NATIONAL CENTER FOR HEALTH IN PUBLIC HOUSING

GUIDE TO SDOH SCREENING TOOLS FOR PUBLIC HOUSING RESIDENTS

NCHPH

JULY 2021

DISCLAIMER
This resource is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $2,006,400 with 60% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

Table of Contents:

GUIDE TO SDOH SCREENING TOOLS FOR PUBLIC HOUSINGRESIDENTS

Adapted from: Healthy People 2020

"Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be." [1]
Source: Healthy People 2020

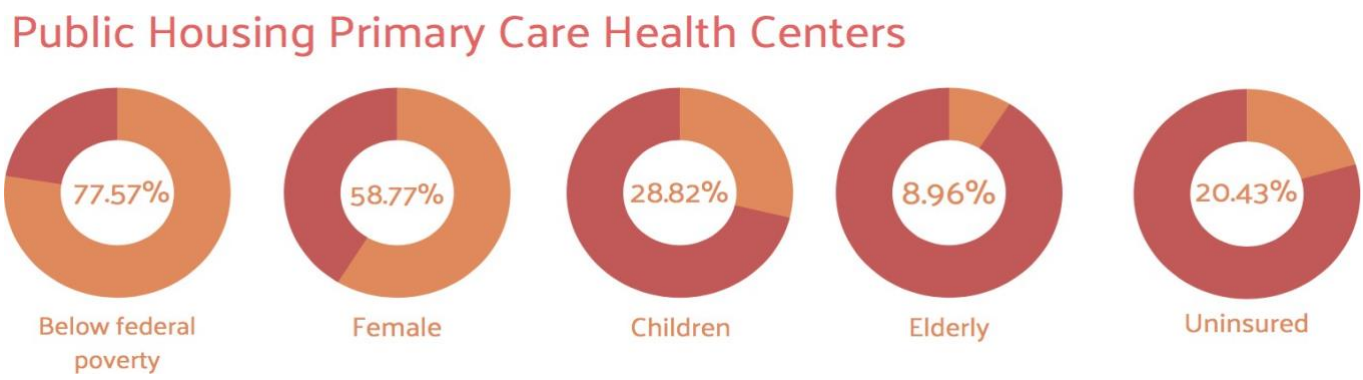
HISTORY

The social determinants of health (SDOH), began in the early 2000's with the World Health Organization's Commission on the Social Determinants of Health internationally, and the Robert Wood Johnson Foundation's Commission to Build a Healthier America in the United States.[2] Since then, public health literature and evidence on the impact of resources, such as food supply, housing, economic and social relationships, transportation, education, and health care on an individual's length and quality of life has amassed.[3]

Patients served by health centers are more likely to be affected by one or more SDOH when compared to the general population. Therefore, it is important for health centers to fully document the SDOH of their patients to determine the best approach to providing comprehensive and culturally appropriate care.

BACKGROUND

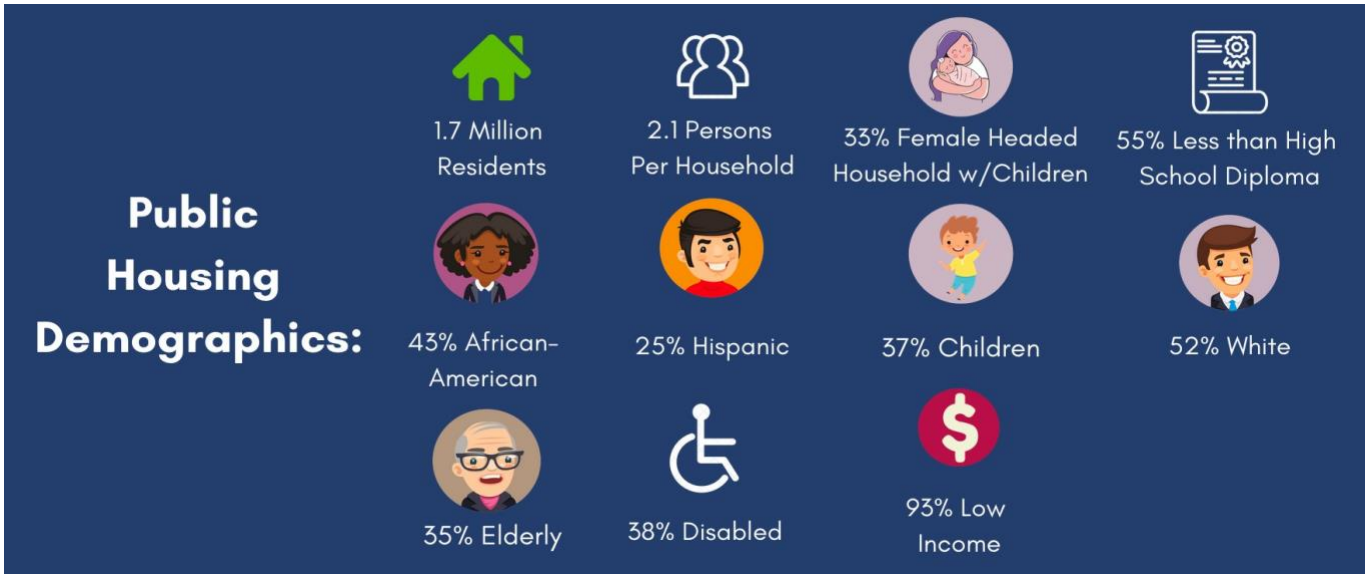
Housing instability, food insecurity, unsafe environments, and other non-medical social needs can impact an individual's use of health care services and their health outcomes.[4] For example, community assets, such as healthy food outlets and safe places to engage in physical activity, can determine diet and exercise, and in turn, obesity and diabetes rates.[5] Gathering social and behavioral data through a standardized screening tool can provide crucial information about the factors that influence health and the effectiveness of treatment.[6] This information can be useful for making effective diagnoses and treatment options; informing efficient health care system design; and spurring innovations that can lead to an improvement in health and wellness, which can potentially reduce health care costs.[7] However, 38% of Public Housing Primary Care (PHPC) health centers do not use a standardized screener.[8]



In 2019, 108 PHPC health centers served 856,191 patients. Approximately 77.57% were living at or below the poverty line, 58.77% were female, 28.82% were children ages 1-17, 8.96% were older adults age 65 and older, and 20.43% were uninsured.[9]

ROLE OF SDOH IN RESIDENTS OF PUBLIC HOUSING

Public housing residents often have complex health issues that are impacted by where they live. Like PHPC health center patients, they share many of the same social risk factors. There are close to 1.7 million individuals living in public housing, most of whom are low-income and disproportionately elderly or disabled.[10] Approximately half have less than a high school diploma and a third are headed by single women with children.[11]



In general, individuals that receive assistance from the U.S. Department of Housing and Urban Development (HUD) are more likely to have chronic health conditions and are higher utilizers of health care than the rest of the U.S. population.[12] However, there is also a difference between those living in public housing compared to other low-income renters, with similar incomes.[13]

Table 1 shows that approximately 36% of adults in HUD programs have fair or poor health, compared to 14% of the general public. Yet, even low-income renters (24%) are less likely to report fair or poor health compared to those receiving HUD assistance. The trend continues for other indicators. Individuals in HUD programs are more disadvantaged than other low-income renters when it comes to obesity, disability, diabetes, Chronic Obstructive Pulmonary Disease (COPD), and asthma.[14] These findings demonstrate the degree and magnitude that the SDOH are affecting the physical health of these individuals.

Table 1. Prevalence of Health Conditions among HUD-Assisted Individuals

	HUD Assisted	Low-Income Renters	All Adults
Fair/Poor Health	35.8%	24%	13.8%
Overweight/Obese	71%	60%	64%
Disability	61%	42.8%	35.4%
Diabetes	17.6%	8.8%	9.5%
COPD	13.6%	8.4%	6.3%

Source: A Health Picture of HUD-Assisted Adults, 2006–2012 | HUD USER

Collecting standardized SDOH data can:

- Assist patients in obtaining services that are related to patient well-being and better personal health.
- Help the health center and the care manager to better assist with the totality of patient needs.
- Improve the patient-provider relationship.
- Bolster patient receptivity to better navigate and attain broader service utilization.

PURPOSE OF THE GUIDE

There are many SDOH screening tools currently available to health centers. It can be a challenge to research, assess, and rank which ones are better suited for a specific health center's needs, capacity, and patient population. Using a set of criteria, NCHPH will identify,describe, and compare a list of evidence-based screening tools that are commonly used at health centers.

RECOMMENDED DOMAINS

Electronic health records (EHRs) can provide crucial information to providers about the health of populations, the determinants of health and the effectiveness of treatment.[15] There are many approaches to determining which SDOH domains are critical to measure; as the evidence and understanding on the impacts of SDOH has grown and changes over time. In 2014, the Institute of Medicine's Committee on the Recommended Social and Behavioral Domains and Measures for Electronic Health Records identified the following domains to be included in a standardized screening tool:

- Race/Ethnicity
- Education
- Financial resource strain (defined as housing insecurity or food insecurity)
- Stress
- Depression
- Physical activity
- Tobacco use and exposure
- Alcohol use
- Social connections and social isolation
- Exposure to violence: Intimate partner violence
- Neighborhood and community compositional characteristics

The committee used the following criteria to determine which domains to include in standardized screening tools. Note that domains may vary in both priority and importance dependent on how they are influenced by context (and/or vice versa); hence, the formation of criteria in determining which domains should be included in standardized screening tools:[16]

1. Strength of the evidence of the association of the domain with health.

2. Usefulness of the domain for management and treatment of a patient's illness; or to describe and monitor population health and making health care related policy decisions that affect the patient population, or for research to learn about the causes of illness, the predictors of outcomes of care, and the impact of interventions at multiple levels.

3. Availability of a reliable and valid measure(s) of the domain.

4. Feasibility, that is, whether a burden is placed on the patient, the clinician and the administrative time and cost of interfaces and storage.

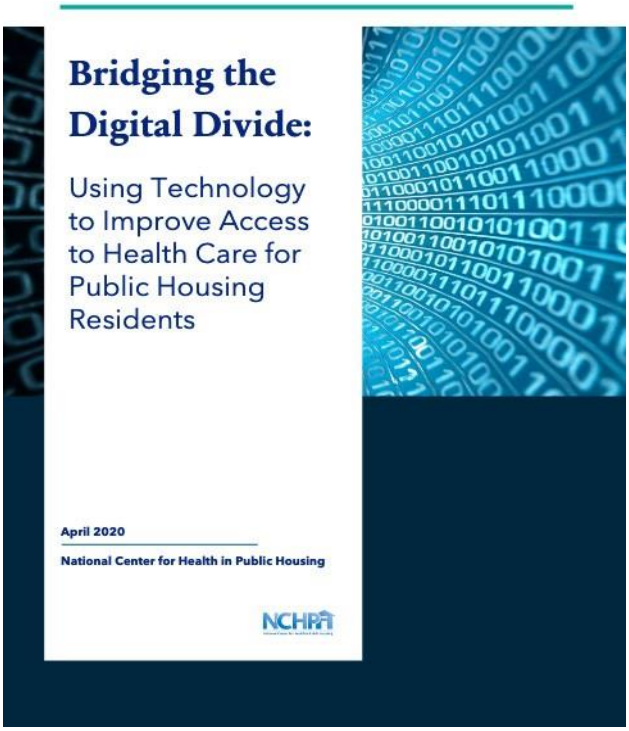
5. Sensitivity, that is if patient discomfort regarding revealing personal information is high and there are increased legal or privacy risks.

6. Accessibility of data from another source (i.e., information from external sources may be accessible to meet the needs of patient care, population health, and research; if so, the domains would have less priority for inclusion in the EHR).

Additional Domains to Consider

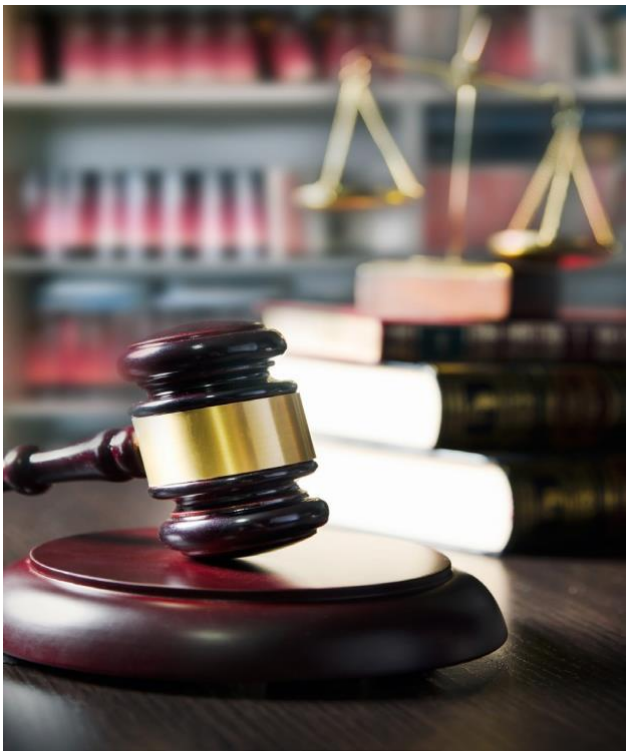
Digital Health Literacy

Other domains that are not recommended by the Institute of Medicine (IOM) but are important to consider for public housing residents include digital health literacy and access to broadband internet. Digital health literacy refers to the ability for an individual to seek, find, understand, and appraise health information from electronic sources.[17] Vulnerable populations, like the elderly and low-income individuals are less likely to use digital health technology and have lower levels of digital health literacy.[18] Those who are disabled are three times more likely to say they never go online.[19] While disparities in access to broadband internet were apparent long before COVID-19, the pandemic has highlighted just how important internet access has become. During the onset of COVID-19, health centers had to pivot from inpatient visits to telehealth services for many of their patients.[20] They also had to rely heavily on patient portals and text messaging services for patient engagement; providing critical health education on COVID-19 prevention, testing, and vaccination as well as using portals for case management for chronic disease monitoring and behavioral health services, conditions more prevalent among residents of public housing. Therefore, access to broadband and the ability to navigate electronic information is critical for this population. For more information on this topic, see Bridging the Digital Divide.



Legal Services

Legal services and needs can be another important domain to screen for among residents of public housing. While some standardized screeners include the legal services domain, many only have it as an optional addition. However, legal services and needs are often connected to other social needs. For example, if a patient has been denied benefits from the Supplemental Nutrition Assistance Program (SNAP), disability, utility, or health insurance benefits, a lawyer can help increase enrollment by identifying appropriate documentation necessary to prove eligibility. Lawyers can also help navigate evictions and shut-offs or hold landlords accountable for poor housing conditions that could be exacerbating health conditions such as asthma. Lawyers can also aid with immigration, as well as criminal background expungement, which has implications for the eligibility of HUD assistance programs. Finally, legal services for individuals experiencing domestic violence can be critical for improving safety and well-being. See Medical-Legal Partnerships for more information.



CRITERIA

NCHPH has identified the following criteria to consider when choosing a standardized screening tool.

Criteria	
Domains	Do the domains included in the tool cover the SDOH challenges faced by your patients?
Reading Level	Is the tool written at an appropriate literacy level for your patients?*
Languages	Has the tool been translated into multiple languages that represent the diversity of your patients?
Length of Assessment	How many questions are included in the screening tool? Will the length pose a burden on patients and deter them from completing it?
Cost	Is there a cost associated with use of the tool?
Integration into EHRs	Does the tool have an EHR template that works with your EHR system?
Resources Needed	What type of staff training and/or IT capacity is necessary to implement the tool?
Flexibility	Can questions be modified, added, or omitted?
Rating	How has the tool been rated according to other experts?#

*Reading levels can be determined using this tool.

#Kaiser Permanente and SIREN's Systematic Review of Social Risk Screening Tools

Variation of Question Phrasing Within a Domain

Another point to consider is the way in which questions are worded in a particular tool. The phrasing of a question within a domain can vary based on the tool used. For example, there are many different approaches to the questions on housing insecurity and homelessness. Some tools like the Accountable Health Communities Tool, Medicare Total Health Assessment, and PRAPARE ask individuals to describe their current living situation. They offer multiple options describing specific scenarios. Other tools ask a more direct yes/no question, such as, "Are you living in a shelter?" while others ask whether an individual has concerns or is worried about losing their housing. The latter has a different implication from previous examples. Finally, the tool from NC Medicaid asks about homelessness within the past 12 months. Adding a time period can provide health centers with an understanding of other types of risks or needs from that patient.

Phrasing is important for two reasons. First, it can impact the perception of the question from a patient's point of view and alter their response. For example, a patient may not feel "worried" about losing their housing, however they may feel "concerned at times." Health centers should be aware of how phrasing may be interpreted among different cultural groups, which could affect the accuracy of their data and appropriateness of the health centers response to the patient's needs. Second, understanding what is being asked specifically within a tool can determine whether that tool fits the Health Center's needs or if additional follow up is required.

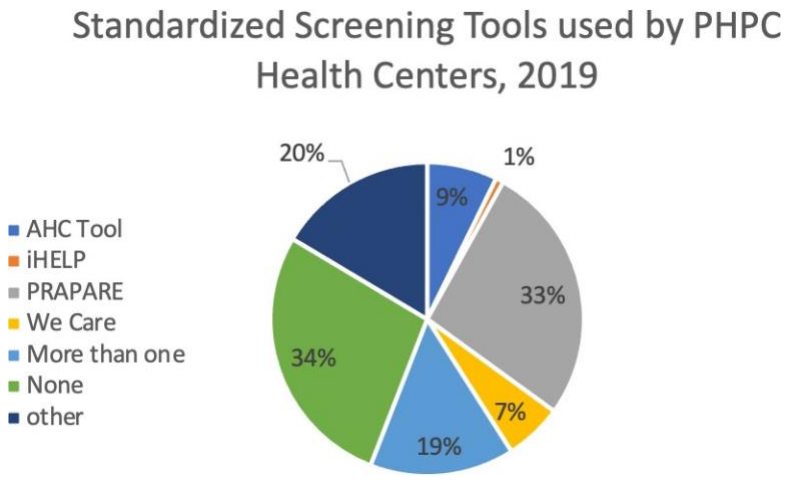
Table 2. Comparison of Housing Insecurity/ Homelessness Questions across Screening Tools

AHC-Tool	BMC-Thrive	Medicare Total Health Assessment Questionnaire	NC-Medicaid	PRAPARE	WellRx	iHELP
What is your living situation today? I have a steady place to live I have a place to live today, but I am worried about losing it in the future I do not have a steady place to live (I am temporarily staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building, bus or train station, or in a park)	**Do you currently live in a shelter or have no steady place to sleep at night?** Yes/ No **Do you think you are at risk of becoming homeless?** Yes/ No	**Which of the following best describes your current living situation?** Live independently in own home (may get some help with meals, household chores, and personal care) Live in home with a relative or friend who helps with meals and household chores Live in a senior/retirement or Assisted Living facility where meals and household help are routinely provided by paid staff (or could be if requested) Live in a facility such as a nursing home which provides meals and 24-hour nursing care Other	**Within the past 12 months, have you ever stayed: outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else's home (i.e. couch-surfing)?** Yes/ No **Are you worried about losing your housing?** Yes/ No	**What is your housing situation today?** I have housing I do not have housing (staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, or in a park) I choose not to answer this question **Are you worried about losing your housing?** Yes/No	**Are you homeless or worried that you might be in the future?** Yes/No	**Do you have any concerns about being evicted or not being able to pay the rent?** **Do you have any concerns about not being able to pay your mortgage?**

Adapted from SIREN Social Need Screening Tools Comparison Table

STANDARDIZED SCREENING TOOLS

According to 2019 Uniform Data System (UDS) data, the most common standardized screening tool used by PHPC health centers is the Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences (PRAPARE) tool. Approximately 33% of PHPC health centers are using the PRAPARE standardized screening tool.[21]



*Percentages do not add to 100 due to overlap in count for health centers that report the use of more than one tool.

Below are descriptions of the most used screening tools at PHPC health centers and an example of how they compare using the criteria described earlier.

Accountable Health Communities Tool[22]

The Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (CMMI) made the Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool to use in the AHC Model. It is unique in that it combines screening across five (5) key domains of HRSNs into only 10 questions.

Few social needs screening tools achieve that same breadth and brevity; it takes approximately 5 minutes to complete. The questions are at an 8th grade reading level, it is available in multiple languages at no cost. The questions in the AHC HRSN Screening Tool are meant to be used for individual respondents who answer the questions themselves. A parent or caregiver can also answer for an individual if needed or clinicians and theirstaff can use the tool as part of their clinical workflows with people of all different ages, backgrounds, and settings. There is also some flexibility and some supplemental domains to add if needed.

Screening Tool: Accountable Health Communities Health Related Social Needs Screening Tool
Cost: Free

Topics Covered	No. of Items	Reading Level	Languages	Completion Time	Flexibility	EHR
Food Insecurity, Housing, Safety, Transportation, Utilities	10	8th grade	Multiple	< 5 min	Supplemental domains: Disabilities, Education, Financial Strain, Social Support, Health Behaviors, Mental Health Paper-based and electronic, staff-administered and self-screened	NextGen, EPIC, eClinicalWorks, Allscripts,

Comparison chart adapted from Social Interventions Research and Evaluation Network (SIREN) Evidence & Resource Library

Income Housing Education Legal Status Power of Attorney (iHELP)

iHELP is a pediatric social need screening tool developed in 2007 by Dr. Chen Kenyon from Boston Medical Center.[23] There are 14 questions across 5 domains household needs (financial strain, insurance, hunger, domestic violence, housing stability and housing conditions) and several child-specific domains (child educational needs, child legal status, and power of attorney/guardianship).[24]

Screening Tool: Income, Housing, Education, Legal Status, Personal Safety (IHELP) Questionnaire
Cost: Free

Topics Covered	No. of Items	Reading Level	Languages	Completion Time	Flexibility	EHR
Financial Strain, Insurance, Hunger, Domestic Violence, Housing Stability and Housing Conditions	14	7th grade	English	Unknown	Supplemental domains and additional questions available	Unknown

Comparison chart adapted from Social Interventions Research and Evaluation Network (SIREN) Evidence & Resource Library

Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences (PRAPARE)[25]

The PRAPARE tool was jointly developed by the National Association of Community Health Centers, Asian American Pacific Islander Community Health Organizations, and the Oregon Primary Care Association. There are 21 questions that assess for 16 core measures with opportunities to address other social risk factors. The tool was developed and tested by health centers and was the most widely used standardized SDOH risk screening tool used in 2019.[26] It contains free EHR templates, a workflow agnostic that can fit within existing workflows and can be combined with other tools and data, and a robust set of accompanying resources to help health centers implement the tool.

Screening Tool: Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences (PRAPARE)
Cost: Free

Topics Covered	No. of Items	Reading Level	Languages	Completion Time	Flexibility	EHR
16 core measures	21	8th grade	Multiple	Unknown	Supplemental domains include incarceration history, safety, domestic violence, and refugee status Paper-based and electronic, staff-administered and self-screened	Free EHR Templates available for NextGen, eClinical Works, athenaPractice, Epic, Cerner, Greenway Intergy, Athena

Comparison chart adapted from Social Interventions Research and Evaluation Network (SIREN) Evidence & Resource Library

Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education Survey Instrument (WE CARE) [27]

WE CARE is a pediatric social needs screening tool that includes 10 questions across five (5) domains (childcare, education, employment, food insecurity, and housing) and takes approximately 5 minutes to complete.It is written at the 9th grade reading level.

Screening Tool: Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education Survey Instrument (WE CARE)
Cost: Free

Topics Covered	No. of Items	Reading Level	Languages	Completion Time	Flexibility	EHR
Childcare, Education, Employment, Food Insecurity, and Housing	10	9th grade	English	< 5 min	Paper-based and verbal (staff-administered)	Resource referrals can be printed directly from EHR Resource referrals can be tracked in patient's EHR

Comparison chart adapted from Social Interventions Research and Evaluation Network (SIREN) Evidence & Resource Library

Another scale that is relevant for public housing residents is the eHealth Literacy Scale (eHEALS). eHEALS is an 8-item scale developed to measure consumers' combined knowledge, comfort, and perceived skills at finding, evaluating, and applying electronic health information to health problems.[28] Norman and Skinner found that eHEALS reliably and consistently captures the eHealth literacy concept and is a promising tool for assessing skill in using health information technology. Within a clinical environment, it may be used to identify patients that could benefit from an eHealth intervention or resource.[29]

CONCLUSION

There are great inequities in health among communities of color and low-income individuals nationwide, both of which are disproportionately clustered in public housing. As a result, screening and addressing the SDOH in those communities will benefit those that are hardest to reach , disenfranchised, with the lowest opportunities. It may also have the potential to improve health outcomes and well-being and improve health equity and opportunity at a broader scale.

RESOURCES

NCHPH SDOH Screening Tools for Public Housing Learning Collaborative is a 5-part online learning collaborative that guides participants through the practical aspects of identifying and implementing an SDOH screening process at their health center. The series goes beyond the basics by covering issues such as: building trust; integrating data; evaluating impact; and reimbursement for SDOH screening and referrals.

The Screening Technical Assistance & Resource Center (STAR Center) seeks to improve the health, wellness, and development of children through practice and system-based interventions to increase rates of early childhood screening, counseling, referral, and follow-up for developmental milestones, perinatal depression, and social determinants of health.

Screening Time! This site provides a variety of resources to assist you with the screening process formaternal depression, developmental concerns, and social determinants of health.

The Social Interventions Research and Evaluation Network (SIREN) Evidence & Resource Library has expanded to include both peer reviewed publications and other types of resources such as webinars and screening tools/toolkits on medical and social care integration.

Kaiser Permanente and SIREN's Systematic Review of Social Risk Screening Tools

REFERENCES:

[1]Office of Disease Prevention and Health Promotion. (n.d.). Social Determinants of Health. Social Determinants of Health |Healthy People 2020. https://www.healthypeople.gov/node/3499/2020/topics-objectives/topic/social-determinants-health.

[2]Commission on Social Determinants of Health (2008). Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health (PDF). World Health Organization. http://www.commissiononhealth.org/PDF/ObstaclesToHealth-Report.pdf

[3]K., B. R. L., Baker, E. A., & Metzler, M., Promoting health equity: a resource to help communities address social determinants of health (2014). Atlanta, GA; Social Determinants of Health Work Group at the Centers for Disease Controland Prevention, U.S. Department of Health and Human Services.

[4]Billioux, A., Verlander, K., Anthony, S., & Alley, D. (2020, August 25). Standardized Screening for Health-Related Social Needs in Clinical Settings: The Accountable Health Communities Screening Tool. National Academy of Medicine. https://nam.edu/standardized-screening-for-health-related-social-needs-in-clinical-settings-the-accountable-health-communities-screening-tool/

[5]National Center for Health in Public Housing. (2020, September). Social Determinants of Health for Public Housing Residents: Diabetes. Alexandria, VA. https://nchph.org/wp-content/uploads/2021/01/Diabetes-2020-9232020.pdf

[6]Institute of Medicine. (2014 June 23.) Capturing Social and Behavioral Domains in Electronic Health Records: Phase 1.Washington, DC: The National Academies Press. https://doi.org/10.17226/18709.

[7]Institute of Medicine. (2014 June 23.) Capturing Social and Behavioral Domains in Electronic Health Records: Phase 1.Washington, DC: The National Academies Press. https://doi.org/10.17226/18709.

[8]United States Health Resources and Services Administration (2019). National Health Center Data: National PublicHousing Primary Care Program Awardee Data. https://data.hrsa.gov/tools/data-reporting/program-data/national/table?tableName=Full&year=2019.

[9]United States Health Resources and Services Administration (2019). National Health Center Data: National PublicHousing Primary Care Program Awardee Data. https://data.hrsa.gov/tools/data-reporting/program-data/national/table?tableName=Full&year=2019.

[10]United States Department of Housing and Urban Development. Resident Characteristics Report (RCR) (2020.)https://www.hud.gov/program_offices/public_indian_housing/systems/pic/50058/rcr.

[11]United States Department of Housing and Urban Development. Resident Characteristics Report (RCR) (2020.)https://www.hud.gov/program_offices/public_indian_housing/systems/pic/50058/rcr.

[12]Helms, V. E., Sperling, J., & Steffen, B. L., A health picture of HUD-assisted adults, 2006-2012: HUD administrative datalinked with the National Health Interview Survey (2006-2012.)

[13]Helms, V. E., Sperling, J., & Steffen, B. L., A health picture of HUD-assisted adults, 2006-2012: HUD administrative datalinked with the National Health Interview Survey (2006-2012.)

[14]Helms, V. E., Sperling, J., & Steffen, B. L., A health picture of HUD-assisted adults, 2006-2012: HUD administrative datalinked with the National Health Interview Survey (2006-2012.)

[15]Institute of Medicine. (2014 June 23.) Capturing Social and Behavioral Domains in Electronic Health Records: Phase 1.Washington, DC: The National Academies Press. https://doi.org/10.17226/18709.

[16]Institute of Medicine. (2014 June 23.) Capturing Social and Behavioral Domains in Electronic Health Records: Phase 2.Washington, DC: The National Academies Press. https://doi.org/10.17226/18709.

[17]Norman, C. D., & Skinner, H. A. (2006). eHEALS: The eHealth Literacy Scale. Journal of Medical Internet Research 8(4). https://doi.org/10.2196/jmir.8.4.e27

[18]Lisa Fitzpatrick, "The Time Is Now: The Case for Digital Health Innovation for the Poor and Underserved," To the Point (blog), Commonwealth Fund, Dec. 17, 2018. https://doi.org/10.26099/VMDB-A964; Zher, S. Y., & Chye, C. S. (2017, November 21). Developing a digital literacy scale & measuring digital divide using PIAAC data. Institute for Adult Learning,Singapore.

[19]Anderson, M., & Perrin, A. (2020, August 14). Disabled Americans less likely to use technology. Pew Research Center.https://www.pewresearch.org/fact-tank/2017/04/07/disabled-americans-are-less-likely-to-use-technology/.

[20]National Center for Health in Public Housing. (2020). Public Housing Primary Care (PHPC) COVID-19 By The Numbers.Alexandria, VA. www.nchph.org/dashboard

[21]United States Health Resources and Services Administration (2019). National Health Center Data: National Public Housing Primary Care Program Awardee Data. https://data.hrsa.gov/tools/data-reporting/program-data/national/table?tableName=Full&year=2019.

[22]Centers for Medicare and Medicaid Services. Accountable Health Communities (AHC) Health-Related Social Needs(HRSN) Screening Tool Retrieved from AHC Screening Tool Explanation (cms.gov)

[23]Kenyon, C., Sandel, M., Silverstein, M., Shakir, A., & Zuckerman, B. (2007). Revisiting the Social History for Child Health.PEDIATRICS, 120(3). https://doi.org/10.1542/peds.2006-2495

[24]Social Interventions Research and Evaluations Network. (n.d.). IHELP Pediatric Social History Tool. SIREN.

[25]National Association of Community Health Centers. (2021, May 18). Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences (PRAPARE) NACHC. https://www.nachc.org/research-and-data/prapare/.

[26]United States Health Resources and Services Administration (2019). National Health Center Data: National PublicHousing Primary Care Program Awardee Data. https://data.hrsa.gov/tools/data-reporting/program-data/national/table?tableName=Full&year=2019.

[27]American Academy of Pediatrics. (Feb. 2015). Practice Tips. AAP.org. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/poverty/Pages/practice-tips.aspx.

[28]Norman, C. D., & Skinner, H. A. (2006). eHEALS: The eHealth Literacy Scale. Journal of Medical Internet Research,8(4). https://doi.org/10.2196/jmir.8.4.e27

[29]Norman, C. D., & Skinner, H. A. (2006). eHEALS: The eHealth Literacy Scale. Journal of Medical Internet Research,8(4). https://doi.org/10.2196/jmir.8.4.e27