



# Disseminating Best Practice Equity Innovations in Health Care: A Synopsis of Study Groups with Health Care Executives

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HARVARD Kennedy School

**MOSSAVAR-RAHMANI CENTER**  
for Business and Government

**Disseminating Best Practice Equity Innovations  
in Health Care**

*A Synopsis of Study Groups with Health Care Executives*

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## **Disseminating Best Practice Equity Innovations in Health Care** *A Synopsis of Study Groups with Health Care Executives*

In the unusually warm fall of 2023, we hosted a series of study group sessions in Cambridge at Harvard University's Mossavar-Rahmani Center for Business and Government, with executives from well-known and highly regarded health care organizations. We sought to learn about the nature of emerging health care equity strategies and about the motivations and aspirations of the leaders driving the innovations. We present here a synopsis of these discussions to disseminate learnings, spur innovation and catalyze the adoption of equity innovations in health care.

### *Background*

Equity in health care is hardly a new or novel subject. In 1985, a Task Force commissioned by Secretary of Health and Human Services, published a report titled "Black and Minority Health" (more widely known as The Heckler Report)<sup>1</sup>. The Report focused particularly on racial and ethnic differences in mortality rates for minority populations. The Report described 59,000 more deaths per year for African Americans than Whites, thereby explicitly increasing the visibility of inequities in health status. The concept of equity is one of the foundational principles of the modern Quality Improvement movement. The Institute of Medicine's (IOM) report, "Crossing the Quality Chasm" (2001)<sup>2</sup>, defined health care quality as constituted by six dimensions for improvement (i.e., six "aims"), one of which is equitable care. More recently, the Triple Aim framework<sup>3</sup> (i.e. best population health, best patient experience, lowest cost) first conceptualized in 2008, expanded to the Quintuple Aim with the addition of workforce well-being and thereafter, health equity<sup>4</sup>.

Despite these notional shifts towards greater equity in health care, significant disparities in outcomes persist as highlighted in Figure 1. Differences in death rates across races showed an encouraging decrease over 2000-2010 (35% higher death rate for Non-Hispanic Black vs. Non-Hispanic White population in 2000 vs. 22% in 2010)<sup>5</sup>, yet improvements have been achieved at a much slower rate since then. In 2019, the adjusted death rate for the Non-Hispanic Black population was c.18% higher than the Non-Hispanic White population (871 deaths per 100,000 population vs. 737)<sup>6</sup>. This gap was slightly wider for males, and was primarily driven by certain modifiable and treatable diseases such as Hypertension (2.2 Non-Hispanic Black to Non-Hispanic White death rate ratio) and Diabetes (2.0 Non-Hispanic Black to Non-Hispanic White death rate ratio).

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<sup>1</sup> Margaret Heckler, Black & Minority Health. US Department of Health and Human Services; 1985

<sup>2</sup> Institute of Medicine (US) Committee on Quality of Health Care in America. Crossing the Chasm: A New Health System for the 21st Century. Washington, DC: National Academies Press; 2001.

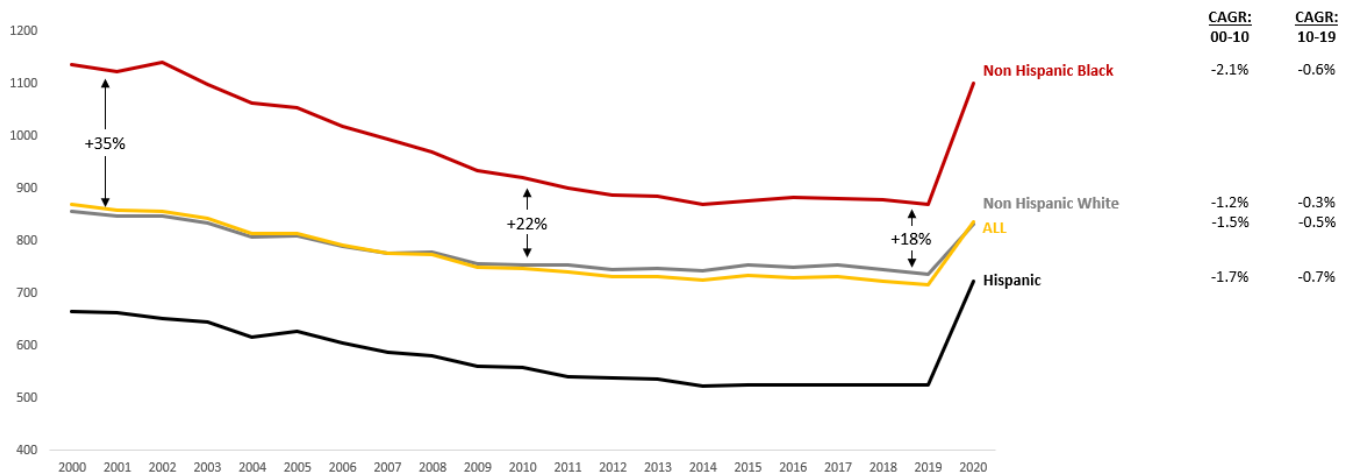
<sup>3</sup> Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The Triple Aim: Care, Health, And Cost. Health Affairs. 27(3), 759–769. <https://doi.org/10.1377/hlthaff.27.3.759>

<sup>4</sup> Institute for Healthcare Improvement. Triple Aim and Population Health. Updated November 14, 2023; Accessed. November 25, 2023. <https://www.ihl.org/improvement-areas/triple-aim-population-health>

<sup>5</sup> Jiaquan Xu, Sherry L. Murphy et al. Center for Disease Control and Prevention; 2013

<sup>6</sup> Jiaquan Xu, Sherry L. Murphy et al. Center for Disease Control and Prevention; 2021

Figure 1: Adjusted death rates by race per 100,000 population; United States; 2000-2020; Both sexes



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics Reports, Deaths: Final Data for 2010 [https://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_04.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_04.pdf), Deaths: Final Data for 2019 <https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-08-508.pdf>, Deaths: Final Data for 2020 <https://www.cdc.gov/nchs/data/nvsr/nvsr72/nvsr72-10.pdf>

In 2020, as the COVID-19 pandemic unfolded in the US, racial variation in health care outcomes surfaced at the forefront of media reporting<sup>7</sup>. African American and Hispanic people exhibited significantly higher mortality rates (Figure 1) and lower vaccination rates. The death of George Floyd at the hands of law enforcement, and social justice campaigns occurring adjacent to the pandemic, further amplified the extent of the disparities experienced by minority communities. The result has been a re-invigorated groundswell of attention for gains in health equity, that has included policy changes to advance conformity strategies. The Centers for Medicare and Medicaid Services (CMS) 2022-2032 Framework for Health Equity<sup>8</sup> has set forth 5 expansive priorities to address disparities. CMS has announced plans for a Health Equity Index to launch in 2027, based on 2024-2025 measurement periods, that will impact the Medicare Advantage plan’s star rating and reward factor<sup>9</sup>. The National Committee for Quality Assurance (NCQA), custodian of the HEDIS measures and the leading accreditor of US health plans, advanced its ambitions for health equity know through the Health Equity Accreditation Plus<sup>10</sup> program launched in 2022. The Joint Commission in 2023 added a health equity standard as part of its health care accreditation programs<sup>11</sup>. In sum, the emerging policy changes create an enabling environment for health care equity strategies to be implemented in practice.

*Applying the Diffusion of Innovation Theory to Health Care*

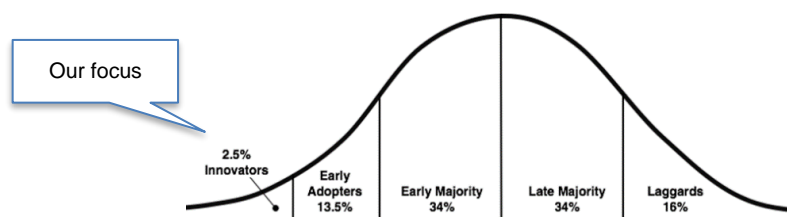
The widely cited Diffusion of Innovation Theory, developed by E.M. Rogers in 1962<sup>12</sup>, explains how an idea or a product spreads across a population through a sequenced process relying on five categories of adopters, as illustrated in Figure 2. The Theory is useful to understand how the contemporary dissemination of health care equity practices may occur in industry. Each category of adopters within Rogers’ Diffusion of Innovation

<sup>7</sup> Basch, C.H., Kecojevic, A. & Wagner, V.H. Coverage of the COVID-19 Pandemic in the Online Versions of Highly Circulated U.S. Daily Newspapers. *J Community Health* 45, 1089–1097 (2020). <https://doi.org/10.1007/s10900-020-00913-w>  
<sup>8</sup> The Centers for Medicare and Medicaid Services, Framework for Health Equity 2022-2032. US Department of Health and Human Services; 2022.  
<sup>9</sup> The Centers for Medicare and Medicaid Services, 2024 Medicare Advantage and Part D Final Rule. US Department of Health and Human Services; 2023  
<sup>10</sup> NCQA. NCQA’s Health Equity Accreditation Programs. Updated September 20, 2023. Accessed October 15, 2023. <https://www.ncqa.org/programs/health-equity-accreditation/>  
<sup>11</sup> The Joint Commission. Advancing Health Care Equity, Together. November 1, 2023. Accessed November 25, 25. <https://www.jointcommission.org/our-priorities/health-care-equity/>  
<sup>12</sup> E.M. Rogers. Diffusion of Innovations. 1st Edition. The Free Press of Glencoe; 1962.

model has unique characteristics, that impacts the attitudes and behaviors that organizations apply to innovations, as follows<sup>13</sup>:

- **Innovators** show a strong interest in new ideas, aspire to be pioneers and have a high risk appetite compared to their peers.
- **Early adopters** are influential opinion leaders. These organizations are acutely aware of the need to change. They are willing to communicate their point of view and experience to their peers, thereby influencing the adoption of innovations more widely.
- **Early majority adopters** usually adopt new ideas before the rest of their peers, but do not assume the explicit role and responsibility expected of an organization that seeks to lead its peers. They may require more compelling evidence before adopting an innovation.
- **Late majority adopters** require far greater persuasion than their peers before they implement change, preferring to observe adoption by a strong share of the majority before doing similar.
- **Laggards** prefer to sustain an established operating cadence, with limited flexibility for innovation. They are difficult to convince of the value of change, and may appear disinterested as their operating environment changes.

Figure 2: Adoption Curve – Rogers’ Diffusion of Innovation Theory



The Diffusion of Innovation Theory holds relevance for health care as described by Donald M. Berwick in his 2003 paper, *Disseminating Innovations in Health Care*<sup>14</sup>. Berwick acknowledges the important role played by innovators and early adopters who lead change, and describes them as “well-connected socially”, with “the resources and risk tolerance to try new things”, and “watched” by others. The landmark, well documented 100,000 Lives Campaign launched by the Institute for Healthcare Improvement in 2004 demonstrated the important role of early change makers in the diffusion of health care improvements. The campaign objective was to reduce preventable deaths for hospitalized patients. Mobilizing only 20 IHI staff, the IHI recorded 120,000+ deaths that were prevented over 18 months<sup>15</sup>. This was achieved partly through the use of the early adoption principle where IHI targeted early adopter hospitals, keen on implementing changes, and relied on these early adopters to serve as mentors to other hospitals.

The model for dissemination of best practices in health care remains overwhelmingly scientific, through scholarly research and peer reviewed publication. However, as Berwick reflects, there should also be room to learn from the practices of “progressive organizations”, as manifest in their pilot projects, experiments and improvement programs. As the pace of innovation in health care speeds up, so to must the pace of

<sup>13</sup> Boston University School of Public Health. Diffusion of Innovation Theory. Updated November 3, 2022. Accessed October 15, 2023. <https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories4.html>

<sup>14</sup> Donald M. Berwick. *Disseminating Innovations in Health Care*. The Journal of the American Medical Association. 289(15):1969-1975. doi:10.1001/jama.289.15.1969

<sup>15</sup> Thomas Bodenheimer. *The Science of Spread: How Innovations in Care Become the Norm*. California Healthcare Foundation; 2007.

dissemination. The alternative would be a re-set to the pre-pandemic environment where the goals of the universally aspired Triple Aim, continued to be out of reach for major health care systems around the world.

### *Designing Health Care Equity Innovations*

However motivated, it is clear that some health care organizations are designing and implementing health care equity strategies for scale and impact. Assuming the role of vanguards (innovators and early adopters), their successes will offer inspiration and practical roadmaps for others to follow, paving the way for the diffusion of health equity initiatives.

Independent of where health care organizations place on the adoption curve, designing and implementing a strategic approach for health care equity requires leaders to make difficult choices in the presence of uncertainty and asymmetries of information. These choices must be made consistently with, and in consideration of, important contextual factors, including organizational preferences and characteristics, conformity with regulations, and collaborative engagements with other entities within the health care ecosystem. Specifically, the strategic choices facing health care organizations planning equity strategies relate to the following decisions:

1. Scope of Accountability: What to do
2. Organizational Capabilities: How to do it
3. Risk Appetite: Setting the velocity of change

### **Defining an Organization's Scope of Accountability: What to Do**

The CDC defines health equity as the “state in which everyone has a fair and just opportunity to attain their highest level of health”<sup>16</sup>. Health *care* equity, more narrowly, relates to the outcomes of care, both clinical and personal, experienced by patients while accessing and receiving care within a health care system (Ma et al., 2023)<sup>17</sup>. These two concepts are obviously related but are subject to varying degrees of influence by individual health care institutions.

This distinction between health *care* equity and health equity is useful for measurement, analysis, financing, and incentive design. Improving health equities usually begins at the policy level. Macro-level regulatory changes aim to benefit marginalized populations through initiatives affecting poverty, education, housing, employment, and their variation across communities. In contrast, health care equity outcomes can be attributed more directly at the entity or individual level, where the influence on the determination of priorities and implementation is within the control of the health care organization. Through initiatives directly addressing health care equity, institutions influence health equity outcomes in the proximate community and, through advocacy and best practice sharing, larger segments of society. To be effective in this effort, an organization needs to define its scope for improving equity through a dual approach: (1) what the institution can impact directly, and (2) how it can influence aspects outside its direct control. This approach is consistent with the principles underlying the Report by the Special Representative to the Secretary General of the United Nations (2008), which describes how multinational businesses may approach Corporate Social Responsibility (CSR) goals. This approach, when applied to equity strategies in health care, means that organizations should first, prioritize the improvement of equity outcomes within their direct control. Second, they should seek opportunities to exert influence on more distal equity outcomes such as food insecurity and transport, even without direct accountability for mitigating social risk factors.

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<sup>16</sup>Centers for Disease Control and Prevention. What is Health Equity. Updated July 1, 2022. Accessed October 15, 2023. <https://www.cdc.gov/nchhstp/healthequity/index.html>

<sup>17</sup> Ma et al. Distinguishing Health Equity and Health Care Equity: A Framework for Measurement. *Nejm Catalyst*. doi: 10.1056/CAT.22.0442. <https://catalyst.nejm.org/doi/full/10.1056/CAT.22.0442>

## Determining an Organization's Capabilities: How to Do It

In determining its health care equity strategies, each health care organization must face a key choice: Should health equity be a mix of circumscribed, time defined projects, or an organizational vision fully integrated into the entity's strategy and embedded in its organizational culture and values? The answer has important implications for planning, execution, and evaluation. Specifically, the positioning between these extremes influences talent acquisition, skills development, resource allocation, organizational priorities, and expectations for investors and stakeholders.

Health care organizations developing equity innovations can learn from the historical evolution of Corporate Social Responsibility (CSR) to the contemporary widescale implementation of ESG (Environmental, Social and Corporate Governance) strategies. Corporations have long attempted to contribute to the betterment of society beyond the economic value created for their investors. Until the shift from philanthropy-based CSR to "shared value" (Porter & Kramer, 2011)<sup>18</sup>, corporate contributions were in the form of philanthropic donations for initiatives that could be related or unrelated to the organization's mission and production function. In the absence of mandates, implementing CSR strategies came down to several key factors, including the following: strength of prevailing evidence or the business case for CSR; influence of leaders; peer pressure; organizational culture; and, competing strategic priorities. These factors can be useful to health care institutions as they define their strategic approach to health care equity. Given the pressing societal need and the changing regulatory environment, ignoring health care equity altogether is unlikely to be a favored approach. However, not every institution needs to begin its journey by adopting a fully integrated health equity lens to all aspects of its strategy. Organizations that make the choice to begin small should still anticipate the future need for scale and work toward building the foundational infrastructure to grow appropriate capabilities when needed.

## Evaluating an Organization's Risk Appetite: Setting the Velocity of Change

To forecast the returns of executing a strategy over time, organizations must determine the strategy's velocity, or rate of advancement along the adoption curve.

The advantages of being an industry vanguard, have been described in business literature over the past decades. Marvin B. Lieberman and David B. Montgomery in their seminal 1988 article *First Mover Advantages*<sup>19</sup>, identified three benefits leading to financial gain accrued to first movers: sustained technological leadership enabled by early research and development investments or a more advanced learning curve than peers; the ability to leverage scarce, high value resources including professional talent; and enhanced consumer retention from switching costs such as initial transaction fees or contractual costs<sup>20</sup>. Additionally, first movers benefit from consumer centered advantages including the value placed on organizational attributes such as brand loyalty, public image and reputation<sup>21</sup>. Importantly, and of relevance to health care equity, innovators and early adopters have an opportunity to set the standards for their initial product categories<sup>21</sup>, entrenching their brand leadership while simultaneously raising the expectations of peers, to match or exceed what has been achieved. However, there are also disadvantages that may arise from being a vanguard that need to be balanced with the benefits. Arguably, the most obvious and pervasive disadvantage to being first, is the "free rider" effect<sup>19</sup>, where vanguard organizations are vulnerable to peers sharing in the gains of innovations without incurring similar cost outlays. There is a further risk to first movers of falling behind late entrant peers who may be better placed to leverage technological advancements and changes in customer preferences<sup>19</sup>.

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<sup>18</sup> Michael E. Porter, Mark R. Kramer. Creating Shared Value. Harvard Business Review. 2011

<sup>19</sup> Marvin B. Lieberman, David B. Montgomery. First-mover advantages. Strategic Management Journal. <https://doi.org/10.1002/smj.4250090706>

<sup>20</sup> Fernando F. Suarez and Gianvito Lanzolla. The Half-Truth of First-Mover Advantage. Harvard Business Review. 2005

<sup>21</sup> Peter N. Golder and Gerard J. Tellis. Pioneer Advantage: Marketing Logic or Marketing Legend. Journal of Marketing Research. <https://doi.org/10.1177/002224379303000203>

The sensitivity surrounding health care equity will likely influence the unpredictable and uncertain nature of how an organization's stakeholders will respond to equity strategies. Each health care organization should determine the velocity (how fast or slow) at which they aspire to create value from their equity innovations informed by its risk appetite, where risk appetite represents an organization's choice of risk-reward balance. Early change-makers will typically exhibit high tolerance for risk, being first and boldest with executing health care equity initiatives aiming to deliver great value. Their higher tolerance for risk, will likely be reinforced by several internal and external factors:

- Pressure from social activists scrutinizing measurable impact of equity initiatives on the social determinants of health beyond those directly under the control of the organization;
- Negotiation pressures from purchasers of health care services to do more and go faster;
- Advocacy from patient representatives;
- Higher costs to meet governance expectations of more comprehensive and complete compliance, such as the cost outlay for systems development.

An open question is whether there is an advantage to being first and going fast on health care equity. By this we consider whether early health care equity change-makers can leverage their momentum to differentiate themselves from their peers and accrue value for being "best in class" for health care equity. On the other end of the adoption curve, choosing to be a laggard might be acceptable for organizations with a particularly low appetite for risk in the short term. In the absence of mandates or regulatory requirements, organizations might choose to retain the status quo and have no explicit health care equity strategies. However, the same factors that drive the early change-makers' higher risk appetite will likely exert similar pressure on these organizations in the medium-long term. In the face of growing pressure to respond publicly on a matter as sensitive as equity, being a laggard might be acceptable in the short term, but likely not in the medium-long term. Thus, laggards must also structure their health care equity strategies, albeit at a lower velocity. As disparities in care gain a greater share of public discourse, all health care organizations must be prepared to respond when the spotlight is shone on them.

### *Collecting Sociodemographic Data*

It is very likely that organizations will be required to measure and report on their performance on health care equity metrics. At a minimum, measurement will serve a compliance requirement; but measurement may also offer a strategic opportunity to shape organizational health care equity strategies. The measurement of sociodemographic data for the purpose of identifying disparities in health care, is fraught with complexity. The Office of Management and Budget (OMB) defines and maintains minimum standards for how data is reported on race and ethnicity for Federal reporting. The OMB has defined a minimum of 5 race categories and 1 ethnicity category for all reporting in the US<sup>22</sup>. These broad categories over-simplify reality, with the CDC Race and Ethnicity Code system currently assigning 956 detailed race and ethnicity codes<sup>23</sup>. In addition to the OMB's minimum race and ethnicity categories, organizations are considering how to collect and report on language, gender, sexual orientation, and disability status. At state level, the collection of self-reported sociodemographic data such as race and ethnicity is not mandated for enrolment in federal plans. Similarly, commercial payers do not mandate the collection of sociodemographic data at enrolment. Frontline providers have collected sociodemographic data at varying levels of consistency via administrative, servicing and clinical work-flows, casting doubt on the completeness and accuracy of data.

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<sup>22</sup> National Institutes of Health. Office of Management and Budget (OMB) Standards. Updated June 28, 2023. Accessed November 25, 2023. <https://orwh.od.nih.gov/toolkit/other-relevant-federal-policies/OMB-standards>

<sup>23</sup> Lisa Nelson and Lenel James. Race and Ethnicity: The Importance of Standardized Data Collection and Management. Presented at HL7 International. April 19, 2023. Accessed November 29, 2023.



Data standards are evolving at a fast pace to catch up with the momentum associated with equity. In 2023, the Office of Management and Budget is in a public review process with recommendations to combine race and ethnicity, and add North Africa/Middle Eastern as a category<sup>24</sup>. Race and ethnicity are included in Medicare enrolment data, where CMS uses the Social Security Administration (SSA) and an algorithm (including name and address) as its primary sources. Reviews of the Medicare data sets have highlighted inaccuracies and incompleteness of the existing data and made recommendations for improvement<sup>25</sup>. To enhance the direct collection of self-reported sociodemographic data, CMS took an important initial step forward and added race and ethnicity to the 2023 Medicare Part C and Part D enrolment forms<sup>26</sup>. Of note, the Medicare Health Equity Index will initially only stratify measures on the basis of disabilities and/or dual eligible/low income subsidy status<sup>27</sup>.

The direct collection of self-reported data is consistently referenced to as the gold-standard that organizations should aspire to achieve, but is notably a high threshold at an individual entity level. Commercial payers do not mandate reporting on enrolment. Many use imputation methods to predict estimates off small samples. Some hospital systems are investing in staff training to educate members about why the demographic information is needed in attempts to increase the rates of self-reporting. Under-served populations, the intended beneficiaries of equity interventions, may be quite distrustful of the healthcare system, and reluctant to share identifiable data, even if explanations are provided, thereby reducing the usefulness of self-reporting as the preferred mode of collection.

Rather than aim for perfection, organizations may do well by identifying those data collection opportunities that are within their control, for the populations that they serve. Policy-makers can also provide guidance e.g. NCQA has identified a select group of HEDIS measures that payers can focus on to begin their equity improvement strategies. Benchmarking and accreditation across health care systems and states based on sociodemographic data may be more complicated for the reasons described above. It is important to balance the collection of sociodemographic data as a catalyst for improvement with the avoidance of penalties for organizations who are slower than peers with data collection efforts due to the inherent organizational challenges.

### *Disseminating Best Practices*

Given the role of innovators and early adopters to drive change as role models and go-to advisors, we place the spotlight here on health care leaders, within prominent health care organizations, acting as such for health care equity innovations. We sought to understand from these vanguards about the choices they are making to define their strategic approach to designing and implementing health care equity strategies, the challenges they are grappling with, and the opportunities they see in the future. From their respective vantage points across the health care ecosystem, we asked what they are doing about health care equity and how they are doing it. The insights they shared, of their vision, strategies, and projects, are an important contribution to the dissemination of equity innovations in health care.

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<sup>24</sup> Richard L. Revesz. Initial Proposals For Updating OMB's Race and Ethnicity Statistical Standards. Office of Information and Regulatory Affairs; 2023

<sup>25</sup> Office of Inspector General. A Resource Guide for Using Medicare's Enrollment Race and Ethnicity Data. US Department of Health and Human Services; 2023

<sup>26</sup> The Centers for Medicare and Medicaid Services, Medicare Enrollment and Appeals Group – July 5, 2022. US Department of Health and Human Services; 2022.

<sup>27</sup> Adhere Health. Resolving Health Disparities with the Health Equity Index for Medicare Advantage Plans. Blog. February 7, 2023. Accessed November 25, 2023. <https://adherehealth.com/resolving-health-disparities-with-the-health-equity-index/>

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Missy Danforth, The Leapfrog Group

Mark Friedberg, Blue Cross Blue Shield Massachusetts

Deirdre Mylod, Press Ganey

Meika Neblett, RWJBarnabas Health

Sai Ma, Elevance Health

Christopher Whitfield, ex-Gilead

It is our hope that the talented graduate students who attended the study group sessions and engaged openly and with curiosity, find ways to contribute to strengthening health care systems for all patients and their families.

## Missy Danforth and The Leapfrog Group



### Missy Danforth is a nationally recognized thought leader in patient safety and hospital quality ratings

Ms. Missy Danforth has more than 20 years of experience in the health care industry. She is the Vice President of Health Care Ratings at The Leapfrog Group where she informs the organization's strategic direction, engaging experts and stakeholders, and analyzing program results to drive safety and quality improvements. She administers Leapfrog's various measurement and public reporting activities including the Leapfrog Hospital and Ambulatory Surgery Center Surveys, the Hospital Safety Grade, Leapfrog's Value-Based Purchasing Program, and Leapfrog's new partnership with the American Diabetes Association, which recognizes hospitals providing exceptional care for patients with diabetes. Ms. Danforth serves on the governing board of Battelle's Partnership for Quality Measurement (PQM) and has served on various other national committees and technical expert panels. She is currently leading a four-year project to develop national standards for reducing harm to patients from diagnostic errors.

### About The Leapfrog Group

The Leapfrog Group (Leapfrog) is a non-profit company, founded in 2000 in response to the publication of the seminal *To Err is Human* report. This willingness to lead change is deeply rooted in the company's DNA and its "bold transparency". Based in Washington, DC and representing the nation's largest employers and purchasers of health benefits, Leapfrog works to make great leaps forward in the safety, quality, and value of healthcare. The organization collects, analyzes, and publishes data on quality and safety in hospitals to trigger improvement in the quality of care that is delivered in the US. Fiercely independent, with rigorous analytical methodologies and high standards, Leapfrog is very influential in the health care ecosystem, having graded 2,870 hospitals in 2022. Of note, 1,246 hospitals reported using Leapfrog safety ratings for senior leadership compensation. Overall, 73% of in-patient hospital beds in the US are included in Leapfrog's annual Hospital Survey. Additionally, Leapfrog's CEO, Leah Binder, is consistently cited among the most powerful and influential people in health care.

### Key insights

- Leapfrog considers health care equity to be an **important pre-requisite for health care quality and safety**. Equity is therefore part of the organization's core mission and influences how the organization assesses patient safety.
- Patient experience scores decreased during the pandemic, signaling an erosion of trust that patients held for health care systems. Improvements in equity are that more relevant in this environment.
- Leapfrog aims to first advance equity where the organization has **influence and control**, namely within hospitals and ambulatory surgical centers.
- It is developing plans to evaluate patient safety through an **equity lens**:
  - In 2023, the organization collected stratified data by race and ethnicity of cesarean section rates to assess variation in this measure. The data was collected on a voluntary basis and represented a small though significant step towards analyzing equity in safety data.
  - The organization launched a large-scale study across 15 states, involving greater than 10 million patients, to formulate a comprehensive view of health care inequities across the US.
- Leapfrog influences providers to first, **strive for equity goals** that are achievable, and second, to set aspirational equity goals that collectively raise the industry threshold for health care equity improvements.
- Leapfrog is developing a **national standard on health equity** for hospitals and ambulatory surgical centers to increase the national reach, scale and momentum of health care equity initiatives. Standards signal what to prioritize and serve as boundaries for strategies. The national standard will consist of **six components** that are correlated with achieving health care equity in the care that is delivered: (i) Collection of patient self-reported demographic data; (ii) Training for staff responsible for collecting the data; (iii) Stratification of quality measures using the data; (iv) Action plans if disparities are identified; (v) Communication to the public about efforts to reduce disparities; (vi) Accountability through board reporting.
- As highlighted by the organization's CEO: "We cannot have quality in health care without equity". Equity is therefore part of Leapfrog's core mission and influences how the organization assesses safety.
- Since 2020, the organization has made **steady iterative progress** with its equity strategies and plans, from fact-finding exercises, stakeholder consultation, analytical studies, introducing measure stratification in the 2023 Leapfrog survey, and a **planned leap in 2024 with the national equity standard**.

Source: Organization website and published information, Executive biography, Study group 11/01/2023

## Mark Friedberg and Blue Cross Blue Shield Massachusetts



### Mark Friedberg is a physician leader, researcher and expert in health systems, quality improvement and payment reform

Dr Mark Friedberg is Senior Vice President, Performance Measurement & Improvement at Blue Cross Blue Shield of Massachusetts. He is responsible for measuring and improving the quality and equity performance of BCBSMA's provider network, including metrics used in value-based contracts such as the seminal Alternative Quality Contract. He led the design of BCBSMA's pay-for-equity program, which is the first accountable care contract in the nation to apply financial incentives directly to measures of health equity. Before joining BCBSMA in 2019, Dr. Friedberg was a health services researcher at RAND, where he led multiple projects to measure, evaluate, and improve health system performance. He is a general internist and provides primary care at Brigham and Women's Hospital, where he completed his residency and fellowship. Dr Friedberg holds a Master's degree and a Doctor of Medicine.

### About Blue Cross Blue Shield Massachusetts

Blue Cross Blue Shield of Massachusetts (BCBSMA) is a non-profit private health insurance company BCBSMA, and part of the national Blue Cross Blue Shield Association. The organization has a strong presence in the state with 2.9 million medical members and 974, 000 dental members. BCBSMA's provider network is wide and includes 75, 000 clinicians and 74 hospitals. BCBSMA is consistently recognized as one of the best health plans for member satisfaction and quality. As a non-profit organization, BCBSMA's focus is mission and values driven, aiming to support the community that it serves. The innovative organization is known for several 'firsts' in the health insurance market. Its Alternative Quality Contract (AQC), launched in 2009, was transformative for using a global budget linked to pay-for-performance measures. In recent years, BCBSMA has been using AI technologies to lower the administrative burden placed on providers.

### Key insights

- BCBSMA uses the Institute of Medicine's definition of quality as described in the **"Crossing the Quality Chasm"** report.
- Equitable health care is a **central organizational tenet** that alongside quality, affordability and consumer experience, is formally included in BCBSMA's mission statement.
- Equity was an implicit inclusion in the AQC, with evidence that the AQC lower socio-economic population had higher HEDIS performance than non-AQC higher and lower socio-economic populations.
- BCBSMA **had anticipated and been preparing** for a greater national focus on equity, which came during the tumultuous events of 2020. Despite the challenge of nationwide deficits in equity data facing the health care industry, BCBSMA acted fast to leverage the renewed momentum on equity and drive new initiatives.
- The company has designed an **organizational-wide health care equity strategy** that extends across all business functions, namely, care, workforce, culture, products and services, and community.
- The commitment by **senior leadership** and an external **Health Equity Council** are key to ensuring the success of the organization's equity strategy.
- As a significant part of BCBSMA's commitment to advancing equity in health care, equity has been added to all components of the AQC as follows:
  - **Data:** since 2021, Equity reports (refreshed annually), covering 1.2 million members, are shared confidentially with all AQC providers. The reports highlight opportunities to address racial and ethnic disparities.
  - **Support:** is offered in the form of an **Equity Action Community (EAC)** launched in partnership with the Institute for Healthcare Improvement (IHI), and **Grants** are awarded to contracted providers who participate in the EAC to support equity improvement efforts.
  - **Pay for Equity Incentives:** involves financial incentives related to equity measures, with the intent to support providers with investing in equity initiatives.
- BCBSMA recognizes the importance of **self-reported race, ethnicity and language data**, which is not captured at enrolment. Since 2020, the organization has significantly increased efforts to collect demographic data. BCBSMA has proactively implemented several systematic initiatives to

strengthen the **direct collection of self-reported race and ethnicity** data including an on-line pop-up survey on the website and a mailed survey. Member churn complicates the rates and stability of self-reported race and ethnicity data, as does the yield of responses from surveys. In 2023, 22.5% of current BCBSMA members have provided race and ethnicity data (approximately 26% for ACQ attributed members). The organization has prioritized the collection of race and ethnicity data with detailed plans for the short-medium term.

*Source: Organization website and published information, Executive biography, Study group 11/15/2023*

## Deirdre Mylod and Press Ganey



**Deirdre Mylod is a highly regarded executive, known nationally for her expertise in improving patient experience and health equity**

Dr. Deirdre Mylod is a nationally renowned expert in patient experience, having spent over 25 years at Press Ganey researching the topic. She is currently holding leading positions within the organization, serving as executive director of the Institute for Innovation and as senior vice president of Research & Analytics. In this joint role, she is focused on advancing the understanding of the entire patient's experience. Through the Institute, she engages in partnerships with leading health care providers to implement transformative concepts for improving the patient's experience. Dr. Mylod has been leading Press Ganey's Equity Partnership since 2020. Through this work she has surfaced national patterns of patient and workforce experience segmented by race, ethnicity, and other aspects of identity. Dr Mylod holds a Master's degree and a PhD in Psychology.

### About Press Ganey

Press Ganey specializes in the development, distribution, and analysis of patient satisfaction surveys. It was one of the first organizations to conceptualize the importance of patients' experience as an indicator of health care quality. It is a widely recognized health care organization, operating globally, with 38 years of history and several Human Experience Awards. The company is influential in the health care ecosystem and benefits from what it reports to be largest database of patients' feedback, at one billion patient voices around the world. Press Ganey is the strategic business partner to more than 41,000 healthcare facilities. One of the organization's core values, "Dare to try, commit to learning", highlights its openness to change, and willingness to take reasonable risks to progress.

### Key insights

- Press Ganey has been **influencing health care providers** for almost 4 decades through its pioneering work on **patient experience**.
- The publication of the report *To Err is Human* in 1999 marked a tipping point in the industry understanding of health care equity.
- Patient experience is widely recognized as an important aspect of health care quality, alongside processes and outcomes, to the extent that it is reimbursed for and included in federal and commercial payment models.
- More recently, following the social justice campaigns in 2020 and the increased awareness of health care equity, Press Ganey assumed a **leading role** with collecting and analyzing stratified patient data.
- Press Ganey has been leveraging its unique data and analytical patient experience insights to guide and support providers to **reduce disparities** by (i) raising awareness about existing inequities, (ii) identifying major areas of improvement, and (iii) designing targeted strategies with quantified objectives.
- Press Ganey aims to **extend its impact on advancing health care equity beyond its direct influence** through its novel **Equity Partnership**. The initiative serves as a learning resource hub for clients, enables the dissemination of best practices, and provides the opportunity to engage in constructive dialogue. Participating providers may access a large set of improvement resources, including analytics to better understand disparities and gaps in care, learning material and publications.
- Press Ganey regards health care equity as an organizational strategic **priority**, and is working closely with health care providers on the issue. The organization demonstrated the benefits of having a clear **Diversity, Equity and Inclusion (DEI) strategy** to providers through a dedicated study in 2021, that involved an analysis of employee engagement of 410,000 health care workers.
- Press Ganey is at the **forefront of health care equity** and has been progressing at a fast pace: it launched its Equity Platform in **July 2020** (notably just 2 months after George Floyd's death), published its DEI study in **2021**, and focused extensively on health care equity during its **2022** National Client Conference.

Source: Organization website and published information, Executive biography, Study group 10/11/2023

## Meika Neblett and RWJBarnabas Health



### Meika Neblett is a physician executive, leading transformative equity innovations on the frontline of care delivery

Dr Meika Neblett is a highly experienced physician with extensive knowledge of health care systems. Dr. Neblett currently serves as the Chief Medical Officer, Chief Academic Officer, and Chief Quality officer of the Community Medical Center in Toms River, New Jersey. She completed a residency in emergency medicine and practiced medicine in Okinawa, Cape Town, Zimbabwe and Ghana. In recent years, Dr Neblett has been leading several high profile health care equity initiatives including lecturing on implicit bias, creating a health equity lecture series and focusing on race-based medicine in healthcare. Dr Neblett has supported the implementation of a self-referral mammogram screening process for all patients throughout RWJBarnabas Health, and helped to develop a Maternal Child Health Implicit Bias training video with the New Jersey Hospital Association. Dr Neblett holds a Master's degree and a Doctor of Medicine.

### About RWJBarnabas Health

RWJBarnabas Health is a network of health care providers in New Jersey, founded in 2016 following the merger of the Robert Wood Johnson Health System and the Saint Barnabas Health Care System. Its partnership with Rutgers University, has resulted in the largest academic health care system in the state. In 2022, the network treated 3 million patients, with 2 million outpatient visits. The organization reports a complement of 37, 000 employees, 9, 000 physicians, and 1, 000 residents and interns. The group manages care delivery through an expansive network of facilities including 12 acute care hospitals, 3 acute care children's hospitals, outpatient centers and 2 trauma centers. RWJBarnabas Health reports advancing innovative strategies in high-quality patient care with education and research to address both the clinical and social determinants of health. The organization invests in community development programs and views its DEI strategies as a key component of its focus on equity. The organization has implemented equity focused programs for maternal and oncology care.

### Key insights

- Guided by the state's 10 year strategic blueprint, New Jersey 2030, RWJBarnabas Health's health equity strategies span clinical care, workforce, operations, and community.
- The Community Medical Center (CMC) has defined a set of priorities including technological bias, disease disparities, under-representation of minorities within the workforce and race-based health care practices.
- Equity strategies are implemented in a considered, transparent and structured manner by identifying a problem, selecting benchmarking measures, analyzing the problem, **building consensus for an intervention**, and follow-up after implementation.
- CMC addressed the **technological bias** discovered with pulse oximeters and the finding that skin pigmentation could alter the reading of a pulse oximeter measurement, leading to poor clinical outcomes. A policy was implemented where only **FDA approved medical oximeters were made available to employees**, made more difficult during supply chain shortages in the height of COVID.
- An initiative was implemented to **decrease the percentage of Black women diagnosed with late-stage breast cancer** by increasing the number of women screened for breast cancer. The intervention involved the **removal of prescriptions for screening mammography**, resulting in more convenient access to mammography services for Black women. The initiative was successful in achieving its 2023 target.
- CMC is focused on increasing the presence of racial and ethnic professionals who are underrepresented in medicine (**URiM**) through several interventions, including implicit bias training, the Black Executive Alliance mentoring program, a health equity lecture series, and a medical student diversity scholarship.
- CMC is critically re-evaluating **race-based practices** in clinical management such as point of care clinical calculations for renal and pulmonary function. Co-efficients and factors that adjust for race are built into these point of care calculations which may **over-estimate organ function in Black patients, consequently delaying treatment initiation**.
- CMC has set ambitious plans to scale its health equity strategies extending to in and out of hospital settings. The **commitment of senior leadership** was the key to the development and implementation of equity initiatives. Equity was positioned at the center of the **organization's mission**, and this continues to drive the scale and velocity of change.

Source: Organization website and published information, Executive biography, Study group 11/15/2023

## Sai Ma and the Measurement of Health Care Equity



**Sai Ma is a social scientist and industry thought leader with expertise in the collection of sociodemographic data and the measurement of health care equity.**

Dr. Sai Ma is a nationally recognized health care expert with twenty years of experience in the industry. She is a highly regarded thought leader and the author of greater than 30 publications in high profile journals, including on the subject of health care equity. She held various positions across the health ecosystem in government, academia, research organizations, and health insurance. Dr. Ma has extensive expertise in quality measure development and application, health equity, Medicare policy, and value-based purchasing programs. She has led work in identifying health disparities and improving health equity while working at Humana and the National Quality Forum (NQF). She currently holds a leading role at Elevance Health where she serves as director for Enterprise Clinical Quality. Dr. Ma holds a Master's degree and PhD in Health Policy Analysis.

### Key insights

- Organizations should aim to **exercise their influence within the ambit of their core business operations** to improve health care equity for the populations they serve.
- The **development and measurement of equity metrics** should be at the core of a health care organization's health care equity strategies.
- The collection and **stratification of equity data** should align with certain guiding principles:
  - The **quality and completion of input data** needs to be sufficiently high to allow for meaningful measure stratification that surfaces actionable opportunities for intervention and improvement. This amplifies the point that data should be collected for the purpose of enabling strategic actions for improvements in health equity.
  - **Socio-economic factors**, should be considered in data stratification, in addition to and in combination with race and ethnicity, to provide a more detailed, nuanced analysis to identify opportunities for improvement. For example, income stratification within racial and ethnic groups can surface data insights unique to the intra-group analysis, that would be missed without the deeper analysis. Deeper levels of analysis that account for the heterogeneity of racial and ethnic population groups offers more complete views of the challenges and opportunities facing populations.
  - It is important for organizations to carefully choose a relevant **benchmark or reference group** with which to compare stratified data, draw conclusions about findings, and establish targets for improvement.
- **Disparities within groups**, and not only across groups, should be considered as there is heterogeneity within groups. Despite an acceptable average performance within a group, it is important to pay attention to the lower end of the performance spectrum due to potential wide variations.
- A conceptual model for health and health care equity<sup>17</sup> includes several key distinguishing principles: **Health Care Equity** involves an understanding of disparities along a patient's care journey within health care systems that provide opportunities for improvement that are within healthcare organizations' purview, at distinct touch-points:
  - Prevention and access: to proactively support equitable access to care;
  - Transitions: to ensure equitable admission practices and transitions between care units or care settings;
  - Quality of care: to support equitable quality of care by tracking relevant metrics such as infection and mortality rates
  - Post discharge: to offer equitable social and health literacy support to patients and families during the transition to care post admission.

**Health Equity** is defined as societal and structural equity that is measurable at a community level and includes socioeconomic and environmental factors such as the economy, labor market, neighborhood poverty, neighborhood physical conditions and housing.

<sup>17</sup> Ma, et al. Distinguishing Health Equity and Health Care Equity: A Framework for Measurement. NEJM Catalyst. DOI: 10.1056/CAT.22.0442



## An Example of Elevance Health and Equity

Elevance Health is a publicly listed American Health Insurance provider, offering a comprehensive suite of commercial, Medicare and Medicaid plans to 47.5 million members. It has an expansive national provider network including 97% of all US hospitals. Positively, 21 of the organization's affiliated Medicaid plans are reported to be the first nationwide to earn a three-year accreditation for health equity from the National Committee for Quality Assurance (NCQA), serving greater than 90% of Elevance Health members. The company sought to strengthen work force capabilities and competencies on equity by enrolling Medicaid leaders in a health equity leadership development program at the Harvard T.H. Chan School of Public Health.

Elevance Health has defined key focus areas to improve equity through its proactive and comprehensive **Health Equity by Design** strategy through several stated commitments:

- Collection of socio-demographic consumer data;
- Cultivating an enterprise culture of health equity;
- Improving access and affordability;
- Supporting care providers through capacity efforts and incentive to deliver on advancing health equity;
- Expanding best practices for health outcome improvement.

*Source: Organization website and published information, Executive biography, Study group 10/11/2023*

## Christopher Charles Whitfield and Global Health Equity



**Christopher Charles Whitfield is a bio-pharmaceutical expert with over 30 years of experience leading businesses to highest levels of performance**

Mr. Christopher Whitfield has deep expertise of building and expanding product access through successful product commercialization in the global biopharma and diagnostic health care industry. He served both as a global Executive of large pharmaceutical companies and as a successful startup founder. Mr. Whitfield most recently served as the Executive Director and General Manager at Gilead, where he was responsible for the entire Africa business, extending across 54 countries. Before that, he spent greater than 15 years at Eli Lilly, including 4 years as CEO for South Africa. He has 12 years of entrepreneurship experience during which he founded five health care companies. Mr. Whitfield is an advisor to the Carlyle Group, director of the Eli Lilly Foundation South Africa and Vice Chairman of Innovative Medicines South Africa. Mr. Whitfield holds a Master's degree in Business Administration.

### Key insights

As global focus on health equity continues to grow, amplified by the disparities experienced during the pandemic, multi-national companies are undertaking efforts to advance health equity within their global operations. Many of the diseases targeted by global pharmaceutical companies, affect mainly vulnerable populations in developing countries. Therefore, it is not uncommon for governments, NGO's and patient advocacy groups to lobby **strongly for improved health care equity**, often manifest through requests for improved access to therapeutics within global supply chains. Such advocacy influences how multinational companies shape their mission and implement strategies in global markets. Context matters for global health equity, particularly the appreciation and understanding that each country has its unique operating circumstances and societal dynamics. There is a need to develop the lexicon for global health equity, appreciating that solutions have to consider internal organizational and external environmental challenges. Global health equity strategies are mostly developed through **partnerships with local stakeholders** and implemented as **targeted community-based improvement programs**. Partnerships should be governed by well-crafted **Memoranda of Understanding**. For sustainability, the **return on investment for equity projects** should be developed by combining the imperative to do what is right for patients and stakeholders, with improving value to the multinational organization. The distinction in scope between health equity and health care equity is useful for multinational companies facing the questions of, **how far to go**, and what is the responsibility of governments and other national stakeholders? Smaller, **nimble entrepreneurial ventures** may be able to advance faster with implementing health care initiatives, but have to balance the velocity of execution with the cost of new projects, resources and capabilities. **Timing** is key in global markets, as is stakeholder alignment. Understanding dynamic patient needs and **mapping patient journeys** with an understanding of the **prevailing social determinants** of health, are important success factors to advancing equity strategies. Multinational companies could advance global health equity by tackling gaps that are common to the industry. One such pressing gap, is the need for greater global representation, inclusiveness, and diversity in the design of research trials.

### An example of Gilead and Global Health Equity

- Gilead considers one of its key purposes as promoting health care prosperity in most vulnerable communities in low and middle-income countries. Gilead seeks to **advance health equity in the southern hemisphere** and is keen to partner with **local stakeholders**.
- Gilead promotes health equity in developing countries through **improving affordability** via (i) tiered pricing and access pricing with discounts on medicines based on national per-capita income and (ii) responsible licensing of generic versions of the company's products.
- Gilead's efforts to improve global health equity are in the form of **grants** such as through the Gilead Foundation and **partnerships** with non-profit organizations.
- The company develops programs where its leading products are used to supporting vulnerable communities such as the launch of a **Hepatitis C** improvement initiative in India's Prison Population, and a **breast cancer** research program to assess the impact of ethnicity on metastasis rates in the US.

#### **An example of Eli Lilly and Global Health Equity**

- Eli Lilly promotes health equity worldwide mostly through **partnerships** and a dedicated **foundation**.
- The company partners with **local stakeholders** to launch regional initiatives and address health care challenges mostly related to non-communicable diseases. Diabetes is a key focus and includes programs such as the Tshwane insulin project in South Africa, and the gestational diabetes project in Mexico.
- Global collaborations include a partnership with UNICEF to improve the health of children at risk of chronic non-communicable disease around the world.
- In the US, the organization seeded funds to the **Direct Relief Fund for Health Equity in 2021** as a commitment to racial justice. The fund offers access to free clinic care, and provides grants to community organizations to improve health equity, including interventions addressing the social determinants of health.

*Source: Organization website and published information, Executive biography, Study group 11/01/2023*

## References

1. Margaret Heckler, *Black & Minority Health*. US Department of Health and Human Services; 1985.
2. Institute of Medicine (US) Committee on Quality of Health Care in America. *Crossing the Chasm: A New Health System for the 21<sup>st</sup> Century*. Washington, DC: National Academies Press; 2001.
3. Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The Triple Aim: Care, Health, And Cost. *Health Affairs*. 27(3), 759–769. <https://doi.org/10.1377/hlthaff.27.3.759>
4. Institute for Healthcare Improvement. Triple Aim and Population Health. Updated November 14, 2023; Accessed. November 25, 2023. <https://www.ihl.org/improvement-areas/triple-aim-population-health>
5. Jiaquan Xu, Sherry L. Murphy et al. Center for Disease Control and Prevention; 2021
6. Jiaquan Xu, Sherry L. Murphy et al. Center for Disease Control and Prevention; 2013
7. Basch, C.H., Kecojevic, A. & Wagner, V.H. Coverage of the COVID-19 Pandemic in the Online Versions of Highly Circulated U.S. Daily Newspapers. *J Community Health* 45, 1089–1097 (2020). <https://doi.org/10.1007/s10900-020-00913-w>
8. The Centers for Medicare and Medicaid Services, *Framework for Health Equity 2022-2032*. US Department of Health and Human Services; 2022.
9. The Centers for Medicare and Medicaid Services, *2024 Medicare Advantage and Part D Final Rule*. US Department of Health and Human Services; 2023
10. NCQA. NCQA’s Health Equity Accreditation Programs. Updated September 20, 2023. Accessed October 15, 2023. <https://www.ncqa.org/programs/health-equity-accreditation/>
11. The Joint Commission. Advancing Health Care Equity, Together. November 1, 2023. Accessed November 25, 25. <https://www.jointcommission.org/our-priorities/health-care-equity/>
12. E.M. Rogers. *Diffusion of Innovations*. 1<sup>st</sup> Edition. The Free Press of Glencoe; 1962.
13. Boston University School of Public Health. Diffusion of Innovation Theory. Updated November 3, 2022. Accessed October 15, 2023. <https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories4.html>
14. Donald M. Berwick. *Disseminating Innovations in Health Care*. The Journal of the American Medical Association. 289(15):1969-1975. doi:10.1001/jama.289.15.1969
15. Thomas Bodenheimer. *The Science of Spread: How Innovations in Care Become the Norm*. California Healthcare Foundation; 2007.
16. Centers for Disease Control and Prevention. What is Health Equity. Updated July 1, 2022. Accessed October 15, 2023. <https://www.cdc.gov/nchhstp/healthequity/index.html>
17. Ma, et al. Distinguishing Health Equity and Health Care Equity: A Framework for Measurement. *NEJM Catalyst*. DOI: 10.1056/CAT.22.0442
18. Michael E. Porter, Mark R. Kramer. Creating Shared Value. *Harvard Business Review*. 2011
19. Marvin B. Lieberman, David B. Montgomery. First-mover advantages. *Strategic Management Journal*. <https://doi.org/10.1002/smj.4250090706>
20. Peter N. Golder and Gerard J. Tellis. Pioneer Advantage: Marketing Logic or Marketing Legend. *Journal of Marketing Research*. <https://doi.org/10.1177/002224379303000203>
21. Fernando F. Suarez and Gianvito Lanzolla. The Half-Truth of First-Mover Advantage. *Harvard Business Review*. 2005

22. National Institutes of Health. Office of Management and Budget (OMB) Standards. Updated June 28, 2023. Accessed November 25, 2023. <https://orwh.od.nih.gov/toolkit/other-relevant-federal-policies/OMB-standards>
23. Lisa Nelson and Lenel James. Race and Ethnicity: The Importance of Standardized Data Collection and Management. Presented at HL7 International. April 19, 2023. Accessed November 29, 2023.
24. Richard L. Revesz. *Initial Proposals For Updating OMB's Race and Ethnicity Statistical Standards*. Office of Information and Regulatory Affairs; 2023
25. Office of Inspector General. *A Resource Guide for Using Medicare's Enrollment Race and Ethnicity Data*. US Department of Health and Human Services; 2023
26. The Centers for Medicare and Medicaid Services, *Medicare Enrollment and Appeals Group – July 5, 2022*. US Department of Health and Human Services; 2022.
27. Adhere Health. Resolving Health Disparities with the Health Equity Index for Medicare Advantage Plans. *Blog*. February 7, 2023. Accessed November 25, 2023. <https://adherehealth.com/resolving-health-disparities-with-the-health-equity-index/>