

PAVING THE WAY TO EQUITY: A PROGRESS REPORT

Centers for Medicare & Medicaid Services
Office of Minority Health

2015-2021

Table of Contents

Executive Summary	3
Introduction	6
The CMS Equity Plan for Improving Quality in Medicare	7
CMS Equity Plan for Medicare: Priority Areas	9
Measuring Progress	10
Evaluation Goal	10
Evaluation Questions	11
Limitations of This Report	11
Increasing Understanding and Awareness of Disparities	11
CMS Expanded the Collection, Reporting, and Analysis of Standardized Data	12
CMS Developed Resources to Increase the Health Care Workforce’s Understanding of Disparities.....	15
Gaps, Needs, and Next Steps To Increase Understanding and Awareness of Disparities.....	17
Developing and Disseminating Solutions to Achieve Health Equity	18
CMS Evaluated Disparities Impacts and Integrated Equity Solutions across CMS Programs	18
CMS Developed and Disseminated Promising Approaches to Support the Health Care Workforce in Addressing Health Disparities	20
Gaps, Needs, Next Steps to Achieve Health Equity By Developing and Disseminating Solutions.....	25
Implementing Sustainable Actions to Achieve Health Equity	25
CMS Leveraged Qualitative and Quantitative Research Findings to Improve Programs and Policies to Reduce Disparities.....	26
CMS Convened and Mobilized Partners to Take Action on Disparities.....	28
Gaps, Needs, and Next Steps to Implement Sustainable Actions	30

Executive Summary

Disparities in health and health care persist despite decades of research and widespread efforts to improve health in the United States.ⁱ Certain populations – including racial and ethnic minorities, sexual and gender minorities, people with disabilities, and individuals living in rural areas – are more likely to experience worse health outcomes, limited access to health care services, and lower quality of care than the general population.^{ii,iii,iv,v} These disparities are reflected among vulnerable Medicare beneficiaries. These individuals typically have lower preventive care utilization, limited access to chronic disease management, lower patient experience scores, and higher rates of hospital readmissions and chronic disease compared to their non-minority counterparts.^{vi,vii,viii}

In 2015, in recognizing these disparities and seeking to close gaps in health care access, quality, and outcomes among those CMS serves, the agency developed the first-ever [CMS Equity Plan for Improving Quality in Medicare](#) (CMS Equity Plan for Medicare). This plan provides an action-oriented, results-driven path for achieving health equity by focusing on populations that experience disproportionately high burdens of disease, worse quality of care, and barriers to accessing care – specifically, racial and ethnic minorities, sexual and gender minorities, people with disabilities, and individuals living in rural areas. CMS developed this strategic approach to addressing disparities to support and advance work already underway within the agency and among partners. This includes CMS’ network of quality improvement partners, federal, state, local, and tribal organizations, health care providers, health plans, individuals and families, researchers and policymakers, and other stakeholders invested in achieving health equity among Medicare beneficiaries. The CMS Equity Plan for Medicare focuses the agency and external stakeholders on results, unleashing innovation, and empowering patients, while eliminating disparities among those we serve.

The CMS Equity Plan for Medicare reflects CMS’ *Path to Equity*, an organizing framework with three core elements: 1) increasing *understanding and awareness* of disparities; 2) developing and disseminating *solutions* to achieve health equity; and 3) implementing sustainable *actions* to achieve health equity. CMS uses this framework to guide health equity work within the agency and with external partners. This report describes some of the key ways CMS has demonstrated progress on the Path to Equity between 2015 and 2021, including:

Increasing Understanding and Awareness of Disparities

- ▶ CMS expanded the collection, reporting, and analysis of standardized data through publication of reports, public data sets, increased access to CMS data for researchers, and data visualization products. These resources allow users to see variations across communities. They also empower users to enhance their own data collection and analysis to deliver results. For example in 2016, CMS began annually releasing data and reports on the [Medicare Advantage \(MA\) population stratified by race and ethnicity](#). In 2018, CMS expanded this effort with the annual publication of its [Rural-Urban Disparities in Health Care in Medicare](#) report. These tools and reports are broadly used – as of October 2020, the [Mapping Medicare Disparities Tool](#) has been used by over 39,800 individuals to learn more about local health disparities and identify opportunities for improvement.
- ▶ CMS produced numerous resources to increase the health care workforce’s understanding of disparities and of ways to improve patient experience, and disseminated research findings on the drivers of disparities and best practices on the provision of culturally and linguistically appropriate services (CLAS).

Developing and Disseminating Solutions to Achieve Health Equity

- ▶ CMS focused on results, evaluating disparities impacts and integrating equity solutions across programs through the development and implementation of the [CMS Disparities Impact Statement](#). The CMS Health Equity Technical Assistance Program is available to support quality improvement partners, providers, and all other CMS stakeholders. Stakeholders can ask questions about how to embed health equity and reduce disparities among enrollees and beneficiaries they serve. From its inception in 2017 through October 2020, the Health Equity TA team has responded to over 278 technical assistance requests from stakeholders in 39 states as well as Washington, DC, and Puerto Rico.
- ▶ CMS developed and disseminated innovative and promising approaches to support the health care workforce in addressing health disparities and improving the patient experience through provider-focused, accredited trainings supported by the [Medicare Learning Network](#) and other platforms. Nearly a dozen provider-focused guides have been produced to help practices take strategic, step-by-step approaches to improving care for vulnerable communities.
- ▶ CMS responded to the Coronavirus (COVID-19) pandemic and public health emergency through listening sessions, creation of new resources, developing [Medicare COVID-19 data snapshots](#) to indicate impact on minority populations, and helping to accumulate all existing resources for minority populations, providers serving minority populations, and anything in additional languages.

Implementing Sustainable Actions to Achieve Health Equity

- ▶ CMS embedded a focus on health equity results in programs and policies through standardized monthly and quarterly reporting on health disparities in the QIN-QIO and Hospital Innovation and Improvement Network (HIIN) programs in the 11th Statement of Work. The HIINs were also required to complete and update CMS Disparities Impact Statements and action plans to monitor and reduce disparities.

- ▶ CMS engaged with stakeholders, focusing attention on vulnerable and rural communities who have been hardest hit by the public health emergency and COVID-19. CMS is working with stakeholders and partners to identify barriers, solutions, and opportunities to improve access to care and the quality of care in health settings including nursing homes and hospitals.
- ▶ CMS convened and mobilized partners to take action to reduce disparities through the [CMS Health Equity Award](#) focused on results and innovation. This recognition has fostered dedicated communities of national stakeholders working together and independently to close gaps in health care, access, and outcomes. In the 3 years this recognition has been shared, nearly 90 organizations have applied for the award and six have been profiled for their ability to reduce and eliminate disparities.

Each section of this report concludes by considering emerging opportunities to build on our progress with a focus on CMS' current [strategic initiatives](#), HHS priorities, and areas in which CMS quality improvement contractors will be in action moving forward. For example, CMS will continue to rethink and improve its work in partnership with rural and other vulnerable communities to ease the burden on local providers and focus on results, innovation, and patient experience. We will build on successful work embedding evaluation, monitoring, standardized data, and tools to reduce disparities for minority beneficiaries served by CMS programs, further inspire our partners to collaborate to achieve health equity, and continue spreading resources and innovative practices to reduce disparities across organizations and communities.

CMS will also enhance and strengthen existing work supporting providers in underserved and rural areas as they move toward [Merit-Based Incentive Payment](#), [Advanced Alternative Payment Models](#), and other value-based payment systems, to ensure that all individuals served by CMS can reach their highest level of health. CMS will continue to explore opportunities to advance health equity across all of the Agency's programs and policies, broadening the reach and impact of the CMS Equity Plan beyond the Medicare program to benefit the millions of individuals we serve. COVID-19 has shed new light on the prevalence of disparities in access, quality, and outcomes among minority and vulnerable communities, and has underscored the importance of taking action to promote health equity. Although the Path to Equity is long and challenging, CMS is committed to working with partners and communities to move the needle on disparities and achieve health equity for all those impacted by CMS programs.

Introduction

Health and health care disparities are related but unique concepts: *health disparities* typically refer to higher burdens of illness, mortality, injury, or quality of life experienced by one group relative to another, whereas *health care disparities* generally refer to differences between groups in access to, use of, quality of care, or health coverage.^{ix,x,xi,xii} These differences cannot necessarily be explained by variations in health needs, preferences, or treatment recommendations but are more likely to be related to social, systemic, and environmental inequities or inequalities that affect individuals.^{xiii,xiv,xv} For example, language barriers, how health care is organized and accessed, provider bias, geography, affordability, transportation, social isolation, housing, nutrition, access to technology, and other social risk factors that affect individuals' health behaviors, work together and independently to create gaps between and among groups of varied socioeconomic status, age, location, gender, disability status, race and ethnicity, and sexual identity and orientation. Disparities can affect any and all populations and subgroups within populations, and may differ for communities across locations and over time.^{xvi,xvii}

Many communities face significant disparities in health care quality, outcomes, and access, but racial and ethnic minorities, sexual and gender minorities, individuals with disabilities, and individuals living in rural areas are disproportionately affected.^{xviii,xix,xx} For example:

- ▶ In 2017, across nearly every state and territory Black, Hispanic, Asian Pacific Islander, and American Indian and Alaska Native Medicare beneficiaries have a higher prevalence of chronic conditions including hypertension, diabetes, chronic kidney disease, and heart failure than Whites.^{xxi}
- ▶ The LGBTQ population has the highest rates of tobacco use, and certain LGBTQ subgroups have more chronic conditions as well as higher prevalence and earlier onset of disabilities than heterosexuals.^{xxii,xxiii}
- ▶ Individuals with disabilities experience worse health and poorer access to mental health care services compared to people without a disability. Women with disabilities are less likely to receive regular breast and cervical cancer screenings and are more likely to have cancer and then be diagnosed at a later stage, than women without disabilities.^{xxiv,xxv}
- ▶ The prevalence of diabetes is 8.6 percent higher in rural areas than in urban areas, and those diagnosed with diabetes in rural areas are at higher risk of amputations and inpatient death. They are less likely to receive a professional foot exam, and less likely to be able to access diabetes self-care education than their urban counterparts.^{xxvi}

Providers, government agencies, and researchers have worked for decades to understand and reduce health and health care disparities. However, despite improvements in overall population health, communities including racial and ethnic minorities, sexual and gender minorities, individuals with disabilities, and those living in rural areas, experience a lower quality of care and worse health outcomes than their non-minority counterparts.^{xxvii,xxviii,xxix} Disparities persist, and in some cases, continue to worsen, and affect individuals throughout their lifespan from birth into older adulthood, often leading to complex and compound health conditions at later life

stages.^{xxx,xxxi} It is not necessarily a lack of effort or intention allowing these gaps to grow. Rather, in many cases CMS has heard that organizations struggle with knowing where to begin to address the driving forces of these disparities and how they can systematically change communities' and individuals' social determinants of health and their health trajectory. In order to effectively reduce disparities, government, providers, and health care organizations need to work deliberately and collaboratively to address the factors driving these gaps, so that each individual can achieve their highest level of health.

CMS is committed to quality improvement and reducing disparities while meeting the needs of providers, individuals, and families. Though the Path to Equity is long, CMS and its many partners will continue to work together to bring about long-term change. This report highlights some of CMS' progress from 2015 through 2021 and identifies areas of opportunity to achieve health equity moving forward.

THE CMS EQUITY PLAN FOR IMPROVING QUALITY IN MEDICARE

CMS developed the [CMS Equity Plan for Improving Quality in Medicare](#) (CMS Equity Plan for Medicare) in 2015, to support its commitment to achieving health equity through a focus on results, innovation, and improving the patient experience. The CMS Equity Plan for Medicare lays out an action-oriented, results-driven path for achieving health equity. It focuses on driving improvement in communities with disproportionately high burdens of disease including chronic conditions, worse quality of care, and barriers to accessing care. These vulnerable populations include racial and ethnic minorities, sexual and gender minorities, people with disabilities, and individuals living in rural areas. This strategic approach to disparity reduction advances work underway at CMS' network of quality improvement partners, federal, state, local, and tribal organizations, providers of all types, health plans, beneficiaries and their families, researchers and policymakers, and other stakeholders invested in achieving health equity among Medicare beneficiaries.

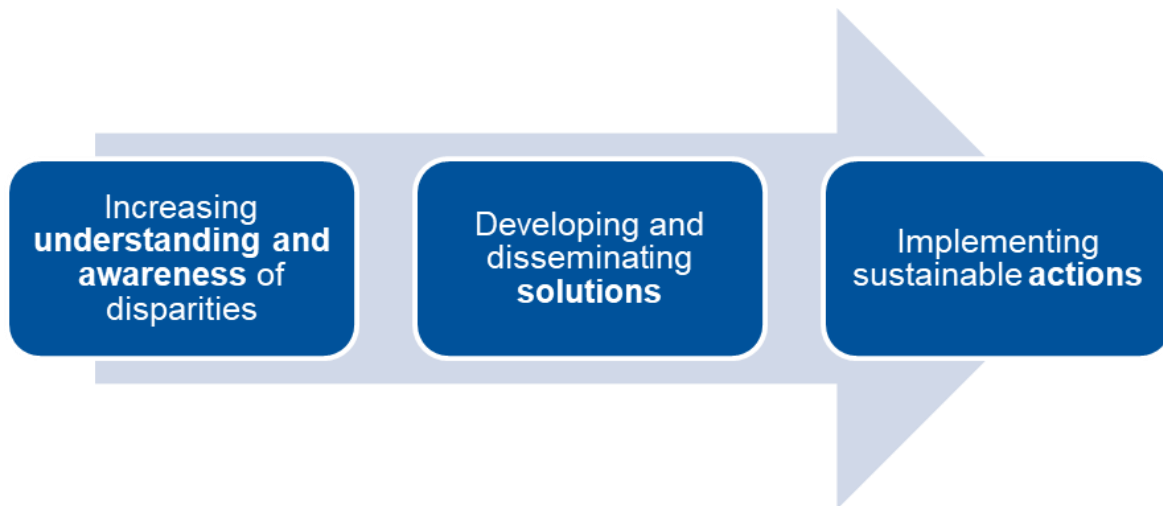
To develop the plan, CMS conducted a literature review to identify evidence-based health care interventions, quality improvement programs, and initiatives with potential to reduce disparities among our priority populations. CMS also conducted an environmental scan to identify promising health care interventions, programs, initiatives, and policies. Most importantly, CMS gathered initial and ongoing input from stakeholders in a series of regional listening sessions across the U.S. Over the last five years and into the future, CMS OMH has and will continue to engage in conversations with national, regional, and local thought leaders to carve out a timely, responsive, and actionable plan for a Path to Equity in Medicare.

The CMS Equity Plan for Medicare is built around a framework that consists of three core elements:

1. Increasing understanding and awareness of disparities;
2. Developing and disseminating solutions to achieve health equity; and
3. Implementing sustainable actions to achieve health equity.

CMS has termed this focus on understanding, solutions, and actions the *Path to Equity*. This organizing framework is pictured in **Figure 1**, below, showing how these areas feed into each other on a continuum, each one leading to the next. This report summarizes CMS' progress over the last four and a half years (September 2015 to January 2021)¹ in achieving health equity through its policies and programs. It is illustrated with examples of how the agency has increased understanding, solutions, and actions to reduce disparities nationwide. The examples included in this report are not exhaustive, and CMS' work is ongoing. We encourage stakeholders to visit [CMS OMH's webpage](#) to navigate and explore the full suite of resources, tools, and information that is publicly available.

Figure 1. CMS Path to Equity



¹ Data on utilization of products and resources is reported as of October 2020.

CMS EQUITY PLAN FOR MEDICARE: PRIORITY AREAS

On this foundation of understanding, solutions, and actions, CMS has built up a focus around six high-impact priority areas identified by Agency stakeholders. These priorities incorporate both community- and systems-level approaches to achieving health equity. They were established based on stakeholder input and requests for increased CMS support and direction, a review of the evidence base, and consideration of CMS' role in the work underway within the U.S. Department of Health and Human Services (HHS). These priorities were drafted in alignment with existing CMS and HHS initiatives and were designed with particular focus on how CMS could best support QIN-QIOs and other quality improvement contractors in the 11th Statement of Work. They are intentionally flexible to allow our work to adapt to our evolving health care system. Activities related to these priorities cut across the three areas of the Path to Equity. The six priorities embedded in the CMS Equity Plan for Medicare are listed in **Figure 2** and described in more detail below.

Figure 2. CMS Equity Plan for Medicare: Priority Areas

- **Priority 1:** Expand the Collection, Reporting, and Analysis of Standardized Data
- **Priority 2:** Evaluate Disparities Impacts and Integrate Equity Solutions across CMS Programs
- **Priority 3:** Develop and Disseminate Promising Approaches to Reduce Health Disparities
- **Priority 4:** Increase the Ability of the Health Care Workforce to Meet the Needs of Vulnerable Populations
- **Priority 5:** Improve Communication and Language Access for Individuals with Limited English Proficiency and Persons with Disabilities
- **Priority 6:** Increase Physical Accessibility of Health Care Facilities

Priority 1: Expand the Collection, Reporting, and Analysis of Standardized Data. The focus of Priority 1 is to increase the importance placed on collecting and analyzing standardized patient data, and to develop solutions that enable stakeholders to collect and analyze data in their communities. Comprehensive patient data, including race, ethnicity, language, sexual orientation, gender identity, disability status, and geographic location are required to plan for quality improvements and address changes among the target populations.

Priority 2: Evaluate Disparities Impacts and Integrate Equity Solutions across CMS Programs. The focus of Priority 2 is two-fold: 1) to measure and understand the effects that CMS programs and policies have on vulnerable populations and embed evaluation instruments into existing and new CMS policies, programs, models, and demonstrations; and 2) to build solutions into the fabric of the agency that will help close gaps in health care quality, access, and outcomes, moving CMS and partners to take action together to reduce disparities. To achieve Priority 2, CMS is always engaging partners to identify any gaps among vulnerable populations' health care quality, outcomes, and access and working to close those gaps through the agency's programs, policies, models, and demonstrations.

Priority 3: Develop and Disseminate Promising Approaches to Reduce Health Disparities. The focus of Priority 3 is to develop promising solutions to achieve equity in Medicare quality and to replicate and adapt effective models and strategies. Priority 3 activities identify and share best

practices and promising approaches in the reduction of health disparities to complement the work of other priorities in the CMS Equity Plan for Medicare.

Priority 4: Increase the Ability of the Health Care Workforce to Meet the Needs of Vulnerable Populations. The focus of Priority 4 spans understanding, solutions, and actions. It aims to increase the understanding of health care workforce innovations that reduce disparities for vulnerable populations. Work under this priority also supports developing solutions to equip the health care workforce to increase the provision of culturally and linguistically appropriate and effective care for beneficiaries. Finally, this work drives actions to adopt and adapt promising practices that enhance the workforce's ability to improve quality of care and outcomes for the individuals and communities they serve.

Priority 5: Improve Communication and Language Access for Individuals with Limited English Proficiency and Persons with Disabilities. The focus of Priority 5 is to improve communication and language access for Medicare and dual eligible beneficiaries. Through the development of tools and resources, this activity supports organizations as they provide communication and language assistance services to consumers to ensure they can actively participate in the care they receive.

Priority 6: Increase Physical Accessibility of Health Care Facilities. Priority 6 focuses on building shared understanding of the physical accessibility of health care facilities, identifying solutions, and facilitating action to increase the physical accessibility of health care facilities.

Measuring Progress

To evaluate CMS' progress toward achieving health equity among Medicare beneficiaries, we established a goal and set of guiding questions. The Path to Equity is influenced by many factors – some that CMS and our partners can influence directly and some that we cannot. This makes evaluation and measurement a challenge. This progress report acknowledges that improvements in health outcomes are slow to surface and difficult to attribute to a discrete action, policy, or change. It gives the reader a snapshot into some of the key work that has been done to move the needle since the CMS Equity Plan for Medicare was drafted in 2015. Moving forward, CMS will continue to focus on results, identifying areas where success can be measured qualitatively and quantitatively.

EVALUATION GOAL

The overarching goal for evaluating and monitoring CMS' progress in achieving the aims of the CMS Equity Plan for Medicare is to determine the extent to which CMS' activities have increased understanding and awareness of disparities, increased development and dissemination of solutions, and accelerated the implementation of sustainable actions to achieve health equity.

EVALUATION QUESTIONS

To monitor CMS' progress toward achieving health equity in Medicare, CMS developed four evaluation questions. The first three align with the Path to Equity and help CMS determine how its activities contribute to each of these aims. The fourth question helps inform opportunities for CMS to improve its activities over time and work more effectively toward achieving health equity among Medicare beneficiaries.

1. How are the activities in the CMS Equity Plan for Medicare increasing understanding and awareness of disparities?
2. How are the activities in the CMS Equity Plan for Medicare supporting the development and dissemination of solutions to increase equity in Medicare?
3. How are the activities in the CMS Equity Plan for Medicare leading to sustainable actions that increase equity in Medicare?
4. What are the gaps, needs, and next steps to achieve equity in the Medicare program?

LIMITATIONS OF THIS REPORT

This progress report focuses on key results of CMS' activities to achieve health equity in Medicare. It does not report every initiative undertaken as part of the CMS Equity Plan for Medicare or more broadly at CMS and HHS. Given the multi-faceted nature of community- and systems-change and the potential for confounding factors, it is not possible to directly attribute changes in health disparities among Medicare beneficiaries to CMS' activities to achieve health equity through its policies and programs at this time. However, the current and potential future impact of these initiatives should not be ignored. The purpose of this progress report is to describe key results and activities between September 2015 – January 2021 that are paving the way to health equity and helping CMS and partners begin to move the needle on disparities.

Increasing Understanding and Awareness of Disparities

The first step on the Path to Equity is increasing *understanding and awareness* of disparities. CMS' activities in this area respond to the research question: How are the activities in the CMS Equity Plan for Medicare increasing understanding and awareness of disparities?

In this section, we explore two major areas of progress: 1) expanding the collection, reporting, and analysis of standardized data, and 2) increasing the health care workforce's understanding of disparities by disseminating research findings on disparities,

Paving the Way to Equity through Understanding involves:

- Identifying knowledge gaps across CMS and partners about disparities and their drivers;
- Filling knowledge gaps to better inform programs, policies, and partners;
- Enhancing understanding of the drivers of disparities; and
- Improving understanding of why disparities matter and why it is important to address them.

their drivers, and best practices on the provision of culturally and linguistically appropriate services (CLAS).

CMS EXPANDED THE COLLECTION, REPORTING, AND ANALYSIS OF STANDARDIZED DATA

CMS has worked to achieve equity by making existing data more accessible as well as increasing and improving the collection of standardized data. This helps quality improvement partners and other stakeholders, as well as the providers they serve, identify where there are gaps in health care quality, outcomes, and access. This can show where and how interventions can be targeted to ensure all beneficiaries are receiving the highest and most equitable care under the Medicare program. This approach enables CMS and our partners to focus on results, and to tailor our work to improving patients' experiences with the health care system.

CMS made existing data more accessible

The published literature suggests that increasing the collection of standardized patient demographic and language data across health care systems, including race, ethnicity, language preference, sexual orientation, gender identity, disability status, and geographic location is an important first step toward improving population health.^{xxxii,xxxiii} Equally important is ensuring that these data are accessible to key stakeholders. As such, CMS is committed to making existing data relevant, accessible, and easy to use for providers, researchers, quality improvement professionals, health care organizations, and other stakeholders in support of their efforts to access federal data to identify and address health disparities.

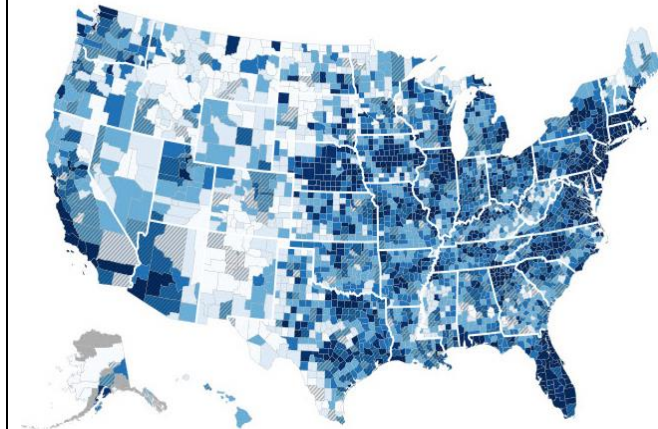
For example, in 2016, for the first time in its history, CMS released stratified data and reports on the Medicare Advantage (MA) population. This is significant because Medicare Part C and D plans cover nearly one-third of Medicare beneficiaries. These data and reports identify variations in their clinical care outcomes and patient experiences. Because they provide contract-level data, CMS' annual publication of these reports encourages health plans to respond to disparities within their member populations. CMS has published numerous reports and products on these data, many of which are updated annually and as new data become available. This provides the public with streamlined and easily accessible information on disparities in health care by race and ethnicity, gender, and urban-rural location. Some of the most recent include:

- ▶ [Racial, Ethnic, and Gender Disparities in Health Care in Medicare Advantage](#) (April 2020) describes the quality of health care received in 2018 by Medicare beneficiaries enrolled in Medicare Advantage (MA) plans nationwide (31.6 percent of all Medicare beneficiaries). The report highlights racial and ethnic differences in health care experiences and clinical care, compares quality of care for women and men, and examines racial and ethnic differences in quality of care among women and men separately. This 2020 report is the fifth in a series of reports that are updated annually.

- ▶ [Rural-Urban Disparities in Health Care in Medicare](#) (November 2020) describes rural-urban differences in health care experiences and clinical care received nationally in 2019. In addition to comparing the quality of care delivered to rural and urban Medicare beneficiaries overall, the report looks at how these differences vary by race and ethnicity and by race and ethnicity within rural and urban areas.

Another important way CMS has improved the accessibility of existing data is through the development of the [Mapping Medicare Disparities \(MMD\) Tool](#), an interactive data visualization tool used to identify areas of disparities between subgroups of Medicare beneficiaries (e.g., racial and ethnic groups) in health outcomes, utilization, and spending. The MMD Tool includes both a Population and Hospital View. The Population View uses Medicare FFS data to show the prevalence of 60 chronic conditions, health care utilization, and health care costs by race, ethnicity, sex, urban/rural location, dual-eligibility status, and age. The Hospital View includes data from the Hospital Compare website and allows comparisons of hospitals on quality and cost of care measures. The MMD Tool's interactive web interface allows users to visualize disparities in chronic diseases and health care utilization in their communities, which enables them to target specific interventions where they are needed most (see **Figure 3**).

Figure 3. Mapping Medicare Disparities (MMD) Tool



Stakeholder Feedback on the MMD Tool

- “We are going to download the data to understand how the data can support research in radiology. [The MMD Tool] has great potential to provide additional insight on disparities in preventive services.” – Comment from providers, March 2019
- “[We] will be a strong partner in using this tool and would like to provide bi-directional feedback and expand use of the tool in rural areas and around screenings and other preventive service disparities.” – Comment from providers, March 2019
- “[The MMD Tool] map and included data are very interesting. The Tool will help reduce provider burden.” – Comment from a Medicare Administrative Contractor (MAC), April 2019

CMS released the first version of the MMD Tool in 2016. Since then, CMS has incorporated multiple enhancements and data updates based on user feedback to provide a broader range of measures for identifying and understanding health disparities. These enhancements involved integrating data on: additional chronic

diseases; the utilization of preventive services; opioid use disorders; certain cancer diagnoses; emergency department visits; the prevalence of disabilities; and behavioral health. The MMD Tool also now includes county social-risk profiles based on American Community Survey (ACS) data regarding the proportion of the county's population with limited English proficiency, average household income, unemployment rate, percent of vacant homes, average household size, and poverty rate. The ACS profile is also available at the state and national level. Additionally, a new trend analysis feature allows users to view changes over time (2012-2018) and compare differences by race and ethnicity, gender, age, urban/rural location, or Medicare and Medicaid eligibility within or by county and/or state. To further increase the accessibility of this data, CMS created a Spanish-language version of the tool for MMD's Population View along with accompanying documentation, including end user guidance. As of October 2020, the MMD Tool had received more than 39,800 views.

CMS increased and improved the collection of standardized data

While evidence-based guidelines and practices exist for improving the collection of data on race, ethnicity, and language in health care settings, these guidelines may not be known nor implemented, resulting in wide variations in data collection that negatively impact the accuracy and reliability of the data. To improve standardized data collection among stakeholders, CMS developed the [Inventory of Resources for Standardized Demographic and Language Data Collection](#) (updated March 2020). The inventory combines data collection best practices from reports, toolkits, webinars, and training tools into a single resource that can be used by health care organizations of all types. Stakeholders can use these resources to improve the collection of standardized data, which can help them identify and address health disparities. Each year, the inventory is updated to ensure it reflects the most up-to-date guidance available. Between its initial publication in 2016 and October 2020, this inventory was downloaded over 1,200 unique times and it has been used and shared by CMS quality improvement partners among their members and providers to improve local and regional data collection.

To improve federal data collection, in 2016, CMS conducted cognitive testing around modified Spanish language for a question about sexual orientation for the National Health Interview Survey (NHIS). The NHIS has been conducted for more than 50 years through household telephone interviews to assess the health of the nation. This survey collects data on important health topics, such as health status, health care access, and progress toward achieving national health objectives. The research showed that the updated language, while not a direct translation of the English question, is better understood by Spanish speakers, which could lead to lower rates of non-response. As a direct result of this work, the Bureau of Justice Statistics adopted the revised sexual orientation question in the Spanish version of the 2016 National Crime Victimization Survey, and in 2017, the Centers for Disease Control and Prevention (CDC) began using the modified language for the **Error! Hyperlink reference not valid.** These changes will enable surveys to capture a more accurate picture of health disparities among Spanish-speaking sexual minorities.

CMS has also been instrumental in improving the availability and use of standardized Medicare data through the [Medicare Current Beneficiary Survey](#) (MCBS). The MCBS is a continuous, in-

person, longitudinal survey of a representative national sample of the Medicare population. CMS supported the development of the MCBS Public Use File, which allows individuals to assess and monitor the impact of the Medicare program on beneficiaries' health. This public data file lets users sort beneficiaries by age, race, ethnicity, and gender. Users can view information about health conditions, access to and satisfaction with care, type of insurance coverage, and information on utilization, including the number of fee-for-service claims per beneficiary for certain health care event types. The MCBS data is designed to represent the

Medicare population as a whole and CMS has supported oversampling of certain smaller, but critically important populations. This method ensures that researchers and other users can examine the health status of elderly beneficiaries (age 85 and over), beneficiaries with disabilities, beneficiaries in Accountable Care Organizations (ACOs), and Hispanic beneficiaries to see health changes over time. The release of the public use file, or PUF, of the MCBS data makes this information more accessible and usable for anyone interested in understanding outcomes and disparities among Medicare beneficiaries over time, regardless of whether they are a researcher with a formal data use agreement with the government.²

CMS DEVELOPED RESOURCES TO INCREASE THE HEALTH CARE WORKFORCE'S UNDERSTANDING OF DISPARITIES

CMS has worked to achieve health equity by supporting the health care workforce's ability to provide patients with more culturally appropriate and person-centered care. The agency has focused on giving providers tools to better understand and meet patients' needs by sharing research, information, and best practices that providers can easily find and use in their everyday practice.

CMS disseminated research findings on disparities and their drivers to increase the health care workforce's understanding of disparities

CMS analyzes Medicare beneficiary data to identify and better understand the drivers of disparities among target populations, including racial and ethnic minorities, sexual and gender minorities, people with disabilities, and individuals living in rural areas. For example, CMS analyzed data for transgender beneficiaries, which resulted in three published manuscripts.^{xxxiv,xxxv,xxxvi}

CMS routinely disseminates reports, briefs, maps, and guidance to stakeholders through its website. Data highlights, infographics, and research reports on topics related to health disparities across a number of vulnerable Medicare populations are available on the [CMS OMH website](#). A small subset of the products published between 2015 – 2021 are noted on the following page.

² The MCBS sample frame includes all aged individuals, but only individuals 18 and over are interviewed and included in the LDS files.

In addition, CMS has supported innovation in telehealth by exploring trends of the effect and utility of expanded telehealth services for vulnerable Medicare beneficiaries. This analysis informs the Agency's understanding of this mode of health care delivery. CMS analyzed claims data from 2014 through 2016 to quantify the current extent of telehealth services provided to Medicare beneficiaries, the demographic and diagnostic characteristics of beneficiaries who receive them, and high-volume services provided to Medicare beneficiaries. Results of this work showed that telehealth services can increase access to critically important care for older, rural, and low-income beneficiaries as well as those with disabilities.^{xxxvii} CMS shared these results with Congress, federal colleagues, public health professionals, health care providers, and policy experts.

Selection of CMS Products to Increase Understanding of Disparities

- [Racial and Ethnic Disparities in Diabetes Prevalence, Self-Management, and Health Outcomes among Medicare Beneficiaries](#) (March 2017)
- [Does Disability Affect Receipt of Preventive Care Services among Older Medicare Beneficiaries?](#) (July 2017)
- [Medicare Fee-For-Service Beneficiaries with Disabilities, by End Stage Renal Disease Status, 2014](#) (July 2017)
- [Understanding the Health Needs of Diverse Groups of Asian and Native Hawaiian or Other Pacific Islander Medicare Beneficiaries](#) (August 2017)
- [Toward the Creation of a Patient-Reported Disability Index](#) (September 2018)
- [Understanding the Health Needs of Diverse Groups of Hispanic Medicare Beneficiaries](#) (November 2018)
- [Putting Patients First: Special Issue of Health Services Research Journal](#) (January 2019)
- [Opioid Prescription in Medicare Beneficiaries: Prescription Opioid Policies and Implications for Beneficiaries with Sickle Cell Disease](#) (June 2019)
- [How Does Disability Affect Access to Health Care for Dual Eligible Beneficiaries](#) (July 2019)
- [Z Codes Utilization among Medicare Fee-for-Service \(FFS\) Beneficiaries in 2017](#) (January 2020)
- [Understanding Rural Hospital Bypass Among Medicare Fee-for-Service \(FFS\) Beneficiaries in 2018](#) (September 2020)
- [Chronic Kidney Disease Often Undiagnosed in Medicare Beneficiaries](#) (October 2020)

CMS worked to increase the health care workforce's understanding of disparities by disseminating best practices on providing culturally and linguistically appropriate services

Providing culturally and linguistically appropriate services (CLAS) and consistently monitoring health care quality among at-risk populations are effective tactics to address persistent disparities among vulnerable communities.^{xxxviii,xxxix,xi,xli} However, there is little national data available to characterize the provision of CLAS services, nor are there relevant quality measures that can be used to monitor and engage the health care system to drive improvement. To address this need, CMS examined the current state of health quality measures related to CLAS and disparities. CMS assessed gaps in existing measures and their implementation. CMS then identified measurement opportunities to address these gaps among racial and ethnic minorities, people with limited English proficiency, people with low health literacy, people with disabilities, and sexual and gender minorities. In 2016, CMS released [A Practical Guide to Implementing the National CLAS Standards: For Racial, Ethnic and Linguistic](#)

[Minorities, People with Disabilities and Sexual and Gender Minorities](#) to support hospitals, health plans, and other health care organizations in improving health equity and implementing the National CLAS Standards. This toolkit presents best practices for implementing the national CLAS standards to address disparities in clinical practice, for example: organizational policies focused on the provision of CLAS; practical tools for use by organizations and providers; training and educational resources for organizational governance, leadership, and providers; assessment tools to gauge cultural competence; and examples of programs designed to provide culturally competent and person-centered care.

CMS also shared knowledge and promising practices to address disparities among Medicare beneficiaries with limited English proficiency and those with sensory disabilities who need additional communication services during health care visits. CMS analyzed 2014 American Community Survey data to improve understanding of the communication and language needs of Medicare beneficiaries at the national, state, and local levels. Findings indicated that local beneficiary needs are not always the same as needs at a state or national level. This emphasizes the need for providers to understand communication and language trends in the smallest geography relevant to their service areas. This analysis led to [Understanding Communication and Language Needs of Medicare Beneficiaries](#) (April 2017), an issue brief with recommendations and promising practices for providers, CMS quality improvement partners, and other health care stakeholders. From its initial publication through October 2020, the issue brief has been downloaded more than 1,400 times. CMS also conducted interviews with a variety of health care organizations across the country (i.e., community health centers, hospitals, health systems, and health plans) about the innovative approaches to provide language assistance services to persons with limited English proficiency. Key findings from this work are highlighted in [Providing Language Services to Diverse Populations: Lessons from the Field](#) (February 2018). This resource describes language assistance approaches suited to different settings, populations served, and resource availability.

GAPS, NEEDS, AND NEXT STEPS TO INCREASE UNDERSTANDING AND AWARENESS OF DISPARITIES

Moving forward, CMS will continue working to achieve health equity by increasing understanding and awareness of disparities in Medicare, and will explore new opportunities across all of its programs and policies. For example, consistent with the [CMS Rural Health Strategy](#) and [Rethinking Rural Health initiative](#), the agency will continue to increase understanding around disparities in rural communities' health care access, outcomes, and quality. As the number of individuals with chronic conditions continues to grow, CMS will build on its ongoing work understanding disparities in diabetes and chronic kidney disease. As increasing numbers of older adults seek long term care, CMS also recognizes that a growing proportion of these individuals are racial, ethnic, sexual and gender minorities, individuals with disabilities, and those living in rural areas.^{xlii,xliii} CMS will also continue to improve understanding around disparities related to, and emerging from, our experience with COVID-19. This includes disparities related to access, quality, and outcomes for those in post-acute care and other settings. In addition, CMS will continue to work with federal and private partners to collect and leverage data on social determinants of health to improve our understanding of how social risk

factors can be addressed to reduce disparities. Finally, and of critical importance, CMS will build on its commitment to the standardization of data and will continue to release public data that are standardized and stratified to reveal and monitor disparities among the individuals and communities CMS serves.

Developing and Disseminating Solutions to Achieve Health Equity

The second step along the Path to Equity is developing and disseminating *solutions* to achieve health equity. CMS' activities in this area respond to the research question: How are the activities in the CMS Equity Plan for Medicare developing and disseminating solutions to achieve health equity in Medicare quality?

In this section, we explore two major areas of progress: 1) evaluating disparities impacts and integrating equity solutions across CMS programs, and 2) developing and disseminating promising approaches to support the health care workforce in addressing health disparities.

Paving the Way to Equity through Solutions involves:

- Creating new solutions based on our understanding of disparities and the unique health care needs of individuals and communities;
- Testing promising strategies and interventions; and
- Sharing flexible tools that CMS stakeholders can use to improve the health care experience and health outcomes for those they serve.

CMS EVALUATED DISPARITIES IMPACTS AND INTEGRATED EQUITY SOLUTIONS ACROSS CMS PROGRAMS

CMS has focused on results and unleashing innovation, creating solutions for evaluating the impacts of disparities and embedding new resources and tools within CMS programs and partner organizations to help quantify disparities and close gaps. CMS' goals are two-fold: 1) enhancing providers' and other stakeholders' ability to easily identify disparities and opportunities for improvement among those they serve, and 2) relieving the burden on providers and planning for creating and testing new solutions that can produce measurable results and improve outcomes among vulnerable populations.

CMS developed and embedded Disparities Impact Statements and other evaluation mechanisms across CMS programs and partner organizations

CMS has worked to ensure its programs, policies, and stakeholders are equipped to identify disparities. This allows stakeholders to prioritize efforts where gaps are greatest, take actions to improve care, and monitor changes over time. To support this effort, CMS developed and piloted the [CMS Disparities Impact Statement](#). The CMS Disparities Impact Statement is a quality improvement tool that enables CMS and its stakeholders to systematically evaluate the impacts of a policy or program on health disparities. CMS has facilitated organizations' quality improvement efforts to reduce disparities through targeted interventions. For example, the HIIN

11th Statement of Work incorporated provisions around the Disparities Impact Statement to facilitate ongoing monitoring and reporting on disparities reduction. At the close of the 11th Statement of Work in 2019, more than 4,000 hospitals across 16 HIINs nationwide participated in the Partnership for Patients (PfP), a program that focuses on reducing inpatient harms and readmissions. HIINs were charged to develop strategic plans to identify, address, and monitor progress on reducing disparities across harm areas among their aligned hospitals. Additionally, within the Accountable Health Communities (AHC) program, CMS used an instrument called a Health

Equity Resource Statement, a variation on the CMS Disparities Impact Statement, as part of the scored evaluation criteria for grant awards. The CMS Disparities Impact Statement has been promoted and used by various organizations, including QIOs, Health Care Innovation Awardees, health plans, hospital systems, and provider networks.

Further, through internal partnerships across Centers and Offices, CMS has strengthened the evaluation and reporting elements for the QIO program, Medicare, Medicare Advantage, and other programs. This yields a more informed understanding of how the agency and its partners are structuring disparities reduction efforts and helps identify gaps, challenges, and future opportunities. For example, the recent reports and data highlights focused on Sickle Cell Disease and the use of opioids among Medicare beneficiaries mentioned in the “Understanding” section of this report pave the way to “Solutions,” helping drive decisions and quality improvement work related to pain management in the Medicare program. In addition, annual reporting of stratified HEDIS and CAHPS scores is now part of the agency’s ongoing monitoring and CMS Medicare Advantage Organizations are leveraging this data to identify areas of opportunity to enhance patient experience, access, quality, and outcomes among MA and dual beneficiaries. Moving forward, CMS will continue to strengthen monitoring and reporting of disparities across QIOs and other quality improvement contractors. This supports CMS and its partners in tailored interventions and focuses improvement on our most vulnerable Medicare beneficiaries.

CMS embedded equity solutions across CMS programs and partners

Through our work with partners and stakeholders, we found that many organizations and federal partners recognize that disparities exist. However, stakeholders expressed that they do not know how to evaluate the impact of their program on disparities, nor what steps they should take to achieve health equity among the individuals they serve. To address this need, in 2016, CMS formed the [Health Equity Technical Assistance](#) program. Health Equity Technical Assistance provides direct, flexible, on-demand technical assistance to internal CMS partners and external stakeholders, including quality improvement partners, providers, health systems, federal partners, health plans, state Medicaid agencies, health care organizations, local agencies, and community associations. As of October 2020, through the Health Equity

Feedback on the Disparities Impact Statement

“The Disparities Impact Statement is a really nice tool. I like that it used the PDSA approach and helps you think about what you are doing, identify why this is a need, what the data show, [and] who you can partner with to impact change and develop interventions. What a great way to get health care professionals to think about disparities in a QI framework! This is a thoughtful tool.”

- HIIN, February 2019

Technical Assistance Program, CMS health equity subject matter experts have responded to over 278 technical assistance requests from stakeholders in 39 states as well as Washington, DC, and Puerto Rico. Requests for technical assistance have come from internal CMS staff as well as partner organizations, including health plans, health departments, universities, hospitals and health systems, associations, quality improvement contractors, individual providers, community organizations, researchers, and other stakeholders.

Recognizing the growing numbers of individuals enrolled in Medicare Advantage and managed care, CMS continues to embed equity solutions to support health plans' actions to reduce disparities. For example, CMS began a series of strategic conversations to gather input from Medicare Advantage Organizations (MAOs) and Medicare-Medicaid Plans (MMPs) focused on what they are doing to reduce disparities and how CMS could support their progress. This led to the development of a cross-agency work group focused on learning from plans and generating program and policy solutions to address disparities among Medicare Advantage enrollees. CMS continues to engage with MAOs and MMPs to identify and address areas of opportunity where plans and CMS can work together to improve care for Medicare Advantage and dual-eligible beneficiaries.

CMS DEVELOPED AND DISSEMINATED PROMISING APPROACHES TO SUPPORT THE HEALTH CARE WORKFORCE IN ADDRESSING HEALTH DISPARITIES

CMS has promoted innovative solutions through trainings and resources for health care professionals and Medicare beneficiaries to reduce disparities and improve the patient experience among vulnerable populations. Expanding care teams to incorporate a diverse group of providers and enhancing providers' skills and cultural competence can help reduce burden on the workforce as they improve the health of vulnerable communities.

CMS developed and enhanced trainings and resources for health care professionals to include health equity solutions

Through the [Medicare Learning Network](#) (MLN), CMS's primary mechanism for engaging and educating Medicare providers on how to work with CMS programs and beneficiaries, the agency developed and enhanced trainings for the health care workforce. These trainings are quality-improvement focused. They help organizations and health care providers understand why and how to improve the care they provide to vulnerable populations, including racial and ethnic minorities, sexual and gender minorities, individuals with disabilities, and individuals living in rural areas. CMS quality improvement contractors and providers can use these trainings to reduce disparities and improve patient experience across multiple settings, while earning continuing education credits. Recent trainings have focused on improving the quality of care and data collection for sexual and gender minorities, and developing and strengthening strategic responses to reducing disparities among beneficiaries. In addition, CMS has embedded content related to disparities and practical solutions to achieve health equity in practice settings into existing MLN trainings. This reduces burden on providers and minimizes the number of individual training courses the workforce would need to take to feel well-equipped to care for all patients. By incorporating a health equity lens into existing training content, CMS is efficiently

enhancing providers' cultural competency and reinforcing the importance of including health equity approaches among professionals in all health care settings.

To illustrate CMS' reach, between its release in January 2017 and October 2020, over 3,700 individuals from all 50 U.S. states, the District of Columbia and U.S. territories, and other countries completed the training on improving the quality of care and data collection for sexual and gender minorities. Participants included clinical providers, such as physicians, nurses, and pharmacists; non-clinical support staff, such as medical billers and coders, front office staff, and office managers; and others, including researchers. Although the Medicare Learning Network is tailored to providers serving Medicare beneficiaries, individuals who take this training may be serving populations that include Medicare, Medicare Advantage, Medicaid, Marketplace and individuals with other private coverage.

As a complement to accredited training modules, CMS has created a number of provider-focused resources to help drive solutions to reducing disparities. For example, to address disparities in diabetes, a key focus area for CMS quality improvement contractors and partners, CMS created a [Culturally and Linguistically Tailored for Type 2 Diabetes Prevention Resources Inventory](#) for CDC-managed Diabetes Prevention Program (DPP) suppliers. This inventory includes fully translated curricula and supplemental materials tailored to various minority populations. The inventory meets the need for culturally and linguistically tailored resources to support organizations delivering lifestyle-change programs to minority populations. As of October 2020, it includes links to 11 sets of culturally and linguistically tailored materials developed for organizations that may work with minorities seeking to prevent type 2 diabetes and improve overall health and wellness. The materials presented in this inventory can support organizations offering the National DPP lifestyle-change program and lifestyle-change program curricula recognized by the CDC's DPP, including the [Medicare Diabetes Prevention Program \(DPP\) Expanded Model](#). The inventory is available to all Diabetes Prevention Program providers and other aligned stakeholders to help enhance DPP programming and will be updated regularly to reflect improved and new training resources as they become available.

CMS also created a [Directory of Provider Resources for Diabetes Management](#), which compiles existing guidelines and clinical recommendations; toolkits and clinical reference tools; continuing education courses; and diabetes care, e-prescribing, and formulary management apps. The directory is designed to facilitate the effective management of type 2 diabetes by primary care teams. It is tailored to meet the needs of providers working with Medicare beneficiaries and vulnerable populations who experience a higher prevalence of type 2 diabetes and its complications. As with the DPP Resource Inventory, this directory will be routinely updated to equip providers with timely tools to help patients manage their health. These two resources were both released at the end of 2019. As of October 2020, together they have been downloaded from the CMS website more than 2,700 times.

To support hospital-based practices and hospital networks, CMS has spread solutions for reducing disparities among vulnerable populations through the [Guide to Reducing Disparities in Readmissions](#) (revised August 2018). Hospital admissions and readmissions for chronic illnesses generate significant costs for Medicare, and research has shown that minority and

other vulnerable populations are more likely to be readmitted to the hospital within 30 days of discharge for chronic conditions.^{xiv,xv,xvi} CMS developed this guide as a tool for hospital leaders to reduce avoidable readmissions for their diverse Medicare beneficiary populations. It provides leaders of all types of hospitals (e.g., rural, urban, private, and nonprofit), and quality improvement organizations that provide support to hospitals, with: 1) an overview of key issues related to disparities in readmissions; 2) a set of activities that can help hospital leaders address readmissions in these populations; and 3) strategies aimed at reducing readmissions in diverse populations. From its initial release in August 2016 through October 2020, the guide was downloaded from the CMS website more than 5,300 times and was shared widely by CMS quality improvement contractors to address key drivers of readmission rates at hospitals nationwide.

CMS developed [Modernizing Health Care to Improve Physical Accessibility](#), to educate health care providers across all practice settings on strategies to increase physical accessibility of health care facilities and services. This resource was downloaded more than 1,900 times between its release in July 2019 and October 2020. In addition, CMS collaborated with the Department of Justice (DOJ), the HHS Office of Civil Rights (OCR), and the Administration for Community Living (ACL) on [Increasing the Physical Accessibility of Health Care Facilities](#) (May 2017). This issue brief provides an overview of the importance of physical accessibility of health care facilities, laws to promote accessibility, and examples of federal and state-level efforts to better understand patient needs and support improvements in accessibility. The brief has been downloaded more than 1,400 times since its publication through October 2020. These resources educate stakeholders about the complexity of issues related to Medicare beneficiary access and highlight opportunities for CMS and other federal agencies to work together in addressing the need for more accessible facilities. They also close a gap in research and practice by focusing explicitly on improving care for members of the Medicare population with mobility-related disabilities. Each provides examples of mechanisms that have increased the accessibility of facilities and real-world strategies and tools providers can access to make improvements in their practice for individuals they serve.

Further, because effective communication is critical to ensuring mutual provider-patient understanding, empowering patients, and providing high-quality care across all patient care settings and provider types, CMS developed a practical tool to improve how providers and plans communicate with individuals and communities. The [Guide to Developing a Language Access Plan](#) (February 2018) helps organizations go through the steps they can take to provide high-quality, appropriate language assistance services to all individuals they serve. Following a Language Access Plan helps ensure that staff members are aware of what to do when an individual with limited English proficiency needs assistance. CMS also developed two resources (November 2020) to support providers serving those with sensory disabilities. When serving a patient who is blind or has low vision or who is deaf or hard of hearing, it is important for an organization to plan how they will provide effective, accessible communication. These resources describe how to assess practices, develop communication plans, and be prepared to implement accessible services.

During the public health emergency, CMS is working to support providers and partners in our most vulnerable communities. To assist administrators and providers in rural communities during COVID-19, CMS OMH developed a [Rural Crosswalk: CMS Flexibilities to Fight COVID-19](#). The crosswalk is intended to assist rural providers in accessing information on key provisions CMS has issued during the public health emergency. Rural providers including those in Rural Health Clinics, Federally Qualified Health Centers, Critical Access Hospitals, rural hospitals, and long term care facilities face numerous challenges while trying to serve their patients. This document brings together key information that CMS has released to date in one location to improve provider access to this crucial information and allowing them time to better serve their patients. In addition, the CMS OMH website now includes a site with COVID-19-related federal resources for vulnerable populations to help consumers, health care professionals, community organizations, and other CMS stakeholders find trusted resources in one place, including resources in languages other than English.

CMS designed, pilot-tested, and continuously enhances these provider tools and other resources through engagement with health care professionals and disparities experts. This ensures organizations have relevant, applicable tools and solutions to improve the quality of care provided to vulnerable populations and create inclusive clinical practice environments.

CMS developed beneficiary-facing resources to improve care in vulnerable communities

In addition to developing trainings and resources for health care professionals, CMS has also developed individual and family-facing resources for Medicare beneficiaries. For example, CMS developed the consumer-facing [Getting the Care You Need: A Guide for People with Disabilities](#) to help raise awareness among individuals with disabilities about working with their providers to ask for needed accommodations. An accompanying checklist highlights steps individuals and family members can take before, during, and after appointments with health care providers to ensure individuals with access challenges can get the care they need. From their publication in July 2019 through October 2020, the handout and accompanying checklist have been downloaded from the CMS website over 2,900 times. CMS' release of these resources included a Braille translation, and based on user feedback they are translated into multiple languages. CMS also produced a suite of videos featuring the personal experiences of individuals with disabilities navigating care, called [Navigating Health Care with a Disability: Our Stories](#). One video is aimed at a [provider audience](#) while the other is intended for [individuals with disabilities](#). As of October 2020, together these videos had been viewed on YouTube 5,000 times.

Further, to address the growing number of Medicare beneficiaries managing chronic conditions, CMS partnered with HRSA's Federal Office of Rural Health Policy to launch the [Connected Care campaign](#). This campaign was designed to raise beneficiary and provider awareness for the services now available for chronic care management (CCM).³ Medicare beneficiaries with two or more chronic conditions may be eligible for CCM services. CCM services can be

³ The CCM campaign was specifically mandated by Congress to focus on racial and ethnic minorities, and rural populations, and a Report to Congress was prepared and delivered to address the *Connected Care* campaign.

delivered by several provider types and bring significant benefits to individuals in rural areas and other vulnerable communities. CMS has released a number of beneficiary- and provider-facing Connected Care resources to ensure that all eligible Medicare-covered individuals can get services to help them manage their multiple chronic conditions. The campaign focused on ensuring that individuals and providers in underserved communities were aware of these reimbursable services. Connected Care resources include patient education resources such as a poster, postcard, and video that can be used in clinical and community settings, and a toolkit for healthcare professionals and community partners. CMS recognizes that CCM services take providers' time and effort. These resources help individuals with asking the right questions so they can get help managing their care. These support tools also help providers account for the additional time and resources they spend to provide help between appointments. Since the campaign's launch at the end of 2016, the Connected Care website has more than 108,000 unique pageviews, and resources have been downloaded by tens of thousands of users. Many Medicare and dual eligible patients, including those in underserved communities, depend on this extra effort to help them stay on track with their treatments and plan for health.

To address the public health emergency, CMS looked for ways to assist local communities and our partners who work with those most vulnerable—such as older adults, those with underlying medical conditions, racial and ethnic minorities, rural communities, and people with disabilities. CMS sought feedback through a series of calls and listening sessions to find out what partners needed to better serve vulnerable populations, specifically racial and ethnic minority populations. Based off of this feedback, the [From Coverage to Care](#) (C2C) initiative created two new consumer-facing resources to encourage people to stay healthy during COVID-19, receive needed care, and understand how their health coverage would work during the public health emergency. The first resource [Coronavirus and Your Health Coverage: Get the Basics](#) helps consumers learn how to protect themselves and their family during COVID-19 with tips for staying healthy. This resource also has information about what health services are typically covered under Medicare and Marketplace plans and additional resources. Second, C2C released [Stay Safe: Getting the Care You Need, at Home](#) which offers tips for how to stay healthy during COVID-19 with information about scheduling health appointments from home and planning ahead for prescriptions. Both resources were originally posted in English and Spanish with additional languages in development. To further assist partners in their work with local communities, social tiles and graphics with key messages were also created.

Recognizing the interaction between chronic conditions and COVID-19 outcomes, and the disproportionate number of racial and ethnic minorities with diagnosed Type 2 diabetes, CMS created [Managing Diabetes: Medicare Coverage and Resources](#). This two-page resource is available in English and Spanish and pools CDC and CMS resources from over 20 websites into a single, easy-to-navigate document. With one click on [Medicare.gov](#), Medicare beneficiaries can find links to help live with diabetes, how to find diabetes self-management education and a provider to help them manage their care, how to get coverage for diabetes services, and how to get help with costs. CMS and CDC's collaboration on this product aims to help individuals, particularly members of vulnerable communities who bear a high burden of Type 2 diabetes, improve their management of diabetes and their overall health to decrease the risk of the severe and adverse effects of COVID-19.

GAPS, NEEDS, NEXT STEPS TO ACHIEVE HEALTH EQUITY BY DEVELOPING AND DISSEMINATING SOLUTIONS

Moving forward, CMS will continue working to achieve health equity by developing and sharing solutions and tools to eliminate disparities in Medicare, and will explore new opportunities across all of its programs and policies. CMS will remain focused on developing resources for beneficiaries and providers to improve vulnerable communities' understanding and management of their chronic conditions. This includes paying deliberate attention to conditions that heavily impact minority and rural communities, such as diabetes, cancer, and heart disease. Each of these conditions, among many others, place beneficiaries at increased risk for severe illness from the virus that causes COVID-19. If current data trends hold, COVID-19 related disparities will continue to deepen across CMS OMH's priority populations.^{xlvii}

Based on ongoing stakeholder feedback, the agency will also prioritize resources that help providers and partners reduce avoidable readmissions, address social determinants of health in various care settings, and manage patient safety concerns across settings from hospitals to primary and post-acute care and as individuals transition between settings. Consistent with the agency's overarching priorities, CMS will continue to focus efforts on ensuring rural communities have resources and tools to improve access, quality, and outcomes, and will work to develop and share innovative solutions to address the opioid epidemic for vulnerable communities nationwide. Finally, CMS will continue to build on its ongoing commitment to results through the evaluation and monitoring of disparities among those we serve by embedding tools including the CMS Disparities Impact Statement and monitoring and reporting on disparities across our programs.

Implementing Sustainable Actions to Achieve Health Equity

The third step along the Path to Equity is implementing sustainable *actions* to achieve health equity. CMS' activities under this area inform the following research question: How are the activities in the CMS Equity Plan for Medicare leading to sustainable actions that achieve equity in Medicare quality?

In this section, we explore two major areas of progress: 1) taking action to improve CMS programs and policies to reduce disparities, and 2) mobilizing partners to take action to reduce disparities.

Paving the Way to Equity through Actions involves:

- Bringing stakeholders together and spurring collective and individual action among partners;
- Supporting stakeholders in their efforts to achieve health equity;
- Making adjustments for continuous quality improvement; and
- Ensuring actions are sustained over time.

CMS LEVERAGED QUALITATIVE AND QUANTITATIVE RESEARCH FINDINGS TO IMPROVE PROGRAMS AND POLICIES TO REDUCE DISPARITIES

CMS has driven results across the nation and the agency, promoting action among CMS components and external stakeholders through new partnerships and focused efforts to measure, monitor, and eliminate disparities.

CMS programs are measuring and monitoring progress to eliminate disparities

The [QIO program](#) is one of the largest federal programs dedicated to improving health and health care quality at the local level for Medicare beneficiaries. The program's 11th Statement of Work focused on five primary functions: 1) excellence in operations; 2) better health; 3) better care; 4) lower costs; and 5) technical assistance. Under this program, CMS specifically aimed to reduce disparities in diabetes and cardiac health. QIOs routinely updated CMS on their activities related to vulnerable communities across all tasks, for example those targeting racial and ethnic minorities, sexual and gender minorities, individuals with disabilities, and individuals living in rural areas. CMS tracked QIO progress, as well as progress made by HIINs, CMS' hospital-focused quality improvement contractors. This helped ensure that the agency was aware of, and able to encourage, our partners and stakeholders to continue to move the needle on health disparities. As CMS and partners support the 12th Statement of Work, the agency will continue to support the network of quality improvement and innovation contractors' strong focus on health equity so that together we can demonstrate results. In particular, CMS will work with quality improvement contractors and individual providers to drive improvements in nursing homes and hospitals as they navigate the current public health emergency. The Agency and our partners will seek opportunities for improvement in health care quality, outcomes, and access for vulnerable and rural communities – particularly those hardest hit by COVID-19.

CMS has also focused on testing approaches to reducing disparities through our models and demonstrations. For example, health equity monitoring and measurement was embedded into the scored grant selection criteria for the [Accountable Health Communities](#) (AHC) model. As mentioned above, the AHC model required a Health Resource Equity Statement, a form of the CMS disparities impact statement, to be included with each application and monitored over time. CMS' grant application with embedded equity statement ensured that selected awardees were demonstrating a commitment and awareness of local health disparities and the communities they serve. This was the first time a scored element related to health equity was included in CMS' grant application process and represents a significant step along the Path to Equity for the agency.

CMS has increased internal collaboration to reduce disparities

Over the last several years, CMS has worked to increase collaboration and communication across teams to ensure that beneficiaries and providers benefit from the most streamlined and intelligently designed programs and policies. For example, CMS collaborated across Centers and Offices to gather feedback from Medicare beneficiaries, providers, advocates, and health care suppliers that would inform changes to Medicare payment policy to improve access to care of people with disabilities. As a result of this work, CMS implemented a change to the [Medicare](#)

[Physician Fee Schedule](#) (PFS) to support providers in spending additional time providing preventive care to their patients. Beginning January 1, 2018, using a new provider billing code, providers can bill for services that extend beyond the typical time assumed for eligible preventive services. This change recognizes the increased resource costs associated with providing care to some patients, including the medically necessary use of specialized mobility-assistive technology during an office visit, such as adjustable height chairs or tables, patient lifts, and adjustable padded leg supports.

CMS also recommended that beneficiaries with sickle cell disease be excluded from the opioid safety edits starting in 2020. Previously, the CDC Guideline for Prescribing Opioids for Chronic Pain stated that “given the challenges of managing the painful complications of sickle cell disease, readers are referred to the NIH National Heart, Lung, and Blood Institute’s Evidence Based Management of Sickle Cell Disease Expert Panel Report for management of sickle cell disease.”^{xlviii} In 2018, CMS released a report on the challenges of pain management for beneficiaries with sickle cell disease titled “[The Invisible Crisis: Understanding Pain Management in Medicare Beneficiaries with Sickle Cell Disease](#)” (September 2018), which provided supporting evidence for this change. CMS encouraged its partners to work with their pharmacy and therapeutics (P&T) committees to identify other vulnerable patient populations for exclusion from the opioid safety edits. To further support these efforts, CMS released comprehensive guidance for sponsors and educational materials for providers, beneficiaries, and other partners, such as pharmacies, professional organizations, and advocacy groups, which are available on the [Improving Drug Utilization Review Controls in Part D webpage](#).

In addition, in 2019, CMS identified and developed [standardized patient assessment data elements \(SPADEs\)](#) to assess social determinants of health and embedded these data elements into the Post-Acute Care Quality Reporting Programs, to be collected starting in 2020. Although data collection is delayed due to the public health emergency, this policy change in Medicare’s prospective payment system makes collection of social determinants of health data part of the required standardized patient assessments administered in post-acute care settings. This extends to long-term care hospitals, skilled nursing facilities, intermediate rehabilitation facilities, and home health agencies. The additional SPADEs include race, ethnicity, preferred language/interpreter services, health literacy, transportation, and social isolation. Collecting these data elements will allow CMS to inform provider understanding, facilitate coordinated care and care planning, reduce readmissions, and improve quality of care and outcomes for beneficiaries. While CMS acknowledges that there are other important social determinants worth measuring, CMS also aims to balance the value of capturing data with the burden of reporting for post-acute care providers. CMS strategically identified these specific demographics and determinants of health because of their relevance to patients and residents receiving post-acute care. Post-acute care settings have an opportunity to address SDOH. For example, they may connect patients and residents to transportation programs, certified interpreters, or social support programs. Collecting these data elements will provide the basis for CMS’ periodic analyses of the relationship between an individual’s health status and demographic and social risk factors that can inform efforts to promote health equity. To support post-acute care providers in meeting this new requirement, CMS continues to refine our guidance on how to collect these additional data with minimal burden.

CMS leveraged internal partnerships to identify and mitigate challenges beneficiaries face in identifying providers with accessible office locations and equipment. To help prospective enrollees identify providers with accessible offices, CMS worked with states and plans participating in the [Financial Alignment Initiative \(FAI\)](#) to improve Medicare-Medicaid Plan (MMP) provider and pharmacy directories. CMS is seeing improvements in these directories, which now indicate if a provider location is on a public transportation route. Some MMPs have made progress in indicating which providers have completed cultural competency training. CMS continues to work with plans about indicating the specific accommodations available at provider locations for individuals with physical disabilities.

In support of Medicare's evolving payment systems in 2019, CMS strengthened the validation criteria for [Quality Payment Program Merit-Based Incentive Payment System \(QPP MIPS\) Improvement Activities](#) to align with our goal of achieving health equity. Providers participating in the Merit-Based Incentive Payment System, or MIPS, may participate in Improvement Activities to improve their score, and therefore their reimbursement, under this new Medicare payment system. Improvement Activities are structured to improve care for beneficiaries, and CMS' cross-component collaboration helps reduce burden on providers as they engage in – and are recognized for – meaningful, impactful disparities reduction efforts as a part of their participation in the Medicare program.

This progress report has highlighted a number of examples of internal CMS collaboration to reduce disparities among priority populations. However, there are many more partnerships that help inform and advance health equity work across the agency each day. CMS has strengthened its internal operations to improve our work across components, paving the way for the agency to address new and emerging equity issues and continually improve CMS programs and policies.

CMS CONVENED AND MOBILIZED PARTNERS TO TAKE ACTION ON DISPARITIES

CMS mobilized communities, partners, and providers to take action on reducing disparities and implementing innovative, self-directed health equity activities.

CMS inspired action and sharing among providers and external partners

In an effort to spur ongoing, sustainable health equity actions among health care providers and others, CMS announced the [CMS Health Equity Award in 2018](#). From 2018-2020, this recognition highlighted organizations demonstrating an exceptional commitment to health equity by reducing disparities among the CMS beneficiaries they serve, particularly among racial and ethnic minorities, individuals with disabilities, sexual and gender minorities, and those living in rural areas. CMS used a rigorous, peer-reviewed selection process to select and recognize organizations who can demonstrate results in reducing disparities in health care quality, access, or outcomes for a priority population. This award helped mobilize CMS stakeholders, spurring CMS' partners to share and spread innovative best practices that measurably reduce

disparities, and lifting up organizations who are successfully closing gaps among those they serve.⁴

For example, in 2018, CMS recognized Kaiser Permanente for reducing disparities in hypertension control, closing the Black/White gap to dramatically improve hypertension control for African Americans through a targeted intervention. CMS also recognized Novant Health for identifying and reducing a disparity in pneumonia readmission rates, improving pneumonia-related readmissions for African Americans over less than one year to close the gap between this population and other patients served. In 2019, CMS recognized HealthPartners for their organization-wide approach which helped them reduce health disparities and close or eliminate gaps between racial and ethnic minority enrollees and white enrollees for multiple health outcomes across the clinic, health plan, and hospital settings. CMS also recognized Centene Corporation for their national initiative to increase the accessibility of provider offices and services for people with disabilities by providing grant funding directly to providers to make improvements. In 2020, CMS presented the award to UnitedHealthcare, which used home visits, local primary care and obstetric nurse partnerships, and care coordination to improve the delivery of timely, comprehensive postpartum care among Black women in Michigan and Ohio as well as rural women in Hawaii. CMS also presented the award to Atrium Health, which improved their collection of demographic data, created an analytic tool that stratifies health-related data by key demographic variables, and used the results to design and implement culturally appropriate interventions in communities and primary care practices. This effectively closed the gap in colorectal cancer screenings for Hispanic males.

Further, in 2018, inspired by CMS' work to reduce disparities, the HIIN community initiated a self-driven effort to develop, test, and implement a Health Equity Organizational Assessment. This assessment was completed by enrolled hospitals and helped HIINs, hospitals, and CMS to refine our understanding of where hospitals are on their journeys to eliminating disparities and how to meet their members' needs. The elements that HIINs identified and measured in their hospital assessment bring health equity to the forefront of the program. Coupled with CMS Disparities Impact Statements and the robust self-governed HIIN Health Equity Affinity Group, CMS and HIINs gained insight on a broad swath of hospitals and could track health equity progress nationwide.

Another example of how CMS has generated self-directed health equity activities is through engagement with federal stakeholders to identify actions to improve accessibility in health care and other facilities for people with disabilities. CMS has engaged more than 40 federal stakeholders representing 11 federal agencies on a regular basis to identify solutions that will

⁴ The receipt of a CMS Health Equity Award should not be interpreted as a release of or a statement made on a recipient's compliance with its specific legal or regulatory obligations, or the merit, existence or lack of existence of any investigation, lawsuit, or other matter relating to compliance or law enforcement. The CMS Health Equity Award solely represents recognition for specific efforts to improve health equity, as evaluated based on the information reviewed by CMS's selection committee.

ensure health care and other facilities are physically accessible to individuals with mobility impairment. This work created a robust network of disability experts who are now pursuing and generating opportunities to eliminate disparities for beneficiaries with disabilities. For example, this group collaborated to inform CMS' most recently released provider accessibility resources, ensuring providers and beneficiaries get the most well-rounded and well-informed perspective. Throughout the public health emergency, this group has engaged in regular discussions to assess the unique challenges and barriers that individuals with disabilities face related to COVID-19. Each agency has shared their perspectives, assets, and the challenges they face to collectively identify solutions and improve quality, access, and outcomes for individuals with disabilities in the public health emergency.

Feedback from Listening Session Participant:

“Thanks very much for providing an opportunity for those of us who have been working for many years on health equity for people with disabilities to participate in today's listening session on increasing physical accessibility of health care facilities. We appreciate the leadership of [CMS] OMH on this issue and look forward to continued discussions.”

Understanding that many of the office's populations were being hit the hardest by the COVID-19 public health emergency, CMS hosted three listening sessions focusing on racial and ethnic minority populations and COVID-19. The feedback received in these sessions was shared within the Agency to inform next steps to continue addressing the unique needs minority communities face during the public health emergency.

Lastly, CMS administers the [Minority Research Grant Program](#) (MRGP) to support researchers at minority-serving institutions who are exploring how CMS can better meet the health care needs of racial and ethnic minorities, people with disabilities, sexual gender minorities, and individuals living in rural areas. Minority-serving institutions include Historically Black Colleges and Universities, Hispanic-Serving Institutions, Tribal Colleges and Universities, and Asian American and Native American Pacific Islander-Serving Institutions. CMS supports recipients of the MRGP by providing research funding for 24 months along with technical assistance, one-on-one support, and progress reports. Between 2005 – 2020, the MRGP has funded 48 grantees resulting in expanded health-related knowledge, attitudes, behaviors, and outcomes as evident by more than 40 published manuscripts, 55+ abstracts and presentations, book publications, and over 190 citations in subsequent research. This work has increased the agency's and external partners' knowledge of new and emerging research to support health equity through the expertise and technical mastery of research faculty at minority-serving institutions.

GAPS, NEEDS, AND NEXT STEPS TO IMPLEMENT SUSTAINABLE ACTIONS

In the future, CMS will continue to implement sustainable actions across its programs and policies to achieve health equity among Medicare beneficiaries, and will explore new opportunities across all of its programs and policies. CMS will promote and expand upon its current efforts to support providers in small practices, and those in rural and underserved areas, through the Quality Payment Program as they transition to Advanced Alternative Payment Methodologies and the Merit-Based Incentive Payment System, as well as through other CMS payment systems and models. In addition, CMS, in collaboration with the Office of the Assistant

Secretary for Planning and Evaluation (ASPE) and other HHS partners, will continue to consider ways to standardize data collection of social determinants of health and demographic information. CMS and HHS partners will continue to collaborate on ways to leverage this data collection to add value to federal agencies, providers, and local communities.

CMS will continue convening partners and consumers to understand where action is needed, and what actions will be most impactful. The Agency will maintain their focus on continuous, system-wide, sustainable quality improvement. CMS will continue to engage on ways to encourage providers to address the needs of the whole person and link individuals with the services they need to achieve their highest level of health. CMS will also continue to explore how best to encourage providers to eliminate disparities through Medicare and other value based payment systems and model tests. The agency will maintain a focus on vulnerable communities hit hardest by the public health emergency, considering barriers and solutions specific populations face during the COVID-19 crises and other emerging diseases. Finally, CMS will build on its current work embedding health equity and standardized data into its rules, regulations, and guidance across health care settings. This work, and all of the work of the CMS Equity Plan, will maintain a focus on ensuring that CMS programs and policies are designed to help organizations across the health care continuum work together to reduce disparities and achieve health equity for CMS beneficiaries nationwide.

SUGGESTED CITATION

Centers for Medicare & Medicaid Services, “Paving the Way to Equity: A Progress Report (2015-2021),” (2021).

CMS OFFICE OF MINORITY HEALTH

7500 Security Blvd.

MS S2-12-17

Baltimore, MD 21244

HealthEquityTA@cms.hhs.gov

[go.cms.gov/omh](https://www.cms.gov/omh)

Paid for by the US Department of Health & Human Services.

January 2021

References

- ⁱ 2017 National Healthcare Quality and Disparities Report. Agency for Healthcare Research and Quality. 2018. <http://www.ahrq.gov/research/findings/nhqrdr/nhqrdr17/index.html>
- ⁱⁱ Fredriksen-Goldsen KI, Hoy-Ellis CP, Muraco A, Goldsen J, Kim H-J. The health and well-being of LGBT older adults: Disparities, risks, and resilience across the life course. *The lives of LGBT older adults: Understanding challenges and resilience*. Washington, DC, US: American Psychological Association; 2015:25-53.
- ⁱⁱⁱ *Health, United States, 2015: With special feature on racial and ethnic health disparities*. National Center for Health Statistics. 2016. <https://www.cdc.gov/nchs/data/abus/abus15.pdf>
- ^{iv} Krahn GL, Walker DK, Correa-De-Araujo R. Persons with disabilities as an unrecognized health disparity population. *Am J Public Health*. 2015;105 Suppl 2(Suppl 2):S198-S206. doi:10.2105/AJPH.2014.302182
- ^v Douthit N, Kiv S, Dwolatzky T, Biswas S. Exposing some important barriers to health care access in the rural USA. *Public Health*. 2015;129(6):611-620. doi:10.1016/j.puhe.2015.04.001
- ^{vi} Mapping Medicare Disparities (MMD) Tool. Centers for Medicare & Medicaid Services. Updated 2019. <https://data.cms.gov/mapping-medicare-disparities>
- ^{vii} Stratified Reporting: Part C and D Performance Data Stratified by Race, Ethnicity, and Gender. Centers for Medicare & Medicaid Services. Updated 2019. <https://www.cms.gov/About-CMS/Agency-Information/OMH/research-and-data/statistics-and-data/stratified-reporting.html>
- ^{viii} *Disparities in Health Care and Health Outcomes in Selected Conditions*. National Quality Forum, "January 15, 2017. https://www.qualityforum.org/Projects/c-d/Disparities/Final_Report.aspx
- ^{ix} *HHS Action Plan to Reduce Racial and Ethnic Health Disparities*. US Dept. of Health & Human Services; April 2011. http://minorityhealth.hhs.gov/npa/files/plans/hhs/hhs_plan_complete.pdf
- ^x Frieden TR; Centers for Disease Control and Prevention (CDC). Forward: CDC Health Disparities and Inequalities Report - United States, 2011. *MMWR Suppl*. 2011;60(1):1-2.
- ^{xi} Carter-Pokras O, Baquet C. What is a "health disparity"? *Public Health Rep*. 2002;117(5):426-434. doi:10.1093/phr/117.5.426
- ^{xii} NCHHSTP Social Determinants of Health: Frequently Asked Questions. Centers for Disease Control and Prevention. Accessed December 2019. <https://www.cdc.gov/nchhstp/socialdeterminants/faq.html>
- ^{xiii} *HHS Action Plan to Reduce Racial and Ethnic Health Disparities*. US Dept. of Health & Human Services; April 2011. http://minorityhealth.hhs.gov/npa/files/plans/hhs/hhs_plan_complete.pdf
- ^{xiv} Frieden TR; Centers for Disease Control and Prevention (CDC). Forward: CDC Health Disparities and Inequalities Report - United States, 2011. *MMWR Suppl*. 2011;60(1):1-2.
- ^{xv} Carter-Pokras O, Baquet C. What is a "health disparity"? *Public Health Rep*. 2002;117(5):426-434. doi:10.1093/phr/117.5.426
- ^{xvi} Agency for Healthcare Research and Quality: Division of Priority Populations. Agency for Healthcare Research and Quality., April 2016. http://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/factsheets/priority-populations/prioritypopulations_factsheet.pdf
- ^{xvii} Chapter Eight: Focusing on Vulnerable Populations. Agency for Healthcare Research and Quality. March 1998. <http://archive.ahrq.gov/hcqual/meetings/mar12/chap08.html>
- ^{xviii} *Disparities in Health Care and Health Outcomes in Selected Conditions*. National Quality Forum. January 15, 2017. https://www.qualityforum.org/Projects/c-d/Disparities/Final_Report.aspx
- ^{xix} National Healthcare Quality and Disparities Reports. Agency for Healthcare Research and Quality, Rockville, MD. Updated June 2020. <https://www.ahrq.gov/research/findings/nhqrdr/index.html>
- ^{xx} Braveman P. What are Health Disparities and Health Equity? We Need to Be Clear. *Public Health Rep*. 2014;129(1_suppl2):5-8. doi:10.1177/00333549141291S203
- ^{xxi} Mapping Medicare Disparities (MMD) Tool. Centers for Medicare & Medicaid Services. Updated 2019. <https://data.cms.gov/mapping-medicare-disparities>
- ^{xxii} American Heart Association News. LGBT health disparities the 'next frontier'. June 2015. <https://news.heart.org/lgbt-health-disparities/>
- ^{xxiii} Kates J, Ranji U, Beamesderfer A, Salganicoff A, Dawson L. Health and Access to Care and Coverage for Lesbian, Gay, Bisexual, and Transgender Individuals in the U.S. Kaiser Family Foundation. May 2018. <https://www.kff.org/disparities-policy/issue-brief/health-and-access-to-care-and-coverage-for-lesbian-gay-bisexual-and-transgender-individuals-in-the-u-s/>
- ^{xxiv} Haverkamp SM, Scott HM. National health surveillance of adults with disabilities, adults with intellectual and developmental disabilities, and adults with no disabilities. *Disabil Health J*. 2015;8(2):165-172. doi:10.1016/j.dhjo.2014.11.002
- ^{xxv} Wisdom JP, McGee MG, Horner-Johnson W, et al. Health disparities between women with and without disabilities: a review of the research. *Soc Work Public Health*. 2010;25(3):368-386. doi:10.1080/19371910903240969
- ^{xxvi} Skrepnek GH, Mills JL Sr, Armstrong DG. A diabetic emergency one million feet long: disparities and burdens of illness among diabetic foot ulcer cases within emergency departments in the United States, 2006-2010. *PLOS One*. 2015;10(8):e0134914. doi:10.1371/journal.pone.0134914

- xxvii Institute of Medicine (US). How Far Have We Come in Reducing Health Disparities? Progress Since 2000: Workshop Summary. Washington (DC): National Academies Press (US); 2012. 2, What Progress in Reducing Health Disparities Has Been Made? A Historical Perspective. <https://www.ncbi.nlm.nih.gov/books/NBK114236/>.
- xxviii 2018 National Healthcare Quality and Disparities Report. Rockville, MD: Agency for Healthcare Research and Quality; September 2019. AHRQ Pub. No. 19-0070-EF. <https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/2018qdr-final.pdf>.
- xxix Ferdows NB, Aranda MP, Baldwin JA, Baghban Ferdows S, Ahluwalia JS, Kumar A. Assessment of Racial Disparities in Mortality Rates Among Older Adults Living in US Rural vs Urban Counties From 1968 to 2016. *JAMA Netw Open*. 2020; 3(8):e2012241. doi:10.1001/jamanetworkopen.2020.12241.
- xxx National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Baciu A, Negussie Y, Geller A, et al., eds. Communities in Action: Pathways to Health Equity. Washington (DC): National Academies Press (US); January 11, 2017. <https://www.ncbi.nlm.nih.gov/books/NBK425844/>
- xxxi 5. Improving Data Collection across the Health Care System. Agency for Healthcare Research and Quality. Updated May 2018. <https://www.ahrq.gov/research/findings/final-reports/iomracereport/reldata5.html>.
- xxxii Bhalla R, Yongue BG, Currie BP. Standardizing race, ethnicity, and preferred language data collection in hospital information systems: results and implications for healthcare delivery and policy. *J Healthc Qual*. 2012;34(2):44-52. doi:10.1111/j.1945-1474.2011.00180.x
- xxxiii Proctor K, Haffer SC, Ewald E, Hodge C, James CV. Identifying the Transgender Population in the Medicare Program. *Transgender Health*. 2016;1(1):250-265. doi:10.1089/trgh.2016.0031
- xxxiv Dragon CN, Guerino P, Ewald E, Laffan AM. Transgender Medicare Beneficiaries and Chronic Conditions: Exploring Fee-for-Service Claims Data. *LGBT Health*. 2017;4(6):404-411. doi:10.1089/lgbt.2016.0208
- xxxv Ewald E, Guerino P, Dragon C, Laffan AM, Goldstein Z, Streed C. Identifying Medicare Beneficiaries Accessing Transgender Related Care in the Era of ICD-10. *LGBT Health* 2019;6(4):166-173. doi:10.1089/lgbt.2018.0175
- xxxvi *Information on Medicare Telehealth*. Centers for Medicare & Medicaid Services. November 2018. <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Information-on-Medicare-Telehealth-Report.pdf>
- xxxvii *National Standards for CLAS in Health and Health Care: A Blueprint for Advancing and Sustaining CLAS Policy and Practice*. US Dept. of Health & Human Services, Office of Minority Health. April 2013. <https://thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedCLASStandardsBlueprint.pdf>
- xxxviii Weech-Maldonado R, Elliott M, Pradhan R, Schiller C, Hall A, Hays RD. Can hospital cultural competency reduce disparities in patient experiences with care?. *Med Care*. 2012;50 Suppl(0):S48-S55. doi:10.1097/MLR.0b013e3182610ad1
- xi Betancourt JR, Green AR, Carrillo JE, Ananeh-Firemong O 2nd. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Rep*. 2003;118(4):293-302. doi:10.1093/phr/118.4.293
- xii Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington (DC): National Academies Press (US); 2003.
- xiii Feng Z, Fennell ML, Tyler DA, Clark M, Mor V. The Care Span: Growth of racial and ethnic minorities in US nursing homes driven by demographics and possible disparities in options. *Health Aff (Millwood)*. 2011;30(7):1358-1365. doi:10.1377/hlthaff.2011.0126
- xiiii Rivera-Hernandez M, Rahman M, Mukamel DB, Mor V, Trivedi AN. Quality of Post-Acute Care in Skilled Nursing Facilities That Disproportionately Serve Black and Hispanic Patients. *J Gerontol A Biol Sci Med Sci*. 2019;74(5):689-697. doi:10.1093/gerona/gly089
- xlv Ash M, Brandt S. Disparities in Asthma Hospitalization in Massachusetts. *Am J Public Health*. Feb 2006;96(2):358-362.
- xlv Jiang HJ, Andrews R, Stryer D, Friedman B. Racial/Ethnic Disparities in Potentially Preventable Readmissions: The case of diabetes. *Am J Public Health*. Sep 2005;95(9):1561-1567. doi:10.2105/AJPH.2004.044222
- xlvi Rathore SS, Foody JM, Wang Y, et al. Race, Quality of Care, and Outcomes of Elderly Patients Hospitalized with Heart Failure. *JAMA*. May 21 2003;289(19):2517-2524. doi:10.1001/jama.289.19.2517
- xlvii Your Health: People With Certain Medical Conditions. Centers for Disease Control. 2020. [https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#:~:text=Having%20COPD%20\(including%20emphysema%20and,severe%20illness%20from%20COVID%2D19](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html#:~:text=Having%20COPD%20(including%20emphysema%20and,severe%20illness%20from%20COVID%2D19)
- xlviii National Heart Lung and Blood Institute. Evidence-based management of sickle cell disease. Expert Panel report. Washington, DC: National Institutes of Health; 2014.