

Equity in Health and Health Care: A Roadmap to Collaborative Action

2021





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Executive Summary

Despite major advancements in health care and medicine, disparities persist in access to health care and health outcomes among racial, ethnic, and other historically marginalized and underserved populations. The health care system is an interconnected ecosystem. Closing disparities requires systematic change and collaboration across a broad coalition of stakeholders.

Eli Lilly and Company (Lilly) and the Network for Excellence in Health Innovation (NEHI) are committed to confronting health inequities head-on and promoting health care that is more inclusive and effective by collaborating with stakeholders who share this vision. The two organizations partnered with Avalere Health to convene the “*Equity in Health and Health Care*” summit. The Summit brought together thought leaders in health care and industry partners to identify major opportunities for collaboration in three integrated domains: **digital health and connectivity, data-driven health care, and health care access.**

The Summit outlined the following priorities for action:

Health Care Access

- Promote greater flexibility and incentives for health care that addresses social needs
- Align payment incentives with health outcomes that advance health equity
- Increase access to clinical trials for Black, Indigenous, and people of color (BIPOC) communities
- Promote greater flexibility for value-based arrangements based on measurable, equity-related outcomes



Digital Health and Connectivity

- Improve Medicaid reimbursement to incentivize the adoption of telehealth and digital health solutions
- Make permanent and improve COVID-19 telehealth regulatory flexibilities
- Expand adequate and reliable broadband access in underserved areas
- Engage communities in the development of digital health solutions
- Provide technical support to facilitate uptake of digital health tools in low-resource settings

Data-Driven Health Care

- Improve electronic health record infrastructure in low-resource care settings
- Develop standards for the collection of race and ethnicity data
- Develop standards for the collection and sharing of social determinants of health (SDoH) data
- Engage communities to improve the collection of individual-level SDoH data

A Call to Action: Four Principles for Collaboration

The summit identified four principles for collaboration:

- 1. Strategic focus on equitable and measurable health outcomes:** All equity-related policies and practices should be assessed against metrics of improved outcomes.
- 2. Partnerships with non-traditional stakeholders:** Progress requires strong and unprecedented partnerships between established health care stakeholders, community-based organizations, and other non-traditional partners.
- 3. Investment in community-based, equitable care infrastructure:** Collaboration is needed to direct investment towards infrastructure (e.g., local broadband) that enables equitable access to effective care.
- 4. Policy and advocacy:** Collaboration is needed on advocacy to promote high-priority, time-sensitive changes in policy.



Background

Systemic inequities that persist within the health care system continue to shape disparities in health and health outcomes for historically marginalized communities. Addressing disparities in health and health care is an imperative that involves not only developing innovative ways to close known gaps in health care, but also centering patients in the delivery of care to meet their individual needs. COVID-19 has unprecedentedly shed a light on health disparities and validated a sense of urgency to address barriers to equitable, high-quality care that continue to account for disparities in health outcomes and health care access. Although there have been increased levels of interest in closing the gaps in disparities by all sectors since the start of the pandemic, widespread efforts to address SDoH and improve health disparities have pre-dated COVID-19. Notably, the first federal government effort to improve health disparities experienced by racial and ethnic minorities as a national policy issue was released in 1985 and is known as the **Heckler Report**. In response to this report, Congress created the Office of Minority Health within the U.S. Department of Health and Human Services (HHS) the following year. Other legislative efforts to address health disparities include the “Minority Health and Health Disparities Research and Education Act” passed by Congress in 2000 and the 2010 Affordable Care Act (ACA).¹ Coverage expansions introduced by the ACA spurred large gains in health coverage among people of color that have helped narrow disparities in health care access.² Payers and providers have also been at the forefront of addressing SDoH among their patient populations. For example, the Blue Cross Blue Shield (BCBS) Association established the BCBS Institute in 2018 to address social and environmental factors like food deserts, physical fitness deserts, and transportation barriers that influence the health of its members.³

In addition, while policymakers have taken action in the past, we are calling on them to continue to take action related to several ongoing initiatives:

In April 2020, a set of Senators introduced the Health Equity Accountability Act. The comprehensive legislation would expand care access to immigrant and rural communities, enhance language access services, encourage provider training on cultural competency, and invest in diversifying the workforce.⁴

In January 2021, the Centers for Medicare and Medicaid Services (CMS) released a roadmap for states to address SDoH; simultaneously, the House Ways & Means Committee announced a framework for achieving health equity.^{5,6}

The U.S. Food and Drug Administration (FDA) released guidance in 2020 to enhance diversity in clinical trials and encourage inclusivity in medical product development.⁷

H.R. 133, the Consolidated Appropriations Act, 2021, requires state Medicaid plans to cover routine patient costs of items and services furnished in connection with a Medicaid beneficiary’s participation in qualifying clinical trials effective January 1, 2022.⁸

To catalyze action and highlight priority policies and practices that can improve health equity, the “*Equity in Health and Health Care: A Roadmap to Collaborative Action*” summit agenda focused on critical issues aimed at developing an equity-focused health and health policy roadmap centered on three areas—digital health and connectivity, data-driven health care,

and health care access. The recommendations outlined in this roadmap are informed by vibrant expert panelist discussions on opportunities that interested stakeholders can undertake in the future to address health disparities. The roadmap also emphasizes the need for a collaborative cross-sector approach, targeting adoption by a variety of stakeholder groups including, but not limited to, CEO Action for Diversity and Inclusion members, NEHI network members, policymakers, researchers, patient groups, non-health care businesses, and foundations.

Key Definitions

Health Equity | Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities by attaining the highest level of health for all people.⁹

Health Disparities | When groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; physical disability; or other characteristics historically linked to discrimination or exclusion are adversely affected.¹⁰

Health Inequities | Differences in health status or in the distribution of health resources between different population groups, arising from the social conditions in which people are born, grow, live, work, and age.¹¹

Social Determinants of Health | Conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.¹²

Summit Overview

The “*Equity in Health and Health Care: A Roadmap to Collaborative Action*” Summit convened on September 15, 2021 to link action in government policy with both private sector and community-based action. The summit focused on three action areas: digital health, data, and health care access. Lilly, NEHI, and Avalere identified policy and practice issues relevant to the summit focus areas and invited expert speakers to participate in the opening panel and breakout discussions. More than 300 representatives from health care and non-health care organizations attended the summit.

The summit began with an opening panel discussion among seven health care leaders from different organizations with robust expertise in health care improvement (See Appendix). This discussion facilitated dialogue surrounding the integration of digital health and connectivity, better use of data and analytics, and supportive health care access as necessary steps to drive health equity and provided context for three subsequent breakout sessions. Following the opening panel, participants attended one of three concurrent breakout discussions in which additional panelists provided a “deep dive” into topic priority issues and identified opportunities for collaboration among attendees. The summit concluded with a rapid-fire round-up in which moderators summarized key takeaways from each breakout discussion.

Framework for Driving Health Equity: Integration of Digital Health, Data, and Access

According to Healthy People 2030, “achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health care disparities by attaining the highest level of health for all people.”¹³ A serious commitment to health equity requires both a focused policy agenda at the federal and state levels as well as action in the private sector and in local communities. Meaningful action is essential to ensure that health equity is not only a goal to be achieved through public policy and corporate social responsibility. Equitable and measurable health outcomes should become standard business principles leveraged by organizations and institutions.

The “*Equity in Health and Health Care*” summit focused on three action areas: digital health, data, and health care access; integrating digital health; and effective use of data with the supportive policy on health care access.

How Are These Three Focus Areas Linked?

Access to health care is fundamental to progress health equity. Historically underserved or marginalized communities, such as Black, Indigenous People of Color (BIPOC), and other groups in urban and rural areas alike, must have access to health care



through affordable insurance coverage as well as convenient access to providers. Innovations in health insurance coverage and health care delivery that bring needed care directly to underserved individuals will help close longstanding disparities.

However, in today's health care environment, access alone will not close health care disparities. Underserved and marginalized communities must have equal access to health care coverage and the services and tools that drive innovation, effectiveness, and efficiency in the larger health care system. For example, innovative health insurance plans now offer beneficiaries coverage that addresses critical SDoH such as transportation to and from medical appointments, health care delivered at home, or access to food and nutrition services. Meaningful access means creating or expanding payer coverage of these services for individual patients and reasonable reimbursement for the providers who deliver or coordinate said services.

Digital health services and data are linked to access as they are also key drivers of improved effectiveness and efficiency in today's health care environment. The COVID-19 pandemic sparked a dramatic upsurge in the use of telehealth services which has shown potential to overcome patient barriers to health care access (e.g., the need for transportation to a medical facility) by enabling the delivery of some health care services in the home and community. Telehealth has also brought clinical trials of crucial vaccines and therapeutics closer to the community by enabling decentralized trials and improved recruitment of historically under-represented groups.

In order to benefit from digital health innovations, underserved and marginalized communities must have access to affordable broadband services—federal and state policy to expand affordable broadband access is thus a critical goal for achieving equity. At the same time, sustained payer coverage for telehealth and other digital health services delivered through broadband is a fundamental requirement for

digital health equity. Further, there must be efforts to address patients' digital literacy to ensure that they are able to access, understand, and communicate via telehealth. In the future, technological advancements, such as natural language processing algorithms, are emerging strategies that hold promise for bridging the patient health literacy gap and improving uptake of patient-facing digital health tools.

Data and advanced data analytics are increasingly important drivers of effectiveness and efficiency in today's health care environment. Sophisticated use of clinical and claims data drives more personalized care, including care that addresses social risks that harm patient health. Again, the COVID-19 pandemic has underscored significant gaps in the collection, interpretation, and dissemination of data necessary to identify and address health disparities and inequities in health care delivery. For example, health insurance coverage for services that address SDoH relies heavily on the ability to collect and analyze data on patient health and their access to services. Current data systems and methods lack standardization and are inadequate for expanding services that address social risks and SDoH or measuring progress in eliminating racial and ethnic health disparities. Meaningful action to improve the collection and use of data in the health care system, including data that enables us to measure progress in closing disparities, is a fundamental goal for achieving equity.

This Roadmap is a call to action for integrating action across all three areas: implementing policy and practice to expand needed access to care, ensuring the ongoing revolution in digital health services will benefit underserved and marginalized communities, and developing the data infrastructure and focused processes needed to expand the use of data in closing longstanding health and health care disparities.



Barriers and Potential Stakeholder Solutions to Advance Health Equity

Health Care Access

It is widely recognized that expanding access to affordable health care coverage is a priority for improving health outcomes. However, it is not the sole solution to meaningful improvement of health care access as there are barriers to accessing high-quality care even among individuals with insurance coverage. Improving access to health care is a multi-faceted endeavor that will likely require enhanced comprehensiveness of insurance coverage in addition to addressing cultural and structural barriers that prevent patients from accessing the care they need.

The extent to which services and other medical care are covered under a given plan is detailed via the plan's benefit design. While benefit design varies across plans, experts stressed that many traditional benefit designs do not cover interventions that holistically address patients' medical and social needs (e.g., visits with community health workers, care teams).

In addition to comprehensive insurance, policy solutions must address structural barriers that prevent people from seeking needed care and drive disparities, including lack of transportation, inability to obtain appointment times outside of work, or inadequate translation

services. Similarly, solutions should remedy cultural or attitudinal barriers, including patient mistrust in the medical system due to both historical and modern inequality and patient stigmatization. At a systems level, expanding access to health care also involves reframing the culture of the U.S. health care system to step back from the misconception that health care is a scarce commodity that needs to be rationed. The U.S. health care ecosystem must drive toward equitable health care reform centered on the belief that the health care system has the capacity to provide high-quality care for all populations.



During the Summit, panelists introduced four priority solutions intended to assist stakeholders in ensuring patients have the opportunity to meaningfully access care and services that meet their individual needs.

1. **Promote Greater Flexibility and Incentives for Care that Addresses Social Needs**

In recent years, the introduction of efforts from public and private payers to cover non-medical services that address patients' social needs has increased. Examples include the expansion of supplemental benefits in Medicare Advantage (MA) that cover non-medical services ranging from air conditioning to pest control, to Uber and Lyft rides to medical appointments.¹⁴ These are targeted services based on data analyses and risk assessments identifying patients in need and the non-medical services that will be most effective in improving their health. The goal is improved health outcomes, but a reduction in the total cost of a patient's medical care may result as well.

The movement in health benefits and provider reimbursement toward inclusion of social needs is an important element in the overall strategy to improve health equity, although still in its early stages. Experts emphasized that relatively few health plans provide reimbursement of non-medical services, and relatively few providers are either prepared to coordinate services for patients or refer patients to outside organizations that serve social needs. They also noted that providers who do not belong to value-based or other payer-provider arrangements must also spend time navigating complex regulatory compliance barriers to get non-medical interventions approved for their patients. Moreover, in many underserved communities, relatively few local organizations are equipped to accept referrals or to accommodate the scale of complex patient needs.

The movement toward coverage of non-medical services requires action at several levels, including appropriate expansion of benefit coverage supported by public programs (i.e., Medicare and Medicaid) and concomitant provider reimbursement; similar action in the private sector through commercial insurance as well as coverage by self-insured employers; and active support for partnerships between clinical providers and community-based organizations (CBOs), including support for interoperability (i.e., data exchange) and support for the expansion of local social service workforces.

2. **Align Payment Incentives with Outcomes that Advance Health Equity**

Our current health care system still tends to operate on a fee-for-service (FFS) model that reimburses providers based on the volume of services delivered rather than the relative value of those services to improve health outcomes. Payment incentives in value-based models should align with health outcomes that advance health equity. Specifically, provider reimbursement should be tied to patient-centered outcomes, reductions in health disparities and inequities, and the uptake of evidence-based, high-value, low-cost care that is known to improve health outcomes (e.g., community-based dental clinics). Experts highlighted the Medicare Diabetes Prevention Program (MDPP) as a known, community-based intervention that effectively increases access to diabetes management care for BIPOC patients. Although every MA plan, for example, is required to fully cover MDPP, uptake of

this intervention remains suboptimal due to the cost of delivering MDPP services. For health care purchasers, driving down the cost of care will involve working with plan carriers to ensure provider reimbursement aligns with the perceived value of care for their enrollees. Stakeholders can also consider investing in building CBO capacity to support the sustainable implementation of high-value, community-based interventions that increase access to care (e.g., diabetes educators).

3.

Increase Access to Clinical Trials for BIPOC Communities

BIPOC individuals have long been underrepresented in clinical trials. This is due to various access barriers, including the tendency of researchers to recruit patients from academic medical centers, health literacy barriers, and structural constraints (e.g., transportation). Panelists highlighted that increasing access to clinical trials for underserved populations allows patients to receive care that would otherwise not be available to them. Increasing patient diversity and inclusivity in clinical trial representation also remedy a longstanding gap in clinical evidence generation that has not been representative of heterogeneous patient populations. This also ensures that clinical evidence is reliable for the intended patient and serves as the basis for building trust with historically excluded communities. To increase access to clinical trials for underserved populations, researchers should expand their inclusion criteria and diversify clinical trial locations beyond academic medical centers. This can be done by leveraging care settings that typically serve underserved populations (e.g., community health centers, ambulatory health centers). Health care stakeholders should consider engaging in non-traditional partnerships that are crucial for improving enrollees' health literacy and increasing the accessibility of clinical trials.

Takeda Pharmaceuticals Case Study: Utilizing Information-Sharing as a Means to Build Trust

Challenge: Compared to other health care stakeholders, the pharmaceutical industry has been slow to engage in partnerships at the community level. To retain and recruit Black patients in clinical trials, pharmaceutical manufacturers must build trust within these communities. Partnerships are required to demystify the pharmaceutical industry, and clinical trials are important to inform decision-making and connect with Black communities.

Action Taken: Takeda partnered with the National Association of Black Journalists (NABJ) to normalize communication around clinical trials and normalize clinical trials in Black communities. The NABJ National Virtual Convention provided a trusted avenue of communication to facilitate information-sharing about clinical trials and the pharmaceutical industry in a low-pressure environment. This partnership helped to elevate the importance of clinical trials by circulating information to journalists and investing in the power of storytelling as a way to connect with communities. Answering questions early on using a non-threatening method of communication is important to continue encouraging this type of information-sharing outside of academic settings to improve health literacy and increase the representation of historically excluded patients in clinical trials.

4.

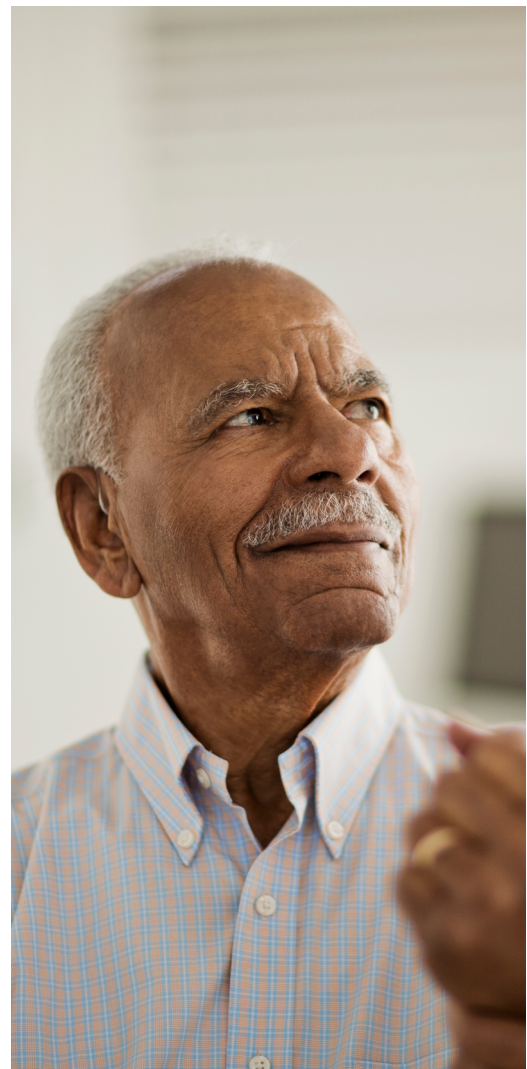
Promote Greater Flexibility for Value-based Arrangements Based on Measurable, Equity-Related Outcomes

Value-based arrangements between health care providers and payers, and between payers and manufacturers (e.g., pharmaceuticals and medical devices) have become increasingly familiar tools for linking health care payments to demonstrable results in patient outcomes. These arrangements are subject to extensive government regulation and oversight to prevent undue inducements that providers, payers, and manufacturers may offer to each other or to patients. Appropriate flexibility in these regulations could encourage more innovative value-based arrangements structured around measurable improvements in patient health outcomes, lower costs of care or both.

Innovations currently subject to barriers include arrangements for data-sharing and analytical models offered by manufacturers to providers and payers, as well as manufacturer support for patient adherence programs that could be customized to serve specific patient populations. Recent changes in federal regulations have lowered barriers to value-based arrangements between payers and providers, but not for manufacturers. Under finalized revisions made to the Anti-Kickback Statute (AKS) in November 2020, device and drug manufacturers were excluded from the three newly created safe harbors intended to facilitate broader based deployment of value-based agreements.¹⁵ There also remains a lack of clarity around which existing safe harbors in the AKS would apply to payer/manufacturer or provider/manufacturer contracts, which may discourage stakeholders from entering such contracts.¹⁶ Carefully drafted revisions to regulations on manufacturers, including revisions to AKS enforcement and within Medicaid Best Price regulation, could be crafted to test measurable improvements in equity-related outcomes for patients.

Digital Health and Connectivity

There has been accelerated uptake of digital health platforms as patients experienced disruptions to in-person care delivery due to the COVID-19 pandemic. Federal and state governments implemented emergency regulatory flexibilities in response to the public health emergency (PHE) that broadly expanded access to telehealth and provider-facing digital tools (e.g., remote patient monitoring) for many patients, allowing them to safely access non-urgent care during the pandemic. As a result, telehealth usage has surged to nearly 38 times its pre-pandemic levels.¹⁷ Despite the expanded availability of telehealth services, there remain infrastructure barriers in underserved communities that impede the effective use of virtual care and other technology-based solutions. Underserved areas still face lagging access to broadband connectivity, including substandard speeds and reliability that inhibit the effective use of patient-facing digital health solutions. Beyond telehealth, inadequate broadband access also affects patients' ability to use patient-facing digital health tools, including mobile health application apps, which can promote patient engagement and empowerment in underserved populations. While the number of patient-facing platforms has increased substantially, drivers of the digital divide (i.e., digital literacy, digital device access, and language barriers) still limit patient access and adoption of technology.¹⁸ Providers also face reimbursement and technical challenges with using provider-facing digital health platforms.



During the summit, panelists identified five priority solutions as critical for accelerating the adoption of digital health platforms.

1. **Improve Medicaid Reimbursement to Incentivize Adoption of Telehealth and Digital Health Solutions**

Medicaid is the main source of health care coverage for low-income Americans and generally reimburses providers at lower rates than commercial health plans and Medicare.^{19,20} Research shows that increased Medicaid reimbursement leads to increased access to care as well as health care utilization and improved health status.²¹ For providers in settings that primarily serve low-income patients (e.g., community health centers), attendees also emphasized that the lack of Medicaid payment parity between in-person and telehealth visits serves as a disincentive to use telehealth services and provider-facing digital platforms. Additionally, despite widespread recognition that unmet social needs are the primary driver of health outcomes in low-income populations, federal Medicaid rules prohibit providers from being reimbursed for most non-medical services provided to Medicaid patients.²² While regulators have indicated that state Medicaid agencies have opportunities to leverage certain regulatory flexibilities to address SDoH, experts highlighted that the lack of adequate reimbursement precludes many Medicaid providers from screening patients for social risks and subsequently making referrals to community-based and social service organizations. The formation of multi-stakeholder alliances that advocate for mitigating Medicaid barriers faced by providers could help expand the reach of digital health innovations to populations that still face challenges in accessing care.

2. **Make Permanent and Improve COVID-19 Telehealth Regulatory Flexibilities**

In response to the pandemic, federal and state governments took temporary steps to remove regulatory barriers to accessing telehealth. Changes that were made included the elimination of originating site requirements, expanding the scope of practice and covered telehealth services, and allowing audio-only visits for evaluation and management services.²³ According to a Sykes survey that polled 2,000 Americans in April 2021, 88% of respondents wish to continue using telehealth services after regulatory flexibilities expire.²⁴ Public and private payers have indicated a commitment to maintaining access to telehealth and virtual care tools beyond the PHE as they address many structural barriers that typically prevent patients from accessing care, such as transportation and the inability to take time off of work. To support the continued expansion of telehealth access, permanent supportive regulations need to be established. However, experts stressed that telehealth might not be the appropriate solution for improving access to high-quality care for all patients or situations, recognizing that digital health solutions should be seen as one means to achieving the end goal of health equity. Policy solutions should also account for the dependencies that affect meaningful telehealth adoption, such as adequate reimbursement and broadband access, as well as the practicality or limitations of telehealth services in addressing

certain types of care. Stakeholders should consider the promise of telehealth as a vehicle for lowering employee health care expenditures and increasing access to services that address non-urgent or behavioral health needs (e.g., mental health). Employers can work with their plan entities to improve access to telehealth services through their employee benefit designs and ensure that covered services also account for the dependencies mentioned above.

3. Expand Adequate and Reliable Broadband Access in Underserved Areas

As the U.S. health care system continues to adopt increased methods of virtual care, deficits in broadband coverage will need to be remedied to ensure health care access is not compromised by the digital divide. Lack of broadband internet has been associated with lower use of telehealth services, particularly for individuals living in rural areas.²⁵ The Infrastructure Investment and Jobs Act recently passed by the Senate is a key piece of legislation that shows federal commitment to funding digital inclusion.²⁶ However, there remain important aspects of digital inclusion to address that were left out of the legislation, including defining a minimum standard for “adequate broadband” speeds and addressing organization-specific barriers to deploying telehealth and digital platforms (e.g., integrating tools into provider workflow). Stakeholders should consider joining alliances to support policies that make continued investments in expanding adequate broadband access in historically underserved areas. Employers can also assess the feasibility of integrating more services that can accommodate the use of digital health solutions (e.g., insurance coverage for internet services) into their benefit packages.

4. Engage Communities in Development of Digital Health Solutions

While the number of available patient-facing digital health platforms has increased substantially, adoption rates suggest that patient uptake and perceptions of the utility of such platforms remain low, particularly among elderly patients and patients that experience language barriers.^{27,28} Digital literacy barriers among vulnerable populations can be mitigated by community engagement and inclusion from the outset of developing technology-based solutions. By engaging communities early on in the process, developers can ensure that new technologies integrate considerations related to how intended users view and utilize technology. In particular, vendors should bring CBOs and faith-based organizations to the table as partners during the development and deployment of digital health solutions. These organizations bring the community knowledge needed to address issues related to patient mistrust and ensure digital platforms are culturally and linguistically accessible for their intended users. Further, vendors can engage in public/private partnerships to assess the usability of digital tools among underserved patients.

Brigham and Women's Hospital Case Study: Digital Inclusion as a Way to Deliver Meaningful Care

Challenge: As the introduction of patient-facing digital platforms in health care continues to accelerate, there remain challenges to using these platforms for marginalized communities as they grapple with drivers of the “digital divide.” Without addressing these underlying factors, the increased use of digital platforms can serve to increase disparities in care for these vulnerable groups.

Action Taken: Brigham and Women's Hospital has deployed a multi-pronged approach to address drivers of the “digital divide” that limit the uptake of digital tools and platforms by vulnerable patients. Like other SDoH screening mechanisms, the health system's approach first involves screening patients to assess their digital needs and skills. The digital inclusion strategy also involves ensuring digital platforms are linguistically tailored for patients and employing digital health navigators to assist patients with low digital literacy with guidance on using a digital platform. Health care providers can further address underlying causes of digital exclusion by stratifying platform usage data by race and ethnicity to guide targeted solutions for increasing access among specific patient groups.

5.

Provide Technical Support to Facilitate Uptake of Digital Health Tools in Low-Resource Settings

Major differences in resource availability between larger health care systems and publicly-funded clinics create an unequal playing field for providers who serve vulnerable patient populations. This also contributes to the limited uptake of provider-facing digital health tools among providers that practice in low-resource settings, including those that capture SDoH data. Along with the reimbursement for social needs screening, funding for the provision of technical support services for providers that do not have the necessary resources to institute new provider-facing technology is essential. There are also downstream challenges for providers that are unfamiliar with how to effectively use SDoH data integrated into an EHR system. Providers may face challenges related to identifying clear clinical workflows for integrating social risk information or differentiating between the generalizability of different types of SDoH data (e.g., individual-level versus census tract data). Early initiatives that facilitate the integration of digital health tools into provider workflows include scoring systems to assess the feasibility or usability of adopting digital health solutions in various clinical settings. Vendors should engage clinicians during the development of such tools to ensure that they can be readily integrated into provider workflow.

Data-Driven Health Care

The collection of accurate and meaningful data creates actionable insights that enable stakeholders to identify priority areas with the most glaring health inequities and can inform interventions tailored to address specific inequities. However, there remains a knowledge gap regarding the types of data and methods required to track improvements in addressing health disparities. For example, there is limited evidence on the appropriateness of collecting data reported by the individual versus the extent to which geographic indicators can be used as a proxy for individual attributes. The **Morehouse Health Equity Tracker** developed at the Morehouse School of Medicine was highlighted as an example of a data-driven platform that visualizes disparities in race/ethnicity for many health conditions, including COVID-19. Experts noted that the pandemic has highlighted the feasibility of improving the rapid exchange of patient information and has created an imperative to improve effective data-sharing across sectors as an effective tool for improving health equity. Although questions remain around how clinical data and SDoH data should be integrated to generate meaningful insights, effective data-sharing is crucial for obtaining that SDoH data. SDoH data enables providers to contextualize social risk factors that influence health outcomes and ensure that interventions are holistically addressing patient's medical and non-medical drivers of health.

Beyond research, all stakeholders can work towards integrating an equity lens into their culture of data management and applying equity considerations in the development of data-driven decision metrics.



During the summit, panelists identified four recommendations stakeholders should prioritize to advance data-driven health care.

1. **Improve Electronic Health Record (EHR) Infrastructure in Low-Resource Care Settings**

Over the past decade, the federal government has played a large role in driving the unprecedented growth in EHR adoption. As of 2017, the Office of the National Coordinator for Health Information (ONC) estimated that nearly 80% of office-based physicians have adopted a certified EHR system.²⁹ However, EHR systems currently being used by providers in underserved areas are outdated and unable to send, receive, or integrate electronic data with other sources. Health centers located in underserved communities see a disproportionate share of people who would benefit from access to SDoH screening and referrals to social service providers. The integration of clinical and SDoH data is critical for painting the full picture of a person's health status; experts noted that this data can also inform providers in adapting treatments according to a patient's lived experiences. For example, it may not be appropriate for providers to prescribe a medication that must be refrigerated to a patient who is experiencing housing insecurity because they likely do not have regular access to a refrigerator. EHR vendors should engage in public/private partnerships that facilitate access to their software and services for provider practices in underserved areas.

2. **Develop Standards for the Collection of Race and Ethnicity Data**

The scattered and limited collection of race and ethnicity-stratified data has hampered the visualization of how COVID-19 disproportionately impacted certain communities. Significantly, the Morehouse Health Equity tracker shows that the lack of standardization for collecting race and ethnicity data across local and state jurisdictions obscured the full scope of COVID-19-related disparities—almost 36% of COVID-19 cases in the dataset reported unknown race or ethnicity. In addition, there are discrepancies related to whether the broad racial and ethnic categories used to collect data are aligned with categories individuals self-identify with. These shortcomings signal a clear need to develop standards for collecting race and ethnicity data in a more robust way. Moving forward, public/private partnerships will continue playing a crucial role in advancing needed health information technology data standards. In recent years, stakeholders have coalesced around the uptake of **Fast Healthcare Interoperability Resources** as the nationally-supported data standard to drive increased interoperability of electronic health information.³⁰ Businesses can leverage organizational data that is typically used to drive operational decisions to understand their business model's impact on employee health and well-being. In addition, experts suggested businesses can work with payer partners to leverage employer-collected race and ethnicity data and assess the feasibility of integrating that data into employer plan claims data for stratification purposes. Employers and their carriers can work towards stratifying plan data by race and ethnicity to identify health disparities in employee populations and strategies to address them.

OCHIN Case Study: Integrated EHR Infrastructure Provides Evidence of Testing and Vaccination Disparities

Challenge: Few health care organizations were equipped with the right infrastructure to report COVID-19 testing and vaccination rates based on race and ethnicity. This limitation obscured disparities in testing and vaccine access among vulnerable communities and delayed the modification of the federal vaccine distribution strategy to increase equitable access.

Action Taken: OCHIN leveraged the connected EHR infrastructure available in its network of community health centers to stratify COVID-19 testing and vaccination data by race and ethnicity. The data revealed clear disparities about which patient groups were lacking access to COVID-19 tests and vaccines. As a result of these findings, the Biden Administration began sending vaccines directly to community health centers to boost access for underserved patients.

3.

Develop Standards for the Collection and Sharing of SDoH Data

There is currently a patchwork approach to addressing SDoH as states are looking at SDoH differently and asking their own unique questions. Data standards are foundational as a common language for collecting SDoH data. They also ensure that all stakeholders are collecting the same data in an aligned way, which enables data-sharing between different organizations. Further, data-sharing standards are critical for aligning incentives and establishing common outcome metrics for entities participating in cross-sector initiatives to improve equitable access to care. Collecting aggregated SDoH data is valuable for providing evidence of health care disparities to policymakers and can help under-resourced clinics identify and advocate for funding or supplies that would level the playing field with large, fully funded health centers. The use of current standardized methods of capturing SDoH information in claims, such as ICD-10 Z codes, has been steadily increasing but remains low. A recent report found that while there had been a 12.6% increase in Z code claims from 2017 to 2019, only 0.11% of Medicare FFS claims contained Z codes.³¹

Even with the introduction of data standards, data elements must be standardized across systems so that there is a common way of sharing and understanding the data that is being analyzed and used to drive decision-making. To fill this gap, experts highlighted a need to create a common data-sharing governance that imbues trust, transparency, and is predicated on the common goal of advancing health equity. Further, adopting a common data model will optimize the utility of SDoH data when aggregated across health systems, which will enable providers to learn what strategies are working well and assess evidence for implementing targeted interventions and programs. Establishing uniform data collection and sharing standards to holistically measure health equity improvements requires forming a cross-sector working group to build consensus on considerations for collecting

data related to sensitive information (e.g., needed protective factors to maintain patient privacy) and data-sharing principles. This working group must also engage community members to increase transparency for how sensitive information will be used and adopt best practices from organizations that have identified effective strategies to collect complete household-level SDoH data.

4. ● Engage Communities to Improve Collection of Individual-Level SDoH Data

Health inequities do not impact individuals belonging to the same identity group in the same way. Examining disparities solely through a race and ethnicity lens can lead to the misconception that all members of a specific identity group lack access to certain resources. Although a generalized population disparity may exist, this does not give us reliable information on individual-level needs. As such, the collection of community-level SDoH data alone is insufficient—SDoH data must be individualized to effectively target individual-level resources toward patients that are most in need. The **Morehouse Health Equity Tracker** shows gaps in datasets due to underlying structural inequities hindering the collection of SDoH data reported by individuals, including patient mistrust of the health care system or fear of disclosing personal information. In order to improve the collection of individual-level data, health care stakeholders must engage with partners embedded in marginalized communities to build trust and encourage community members to share individual-level data. Community partners should be elevated as leaders in determining the best metrics for measuring health inequities within their own communities. For example, Blue Shield of California employs community health advocates who are trusted members of the local community and trains them to use and understand a neighborhood-based health dashboard containing over 3,000 community health data indicators. Community health advocates can then use their knowledge to determine salient data points that can inform targeted care plans.³²

Call to Action

Participants in the health equity summit point toward four parallel courses of action to achieve measurable outcomes in health equity: (1) **internal changes that should be self-initiated by organizations**, (2) **strategic partnerships with non-traditional stakeholders**, (3) **investments in community infrastructure that support equitable outcomes**, and (4) **advocacy for supportive policies**. All four courses of action should focus on the systemic challenges and barriers that have perpetuated inequitable health care and poor health outcomes for many Americans in historically underserved and marginalized communities. Experts at the health equity summit stressed that this will require targeting resources and tailoring solutions that are aimed directly at equitable, measurable outcomes.

1. Create a Strategic Focus on Equitable and Measurable Health Outcomes

Many organizations have made a strategic commitment to diversity, equity, and inclusion (DEI) in their internal operations, but a broader strategy is needed to advance health equity for employees and other stakeholders served by organizations, such as customers and local communities. Participants in the summit offered several examples of ongoing initiatives and potential new initiatives.

Some **pharmaceutical companies** are acting to ensure that health equity is a goal in new product development. These companies are investing in research to understand patient experience from the perspective of underserved and marginalized communities, and through a new investment in improving

diversity and representation of under-represented populations in clinical trials, including investment in telehealth-enabled, community-based clinical trials.

Self-insured employers have a leading role to play by embedding equity goals into employee health benefits; for example, by requiring data collection and analysis that supports innovations in care (e.g., care models that address social risks and SDoH), and in monitoring progress towards equity, (e.g., appropriate use of racial and ethnic data). Health care purchasers can work with their plan carriers to increase provider-payer alignment, ensuring that benefit design aligns with actual provider practices that address social needs, including social screening. Stakeholders can also participate in employer learning collaboratives to share best practices with other employers; for example, best practices for improving health literacy.

Action for health equity should be seen as an integral part of larger reforms underway in our health system. **Health insurers and self-insured health care purchasers**, in both the public and private sectors, have committed themselves to purchasing that moves the system toward patient-centered care and value-based purchasing. The movement towards health equity and measurable, equitable outcomes should be seen as completely aligned with these movements.

2. Partner Strategically with Traditional and Non-Traditional Stakeholders

Traditional health care stakeholders, including manufacturers, payers, health systems, and others, continue to play a

crucial and overlapping role in creating lasting change to improve the quality of life for all people. Therefore, partnerships are essential to addressing complex problems that require systematic changes in health care and the wider environment. Through broad industry partnerships, health care stakeholders can establish common expectations and collective accountability while implementing key health equity initiatives. For example, Blue Shield of California has partnered with Kaiser Permanente, CommonSpirit Health, and the California Healthcare Foundation to improve the collection of social needs data by integrating a standardized screening tool into the social services referral platform UniteUs. These groups also regularly convene to think through how UniteUs functionalities can be improved to enhance interoperability between health systems or operationalized to be more meaningful for provider use.³³ Experts highlighted the success of the COVID-19 vaccine clinical trials and the vaccine's rapid development as a blueprint for how the health care system should continue to work together to advance health equity.

Cross-sector collaborations bring a range of expertise and collective resources necessary for addressing non-medical drivers of community health. Businesses have the opportunity to partner with CBOs, foundations, local government agencies, health care stakeholders, and other businesses to maximize collective impact and move the dial on a wide range of complex health equity issues. Engaging with local communities and investing in community health and well-being is crucial for businesses to enhance economic empowerment among their customers and employees. For historically marginalized communities that lack trust in the health care system, partnerships between key

players in the health care ecosystem and CBOs are critical to building a culture of trust and understanding. Experts shared a prime example regarding Bon Secours Mercy Health System's participation in Ohio's nutrition incentive program, Produce Perks. Bon Secours funded and partnered with local grocery stores to roll out the program, which matches \$25 for free when Supplemental Nutrition Assistance Program-eligible patients buy up to \$25 of produce.³⁴ This type of locally-based initiative does not only serve as a solution for addressing food insecurity—it also creates a sense of community between Bon Secours and small business owners that can facilitate increased trust. To accelerate future partnerships, stakeholders should consider investing in evidence generation studies that help create a business case for reducing health and health care disparities through cross-sector initiatives.

3. Invest in Community-Based Equitable Care Infrastructure

Organizations can leverage their purchasing power to influence the local supply chain or make investments in addressing community conditions that shape their stakeholders' well-being. For example, AT&T has committed to opening 20 Connected Learning Centers in local community organizations across the country to bridge the digital divide in underserved communities. These centers provide free access to digital devices, the internet, and educational resources to improve digital literacy.³⁵ Businesses can build the capacity of CBOs and social services organizations that lack the financial support to implement and

Call to Action

sustain evidence-based community-based interventions or address non-medical drivers of health. There is a strong business case to invest in community-based infrastructure that facilitates the shift to patient-centered care, acknowledging the need to reach the most vulnerable patients where they are. These types of community investments produce shared value for businesses and stakeholders—organizations are encouraged to adopt profitable business strategies that produce real societal benefits for their stakeholders.³⁶

4. Engage in Policy and Advocacy Efforts

When engaging in policy and advocacy efforts, stakeholders should consider prioritizing time-sensitive policy issues. The Biden Administration's enhanced focus on equity can be leveraged by multi-stakeholder alliances to collectively advocate for policies and funding that support health equity. For example, the inclusion of oral health in Medicare is a key policy issue that Congress is considering addressing through legislation to ensure that elderly populations have equitable access to oral health care services.³⁷ Notably, there is bipartisan agreement that regulatory flexibilities expanding telehealth adoption should be maintained past the current PHE, which was recently renewed on October 18, 2021.³⁸ In addition, there are legislative opportunities to address drivers of the digital divide that were not included in the recent Infrastructure Investment and Jobs Act through future advocacy efforts, including policies and practices that address digital literacy and inadequate

broadband speed and reliability in underserved communities. Providers and manufacturers are also key partners to engage in advocacy groups as they are aware of the most pressing health care issues that require policy action. With support from several manufacturers, the Community Oncology Alliance partnered with CancerCare, a non-profit that provides support services for individuals managing the challenges of cancer, to launch the "Time to Screen" awareness campaign in April 2021. The campaign raises public awareness around the importance of timely cancer screenings, as COVID-19 has led to a drop in cancer screenings in 2020.³⁹

The opportunities to work in partnership across organizations to combat structural racism, advance health equity, and close quality gaps are numerous. This work continues to be necessary to fundamentally change the way health care is delivered. The solutions and strategies included in this roadmap are examples of ways to innovate and collaborate around health equity.



Acknowledgements

Lilly and NEHI would like to acknowledge the following individuals for their participation in the summit and for providing the subject matter expertise that informed the development of this roadmap:

Marshall Chin, MD

University of Chicago School of Medicine

Nakela Cook, MD, MPH

Patient-Centered Outcomes Research Institute

Eric Dozier, MBA

Eli Lilly & Company

Mark Fendrick, MD

University of Michigan Center for Value-Based Insurance Design

Dana Gelb Safran, PhD

National Quality Forum

Jasmaine McClain, PhD

Health Management Academy

Rachel Gold, PhD

Kaiser Permanente Center for Health Research

Bryan Heckman, PhD

Meharry Medical College Center for the Study of Social Determinants of Health

Ann Mond Johnson, MHA

American Telemedicine Association

Shruti Kothari, MPH

Blue Shield of California

Myechia Minter-Jordan, MD

DentaQuest Institute

Kristi Mitchell, MPH

Health Equity Outcomes

Gary Puckrein, PhD

National Minority Quality Forum

Lauren Powell, PhD, MPA

Takeda Pharmaceuticals

Jorge Rodriguez, MD

Brigham & Women's Hospital

Kendra Smith, AICP, MSUS

Bon Secours Mercy Health

Jennifer Stoll

OCHIN

Michael Thompson

National Alliance of Healthcare Purchaser Coalitions

Laurie Zephyrin, MD

The Commonwealth Fund

Appendix: Summit Agenda

Time	Activity	Lead
1:00 PM	Welcome	<p>Nelly Ganesan, Former Principal, Avalere Health</p> <p>Wendy Warring, CEO, NEHI-Network for Excellence in Health Innovation</p>
1:15 PM	<p>Opening Panel: Digital Health Solutions, Data- Driven Health Care, and Health Care Access: Ingredients for Health Equity</p>	<p>Moderator: Kristi Mitchell, MPH, health services researcher, former Senior Vice President, Avalere Health</p> <ul style="list-style-type: none"> • Dana Gelb Safran, PhD, CEO, National Quality Forum • Eric Dozier, VP, North American Oncology, Eli Lilly & Company • Gary Puckrein, PhD, CEO, National Minority Quality Forum • Marshall Chin, MD, Professor of Healthcare Ethics, University of Chicago School of Medicine • Michael Thompson, CEO, National Alliance of Healthcare Purchaser Coalitions • Myechia Minter-Jordan, MD, CEO, CareQuest Institute • Nakela Cook, MD, MPH, Executive Director, Patient-Centered Outcomes Research Institute
2:45 PM	Break	
2:55 PM	Breakout Sessions	<p>Digital Health Solutions Moderator: Jasmine McClain, PhD, Health Management Academy</p> <ul style="list-style-type: none"> • Rachel Gold, PhD, Kaiser Permanente Center for Health Research • Jorge Rodriguez, MD, Brigham & Women's Hospital • Ann Mond Johnson, American Telemedicine Association <p>Data-Driven Health Care Moderator: Tom Hubbard, MPP, NEHI</p> <ul style="list-style-type: none"> • Jennifer Stoll, OCHIN • Bryan Heckman, PhD, Meharry Medical College Center for Study of Social Determinants of Health • Shruti Kothari, Blue Shield of California, Industry Initiatives <p>Health Care Access Moderator: Laurie Zephyrin, MD, The Commonwealth Fund</p> <ul style="list-style-type: none"> • Mark Fendrick, MD, University of Michigan Value-based Insurance Design (VBID) Center • Lauren Powell, MPA, PhD, Takeda Pharmaceutical, US Health Equity & Community Wellness • Kendra Smith, Bon Secours Mercy Health, Community Health
3:55 PM	Break	
4:00 PM	Rapid-Fire Roundup	Kristi Mitchell, MPH, High-level summary of breakout sessions
4:20 PM	Concluding Remarks	Wendy Warring, CEO, Network for Excellence in Health Innovation
4:30 PM	Summit Ends	Julie Dunlap, Chief Diversity, Equity and Inclusion Officer and Vice President of Talent Management, Eli Lilly and Company

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