DEEP DIVE

BASIC NEEDS: HEALTH CARE

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THE ROLE OF HEALTH CARE IN EQUITABLE RECOVERY & RESILIENCE IN COMMUNITIES ACROSS AMERICA

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INTRODUCTION

The Institute for Healthcare Improvement (IHI) is an independent not-for-profit organization based in Boston, Massachusetts, USA. For more than 25 years, IHI has used improvement science to advance and sustain better outcomes in health and health systems across the world. IHI brings awareness of safety and quality to millions, catalyzes learning and the systematic improvement of care, develops solutions to previously intractable challenges, and mobilizes health systems, communities, regions, and nations to reduce harm and deaths. IHI collaborates with a growing community to spark bold, inventive ways to improve the health of individuals and populations. IHI generates optimism, harvests fresh ideas, and supports anyone, anywhere who wants to profoundly change health and health care for the better.

IHI's values include:

- Courage: we stay true to our values, even in the face of risk or loss. We speak up. We do this all in the service of personal and organizational integrity.
- Love: we build relationships grounded in patience, kindness, gratitude, and respect. In our teams and in our work, we bring our whole selves in an authentic and caring spirit and encourage others to do the same.
- Equity: we work to prevent and undo unfair systems, policies, and forms of racism and discrimination that drive gaps in our organization and in our work. We tell the truth about inequities and value all voices. We believe that we are interconnected and that inequities lead us all to lose. We want everyone to thrive and none of us can truly thrive until we all do.
- Trust: we recognize the unique experience that each of us brings and believe in each other's strengths. We ensure that people feel empowered and supported. We engage in genuine dialogue and encourage feedback with one another and our customers.

From origins in performance improvement of hospital microsystems, we have broadened our focus in the past decade to work on population health and health equity. As improvers of health care quality, the Institute for Healthcare Improvement (IHI) believes that health care organizations, in partnership with the communities and partners they serve, can learn and innovate together to drive measurable change in inequities in a relatively short period of time—years, rather than decades or generations.

IHI has continued to support communities and multi-stakeholder coalitions from sectors within and outside of health care and public health, on myriad topics, and has an evidence-based approach to scale-up that we have applied globally to achieve results at the local and country level. IHI has learned a great deal about developing learning networks that build improvement skills and accelerate improvement across communities and health care systems. Our approach is rooted in partnerships and focused on supporting systems transformation. Relevant work includes: the Pursuing Perfection Initiative, 100,000 Lives Campaign and 5 Million Lives Campaign; the Triple Aim, Pursuing Equity, and the 100 Million Healthier Lives initiative, which includes SCALE, Pathways to Population Health, and the equity work of the IHI Leadership Alliance.

CURRENT STATE

Even prior to this global pandemic, health care in the United States has held a tension. There are incredible contributions, breakthroughs, and improvements that the health care delivery system can proudly claim, as well as systems problems that chronically plague the industry. Despite the pockets of excellence and innovation and the tireless commitment of health care providers, the US health care system continues to experience inefficiencies, challenges, and poor outcomes for populations in relation to the investment made.

THE HEALTH OF POPULATIONS

The US has health outcomes ranked among the lowest when compared to other high-income countries.[1] Our scorecard on inequitable outcomes is bleak.

- By race, Black, Indigenous and People of Color (BIPOC) fare worse across nearly every key measure of morbidity and mortality.[2,3,4,5]
- Compared to households with annual incomes greater than $115,000, households with lower incomes have a higher relative risk of mortality, which increases with decreasing income.[6]
- Lesbian, gay, bisexual, and transgender (LGBT) youth represent up to 40 percent of all young people experiencing homelessness and are also at an increased risk of physical or sexual abuse, sexually transmitted infections (STIs), and mental health issues.[7,8]

While these are just a few examples, health inequities are observed across many intersecting demographics. The primary drivers of inequitable health care outcomes are institutional racism, implicit bias, and other forms of oppression.[9] These play out across all societal systems, and health care delivery is no exception. Structural inequities and interpersonal bias are visible in adverse patient experiences of care[10] and contribute to unjust disparities in outcomes.

COST OF CARE

It is widely accepted that our current health care delivery system is unaffordable and unsustainable. The burden of health care cost falls on individuals, in the worst cases leading to personal financial devastation, and on the system as a whole in terms of proportion of GDP. In the US, some estimates suggest that upwards of 20 percent of an individual's paycheck is spent on health insurance,[11] over 60 percent of bankruptcies are due to medical expenses,[12] and 18 percent of our GDP is spent on health care. Perverse financial incentives and the associated overdiagnosis and overuse of services are a significant contributor to the problem of affordability.[13]

SYSTEMS OF CARE

Our current health care system has ongoing issues around safety, reliability, and right-sizing care for the right purpose. A 2015 study suggested there may be as many as 400,000 preventable deaths per year from hospital-associated patient harm.[14] And in 2016, a study published in the BMJ estimated the number at more than 250,000, which, the authors asserted, would make

1 Tikkanen R. Multinational Comparisons of Health Systems Data, 2019. The Commonwealth Fund. January 30, 2020. https://www.commonwealthfund.org/publications/other-publication/2020/jan/multinational-comparisons-health-systems-data-2019

2 Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths. Centers for Disease Control and Prevention website. https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html. Published September 5, 2019. Accessed June 4, 2020

3 Wyatt R. Age and race are social determinants of health. Aging Today. 2016 Jan/Feb:15

4 Williams D. "Race, Racism, and Racial Inequalities in Health." Presentation to Harvard Kennedy School Multidisciplinary Program in Inequality and Social Policy. February 8, 2016. http://inequality.hks.harvard.edu/files/inequality/files/williams16slides.pptx?m=1455915158

5 Signorello LB, Cohen SS, Williams DR, Munro HM, Hargreaves MK, Blot WJ. Socioeconomic status, race, and mortality: A prospective cohort study. American Journal of Public Health. 2014;104(12):e98-e107.

6 Deaths by place of death, age, race, and sex: United States, 2005. National Center for Health Statistics, Centers for Disease Control. https://www.cdc.gov/nchs/data/dvs/Mortfinal2005_worktable_309.pdf

7 A population-based study of sexual orientation identity and gender differences in adult health. Conron KJ, Mimiaga MJ, Landers SJ. Am J Public Health. 2010;100:1953–1960.

8 Gay and lesbian homeless/street youth: special issues and concerns. Kruks G. J Adolesc Health. 1991;12:515–518.

9 Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. Achieving Health Equity: A Guide for Health Care Organizations. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016.

10 Institute of Medicine; Smedley BD, Stith AY, Nelson AR (eds). Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, DC: National Academies Press; 2003.

11 The Real Cost of Health Care: Interactive Calculator Estimates Both Direct and Hidden Household Spending. KFF. February 21, 2019. https://www.kff.org/health-costs/press-release/interactive-calculator-estimates-both-direct-and-hidden-household-spending/. Accessed June 5, 2020.

12 Himmelstein DU, Lawless RM, Thorne D, Foohey P, Woolhandler S. Medical Bankruptcy: Still Common Despite the Affordable Care Act. Am J Public Health. 2019;109(3):431433. doi:10.2105/AJPH.2018.304901

13 National Health Expenditure Data. Centers for Medicare & Medicaid Services website. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical. Updated December 17, 2019. Accessed June 4, 2020.

14 James, John T. PhD A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care, Journal of Patient Safety: September 2013 - Volume 9 - Issue 3 - p 122-128 doi: 10.1097/PTS.0b013e3182948a69

preventable patient harm the third leading cause of death in the US.[15] Our system continues to function primarily as designed for acute, episodic, fee-for-service care. This has resulted in fragmented, inadequate, and at times, inappropriate service delivery for many chronic physical and mental health conditions.[16,17] For example, operational capacity of US health systems has significantly decreased, with inpatient psychiatric beds dwindling to less than 50,000 nationally, while differing insurance and other legal and regulatory requirements add complexity to the system.[18] Reduced supply of beds and psychiatric resources, coupled with the increased likelihood of an inpatient admission, means that patients with a behavioral health condition may spend three times as long in the emergency department as those without a behavioral health condition. This increases their overall length of stay (LOS) and likelihood of being transferred to another facility.[19] In addition, our health care delivery system has medicalized both birth[20,21] and death,[22] often in misalignment with the wishes and care preferences of patients. For example, surveys show that around 70 percent of people want to die at home, but in reality, 70 percent of people die in health care facilities. The adverse and inequitable experiences, costs, and outcomes due to this type of fragmented, unreliable care are tremendous.[23,24,25]

THE HEALTH CARE WORKFORCE

In addition, the unnecessary complexities and inefficiencies in the health care system—even prior to the added stresses of the COVID-19 pandemic—have negatively impacted the safety, burnout rates, and mental health and wellbeing of the health care workforce. Long before the country was captivated by the issue of lack of sufficient personal protective equipment (PPE) for those treating COVID-19, the Bureau of Labor Statistics reported the health care workforce as having one of the highest rates of injury of any private industry in the United States.[26] Between 35 and 54 percent of US nurses and physicians have substantial symptoms of burnout; similarly, the prevalence of burnout ranges between 45 and 60 percent for medical students and residents.[27] Thirty-three percent of new registered nurses seek another job within a year, according to another 2013 report.[28,29]

All of these challenges represent a significant opportunity to leverage this pivotal moment in time to drive whole-system redesign in service of better, more equitable health outcomes.

IMPACT OF COVID-19 ON HEALTH CARE

The impacts of the COVID-19 pandemic on health care are significant, including direct effects on patients, impacts on the health care delivery system, and macro-

15 Makary Martin A, Daniel Michael. Medical error—the third leading cause of death in the US BMJ 2016; 353 :i2139
16 Stange KC. The problem of fragmentation and the need for integrative solutions. Ann Fam Med. 2009;7(2):100 103. doi:10.1370/afm.971
17 Stange KC. The paradox of the parts and the whole in understanding and improving general practice. Int J Qual Health Care. 2002;14(4):267–268.
18 ACEP Emergency Medicine Practice Committee. Care of the Psychiatric Patient in the Emergency Department: A Review of the Literature. American College of Emergency Physicians; 2014.
19 Zhu JM, Singhal A, Hsia RY. Emergency department length-of-stay for psychiatric visits was significantly longer than for nonpsychiatric visits, 2002–11. Health Affairs. 2016;35(9):1698-1706.
20 New ROOTS, Beyond Medicalization: Midwives and Maternity Care in America. Jewish Healthcare Foundation. April 30, 2020. https://www.jhf.org/news-blog-menu/entry/new-roots-beyond-medicalization-midwives-and-maternity-care-in-america. Accessed June 4, 2020.
21 http://blackmamasmatter.org/wp-content/uploads/2018/04/BMMA_BlackPaper_April-2018.pdf
22 Clark D. Between hope and acceptance: the medicalisation of dying [published correction appears in BMJ 2992 Jun 8;324(7350):1391]. BMJ. 2002;324(7342):905.907. doi:10.1136/bmj.324.7342.905
23 S.K. Bell, et al. A multi-stakeholder consensus-driven research agenda for better understanding and supporting the emotional impact of harmful events on patients and families Jt Comm J Qual Patient Saf, 44 (2018), pp. 424-435 ,
24 Delivering Quality Health Services: A Global Imperative for Universal Health Coverage. World Health Organization; Organisation for Economic Co-operation and Development; OECD; World Bank. ,
25 Frandsen BR, Joynt KE, Rebitzer JB, Jha AK. Care fragmentation, quality, and costs among chronically ill patients. *Am J Manag Care*. 2015;21(5):355.362
26 Bureau of Labor Statistics, US Department of Labor. Employer-Reported Workplace Injuries and Illnesses-2018. https://www.bls.gov/news.release/archives/osh_11072019.pdf. Published November 7, 2019. Accessed June 4, 2020.
27 National Academies of Sciences, Engineering, and Medicine. 2019. Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being. Washington, DC: The National Academies Press. https://doi.org/10.17226/25521.
28 Lucian Leape Institute. Through the Eyes of the Workforce: Creating Joy, Meaning, and Safer Health Care. Boston, MA: National Patient Safety Foundation; 2013.
29 Perlo J, Balik B, Swensen S, Kabcenell A, Landsman J, Feeley D. IHI Framework for Improving Joy in Work. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2017.

level impacts on society as a whole. A common thread that runs through them all is the notion of uncertainty; it is a challenge to predict the full spectrum of consequences in the near, intermediate, or long term. Though studies are beginning to emerge on the clinical course of the disease,[30] utilization patterns,[31] and the characteristics and outcomes of COVID-19 patients,[32] at the time of the creation of this report, the nature of this novel virus has meant that expert clinicians are still relatively unfamiliar with the full nature of the disease. Because this virus came to us as an unknown entity, every treatment and approach is new and untested. Everyone has been doing their best to learn quickly, yet there is no standard for best practice and no standard way to learn and share quickly across settings and around the world. Amid these challenges, we are also seeing unprecedented levels of innovation and change.[33] The work of the unfolding months and years will be identifying and spreading positive innovations and mitigating the negative consequences of the pandemic on the various aspects of health care.

IMPACTS ON PATIENTS

The magnitude of impact of this epidemic on the experience of patients and families is hard to comprehend. There is a broad ripple effect even beyond the many sick and the hundreds of thousands who have died from the disease in the United States. An institution that is trusted to provide care, safety, and relief has done so for many, and at the same time has been forced to turn away families from their loved ones. In order to reduce risk of exposure to patients, families, and staff, many hospitals have essentially eliminated visitors.[34,35,36] This means that the sickest patients and the dying patients suffer and die away from loved ones.[37] For many, the hospital has become a place to fear. This means that a healthy woman giving birth in a hospital during this time of COVID-19 either gives birth in an environment of fear and isolation, or chooses to give birth at home to reduce risk of exposure.[38] Patients have been forced to defer care for chronic conditions like diabetes, asthma, or depression due to loss of employer-based health insurance [39] or suspended appointments.[40]

Most of all, this pandemic has focused attention on underlying defects in our system that negatively impact patient outcomes, especially among Communities of Color. Black people in US communities are contracting and dying from the virus at alarmingly disproportionate rates. A study of more than 3,100 counties by amfAR, The Foundation for AIDS Research, found that counties with higher Black populations account for more than half of all COVID-19 cases and almost 60 percent of deaths.[41] In places such as Chicago and Louisiana, African Americans account for 67 and 70 percent of COVID-19-related deaths, respectively, while representing only 32 percent of the population of each city. Multi-faceted factors

30 Zhou F, Yu T, Du R, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study [published correction appears in Lancet. 2020 Mar 28;395(10229):1038] [published correction appears in Lancet. 2020 Mar 28;395(10229):1038]. Lancet. 2020;395(10229):1054- 1062. doi:10.1016/S0140-6736(20)30566-3

31 Spriha G, Newton-Dame R, Boudourakis L, et al. Covid-19 X-Curves: Illness Hidden, Illness Deferred. NEJM Catalyst. https://catalyst.nejm.org/doi/abs/10.1056/cat.20.0231. Published May 29, 2020. Accessed June 4, 2020.

32 Marcello RK, Dolle J, Grami S, et al. Characteristics and Outcomes of COVID-19 Patients in New York City's Public Hospital System. medRxiv. Published online June 2, 2020:2020.05.29.20086645. doi:10.1101/2020.05.29.20086645.

33 Berwick DM. Choices for the "New Normal". JAMA. 2020;323(21):2125–2126. doi:10.1001/jama.2020.6949

34 COVID-19 Visitor Guidelines. UCLA Health website. https://www.uclahealth.org/covid-19-visitor-restrictions. Updated May 29, 2020. Accessed June 4, 2020.

35 Visitor Restrictions at UCSF Due to Coronavirus (COVID-19). UCSF Health. https://www.ucsfhealth.org/for-visitors/visitor-restrictions-due-to-coronavirus. Accessed June 4, 2020

36 Shapiro J. Hospital Visitor Bans Under Scrutiny After Disability Groups Raise Concerns Over Care. NPR.org. May 17, 2020. https://www.npr.org/2020/05/17/857531789/federal-government-asked-to-tell-hospitals-modify-visit-bans. Accessed June 4, 2020.

37 Schairer M. Coronavirus Patients Are Dying Alone, Leaving Loved Ones with Grief and Guilt. WGBH. May 14, 2020. https://www.wgbh.org/news/local-news/2020/05/14/coronavirus-patients-are-dying-alone-leaving-loved-ones-with-grief-and-guilt. Accessed June 4, 2020.

38 Holohan M. Home births: What to know about midwives, cost and safety. TODAY. August 28, 2018. https://www.today.com/health/home-birth-advice-women-about-labor-delivery-t135859. Accessed June 4, 2020

39 Zipperer B, Bivens J. 3.5 million workers likely lost their employer-provided health insurance in the past two weeks. Economic Policy Institute. https://www.epi.org/blog/3-5-million-workers-likely-lost-their-employer-provided-health-insurance-in-the-past-two-weeks/. Published April 2, 2020. Accessed June 4, 2020.

40 Kowalczyk L. Hospitals cancel hundreds of non-urgent procedures, surgeries, and medical appointments. The Boston Globe. March 17, 2020. https://www.bostonglobe.com/2020/03/17/metro/hospitals-cancel-hundreds-non-urgent-procedures-surgeries-medical-appointments/. Accessed June 4, 2020.

41 COVID-19 Racial Disparities in U.S. Counties. amfAR Making AIDS History. https://ehe.amfar.org/inequity?_a=2.70766672.1552216761.1591248840-1270368916.1591248840. Accessed June 4, 2020.

contribute to this inequity —economic barriers, impact of quarantine, lack of testing, and structural inequities within health care.[42] A retrospective cohort analysis of COVID-19 patients at Sutter Health, a large integrated health care system in northern California, found that, compared with non-Hispanic White patients, African Americans had 2.7 times the odds of hospitalization, after adjusting for age, sex, comorbidities, and income.[43]

The health care delivery system, in partnership with other sectors and communities, has a responsibility to dramatically change the trajectory of patient experience and outcomes in the midst of COVID-19. There is no quality without equity.

IMPACTS ON THE HEALTH CARE DELIVERY SYSTEM

In addition to the direct impacts on patients, COVID-19 has had a substantial impact on our health care delivery system, including the capacity for care delivery; supply chain planning, coordination, and distribution; and the safety and wellbeing of the health care workforce.

Capacity for care delivery

One of the most evident impacts has been the surge of patients in need of hospital-level care[44] and the associated need for hospital beds, ICU beds, ventilators, and staff, particularly in the communities that have been the hardest hit. Most, if not all hospitals, have disaster plans, yet in many cases, those have been pushed to the limit to manage this crisis. Mark Jarrett, MD, MBA, Senior Vice President and Chief Quality Officer of Northwell Health, a major health care system at an epicenter of the US crisis north, south, and east of New York City, shared his experience:

> *"We started meeting [around mid-February] to plan for COVID-19 surge preparedness and opened our formal emergency operations center [in late February]. At [the beginning of March], we had one case in one of our hospitals. [Very quickly], we had over 3,000 COVID-positive patients in our hospitals, with more than 600 on ventilators. Over 40 years of my professional career, this has been the hardest thing I've ever dealt with."*

To prepare for a COVID-19 surge, building bed capacity and building space has become necessary nationwide. By mid-April, Northwell had prepared 1,600 additional beds. Northwell, like its colleagues across New York, is providing little non-COVID-19 care in the hospital; extra capacity in hospitals and alternate locations are necessary for patients with non-COVID-19 issues.[45] Northwell isn't an outlier; these unprecedented circumstances have been met with ingenuity and innovation: other examples from around the US include opening and converting floors to increase surge capacity, and setting up short-term triage stands outside emergency departments to deal with the steadily increasing number of patients needing care.[46]

And across the health system, many surgeries, procedures, and services have been put on hold so as to reduce exposure to all involved and shift staff to attend to acute needs. From a business perspective, these service reductions are not offset by the influx of COVID-19 cases. A benchmark analysis of over 1,100 hospitals in 45 states showed that increases in COVID-19 cases have not offset the steep declines in patient volumes in other parts of the health system: inpatient admissions in April 2020 ran over 30 percent compared to January 2020, while emergency department visits and observation services were down 40 and 47 percent, respectively, and outpatient ancillary services declined 62 percent and outpatient surgery volume decreased 71 percent.[47] In addition to the impact this service reduction has on patient outcomes for those with non-COVID-19-related illnesses and those forced to defer preventative care, this drastic service reduction is a significant loss of revenue for many health care delivery

42 Thebault R, Tran AB, Williams V. The coronavirus is infecting and killing black Americans at an alarmingly high rate. Washington Post. April 7, 2020. https://www.washingtonpost.com/nation/2020/04/07/coronavirus-is-infecting-killing-black-americans-an-alarmingly-high-rate-post-analysis-shows/. Accessed June 4, 2020.
43 Azar KMJ, Shen Z, Romanelli RJ, et al. Disparities In Outcomes Among COVID-19 Patients In A Large Health Care System In California. Health Aff (Millwood)2020;f202000598.pmid:32437224
44 Public Health Preparedness Capabilities: National Standards for State and Local Planning. US Department of Health and Human Services, Centers for Disease Control and Prevention. https://www.cdc.gov/cpr/readiness/00_docs/capability10.pdf
45 8 Lessons from a COVID-19 Surge Hotspot. Institute for Healthcare Improvement. April 22, 2020. http://www.ihi.org/communities/blogs/8-lessons-from-a-covid-19-surge-hotspot. Accessed June 4, 2020.
46 COVID-19: Early Learning from One of the Epicenters. Institute for Healthcare Improvement. March 23, 2020. http://www.ihi.org/communities/blogs/covid-19-a-view-from-one-of-the-epicenters. Accessed June 4, 2020.
47 Crowe RCA Benchmarking Analysis | Hospital volumes hit unprecedented lows. Crowe website. https://www.crowe.com/insights/asset/h/hospital-volumes-hit-unprecedented-lows. Published May 2020. Accessed June 4, 2020

systems, which has rippling effects on furloughed or laid off staff as a result, as well as the health system's stability in a community.

Possibly the most positive impact of this pandemic on the health care delivery system is the rapid shift of ambulatory care services to telemedicine to diagnose, monitor, and triage patients when traditional office visits pose a real or perceived risk to patients. Almost overnight, primary care and other providers began offering telephone and telemedicine consults for all kinds of issues that normally would have required an appointment and office visit,[48,49,50] or, as in the case of Bergen New Bridge Medical Center in New Jersey, expanded telehealth services to include COVID-19 screening and virtual infectious disease consultations.[51] NYU Langone Health reported that non-urgent telehealth visits increased by more than 4,000 percent from March 2 to April 14; urgent care visits increased 135 percent during that same six-week stretch.[52] In many cases, this has resulted in improved access and experience of care.[53] One US health system's telehealth department used an online retailer to get an oxygen saturation monitor and a thermometer to the homes of high-risk patients. Self-monitoring was complemented by frequent and regular check-ins from telehealth nurses. Clinicians can monitor patients at home, and the patients feel well-supported. These successes and innovations have been important and impactful and we must bring an equity lens to the expansion of telehealth to ensure access for low-income, uninsured, those with limited broadband access, and undocumented patients and families.

Supply chain, planning, coordination, and distribution

The widely reported shortage and maldistribution of PPE in the midst of COVID-19 has put many people's lives at risk.[54] This speaks to challenges in planning, coordination, and distribution. Similar challenges have been experienced relative to testing for the virus. The availability of testing early on and continuing today has been markedly insufficient. When supply shortages exist, decisions are made on how to distribute scarce resources. Without an equitable system, the outcome is that those scarce resources are often distributed in ways that reinforce existing inequities. That pattern plays out unjustly and predictably.

In California, for example, testing varies widely hospital to hospital, city to city, county to county. An overwhelmed supply chain and a disjointed public health system have created "testing deserts," especially in the state's rural northern communities and in lower-income urban neighborhoods where access to quality care was already an issue for residents. Lake County, California, has had so few testing supplies for its 65,000 residents that officials have resorted to buying swabs on Amazon and pilfering chlamydia testing kits for swabs and the liquid used to transport specimens to labs.[55]

As of June 2020, many American Indian/Alaskan Native tribal nations have not received promised federal health care funding included in COVID-19 relief legislation,[56] and some health centers that serve American Indian/Alaskan Native populations have received the wrong testing and

48 COVID-19 and the rise of Telemedicine. The Medical Futurist. March 31, 2020. https://medicalfuturist.com/covid-19-was-needed-for-telemedicine-to-finally-go-mainstream. Accessed June 4, 2020.
49 Rashid Bashshur, Charles R. Doarn, Julio M. Frenk, Joseph C. Kvedar, and James O. Woolliscroft.Telemedicine and e-Health.May 2020.571-573. http://doi.org/10.1089/tmj.2020.29040.rb
50 Landi H. Half of physicians now using telehealth as COVID-19 changes practice operations. FierceHealthcare. April 23, 2020. https://www.fiercehealthcare.com/practices/half-physicians-now-using-telehealth-as-covid-changes-practice-operations. Accessed June 4, 2020.
51 Bergen New Bridge Medical Center Expand Telehealth Service for COVID-19. GlobeNewswire News Room. March 3, 2020. http://www.globenewswire.com/news-release/2020/03/03/1994551/0/en/Bergen-New-Bridge-Medical-Center-Expand-Telehealth-Service-for-COVID-19.html. Accessed June 4, 2020
52 Telehealth: Problems and Possibilities Beyond COVID-19. Institute for Healthcare Improvement. May 4, 2020. http://www.ihi.org/communities/blogs/telehealth-problems-and-possibilities-beyond-covid-19. Accessed June 4, 2020.
53 Peters AL, Garg SK. The Silver Lining to COVID-19: Avoiding Diabetic Ketoacidosis Admissions with Telehealth. Diabetes Technol Ther. 2020;22(6):449.453. doi:10.1089/dia.2020.0187
54 Ranney ML, Griffeth V, Jha AK. Critical supply shortages — the need for ventilators and personal protective equipment during the Covid-19 pandemic. N Engl J Med. 2020;382:e41
55 Barry-Jester AM, Hart A, Bluth R. California's Coronavirus Testing Still A Frustrating Patchwork of Haves and Have-Nots. NPR. May 3, 2020. https://www.npr.org/sections/health-shots/2020/05/03/849243723/californias-coronavirus-testing-still-a-frustrating-patchwork-of-haves-and-have. Accessed June 4, 2020.
56 Robeznieks A. AMA urges HHS to address funding for Navajo COVID-19 hot spot. American Medical Association. May 28, 2020. https://www.ama-assn.org/delivering-care/population-care/ama-urges-hhs-address-funding-navajo-covid-19-hot-spot. Accessed June 4, 2020.

treatment supplies.[57] Even as we celebrate the innovation and ingenuity of individual players in the system have demonstrated to overcome challenges, the system issues around coordination are pervasive.

Safety and well-being of the health care workforce

The rapid impact and unknown nature of this crisis and the lack of PPE have all combined to create threats to the health care workforce. For those working on the front lines, including health care providers, environmental services staff, and food services staff, that includes risk of exposure for them and their families,[58] psychological trauma[59] associated with witnessing death after death, and moral injury from feeling like they are never doing enough and/or doing too much.[60] There is exhaustion, isolation, doubt, guilt, and fear. Health care workers are being revered as heroes even as they watch their patients and some colleagues die.

The pandemic only serves to exacerbate concerns about the burnout and well-being of the workforce, with a predicted "second curve" of mental health problems among both health care workers and the public due to unmitigated residual social, economic, and behavioral health impacts of the virus.[61] Studies are already emerging documenting the negative impact of the pandemic on health care worker mental health,[62] with a significant proportion of point-of-care clinicians experiencing extraordinarily high rates of depression, anxiety, insomnia, and distress.[63,64]

The most significant immediate impact of this pandemic is an urgency to drive improvement. We need to learn and respond quickly. The urgency is felt by the people who serve. Our health care workforce needs a better plan, safe available equipment, quick and transparent ways to share and learn, and a respite. The urgency is felt by the people we serve.

Our communities need a partner they can rely on to provide equitable, safe care that meets their needs. The urgency is felt by those who administer the services. The resources are stretched thin and decisions need to be made as to how to allocate those resources in service of better outcomes for all. And the urgency is felt in the communities we serve. For many communities, the hospital is among the largest employers. With layoffs and furloughs, that swells the growing ranks of the unemployed and potentially uninsured, which in turn negatively impacts community wellbeing.

The pandemic has upended numerous policies, practices, behaviors, and norms as health systems and frontline workers have moved with agility to respond to the influx of patients into the health care system. Over time, some changes will prove to be for the better, and some will not.

Undoubtedly, this crisis allows us the opportunity to examine the way care is delivered, coordinated, and paid for, and use this urgency as a disruptive moment to drive radical redesign toward better, more equitable outcomes. In the words of Dr. Don Berwick, "Fate will not create the new normal; choices will."[65]

CHANGING COURSE FROM CURRENT TO FUTURE STATE

HOW WE IMPROVE

If we commit to using this moment to redesign our

57 Ortiz E. A Native health center asked for COVID-19 medical supplies. It got body bags instead. NBC News. May 5, 2020. https://www.nbcnews.com/news/us-news/native-american-health-center-asked-covid-19-supplies-they-got-n1200246. Accessed June 4, 2020

58 Farmer B. At Least 9,000 U.S. Health Care Workers Sickened With COVID-19, CDC Data Shows. NPR. April 15, 2020. https://www.npr.org/sections/health-shots/2020/04/15/834920016/at-least-9-000-u-s-health-care-workers-sickened-with-covid-19-cdc-data-shows. Accessed June 4, 2020

59 Mock J. Psychological Trauma Is the Next Crisis for Coronavirus Health Workers. Scientific American. June 1, 2020. doi:10.1038/scientificamericano620-36

60 Williams RD, Brundage JA, Williams EB. Moral Injury in Times of COVID-19 [published online ahead of print, 2020 May 2]. J Health Serv Psychol. 2020;1.5. doi:10.1007/s42843-020-00011-4

61 Perez Ortega R. Health care workers seek to flatten COVID-19's 'second curve'—their rising mental anguish. Science | AAAS. April 22, 2020. https://www.sciencemag.org/news/2020/04/health-care-workers-seek-flatten-covid-19-s-second-curve-their-rising-mental-anguish. Accessed June 4, 2020.

62 Spoorthy MS, Pratapa SK, Mahant S. Mental health problems faced by healthcare workers due to the COVID-19 pandemic-A review [published online ahead of print, 2020 Apr 22]. Asian J Psychiatr. 2020;51:102119. doi:10.1016/j.ajp.2020.102119

63 Lai J, Ma S, Wang Y, et al. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open. 2020;3(3):e203976. doi:10.1001/jamanetworkopen.2020.3976

64 Tan BYQ, Chew NWS, Lee GKH, et al. Psychological Impact of the COVID-19 Pandemic on Health Care Workers in Singapore [published online ahead of print, 2020 Apr 6]. Ann Intern Med. 2020;M20-1083. doi:10.7326/M20-1083

65 Berwick DM. Choices for the "New Normal". JAMA. 2020;323(21):2125–2126. doi:10.1001/jama.2020.6949

broken health care system, how we approach that process matters. There are several considerations for how the suggestions we outline can be implemented and spread in a way that it is equitable and sustainable. A grounding set of design principles, a methodology for how to improve, and new ways of partnering and new ways of leading are proposed to guide how we approach the efforts in recovery and in reimagining a new normal.

First, it is important to establish clear definitions of the terms we use:

- Health equity: IHI uses the US Centers for Disease Control and Prevention definition for health equity: "Health equity is achieved when every person has the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances."[66]
- Health inequity: Differences in health outcomes that are systematic, avoidable, and unjust.[67]
- Health disparity: The difference in health outcomes between groups within a population. Health disparity simply denotes differences, whether unjust or not. We often look for disparities in health outcomes or health care experience data as a sign of health inequity.[68]
- Institutional (or institutionalized) racism: The differential access to the goods, services, and opportunities of a society by race.[69]
- Multiple determinants of health: The health care services, social factors, physical environment, and healthy behaviors that directly or indirectly determine health, as well as the policy and advocacy activities that health care organizations can conduct to achieve health equity.[70]

Furthermore, in presenting the approaches below, we align with the World Health Organization, Healthy People 2030, and other national and international bodies in affirming the following:

- That assuring health includes and extends beyond physical health and disease prevention to encompass mental health and multiple types of wellbeing (evaluative, eudaimonic, hedonic)[71,72] for both individuals and communities.[73,74]
- That attaining health equity benefits all people and communities, and the social and economic thriving of our nation.[75]
- That health is a human right. As stated by the Constitution of the World Health Organization: "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."[76]

DESIGN PRINCIPLES

To facilitate transformational and lasting improvements, we recommend the following guiding design principles for health care, as it works in partnership with other sectors:

- Create a system that puts the people most affected at the center. Build and sustain

66 NCHHSTP Social Determinants of Health: Definitions. Centers for Disease Control and Prevention. https://www.cdc.gov/nchhstp/socialdeterminants/definitions.html

67

68 Improving Health Equity: Build Infrastructure to Support Health Equity. Guidance for Health Care Organizations. Boston, Massachusetts: Institute for Healthcare Improvement; 2019. (Available at www.ihi.org)

69 Jones CP. Levels of racism: A theoretic framework and a gardener's tale. American Journal of Public Health. 2000 Aug;90(8):1212-1215. https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.90.8.1212

70 Improving Health Equity: Address the Multiple Determinants of Health. Guidance for Health Care Organizations. Boston, Massachusetts: Institute for Healthcare Improvement; 2019. (Available at www.ihi.org)

71 OECD Guidelines on Measuring Subjective Well-being, OECD Publishing, Paris (2013).

72 U.S. Department of Health and Human Services. (2020). Development of the National Health Promotion and Disease Prevention Objectives for 2030. https://www.healthypeople.gov/2020/About-Healthy-People/Development-Healthy-People-2030.

73 Stiefel MC, Gordon NP, Arsen EL. Sociodemographic Determinants of Health and Well-Being Among Adults Residing in the Combined Kaiser Permanente Regions. The Permanente Journal - Kaiser Permanente -. 2019;23:18-091. doi:https://doi.org/10.7812/TPP/18-09

74 Roy B, Riley C, Sears L, Rula EY. Collective Well-Being to Improve Population Health Outcomes: An Actionable Conceptual Model and Review of the Literature. Am J Health Promot. Published online August 5, 2018:0890117118791993. doi:10.1177/0890117118791993

75 U.S. Department of Health and Human Services. (2020). Development of the National Health Promotion and Disease Prevention Objectives for 2030. https://www.healthypeople.gov/2020/About-Healthy-People/Development-Healthy-People-2030.

76 Constitution of the World Health Organization. 1946. Bull World Health Organ. 2002;80(12):983-984.

partnerships to co-design solutions with those in the system most affected by inequity (e.g., clients, patients, families, community members). [77,78,79,80,81]

- Prioritize equity as foundational and drive action at multiple levels. Recognize that equity is foundational to improving outcomes and act on this recognition. We can center our work around equity by continually asking "Who isn't thriving?" and "What would it take to change that together?" Learn about, understand, and seek to shift historical and current inequities—what they are, why they are in place, how they are sustained at multiple levels (institutional, cultural, interpersonal, individual)—so the new systems will be designed for equity.
- Call out and then address racial inequity specifically. This work includes:
    - Recognizing that our systems have been designed to achieve worse outcomes for Communities of Color.
    - Shifting language from "persons of color do worse…" to "our system(s) produce poorer outcomes for People of Color."
    - Combining continuous improvement and an equity lens to systematically identify and improve until racial inequities no longer exist.
- Let data, both quantitative and qualitative, drive decision making. This work includes:
    - Creating and using data systems and measures that support learning and inform action
    - Using data for improvement instead of judgement
    - Using measures that matter to people most affected by inequity
    - Integrating data into existing workflows and learning systems
    - Including both qualitative and quantitative data as a part of learning systems, as stories are one way to best help illuminate both the problems and potential solutions
- Build and rely on trusting relationships to create sustainable systems. Relationships, trust, collaboration, and transparency are essential for sustainable solutions, so actively work to develop and nurture trusting relationships.
- Eliminate silos and advance cross-sector collaboration. Rebuilding health care to be more equitable and effective will require that a full range of sectors and community residents work together, based on all the assets they hold, to advance common goals.
- Cultivate mindsets and approaches for adaptive, complex challenges. Equitable recovery is an adaptive challenge, rather than a technical one. To succeed, all stakeholders will need to adopt adaptive mindsets and approaches (e.g., failing forward and growth mindsets).
- Build capacity and capability for transformation at the community level so that the community as a whole, each sector, and community residents are better equipped to address equity and become better overall problem solvers. This includes both quality improvement and change management methods, as well as individual and group work to understand systems of oppression and structural racism.
- All teach, all learn, all lead. We all teach, we all learn, and we all lead together. For the system to be meaningfully different, we will not solve problems alone. We commit to learning together and sharing widely what we learn and discover, including our experiences of learning from failure

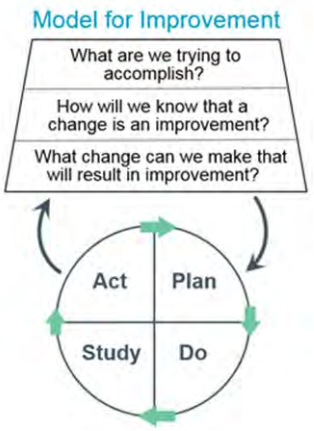
77 Lived Experience Advisory Council. Nothing About Us Without Us: Seven Principles for Leadership and Inclusion of People with Lived Experience of Homelessness. Toronto, Canada: The Homeless Hub Press; 2016.
78 Batalden M, Batalden P, Margolis P, et al. Coproduction of healthcare service. BMJ Qual Saf. Published online September 16, 2015:bmjqs-2015-004315. doi:10.1136/bmjqs-2015-004315
79 Elwyn G, Nelson E, Hager A, Price A. Coproduction: when users define quality. BMJ Qual Saf. Published online September 5, 2019. doi:10.1136/bmjqs-2019-009830
80 Homer A. Engaging People with Lived/Living Experience: A Guide for Including People in Poverty Reduction. Tamarack Institute; 2019. https://www.tamarackcommunity.ca/hubfs/Resources/Publications/10-Engaging%20People%20With%20LivedLiving%20Experience%20of%20Poverty.pdf
81 Coleman S, Byrd K, Scaccia J, Stout S, Schall M, Callender S, Anderson J, Behrman N, Budnik A, Smith D, Brown L, Douglas W, Bussey R, McDermott E, Munene E, Mullin F, Hatchett L, Pohorelsky J, VanLanen T, Pairolero B, Mann Z. Engaging Community Members with Lived Experience. SCALE 1.0 Synthesis Reports. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2017.

along the way.

A METHODOLOGY FOR HOW TO IMPROVE

The path to recovery, resilience, and transformed systems requires working in ways that anchor in the above design principles; put continuous learning and improvement at the center; help us see and transform systems rather than blame individuals; help us use data to inform action; make visible vulnerabilities and inequities and provide tools that allow us to meaningfully work to eliminate inequities; and facilitate co-design with others, unleashing everyone's agency and power (ability to achieve shared purpose).[82]

We recommend the following approach to guide how we improve—across topics, across communities and systems, towards transformation in a way that snowballs learning, resilience, and equity. This approach is grounded in Improvement Science, specifically the Model for Improvement,[83] in methods for advancing equity and resilience, and in methods and approaches for achieving the Triple Aim[84] (improved health for populations, improved experience of care, at lower per capita costs). The Model for Improvement is a simple, yet powerful tool for accelerating improvement, detailed below.



To achieve equitable results at scale for populations, we must first identify a population of focus for improving health, wellbeing, and equity. We recommend focusing on populations or population segments that have been disproportionately affected by inequities and in which health status has considerable room for improvement.

After selecting the population of focus, the next step is to deepen our understanding of the needs and assets of the population, utilizing segmentation; stratified data analysis by race, ethnicity, gender; and engagement of individuals within the population to understand the lived experience of inequity. This understanding of the population will lead to a decision on concrete aims and goals for improving equitable outcomes. Without shared purpose and concrete aims, efforts to improve equity may serve narrow purposes and perhaps build trust, but do not move an entire organization, community, region, or nation toward outcomes.

The identification of a population of focus will also drive the creation and/or alignment of leadership and governance structures to champion and drive the work over time. Pursuing health equity requires change in a system's culture and infrastructure, as well as specific changes in aspects affecting the community-wide issues that are to be addressed. A number of different individuals and groups are required to effectively adapt and implement these changes, including individuals with lived experience of the inequities you wish to improve.

We also believe and recommend that there is an opportunity and a responsibility for health care to set some bold aims to drive us towards a transformed system. We have not proposed such aims within this document, because that is work that must be done in co-design with a full range of stakeholders, including those most affected by inequity.

How will we know if the changes we make are creating the improvements and system transformation we seek? How will we know if equity is improving?

Identifying a cogent set of system-level measures for population health, wellbeing, and equity is necessary to help organizations and coalitions evaluate their progress. These measures must be aligned with the identified population and aims and will help guide priority areas of improvement. The Well-being in the Nation Measures provide one place to start in identifying measures.[85]

82 Hilton K, Anderson A. IHI Psychology of Change Framework to Advance and Sustain Improvement. Boston, Massachusetts: Institute for Healthcare Improvement; 2018.
83 Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.
84 Whittington JW, Nolan K, Lewis N, Torres T. Pursuing the Triple Aim: The first seven years. Milbank Quarterly. 2015;93(2):263-300.
85 Well-being in the Nation (WIN) Measurement Framework: Measures for Improving Health, Well-being, and Equity Across Sectors. Facilitated by 100 Million Healthier Lives with the National Committee on Vital and Health Statistics; 2019. Available at www.winnetwork.org

What changes can we make that will result in lasting improvements and elimination of inequities at multiple levels?

A guiding purpose, concrete aims, and system-level measures are long-term guideposts—three to five years or longer. To accomplish this long-term purpose requires a portfolio of interventions and initiatives, and associated projects and investments that can be addressed in a shorter term, which will together achieve population health and equity. Projects and investments selected may center on an entirely new care or service design and/or care coordination model. Another option is to pull an existing project within the organization or region into the portfolio and build on it, where appropriate. The portfolio of interventions should tie to an explicit theory or rationale for system changes for the population of focus and align with identified population level measures.

To drive the outcomes over time toward spread and scale, a comprehensive learning system is needed that fosters intentional testing and learning, provides feedback loops to compare performance with specific aims and measures for the designated population, and integrates the assets of leaders and organizations. This includes learning by iterative testing (e.g., Plan-Do-Study-Act [PDSA] cycles, sequential testing of changes, Shewhart time series charts), using informative cases to "act with the individual, and learn for the population"[84], and selecting leaders to manage and oversee the learning system with particular focus on rebalancing the portfolio of work overtime. This approach of how to improve comes to life in four overarching components, each with a set of guiding questions that include prompts related to advancing equity, that build on one another. This approach embeds learning and improvement skills within and across systems and communities, at both the individual and group level, as a means to support sustainability.

COMPONENTS	GUIDING QUESTIONS	KEY ELEMENTS OF THE APPROACH
Understand the population, align leadership and governance, and co-develop aims	• What are we aiming to accomplish—for and with whom? • Who is not thriving, and what would it take for that to change? • In what ways are those most affected by inequity partnering in governance, leadership, and initiatives we undertake?	• Identify population of focus (in partnership with those in the population most affected by inequity) • Understand the population's assets and needs through quantitative data review as well as client and provider interviews • Establish and/or align leadership and governance structures based on needs of assets and population • Co-design leadership structures with people most affected by inequity • Co-design clear and concrete aims
Identify cogent set of population level measures that matter for the chosen population	• How will we know if the changes we make are creating the improvements and system transformation we seek? • How will we know if equity is improving?	• Identify and use measures that matter—both subjective and objective, inclusive of topic-specific and overall well-being of people, communities, and the system
Identify and assemble a portfolio of projects and investments that together will achieve outcomes	• What changes can we make will result in lasting improvements and elimination of inequities at multiple levels (individual, interpersonal, organizational, cultural)? • Who is missing from our shared tables, in leadership and in participation?	• With people most affected by inequity, establish and implement a portfolio of strategic initiatives • Choose a collection of existing and new work to redesign the system (including care or service delivery and coordination, data integration, etc.) • Rebalance the portfolio over time as you learn
Create and continuously improve a learning system that will facilitate scale and spread equity	• What are we learning that we can share, scale up, and spread to others? • What do we still need to learn?	• Engage in overall testing and learning, in iterative cycles that align with the aims and advance scale up and spread • Have a bias towards sharing—both successes and "fail forward"

NEW WAYS OF PARTNERING AND NEW WAYS OF LEADING

Bringing about transformative change will require health care system stakeholders to use a new set of "hows"—new ways of partnering, of leading, and of being in our role. These new ways of being will invite health care to lean into humble leadership and partnership, to hold more responsible global citizenship, and to take seriously its responsibility for "the moral determinants of health."[86]

Through the 100 Million Healthier Lives movement (convened by IHI in partnership with communities, leaders, people most affected by inequities, and health care organizations globally), partners identified of a set of key skills, strategies, and tools drawn from multiple disciplines and designed to change mindsets and behaviors to improve health, wellbeing, and equity. The new ways of being can be thought of as muscles we are building, individually and as part of organizations, systems, and communities. This set of skills is organized around five dimensions of leadership, known collectively as the Community of Solutions Framework:[87]

Leading from within

Leading from within involves one's inner journey as a leader, including the ability to know oneself and what brings one to leadership, reflect, fail forward, and change as needed.[88,89] In addition, these skills involve seeing and committing oneself to unlocking the leadership of others, especially those with lived experience of inequity.[90] The concept of failing forward not only accepts that mistakes will be made in any transformative work but embraces them as a critical part of learning. This mindset is key for health care leaders for the longitudinal journey toward building and championing more equitable systems.

Embracing this form of leadership requires practicing "slowing down to speed up" and getting comfortable being uncomfortable. Recognize that leading and learning through complex, adaptive systems change and undoing systems of racism and oppression often requires us to take a pause before accelerating work.[91,92] Some of these ways of being may at first feel counter-cultural or unnatural. Practice these skills and exhibit these ways of being even and especially when they feel uncomfortable.

Leading together

Leading together is grounded in the perception of the community as a dynamic

network of interacting people, organizations, structures, and systems. Leading Together offers practical skills, strategies, and tools to create effective change within people, organizations, complex systems, and communities. Embracing a Leading Together approach requires health care organizations and systems to explore and map the current organizational and individual partnerships to address health equity as well as the other assets within the community to do this work. This will help the health care organization understand where new relationships are needed or where they should join existing efforts versus creating new interventions of their own.[93,94,95,96] For example, community stakeholders in Bergen County, NJ, have established a collaborative Housing First model that was recognized by the Department of Housing and Urban Development (HUD) as the first community in the country to end, or reach "functional zero" for, chronic homelessness in 2017. In a community like Bergen County it is most fruitful for the local health systems to join this multi-stakeholder coordinated entry system for housing rather than create a

86 Commins J. Berwick Outlines Sweeping 7-Step Campaign for the Quality Movement. HealthLeaders Media. December 12, 2019. https://www.healthleadersmedia.com/innovation/berwick-outlines-sweeping-7-step-campaign-quality-movement. Accessed June 4, 2020.
87 Stout S. Overview of SCALE and a Community of Solutions. SCALE 1.0 Synthesis Reports. Cambridge, Massachusetts: Institute for Healthcare Improvement, 2017. Available at www.ihi.org/100mlives.
88 Palmer, P. (2009). Let Your Life Speak: Listening for the Voice of Vocation (1 edition). Jossey-Bass.
89 Palmer PJ. Healing the Heart of Democracy: The Courage to Create a Politics Worthy of the Human Spirit. John Wiley & Sons; 2014
90 Coleman S, Byrd K, Scaccia J, Stout S, Schall M, Callender S, Anderson J, Behrman N, Budnik A, Smith D, Brown L, Douglas W, Bussey R, McDermott E, Munene E, Mullin F, Hatchett L, Pohorelsky J, VanLanen T, Pairolero B, Mann Z. Engaging Community Members with Lived Experience. SCALE 1.0 Synthesis Reports. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2017
91 Heifetz RA, Linsky M, Grashow A. The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World. Harvard Business Press; 2009.
92 Hassan Z. The Social Labs Revolution: A New Approach to Solving Our Most Complex Challenges. Berrett-Koehler Publishers; 2014.
93 Heath C, Heath D. Switch: How to Change Things When Change Is Hard. 1 edition. Crown Business; 2010.
94 Improving Health Equity: Partner with the Community. Guidance for Health Care Organizations. Boston, Massachusetts: Institute for Healthcare Improvement; 2019. (Available at www.ihi.org)
95 Heifetz RA, Linsky M, Grashow A. The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World. Harvard Business Press; 2009.
96 Hassan Z. The Social Labs Revolution: A New Approach to Solving Our Most Complex Challenges. Berrett-Koehler Publishers; 2014

comprehensive housing navigation program of its own.

Leading for outcomes

Leading for outcomes supports organizations and communities in making change easier, co-creating a theory of change, identifying measures, testing the theory, getting feedback from end-users, refining, and planning for implementation and scale-up. With the rigor it brings to its quality improvement efforts such as preventing infections or decreasing wait times, health care can and should also bring a focus on outcomes to its pursuit of equity for patients, employees, and communities.[97,98,99,100,101]

Leading for equity

Leading for equity integrates with and applies Leading from Within, Leading Together, Leading for Outcomes, and Leading for Sustainability to address equity at a population and structural level. Leading for Equity skills provide practical strategies for addressing racism, identifying inequities, and working to eliminate inequities in partnership with those most affected by them.[102,103] These skills provide actionable ways to make real the recognition that, "it is not possible to achieve the health outcomes we seek without addressing equity ... of the tremendous waste in human potential that results from inequity... a belief in our interconnectedness, common opportunity and destiny."[104]

Leading for sustainability

Leading for sustainability facilitates an ongoing process of transformation in a community (generative sustainability) as opposed to maintaining programs. These skills consider dimensions of sustainability including the people making change, resources required, environmental factors, and considerations of sustaining the process of change and transformation.

Below are two case examples of this type of leadership in action.

Leading together & leading for outcomes in practice: Bellin Health Systems & the NE Wisconsin Poverty Outcomes and Improvement Network Team (POINT)

Bellin Health Systems participated alongside 100 other local community-based organizations and social service agencies in the NE Wisconsin Poverty Outcomes and Improvement Network Team (POINT) initiative.[105] The POINT was an 18-month improvement collaborative launched in 2016 as part of a multi-year regional effort that seeks to reduce poverty and meet the basic needs of individuals and families through the use of quality improvement methods and tools to improve the services provided to those in the community living in poverty.

The initiative drew upon the IHI Breakthrough Series Collaborative model,[106] in which partnering stakeholders co-created a theory of change for what interventions, services, and redesign efforts would lead to positive outcomes and launched multi-stakeholder improvement initiatives in a variety of areas such as: housing placement and stability, mental health service delivery, job creation and placement, domestic violence prevention and recovery, early childhood development, recidivism reduction, and the creation of positive post-high school pathways. Bellin Health Systems decided to take on

97 Schall M, Howard P, Lewis N, Archer K, Blanton S, Byrd K, Chen S, Douglas W, Ebersole K, Fairley K, Fritsch S, Kendrick C, Klysa E, Munene E, Platson L, VanLanen T, Scaccia J. SCALE: Using Improvement Methods and Design Thinking to Guide Action. SCALE 1.0 Synthesis Reports. Cambridge, Massachusetts: Institute for Healthcare Improvement, 2017.
98 Langley GJ, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance. 2nd ed. Jossey-Bass; 2009.
99 Moen R. A Guide to Idealized Design. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2002.
100 Brown T, Wyatt J. Design Thinking for Social Innovation. Stanford Social Innovation Review. Published online Winter 2010. Accessed May 12, 2017. https://ssir.org/articles/entry/design_thinking_for_social_innovation.
101 Barker PM, Reid A, Schall MW. A framework for scaling up health interventions: lessons from large-scale improvement initiatives in Africa. Implementation Science. 2016;11(1):12. doi:10.1186/s13012-016-0374-x
102 Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. Achieving Health Equity: A Guide for Health Care Organizations. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016. (Available at ihi.org)
103 Institute for Healthcare Improvement. Improving Health Equity: Guidance for Health Care Organizations. Published 2019. Accessed June 4, 2020. http://www.ihi.org:80/resources/Pages/Publications/Improving-Health-Equity-Guidance-for-Health-Care-Organizations.aspx
104 Stout, S, Polan, S, Hatchett, L, Martin, D, Smith F, Peck, J, Ayers, J and Tucker E. 100 Million Healthier Lives Program Brief on Equity. Institute for Healthcare Improvement. April 2017. Available at www.ihi.org/100mlives.
105 Hostetter M, Klein S. Using Quality Improvement Methods to Combat Poverty: Northeast Wisconsin POINT Initiative. Boston, MA: Institute for Healthcare Improvement; 2018.
106 The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement. IHI Innovation Series white paper. Boston: Institute for Healthcare Improvement; 2003. (Available on www.IHI.org)

medical debt for those in the community through an improvement initiative to reduce the ratio of bad debt (patient debt that is considered unrecoverable) to community care (Bellin's financial assistance program) from 2.63 to 1.32 by December 31, 2018.[107]

By interviewing patients and employees sent to bad debt, the Bellin interdepartmental improvement team designed and tested a series of PDSA cycles to increase patients' and employees' awareness of and connections to financial health resources offered by the health system.

The work of this rigorous improvement effort has led to multiple improvements within the health system, including: steady improvements in the ratio of bad debt to community care which continue today; financial health being measured at a strategic system level; the use of a simplified financial assistance application, redesigned bills, and a host of user-informed materials that help patients and employees navigate financial resources; and the evolution of the work started within the POINT into a health-system-wide campaign to end medical debt.

Leading together & leading for equity in practice: Rush University Medical Center and West Side United

In January 2017, Rush University Medical Center, Cook County Health, and University of Illinois Hospital & Health Sciences System convened 130 individuals from 50 community organizations in Chicago's West Side to discuss how they could come together to equitably improve the health and wellbeing of their community.[108] The impetus for this first meeting was the "death gap" that residents of the West Side experienced. While the residents in the downtown Loop area have a life expectancy of 85 years, those living in West Garfield Park in Chicago's West Side, a 15- minute train ride away, have a life expectancy of 69 years.[109]

The group understood that life expectancy gaps are caused by factors that stretched beyond what a health care system could address on its own, including structural racism and economic and educational deprivation. With this understanding and a growing number of partners, in early 2018, six hospital systems—AMITA Health, Ann & Robert H. Lurie Children's Hospital of Chicago, Cook County Health, Rush University Medical Center, Sinai Health System, and the University of Illinois Health System—with support from dozens of community partners and stakeholders officially launched West Side United (WSU).[110]

From its inception, WSU has demonstrated Leading Together by seeing community residents as experts and holding a series of listening sessions with them to find out what was most important to them. Based on what they heard from residents, WSU decided to focus on four priority areas: health and health care, neighborhood and physical environment, economic vitality, and education. WSU then demonstrated its commitment to authentically leading with community residents by ensuring that half of the seats on its Executive Leadership Council would be filled by community residents and that all of WSU's working committees had substantial community representation. WSU has since shown its commitment to Leading for Equity by naming the root causes of inequities in their four priority areas, including structural racism, committing to tackling these root causes, developing transparent metrics with community residents to track their progress, and stratifying this data based on race, ethnicity, and other socio-demographic factors. This has resulted in a publicly accessible dashboard on the WSU website showing progress on 14 indicators for their four priority areas.

These new ways of partnering and leading are critical ingredients that when present, will enable success of equitable, sustainable transformation. When absent, we risk undertaking efforts that waste resources, erode trust, and build upon existing systems and years of physical, emotional, and intergenerational harm to patients, the workforce, and communities.

OPPORTUNITIES FOR STRATEGIC ACTION AND BIG IDEAS FOR TRANSFORMATION

An equitable recovery will not happen on its own—it will require intention. If we design for recovery in health care without the explicit use of an equity lens, we will maintain or exacerbate inequities and injustices. We have an opportunity to create a new future together by centering equity-creating processes and a broad-based,

107 Bellin Health Systems Presentation at 2018 IHI National Forum on Quality Improvement in Health Care

108

109 Mapping Life Expectancy. Virginia Commonwealth University Center on Society and Health. https://societyhealth.vcu.edu/work/the-projects/mapping-life-expectancy.html

110 West Side United COVID-19 Resources. West Side United website. https://westsideunited.org/. Accessed June 5, 2020.

anti-racist effort to improve the wellbeing of marginalized communities, and, because we are all interconnected, to improve wellbeing for all. The approach of Targeted Universalism demonstrates this.[111]

The status quo has produced predictable inequities in our systems time and time again. In order to get different, equitable, results, we will have to challenge the status quo. As Ibram X. Kendi notes, there is no space for neutrality. We either support (actively or passively) the status quo or we actively work against it to transform our systems and communities. Kendi shares, "Racist policies yield racial inequity; antiracist policies yield racial equity. A racist or antiracist is not who we are, but what we are doing in the moment."[112] Rebuilding health care equitably will require us to actively, intentionally choose equity at each step, in each decision, and in every process. How do we do that?

First, we present a set of "we must" statements and actions for health care to undertake if we are to keep equity as the foundation of our rebuilding efforts. In the final section, to leverage and support health care's contribution to equitable recovery and resilience, we propose areas to strengthen, to disrupt, and to grow, offering a set of both 24-month strategic actions and longer-term changes for health care to undertake, both within the health care system and in partnership with others, that will contribute to a more just society.

"WE MUST"

We must ensure that all in health care have a clear picture of persistent inequities and a shared narrative of the underlying why: the root causes of inequities

To address inequities, health care must acknowledge that racism exists. It is from a shared foundation of understanding the context, history, and root causes of racism and oppression that health care practitioners and organizations can begin to improve health equity. We need agreement on a shared narrative explaining *why* inequities exist by race, ethnicity, language, housing status, immigration status, and geography in incidence, testing, treatment, and deaths related to COVID-19 and across all diseases. Moreover, it is critical that we understand why it was entirely predictable that such inequities would manifest. That narrative is critical because it shapes public opinion, supports transparency and accountability, and provides information that can inform more equitable policies and resource allocation.

Noting the disproportionate impact on Native Hawaiian and Pacific Islanders, Dr. Keaweʻaimoku Kaholokula and Dr. Robin E. S. Miyamoto, from the Department of Native Hawaiian Health at the John A. Burns School of Medicine at the University of Hawaii at Manoa, outline the reasons for the inequities, including lower wages and poorer economic and living conditions as well as poor access to quality health care.[113] They note that the pandemic has "brought clarity to the structural racism that has created these inequities and we need to engage in the critical conversations while we have the opportunity."[114] Additionally, Dr. Braithwaite and Dr. Warren explain that the inequities in the impact of COVID-19 in Communities of Color are due to structural factors and "the country's history of dehumanizing racial inequities" and conclude, "The war against the coronavirus for People of Color is part and parcel of the war to eliminate historic inequities and to level the socioeconomic playing field."[115]

If we understand these inequities as tied to larger structural injustice that was present before COVID-19 and will be present after unless we take action urgently, that allows us to work together from an aligned perspective. If we do not have the why right, we cannot hope to get the solutions right. Once in agreement on the root causes, we will be required to think and act in new ways together. Furthermore, we must agree that it is the role, responsibility, and opportunity of health care to address

111 powell, john, Stephen Menendian and Wendy Ake, "Targeted universalism: Policy & Practice."
Haas Institute for a Fair and Inclusive Society, University of California, Berkeley, 2019. haasinstitute.berkeley.edu/targeteduniversalism. (note: john powell does not capitalize his name)
112 Kendi IX. This is what an antiracist America would look like. How do we get there? The Guardian. https://www.theguardian.com/commentisfree/2018/dec/06/antiracism-and-america-white-nationalism. Published December 6, 2018. Accessed June 4, 2020
113 Kaholokula JK, Samoa RA, Miyamoto RES, Palafox N, Daniels SA. COVID-19 Special Column: COVID-19 Hits Native Hawaiian and Pacific Islander Communities the Hardest. Hawaii J Health Soc Welf. 2020;79(5):144.146.
114 COVID-19 Hits Native Hawaiian and Pacific Islander Communities the Hardest. John. A Burns School of Medicine, University of Hawai'i at Mānoa. April 30, 2020. http://www2.jabsom.hawaii.edu/native/docs/news/NHPI-Data-re-COVID-19-Keawe-Kaholokua-Google-Docs_4-30-20.pdf
115 Braithwaite R, Warren R. The African American Petri Dish. Journal of Health Care for the Poor and Underserved. Published online April 28, 2020. doi:10.1353/hpu.0.0026

structural racism and injustice.

We must stratify data by race, ethnicity, language, sexual orientation, gender identity, payer status, and other relevant socio-demographic factors

We cannot improve what we don't measure. Stratified data allow us to take stock of the current state, and track and be accountable for closing equity gaps. These data must be collected as a regular practice and reported transparently. The COVID-19 racial data tracker[116] has begun this work in our current context, and we must collect, share transparently, and act on these stratified data for COVID-19 and other diseases. Health care systems have to be supported in the collection, analysis, and leveraging for action of these data with training and best practices. The Disparities Solutions Center and the American Hospital Association's Equity of Care Pledge have moved these efforts forward, as have urgent calls by the American Medical Association, American Nurses Association, National Council of Asian Pacific Islander Physicians and many others to demand the collection and reporting of COVID-19 testing and cases by race, ethnicity, and language.[117,118] In addition to quantitative data, stories from those most impacted by inequities help to build an understanding of the problem and ideas for solutions. For example, conversations with women of color regarding their experience in the health care system helped shape the approach for IHI's work on better maternal outcomes. The Well Being in the Nation Measures provide a set of core measures (e.g., well-being of people, well-being of places, and equity), leading indicators by key topic area (e.g., health care, housing, environment and infrastructure), and an expanded set of measures for consideration and adoption.[119]

Brigham and Women's Hospital has used data dashboards to review COVID-19 data stratified by race, ethnicity, and language with key leaders and decision makers to inform their community outreach efforts.[120] They name racism and structural inequities as the underlying cause of inequities. This naming implores us to examine our systems that produce these results. In Chicago, informed by stratified data demonstrating the disproportionate impact of COVID-19 on Black communities, Mayor Lightfoot has launched a Racial Equity Rapid Response team with health care institutions as key partners, to engage in community-led efforts to close equity gaps.[121]

Dr. Aletha Maybank, Chief Health Equity Officer at the American Medical Association (AMA), penned an essay noting: "Our call for the reporting of racial and ethnic data is not based on a poisonous argument that some races are more susceptible to the coronavirus. Our call, instead, is based on widely known history that American health institutions were designed to discriminate against blacks, whether poor or not."[122] Again, the understanding of why we see the present inequities leads us to a particular set of conversations, decisions, truth telling, and system redesign. The field of health care must name structural racism and injustices as the root cause of inequities and make them visible with data and stories so we can get to work on these root causes.

We must use a racial equity framework for all decisions to understand who benefits and who is left behind

Immediate decisions in the current crisis include where to place testing sites, how to approach contact tracing, and how we decide who receives life-saving treatment, and in the future, vaccines. For decisions, policies, and practices, as a standard part of our process, we can pause to ask the question, "Who benefits and who is left behind?" and be prepared to amend our plans to promote equity and justice. By making intentional space for this question, we bring our awareness to this issue and design for equity from the beginning. This requires us to share

116 The COVID Racial Data Tracker. The COVID Tracking Project. https://covidtracking.com/race. Accessed June 5, 2020.
117 NCAPIP Recommendations on CDC / Health Department Data Collection for COVID-19. National Council of Asian Pacific Islander Physicians. https://mailchi.mp/0d60c6de567e/covid-19-unique-opportunity-for-health-data
118 Robeznieks A. National COVID-19 patient data vital to fixing inequity. American Medical Association. April 24, 2020. https://www.ama-assn.org/delivering-care/health-equity/national-covid-19-patient-data-vital-fixing-inequity. Accessed June 4, 2020.
119 Well-being in the Nation (WIN) Measurement Framework: Measures for Improving Health, Well-being, and Equity Across Sectors. Facilitated by 100 Million Healthier Lives with the National Committee on Vital and Health Statistics; 2019
120 How to Address Equity as Part of COVID-19 Incident Command. Institute for Healthcare Improvement. May 6, 2020. http://www.ihi.org/communities/blogs/how-to-address-equity-as-part-of-covid-19-incident-command. Accessed June 5, 2020
121 Mayor's Press Office (Press Release). Mayor Lightfoot and the Racial Equity Rapid Response Team Announce Latest Efforts to Address Racial and Health Disparities Among Minority Communities. Published April 20, 2020. Accessed June 4, 2020. https://www.chicago.gov/content/city/en/depts/mayor/press_room/press_releases/2020/april/RERRTUpdate.html
122 Maybank A. Opinion | The Pandemic's Missing Data. The New York Times. https://www.nytimes.com/2020/04/07/opinion/coronavirus-blacks.html. Published April 7, 2020. Accessed June 5, 2020.

decision making power and to consider equity-creating processes—new ways of working and being that can get us to new outcomes. This also requires there to be space in decision making, in meetings, to raise this question and to challenge the status quo. It has to feel acceptable to raise this question, and leaders have to model and thank those who do. Racial Equity Impact Assessments[123] help to guide a stepwise process of asking critical questions at key points to mitigate inequities in process and outcomes.

Without adopting a racial equity framework from the start, we risk crafting policies that perpetuate inequities. For example, the Crisis Standards of Care (CSCs) as originally written lead to increased deaths among marginalized populations. Dr. Manchanda and colleagues note: "CSCs that deprioritize people with coexisting conditions or with a higher likelihood of death within 5 years penalize people for having conditions rooted in historical and current inequities and sustained by identity-blind policies. In the US, Black, poor, disabled, and other disadvantaged people have shorter life expectancies than White and able-bodied Americans. If maximizing life-years is the prime directive, their lives will be consistently deprioritized as compared with already-advantaged groups."[124] The policy perpetuates inequity.

When we pause to ask who benefits and who is burdened, we have the opportunity to name gaps, identify harms, and make a plan to mitigate and eliminate them.

Health care has an incredible opportunity to live into a more equitable future, addressing structural inequities head on and taking a proactive role to pursue equity and justice. IHI, together with multiple health systems, has described and begun to test a framework for pursuing equity in health care and has produced guidance documents to share case examples and learning.[125] There are five components to the theory:

Make health equity a strategic priority

Organizational leaders commit to improving health equity by including equity in the organization's strategy and goals. Equity is viewed as mission critical—that is, the mission, vision, and business cannot thrive without a focus on equity. There are three strategies for this: build will to address health equity, include equity as a priority in the organization's strategic plan and department-level goals, demonstrate senior leader ownership for and commitment to improving health equity.

> *HealthPartners in Bloomington, Minnesota, has a longstanding strategic focus on health equity and diversity and inclusion, with a strong commitment from its consumer-governed board of directors and senior leaders. Since 2005, the organization has included equity and the elimination of racial and financial class disparities in five-year stretch goals called Partners for Better Health Goals to improve the health and wellbeing of each member and patient and the entire community.[126] To advance this priority, HealthPartners' leaders focused on equipping employees with the knowledge and resources needed to provide appropriate care and services, engaging communities to learn how to best support them, and improving care through data-driven quality improvement.*

Build infrastructure to support health equity

Operationalizing a health equity strategy requires dedicated resources, including human resources and data resources, as well as organizational infrastructure and capacity building efforts. Quality and equity in health care are inextricably linked; we cannot have quality, or fully achieve the other five aims, without equity. A health care organization's quality department and equity department or team (or equity leaders, if a separate department or team does not exist) need to work in partnership to create an infrastructure that brings together their unique assets for the benefit of the patients and populations served. Quality department staff also need to view equity as a part of their job.

Address the multiple determinants of health

Health care organizations must develop strategies to address the multiple determinants of health, including health care services, organizational policies, the organization's physical environment, the community's socioeconomic status, and healthy behaviors.

123 Keleher T. Racial Equity Impact Assessment Toolkit. Race Forward. https://www.raceforward.org/practice/tools/racial-equity-impact-assessment-toolkit. Accessed June 5, 2020.
124 Cleveland Manchanda E, Couillard C, Sivashanker K. Inequity in Crisis Standards of Care. New England Journal of Medicine. 2020;0(0):null. doi:10.1056/NEJMp2011359
125
126

Eliminate racism and other forms of oppression

Health care organizations must look at their systems, practices, and policies to assess where inequities are produced and where equity can be proactively created. We identified five strategies for eliminating racism and other forms of oppression in health care organizations: understand the historical context for racism and other forms of oppression, address institutional racism and its impact on health equity through culture and communication, establish policies and practices to promote workforce diversity and racial equity, implement business practices that support and promote racial equity, and improve clinical processes and outcomes to narrow equity gaps and improve equity for all.

> *Boston's Southern Jamaica Plain Health Center (SJPHC) invites elders and senior organizers from their community to staff meetings to provide historical context. Many SJPHC staff also have historical knowledge of Jamaica Plain and the surrounding communities. SJPHC Directors of Racial Justice and Equity provide training on using different types of narrative to discuss the historical, cultural, and institutional patterns that have perpetuated race-based advantage. SJPHC uses the Storytelling Project Curriculum as a framework to discuss racism with staff, focused on four types of stories and how to go beyond the stock stories narrative, the first of four types of stories: 1) Stock stories: Public, mainstream stories told by the dominant group and documented; 2) Concealed stories: Not public, hidden from the dominant group, and circulated by marginalized groups; 3) Resistance stories: Current and historical stories challenging stock stories and describing how racism has been resisted; and 4) Counter stories: New stories that build on resistance stories and are constructed to disrupt the status quo and deliberately challenge stock stories.*[127]

Partner with the community

To support communities to reach their full health potential, health care organizations must work in partnership with community members and community-based organizations that are highly engaged with community members.

> *In October 2018, Main Line Health and 25 other health systems, academic institutions, and community organizations officially launched Together for West Philadelphia (TfWP), a collaborative nonprofit organization aiming to dissipate inequities in access to health care, education, food access, and opportunity. TfWP's mission is to facilitate collaboration within West Philadelphia among community, public, and private sector stakeholders to foster shared projects that maximize impact in six areas: education, employment, food justice, health equity, housing, and senior wellbeing. The power of TfWP is in the collaboration of its partner organizations. In order to break down silos and work better together, TfWP's partners share their time, ideas, and resources as part of this cohesive organization dedicated to addressing the physical, mental, and social health needs of the residents living in the five zip codes of West Philadelphia.*

The immediate actions and long-term strategies we suggest in redefining and redesigning health care's role connect to this broader, five-component theory.

Redefine and redesign health care's role: strategic actions for the short and long term

In order for the health care sector to fully contribute to equitable recovery, we need to use this moment for system redesign, both to address chronic issues and to ameliorate immediate stressors. In every step, we must leverage the design principles and approaches described above to assure we drive change that centers Black, Indigenous and People of Color.

One pitfall health care must avoid is a temptation to lead with solving the health care sector's financial challenges. This will not lead to equitable outcomes, and based on history, will likely worsen inequities. Health care is already and will likely continue to experience economic downturn. This may be experienced as a financial threat to individuals and organizations, who then may seek to maintain prior levels of revenue or income, often referred to as "keeping us whole." Yet, more is not better.[128] The Triple Aim invites us to seek balance across three sets of outcomes, striving for: better health (equitable health and wellbeing outcomes across populations); better

127 Bell L, Roberts R, Irani K, Murphy B. The Storytelling Project Curriculum. The Storytelling Project, Barnard College;February 2008. https://www.racialequitytools.org/resourcefiles/stp_curriculum.pdf

128

care (equitable, patient centered, safe, effective, timely, efficient), and lower costs (more equitable, effective and intentional distribution of limited resources).[129]

Helpful framing borrowed and adapted from social movements is to think about what in our system we want to strengthen, what we need to disrupt, and what we want to grow. Below we will explore key *strengthen, disrupt*, and grow actions—both immediate steps and long-term commitments—the health care sector, together with people with lived experiences of inequity, community, and federal partners, can take.

Strengthen, build upon, and improve

Strengthen acute care's emergency response and readiness. Our health care system is anchored in our acute care service delivery. Equitably providing necessary acute medical treatment can be health care's unique contribution in times of crisis and beyond. There are many things about the acute care response that went right during this pandemic. Let's formally learn from what worked and what did not to be ready for the next surge. At the national, regional, and facility level, we can intentionally design for acute care surges of infectious disease or other disasters. This includes planning for rapid shifts and redeployment of facilities, supplies, workforce, and protocols, and intentionally bringing an equity lens to our emergency response planning.

- Immediate actions: Establish transparent learning systems at the local, regional and national level to broadly share, learn from and build upon successes, failures, opportunities, and exemplars.
- Long-term strategies: Commit to leveraging these learnings to improve national, regional, and local coordination and response and assure care is equitable, patient centered, safe, effective, timely, and efficient.

Build upon the stability of chronic care services. Even as the number of new cases of COVID-19 patients increased, the number of patients with chronic medical needs did not necessarily decrease.[130] Patients with serious chronic conditions such as heart disease, cancer, and mental illness still need access to acute and chronic care services. We know that People of Color carry a disproportionate burden of chronic disease due to structural inequity, and if ignored, that burden will increase.[131] Simultaneously, patients with chronic disease appear to be amongst those at the highest risk of severe disease from COVID-19 if infected.[132] In addition, in the U.S. self-reported levels of thriving are at a 12-year low, and the need for mental health services is likely to grow.[133] There is an opportunity to improve the continuity of chronic care services even as resources shift to the emergency response. This will likely require innovation.

- Immediate actions: Use data and stories to understand how needs for chronic care services, with particular emphasis on mental health, shift during crisis. Identify success stories of delivery systems who creatively met needs during this unique time.
- Long-term strategies: Partner with people with lived experience to test, improve and scale new approaches to chronic and serious illness care during crises.

Improve care for the caregivers. Through this pandemic, our health care workforce has experienced significant trauma, reaching from the doctors and nurses to all health care facility workers. The workforce includes providers, food service staff, environmental services staff, and all who contribute their skills to ensure a functioning health system. Many leaders of health institutions have made caring for their workforce their highest priority. And there is a need to continue to increase our emphasis on supporting the workforce. This will require healing spaces and system level changes. Many challenges that the workforce is facing are not unique to the pandemic. Ongoing efforts should include addressing meaning and purpose, choice and autonomy, wellness and resilience, and other factors as described in the IHI Joy in Work Framework.[134]

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130 Krumholz HM, M.D. Where Have All the Heart Attacks Gone? The New York Times. https://www.nytimes.com/2020/04/06/well/live/coronavirus-doctors-hospitals-emergency-care-heart-attack-stroke.html. Published April 6, 2020. Accessed June 5, 2020.

131 Abrams EM, Szefler SJ. COVID-19 and the impact of social determinants of health. The Lancet Respiratory Medicine. 2020;0(0). doi:10.1016/S2213-2600(20)30234-4

132 People Who are at Higher Risk for Severe Illness. Centers for Disease Control and Prevention website. Updated May 14, 2020. Accessed June 5, 2020. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html

133 Witters D, Harter J. In U.S., Life Ratings Plummet to 12-Year Low. Gallup. Published April 14, 2020. Accessed June 5, 2020. https://news.gallup.com/poll/308276/life-ratings-plummet-year-low.aspx

134

- Immediate actions: Health care leaders can pause, ask, and listen to what matters to their staff with particular attention to staff of color during all the phases of this stressful time. We should provide proactive support to manage fear and anxiety in daily work; ensure psychological safety and provide opt-out mental health and wellbeing support; and create opportunities for staff to reconnect to meaning and purpose in their work.[135]
- Long-term strategies: Support efforts to create conditions for thriving for all workers within our health care setting.

Disrupt to fundamentally redesign

Disrupt the office visit as we know it. Thousands of health care providers shifted their delivery mode from in-person office visits to virtual visits (telehealth) almost overnight. Overall this has been a huge success and represents an even bigger opportunity. What if the virtual visit became the default and we only invited people into an office when absolutely necessary (even when viral exposure is less of a worry)? A large proportion of primary care, chronic care maintenance, and mental health services can be effectively delivered virtually.[136] We must resist the temptation to return to the old normal and embrace this opportunity for change.

- Immediate actions: Intentionally partner with patients to design and improve the virtual care experience.[137] Attend to differential access to technology supports in the design (such as lack of internet access for some patients). Assure ongoing appropriate payment for virtual services, language access, and access for undocumented people.
- Long-term strategies: Leverage rapid and shared learning approaches to assure virtual care is equitable, patient centered, safe, effective, timely, and efficient.

Disrupt the current pattern of overuse. We must use this time of financial challenge to eliminate overuse.[138] Some will try to tell us that we have insufficient resources, but that is only true if we attempt to go back to our prior model of overuse of care. The limited access created by fear of exposure and a shift of resources toward the crisis has slowed the delivery of many services. The delay in critical services could cause harm. We may also find some delayed services were not necessary.

- Immediate actions: Use data and stories from this acute time of delay and avoidance to better define necessary and unnecessary services through a lens of equitable health outcomes.
- Long-term strategies: Set new standards of care and align financial incentives and disincentives appropriately.

Disrupt the medicalization of childbirth. Giving birth in a hospital has likely never been so scary. The medicalization of childbirth has led to a deeply held belief in this country that the only safe births are hospital births.[139,140] This is our opportunity to move healthy birth outside of the hospital, apply a critical race lens to the care we provide,[141] expand community-based support services, and assure strong linkages to advanced emergency obstetric care when needed.

- Immediate actions: Support and expand prototypes of asset-based community co-design centering Black, Indigenous and Women of Color alongside community partners and maternal and infant health providers to re-design care for better, equitable maternal and infant health outcomes.[142,143] Shift resources to better support doulas and midwives.

135 Laderman M, Perlo J. Three Actions to Support Healthcare Workforce Mental Health and Wellbeing During COVID-19. Fierce Healthcare. https://www.fiercehealthcare.com/hospitals-health-systems/industry-voices-3-actions-to-support-healthcare-workers-well-being-during

136 Bashshur RL, Howell JD, Krupinski EA, Harms KM, Bashshur N, Doarn CR. The Empirical Foundations of Telemedicine Interventions in Primary Care. Telemed J E Health. 2016;22(5):342.375. doi:10.1089/tmj.2016.0045

137 Torres T. Ways to Prevent Telemedicine from Becoming Lesser Medicine. Institute for Healthcare Improvement. May 14, 2020. http://www.ihi.org/communities/blogs/ways-to-prevent-telemedicine-from-becoming-lesser-medicine. Accessed June 4, 2020

138 Nassery N, Segal JB, Chang E, Bridges JF. Systematic overuse of healthcare services: a conceptual model. Appl Health Econ Health Policy. 2015;13(1):1.6. doi:10.1007/s40258-014-0126-5

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140

141 Hardeman RR, Karbeah J, Kozhimannil KB. Applying a critical race lens to relationship-centered care in pregnancy and childbirth: An antidote to structural racism. Birth. 2020;47(1):3-7. doi:10.1111/birt.12462

142 Welch S. Testing Virtual Ways to Support New Mothers. Institute for Healthcare Improvement. May 18, 2020. http://www.ihi.org/communities/blogs/testing-virtual-ways-to-support-new-mothers. Accessed June 4, 2020.

143 Karbeah J, Hardeman R, Almanza J, Kozhimannil KB. Identifying the Key Elements of Racially Concordant Care in a Freestanding Birth

- Long-term strategies: Create a new narrative for healthy birth. Set new standards for the integration of advanced emergency obstetric care in support of community centered care. Align financial incentives and disincentives appropriately, including advocating for new payment models.[144]

Disrupt and discontinue practices and investments that accelerate the destruction of the planet to be a better global citizen. Divest from infrastructure that hastens the pace of climate change and invest in climate resilient practices.[145]

- Immediate actions: Learn more (at the local, regional, and national levels; know your carbon footprint, contribution to waste production, etc.). Critically review all new building projects. Learn about exemplars and opportunities to improve.
- Long-term strategies: Create standards of practice and align financial incentives to support this approach broadly.

Grow to invest in building, partnering, and leveraging

Leverage all assets. One thing we have learned from this epidemic is the power of social action—social distancing, safer at home advisories, and using masks in public all significantly impacted the course of this epidemic by actively bending the curve and helping assure the availability of acute services for the sickest people. These efforts rely on community and individual engagement. Similarly, community and individual engagement impact a multitude of health outcomes. Strengthening community and individual supports can be protective for a range of needs, including mental health and substance use disorders, elder care, maternal and infant health, heart disease and diabetes, and violence and trauma. We have the opportunity to build a network of actors that are connected and communicating to help strengthen the community and social bonds that are needed to act rapidly in times of emergency and support one another at all times. Where effective, this should be viewed as first-line care—the foundation of our care system (not a bonus feature).

- Immediate actions: At a local level, build relationships and invest resources in trusted community supports, including People of Color in their communities, who can activate and engage residents. Move toward shared power and decision making regarding community approaches to protecting and improving the health and building thriving communities.
- Long-term strategies: Promote, invest in, support, and grow self-care, family, peer, and community support in all appropriate instances.

Grow and strengthen public health and prevention. Availability and equitable distribution of testing and contact tracing are critical elements in slowing the pandemic and managing any resurgence. These efforts are anchored in the strength of our public health system. However, public health and preventive efforts have historically been hindered.

- Immediate actions: Invest in public health infrastructure to support equitable testing, contact tracing, mitigation of infections, and other crisis management efforts.
- Long-term strategies: Elevate the investment in public health infrastructure to prevent chronic disease. Strengthen innovation and research in prevention and primary care. Shift health care resources and locus of control toward public health and social services.

Partner to assure strong linkages and appropriate integration and handoffs between primary care, prevention, public health, social services, community-based supports, and acute care services.[146] Fragmentation leads to poor and inequitable health outcomes.

- Immediate actions: At the local level, choose an organizational or agency partner. Focus on an urgent local issue related to the pandemic or other priority. Solve a problem together. Build trust. Repeat.
- Long-term strategies: Identify and dismantle political and financial barriers to collaboration and integration. Co-create an environment where

Center. J Midwifery Womens Health. 2019;64(5):592-597. doi:10.1111/jmwh.13018.

144 Kozhimannil KB, Zimmerman M. Keeping Moms Alive: Medicaid Policy Changes And Ideas For Systems Transformation. Health Affairs Blog. Accessed June 5, 2020. https://www.healthaffairs.org/do/10.1377/hblog20200228.150620/full/

145 Chen A, Murthy V. How Health Systems Are Meeting the Challenge of Climate Change. Harvard Business Review. Published online September 18, 2019. https://hbr.org/2019/09/how-health-systems-are-meeting-the-challenge-of-climate-change

146 Hostetter M, Klein S. Improving Population Health Through Communitywide Partnerships. Commonwealth Fund. 2012. Accessed June 5, 2020. https://www.commonwealthfund.org/publications/newsletter-article/improving-population-health-through-communitywide-partnerships.

collaboration is rewarded.

Unleash the power and potential of, and integrate with, the community-based workforce, both in the immediate response and recovery from COVID-19 and to help prevent, mitigate, and respond to potential future public health crises. While public health, health care, and governments can and are doing so much, a comprehensive and ultimately effective and equitable response will draw upon the resources, evidence base, creativity, and collaborative knowledge that is already present in our communities. We need an operational, policy, and financing approach to ramping up a ground-level health workforce that can address this pandemic and its impacts, as well as prepare to be mobilized and ready for potential future crises. These efforts will be most effective if they draw on the skills and abilities of contact tracers, community health workers, and the broader workforce of peer navigators, promotoras, certified peer counselors, recovery coaches, community health advocates, community connectors, and other community workers helping members of their community navigate health care and social services, or access other important services. For communities facing some of the biggest impacts of COVID-19—including racial and ethnic minorities and lower-income populations—community health workers can conduct contact tracing and provide holistic support. In other communities, a surge army of volunteer tracers or even technology-based solutions may suffice.[147,148]

- Immediate actions: Partner with states to launch a Community Health Service Corps that can scale up enhanced contact tracing.149 Before building new community workforce for response efforts such as contact tracing, explore and partner with ground-level already trained and deployed within the community.
- Long-term strategies: Support short- and long-term financing for the community-based workforce. Such funding should be tied to evidence-based delivery systems and national standards for hiring, training, and deploying the workforce. Potential sources:
  - Community benefit dollars invested in state and local "wellness trusts"
  - Emergency Congressional supplemental funding (as part of broader contact tracing packages) as well as sustainable funding sources.[150,151]
  - Payment through CMS.[152]

Grow and strengthen health care's policy advocacy role. Leverage our voice and influence to improve the living and working conditions for those our systems have marginalized. We can increase linkage between health care, community, and business and leverage our collective voices in service of shared aims. It is time to be bold alongside our communities, not only to make better decisions, but to advocate for the future and the investment that is needed to improve outcomes of our citizens.

- Immediate actions: Learn more from patients, providers, staff, and community, with particular emphasis on People of Color, to understand what policy issues are most pressing and meaningful. Many community organizations are already working to support critical areas of need, and health care can lend its voice and resources. Some areas that need our advocacy: pause evictions and foreclosures, end sharing information with immigration and law enforcement, support the expansion of Medicaid, expand transportation

147 Kangovi S. Why States May Fall Short on Contact Tracing. IHI Blog. Published May 20, 2020. Accessed June 5, 2020. http://www.ihi.org/communities/blogs/why-states-may-fall-short-on-contact-tracing

148 Kangovi S, O'Kane M. Community Health Workers: Developing Standards to Support These Frontline Workers During the Pandemic and Beyond. Milbank Memorial Fund. Published May 15, 2020. Accessed June 5, 2020. https://www.milbank.org/2020/05/community-health-workers-developing-standards-support/

149 Manchanda R. Three Workforce Strategies To Help COVID Affected Communities | Health Affairs. Health Affairs Blog. Published May 9, 2020. https://www.healthaffairs.org/do/10.1377/hblog20200507.525599/full/. Accessed June 5, 2020.

150 American Diabetes Association, American Public Health Association, Community Health Action Partnership, et al. Letter to Congress. Published online May 11, 2020. https://chw.upenn.edu/2020/04/17/callstoaction/. Accessed June 5, 2020.

151 ASTHO. Contact Tracing Memo to Congress. Published online April 10, 2020. Accessed June 5, 2020. https://www.astho.org/Federal-Government-Relations/Correspondence/ASTHO-Issues-Contact-Tracing-Memo-to-Congress/

152 Kangovi S. Letter to CMS. Published online May 11, 2020. Accessed June 5, 2020. https://chw.upenn.edu/2020/04/17/callstoaction/

access; ensure a living wage, and advocate for decarceration and an end to police brutality.[153,154]

- Long-term strategies: Co-create an integrated strategic approach to drive change that matters in our communities.

It Starts with Us

To have a chance at successful transformation requires that we start with ourselves, holding up a mirror to our organizations to make our health care institutions more equitable. Health care has an opportunity to embrace a multitude of levers to impact health and equity. Health care organizations manage investment portfolios and purchase billions of dollars of food and goods each year to run hospitals and clinics. By aligning institutional needs such as hiring, purchasing, and investment with community needs and available suppliers, health care can have a massive impact on long-term economic security, population health, and equity.

This "anchor institution" approach, developed by the Democracy Collaborative, has great potential to substantially increase health care's impact on local economies and social drivers of health and wellbeing.[155] There are a host of system wide efforts to engage in—today, tomorrow, and in the long term—and there are immediate actions health care can take within its walls to show what is possible and be a model for equitable institutions.

The Pathways to Population Health framework, co-designed by the American Hospital Association (AHA) / Health Research & Educational Trust (HRET), IHI, Network for Regional Healthcare Improvement (NRHI), Stakeholder Health, and Public Health Institute (PHI), and supported by the Robert Wood Johnson Foundation, provides a starting point.[156] In addition, IHI's Leadership Alliance has undertaken many efforts, collected from across 40+ health system members, and crafted a call to action.[157]

Immediate actions health care can take include:

- Improve equity in hiring, promotion, and pay
- Pay a living wage
- Ensure a diverse board and leadership representative of the community served[158]
- Collect sociodemographic data, including race, ethnicity, language, sexual orientation, gender identity, and other factors
- Collect and contribute to individual- and community-level measures of equity[159]
- Review and act on stratified quality, safety, and patient experience process and outcomes data
- Design a system to surface and address inequities in different parts of the organization
- Accept Medicaid
- Hire and purchase with local, women, and POC-owned businesses
- Invest in housing[160]
- Reduce medical debt and decrease the percentage of people sent to collections
- Examine patient terminations by sociodemographic factors to determine the extent of the equity gap and work to address it
- Eliminate over-policing and review the calls to security and police on patients and families for inequity[161]
- Understand and acknowledge the history of the

153 Emergency Task Force on Coronavirus and Equity. Massachusetts Public Health Association. Accessed June 5, 2020. https://mapublichealth.org/covid19equity/
154 Sivashanker K, Rossman J, Resnick A, and Berwick D. Covid-19 and decarceration. BMJ 2020; 369 :m1865
155 Norris T, Howard T. Can Hospitals Heal America's Communities? Democracy Collaborative; 2015.
156 Stout S, Loehrer S, Cleary-Fishman M, et al. Pathways to Population Health | An Invitation to Health Care Change Agents. http://www.ihi.org/Topics/Population-Health/Documents/PathwaystoPopulationHealth_Framework.pdf
157 IHI Leadership Alliance Health Equity Call to Action. http://www.ihi.org/Engage/collaboratives/LeadershipAlliance/Documents/Achieving%20Health%20Equity%20Call%20to%20Action_IHI%20Leadership%20Alliance_120517.pdf. Accessed June 4, 2020.
158 #123forEquity Campaign to Eliminate Health Care Disparities. Equity of Care, American Hospital Association. http://www.equityofcare.org. Accessed on June 5, 2020
159 Well-being in the Nation (WIN) Measurement Framework: Measures for Improving Health, Well-being, and Equity Across Sectors. Facilitated by 100 Million Healthier Lives with the National Committee on Vital and Health Statistics; 2019.
160 Making the Case for Hospitals to Invest in Housing. American Hospital Association. 2019. https://www.aha.org/system/files/media/file/2019/05/AIHC_issue_brief_final.pdf
161 A comprehensive package of urgent policy solutions. Campaign Zero. https://www.joincampaignzero.org/solutions#solutionsoverview.

health care institution as it relates to racism and inequity

- Be courageous

SOURCES AND DOCUMENTS

TRAININGS:

Racial Equity Institute

Undoing Racism by the People's Institute for Survival and Beyond

Building Racial Equity Trainings by Race Forward

Advancing Racial Justice in Organizations by Interaction Institute for Social Change

WHITE PAPERS, FRAMEWORKS AND GUIDES:

IHI Psychology of Change White Paper

Community of Solutions Framework and Tools

Improving Health Equity: Guidance for Health Care Organizations

WIN Measurement Framework

Liberation in the Exam Room: Racial Justice and Equity in Health Care. Southern Jamaica Plain Health Center

PATHWAYS TO POPULATION HEALTH CASE STUDIES:

New Hampshire Foundation for Healthy Communities

Providence St. Joseph Health

University of Arkansas for Medical Sciences

Accessed June 5, 2020