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CAH Perspectives on Collection and Use of Demographic and Social Drivers of Health Data

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KEY FINDINGS

- Interviews with nine Critical Access Hospitals (CAHs) revealed five main challenges with collecting and using demographic and social drivers of health data: discomfort, offering patient resources, logistical or technical challenges, limited staff capacity, and broad challenges.

- These interviews also highlighted five themes related to how CAHs use the data they collect: community characteristics and needs, individual patient needs, health outcomes and utilization, partnerships, and plans to expand data collection.

- By better understanding these challenges and uses of data, State Flex Programs can support their hospitals in the barriers they face with collecting patient data, using the data in a meaningful way, and reporting related quality measures.

PURPOSE

Collecting information about social drivers of health (SDOH) during patient encounters can be helpful to hospitals to inform treatment decisions and discharge planning for individual patients as well as understand population level issues that the hospital can form programs or partnerships to address. Demographic data can be used as well to identify inequities in health outcomes, access to services, or SDOH. Critical Access Hospitals (CAHs) may face additional challenges in collecting these data given their limited resources. This brief describes common themes that emerged through interviews with CAH quality staff about their challenges with and uses of these data.

BACKGROUND

Hospital collection of demographic and SDOH data is an important first step to understanding differences in health outcomes between populations and allowing hospitals to begin addressing these inequities.[1,2] Demographic data commonly includes race, ethnicity, language (REL), sex assigned at birth, sexual orientation, and gender identity (SOGI). Collecting demographic data can improve doctor-patient interactions and allow for more accurate conversations about health and health behaviors.[3] In health care facilities generally, collection of demographic data can allow for more equitable distribution of resources.[4]

SDOH may also be referred to as "health-related needs" or "social determinants of health." While these terms are often used interchangeably, they have distinct

meanings. In this project, we asked interviewees about their practices related to collecting SDOH data to align with the language of the new CMS quality measures. SDOH refer to the underlying social and economic factors that impact the health of communities. In practice, hospitals may aim to understand the SDOH present in their community by collecting health-related social needs data which include individual challenges related to housing, food, transportation, and other resources.[5]

There are four new measures in the Medicare Beneficiary Quality Improvement Project (MBQIP) related to SDOH: Hospital Commitment to Health Equity (HCHE), Screening for Social Drivers of Health (SDOH-1), Screen Positive Rate for Social Drivers of Health (SDOH-2), and CAH Quality Infrastructure. First, the HCHE measure[6] is a new structural measure in CMS' Hospital Inpatient Quality Reporting (IQR) program for 2023 that will be added to MBQIP in 2025. Two of the five domains of this measure are specifically about data: domain 2 (data collection) and domain 3 (data analysis). Within data collection, hospitals must attest to collecting demographic and/or SDOH data on the majority of patients, training staff on culturally sensitive collection of these data, and inputting these data into structured data elements within their electronic health record (EHR).

Two other new measures were also added to CMS' IQR program for 2023 for hospitals to report the percentage of patients screened for five key SDOH (housing insecurity, food insecurity, utility needs, interpersonal violence, and transportation) and the percentage of those patients that screen positive for these needs.[7] Beginning in 2025, these measures will also be added to MBQIP.

Lastly, one element of the CAH Quality Infrastructure measure[8] (also part of MBQIP) contains explicit criteria for health equity data collection. The element "Integrating Equity into Quality Practices" includes the criterion "managers use collected data and other available resources to identify inequities". CAHs can meet the criteria by attesting to one or more statements about stratifying data for different populations, accessing and using external data, utilizing a dashboard to share data, and applying an equity lens to other quality and safety improvement data.

According to a study of data on health-related social needs (HRSN), the most commonly assessed need among CAHs is food insecurity, and the least assessed need is utility needs.[9] CAHs most commonly use these data for referrals to social service organizations, to inform clinical decision making, and to inform discharge planning.[9] CAHs that collect health related social needs data routinely are more likely to use the data for population health analytics, quality management and to inform community needs assessments or other equity initiatives.[9] While CAHs are less likely than non-CAHs to collect health-related social needs data, this difference may potentially be mitigated by system membership and EHR vendor.

Health care facilities face several challenges in efforts to begin or improve collection of demographic and SDOH data including those related to standardization, capacity and resources, and comfort of providers with asking questions of patients. Standardization of health-related social needs data collection may improve the quality and use of these data, though previous studies have found that CAHs are less likely than Inpatient Prospective Payment System (IPPS) hospitals to use standardized methods such as Z codes (diagnostic codes to identify nonmedical factors that may affect a patient's health).[10] These differences in levels of standardization may be attributed to capacity and resource challenges present among many CAHs related to advancing EHR functions including costs associated with implementation, fewer trained and experienced IT staff, and a limited digital infrastructure.[11–13] Additionally, some providers are reluctant to collect patient demographic and SDOH data.[14,15]

Through interviews with CAH staff, this brief seeks to identify current practices and challenges related to the collection and use of SDOH data.

APPROACH

This brief describes findings from semi-structured interviews with CAH staff. State Flex Coordinators (SFCs) from eight states with CAHs actively working on this topic provided contact information for 42 CAHs. We contacted all CAHs in states that provided three or fewer hospitals and chose three CAHs via random sampling (and only selecting one per hospital system where applicable) from states that provided more than three hospitals. This resulted in 19 CAHs in our sample. CAH staff were contacted by email requesting a 30-minute interview via Zoom. Nine interviews were completed from February to April 2024, during which CAH staff were asked about how they collect and analyze demographic and SDOH data, and the challenges they have encountered with these activities.

Interviewed CAHs were located in all four U.S. Census regions of the country, with three in the West region, three in the South, two in the Midwest, and one in the Northeast. Eight CAHs had 25 beds, and the remaining CAH had 21. Of the hospitals interviewed, four were independent, four were system-owned, and one was contract managed (according to data from the 2023 CAH Quality Inventory and Assessment, collected by the FMT). Six interviews were completed with one staff member, and three included multiple staff members. Interviewees held a variety of roles, including Chief Nursing Officer, Quality Department Manager, Diversity Equity and Inclusion (DEI) Officer, and Social Services Manager.

Two team members separately coded each interview and then reconciled their codes to arrive at themes. One team member then reviewed each interview again to code for the themes.

RESULTS

While our interview guide distinctly asked participants about their experiences collecting demographic data and SDOH data separately, we found that there was significant overlap between the two types of data in their responses and decided to combine responses for the purposes of analysis and identification of overall themes. We chose to focus on two specific domains to assess these results: challenges (Table 1) and use of data (Table 2).

Challenges

Table 1 displays the five themes of challenges mentioned by interviewees, including a description of each theme and quotes from interviews demonstrating the corresponding theme.

One major theme that came up among interviewees was **discomfort**. This includes the comfort of CAH staff to ask patients questions about their demographics and SDOH, as well as staff's perception of how comfortable patients feel to answer those questions. Some participants expressed that this may be more of a challenge for staff in rural areas due to implicit bias or overall assumptions of minimal diversity (particularly in terms of race and sexual or gender minorities) in their community. Within this theme, many interviewees also discussed the importance of the setting in which these questions are asked, including who on their staff is asking, at what point in a patient's visit, or where the patient is being screened, and that staff believe these factors can all influence a patient's comfortability. Some interviewees also shared concerns about data integrity, citing examples of their staff inaccurately selecting "unknown" or "refused" for patients because the *staff* were too uncomfortable to ask the question.

Another common theme was challenges related to **offering patient resources**. This theme spanned a wide range of challenges including knowing which resources are available in their area, finding an accessible way to provide that information to patients, and lacking local resources to offer. This theme also included some mentions of patients declining resources as well as challenges with not having a "closed loop" referral system, where hospital staff can know if a patient utilized the resource or not.

Several mentions were related to **logistical or technical challenges**. This included limitations with documentation in the EHR, such as not having more than two

options for gender markers, lags in time to access population level data, and other technical issues. For example, one CAH implemented updates to their SOGI data, but this update caused an issue where their EHR would not identify abnormal lab values if a patient chose not to disclose their gender when asked this question, which could lead to serious medical consequences if abnormal lab values are overlooked.

Interviewees also mentioned **limited staff capacity** to ask, document, and follow up on these questions. This was typically mentioned in the context of staff already having limited time with patients, and the perception that prioritizing asking about demographics and SDOH may take time away from other priorities. While this was sometimes mentioned in conjunction with staff comfortability, it was a distinct concept.

Lastly, some CAHs expressed concerns about **broad challenges** outside of the other themes identified. These included anticipated population changes in the community, a lack of resources in rural areas generally, and overwhelm around trying to take on collecting and using demographic and SDOH data.

TABLE 1: Challenges

Theme	Description	Quotes Demonstrating Challenges
Discomfort	Includes discomfort among CAH staff when asking demographic and SDOH questions of patients and perception of how comfortable patients are to answer truthfully	*"In our more rural areas, we tend to see a little bit more reluctance from clinical staff to even ask those questions."* *"I think on the inpatient side… you have to understand, we're asking questions, these types of questions of people who are sick. They don't feel well. They just want to be better… And also, to be fair, some of the questions can be embarrassing to answer. And so I think… we worry that we're not getting accurate answers."* *"One of the things is who and where those questions are asked… And really it becomes whether it should be a nurse or your provider asking those questions or because a lot of those questions seem personal. And then nobody wants to be at the front desk telling them… 'I don't have a place to live', right? Or you know, 'my gender identity is this.' That's not really… a conversation that you have at a front desk. So providing people the ability to answer those questions comfortably, and holding onto their dignity and their privacy is what's going to be important. So just trying to figure all that out is challenging."*
Offering patient resources	Includes difficulty finding local available resources and finding the best way to connect patients with resources	*"If you're not in the circle of knowing what it is, you miss knowing what's out there for people, or you refer someone to something that might not be a service any longer, and then you're back at square one… that's our biggest time consuming and biggest barrier when looking at the resources, is just trying to stay up on what's available."* *"That's honestly where we have more of a barrier. It isn't identifying the needs, it's once we have this need identified, how do we fix this problem?"* *"Emergency departments are 24/7, resources are usually '9 to 5', right? So what's our plan when somebody tests positive for homelessness and it's 2 AM? And it's, you know, minus 3 [degrees], then how do we link that person with resources at 2 AM so they would not release out into the cold?"*

TABLE 1: Challenges, *continued*

Theme	Description	Quotes Demonstrating Challenges
Logistical or technical challenges	Includes difficulty finding local available resources and finding the best way to connect patients with resources	*"When you're looking at community data, it's not very often updated. So you're working off of old data or it's very hard to track to see whether you've been able to make a difference or not. And so it's hard to launch these programs using the data and then be able to show that it's having that impact so that a hospital would actually put the finances into doing it."* *"I understand the purpose of asking the SOGI questions. I think it's super important, and I mean we had delays in care because we didn't know. For instance, someone who presented as male was born as a female [sic], and still had female organs [sic], and so there was a delay in care, because our physician was not thinking about the female reproductive system [sic], and so I wish that we could do better at asking the SOGI questions."*
Limited staff capacity	Includes limited time and capacity of staff to collect, document, and/ or analyze demographic and SDOH data, and a perception that this competes with other priorities	*"Collecting the data, just convincing staff that we have time to do it. That it's worth a few minutes of an appointment slot to do the screener. The biggest barrier that we hit is staff, saying 'I don't have time' or 'that cuts into my appointment time.' We say, 'but is it worth it?' And if they feel like it's worth it, then they totally are on board."* *"From an ED nurse perspective, they are wanting to save their lives. They're thriving on the critical patients overall. It's just a different mindset in a nurse. And we also don't necessarily have that social work type consult in the ED. It is flat out nursing and physicians only, especially because we're only a 5 bed ER, and so just that support itself, or that mindset of that nurse is different than the mindset of an acute care nurse who thinks about more of the discharge planning and home piece of it."*
Broad challenges	Includes challenges with determining areas of focus, establishing new processes, population changes, and getting resources in rural communities generally	*"Not getting hung up with analysis paralysis. We're trying to learn all this about it, we don't want to make the wrong move. We don't want to start something and then have to quit it because we didn't think it through. But okay, we just had to pick something and move forward."* *"Our society and culture is changing pretty rapidly right now with even how people identify themselves. And so that's another barrier right now is we're needing to really update and keep up with where our culture and society is, so that we can identify people the way that they would like to be identified and to be able to then even get more specific in the populations that we need to work with."*

Use of data

Participants also described how they use the demographic and/or SDOH data collected from patients. Five key themes emerged and are described with examples in Table 2.

One common theme was **community characteristics and needs**. This included identifying the volume of certain demographics (e.g., languages spoken), identifying trends in SDOH in the community (e.g., housing insecurity), or using data for their community health needs assessment (CHNA). Many participants spoke about basic analyses to better understand their community's population and needs, though some compared data across different regions they serve or by different demographic characteristics.

Interviewees also discussed using the data to assess **individual patient needs**. This included data for identifying clinical applications for patients (e.g., determining diagnostic testing or treatment options), and referrals to available resources for patients that screen positive for SDOH.

Many CAHs pointed to using the data to assess **health outcomes and utilization**. Some examples of this were assessing blood pressure and diabetes markers among Indigenous patients, sepsis readmissions among older adults, and cardiovascular disease among Black and Hispanic/Latino residents.

Often in conjunction with many of these other themes, interviewees mentioned **partnerships** in the use of data. This theme included mentions of community-wide committees or task forces, use of external data from local organizations, and other partnerships to improve data collection or data quality to address SDOH.

Lastly, some CAHs described **plans to expand data collection** for demographic and/or SDOH data. Some ideas included further data analysis to understand needs and expanding collection of SDOH data to additional clinical settings.

TABLE 2: Use of Data

Theme	Description	Quotes Demonstrating Use of Data
Community characteristics and needs	Includes identifying volume of specific demographics, identifying trends in SDOH in the community, or using data for their community health needs assessment (CHNA).	*"We are now monitoring what we're getting back, and we're already starting to see trends. It's basically the same things that we already know are there. But there's some things that rise to the top that we really were surprised [by]. You know, I personally, everybody keeps saying food insecurity is such a big issue. But in my mind, I thought, is it really that bad? Do you really think? And yes, that was number one. I mean that validates it for our area. And so that's the first phase is really getting the information. Now, we can start seeing the volume."* *"We pull data directly from our interpreter system to see what languages we're using to interpret. For the most part it's Spanish and sign language... But then we're also looking to say, 'Okay, how are we using our tools that we have currently in place? Do we need more tools or not? And what are we seeing in the community?'"* *"We're trying to diversify our services and see how we can present our services, so that people feel welcome in our hospital environments as part of that is looking at, you know, do we have a high transgender population? And how are we meeting their needs? Are we a welcoming place? Are we a safe environment for them? We're really focusing in on trauma informed care... we actually were looking at that as a main focus in our community health assessment as well as within our small little hospital here."*

TABLE 2: Use of Data, *continued*

Theme	Description	Quotes Demonstrating Use of Data
Individual patient needs	Includes clinical uses and referring patients to external resources or hospital-based programs	"We do have an extremely involved social worker where the nurses and the physicians are able to trigger a social worker visit while someone is in the ED. And so, she comes in right away and I think it's more of an informal process. But I think she's able to follow up on some of those questions and ask more about some of the social drivers. And then we do have some resources and programs in place that we're able to utilize if that's needed." "It's more currently to drive the clinical workflow. So, depending on how the questions are answered, it could just drive whatever testing might be required or next steps, things like that. It's more helped with a diagnostic tool to guide for answers rather than any supportive data to really be like project driven or focused."
Health outcomes and utilization	Includes using data to identify specific health outcomes or health care utilization metrics, such as readmissions	"And then we do benchmark our total quality indicators, blood pressure and things like that for our [Indigenous] beneficiary population versus our total population. And in general, because of some of those programs that are restricted to beneficiaries, our [Indigenous] beneficiaries are generally healthier than our non-beneficiaries, particularly in diabetes and heart disease, due to special diabetes funding for Indigenous persons." "We're looking at sepsis readmissions especially for people over the age of 74. We look at mortality rates for cardiovascular disease. We have a high rate, one of the highest rates in the state. And a lot of that is pushed by our Black and Hispanic and Latino population. So, we're looking at a lot of those things. Obviously, we struggle because in health outcomes, we're 13th out of 14 counties in the state. So really, we're trying to focus on why that is, and where those areas that we need to start to focus on."
Partnerships	Includes a variety of partnerships with external organizations to improve data quality and collection, and/or address SDOH	"We have an SDOH committee where we have leaders from the community as well as leaders from within our hospital that will be looking at this information… we can present it to the committee that will have oversight and gleaning the information and then getting that out to our community members as needed." "When we did not have access to a bunch of data, we made a concerted effort to get on boards of local community-based organizations, and got our hands on as much as we could. And that was a good starting place to me to hear from all of those community-based organizations, what they're dealing with and the realities that they have… We very humbly say that we're not the big hospital that knows everything. We're coming into their world and getting their advice on this kind of work. So that was really the biggest starting point for me and even in our presentation that we put together, that's what we built first, was [sic] those partnerships."
Plans to expand data collection	Includes mention of plans to expand collection of SDOH to additional service lines, screening for additional SDOH, or deeper analysis of data.	"I would like to incorporate more social determinants of health in our ED, especially from a 72-hour, return. If a patient returns within the last 72 hours, why and is it related to their social determinants of health overall? We're not there yet, I would like to."

DISCUSSION

Our interviews with CAH staff revealed many insights on the practices and challenges they have faced in collecting and using patient demographic and SDOH data.

Challenges

Two closely related themes came up in many interviews: staff feeling uncomfortable asking patients questions and limited staff capacity to do so. The discomfort described varied across interviews, but largely involved staff feeling uncomfortable asking questions they perceive as quite personal and their perceived concerns about asking those questions at the right place and time. Interviewees also expressed concern about the time involved in asking screening questions, and having this time taken away from other needs during a visit. In emergent situations, screening patients for SDOH is typically not the immediate priority. Some interviewees, however, explained that their staff are more agreeable to take the time to do the screening questions once they understand the value behind it and why it is important for patient care and hospital operations. In this way, implementing demographic and SDOH screening standard operating procedures (SOPs), and staff education and training tailored to any specific barriers (e.g., feeling uncomfortable asking about gender identity, or feeling ill-equipped to explain to patients the rationale for collecting this information), may help foster a more comfortable environment for staff to ask every patient at every encounter. There are several emerging studies on best practices of when, where, and how to collect these data from patients. One study found that non-verbal collection of SOGI via a form during registration yields greater comfort among patients compared to a verbal collection from a nurse during the clinical encounter.[16] Similarly, tablet-based screening for SDOH has been linked to higher disclosure rates due to anonymity, particularly for sensitive topics such as household violence and substance abuse.[17] For areas where patients screen positive on the tablet-based screen, it is recommended that a care team member follow up with additional questions in order to better understand their needs and help build rapport.[18] Additional resources for screening best practices are located in the Appendix.

Another significant challenge mentioned was related to offering patient resources upon positive screening for SDOH, and included difficulty finding resources to offer, staying up to date on those resources, getting the information to patients, and patients declining assistance. In the rural communities where most CAHs are located, there are often few providers of resources such as shelters and food banks, and sometimes these resources are in a neighboring town that is a considerable distance from the CAH and/or where the patient lives. Additionally, as one participant noted, because hospital operations are 24 hours a day, they may see patients at times when other resources and organizations are not open. Some interviewees mentioned utilizing directories of available resources, that either they created or found externally. Some also mentioned involvement in community groups or task forces as a way for hospital staff to stay current with what resources are available. State Flex Programs (SFPs) and CAHs may consider using 211 (a national network that aims to connect individuals with local resources) and other national resources as a starting place for connecting patients with services.[19,20] Building and maintaining or locating an existing state or local directory may also be beneficial long term.

While having a list of resources ready for individual patients who screen positive for a social need is a good starting place, it's important to recognize that these are often temporary solutions for individuals that do not address the root causes of the need at the community level. This is part of the important distinction between HRSN and SDOH. Using transportation as an example, giving someone a bus ticket may address their immediate HRSN, but addressing the SDOH at a community level would involve broader changes such as lowering the cost of public transit.

Use of data

Participants described using demographic and SDOH data in a wide range of ways and at different stages of addressing health equity. Two themes (individual health needs and community characteristics and needs) are the first step: understanding the existing data. For these themes, participants spoke about using data to drive decision making for individual patients and where to focus efforts at the hospital or community level. They also mentioned the usefulness of having the data to demonstrate specific needs, which may be useful to gain support for continued work addressing SDOH at the hospital level, or advocate for more resources in the community. Another theme describes the next step of assessing health outcomes and/or utilization metrics and identifying any trends by demographic groups. These types of analyses can enrich the data to more clearly demonstrate links between various data points collected. For example, if a hospital has data that shows a high use of the emergency department for non-emergent conditions by individuals who are houseless, this may support efforts to have more robust connections with available resources or even launch a hospital-based initiative for people who are housing insecure. Lastly, some interviewees discussed expanding their screening processes (e.g., to additional care settings), but this should only be undertaken once some of the initial infrastructure is in place. Many participants also described partnerships at one or more of these stages. These partnerships can help expand CAHs' access to data and build community connections that may help with additional resources to offer patients.

There are many resources available for health care facilities and providers that illustrate best practices for using data once the collection mechanism is in place. For example, one resource from the HRSA-funded National LGBTQIA+ Health Education Center recommends three steps to effectively and efficiently use SOGI data: check the data integrity, run clinical quality reports using the SOGI data, and use SOGI data to guide decision support.[21] Additional resources are located in the Appendix.

Practice and Policy Implications

Interviewees provided a wide range of CAH perspectives, including different arrangements of system ownership, and these ownership structures may impact how interviewees responded to questions. For example, these structures likely impact the hospitals' practices with collecting and using demographic and SDOH data. A system-owned CAH may have more resources to utilize or more developed processes for collecting SDOH or demographic data that are system-wide. While we did not explicitly ask interviewees about how their system membership may impact these practices, this is an important consideration when interpreting the themes we identified.

As mentioned above, there are four quality measures that are specifically connected to demographic and/or social needs data. The HCHE measure asks hospitals to attest to several statements, including collecting demographic and/or SDOH data on the majority of patients, training staff on culturally sensitive collection of these data, inputting these data into structured data elements within their electronic health record (EHR), and stratifying performance indicators by these variables to identify health equity gaps. These are all important steps and benchmarks for hospitals to meet as they work toward health equity; however, one major limitation of this measure is that each statement uses the phrase "demographic and/or SDOH data". This will limit how this measure is interpreted, as hospitals could respond "yes" if they only do an activity for demographic data, only SDOH data, or both. While this offers hospitals some flexibility for how to meet each statement and domain of the measure, it also leaves some information up to interpretation; both by the hospital when submitting their measure and by end users trying to interpret their data.

There are many ways SFPs can help support their CAHs in improving their collection and use of demographic and SDOH data, as well as support them in reporting the related quality measures. There are many national resources available for needs such as housing

and food access,[19,22] which SFPs can share with their hospitals along with state or locally based organizations. Rural Quality Improvement Technical Assistance (RQI-TA) recently assembled a national list specifically for SFPs and CAHs.[20] There are also many resources available to provide CAHs with best practices for collecting demographic and SDOH data, and support them with reporting the new quality measures.[8,23,24] SFPs can play an important role in supporting their hospitals with an intentional and appropriately paced roll-out of these practices by providing these resources and encouraging CAHs to answer the HCHE and CAH Quality Infrastructure measure questions honestly to identify areas where they may be able to improve. SFPs can also work closely with Small Rural Hospital Improvement Program (SHIP) coordinators to leverage funds in support of these efforts.

When considering the challenges especially, it's also important to acknowledge that the CAHs we interviewed were already engaged in collecting these data and improving their processes, with many of them involved in state Flex projects focused on health equity. The challenges that surfaced during the interviews reflect their perspectives at the time of interviews, but do not necessarily reflect challenges that may arise for hospitals that are just beginning to collect these data. Those CAHs may need more resources on how to integrate data collection into their EHR or how to select a screening tool,[25] for example, and SFPs can provide support at any step of the process, including in collaboration with the state SHIP coordinator. Some key resources for SFPs and CAHs are included in the Appendix.

CONCLUSION

The insights gleaned from interviews with CAH staff bring attention to both the progress and the persistent challenges faced in the collection and use of patient demographic and SDOH data. While the commitment to improving patient care through data collection is evident, obstacles such as staff discomfort, logistical issues, and limited resources to offer patients in rural settings continue to impede progress. Effective staff training and the implementation of best and standard practices, including considering non-verbal screening methods, are crucial in addressing these challenges. Additionally, the involvement in community partnerships can enhance the capacity of CAHs to offer meaningful support and improve patient outcomes. The role of SFPs in providing guidance and facilitating access to resources is vital for the successful integration and utilization of this data, including for related MBQIP measures. Moving forward, it is essential for CAHs to build on their current practices, embrace continuous learning, and leverage available resources to overcome barriers and advance health equity in their communities.

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Appendix

Resource Name	Description
SDOH Resources	
Social Needs Screening Tool Comparison Table	This resource from the Social Interventions Research & Evaluation Network compares 15 different screening tools including how many social needs questions they have and which of the five HRSN included in the new CMS measures.
Tools to Assess and Measure Social Determinants of Health	This resource from Rural Health Information Hub provides descriptions and links to download three screening tools: Health-Related Social Needs Screening Tool, PRAPARE Implementationand Action Toolkit, and HealthBegins.
Social Determinants of Health (SDOH) Toolkit	This toolkit from the State Innovation Model of Iowa provides a step by step guide for health care providers and organizations on how to collect and use SDOH data, from picking a tool to getting feedback from patients to developing new partnerships.
SDOH & Practice Improvement	AHRQ's SDOH & Practice Improvement page provides several tools and resources to help organizations including information about screening tools and clinical-community linkages.
The Health Leads Social Health Data Toolkit	This toolkit from Health Leads provides manager- and director-level staff with information concerning setting up a social needs program.
The Health Leads Screening Toolkit	This toolkit from Health Leads provides information about how to screen for social needs including which domains to address, tips to create a screening tool, a recommended screening tool, and question banks for each social needs domain.
Demographic Data Resources	
Learning Resources - Collecting Sexual Orientation and Gender Identity Data	This page from the National LGBTQIA+ Health Education Center contains learning modules, publications, toolkits, and webinars on best practices for collecting SOGI data.
Helping Your Organization Collect Sexual Orientation and Gender Identity Data	This guide from The Fenway Institute and NORC answers common questions about collecting SOGI data in health care facilities.
You've Built It... Now What?	This publication from the National LGBTQIA+ Health Education Center focuses on steps for effective use of SOGI data to improve care for LGBTQIA+ patients.
Race and Ethnicity Data Improvement Toolkit	This toolkit from the Agency for Healthcare Research and Quality focused on race and ethnicity data includes resources for ensuring adequate IT infrastructure, training data collectors, collecting data from patients, and measuring the effectiveness of education and training efforts.
Data Driven Care Delivery: Data Collection, Stratification and Use	This toolkit form the American Hospital Association's Institute for Diversity and Health Equity covers best practices for collection and use of demographic data. It includes case study examples and discussion questions for organizations to consider.