as opportunities to provide further context for the overall Community Connected Health effort to interested parties. These webinars also highlighted different programs and organizations at the intersection of community health and digital health technologies – along with hearing about the challenges these individuals and organizations face.

The public webinars set the stage for closed small-group conversations that occurred in virtual breakout sessions. Invited attendees of these breakout sessions were identified for their leadership, expertise, or unique perspective on the given topic. A breakdown of the types of breakout session participants is included in Appendix 1 and the framing of all of the breakout sessions is detailed in Appendix 2. Most sessions consisted of 6-8 non-Federal stakeholders and were moderated by two Federal thought leaders from across Departments and Agencies. Other Federal subject matter experts were included in a listening capacity in each breakout session.

Key Themes from All Stakeholder Engagements

The people, places, and organizations within community-based health care delivery systems have the opportunity to be real change makers in improving community health, individual wellness, and health equity. Technology, data and other digital health solutions can empower these entities, but there is a real risk that they could also exacerbate existing inequities. Respondents have noted several recurring, and sometimes overlapping, themes as summarized below.

- **It is critical to listen to and co-create with individuals, caretakers, and community-based organizations on their technological needs.**
 - Successful interventions work *with* communities to prioritize their needs and goals while integrating local assets from the outset and also takes end-users into account in design. For example, “high tech” health solutions are often billed as transformative, when what would truly help improve health outcomes are simpler approaches. This could be through the expansion of text messaging as a mode of communication at community health centers or providing simple map files rather than interactive mapping dashboards to community-based organizations. Additionally, including community members earlier and more consistently in assessment of need/use cases, development, and piloting and deployment of new approaches may lead to earlier identification of successful solutions and easier implementation.
- **When new technology is introduced in any community-based setting, there should be an accompanying assessment and plan for who and what is needed to fully support its implementation and sustainability.**
 - Examples include: Community health centers that could benefit from digital navigators who help patients connect to telehealth appointments. The growing interest and use of digital health devices (such as remote patient monitoring devices) is accompanied by a growing need to clarify what the health care provider’s role is in monitoring the associated data, which are sometimes transmitted in real time. Technology-based referral systems to community-based organizations can overwhelm their resources.
- **Community-based providers would be more likely to adopt digital health technologies if there was seamless integration with their current technologies, workflows, and systems (like electronic health records).**
 - Providers are already stretched very thin and so any new solutions should be easy to learn, integrate, and change as needed.
- **It is important to ensure appropriate support for a representative and diverse health technology workforce.**
 - There has already been a lot of growth in the health technology workforce, particularly among health data scientists, informaticists, and other information

technology developers. As this sector of the workforce continues to grow, it is important that curriculum development and training are made available to sufficiently support the development, integration, and use of new technologies. There should also be a particular focus on training and recruiting a representative and diverse workforce which will ultimately support the capacity for uptake of technologies at the community level.

- **It is necessary for all stakeholders to take thoughtful approaches to equity and inclusion in collecting and using data**
 - Individual, population, and community level data can be incredibly useful for different stakeholders in addressing social determinants of health, but these data need to be findable, accessible, interoperable, and responsibly used and secured. This extends to the use of this data through emerging technologies like Artificial Intelligence and Machine Learning, which should be designed with health equity in mind and monitored for bias and other outcome disparities.
- **Any health system, funder, government, or other external organization that enters a new community should involve community members in the governance and decision-making process for any technological interventions.**
 - Different communities have unique health needs which make it challenging to scale a one-size-fits-all approach to data or technology solutions. Involving community members in the governance of new programs can help scale programs more successfully and also ensure that data collected within communities is used to empower the community directly. Community programs, federally-supported ones in particular, should be designed flexibly so that resources can be adapted to the needs of differing communities. It is also critical to incorporate planning for sustainable resourcing independent of Federal funding given the uncertainty of these funding streams. This preparation can increase the likelihood that communities have what they need to retain what has worked and be left stronger than they were before.
- **Even well-designed technology will never replace a trusted health care worker or provider.**
 - Technology should serve as a connector to these trusted individuals. Tools should be designed to enhance effectiveness of workers, and can help facilitate the bridge between community and clinic. Community health workers empowered with digital tools can improve health outcomes, but their lived experience and trust within the communities in which they work are their most valuable asset. Digital health tools should be designed to reduce burden of this workforce and where possible be co-designed with the community.
- **Organizations and providers involved in community-based health care delivery could benefit from more frequent, actionable data being returned to them.**

- There are many efforts to collect data (e.g., from different levels of government) but there are real or perceived challenges in reporting it back for use at the community level. Sometimes it is unclear to community stakeholders how to access the data, or it is not published, or it is aggregated beyond utility, or the delay between collection, publication, and public access to data reduces its utility.
- **There is an opportunity to leverage technology to further empower community health workers.**
 - The work of community health workers and other types of paraprofessionals who have close ties to the communities they serve – including but not limited to doulas, peer recovery specialists, peer support specialists, and patient navigators – could be amplified by the use of technologies that connect them with the people they serve, the organizations they work with, and for collecting data to be used for measuring outcomes and improving public health. There were several examples provided, particularly in the international context, of technologies that were designed with and for community health workers that were impactful for them and their communities. Stakeholders expressed a desire for more financial support for development, adoption, and implementation of new technologies for this workforce in the United States.
- **Steady and sustainable funding sources for the community health workforce are critical to their success.**
 - As outlined above, technology or digital solutions are an important tool for enabling and empowering community health workers but they are not a panacea. These tools need to be complemented by long-term, sustainable funding for the workforce. One-time or limited term funding makes program continuity difficult and diminishes the quality of their work. While integration into existing healthcare systems is possible, it needs to be designed intentionally from the start to ensure success. Additionally, there are many real or perceived barriers at the state and federal level in payment policies for this workforce.
- **Value-based models of care provide a real opportunity to improve health outcomes of communities.**
 - In healthcare, value-based payment is a form of compensating providers based on quality of care rather than quantity (or fee-for-service). Many healthcare systems and payors, including Medicare, are moving to these kinds of payment models that drive towards “accountable care” in an effort to better incentivize high-quality care and reduce costs. The shift to value-based accountable care inherently lends itself to more of a consideration of the overall health of the individual or patient, but this shift will also be beneficial for the overall health of a community. Shifting away from fee schedules and fee-for-service approaches will allow community-wide health outcomes to be considered as a metric for payment. This

shift in payment model also provides more flexibility to adopt and utilize impactful technologies as they are developed.

- **Many innovative community-based organizations, community health centers, and other community-based health care providers lack the resources of a grant writer or innovation team.**
 - Funders who want to support these organizations should consider the burdens of applying for funds and reporting. In some cases, technology solutions may be able to help reduce these burdens. In other cases, cross-sector networks can be formed with centralized resources such as a central administrative lead who is enabled and well-versed in the technological tools for billing, reporting, measuring outcomes, and also able to secure funding from disparate sources.
- **Community health centers and other community-based health care providers and organizations may struggle more than larger systems in navigating the growing sector of digital health tools and technologies that link communities and health care.**
 - These entities often have more limited time, funding and other resources and therefore need more support in evaluating and integrating new technologies. These organizations may need both training or technical assistance and financial support to appropriately adopt and deploy new technologies. It would be especially helpful to be able to customize information technology systems to the direct needs of a care team and the individuals and communities they work with.
- **There has been beneficial growth and development of virtual learning networks, mentoring opportunities, and educational telehealth resources for providers and health workers of all levels.**
 - Virtual education and training opportunities can allow more adequate preparation for responding during public health emergencies and increase the knowledge and sharing of best practices in rural and underserved communities.
- **Digital literacy is a real, but addressable, challenge for both individuals and health workers and providers.**
 - The COVID-19 pandemic has taught us that we can't just assume comfort or fluency with digital systems. Certain communities will get left behind. This should be addressed in a holistic manner that considers multiple critical touchpoints to increase digital literacy: increasing accessibility of digital tools to all digital literacy levels and increasing levels of end-user digital literacy through education and training in targeted communities.
- **The pandemic-era Federal and state policy changes, and flexibilities that led to the increased provision of an array of virtual health services, should be permanently implemented or expanded.**

- The COVID-19 pandemic and resulting Public Health Emergency expanded the use of digital health technologies, including telehealth, across communities in order to maintain access to care while in-person health care services became limited or entirely unavailable. This was beneficial for many Americans and should be continued, along with efforts to ensure equitable access (e.g., broadband expansion and affordability, digital literacy, accessibility, ensuring data privacy and security) so as not to exacerbate existing gaps and disparities in access to and use of technology. One point that came up repeatedly was that access to audio-only telehealth enabled many community health providers to reach their patients when they may not have been able to have a video connection.
- **Provider licensing should be re-envisioned to better meet the needs of patients and providers in the current context of increased technology usage.**
 - In order to fully take advantage of telehealth, health care providers should be able to care for patients no matter where they are. Patients, especially those who seek care at community health centers, may travel across state lines for family support or for better housing options. Community health care providers have experienced increased rates of burnout over the course of the pandemic. Added to this, limited resources increase difficulty in recruiting providers with sought-after language skills or certain medical expertise. Increasing flexibilities at all levels of government in provider licensing (e.g., license reciprocity, interstate compacts, special licenses or certificates, mutual recognition of licenses, or single federal license) could better meet the moment of telehealth and the needs of patients and providers.

Next steps

The stakeholder engagements described above have laid the groundwork for moving towards action. The themes described above are not directive and, in many cases, not specific to the Federal Government. However, there is certainly a role for the Federal Government in advancing programs, policies, and actions that could move us closer towards a vision of Community Connected Health.

OSTP has been and will continue to seek perspectives from stakeholders and any further input can be transmitted by email to connectedhealth@ostp.eop.gov.

In the coming months, OSTP also plans to work with partners across the Federal Government to develop and advance a suite of executive actions that will support the goal of combining community-based approaches to health care, with the power of digital health technologies, to lower the barriers to health care access and provide healthier lives for all Americans, especially those currently underserved.

OSTP will also look to and call upon non-Federal stakeholders, including state and local governments, private funders, health care systems, national non-profit organizations, technologists, and others in the private sector to make commitments to the same end.

Appendix 1 – Overview of Stakeholders

Respondents to the RFI and roundtable participants included the following types of stakeholder groups/organizations:

- Academic/Research
- Association/Advocacy
- Business/Consulting
- Community-Based Organization
- Foundation/Philanthropy
- Government*
- Healthcare Provider
- Independent/Individual

OSTP also engaged in informal opportunities for input outside of the RFI and roundtables, including small group or individual meetings. Those stakeholders are not represented here.

*Only state and local government stakeholders are represented in the charts below. For the roundtables, stakeholders from across the Federal Government were involved in listening and moderating capacities.

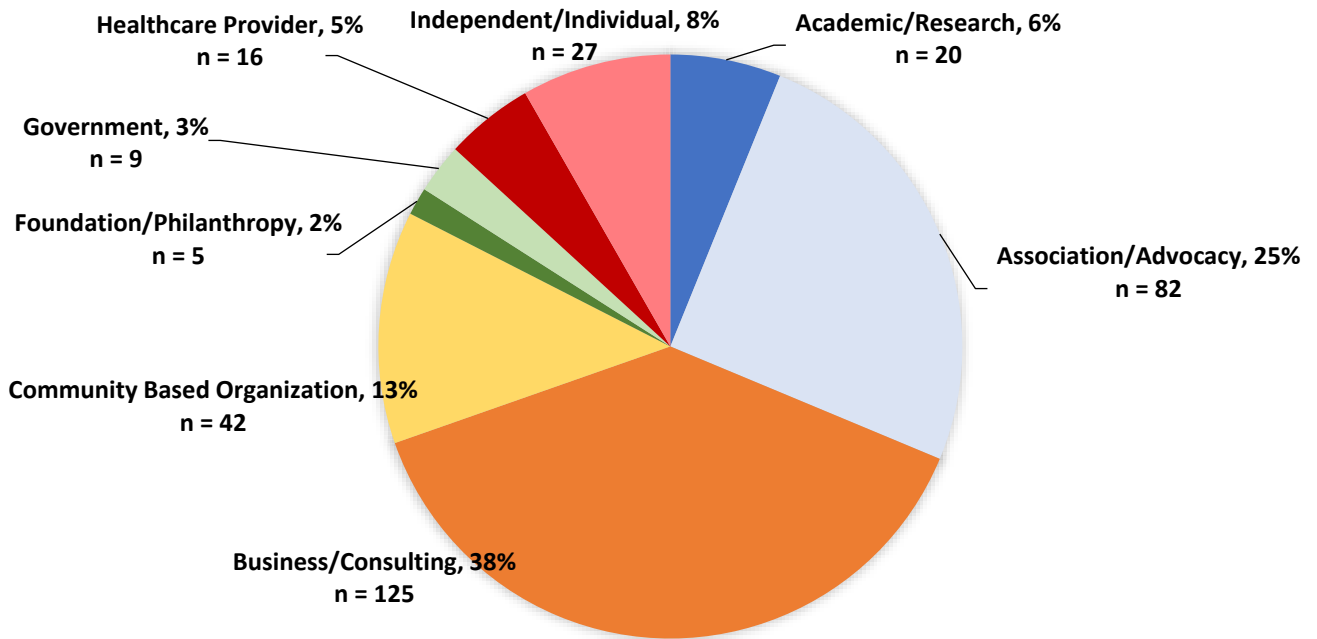


FIGURE 1: RFI RESPONDENTS BY STAKEHOLDER CATEGORY

This graph depicts the types of stakeholders that responded to the RFI by March 30, 2022. There were 326 total responses.

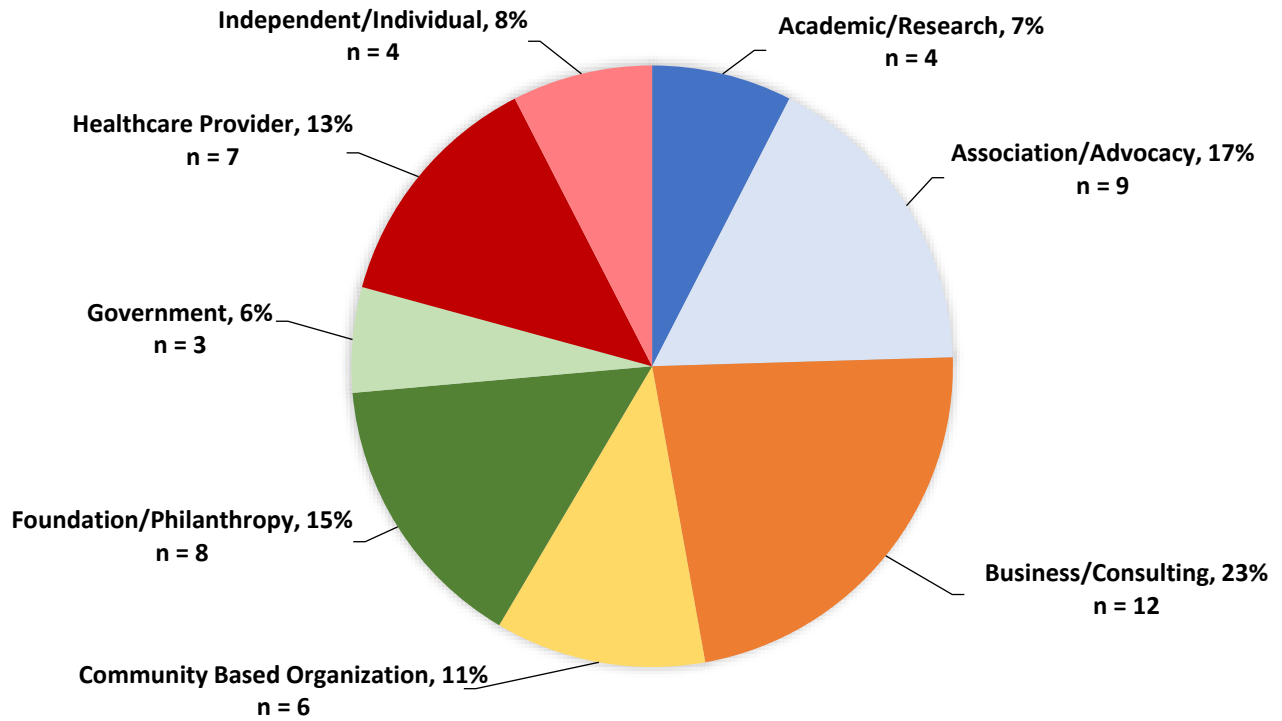


FIGURE 2: ROUNDTABLE PARTICIPANTS BY STAKEHOLDER CATEGORY

The makeup of roundtable participants is collated from across all three roundtables. There were 53 total participants, not including the Federal stakeholders who attended either in moderating or listening capacity. The public webinar portions of the roundtables were livestreamed and collectively amassed 1,129 viewers on HHS.TV.

Appendix 2 – Overview of Breakout Sessions

Below are descriptions of the framing that accompanied all of the breakout sessions across the three roundtables. Because the makeup of each of the roundtables differed by date, there was some intentional overlap in topic areas.

- **Breakout: Technology to Enable Health in Communities**
How has technology enabled organizations to improve health in their communities? This breakout session focused on how community-based health organizations use digital health technologies with a focus on those technologies that involve patient interface. The scope of these technologies encompasses virtual care/telemedicine, remote patient monitoring devices, wearables, smartphone apps, etc. This session also included a focus on health data and electronic health records through the lens of how individuals interact with their own data to enable their personal health and wellness.
- **Breakout: Sustainable Financing for Health in Communities**
What options exist to pay for organizations that promote community health? This breakout session focused on the variety of funding sources available to community healthcare/provider organizations to support their overall mission, including their infrastructure investments in community engagement and partnership building, data collection and IT/technology, including telemedicine, smart devices, or other tools.
- **Breakout: Patient and Provider Voices in the Community**
What is and isn't working for patients and providers in community health settings? This breakout session focused on hearing providers' and patients/individuals' impressions of what is working, and what is not, in community health settings. This included, but was not limited to, a focus on the health technologies used in community settings. Providers who attended were also accompanied by a patient that they have worked with.
- **Breakout: Technology to Enable the Community Health Workforce**
What is the role of technology and data in advancing the community health workforce? From assistive technology to the data that is collected and shared by community health workers (CHWs), digital capacity is integral to advancing the workforce. This Breakout Session sought to spur conversation on the role that data and technology play for CHWs and the broader community-based health workforce.
- **Breakout: Financing to Scale and Grow Community Health Workforce**
What options exist to pay for the community health workforce? Community health work is currently funded through managed care contracts, fee schedules, through providers in their core operating budget, alternative payment models, grants, and more. This breakout session focused on what is working, and what isn't, with respect to financing. Attendees

discussed the opportunities and pitfalls to growing and scaling a workforce dedicated to social determinants of health and community health needs.

- **Breakout: Defining the roles of Community Health Workers**

How to maintain the unique role of CHWs while sustainably growing capacity? This breakout session focused on better understanding the unique value of CHWs and what is needed in order to scale and grow in a sustainable way. CHWs have expertise based on shared life experience and often times, cultural background with the populations they serve. They often do not hold other clinical licenses, and are a meaningful conduit to addressing the social determinants of people's and patient's lives.

- **Breakout: Tracking and evaluating digital health technology support to community health across global and domestic contexts.**

How are we evaluating outcomes and setting targets for digital health technology in a domestic and global context for community health? This breakout session discussed evaluation frameworks and other methods of understanding the impact of digital health technologies, including target setting and how these frameworks could transfer across domestic and global regions.