Social Determinants of Health:

The Impact of Telehealth Adoption on SDOH Data Collection and Use During the COVID-19 Pandemic

Behavioral Health Institute
June 30, 2021

Behavioral Health Institute – Training, Workforce and Policy Innovation Center, Social Determinants of Health: The Impact of Telehealth Adoption on SDOH Data Collection and Use During the COVID-19 Pandemic. Perry E, Franklin A, Payn B, Harvell J, Perry S, McKee M, Towle C.

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Executive Summary

During the early stages of the COVID-19 pandemic, health care providers made a rapid transition to telehealth, utilizing video and phone-based communication strategies to engage, assess, and treat their patients and clients (see note). The Behavioral Health Institute recently administered a provider-focused survey and conducted stakeholder interviews to better understand how the transition to telehealth has impacted providers' collection and use of data about clients' Social Determinants of Health (SDOH).

The anonymous, web-based survey was distributed statewide in May 2021. A total of 469 people responded to at least one question in the survey, with at least two respondents from every county and 59 people representing Tribal and Indian Health Care providers. A total of 138 survey respondents (30%) work in behavioral health settings, followed by 22% who work in primary care settings. Stakeholder interviews included 22 individuals representing 15 health systems, Accountable Communities of Health, Medicaid Managed Care Organizations, and state agencies.

Survey results show a steep decline in the collection of nearly all SDOH data early in the pandemic. As of June 2021, SDOH data collection is now increasing in most settings, but rates of data collection remain lower than in pre-COVID times in almost all domains other than technology. The collection of SDOH data regarding access to technology, internet, and the privacy needed to utilize telehealth services increased throughout the pandemic.

Integrated health settings and mobile crisis services, settings which had the highest rates of SDOH data collection prior to the pandemic, have decreased the most in current practice. Respondents from organizations serving significantly more Medicaid-eligible clients and/or racial and ethnic minorities report their clients having more barriers to engaging in telehealth services due to lack of access to technology and internet services. Stakeholders described challenges, opportunities, and innovations that arose from using telehealth to collect SDOH data and address the new SDOH needs created by COVID.

Survey respondents and stakeholders provided insight on the barriers and possible ways to increase the collection and use of SDOH data in assessment and treatment planning. Respondents and stakeholders cited the following opportunities and challenges:

- Access to technology tools and internet services need to be classified as a social determinant of health due to the impact on vulnerable populations.

- Funding and other mechanisms need to be identified that better incentivize and support providers to sustain SDOH data collection and use, including incorporation of more value-based care into reimbursement structures.

- The provider workforce needs quality educational opportunities that help support and streamline SDOH data collection, supporting provider skills in sensitively collecting these data, and integrating this information into comprehensive care and treatment.

- Providers need mechanisms to promote the coordination and exchange of SDOH data across treatment settings and during care transitions to benefit their clients.

Note: Typically, the term 'client' is used in behavioral health settings and the term 'patient' is used in physical health settings. For the remainder of this report, we will be using the term 'client' to refer to both 'patients' and 'clients.'

1 Background

In collaboration with the Health Care Authority (HCA), the Harborview Medical Center Behavioral Health Institute (BHI) initiated a project to understand what physical, behavioral, and integrated health entities are doing statewide around the collection and use of SDOH data before and during COVID, with a particular focus on the use of telehealth. Given the increased rates of unemployment, isolation, and lack of childcare coupled with statewide closures, it is important to understand the impact and use this knowledge to inform our practices. In addition, with the growing recognition that social factors influence as much as 80–90% of individual and population health outcomes, there was particular interest in understanding the collection of SDOH data via telehealth as it became a common practice to reach people and communities.[1] The project seeks to identify best and promising practices in collecting, using, and storing SDOH data and the barriers to these practices. Also, to contribute to the growing interest in Washington to support the exchange and re-use of this data through community information exchange to better serve clients and providers at the point of care.

This project seeks to build on the work advancing the collection and use of SDOH data that is already in process locally and nationally. Nationally, the Center for Medicare and Medicaid Services issued a letter in early 2021 to state health officials giving guidance on opportunities to better address SDOH. In this letter, they write, "States have the flexibility to design an array of services to address SDOH, including…housing related services and support, non-medical transportation, home-delivered meals…".[2] While many states, managed care plans, and providers have recognized the importance of addressing SDOH for Medicaid and CHIP beneficiaries, the growing shift towards alternative payment models and value-based care has accelerated the interest in addressing SDOH within Medicaid and CHIP to lower healthcare costs, improve health outcomes, and increase the cost-effectiveness of health care services and interventions. Work is also being done on a national level to standardize SDOH data collection. The Gravity Project launched in May 2019, intending to bring stakeholders together to create a standardized approach to capturing, exchanging, and facilitating payment for SDOH data collection across various settings.[3] Locally, the Bree Collaborative recently convened a statewide group of stakeholders to develop a framework of SDOH recommendations intended to address healthcare equity.[4] This project aims to join with existing work to close the gap on health disparities leading to increased health equity and a healthier population.

Social Determinants of Health

- *Food Insecurity*
- *Housing Instability/Homelessness*
- *Inadequate Housing*
- *Transportation Insecurity*
- *Financial Insecurity*
- *Material Hardship (e.g., unable to get childcare, utilities, etc., because they do not exist)*
- *Unemployment*
- *Education Status*
- *Veteran Status*
- *Stress*
- *Social Isolation*
- *Neighborhood Safety*
- *Intimate Partner Violence*
- *Childcare Insecurity*
- *Lack of technology and devices for telehealth (phones, webcam, computer, internet connection, etc.)*
- *Broadband/internet bandwidth unavailability*
- *Inability to cover the costs of access (internet service fees, phone minutes, etc.) for telehealth*
- *Lack of private space to use telehealth*

2 Methods: Survey

Project data was obtained through an anonymous survey targeting providers who deliver mental health, physical health, behavioral health, and integrated health statewide. The survey was distributed through provider listservs, professional associations, and to a group of providers who received laptops and Zoom licenses from the HCA. Additionally, qualitative data was obtained through stakeholder interviews (See Sections 4 and 5 for stakeholder interview methods and results). The survey was collaboratively designed between BHI and HCA and brought to the SDOH Survey Planning Committee for review and feedback. The committee included statewide stakeholders with subject matter expertise from relevant sectors (See acknowledgments for committee membership). Survey data collection began on May 3, 2021, remained open for four weeks, and closed on June 1, 2021. Survey distribution was intended to reach a diverse range of participants across the state, with attention given to ensuring Indian Health Care Provider and rural representation. The SDOH Survey Planning Committee reviewed the data weekly to ensure representation from across the state and targeted outreach to underrepresented demographics. There were 469 instances of the survey being opened and at least one question being answered, and 263 instances of the survey being submitted. Respondents were allowed to skip questions, resulting in varying numbers of responses to each question.

Survey data were collected and managed using REDCap electronic data capture tools (Harris, 2009) hosted at the Institute of Translational Health Sciences (ITHS). REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies, providing: 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources. REDCap at ITHS is supported by the National Center for Advancing Translational Sciences of the National Institutes of Health under Award Number UL1 TR002319.

3 Survey Results

The survey results are presented in three sections: sections 3.1–3.15 contain an overview of the survey results focusing on providers working in physical, behavioral, and integrated health service settings; section 3.16 focuses on survey results for providers working in mobile crisis and dental service settings; and section 5 presents the results of the stakeholder interviews. In section 3, service categories are condensed for data presentation as follows:

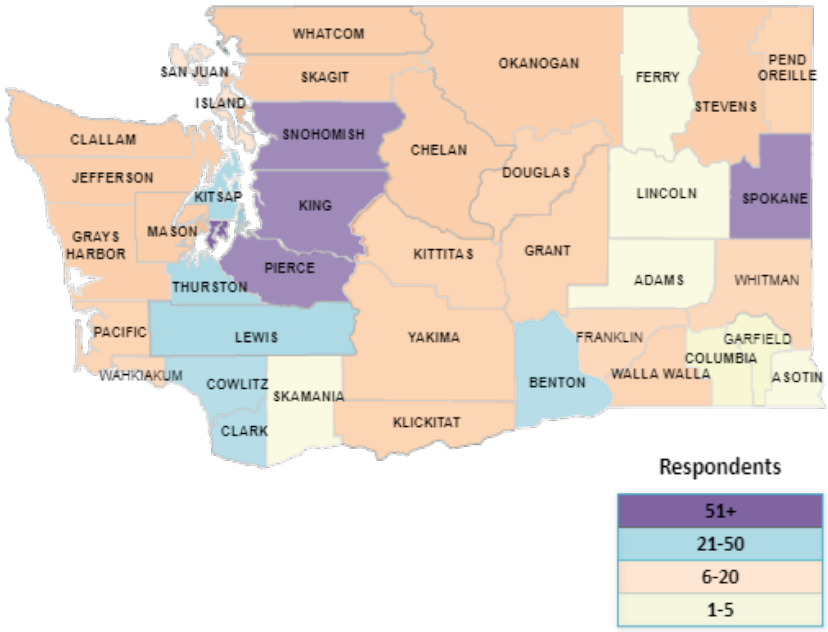
- Survey respondents who selected working in "Primary Care" (N=104) or "Physical Health Specialty" (N=39) are categorized as "PH" representing physical health (N=143).
- Respondents who selected working in "Behavioral Health Care" (N=138), "SUD only" (N=32), "Mental Health Only" (N=141), or "Opioid Treatment (N=55) are categorized as "BH" representing behavioral health (N=366).
- Respondents who selected working in "Integrated Behavioral Health and Primary Care" are categorized as "IH" (N=100).

Dental and mobile crisis services are displayed with other service types in Figures where there are noteworthy trends or comparisons but are not included in every Figure or Table due to the small N and to simplify data presentation. Between 14 to 18 respondents per question worked in mobile crisis settings, while between 32 to 39 respondents worked in dental service settings.

3.1 Number and Distribution of Responses

A total of 469 people responded to the survey. At least two respondents represented each county, and 69 respondents reported statewide representation. Of the respondents, 338 identified as serving an urban region, 288 rural, and 59 Tribal and urban Indian communities. Although Adams, Asotin, Columbia, Ferry, Garfield, Lincoln, and Skamania counties only had 1 to 5 respondents each, per capita response rate was still greater than King County.

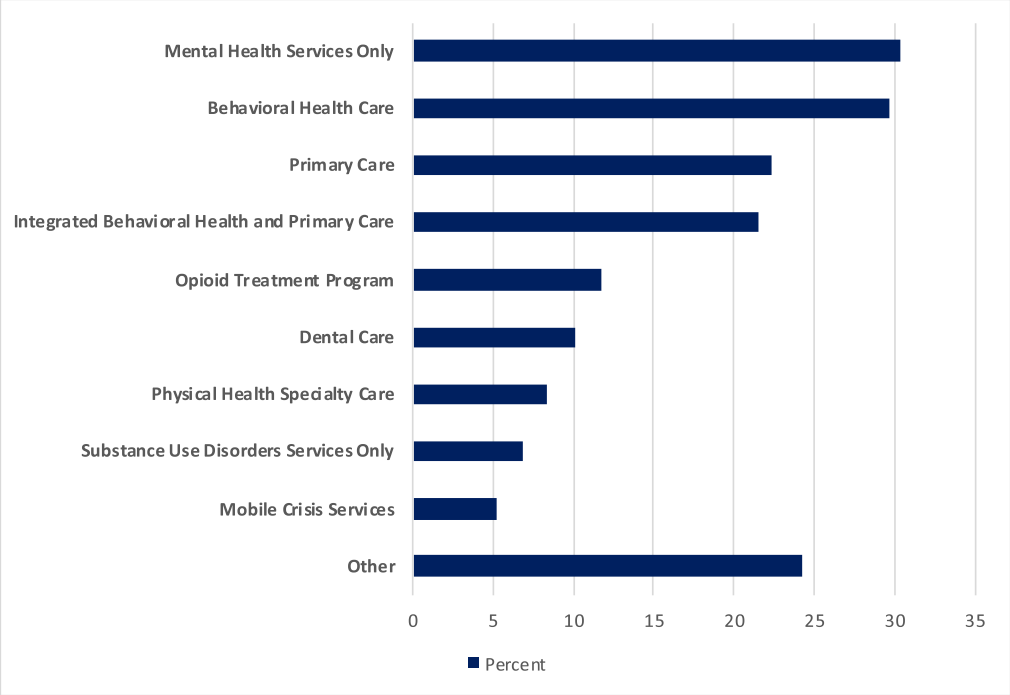
Figure 1, *Number of Respondents by County*



3.2 Type of Organization

Respondents represent agencies providing a wide range of services, specialties, and ages served. Figure 2 shows the distribution of survey responses by services offered. Respondents were able to select all applicable service types. Respondents selected mental health most frequently (N=141), followed by behavioral health (comprised of mental health and substance use disorder treatment) (N=138). Respondents most frequently selected youth services (N=176) as the type of specialty services offered, followed by LGBTQ+ (N=149), pediatric care (N=147), and geriatric care (N=134). The majority reported working in the outpatient setting (N=321) followed by community-based setting (N=120).

Figure 2, *Percentage of Respondents by Services Offered*



3.3 Organization Size

The sample includes representation from organizations of differing sizes. Most respondents (55%) represented organizations serving less than 5,000 clients annually, 36% served between 5,000 and 50,000, and 8% served more than 50,000 clients annually.

3.4 Demographics of Clients Served

As shown in Figure 3, 49% of respondents reported between 25-100% of their clients identifying as a racial or ethnic minority. As shown in Figure 4, 46% of respondents have a caseload of 50% or more Medicaid-eligible clients.

Figure 3, *Respondent Report of the Percentage of Clients Served by Their Organization Who Identify as a Racial or Ethnic Minority*

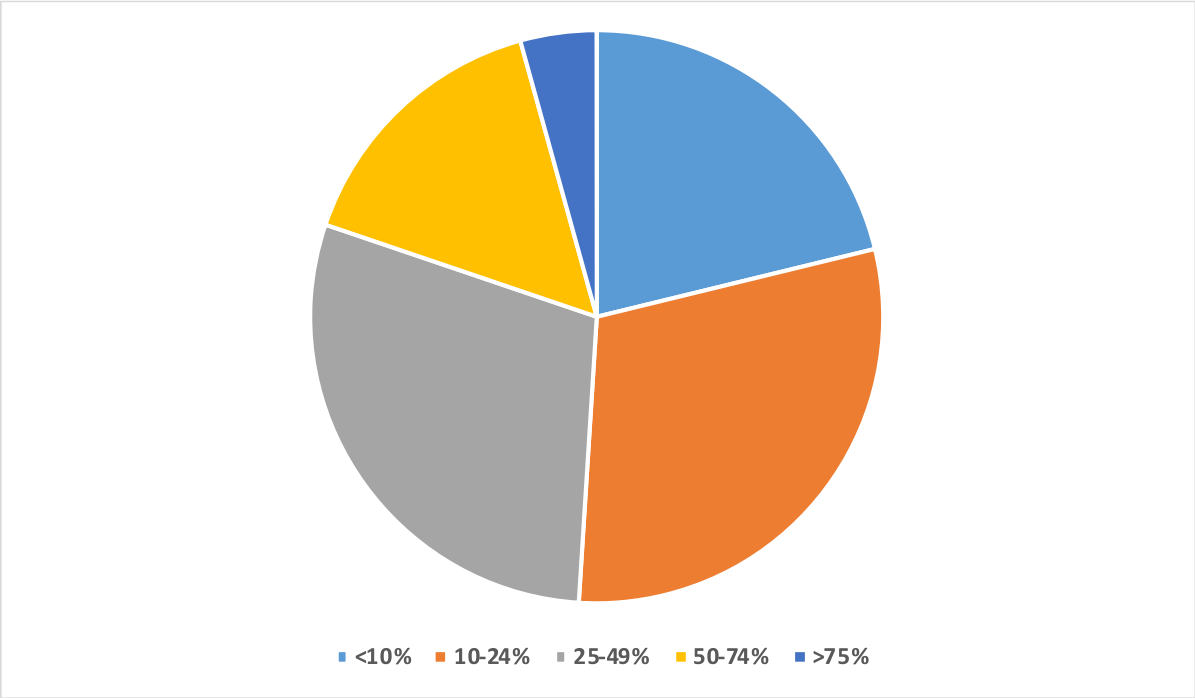
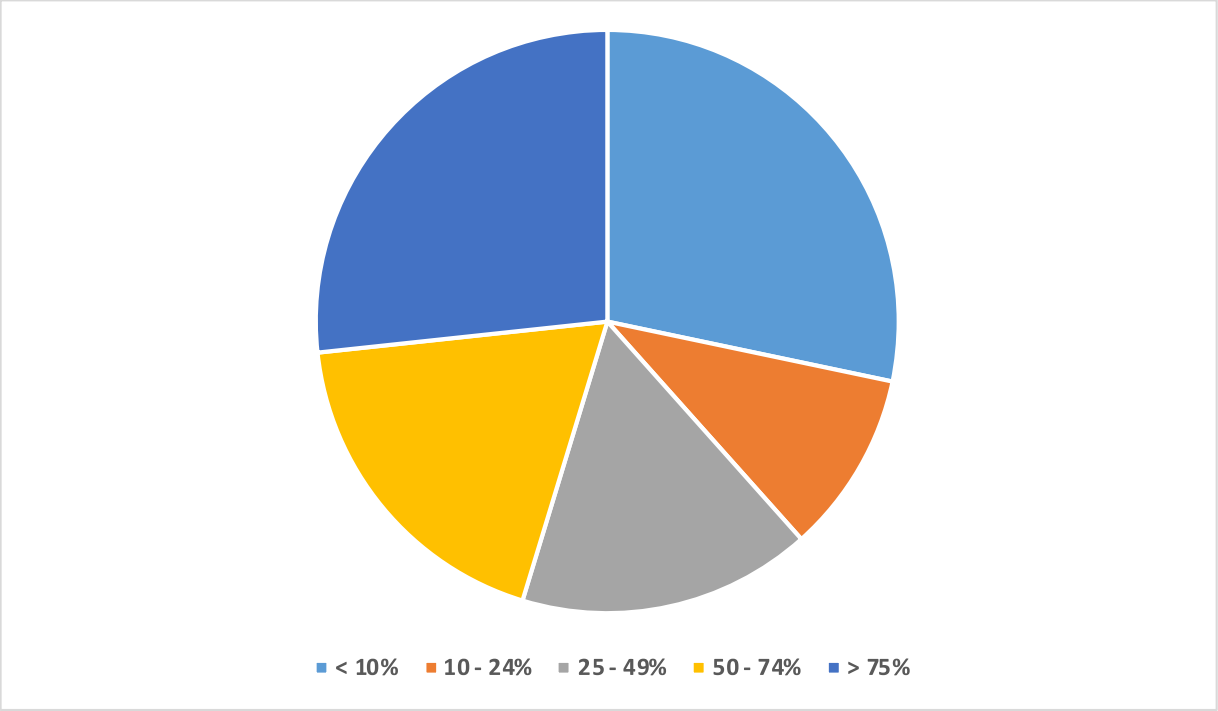


Figure 4, *Respondent Report of the Percentage of Clients Served by Their Organization Who are Eligible for Medicaid*



3.5 SDOH Data Collected

Except for access to technology, all organizations reported SDOH data collection decreasing in early practice changes in the pandemic. Rates of collection did rebound in current practice as of May 2021, but generally remain lower as compared to pre-COVID rates of collection. Figure 5 is an example of this trend as it pertains to the collection of data about food insecurity during COVID.

Figure 5, *Trends in the Collection of Food Security Data During COVID*

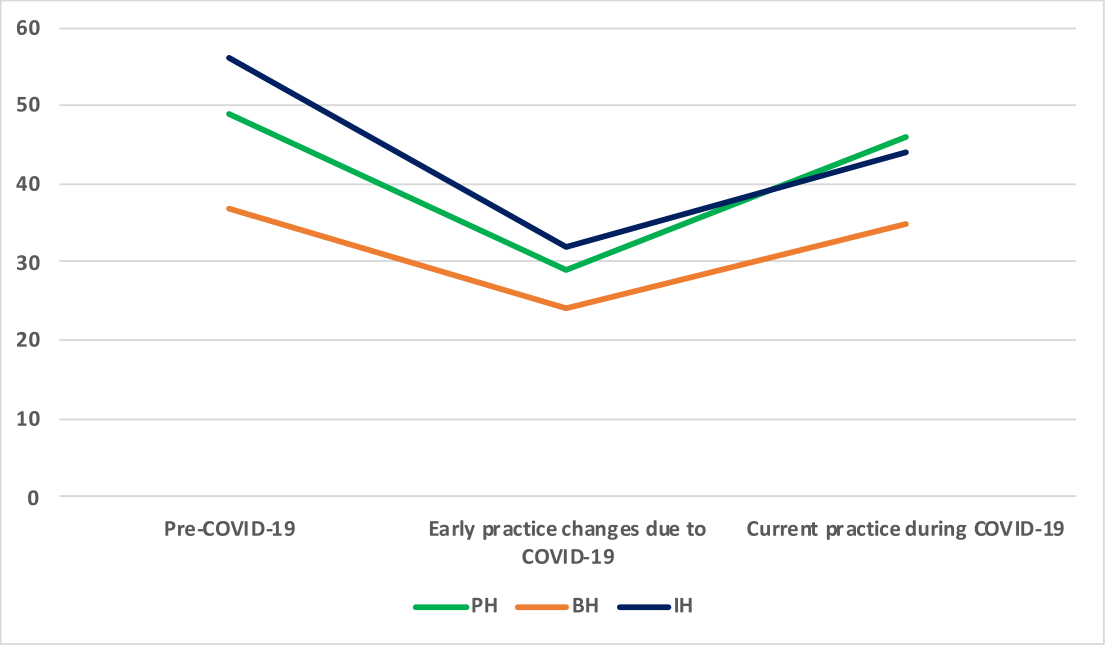


Figure 6 displays the notable increase in the collection of data on broadband/internet access from pre-COVID to current practice.

Figure 6, *Trends in the Collection of Broadband/Internet Access Data During COVID*

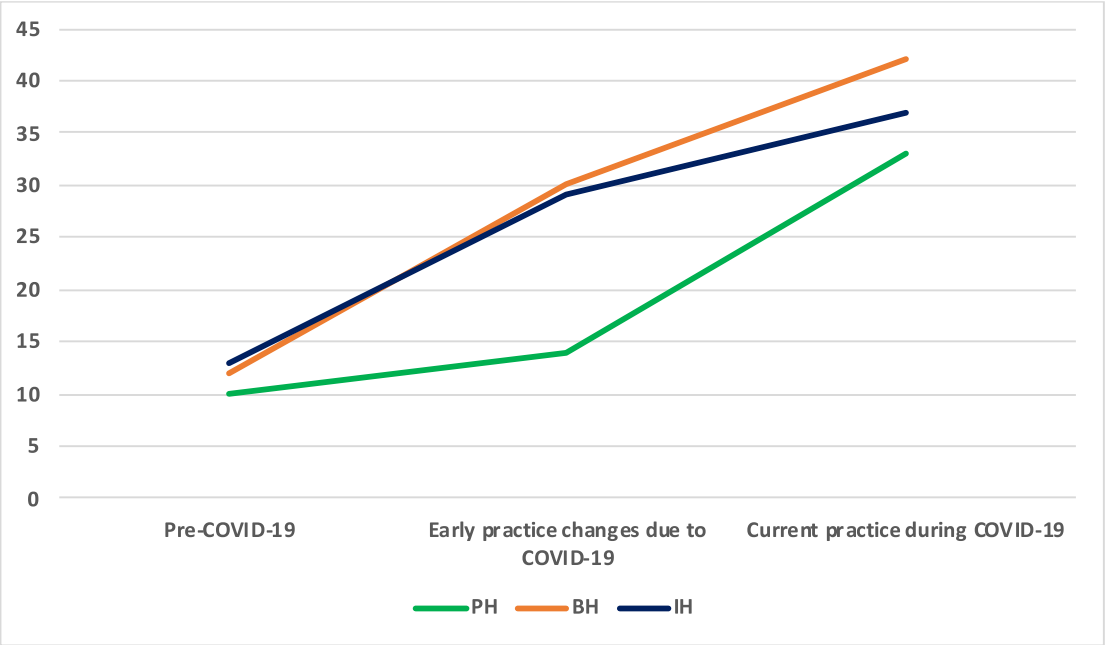


Table 1 shows the types of SDOH data collected by respondents in different service settings pre-COVID, early COVID, and in current practice. Respondents in integrated health service settings collected more SDOH data than other settings across all domains pre-COVID. Physical health settings show a slight increase in current practice for several domains, including housing and social isolation. Integrated health and behavioral health organizations remain below pre-COVID rates of collection in all domains, except technology-related access, with integrated health showing the most notable decrease in the collection from pre-COVID to current practice. In addition to access to technology, childcare became a significant need during COVID. However, the collection of data on childcare insecurity decreased in both behavioral health and integrated health organizations and went up by only 7% in physical health settings. Organizations serving more than 20,000 clients, more than 75% Medicaid-eligible clients, or more than 50% racial or ethnic minority clients all report higher rates of SDOH data collection.

Table 1, *SDOH Data Collected by Type of Organization*

PH = Primary Care and Physical Health Specialty BH = Behavioral Health Care, SUD Only, Mental Health Only, Opioid Treatment IH = Integrated Behavioral Health and Primary Care	**Pre-COVID-19**			**Early practice changes due to COVID-19**			**Current practice during COVID-19**			**Never collected this information**		
	PH	**BH**	**IH**	**PH**	**BH**	**IH**	**PH**	**BH**	**IH**	**PH**	**BH**	**IH**
Food Insecurity	49	37	56	29	24	32	46	35	44	33	47	28
Housing Instability/ Homelessness	63	56	79	32	28	35	65	48	61	18	31	9
Inadequate Housing	46	47	66	25	25	30	47	41	50	33	37	17
Transportation Insecurity	48	45	63	29	27	36	48	41	52	32	40	19
Financial Insecurity	55	50	74	27	28	33	52	47	57	31	32	14
Material Hardship	36	39	46	18	23	21	38	36	34	44	44	38
Unemployment	49	54	65	25	31	32	49	50	47	36	28	24
Education	49	58	66	23	29	28	50	51	49	36	27	22
Veterans Status	55	54	67	22	24	25	55	47	51	26	31	19
Stress	58	66	68	29	37	33	55	59	51	21	17	17
Social Isolation	45	56	51	26	32	30	50	55	47	32	23	27
Neighborhood Safety	23	25	28	10	12	13	22	25	18	67	64	66
Intimate Partner Violence	50	59	59	24	31	24	49	53	43	33	26	29
Childcare Insecurity	26	34	36	16	22	21	33	33	30	54	52	46
Technology Categories												
Lack of technology and devices for telehealth	22	23	29	23	33	35	38	46	43	47	37	35
Broadband/internet bandwidth unavailability	10	12	13	14	30	29	33	42	37	57	46	48
Inability to cover the costs of access for telehealth	8	16	17	11	24	25	28	36	39	67	54	54
Lack of private space to use telehealth	4	13	9	15	38	30	32	53	42	61	35	46

3.6 SDOH Data Collection Methods

Before COVID, most respondents collected SDOH data using questions on intake paperwork. Integrated health providers reported the highest usage of a standardized tool (57%) pre-COVID. Use of all SDOH data collection methods decreased early COVID and rose in current practice, although they remain below pre-COVID rates for all domains except "other". The most common response in the "other" category was collecting SDOH data via informal discussion with clients. Use of intake paperwork decreased from pre-COVID to current practice by 19% for integrated health organizations, 17% for physical health settings, and 17% for behavioral health settings. Overall, larger organizations were more likely to use a standardized intake tool. Between 12–22% of respondents selected more than one method for collecting data.

Table 2, *SDOH Data Collection Methods*

PH = Primary Care and Physical Health Specialty BH = Behavioral Health Care, SUD Only, Mental Health Only, Opioid Treatment IH = Integrated Behavioral Health and Primary Care	**Pre-COVID-19**			**Early practice changes due to COVID-19**			**Current practice during COVID-19**				**Never collected this information**		
	PH	**BH**	**IH**	**PH**	**BH**	**IH**	**PH**	**BH**	**IH**		**PH**	**BH**	**IH**
Standardized tool	41	46	57	22	23	31	37	38	47		40	40	28
Structured interview	42	52	58	25	30	35	42	45	47		39	31	25
Questions on intake paperwork	72	69	77	35	41	41	55	58	58		16	16	11
Other	15	30	18	12	25	18	27	33	32		62	57	59

Pre-COVID, organizations serving more than 75% Medicaid-eligible clients reported higher use of a standardized tool (59%) compared to 33% of organizations serving less than 75%. In current practice, 47% of respondents serving more than 75% Medicaid eligible clients are using a standardized tool, compared to 28% of respondents serving less than 75%.

3.7 Use of SDOH Screening Tools

Most respondents reported using their own internally developed tool for SDOH data collection through all COVID phases. Consistent with other results, use of all types of tools decreased early COVID, except for the Accountable Health Communities Tool, which remained stable during early COVID and increased slightly for physical health and behavioral health providers in current practice.

Table 3, *SDOH Screening Tools Used by Type of Organization*

PH = Primary Care and Physical Health Specialty BH = Behavioral Health Care, SUD Only, Mental Health Only, Opioid Treatment IH = Integrated Behavioral Health and Primary Care	Pre-COVID-19			Early practice changes due to COVID-19			Current practice during COVID-19			Never collected this information		
	PH	BH	IH	PH	BH	IH	PH	BH	IH	PH	BH	IH
Accountable Health Communities (AHC) Tool	5	4	5	5	3	5	9	6	5	88	91	91
Daily Living Activities-20 (DLA-20)	18	13	30	7	5	9	18	9	21	75	81	64
Health Leads Social Needs Screening	6	5	3	2	4	0	9	7	5	87	91	92
PRAPARE	17	6	23	8	3	10	13	6	17	72	87	63
WellRx	8	2	3	2	1	3	6	4	5	91	96	95
Internally developed tool	41	39	48	26	22	36	41	35	44	51	53	44
Other	17	26	21	3	8	0	24	22	32	76	69	68

3.8 Frequency of SDOH Data Collection

Pre-COVID, 45% of respondents reported collecting data routinely based on organizational policy, 42% said they collected routinely based on their own established practice, and 39% collected only occasionally based on their own practice. The frequency of data collection decreased to approximately 25% for all categories during early COVID. It returned to 40% for organizations collecting based on organizational policy, 36% for those routinely collecting using their own practice, and 33% for those collecting occasionally. Organizations annually serving more than 20,000 clients reported collecting data more frequently than organizations serving less than 20,000 clients. Respondents in organizations serving more than 75% Medicaid-eligible clients, or over 50% racial or ethnic minority clients, reported higher rates of routinely collecting data based on organizational policy or their own practice. Both groups also showed a notable decrease in the collection during early COVID and a decrease from pre-COVID to current practice.

3.9 How SDOH Data Were Gathered

There were notable changes in how respondents report gathering SDOH data pre-COVID, early COVID, and in current practice. Most respondents across organizations and COVID phases gathered data through client self-report. The early COVID phase showed a decrease in client self-report and an increase in collecting data telephonically and using video conferencing. In current practice, gathering data through client self-report returned to a similar rate for behavioral health, but it remained lower than pre-COVID rates for integrated health and physical health. For all provider types, the use of

telephone and video conferencing has continued to increase from early COVID to current practice with the rates doubling across organizations compared to pre-COVID, and in some cases, tripling the rate.

Table 4, *How SDOH Data Were Gathered*

PH = Primary Care and Physical Health Specialty BH = Behavioral Health Care, SUD Only, Mental Health Only, Opioid Treatment IH = Integrated Behavioral Health and Primary Care	Pre-COVID-19			Early practice changes due to COVID-19			Current practice during COVID-19			Never collected this information		
	PH	BH	IH	PH	BH	IH	PH	BH	IH	PH	BH	IH
Telephonically	22	22	26	25	36	38	48	56	57	41	29	23
Video teleconference	18	17	21	32	44	44	57	70	65	32	19	19
Through EHR review	49	43	58	19	22	27	51	36	56	32	44	23
Via email exchange with client	9	15	3	4	16	8	13	28	11	82	68	83
Receive from referral source	30	42	30	15	23	19	30	41	32	61	42	54
Client self-report	70	68	78	36	40	45	65	69	69	15	13	9
Link to electronic patient survey	7	3	6	2	2	0	7	4	3	88	92	91
Client-facing portal	28	20	21	18	14	21	26	19	23	58	69	62
Other	5	14	6	0	11	0	14	18	19	86	82	81

3.10 Role Collecting SDOH Data

Most respondents report utilizing either a master's level clinician (67%) or a physician or nurse practitioner (43%) to collect SDOH data. Other roles used to collect data include front desk staff (38%), medical assistants (35%), substance use disorder professionals (28%), peers (17%), and community health workers (13%).

3.11 SDOH Data Storage, Use, and Sharing

Once agencies collected the data, 63% of respondents entered the information directly into an electronic health record (EHR), while 20% report using an electronic user interface or portal. There were 26 different EHRs and portals identified for storing SDOH data, with EPIC and internal systems being the most commonly used. Respondents most frequently shared data with other team members through EHR (69%).

Figure 7 shows how respondents have used SDOH data. The most common uses were: 62% of respondents used the SDOH data gathered to trigger giving a resource list to clients, 50% obtained consent to make a referral, and 47% used the data to trigger additional screening.

Figure 7, *How SDOH Data Are Used*

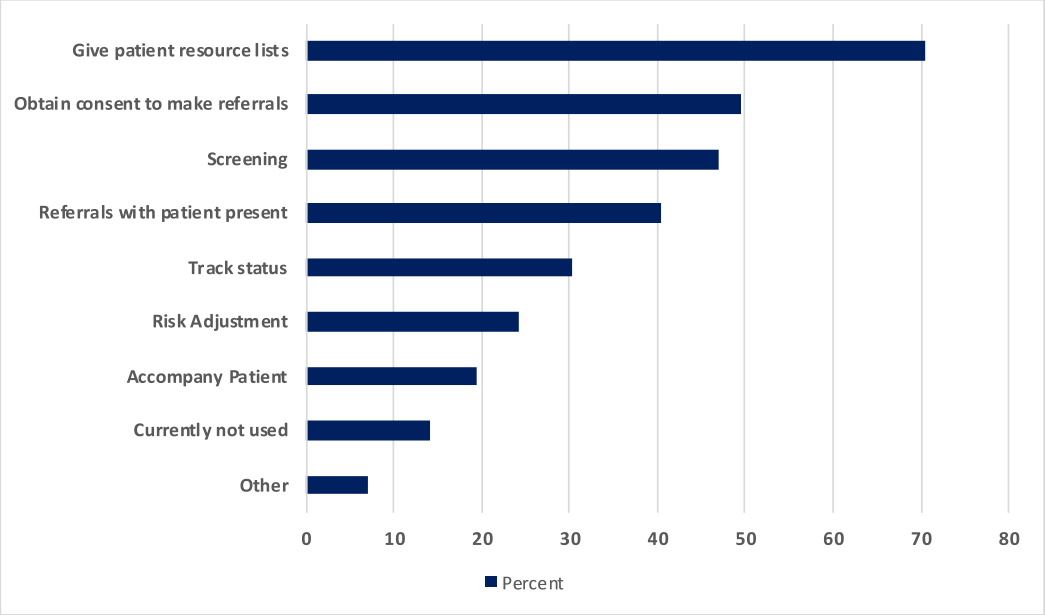
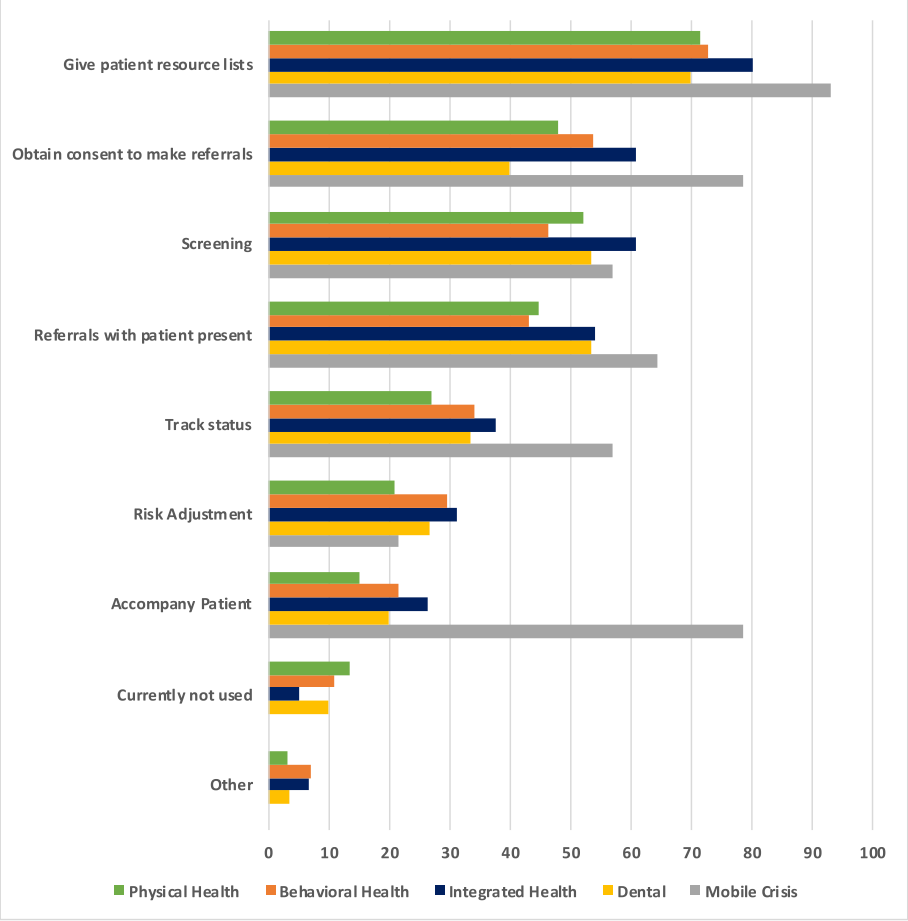


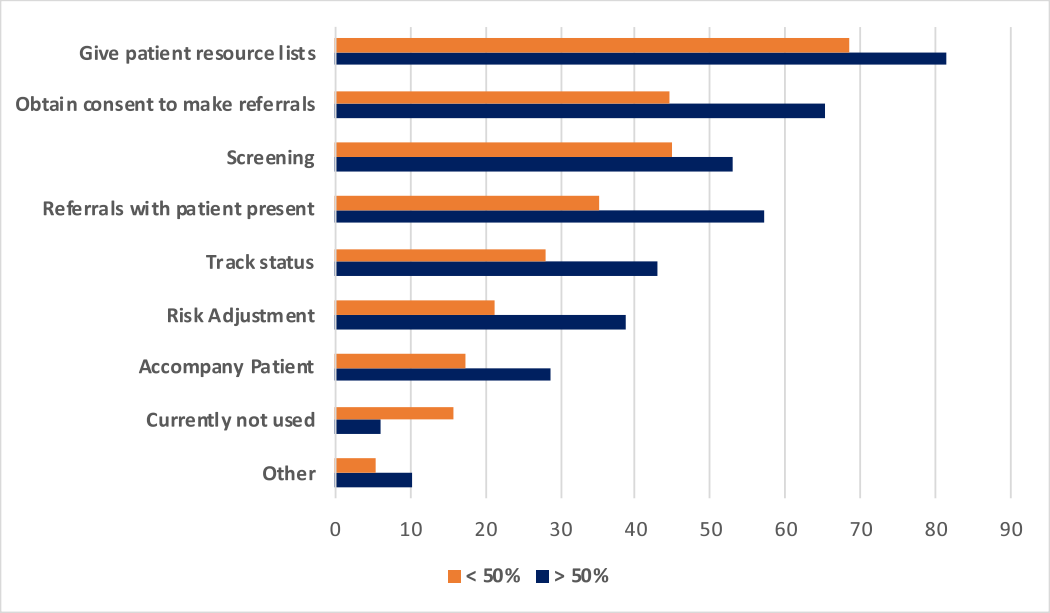
Figure 8 shows the use of the data by organization type. For all uses except risk adjustment, mobile crisis services show notably higher rates of SDOH data use compared to other provider categories.

Figure 8, *SDOH Data Use by Organization Type*



Respondents in organizations that served more than 50% of clients who identified as racial or ethnic minorities reported more use of SDOH data.

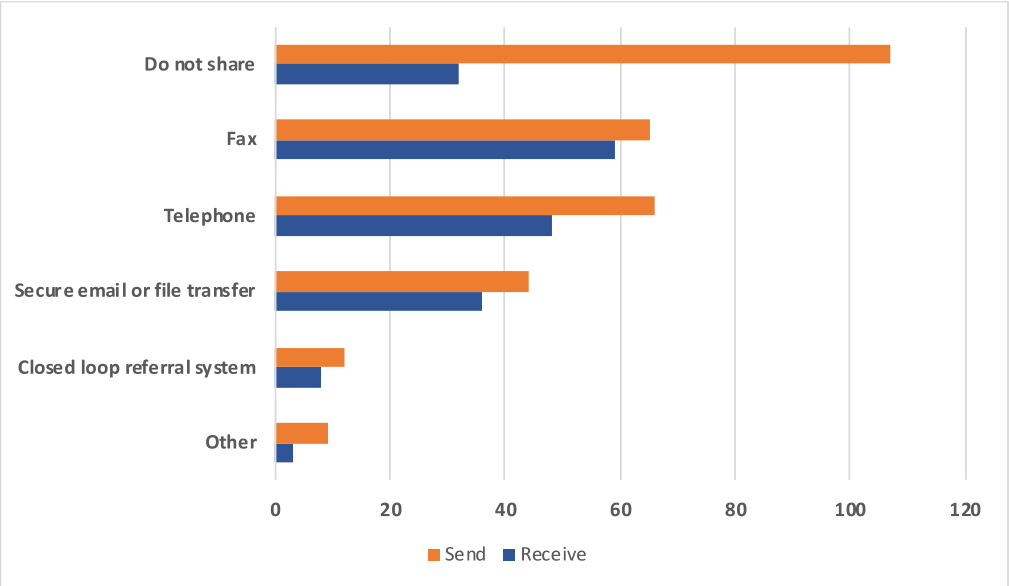
Figure 9, *How SDOH Data are Used by Percent of Organizations Serving Greater than 50% or Less than 50% of Clients Who Identify as Racial or Ethnic Minorities*



3.12 Sharing SDOH Data With Referral Sources

The majority of SDOH data collected from clients is not shared with referral sources; 50% of respondents report that they don't send information, and 32% don't receive information. Less than 1% of respondents report sending or receiving SDOH information through a closed-loop referral system. Most respondents don't have a way to know that a referral is complete. For those that report knowing the outcome of referrals, the method of feedback is typically via call, fax, email, or EHR.

Figure 10, *SDOH Data is Shared with the Referral Source, Including Sending and Receiving*

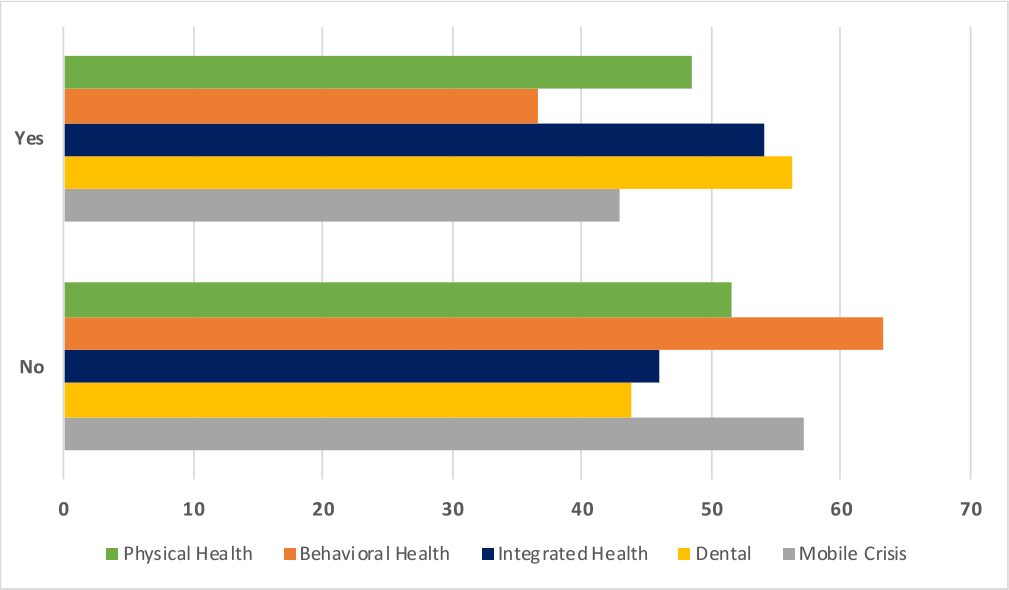


3.13 Use of ICD-10-CM SDOH-Related Z Codes

Z codes Z55-Z65 are the ICD-10-CM encounter reason codes used to capture SDOH data.[2]

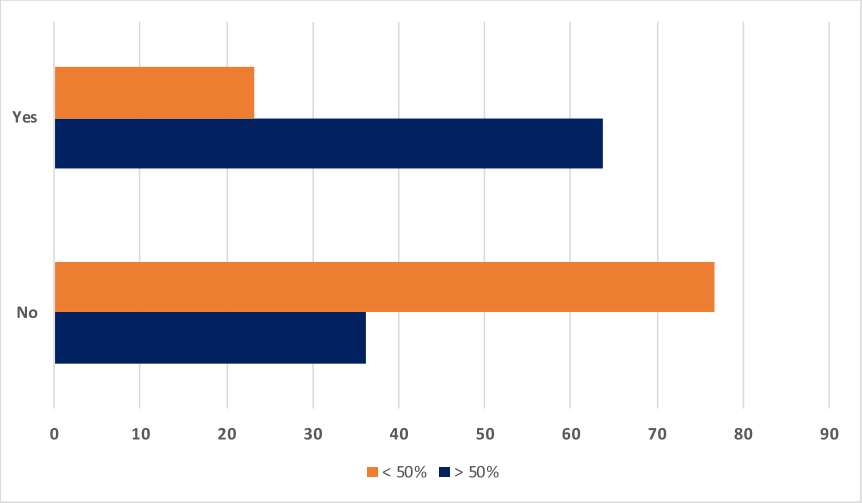
Most survey respondents (68%) don't use Z codes to record SDOH data. The main barriers to using Z codes identified by respondents were lack of familiarity with Z codes (53%) and the use of Z codes not being required by their practice (48%). As shown in Figure 11, dental care settings showed the most use of Z codes (56%), followed by integrated care (54%). In addition, the majority of organizations serving more than 20,000 clients (57%) report using Z codes, contrasted with 24% of organizations serving less than 20,000 clients.

Figure 11, *Use of ICD-10-CM SDOH-Related Z Codes by Organization Type*



As shown in Figure 12, 64% of respondents who worked in organizations serving more than 50% racial or ethnic minorities report using Z codes, compared to 23% of respondents working in organizations serving less than 50% racial or ethnic minorities.

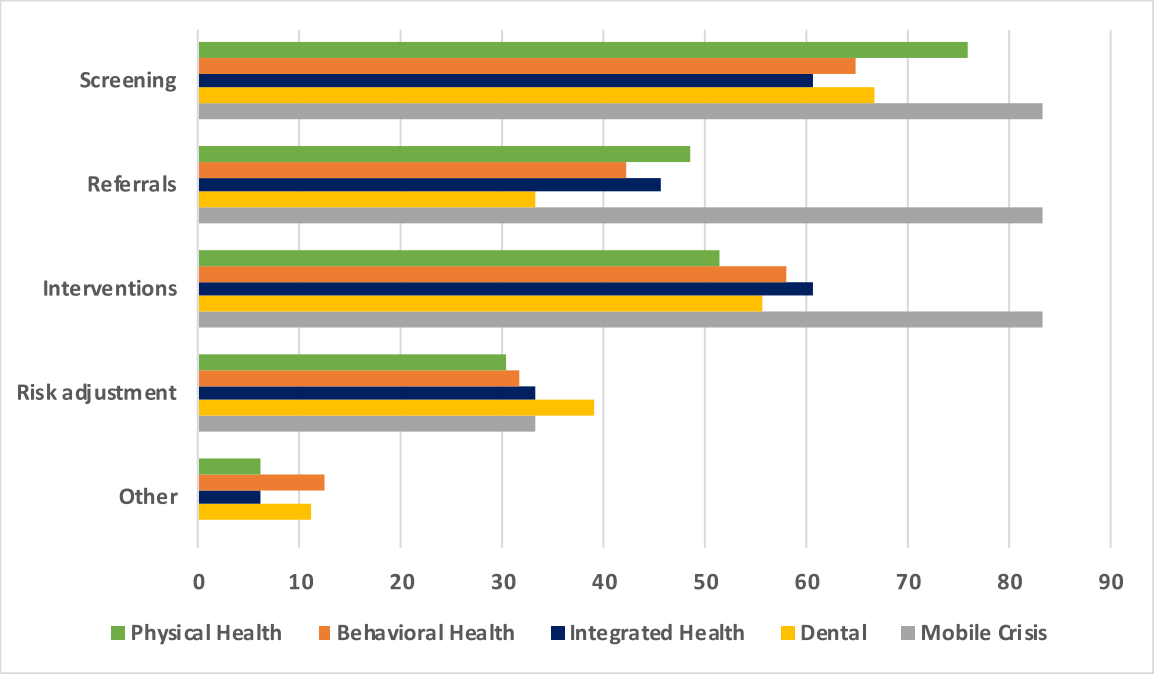
Figure 12, *Use of ICD-10-CM Z Codes by Percentage of Clients Served Who Identify as a Racial or Ethnic Minority*



Of organizations using Z codes, the primary uses are shown in Figure 13 by type of service setting. Mobile crisis services report using Z codes most often for screening, referrals, and interventions.

"Z codes provide a more comprehensive diagnostic picture of complex clients and ensure they receive basic needs as much as possible."

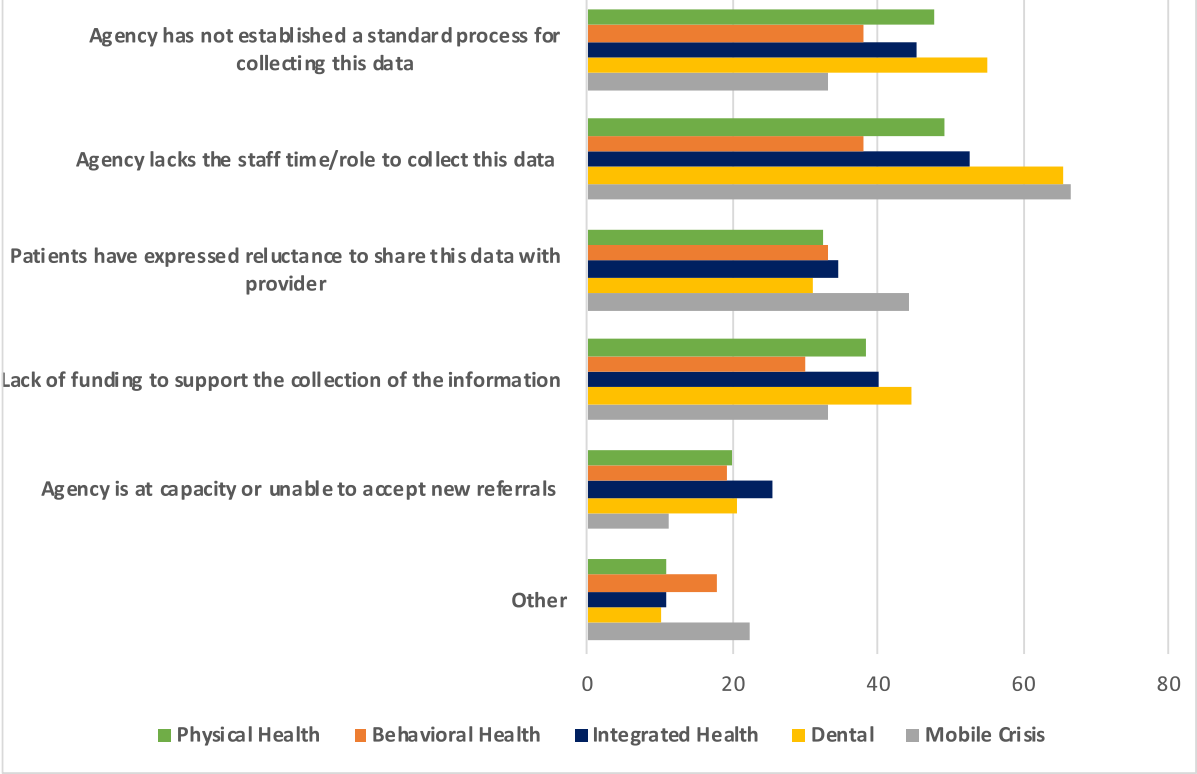
Figure 13 *How ICD-10-CM Z Codes are Used by Organization Type*



3.14 Barriers to SDOH Data Collection

Barriers to SDOH data collection varied by organization type; in general, the most significant barriers reported were the lack of an established process for collecting the data and the lack of staff time or role to collect the data. Behavioral health providers reported the fewest barriers, while dental care providers reported the most.

Figure 14, *Barriers to SDOH Data Collection by Organization Type*



3.15 Barriers to SDOH Collection Using Telehealth

"We serve an extremely low-income population living with high rates of homelessness…Our clients typically don't have access to telehealth services unless we provide pre-paid phones with minutes and data. We have limited resources to provide phones, so the majority of our clients don't have access to this service."

"Some information is sensitive and requires rapport for patient willingness to share. Rapport can be negatively impacted by not being in the room with patients."

Telehealth has created new barriers to the collection of SDOH data. The barrier most frequently reported was the lack of client access to ways to respond to an electronic request for information (49%). Lack of access to technology for telehealth was identified more often as a barrier by respondents in organizations that serve more than 75% Medicaid-eligible clients and more than 50% of clients who identify as a racial or ethnic minority. In addition, respondents identified other barriers to collecting SDOH data using telehealth, including the importance of a face-to-face encounter in building trust, clients not feeling comfortable disclosing SDOH data, lack of time to collect SDOH data, and concerns about the confidentiality of this data.

Figure 15, *Barriers to Collection of SDOH Data Using Telehealth*

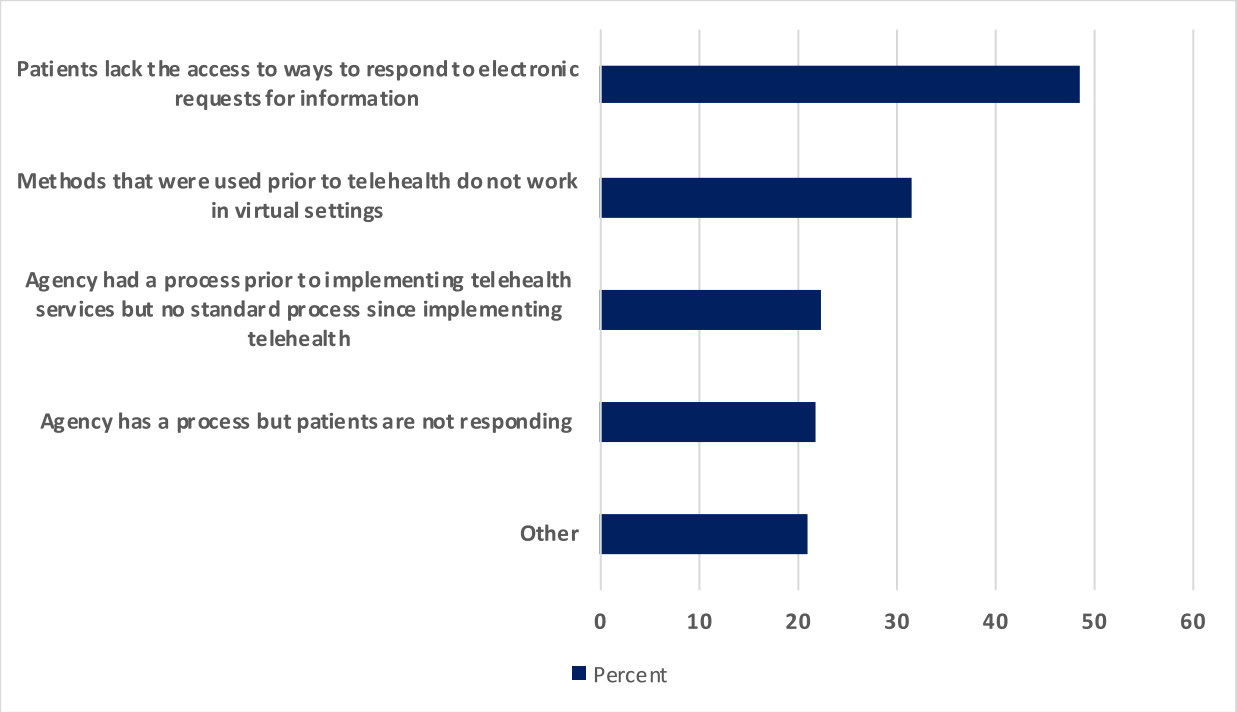


Figure 16, *Barriers to SDOH Data Collection Using Telehealth by Organization Based on Percentage of Clients Who are Medicaid-Eligible*

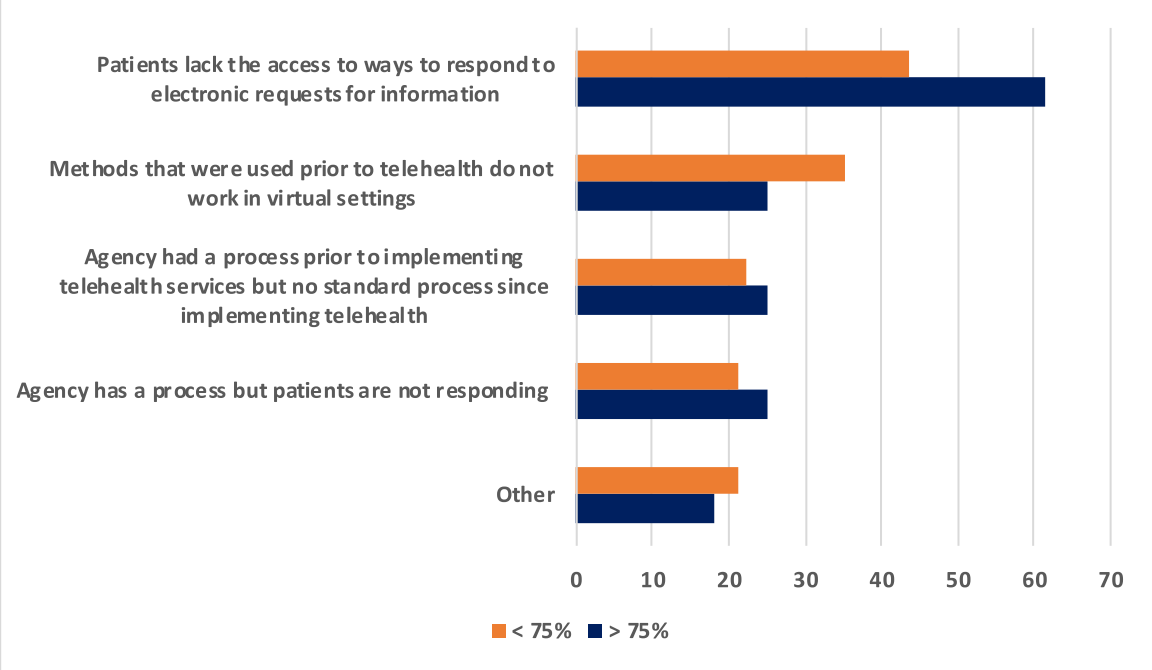
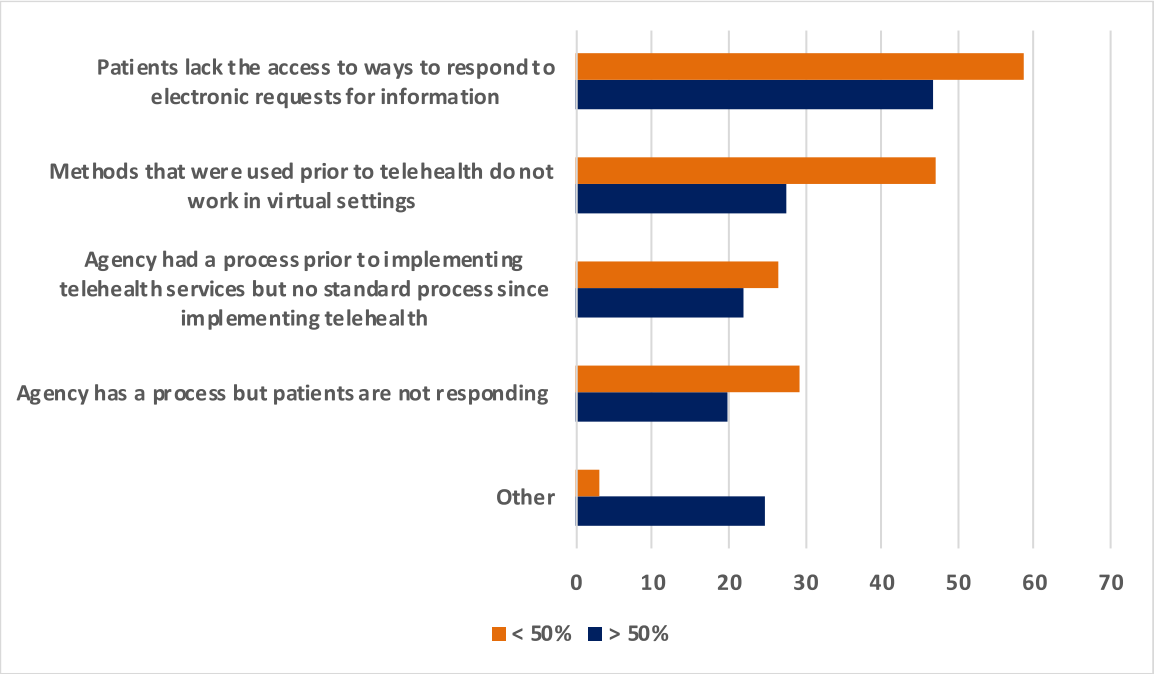


Figure 17, *Barriers to SDOH Data Collection Using Telehealth by Organization Based on Percentage of Clients Who Identify as Racial or Ethnic Minorities*



3.16 Mobile Crisis Services and Dental Services

The majority of dental and mobile crisis services respondents also selected other organization types.

- Respondents from dental service settings also selected other organization types, indicating the dental office is likely co-located with integrated primary care. Most respondents who selected dental services as their setting also chose one of the following services: Behavioral Health and Primary Care (79%), Primary Care (77%), Physical Health Specialty Care (40%), and Integrated and Behavioral Health Care (53%).

- Mobile crisis services are all part of a behavioral health agency. The 24 people who selected mobile crisis services also chose the following organization types: Behavioral Health Care (88%), Opioid Treatment Program (46%), Integrated Behavioral Health and Primary Care (33%), and Primary Care (25%).

Pre-COVID, mobile crisis services had higher rates of collection of SDOH data than any other organization type on all data points. For example, mobile crisis respondents reported collecting data on housing instability/homelessness at 94% compared to the next highest respondent (integrated health) which collected at 79%. Like other organizations, mobile crisis services and dental services show a decrease in assessment of SDOH needs during the early phases of COVID-19, with mobile crisis showing as much as a 75% decrease for some SDOH assessment methods. Both mobile crisis and dental service providers currently report collecting SDOH data at lower rates on all measures, other than questions related to technology needed to access telehealth.

Table 5, *Dental Care and Mobile Crisis SDOH Data Collection Methods*

	Pre-COVID-19		Early practice changes due to COVID-19		Current practice during COVID-19			Never collected this information	
	DC	MC	DC	MC	DC	MC		DC	MC
Standardized tool	39	89	18	33	36	56		36	11
Structured interview	41	86	22	29	34	43		38	21
Questions on intake paperwork	62	94	27	33	43	67		22	6
Other	14	40	14	20	29	80		64	20

Pre-COVID, mobile crisis services used telephonic and video conferencing as methods of collecting SDOH data at higher rates than any other type of organization. In current practice, all other organization types are now comparable to mobile crisis services in their rates of using telephonic and video conferencing as methods of collecting SDOH data.

Table 6, *Dental Care and Mobile Crisis Methods of Collecting SDOH Data*

	Pre-COVID-19		Early practice changes due to COVID-19		Current practice during COVID-19			Never collected this information	
	DC	MC	DC	MC	DC	MC		DC	MC
Telephonically	17	47	14	47	38	60		41	20
Video teleconference	11	33	32	53	43	67		36	13
Through EHR review	58	64	18	9	49	55		27	27
Via email exchange with client	0	0	4	0	8	29		88	71
Receive from referral source	33	67	25	42	38	58		50	17
Client self-report	59	87	31	27	53	53		25	13
Link to electronic patient survey	9	14	0	0	5	14		86	71
Client-facing portal	12	22	15	11	12	33		69	67
Other	0	25	0	25	8	50		92	50

4 Methods: Stakeholder Interview Information

In addition to the survey, semi-structured stakeholder interviews were conducted with the intent of gathering information from staff at state agencies, Accountable Communities of Health (ACHs), Managed Care Organizations (MCOs), and other organizations regarding activities underway to collect and use SDOH data. The SDOH Survey Planning Committee identified interviewees and developed the interview guide. Interviews began on May 20, 2021 and concluded on June 18, 2021. Interviewees represented urban and rural areas or worked statewide and included 22 people representing 15 organizations from around the state. Sectors represented include five ACHs, three MCOs, two health systems, one representative who works with Indian Health Care Providers, and five other organizations. The list of participating organizations is in the Acknowledgements section. After two interviews, a second version of the interview guide was created to increase question relevance to organizations not directly providing health services. On average, the interviews were 45 minutes long. Please refer to Appendix A.4 for the interview questions.

5 Results: Stakeholder Interview Responses

5.1 Role of SDOH Workers and Telehealth During COVID

When questioning interviewees about their use of telehealth, many described how telehealth supported meeting the new and intensified SDOH needs created by COVID. Several organizations spoke about their care coordination staff, particularly community health workers, quickly pivoting during COVID to meet the SDOH needs created by the pandemic. Examples include:

- Using telehealth to assess and address food insecurity and then delivering food boxes or providing fruit and vegetable prescriptions for people experiencing food insecurity while sheltering in place or quarantining due to COVID.
- Doing proactive outreach using telehealth to assess client's risk of social isolation.
- In one rural health system, the care coordination team took on the role of supporting patients who tested positive for COVID. They adapted and condensed their paper-based SDOH assessment and used it telephonically while doing outreach to clients who tested positive for COVID to ensure they had their basic needs met and could safely quarantine. In some cases, the workforce trained in assessing and meeting SDOH needs functioned as a disaster response workforce during the pandemic.

5.2 Methods of Collecting SDOH Data

The majority of interviewees either had a formal approach to collecting SDOH data themselves or their partners or members collected and reported on data. Most organizations with a structured approach to collecting data report transitioning to collecting data using telehealth. One organization reported less interruption to behavioral health providers as the SDOH questions were part of the standardized assessment now being offered through a video platform. Physical health providers were described as having more difficulty collecting SDOH data as their workflow was separate from their office visit and often took place in a waiting room setting pre-COVID.

5.3 SDOH Screening Tools Used and Frequency of Collection

Interviewees mentioned using various tools, including PRAPARE, EPIC-based tools, and tools available through care management platforms. Most organizations that collected SDOH data themselves or had partners who gathered such data generally collected data when a patient initially enrolled and again at unspecified intervals depending on need.

5.4 Role Collecting SDOH Data

One consistent theme amongst most interviewees was the importance of the community health worker's role in assessing SDOH needs and working with complex clients to address the identified needs. In addition, interviewees report clients being more open and willing to share SDOH data with community health workers as individuals hired in the role are often from the same community, have a shared language, and similar lived experience.

"Trust is a barrier, people need to know the information won't be used against them. It's difficult to open up about things we have stigmatized in our society"

"We need to find the right people to ask the questions and get useful information. People won't disclose if trust isn't there."

5.5 SDOH Data Storage, Use, and Sharing

Different approaches are being used to store and share SDOH data once collected. The most common methods are storage in an EHR and various care coordination platforms. EPIC was the most frequently identified EHR used.

The idea of a community information exchange (CIE) was brought up in most interviews when discussing methods for sharing data. The greatest needs related to CIE identified by interviewees were interoperability of any type of exchange platform used and accessibility for community-based organizations that frequently lack the resources and bandwidth to onboard a new platform.

"There needs to be one integrated system across the state rather than separate portals; we need a system that's easy for community-based organizations to access."

"Technology can be a barrier as lots of agencies don't have the bandwidth to add more technology platforms."

5.6 Use of ICD-10-CM SDOH-Related Z Codes

There was a range of familiarity, opinions, and usage of Z codes to record SDOH data. Most interviewees saw value in creating a standardized process for capturing the complexity related to SDOH data. Five interviewees report currently using Z codes, and most were interested in using Z codes to record SDOH data more frequently. Two organizations were not familiar with Z codes, and others reported using different terminologies (such as SNO MED CT) to code SDOH data. Some interviewees had concerns about using Z codes, such as the additional work for already busy providers and the implications of using billing codes to define patients.

5.7 Barriers to Collecting and Using SDOH Data

For interviewees representing organization that are directly addressing SDOH needs, the most frequently identified barrier to collecting and using SDOH data was the lack of sustainable funding. In particular, funding for roles that are most crucial to meeting the complex client needs, such as community health workers. Many programs report continuing to rely on grant or philanthropy funding despite having data demonstrating improved client outcomes through response to SDOH data. In addition, several interviewees spoke about the importance of fully transitioning to a value-based payment model, rather than being partially fee-for-service and partially value-based. This need was also identified in the qualitative survey feedback in text responses to survey questions.

Additional barriers that interviewees mentioned include:

- Lack of capacity and resources to address SDOH needs
- Reluctance, and even distress, related to collecting SDOH data if the information is not actionable.
- Privacy concerns regarding sharing of SDOH data, including HIPAA and confidentiality.

"A lot of places don't know what to do if someone says 'yes' when asked about a need."

5.8 Barriers to Collecting SDOH Data Using Telehealth

"Telehealth can be used to create additional options for people who can't access care in person."

"Clients don't have minutes or data on their phone. Individuals we are serving don't have resources to engage with providers."

Several interviewees discussed how telehealth has increased access for some clients and created new barriers to getting care for others. The most frequently reported barrier to collecting SDOH information over telehealth is clients' lack of access to the technology needed to use telehealth, including phone, computer, data or minutes, and internet access. Additionally, many interviewees talked about the importance of face-to-face interactions in engaging their most vulnerable and complex patients.

Interviewees also identified ways telehealth has enhanced access for some clients. For example, telehealth has created additional ways of delivering care for individuals who cannot leave their job during typical appointment times, who lack access to transportation, or who are caregivers to children or other family members.

6 Discussion, Opportunities, and Potential Next Steps

The COVID-19 pandemic has changed the world and healthcare, including how we provide care to the most vulnerable members of our society. The transition to caring for clients through telehealth has created both new opportunities and barriers in collecting the SDOH information needed to help meet identified needs. The impact of COVID resulted in reduced access to basic needs support, such as access to adequate food, housing, and childcare. While the assessment of SDOH needs decreased from levels prior to the start of the pandemic, demands for essential supports has increased during the pandemic.

The responses to COVID have enabled access to some services for some while also creating new areas of inequity. Advances in telehealth have enabled many to stay connected to needed health care and behavioral health supports, while also often making technology and the internet connectivity prerequisites for active participation in health care, education, and other aspects of day-to-day life.

Opportunities that emerged from the valuable information provided through the survey and interviews are as follows:

6.1 Classifying Access to Technology and Broadband as a SDOH

Although many clients will return to seeking in-person services, telehealth will likely remain a part of healthcare after COVID. Survey and interview results indicate that clients who are already disproportionately impacted by health disparities are also the most impacted by lack of access to technology. If broadband and other needed technology tools are available, telehealth has the potential to increase access to care for clients who may otherwise be unable to engage due to their work situation, caregiving responsibilities, or financial limitations. There is currently statewide recognition of the importance of broadband access, as demonstrated by House Bill 1136 (House Bill 1136, 2021) and Senate Bill 5383 (Senate Bill 5383, 2021) two bills signed into law on May 23, 2021. Both bills are intended to increase broadband coverage in remote areas. Additionally, a recently enacted provision in Senate Bill 5092, allocates $1,800,000 of the general fund-federal appropriation for HCA to contract on a one-time basis with UW Behavioral Health Institute to continue and enhance its efforts related to training and workforce development, including providing continued access to telehealth training and support (Senate Bill 5092, 2021).

6.2 Identify Financial Mechanisms to Sustain Collection and Use of SDOH Data

A consistent theme of interviewees and survey respondents was the need for sustainable funding supporting the collection and use of SDOH data. Opportunities for sustaining and scaling SDOH work include:

1. Incentivizing providers and staff to collect SDOH data through existing fee-for-service reimbursement structures and alternative payment models.

2. Fully transitioning to value-based care: Interviewees spoke of the challenge and unsustainability of being pulled between fee-for-service and value-based care. Value-based structures could be designed to incentivize assessing and addressing SDOH factors.

3. Supporting collection of standardized SDOH data using ICD-10-CM Z codes (or other standards for collecting and re-using SDOH data). There is a need for standardized and interoperable (coded) SDOH data to enable exchange and re-use of SDOH data for referrals and for provider and payer analytics. Using Z codes can also facilitate risk adjustment and reimbursement for clinical complexity caused by SDOH vulnerabilities. Organizations leading efforts to standardize and make interoperable the collection and exchange of SDOH data, such as the Gravity Project (https://thegravityproject.net/), have identified ICD-10-CM Z codes as one of the key terminologies and code sets for many SDOH data elements. The Z codes Z55- Z65 capture social issues such as education, employment, and housing. CMS has provided guidance on the use of Z codes for Medicare billing, and in July 2021 the HCA will publish billing guidance encouraging health care providers and coding professionals to use ICD-10-CM SDOH Z codes. Federal and State guidance includes:

- SDOH Z codes can be used in any healthcare setting.
- SDOH Z codes must be accompanied by a corresponding procedure code to describe any procedure performed.
- SDOH Z codes cannot be the primary diagnosis.

6.3 Invest in Sustaining Collection of SDOH Through Workforce Support and Innovation

Much of the physical and behavioral health workforce was already at-capacity—if not overextended—prior to COVID. The trauma of the pandemic and the increasing mental health needs have compounded these shortages. Therefore, expectations of practice modifications need to include support and change management for care providers. Opportunities for supporting the workforce in sustaining SDOH collection and use could consist of:

1. Streamlining SDOH collection workflows, particularly in incorporating ICD-10-CM Z codes: In interviews and surveys, respondents identified lack of time as a barrier to collecting SDOH data in interviews and the survey. Therefore, ensuring the collection is integrated into EHRs in an optimal workflow will support buy-in.

2. Replicating innovative approaches to collecting and using SDOH data: Any member of a care team can SDOH collect data, yet 67% of respondents report their organizations using a masters-level clinician such as a social worker, and 47% report using a licensed prescriber such as an MD or ARNP to collect data. Thus, there is an opportunity to leverage the community health care worker (CHW) role. For the purposes of this report, we're using the term community health work to also represent peers, cultural navigators, and other similar roles. The CHW role is particularly important for Indian Health Care Providers as CHWs may be the only resource available to collect SDOH data. As discussed in the qualitative data, many organizations,

particularly in coordination with Accountable Communities of Health, report improved client outcomes and increased satisfaction from clients who work with community health workers. In addition to the benefits mentioned of the value of having a CHW with shared lived experience, other benefits reported include provider satisfaction with being able to access help for their clients and shifting the time investment from clinicians to community health workers.

3. Provide workforce education on SDOH: Many respondents shared concerns about making clients uncomfortable by asking about SDOH. Education and scripting can build confidence in addressing SDOH information. Additionally, there is an opportunity to provide workforce education on the value of collecting SDOH data not only to meet the immediate need of clients, but also to understand the extent of unmet needs and have data available for payer and provider analytics. Education will need to address the concerns providers and staff have about asking for SDOH data that are not actionable.

6.4 Coordination and Information Exchange

Nearly all interview respondents spoke about the importance of coordinating and communicating with other health care providers and community-based organizations to address SDOH needs. Yet very few report using bi-directional communication. Opportunities for promoting communication and information exchange include:

1. Leveraging collection and sharing of SDOH data in electronic health records: EPIC was the most frequently mentioned EHR used to collect SDOH data. EHR companies can make interoperable SDOH assessment tools available in their records and include functionality to send and close electronic referrals based on SDOH assessments.

2. Supporting the interoperability and accessibility of community information exchange (CIE): There were varying opinions about the best way to share SDOH information and facilitate referrals and communication. There was a clear theme of ensuring CIE are interoperable and the importance of avoiding having multiple disparate systems across the state. Additionally, CIE systems must be affordable and technically accessible to community-based organizations; respondents expressed concern about the cost of some platforms and the infrastructure needed to onboard the platform.

3. Using ICD-10-CM Z codes to promote coordination: A standardized approach to capturing SDOH data, including when it is collected, how it is collected, and the frequency of collection, can facilitate sharing, coordination, and use amongst health care providers. It also enables analysis of population health metrics to understand the progress made on addressing SDOH.

6.5 Potential Next Steps

The intent of this report is to provide information that providers, payers, and state agencies can use as they navigate the changing healthcare world. Potential next steps following this project include:

- Identifying mechanisms for promoting access to technology and broadband for vulnerable populations.
- Sharing this report with the Governor's Office, specifically the Office of Broadband, the Department of Commerce, other state agencies, and beyond.
- Consider a follow-project to:
    - Conduct a similar survey targeting community-based organizations.
    - Conduct a study to assess the level of SDOH needs among the Medicaid population.
- The Behavioral Health Institute will convene provider associations, state agencies, and others in the fall of 2021 to discuss the report and develop a plan for action.

Acknowledgements

This report would not have been possible without the survey respondents, stakeholder interviewees, and the SDOH Survey Planning Committee members who generously gave their time and knowledge for this effort. We are grateful for your contribution and commitment to health equity.

Organizations represented in stakeholder interviews:

- Better Health Together Accountable Community of Health
- Cascade Pacific Action Alliance Accountable Community of Health
- Community Health Plan of Washington
- Coordinated Care of Washington
- Department of Social & Health Services, Research Division
- Greater Columbia Accountable Community of Health
- Healthcare Authority, Division of Behavioral Health & Recovery
- Healthcare Authority, Office of Tribal Affairs
- HealthierHere Accountable Community of Health
- Kaiser Permanente Washington
- King County Housing Authority
- Optum
- Providence St. Mary Medical Center
- Southwest Washington Accountable Community of Health
- The Foundation for Healthcare Quality & Bree Collaborative
- United Health Care Quality

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Appendix

A.1 Definition of SDOH for the purposes of the survey

- Food Insecurity
- Housing Instability/Homelessness
- Inadequate Housing
- Transportation Insecurity
- Financial Insecurity
- Material Hardship (e.g., unable to get childcare, utilities, etc., because they do not exist)
- Unemployment
- Education Status
- Veteran Status
- Stress
- Social Isolation
- Neighborhood Safety
- Intimate Partner Violence
- Childcare Insecurity
- Lack of technology and devices for telehealth (phones, webcam, computer, internet connection, etc.)
- Broadband/internet bandwidth unavailability
- Inability to cover the costs of access (internet service fees, phone minutes, etc.) for telehealth
- Lack of private space to use telehealth

A.2 Number of survey respondents by county

County	Total N	County	Total N
Statewide	69	Klickitat	6
Adams	5	Lewis	27
Asotin	4	Lincoln	5
Benton	22	Mason	20
Chelan	16	Okanogan	9
Clallam	10	Pacific	11
Clark	25	Pend Oreille	6
Columbia	3	Pierce	74
Cowlitz	24	San Juan	7
Douglas	9	Skagit	18
Ferry	2	Skamania	5
Franklin	17	Snohomish	58
Garfield	2	Spokane	51
Grant	12	Stevens	8
Grays Harbor	19	Thurston	45
Island	13	Wahkiakum	9
Jefferson	11	Walla Walla	13
King	147	Whatcom	16
Kitsap	34	Whitman	8
Kittitas	9	Yakima	20

A.3 Survey tool

Social Determinants of Health Provider Survey

The Behavioral Health Institute and Health Care Authority (HCA) have teamed up to create this survey for behavioral and physical health providers to help us understand the ways (e.g. strategies, frequencies) in which providers are collecting and using Social Determinants of Health (SDOH) data from clients. We are most interested in how the collection of this data may have changed as a result of the pandemic and the increase in telehealth-delivered services. Our intent in gathering this data is to identify barriers that providers face that may make it difficult to collect this information and to identify and share emerging provider practices in SDOH data collection and use across the state. We appreciate you taking a few minutes to take this anonymous survey. Thank you.

Section I. Learning about the service you provide and the populations you serve:

Regions served: Please select all that apply.

- Rural
- Urban
- Tribal Land
- Other

Please specify the other region(s): _____

Counties served: Please select all that apply.

Age ranges of those you serve: Please select all that apply.

- 0-5
- 6-18
- 19-26
- 27- 40
- 41- 64
- 65 and older

Specialty areas offered: Please select all that apply.

- Geriatric services
- LGBTQ+ specialty care
- Pediatric Care
- Youth Services
- First Episode Psychosis
- Culturally specific care - (e.g., services offered by providers who speak in a language other than English)
- Other

Please specify other specialty population(s) you serve: _____

What type of services do you offer? Please select all that apply.

Primary Care
Physical Health Specialty Care (e.g. OBGYN, cardiology, etc.)
Integrated Behavioral Health and Primary Care
Behavioral Health Care (both SUD and MH care in same agency)
Substance Use Disorder Services Only
Mental Health Services Only
Opioid Treatment Program
Mobile Crisis Services
Dental Care
Other

What types of physical health specialty care do you offer? _____

What other types of services do you offer? _____

Practice setting: Please select all that apply.

Inpatient
Emergency Department
Residential
Outpatient
FQHC
Mobile Outreach
Home Based
School Based
Community Based
Other

What is your other practice setting? _____

Approximately how many patients are served by your organization in a typical year?

Less than 5,000
5,000 - 20,000
20,000 - 50,000
More than 50,000

Approximately how many employees do you have in your organization?

Less than 10
10 - 49
50 - 100
More than 100

Approximately what percentage of the patients in your organization are covered by Medicaid?

Less than 10%
10 - 24%
25 - 49%
50 - 74%
Over 75%

Approximately what percentage of the patients served by your organization identify as a racial or ethnic minority?

Less than 10%
10 - 24%
25 - 49%
50 - 74%
Over 75%

Section II. Learning about your collection of SDOH information:

Have you collected or are you collecting data regarding SDOH from your patients?

Please select all that apply.

	pre COVID-19	early stages of practice changes due to COVID-19	current practice during COVID-19	we are not now and have never collected this information
Food Insecurity	☐	☐	☐	☐
Housing Instability/Homelessness	☐	☐	☐	☐
Inadequate Housing	☐	☐	☐	☐
Transportation Insecurity	☐	☐	☐	☐
Financial Insecurity	☐	☐	☐	☐
Material Hardship (e.g. unable to get childcare, utilities, etc., because they do not exist)	☐	☐	☐	☐
Unemployment	☐	☐	☐	☐
Education	☐	☐	☐	☐
Veterans Status	☐	☐	☐	☐
Stress	☐	☐	☐	☐
Social Isolation	☐	☐	☐	☐
Neighborhood Safety	☐	☐	☐	☐
Intimate Partner Violence	☐	☐	☐	☐
Childcare Insecurity	☐	☐	☐	☐
Lack of technology and devices (phones, webcam, computer, modem/internet connection, etc.)	☐	☐	☐	☐
Broadband/Internet Bandwidth unavailability	☐	☐	☐	☐
Inability to cover the costs of access (internet service fees, phone minutes, etc.)	☐	☐	☐	☐
Lack of private space to use telehealth	☐	☐	☐	☐

How do you describe your process of collecting Social Determinants of Health information?

Please select all that apply.

	pre COVID-19	early stages of practice changes due to COVID-19	current practice during COVID-19	we are not now and have never collected this information
I collect SDOH information routinely based on organizational policy	☐	☐	☐	☐
I collect SDOH information routinely based on my own established routine	☐	☐	☐	☐
I collect SDOH information only occasionally based on my own established routine	☐	☐	☐	☐

What tools or methods did you use to collect this data?

Please select all that apply.

	pre COVID-19	early stages of practice changes due to COVID-19	current practice during COVID-19	we are not now and have never collected this information
Standardized tool	☐	☐	☐	☐
Structured interview	☐	☐	☐	☐
Questions on intake paperwork	☐	☐	☐	☐
Other	☐	☐	☐	☐

What other tools/methods were you using before COVID-19?

_____

What other tools/methods were you using during the early stages of COVID-19?

_____

What other tools/methods are you using as current practice during COVID-19?

_____

Does your organization currently use any of the following social need/social determinant screening tools?

Please select all that apply.

	pre COVID-19	early stages of practice changes due to COVID-19	current practice during COVID-19	we are not now and have never collected this information
Accountable Health Communities (AHC) tool (also known as the Health-Related Social Needs (HRSN) tool)	☐	☐	☐	☐
Daily Living Activities-20 (DLA-20)	☐	☐	☐	☐
Health Leads Social Needs Screening	☐	☐	☐	☐
PRAPARE	☐	☐	☐	☐
WellRx	☐	☐	☐	☐
Internally Developed Tool	☐	☐	☐	☐
Other	☐	☐	☐	☐

What other tools were you using before COVID-19?

_____

What other tools were you using during the early stages of COVID-19?

_____

What other tools are you using as current practice during COVID-19?

_____

How did you gather this data?

Please select all that apply.

	pre COVID-19	early stages of practice changes due to COVID-19	current practice during COVID-19	we are not now and have never collected this information
Telephonically	☐	☐	☐	☐
Video teleconference (e.g., Zoom or other video chat platform)	☐	☐	☐	☐
Through EHR review	☐	☐	☐	☐
Via email exchange with client	☐	☐	☐	☐
Receive from referral source	☐	☐	☐	☐
Client self-report (interview)	☐	☐	☐	☐
Link to electronic patient survey (e.g., REDCap survey)	☐	☐	☐	☐
Client facing portal (MyChart, eChart)	☐	☐	☐	☐
Other	☐	☐	☐	☐

In what other ways did you gather this data before COVID-19?

_____

In what other ways did you gather this data during the early stages of COVID-19?

_____

In what other ways do you gather this data as current practice during COVID-19?

_____

What discipline/role in your agency is authorized to collect SDOH data?

Please select all that apply.

☐ Front Desk staff
☐ Medical Assistant
☐ Master's level practitioner (Counselor, Social Worker, etc.)
☐ SUDP(T)
☐ MD/ARNP
☐ Peer Role
☐ Community Health Worker
☐ Other

What other discipline/role(s) are authorized to collect SDOH data?

_____

What disciplines/roles in your agency routinely review SDOH data for patients on a caseload?

Please select all that apply.

- ☐ Front Desk staff
- ☐ Medical Assistant
- ☐ Master's level practitioner (Counselor, Social Worker, etc.)
- ☐ SUDP(T)
- ☐ MD/ARNP
- ☐ Peer Role
- ☐ Community Health Worker
- ☐ Other

What other disciplines/roles in your agency routinely review SDOH data for patients on a caseload?

Section III. Understanding how you store, share and use SDOH Data:

How do you document/store the data that is collected?

Please select all that apply.

- ☐ Scan forms into record
- ☐ Place forms into paper chart
- ☐ Enter directly into EHR (ICD-10 SDOH-related Z codes or free text)
- ☐ Via Electronic User interface/portal
- ☐ Other

Which interface/portal are you using?

In what other way do you document/store this data?

How is SDOH data shared with other team members involved in patient care?

Please select all that apply.

- ☐ Viewable in EHR
- ☐ Viewable in paper chart
- ☐ Not shared with other team members at this time
- ☐ Verbally share information with other team members
- ☐ Dashboard incorporated into EHR
- ☐ Other

In what other way is the data shared with other team members?

How do you use the SDOH data you collect?

Please select all that apply.

- ☐ It is currently not used
- ☐ Screening
- ☐ Give patient resource lists with contact information for applicable resources
- ☐ Obtain consent and make referrals directly to appropriate resource agency
- ☐ Track status of the SDOH (e.g., housing status, employment status, etc.)
- ☐ Call resource referrals with patient present
- ☐ Accompany patient to resource (e.g., food bank)
- ☐ Risk adjustment
- ☐ Other

In what other way is the data used?

How do you share SDOH data with referral sources, including receiving and sending referrals?

Please select all that apply.

- ☐ Do not currently share this data with referral sources
- ☐ Do not currently receive referrals with this data from referral sources
- ☐ Share by faxing data
- ☐ Receive information by fax
- ☐ Share by telephone to referral agency
- ☐ Receive referrals by phone
- ☐ Send through secure email or SFTP (Secure File Transfer Protocol)
- ☐ Receive through secure email or SFTP
- ☐ Send referrals through a closed loop referral database/system (e.g., HealthBridge, UniteUs, other)
- ☐ Receive referrals through a closed loop referral database/system (e.g., HealthBridge, UniteUs, other)
- ☐ Use other method to send referrals
- ☐ Use other method to receive referrals

What closed loop database do you use to send this data?

_____

What closed loop database do you use to receive this data?

_____

What other method do you use to send this data?

_____

What other method do you use to receive this data?

_____

Do you use ICD-10 SDOH-related Z codes to code Social Determinants of Health data?

- ◯ Yes
- ◯ No

How do you use the ICD-10 SDOH-related Z codes to code SDOH data?

Please select all that apply.

- ☐ Screening
- ☐ Referrals
- ☐ Interventions
- ☐ Risk adjustment
- ☐ Other

In what other way do you use ICD-10 SDOH-related Z codes?

Why don't you use ICD-10 SDOH-related Z codes to code SDOH?

Please select all that apply.

- ☐ I am not familiar with ICD-10 SDOH-related Z codes
- ☐ I don't find the ICD-10 SDOH-related Z codes useful
- ☐ My practice doesn't require it
- ☐ I would like additional training to use the ICD-10 SDOH-related Z codes
- ☐ Guidance from federal, state, and local payers is needed on how to use ICD-10 SDOH-related Z codes
- ☐ Other

Ware are the other reason(s) you don't use the ICD-10 SDOH-related Z codes?

Do you currently have a way to know whether the referrals you make to other agencies are completed?

- ◯ Yes
- ◯ No
- ◯ Yes for some referral sources but not all

How are you notified?

Please select all that apply.

- ☐ Call
- ☐ Fax
- ☐ Email
- ☐ EHR
- ☐ Electronic closed loop system (e.g., HealthBridge, UniteUs, etc.)
- ☐ Other

How are you notified?

What are the barriers/challenges that you experience in collecting this SDOH data from patients:?

Please select all that apply.

- ☐ Agency is at capacity or unable to accept new referrals
- ☐ Agency has not established a standard process for collecting this data
- ☐ Agency lacks the staff time/role to collect this data
- ☐ Lack of funding to support the collection of the information
- ☐ Patients have expressed reluctance to share this data with provider
- ☐ Other

What other barriers do you experience?

What are the barriers/challenges that you experience in collecting this SDOH data from clients in a telehealth world?

Please select all that apply.

- ☐ Agency had a process for collecting this data prior to implementing telehealth services but has not developed a standard process for collecting this data since implementing telehealth
- ☐ Methods that were used prior to telehealth do not work in virtual settings (e.g., paper intake forms filled out at first visit)
- ☐ Agency has a process but patients are not responding (e.g., emailed forms are not returned to agency)
- ☐ Patients lack the access to ways to respond to electronic requests for information
- ☐ Other

What other barriers to do you experience in a telehealth world?

What barriers/challenges do you hear about from your patients regarding sharing SDOH information in a telehealth world?

A.4 Stakeholder Interview Questions

Behavioral Health Institute & Health Care Authority
Use of Telehealth to Capture and Use Social Determinants of Health Data
Stakeholder interview questions

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1) How do you collect SDOH data?
    a. Is it routinized?
    b. What interval is this collected (monthly, quarterly, yearly, ad hoc?)
2) (For MCOs) Do you require collection of and reporting of this data?
3) Do you incentivize collection of this data by providers?
4) Do you (or providers in your network) use a standardized tool for SDOH?
    a. If yes, what tool do you (or providers in network) use?
5) If there is a positive screen, what is the follow up action; timeline?
6) What roles collect this data (MA, RN, MD, ARNP), etc.?
7) Are you (or providers in your network) using Z codes for SDOH status?
    a. How often is this updated?
8) What barriers do you (or providers in your network) encounter regarding the collection of SDOH data?
9) What barriers do you (or providers in your network) anticipate regarding the sustainability of collecting SDOH data on regular intervals?
10) What supports would be helpful to increase or sustain collection of SDOH?
11) Would you please share with us the factors that influenced your decision regarding collection and use of SDOH data?

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