Improving Health Equity: Build Infrastructure to Support Health Equity

Guidance for Health Care Organizations

Acknowledgments:

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The two-year initiative aimed to reduce inequities in health and health care access, treatment, and outcomes by implementing comprehensive strategies to create and sustain equitable health systems. The eight health systems — diverse in size, geographic location, and patient populations served — worked with IHI to apply practical improvement methods and tools, spread ideas in peer-to-peer learning, and disseminate results and lessons to support an ongoing national dialogue and action for improving health equity.

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Executive Summary

Inequities in health and health care persist despite improved medical treatments and better access to care. Health care organizations have a critical role to play in improving health equity for their patients, communities, and employees. In 2016 the Institute for Healthcare Improvement (IHI) published *Achieving Health Equity: A Guide for Health Care Organizations*, a white paper that presents a five-component framework to guide health systems in their efforts to improve health equity. Subsequently, in 2017, IHI launched the Pursuing Equity initiative to learn alongside eight US health care organizations that used the framework to identify and test specific changes to improve health equity.

This guide describes strategies and lessons learned from the eight health care organizations that have tested changes in the framework's second component: Build Infrastructure to Support Health Equity.

The guide includes:

- **Two strategies** for building infrastructure to support health equity in your health care organization;

- **Examples of changes** the eight Pursuing Equity organizations tested to create data infrastructure and build organizational capacity to support health equity efforts; and

- **Common challenges** that arise while pursuing equity and strategies for mitigating them.

Introduction

In April 2017 the Institute for Healthcare Improvement (IHI) launched the two-year Pursuing Equity initiative to learn alongside eight US health care delivery systems that are working to improve equity at their organizations. The five-component framework presented in the IHI White Paper, *Achieving Health Equity: A Guide for Health Care Organizations*,[1] serves as the initiative's theory for how health care organizations can improve health equity. IHI continues to update and refine this theory based on learning in the initiative and the experience of the eight organizations; for example, we have updated some terminology in the original framework to reflect additional learning and clarity (see Figure 1).

Figure 1. IHI Framework for Health Care Organizations to Improve Health Equity
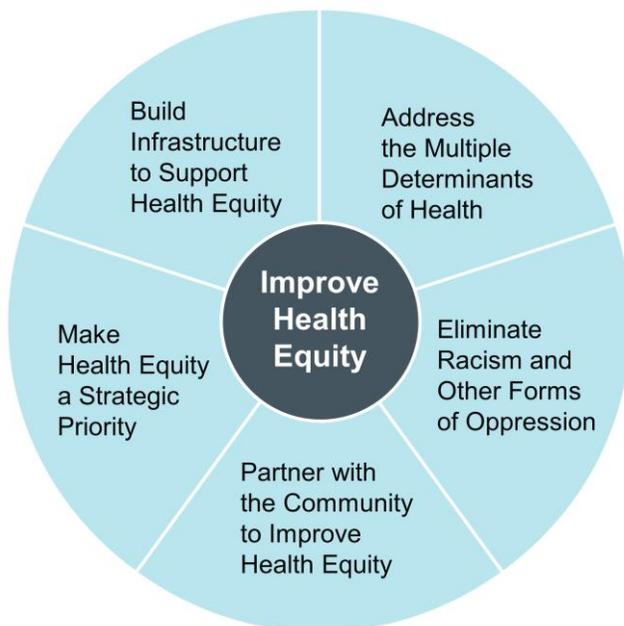
- **Make Health Equity a Strategic Priority**

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.

- **Build Infrastructure to Support Health Equity**

Operationalizing a health equity strategy requires dedicated resources, including human resources and data resources, as well as an organizational infrastructure.

- **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 encouraging healthy behaviors.

- **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.

- **Partner with the Community to Improve Health Equity**

  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.

IHI developed a guide for each of the five components of the equity framework. There is not a sequential order for using the guides, but it is important to note that work in all five components is needed to improve health equity. Guides for the other four framework components are available on IHI's website.[2]

How to Use This Guide

This guide is built on the experience of the eight US health care delivery systems working with IHI in the Pursuing Equity initiative. This guide describes lessons from the second component of the framework: Build Infrastructure to Support Health Equity.

Two strategies have emerged for building infrastructure to support health equity:

- Create the data infrastructure to improve health equity; and

- Build organizational capacity to support efforts to improve health equity.

This guide is organized by the two strategies and includes real examples, tips, and tools. We encourage you to read a section with your team and discuss where your organization may have opportunities to integrate these strategies.

It is important to establish explicit definitions of terms used in this guide.

- **Health equity:** IHI uses the United States 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."[3]

- **Health inequity:** Differences in health outcomes that are unjust, systematic, and avoidable.[3]

- **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.

- **Institutional (or institutionalized) racism:** The differential access to the goods, services, and opportunities of a society by race.[4]

Getting Started

IHI developed an assessment tool to help organizations evaluate their current health equity efforts and determine where to focus their improvement efforts.[5] Teams use this assessment to provide direction for building an equity strategy and promote equity conversations within teams. We encourage you to use the assessment findings to inform your efforts to build infrastructure to support health equity.

Strategies for Building Infrastructure to Support Health Equity

The purpose of this guide is to provide examples of how organizations have built infrastructure to improve health equity. Each strategy includes a brief description, key recommended actions, examples of specific changes that organizations tested for each action, challenges and mitigation strategies, lessons, and additional tools and resources.

Based on the experience of organizations participating in the Pursuing Equity initiative, there is not a sequential order for implementing the two strategies for building infrastructure to support health equity (i.e., in the guide, the strategies are numbered for simplicity, but they do not need to be implemented in the order in which they are presented). Pursuing Equity organizations have had success starting where they have the most will, leadership support, and resources to build organizational infrastructure.

In addition, the guide does not cover the collection and use of social risk factors to understand and address the impact of social determinants of health. See the IHI guide for the third framework component, Address the Multiple Determinants of Health, for an example of how one Pursuing Equity team collected these data and designed and tested the workflow.[2]

Strategy 1: Create the Data Infrastructure to Improve Health Equity

A health equity improvement strategy requires data collection and stratification to identify inequities, help set priorities, and drive improvement activities.

This strategy applies to numerical performance data for clinical processes and outcomes, patient experience, and public health. These data typically are summarized in measurement dashboards and scorecards appropriate to different levels of a health system. We also refer to REaL data — attributes of race, ethnicity, and language (REaL) tied to individual data records — used to stratify clinical, patient, and public health measures.

The guide includes examples from Pursuing Equity teams for collecting and using REaL data to improve health equity, mostly focused on stratification by race and ethnicity data, with relatively little focus on language data. However, the data concepts and recommendations are relevant to all demographic factors that may be associated with inequities in care, including sexual orientation and gender identity (SOGI). As health care organizations obtain and steward additional demographic data for the people they serve, it will be critical to stratify data across multiple factors (e.g., race *and* ethnicity *and* language *and* gender identity).

To create a data infrastructure, organizations need to provide staff with training and support in obtaining accurate REaL data; understand why they want to stratify data by REaL factors; characterize missing REaL data; and assess the accuracy of data.

Understand Equity Data Basics

In 1997, the US Office of Management and Budget (OMB) required reporting on race and ethnicity by federal agencies and beneficiaries of federal dollars.[6] The OMB developed standardized categories for race and ethnicity and as a result many health care organizations adopted the OMB categories. Additionally, the OMB categories for race and ethnicity are included in all electronic health records.[7] OMB standards also enable individuals to select multiple racial categories.

A 2014 Health Research and Educational Trust publication summarizes dimensions of valid REaL data:[8]

- Accuracy: Self-identified, correctly recorded, consistent categorization?

- Completeness: REaL data captured across all services? Percentage unknown, other, or declined tracked and evaluated?

- Uniqueness: Are individual patients represented only once?

- Timeliness: Are data updated regularly?

- Consistency: Are data internally consistent? Reflect the patient population served?

We explored several of these dimensions in the Pursuing Equity initiative and expand on these in the next sections.

1) Provide staff training and support in obtaining accurate REaL data.

In order to stratify, characterize, and assess REaL data organizations must first develop a data collection plan. Pursuing Equity organizations found it necessary to train and support staff in consistently interacting with patients to collect REaL data.

Examples of changes tested:

- HealthPartners in Bloomington, Minnesota, provides a common script for staff: "It is important that we are able to identify any health-related issues you may be at risk for based on your race, ethnicity, or country of origin so we can provide you with the best care. This information will remain confidential."

- Henry Ford Health System (HFHS) in Detroit, Michigan, provides patients with a brochure, "We Ask Because We Care," available in Arabic, Spanish, and English. The brochure explains why the health system requests REaL information, emphasizes that all patient information is confidential, and describes how the information will be used in quality improvement efforts to eliminate disparities in health care.[9]

2) Articulate the reasons for stratifying REaL data.

All Pursuing Equity teams derive their race and ethnicity categories from the OMB categories and may also include more granular categories that roll up to the standard OMB categories. Organizations have a variety of reasons for stratifying performance indicators using ReaL factors.

Pursuing Equity teams stratify ReaL data at their organizations to:

- Identify where inequities exist in order to target quality improvement initiatives to reduce gaps between groups;

- Understand the demographics of the community served by the organization;

- Satisfy requirements in grant applications and for potential funders;

- Better align the health care workforce composition with the community served;

- Meet contractual compliance obligations;

- Provide and manage interpreter services.[10]

Example of changes tested:

- Henry Ford Health System uses the OMB categories to stratify their data by ethnicity. To better serve their patients, the health system gathers granular origin data to reflect community demographics. Figure 2 displays a page from Henry Ford's brochure, "We Ask Because We Care." Question 2 includes a category for Arab or Chaldean identity since there is a large Arab population in Detroit.

Figure 2. Henry Ford Health System REaL Data Collection Example

BELOW ARE THE QUESTIONS YOU WILL BE ASKED AT YOUR APPOINTMENT.

1. Are you of Hispanic or Latino origin?
❑ Yes   ❑ Don't Know
❑ No
❑ Decline

2. Are you of Arab or Chaldean origin?
❑ Yes   ❑ Don't Know
❑ No
❑ Decline

3. Which of the following best describes your race? You may select up to two.
❑ Black   ❑ American Indian/Alaska Native
❑ White   ❑ Native Hawaiian/Pacific Islander
❑ Asian   ❑ Other   ❑ Don't Know
❑ Decline

4. Please provide one or two nationalities or ethnic groups that best describes your ancestry. (For example, Italian, Jamaican, African American, Haitian, Korean, Lebanese, etc. You will be provided with a list of more than 40 nationalities/ethnicities from which to choose).

5. How would you rate your ability to speak English?
❑ Very well   ❑ Not at all
❑ Well   ❑ Decline
❑ Not well   ❑ Don't Know

6. What language do you feel most comfortable using when discussing your health care?
❑ Sign Language (American)
❑ Russian   ❑ Cantonese   ❑ Albanian
❑ English   ❑ Spanish   ❑ Arabic
❑ Italian   ❑ Vietnamese   ❑ Bengali
❑ Mandarin   ❑ Yemen Arabic   ❑ Decline
❑ Don't know ❑ Other (specify) _____

3) Characterize missing REaL data.

In many organizations, identifying and reducing missing REaL data is a typical improvement project. Segmenting rates of missing REaL data by region or assigned primary care home is a starting step to determine opportunities for improvement. As with other patient-provided information, incomplete REaL data are likely to vary by mode of collection (e.g., in person, mail, patient portal). Pursuing Equity organizations estimate that there are higher rates of missing REaL data for ambulatory care patients than for hospital inpatients.

Discussions with Pursuing Equity teams suggest that 5 percent of patients with missing race or ethnicity categories is an achievable target. Even lower rates for missing language preference data appear possible. As missing data rates increase above a 5 percent threshold, clinicians and staff may have increasing questions about the validity of data displays and analysis that stratify by REaL factors, which can stall improvement efforts.

In every health care organization some patients will have missing data for one or more REaL factors. Organizations with low rates of missing REaL data generally exclude these patients from data analysis and displays with minimal risk, other than loss of precision in estimates. On the other hand, if missing REaL data occurs more frequently among some groups than others, like patients with a specific diagnosis or condition, simply ignoring the patients with missing REaL data can bias the summaries.

For example, what should you do to more deeply understand a population of patients with diabetes, with a focus on racial disparities in current HbA1c test results less than 8.0? If analysts provide summary data that includes the group with no race reported, reviewers can see for themselves whether further analysis is needed. The example data summary shown in Table 1 allows the reviewer to make a rough check: If all the patients with no reported race were assigned to either the black population or the white population, would the message in the summary change?

If the message changes, then you will need to dig deeper before drawing conclusions or launching interventions.

Table 1. Example Data Summary Showing Percent of Diabetes Patients with Self-Reported Race

Black/African American Patients with Current HbA1C < 8.0	White Patients with Current HbA1c < 8.0	Patients with Current HbA1c < 8.0 with No Self-Reported Race
68% (of 1,440 patients)	73% (of 2,137 patients)	70% (of 98 patients)
		Total: 2.7% (of 3,675 patients) have no information on race

In this example, assigning the 98 diabetes patients with no self-reported race to either the black or white groups does not change the message that black patients show a lower rate of HbA1c control than white patients; the reported percentages by race, to two digits as the original table, do not change no matter how you assign the 98 patients to the black or white groups.

It is also possible to use specific analytic methods to account for missing race and ethnicity data. A sophisticated approach, originally developed by RAND analysts, uses surname analysis and geocoding to impute race and ethnicity for patients with missing information.[11,12]

Example of changes tested:

- California's Kaiser Foundation Health Plan and Hospitals (Kaiser Permanente) has been using self-reported REaL data obtained directly from Kaiser members for the past three years.[8] As of January 2019, almost 90 percent of its more than 12 million members have self-identified race and ethnicity data in Kaiser's data warehouse. Some subsets of patients are close to a 3 percent level of missing REaL data, enabling Kaiser analysts to reduce or eliminate reliance on imputation in reports that stratify performance measures by race and ethnicity.

4) Assess the accuracy of your REaL data.

Best practice for REaL data requires self-identification by the patient or patient proxy, with the implication that the patient's choices will provide the most accurate records. As with any data item, organizations need REaL data quality assurance to ensure that REaL categories indicated in the data records accurately match patient choices.

Starting points for any data quality assurance program include the following:

- Validation sampling: Randomly select a sample of patients for an additional interview or interaction to inquire about REaL categories and compare to recorded REaL information. Consult with your quality or information systems experts to create an appropriate sampling plan and analysis that will serve your needs.

- Observation of patients: How well do patients understand what is being asked with regard to REaL data? Start with five patients to ask, "What can we do to make it easier to respond to our questions about race, ethnicity, and language use?"

- Observation of staff: How well do staff present the request for patients to respond to the REaL choices? Does each encounter or exchange follow your organization's protocol? As few as five observations can indicate lack of consistency in following a procedure or protocol.[13]

Examples of changes tested:

- Main Line Health in Pennsylvania conducts quarterly quality assurance on REaL data collection by auditing in-person and telephone patient registration.

- HealthPartners in Minnesota reviews REaL data collection rates annually to look for deterioration from baseline performance.

- Partners HealthCare in Boston conducted a special survey study, sponsored by their Health Equity and Quality Committee, to assess accuracy of REaL data. The study involved a random selection of 1,000 patients, across multiple sites, who had REaL data noted in their records. These patients were contacted by telephone to verify their REaL data, with oversampling of patients of color at multiple sites to account for potential higher non-response rates from this population. Responses were compared to fields in the health system's data records as a check on REaL data quality.

For health systems undergoing a merger or acquisition, REaL data categories in legacy information systems are likely to differ; these organizations should expect to invest time and staff effort to align and potentially rebuild patient data in the merged information system.

Challenges and Mitigation Strategies

OMB Categories of Race and Ethnicity Do Not Match Patient Self-Identification

The United States Census Bureau has found that there is an increasing number of Americans who do not identify with any of the OMB race categories listed in the census.[14] For example, the third largest group in the 2000 and 2010 censuses self-identified as "Some Other Race (SOR)."[15] Health system data collection systems need to ensure people can select more than one race and ethnicity. While widely available and used, patients may find the current definitions of race and ethnicity based on 1997 OMB documentation too narrow or confusing, which can lead to missing and inconsistent data records as well as poor patient satisfaction. The increase in biracial marriages in the US has also led to an increase in the number of patients who identify as multiracial.[16]

In addition, the OMB ethnicity category asks about Hispanic/Latino ethnicity. Pursuing Equity teams provided anecdotal evidence that some patients may not find the ethnicity question meaningful when posed as an "either/or" dichotomy (e.g., Hispanic/Latino versus Non-Hispanic/Latino), when other ethnicity choices are not available, or the presence of both race and ethnicity questions may be confusing.

While we do not yet have clear advice to eliminate patient confusion in the use of 1997 OMB race and ethnicity categories, the Pursuing Equity teams have taken the following actions to produce useful race and ethnicity data in their organizations:

- Develop a process to enable people to self-report race, ethnicity, preferred language, and country of origin;[17]

- Ensure that data collection and analysis tools allow people to select more than one racial category; and

- Provide staff with scripted language to clarify to the patient that the demographic categories may not be inclusive.

Political Climate

Pursuing Equity organizations reported concerns that some patients (e.g., undocumented persons) may be more reluctant to provide REaL data to health care organizations, given the current US immigration policy. The political climate in communities will influence trust in the health care organization and willingness of patients to share REaL data. Some Pursuing Equity teams have sent email communications responding to political events to affirm their commitment to all patients, particularly marginalized populations.

In addition, policy advocacy is a strong lever. For example, the leadership of Brigham and Women's Hospital in Boston organized staff for a rally and submission of feedback to the US Department of Homeland Security to oppose the proposed changes to federal public charge policies.[18] Those proposed changes would impact an immigrant's eligibility to obtain a Green Card if they use services like Medicaid and food assistance. In addition, the hospital sent email communications affirming their commitment to patients and employees regardless of immigration status.

Beyond REaL Categories: Sexual Orientation and Gender Identity

Sexual Orientation and Gender Identity (SOGI) data collection and analysis is an emerging area that Pursuing Equity organizations are beginning to explore. Teams are evaluating how to collect these data, holding meetings with staff to discuss SOGI issues within their organizations, and some have begun testing SOGI data collection and will next begin to analyze this data to understand equity gaps. The National Academy of Medicine (formerly the Institute of Medicine) recommended SOGI data collection in 2011 and 2012,[19] and the 2015 US Federal Meaningful Use[20] mandates that certified electronic health record (EHR) systems must have the capacity to collect, store, and retrieve structured SOGI data.

As for REaL data, self-reported data is again standard advice and health systems should enable the information to also be completed outside the clinical setting (e.g., at home) and without the supervision of clinical staff. "SOGI data collection is a somewhat novel concept; therefore, it is important to provide training for health care providers as well institutions on the importance of it as well as best practices for collection. Improving communication skills and providing valid tools such as talking points or scripts for asking questions about sexual orientation, preferred pronouns, and sexual behaviors for health care providers, staff, and community organizations can facilitate data collection."[21]

Who Has Responsibility for the Integrity of REaL Data?

Pursuing Equity organizations address challenges in interpretation and application of REaL data by supporting analysts who specialize in REaL data use. For example, Kaiser Permanente's national data analytics team has assigned a manager to be responsible for REaL data applications, contributing to both Kaiser national and regional equity improvement work. REaL data should be treated like any other patient information in terms of quality assurance, integrity, stewardship, and confidentiality.

Lessons Learned

- Self-reported REaL and SOGI data is the current standard for how health care organizations collect this data.

Tools and Resources

- [Health Research and Educational Trust Disparities Toolkit](#) (2007): Summarizes staff and patient interaction around REaL data requests; health care organizations can use the guide to inform staff training and education

- National LGBT Health Education Center (2018): [Ready, Set, Go! Guidelines and Tips for Collecting Patient Data on Sexual Orientation and Gender Identity](#)

- National Health Plan Collaborative: [Toolkit to Reduce Racial & Ethnic Disparities in Health Care](#)

- Robert Wood Johnson Foundation Aligning Forces for Quality (April 2014): [Using Data to Reduce Disparities and Improve Quality: A Guide for Health Care Organizations](#)

- MN Community Measurement (2010): [Handbook on the Collection of Race, Ethnicity, and Language Data in Medical Groups](#)

- MN Community Measurement (2018): [Race, Hispanic Ethnicity, Preferred Language and Country of Origin (REL): Data Elements, Field Specifications, & Codes](#)

- American Hospital Association (2015): [Equity of Care: A Toolkit for Eliminating Health Care Disparities](#)

- Centers for Medicare & Medicaid Services: [Building an Organizational Response to Health Disparities](#)

- Centers for Medicare & Medicaid Services: [Mapping Medicare Disparities](#)

- Health Research and Educational Trust (2011): [Improving Health Equity Through Data Collection AND Use: A Guide for Hospital Leaders](#)

Display Stratified Data and Utilize Data to Improve Health Equity

The second strategy for building data infrastructure to support health equity is displaying and using stratified data. Collecting data is not enough to eliminate inequities in health care. Staff need access to REaL data to be able to identify opportunities for improvement. Data need to be displayed in the appropriate format for the intended audience.

1) Determine how to display REaL-stratified data.

Pursuing Equity organizations use different formats to summarize and communicate about performance measure data stratified by REaL categories, such as the four formats described below. Technical REaL data preparation tasks — organizing, validating, and summarizing — are common across all display formats. The differences among formats come in the first and last steps of data presentation. The first step is identification of the audience, with attention to what the audience will do with the data. The last step is design and production of the user interface for data presentation.

Presentations at Internal and External Meetings

Figure 3 shows an example of preventive screening rate data stratified by race from a HealthPartners presentation. This figure has several strengths worth studying and emulating:

- The time plot (graph on the left) shows the relationship between the FIT screening test mailing intervention and the rate of colorectal cancer screening over time for patients of color. This display also shows the additional number of patients of color screened relative to

2017 baseline, translating percentage figures into the actual number of patients (756) impacted by the intervention. The translation of percentages into counts of individuals helps viewers understand the impact of inequitable care and promote action in the organization.

- The bar chart (on the right) shows the progress in closing the gap between screening rates for patients of color and white patients from June to October 2017 in terms of both percentages and numbers of patients: in June 2017, the gap is 12.3 percentage points, or 1,883 patients of color who would have been screened if all patients were screened at the same rate as white patients; in October 2017, the gap is 7.1 percentage points, or 1,127 patients of color that would have been screened.

Figure 3. HealthPartners Colorectal Cancer Screening Rates Stratified by Race (June–October 2017)
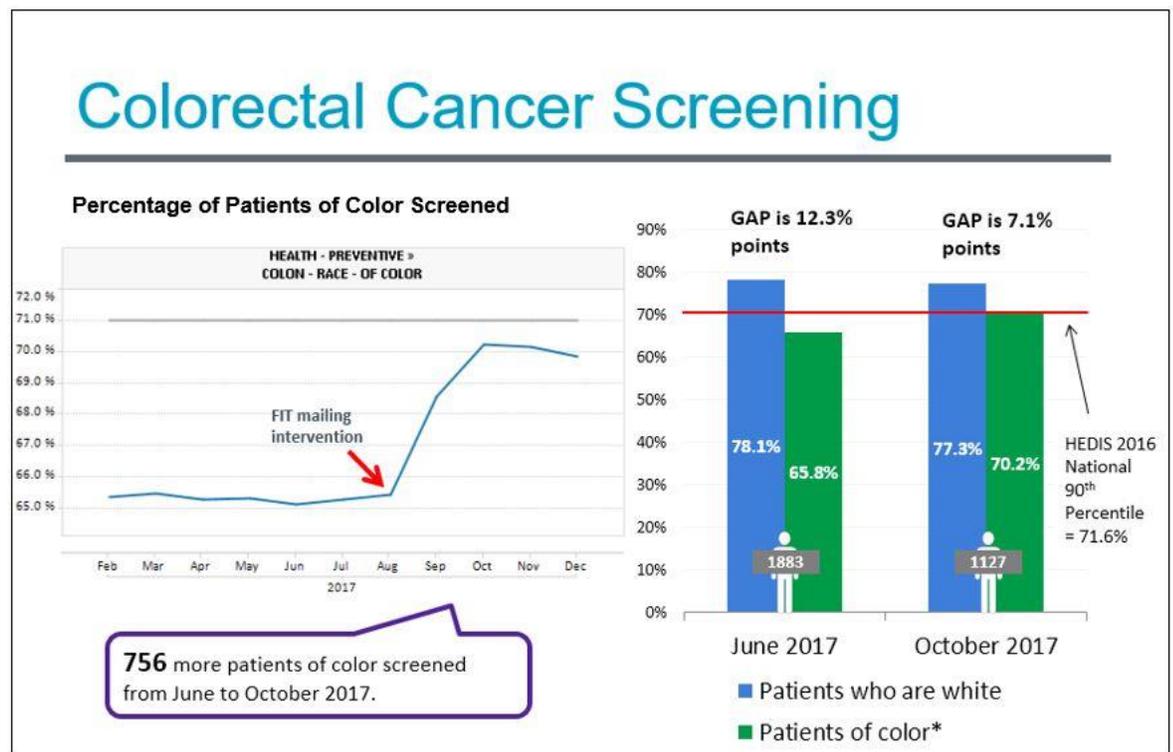
Patients of color: Black and Native American patients start screening at age 45, age 50 for all other races

Annual Equity Reports

Annual equity reports communicate and summarize the organization's goals and progress in addressing equity. The audience is the community and staff within the organization.[22] The user interface is typically a booklet or pamphlet, printed or available electronically on an organization's website. Annual reports may also be tied to community needs assessment.

Example of changes tested:

- At Rush University Medical Center, the *Rush Community Health Implementation Plan 2017–2019* outlines the health system's goals and strategies for reducing hardship and improving wellbeing in the Chicago neighborhoods it serves.[23] Their *2018 Health Equity Report* examines who visits Rush for care, the conditions that bring people to the health system, and how their outcomes reflect public health trends around health disparities that are largely

related to race and ethnicity.[24] This report, the first of its kind for Rush, is a launchpad for future work to continue improving the equitable delivery of health care to the communities served.

On-Demand Reports and Data Displays for Use by Internal Staff

Pursuing Equity organizations also report the need for on-demand, interactive data displays and reports as needed by clinicians and administrators with responsibility for the care of groups of patients and who need to explore the data to identify relationships and patterns. The visual display of data is determined by the user rather than a structured view defined by a data analyst. These views enable clinicians and administrators to examine clinical measures stratified by REaL categories relevant to local operations. For example, a clinic director can access data on patients served by the clinic with diabetes, whose current HbA1c is "out of control" (HbA1c >=8), stratified by ethnicity.

Example of changes tested:

- At HealthPartners, all core clinical measure data displays are created to allow stratification by race, country of origin, language, and payer type (used as a proxy for economic status). HealthPartners staff with appropriate access and skills can dig deeper into data using one or more stratification categories.

Dashboards of Key Performance Measure Data Displayed in Care Units or Other Locations within the Care Setting

As Pursuing Equity organizations explored using data dashboards in their work, they started with a fundamental question: Who are the intended users of the dashboard? The consensus answer: individuals or teams with management accountability and responsibility to identify and eliminate inequities in care, including the health system board, care teams, quality leads, safety leads, community health practitioners, and others.

The dashboard may be a static display of charts and tables or an interactive digital display that enables users to drill down to units or individual care teams and vary summaries of key performance indicators.

Dashboards used by Pursuing Equity organizations were generally of two types.

1) Use existing data dashboards and analytic reports and add stratified views of the data by REaL categories: HealthPartners and Kaiser Permanente take this approach; both organizations have worked for more than 10 years to acquire, validate, and apply REaL data to inform care of patients and members.

    Examples of changes tested:

    - At HealthPartners, ambulatory group leaders review a subset of core ambulatory performance measures by race and payer type, looking for gaps between groups. The quality information team produces quarterly summaries on eight ambulatory measures stratified by REaL data, ranking 55 clinic sites from best to worst based on equity performance. Leaders and managers also review publicly reported measures to compare HealthPartners sites to other medical groups in Minnesota.[25] In addition, a Health Equity Sponsor Group meets regularly to review system-wide projects aimed at closing gaps in care and improving equity. The projects include primary care topics and specific equity projects within the system's hospitals.

- At Kaiser Permanente (KP), national, regional, and/or local analytics groups support efforts to improve equity. For example, the national analytics group routinely provides stratified views of key metrics using REaL factors for several of the six national KP clinical quality initiatives.

2) Create a specific equity dashboard: Henry Ford Health System and Rush University Medical Center use this approach. Dashboard developers in Pursuing Equity organizations want to develop tools that will increase equity for people served by their organizations. They recognize the wasted effort in building dashboards that are not used. Developers should know the specific set of leaders, managers, or teams that will use an equity dashboard before launching into design and production.

Examples of changes tested:

- At Henry Ford Health System (HFHS), the proposed user of the health care equity dashboard is a committee of senior operations executives that will review the dashboard regularly, identify important inequities, and monitor progress of clinical teams to close gaps using targeted improvement projects. The health care equity dashboard under current development contains 17 clinical measures that have been identified by the organization as strategic performance indicators. The selection of strategic performance indicators starts with measures the organization has already deemed high priority. The equity dashboard is designed to show these measures stratified by demographic measures, such as race, and granular ethnicity and language factors. HFHS will be adding gender to this list of measures.

- At Rush University Medical Center, the Corporate Quality and Equity Dashboard has four distinct user groups: Rush senior leadership; Population Health; Quality and Performance Improvement; and the Center for Community Health Equity. Rush has followed a disciplined process to develop its equity dashboard that started with identification of dashboard users and owners. See Appendix A for Rush's high-level project responsibility matrix that includes both the core equity dashboard and specific social determinants of health (SDOH) dashboards that aim to show ambulatory, emergency, and inpatient groups' performance in screening and recommended social services for patients. This example illustrates that equity dashboard development requires dedicated resources and project management like any other dashboard project used by senior leaders.

Pursuing Equity organizations determined that developing enhanced dashboards or specific equity dashboards is not feasible unless the development is resourced appropriately and aligns with organizational priorities. Data analysts and data visualization specialists need to be allocated to these projects in ways that align with internal development schedules and responsibilities. In addition, leaders need to budget for staff time and effort to maintain and revise dashboards over time.

2) Ensure utilization of stratified REaL data.

In the absence of leader agreement on how to use a dashboard to drive action to improve equity, an organization should not expect the presence of a dashboard will lead to improvement. If the right people in the organization do not use the dashboard, then the development effort can be wasted. Yet, there is also the possibility that displaying data that highlights inequities can serve as a will-building call to action. Stratified data for clinical and patient experience measures already deemed important by the organization can show leaders the potential for a systematic view of equity across the health system.

Based on the experience of Pursuing Equity teams, we created a suggested outline for organizations beginning their efforts to use stratified data to improve health equity which combines content from the HRET *Framework for Stratifying Race, Ethnicity, and Language Data*[26] with the structure of the Model for Improvement.[27] While the outline has not been tested completely, it represents our current best advice at this time.

There are several benefits from combining the HRET Framework and Model for Improvement approaches:

- Success in using stratified data by REaL factors for one strategic measure, first, builds will and interest among leaders and clinicians. For example, Brigham and Women's Hospital selected congestive heart failure treatment and stratified service assignment for self-referred patients by race, age, gender, and language. Inequities in treatment and outcomes generated important discussions of institutional decisions and actions.

- Fast deployment of stratified data for one strategic measure versus waiting for development of an entire dashboard allows the organization to learn and understand aspects of equity in practice.

- This approach tests, on a small scale, organizational commitment to using stratified data to reveal inequities and take action.

- This approach supports IHI's current recommendation that organizations should gain experience in improving equity by first applying an "equity lens" to existing improvement projects aligned with strategic priorities rather than chartering new projects with the specific focus to improve equity.

Suggested Outline for Beginning to Use Stratified Data to Improve Health Equity

The HRET Framework for stratifying REaL data, developed with the advice of Pursuing Equity faculty Joe Betancourt and Aswita Tan-McGrory, outlines five steps: assemble a working group on health care disparities data; validate the REaL data; identify the highest priority metrics for stratification; determine if stratification is possible on the selected metrics; and stratify the data.

The Model for Improvement, developed by Associates in Process Improvement, comprises three questions linked to a Plan-Do-Study-Act (PDSA) test cycle (see Figure 5). Based on the experience of Pursuing Equity organizations, answers for the Model's three questions relative to using stratified data to improve health equity might look like the following.

- *What are we trying to accomplish?*
  Provide organizational leaders with a view of strategic measures stratified by REaL factors. The stratification will reveal disparities that can be reduced or eliminated to improve care.

- *How will we know that a change is an improvement?*
  Leaders agree that stratified data helps the organization identify inequities, inform action, and improve overall performance in one or more strategic measures. To assess leader agreement, talk with leaders to get their assessment of the impact of stratified data.

- *What change can we make that will result in improvement?*
  Identify one strategic measure that the organization wants to improve and provide stratified data for that measure to identify opportunities for improvement.

Figure 5. Model for Improvement
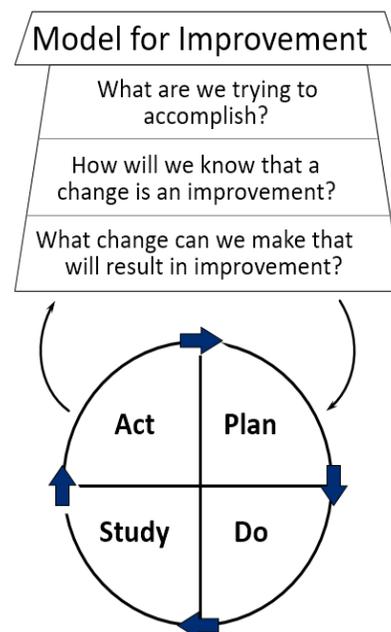
Plan: The Plan step for the PDSA test cycle uses items from the HRET Framework:

1) Identify one strategic measure that the organization wants to improve. Identify who in the organization "owns" improvement of this measure.

2) Assemble a working group that can investigate and analyze REaL data relevant to the strategic measure chosen in step 1.

3) Validate the integrity and completeness of REaL data relevant to the strategic measure.

   - If the measure is related to inpatient care and experience, focus only on the quality of the REaL data associated with patients in the hospital. If the measure is related to outpatient care, focus on the quality of REaL data for patients in the outpatient setting. You do not have to address REaL data quality for all patients.

   - Analyze levels and patterns of missing records relevant to the measure you've selected. Use advice in the "Characterize missing REaL data" section above.

   - Spot-check the quality of data by direct observation of REaL data collection and interview staff responsible for data collection as described in the "Assess the accuracy of your REaL data" section above.

   - Identify whether your organization has conducted any formal quality assurance of REaL data (like the Partners Health Care example noted above). Understand implications for your test.

4) Stratify the strategic measure data by relevant REaL factors.

5) Present and discuss the stratified data with the organization owner identified in step 1, including problems or issues identified in step 3.

Do: Carry out the steps of the plan.

Study: Study the impact of the stratification of one measure.

- What issues did you find in REaL data quality?

- Do leaders agree that stratified data for the measure helps the organization identify inequities and can inform action to improve overall performance in the strategic measure?

Act: Either revise the data stratification for the current measure, to address any REaL data quality issues, or tackle a second strategic measure using the same plan.

After one or two test cycles, organization leaders and technical staff will know whether they are ready to invest in more extensive dashboard development and application.

Challenges and Mitigation Strategies

- The experience of Pursuing Equity organizations identified a potential trap: Dashboard development can become an end rather than a means to improve equity. Use the outline described above to drive action and identify areas to improve equity.

- A second, related challenge: The dashboard work becomes the central focus of equity efforts; the organization may feel "off the hook" to actually make changes, and people say, "We are waiting until the dashboard work is finished."

Lessons Learned

- Displays typically compare data across REaL factors by percentages. We recommend translating percentages and rates into a total number of people. See Figure 3 above for an example that displays HealthPartners colorectal cancer screening rates by race that includes the actual number of 756 more patients of color (rather than a percentage only) who were screened in October 2017 relative to the June 2017 baseline.

Tools and Resources

- The HRET Framework for Stratifying Race, Ethnicity, and Language Data offers practical advice. The five steps can be tackled iteratively, to enable your organization to learn through targeted action.

  o Consider these questions before committing to dashboard development:

  o Who are the intended users of the dashboard?

  o What do the users aim to accomplish by using the dashboard?

  o How will you know that the dashboard is helping users accomplish their aim?

  o Can we estimate how much effort it will take to develop the dashboard?

  If you don't have solid answers to these questions, we recommend learning by testing a simple dashboard on a small scale. See the outline above.

- Massachusetts General Hospital's Annual Report on Equity in Healthcare Quality is an exemplar annual report.

Strategy 2: Build Organizational Capacity to Support Efforts to Improve Health Equity

To sustain health equity improvement efforts, organization's need an internal structure that aligns with and supports the equity strategy and provides education and training opportunities to make practices transparent to all staff and establish accountability for this work.

This strategy includes examples from Pursuing Equity teams on structuring their organizations and teams to support equity improvement efforts, providing staff trainings about equity, hiring practices, and creating opportunities for staff to understand their role in improving equity in the organization and for the patients they serve.

Determine the Internal Infrastructure Needed to Support Equity

There is no single internal structure to support a health equity strategy. Every organization needs to identify a structure that best fits where they are on their equity journey and takes into consideration the organization's culture.

1) Create an organizational infrastructure.

Pursuing Equity teams have had success with creating two types of organizational infrastructures to operationalize their health equity strategies: establish a separately resourced equity department or team, or leaders throughout the organization share responsibility for equity.

Establish a Separately Resourced Equity Department or Team

It is important to think about the various stakeholders that need to be included in the equity department or team (e.g., quality improvement, community health, patient experience, population health, human resources, community leaders, data analysts). Pursuing Equity organizations also note that communications staff have been valuable in the work to improve equity and are often overlooked contributors to the team; these staff can help frame and create key messaging to internal staff and the community.

Examples of changes tested:

- Brigham and Women's Department of Medicine and Southern Jamaica Plain Health Center have representatives who serve on the Department of Medicine Health Equity Committee. This committee launched in 2016 to bring together faculty, staff, and trainees committed to health equity-related substantive policies and initiatives in the organization. Today this committee provides funding, matched by clinical divisions, for eight health equity projects across the Department of Medicine. Investigators submit applications for funding that are reviewed by a research subcommittee. Grantees approved for funding meet monthly in a learning collaborative to share their research and focus on shared concepts of equity. Committee members also work with the quality department and equity team to improve health outcomes. The committee is accountable to their sponsor, the Chair of Medicine, and it reports on progress of health equity improvement efforts, including grants, to this leader. Committee members participate in three, three-hour trainings annually to develop a common foundation and shared language for health equity and institutional racism.

- Under the leadership of their SVP of Community Health and Equity and Chief Wellness and Diversity Officer, Henry Ford Health System established a Pursuing Equity Steering Committee, initially formed to support the organization's participation in the two-year IHI Pursuing Equity initiative. Steering committee members include the Chief Quality Officer,

Chief Medical Officer, SVP of Population Health, Director for the Institute of Multicultural Health, and other senior leaders representing equity, quality, safety, human resources, health care information, and community and population health. The steering committee provides strategic guidance for the organization to align equity strategies, review the health care equity dashboard, identify inequities, and sponsor equity improvement efforts in patient care and patient experience throughout the health system. Additionally, the steering committee tracks progress on the IHI five-component equity framework.

Leaders Throughout the Organization Share Responsibility for Equity

With this structure, equity is not the responsibility of one department or team; it is a shared responsibility among all leaders, in all departments, throughout the organization. Equity is explicitly included in leaders' job descriptions.

Examples of changes tested:

- For several years, HealthPartners has had a Health Equity Sponsor Group and a Diversity and Inclusion Sponsor Group that work closely together to provide direction for the organization's interconnected equity and inclusion strategy and improvement work (see Figure 6).

  o The Health Equity Sponsor Group is focused on reducing health disparities for patients, members, and the community. Co-chaired by the Chief Operating Officer of the care group (includes ambulatory and hospital) and the SVP of Government and Community Relations, the group works closely with the quality department to provide strategic leadership and align equity activities across the organization to eliminate inequities in care for patients and members. Objectives of the Health Equity Sponsor Group include the following:

    ▪ Provide an organization-wide approach to measure and reduce health care disparities;

    ▪ Support workforce development initiatives aimed at reinforcing cultural humility and respect, and increasing awareness of cultural issues;

    ▪ Improve care and service for persons who have limited English proficiency and patients who are hearing impaired;

    ▪ Involve patients and members in the planning and implementation of health equity approaches;

    ▪ Engage communities in strategies and partnerships to promote health equity;

    ▪ Provide recommendations and direction for data collection, analysis, and reporting across the organization; and

    ▪ Communicate progress on health equity initiatives throughout the organization and externally, as appropriate.

  o The Diversity and Inclusion Sponsor Group works closely with the human resources department to foster a culture of inclusion in which all staff feel welcomed, valued, and included. The Cross-Cultural Leadership Network and the Lesbian, Gay, Bi-Sexual, Transgender, Queer & Questioning Network are two business engagement networks that work to ensure the organization's practices and policies serve the diverse and individual needs of patients, staff, and the community.

Figure 6. HealthPartners Infrastructure to Support Health Equity
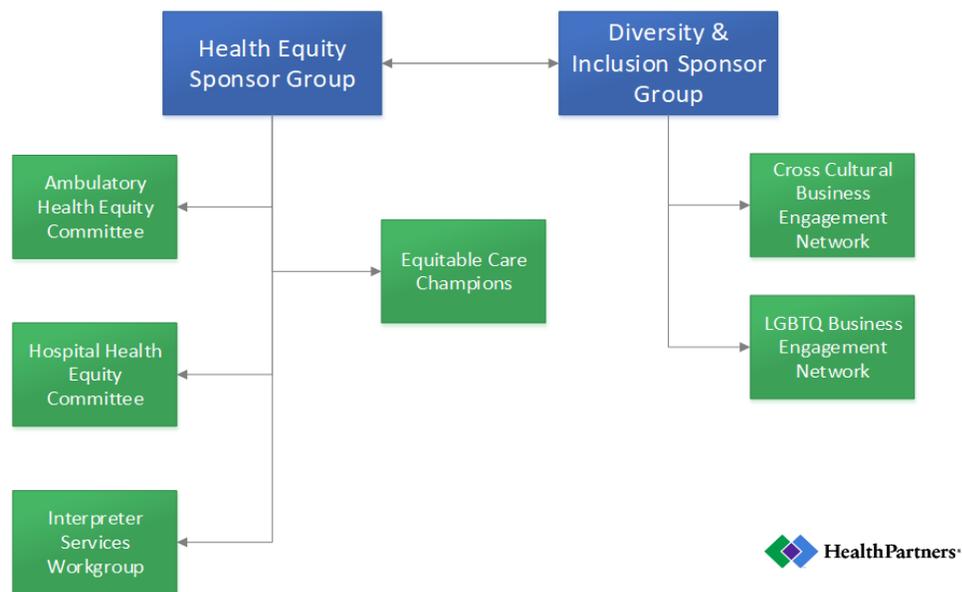
2) The equity department (or leaders) and the quality department work collaboratively to advance equity.

Equity is often described as the "forgotten aim" since progress on this aim has lagged the other five aims for improvement articulated by the Institute of Medicine in the *Crossing the Quality Chasm* report: care that is safe, timely, effective, efficient, equitable, and patient centered.[28]

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. In the experience of Pursuing Equity organizations, when these departments or teams began working collaboratively there was steady improvement. Thus, it is imperative that quality and equity are tightly linked if organizations aspire to make real progress in closing equity gaps.

Pursuing Equity teams suggest including equity in the Chief Quality Officer's job description and stratifying quality data by REaL factors. Additionally, the quality department can support equity improvement efforts by providing training on using various improvement methods and tools (e.g., developing an improvement project aim, theory, measurement strategy, and testing and learning processes). Sharing these processes can help build bridges between the two departments.

Example of changes tested:

- In 2018, Vidant Health in North Carolina formed a cross-departmental Pursuing Equity workgroup to review stratified data and improve the accuracy and completeness of REaL data collected during patient registration. The workgroup comprises representatives from the quality department, including quality analytics and information technology staff, and other departments. The workgroup developed educational materials on the importance of collecting REaL data and provides training sessions to Patient Access Services (PAS) Directors. The

workgroup is also producing an educational video for staff on the workflow for collecting REaL data during registration. The group has used quality improvement methods to charter, measure, and scale their interventions at Vidant Health.

Challenges and Mitigation Strategies

Determining exactly which infrastructure will work in your organization's culture may be challenging. As the work to improve health equity progresses, Pursuing Equity teams have been amenable to refining and evolving their infrastructures and pausing to evaluate effectiveness.

Organizations may encounter a variety of challenges in establishing the infrastructure to support health equity. Of the two types of infrastructure described in this guide, neither is perfect but the main idea is to choose a structure that leads your organization to action.

Challenges with creating an equity department or team:

- Turnover of equity department staff may feel constant with shifting roles, staff turnover, and employee leave. One mitigation strategy to ensure momentum and visibility is not lost when staff leave the department is having a broad base of staff who can contribute. Seek out senior leaders and staff who are passionate about equity, who staff respect, and invite them to equity department meetings and other meetings where equity is a topic. When there is staff turnover, it is critical to continue engaging staff and building will for equity work throughout the organization.

- Ensuring that an equity department is able to move work forward daily and stay visible at senior leadership levels is a challenge. To mitigate this challenge, Pursuing Equity organizations recognized the importance of: 1) designating a project manager for equity improvement efforts, a person responsible for owning next steps, action items, and follow up, and to keep the work moving forward; and 2) closely engaging senior leaders who can remove barriers and ensure visibility of the equity work at the highest levels. See the guide for the first component of the framework, Make Health Equity a Strategic Priority, for more details on leadership ownership of equity work.[2]

- The equity department must have access to data to do their work. Strategy 1 in this guide provides detailed discussion of creating data infrastructure to improve health equity.

- With the establishment of an equity department, others in the organization may view equity as this group's responsibility and not theirs. Quality, including equity, is the responsibility of all staff in the organization; the role of the equity department is to catalyze and support the actions of the entire system to improve health equity.

Challenges with establishing shared responsibility for equity among leaders throughout the organization:

- With broad-based, shared responsibility for equity, staff may feel frustrated because they do not have allocated time for health equity improvement efforts. Mitigation strategies include appropriately resourcing equity work and framing equity as a priority and responsibility for all staff; emphasize that equity is core to the organization's mission, vision, and values.

- All staff need a working understanding of equity and the organization's priorities, strategies, and policies that support equity. To mitigate this challenge, the "Educate Staff and Increase Capability and Capacity for Improving Health Equity" section below describes best practices and provides examples from Pursuing Equity teams.

Lessons Learned

- Whether your organization has one department leading equity efforts or equity responsibilities are spread out across many groups and individuals, invite staff and community representatives to participate in equity improvement efforts, including data analysts; human resources representatives; communications professionals, to help develop key messages for staff, patients, and the community; quality professionals; and community partners.

- Equity teams need to be diverse (race, ethnicity, gender, etc.) and include staff from all levels of the organization.

- Senior leaders must be engaged if equity is going to be strategic for the organization. This work cannot be delegated only to more junior staff.

Tools and Resources

- Use the Health Equity Inventory tool from Association of American Medical Colleges to map all health equity activities underway in your organization, to help you develop a coordinated plan and set of activities for equity improvement.

Educate Staff and Increase Capability and Capacity for Improving Health Equity

Developing staff knowledge and skills to improve equity is a key component of the strategy for building organizational capacity. Leaders need to encourage continuous learning about equity in the organization by supporting staff training, equity groups and activities, and hiring practices and other organizational policies that promote equity.

1) Provide training on equity for leaders and staff.

To increase staff knowledge and skills, Pursuing Equity organizations tested a diverse range of equity training programs for leaders and staff, including required in-person trainings and online trainings. These trainings encourage the development of a shared language at the organization and enable staff to learn how improving equity relates to their daily work.

Examples of changes tested:

- Henry Ford Health System (HFHS) developed a 10-minute online training for all 30,000 employees, including clinical staff, about cross-cultural communication as part of their American Hospital Association #123forEquity Campaign pledge. This required training includes both clinical and non-clinical scenarios and has been completed by more than 90 percent of HFHS employees. The training uses the Learn, Explain, Acknowledge, Recommend, Negotiate (LEARN) model, a teaching framework that helps health care providers better communicate with patients and administrative/non-clinical staff communicate with clinical team members.

- Main Line Health designed a two-day, in-person training called Diversity, Respect & Inclusion Learning Experience for 900 of their managers. They plan to expand this training to 11,000 employees and offer it as a one-day immersive training.

- HealthPartners offers optional online training modules for all staff on the topics of leading with cultural humility, understanding diversity and inclusion, and recognizing and managing bias. Additionally, HealthPartners created a Patient and Member Bias resource guide for staff

that includes guiding principles, recommended language and scripts, and example scenarios to assist staff with creating a plan for addressing instances of member and patient bias.

- In 2018, HealthPartners continued work to improve the experience of care for LGBTQ patients, members, and employees by developing and launching two trainings. The first training, for all staff, focuses on LGBTQ awareness and seeks to:

  o Explain the relationship between sex, gender, and sexual orientation;

  o Increase awareness of the barriers to inclusion that LGBTQ people face; and

  o Practice culturally sensitive strategies for interacting with LGBTQ patients, members, and colleagues.

  The second training, for clinicians, focuses on the care of transgender patients and has the following objectives:

  o Discuss the medical and surgical treatment options for gender transition;

  o Review the basic health screenings and primary care services needed for people who are transgender; and

  o Learn about resources available within the organization, locally, and nationally for people who are transgender.

- In 2018, Vidant Health launched an online, interactive equity and inclusion education module that all new employees complete in the on-boarding process and current employees complete as part of yearly education requirements. To date, 1,156 new staff members and 7,170 existing staff members have completed the online education.

2) Create opportunities for staff to build equity knowledge.

In addition to training programs, it is important to create other opportunities to engage staff in building their knowledge of equity and normalize equity in the organization. Discussion groups, newsletters, book clubs, annual conferences, and meetings where equity is a key focus create opportunities for staff to build their knowledge and understand their role in improving equity. Consistent communication of these opportunities is important to ensure that equity is not seen as a trend that will lose attention, but as an organizational strategic priority. Pursuing Equity organizations find it is important to engage staff frequently around equity and offer various formats and venues for engagement and learning.

Examples of changes tested:

- Henry Ford Health System created a Health Equity Scholars Program to support clinical and non-clinical staff who receive initial and ongoing equity trainings and want to actively work on improving equity across the organization. Scholars focus on a health care quality improvement or health research project as a part of the completion of their training to support initiatives aimed at reducing inequities.

- HealthPartners has an Equitable Care Champions program for clinicians and staff who receive initial and ongoing expert training to help disseminate best practices and serve as local resources for their colleagues caring for patients with limited English proficiency and patients from diverse cultures. The champions hold health equity-related events and manage an intranet site with cross-cultural resources for staff. Additionally, champions receive a bi-monthly newsletter, *Cultural Roots,* which is disseminated throughout the organization and discusses equity-related events and articles. Topics from 2018 include disparities in palliative

care, cultural humility and advance care planning, addressing weight bias, and tips and strategies for managing family members' requests to be interpreters.

- In 2014, Henry Ford Health System established a book club focused on reading books about equity, race, and social justice. The book club meets quarterly and is open to all employees. At each meeting, the group discusses their reactions to the book, themes, and new learnings about equity and chooses the next book. Attendance varies, but typically 8 to 25 people attend and there are 116 members who follow their book club on goodreads.com. To date, the book club has read 33 books and the complete list can be found on the [Henry Ford library website.](#)

- In 2018, Vidant Health designed and launched an equity and inclusion salon for small groups of team members (staff) to gather and discuss why equity and inclusion are critical to Vidant's mission, values, and strategy. A facilitator leads the group in discussion about how equity and inclusion are vital for the organization's safety, quality, experience, and financial outcomes. To date, 263 staff have participated in an equity and inclusion salon.

- Equity is a dimension of Kaiser Permanente's national clinical quality strategy derived from the six Institute of Medicine aims: care that is safe, timely, effective, efficient, equitable, and patient centered. The clinical quality strategy provides a focus and structure to support health equity work. Kaiser Permanente's annual NEID (National Equity, Inclusion, & Diversity) and National Quality Conferences are venues that support equity work and provide learning opportunities for staff across the organization to build knowledge and skills in improving equity.

- Northwest Colorado Health conducted staff roundtables and an open-forum-style discussions to understand what health equity means to staff and to identify training needs.

- Following a series of high-profile traumatic community events such as shootings and examples of discrimination in the news, HealthPartners' 150 executive leaders convened to plan "Open Conversations about Race," collectively leading more than 200 discussions regarding race with staff across the organization. They also engage employees through annual "It's Time to Talk" dialogues, which leverage the framework of Indigenous Talking Circles, on such topics as race, poverty, and language. The most recent dialogues focused on transgender and gender identity.

  o HealthPartners also partnered with Pillsbury House Theater to bring a powerful live performance, called "Breaking Ice," to 2,000 of the system's leaders. The performance highlighted the effect of biases and microaggressions in the workplace, and how these biases can influence interactions with colleagues, members, and patients. Leaders received a video of the performance and discussion guides to use as training resources with their teams, with the goal of reaching all 25,000 colleagues.

3) Establish equity-promoting hiring and professional development practices.

In addition to increasing current staff's understanding of equity, it is also important to think about the characteristics of the future workforce you want to attract to your organization. A good place to start is to look at your workforce diversity and ensure that it is representative of the community your organization serves. There should be staff diversity at all levels of the organization, including the leadership team and board. Pursuing Equity organizations had success in examining their hiring practices with an equity lens, including questions asked during interviews and their recruitment process. The human resources department is an important partner in this work to increase workforce diversity and examine hiring practices and policies. Pursuing Equity teams also examined promotion and professional development policies with an equity lens.

Examples of changes tested:

- Henry Ford Health System reduced potentially discriminatory aspects of their recruitment process, including "ban the box" which aims to create fair opportunities for people with convictions, and implementing competencies instead of qualification requirements (such as higher education degrees).

- HealthPartners tracks racial and ethnic diversity as well as gender diversity at multiple levels of the organization, including all employees, leaders (supervisors, managers, directors, officers), physicians, and physician leaders (medical director or department chair). HealthPartners Board comprises about 50 percent women and 20 percent people of color, which is representative of the community they serve.[29] Additionally, HealthPartners measures inclusion in their annual employee engagement survey, including metrics on feeling free to voice opinions, feeling valued as an individual, and being treated with respect. In 2018, colleagues responded 89 percent positively on the diversity aspects of the survey.

- In 2018, Vidant Health reviewed their staff (team members) and management ethnicity data. (see Table 2). Overall, the Vidant team member population reflects the demographics of eastern North Carolina. Vidant management demographics do not align with eastern North Carolina demographics and Vidant's team member population. As a result, by 2022, Vidant Health aims to increase the representation of people of color in management positions by 15 percent. The health system has a variety of strategies to accomplish this goal.

  o In 2018, Vidant developed a toolkit to assist managers with identifying, encouraging, and supporting advancement opportunities for the staff they supervise, including information on educational development opportunities, resume writing, and interviewing skills.

  o In 2019, Vidant's Human Resources (HR) Department launched a pilot initiative for staff to get tailored help from HR representatives on interview skill development, resume preparation, tuition assistance, and other professional development resources. To date, 55 team members have participated in this pilot, with more than 80 percent self-identifying as black, Hispanic, Native American, or other race.

Table 2. Vidant Health Employee Data Stratified by Ethnic Group and Compared to Eastern North Carolina Demographics (February 2018)

Eastern North Carolina			Vidant Health Team Members			Vidant Management (Including Supervisors)		
Ethnic Group	Count	Index	Ethnic Group	Count	Index	Ethnic Group	Count	Index
Asian	17,951	1.2%	Asian	255	2.3%	Asian	9	1.0%
Black	456,747	29.9%	Black	2,871	26.2%	Black	123	12.7%
Hispanic	124,920	N/A	Hispanic	221	2.0%	Hispanic	18	1.9%
Native American	10,138	0.7%	Native American	46	0.4%	Native American	7	0.7%
Not Specified	65,879	4.3%	Not Specified	137	1.2%	Not Specified	10	1.0%
Pacific	1,419	0.1%	Pacific	5	0.0%	Pacific	0	0.0%
Two or More	36,400	2.4%	Two or More	49	0.4%	Two or More	4	0.4%
White	938,709	61.5%	White	7,382	67.3%	White	798	82.4%
Total	1,527,243		Total	10,966		Total	969	

Challenges and Mitigation Strategies

Everyone has biases that they may or may not be aware of and these biases may impact the hiring and promotion process. Human resources and hiring teams need to be aware of how unconscious biases to generalize and stereotype may perpetuate racial and health care inequities. Mitigation strategies for this challenge include having hiring teams participate in unconscious bias trainings and creating a diverse hiring and promotion committee so diverse points of view are included.

Lessons Learned

- Develop a recruitment and retention strategy to ensure the health system's workforce reflects the demographics of the community it serves.

- Review employee promotion, recruitment, and turnover demographic data to identify areas to improve diversity.

- Assess job applicants' understanding of root causes of inequities. For example, ask candidates to share their definition of health equity and examples of how they have demonstrated cultural humility.

- Normalize conversations about health equity in the organization through trainings, meetings, and other forums.

Tools and Resources

- Use the Project Implicit test to learn about hidden biases and attitudes toward or beliefs about specific topics.

Conclusion

Based on IHI's work alongside eight health care organizations participating in the Pursuing Equity initiative, two strategies for building infrastructure to support health equity emerged: create the data infrastructure to improve health equity and build organizational capacity to support efforts to improve health equity. The recommendations, examples, and tools shared in this guide endeavor to help health care organizations in their efforts to improve health equity by building an infrastructure that best fits their culture and organizational needs.

Appendix A: Example Equity Dashboard

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RUSH FY19 EQUITY|SDOH DATA VISUALIZATION INITIATIVES
by Audience and by Resource

ITEM #	PROJECT	TYPE OF DELIVERABLE	DATA VISUALIZATION DELIVERABLE	FRONT-END TOOL	INTENDED END-USER/AUDIENCE OF DATA VISUALIZATION TOOL	DEVELOPMENT TEAM (Collaborative Cross-Functional Team Members Responsible For The Design, Development and/or Delivery of Data Visualization Tool)	
						BUSINESS SMEs & USER ACCEPTANCE TESTING|VALIDATION	INFORMATION TECHNOLOGY RESOURCES
1.1	Corporate Quality and Equity Dashboard (by Race|Ethnicity and Language and Zip Code info)	NEW	Corporate Quality & Equity Dashboard v1.0 PIOC eCQM's Only (Patient level & trending annually)	DASHBOARD (Tableau)	RUSH Senior Leadership Population Health Quality|Performance Improvement Center for Community Health Equity	Ambulatory Physician(s) Quality|Performance Improvement	RUSH – Combo KM BA|DA|Dev
1.2		ENHANCEMENT	Corporate Quality & Equity Dashboard v1.1 PIOC eCQM's Only (add Provider level & quarterly trending)			Ambulatory Physician(s) Quality|Performance Improvement	RUSH – KM PM or Business Analyst RUSH – KM Data Analyst|Wrangler RUSH – KM Data Visualization Developer
1.3		ENHANCEMENT	Corporate Quality & Equity Dashboard v1.2 PIOC eCQM's & Patient Experience Data Only (add Patient Experience Data)			Ambulatory Physician(s) Patient Experience SME Quality|Performance Improvement	
1.4		ENHANCEMENT	Corporate Quality & Equity Dashboard v1.3 PIOC eCQM's, Patient Experience & Readmission Data Only (add Readmission Data)			Ambulatory Physician(s) Quality|Performance Improvement Readmission SME	
2.1	Corporate Social Determinants of Health (SDoH) Reporting and Dashboarding Tools (by Race|Ethnicity, Age and Language (REaL data), Gender, Zip Code and Financial Class info)	NEW	SDoH Screening Steward tool allows for frontline actionable reporting (Patient level)	REPORT (Epic's Workbench Report)	Clinicians & Medical Assistants Patient Navigators SDoH Operations Team Social Workers	Physician Champions PopHealth PM Quality|Performance Improvement	RUSH - PM or Business Analyst RUSH – Epic Ambulatory App. Team Mbr
2.2		NEW	SDoH Screening Provider tool (Provider|Practice|Department level)	REPORT (Epic's Workbench Report)	Clinicians & Medical Assistants Quality|Performance Improvement SDoH Operations Team Social Workers	Physician Champions PopHealth PM Quality|Performance Improvement	RUSH – PM or Business Analyst RUSH – Epic Ambulatory App. Team Mbr
2.3		NEW	Social Determinants of Health (SDoH) Screening Rate & Outcomes (Ambulatory, ED & Inpatient) Adhoc Self-Service Discovery Tool	CUSTOM/ON-DEMAND STRATIFICATION OF KEY MEASURES (Epic's SlicerDicer)	Clinicians & Medical Assistants Quality|Performance Improvement SDoH Operations Team Social Workers	PopHealth PM Quality|Performance Improvement	RUSH- KM PM or Business Analyst RUSH – Epic Ambulatory App. Analyst RUSH – Epic ASAP App. Analyst RUSH – Epic Inpatient App. Analyst EPIC - Epic Implementation Services
2.4		NEW	SDoH Screening Adoption Tracker *Ambulatory	Emergency	Inpatient *	DASHBOARD (Tableau)	Case Management Clinicians Quality|Performance Improvement Population Health SDoH Operations Team SDoH Leadership Team Social Workers	Case Management Rep. Physician Champions (Ambulatory, ED & Inpatient) PopHealth PM Quality|Performance Improvement	RUSH- KM PM or Business Analyst RUSH – KM Data Analyst|Wrangler RUSH – KM Data Visualization Developer RUSH – Epic Ambulatory App. Analyst RUSH – Epic ASAP App. Analyst RUSH – Epic Inpatient App. Analyst
2.5		NEW	SDoH Resource Utilization Tracker *Ambulatory	Emergency	Inpatient *	DASHBOARD (Tableau)			

*KM = RUSH Knowledge Management Team
*PM = Project Manager
*SME – Subject Matter Expert

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