Using Standardized Social Determinants of Health Screening Questions to Identify and Assist Patients with Unmet Health-related Resource Needs in North Carolina

North Carolina Department of Health and Human Services

April 5, 2018
Standardized Social Determinants of Health Screening Questions are an important component of the Department of Health and Human Services’ overall SDOH strategy, which may be released separately.

The Department welcomes and appreciates input on the Standardized SDOH Screening Questions. Please send comments to Medicaid.Transformation@dhhs.nc.gov.

For more information about the Medicaid transformation to managed care, visit ncdhhs.gov/medicaid-transformation.
I. Introduction

The impact of the social determinants of health (SDOH)—including food insecurity, housing instability, unmet transportation needs, and interpersonal violence—on a person’s health and well-being, and health care utilization and cost, is well-established.\(^1\)\(^,\)\(^2\) Currently, 90% of health care spending in the United States is on medical care in a hospital or doctor’s office. Access to medical services is crucial to being healthy. But research shows that up to 70% of a person’s overall health is driven by these other social and environmental factors, and the behavior influenced by them.\(^3\)

In North Carolina, people feel the impact of unmet health-related social needs every day. More than 1.2 million North Carolinians cannot find affordable housing and one in 28 of our state’s children under age 6 is homeless.\(^4\)\(^,\)\(^5\)\(^,\)\(^6\) North Carolina has the 8\(^{th}\) highest rate of food insecurity in the United States, with more than 1 in 5 children living in food insecure households. In some North Carolina counties, one in three children live in food insecure households.\(^7\) Additionally, nearly one quarter of North Carolina children have experienced adverse childhood experiences, including physical, sexual or emotional abuse or household dysfunction, like living with someone struggling with a substance use disorder.\(^8\) These and other social determinants of health disproportionately impact Medicaid beneficiaries, negatively impact health, and drive higher health care costs. We also know that intervening in and addressing beneficiaries’ needs in these areas can have direct impact on the Medicaid population’s health and can yield a strong short-term and long-term return on health and economic outcomes.

To meet our mission to improve the health, safety and well-being of all North Carolinians, and to be responsible stewards of our resources, the North Carolina Department of Health and Human Services (the Department) aims to ensure that public dollars are used to buy health—not only health care—for our citizens. In collaboration with partners and stakeholders, the Department envisions establishing North Carolina as a national leader in cost-effectively using its resources, and optimizing the health and well-being of all people, by uniting its communities and health care system to address the full set of factors that impact health.

Spurred by North Carolina’s Medicaid transformation to managed care, the Department has begun its work addressing SDOH through initiatives that include creating standardized screening questions for health-related unmet resource needs; a resource database and social service integration platform; a geographic information system “hot spot” mapping of SDOH indicators; and public-private partnership pilots. This paper focuses on the Department’s work to develop a standardized set of SDOH screening questions. A more comprehensive paper describing the Department’s overall SDOH strategy may be released separately.

\(^1\) B. C. Booske, J. K. Athens, D. A. Kindig et al., Different Perspectives for Assigning Weights to Determinants of Health (University of Wisconsin Population Health Institute, Feb. 2010).


\(^5\) The U.S. Department of Housing and Urban Development defines an affordable home as one that requires families to spend no more than 30% of household annual income on housing. Families who pay more than 30% of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.


II. Rationale for Standardized SDOH Screening Questions

Since North Carolina is preparing to transition its Medicaid and NC Health Choice programs from a predominantly fee-for-service delivery system to managed care, there is currently a unique opportunity to engage in system redesign. Over a five-year period, the majority of North Carolina Medicaid beneficiaries will phase into managed care and will enroll in Prepaid Health Plans (PHPs). PHPs will hold responsibility for care management for their enrollees. As set out in the Department’s previous concept paper entitled North Carolina’s Care Management Strategy under Managed Care, one of the Department’s guiding principles for care management is that enrollees will have access to direct linkages to programs and services that address unmet health-related resource needs affecting social determinants of health (SDOH), along with follow-up and ongoing planning. The Department’s inclusion of SDOH as a component of PHP care management requirements, therefore, provides an opportunity to consider and standardize how enrollees will be screened for unmet health-related resource needs affecting SDOH, as well as how PHPs will be required to address those needs. As detailed below, PHPs will be required to use these screening questions as part of fulfilling their overall care management requirements.

At the same time as planning is occurring for the transition to managed care, many leading practices and providers in North Carolina are expressing increasing interest in more systematically addressing SDOH. While most practices are not currently conducting screening on a routine basis, many are beginning to do so and are interested in a standardized approach. As set out below, the Department is not proposing to require SDOH screening requirements for providers at this time (whether through the Advanced Medical Home model or otherwise), instead focusing initial operational attention on integration of the SDOH screening questions into the new PHP care management process flow that will roll out in 2019. However, the Department strongly encourages practices to carry out SDOH screening, and the Department’s vision is that the new standardized SDOH screening questions will be shaped by provider input; that they will become familiar to providers; and that they will eventually become part of routine practice workflows across the state.

Standardizing a set of SDOH screening questions will help maintain strong statewide focus on SDOH. Questions that have been externally validated and written at an accessible reading level have the potential to improve the effectiveness of screening, especially in the early and testing phases. Furthermore, having consistent screening questions and processes will allow for statewide collection of data with respect to the unmet needs of our population and their impact on health outcomes and costs. In turn, this valuable feedback loop will inform policy, planning and investment that can support better ways to address unmet resource needs and improve the quality of care over time.

III. Development of Standardized SDOH Screening Questions

A. Principles

Development of standardized SDOH screening questions has been grounded on the following principles:

- First, the screening questions need to include domains where high-quality evidence exists linking them to health outcomes, and must identify needs for which there are some resources and services in the community available to address them.

- Second, the screening questions must be simple, brief and applicable to most populations, so that they can be easily integrated into workflows in diverse and varied settings across the state. The questions do not have to address all nuances of need; rather, a positive response on a screening question should...
trigger a more in-depth assessment that allows a greater understanding of specific needs and more targeted navigation to resources by a community health worker, care manager, social worker or other member of the team. Since the questions are intended in time to be used by providers in diverse settings as well as by PHPs, there should be flexibility for PHPs or providers to include additional domains as needed or desired by the setting or population being served.

- Third, the questions must be validated, draw from best practices and must be written at accessible reading levels to ensure that they can be effectively used.
- Fourth, to the greatest extent possible, the questions should align with existing screening tools (e.g. Bright Futures Questionnaire,9 Meaningful Use, Uniform Data Set (Community Health Centers), PRAPARE (Community Health Centers), Accountable Health Community, Pregnancy Medical Home Screen. This intentional alignment to existing tools will allow for easier implementation and similar data collection.

B. Design Process

Over the summer of 2017, the Department met with key stakeholders across North Carolina who were interested in or already working on initiatives related to SDOH. The Department conducted a literature review of best practices related to screening and identifying SDOH, and reviewed existing screening tools. From this research, the Department and stakeholders selected four priority SDOH domains: 1) food insecurity, 2) housing instability, 3) transportation and 4) interpersonal violence. In addition, the Department compiled a list of validated questions from the various existing tools under each identified domain.

In winter 2017-18, the Department convened a Technical Advisory Group (TAG) made up of diverse subject matter experts and stakeholders from across the state.10 The TAG reviewed the design principles and refined the list of validated questions. Over four working sessions, the group came to consensus on a recommended set of standardized SDOH screening questions.

IV. The North Carolina Standardized SDOH Screening Questions

The standardized SDOH screening questions below are intended to map to the four priority domains specific to unmet health-related resource needs (food security, housing stability, transportation, and interpersonal violence). The questions are meant to be answered by the individual, or by a parent or caregiver on the individual’s behalf, and are meant to be short, simple and inclusive so that they can be broadly used.

Questions on behavioral health issues (e.g., depression, substance use) and health behaviors (e.g., tobacco, diet, exercise) are expected to be part of routine medical assessment and are therefore not included in the core set of questions on unmet resource needs above.

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9 Bright Futures. Pediatric Intake Form.
10 List of Technical Advisory Group Members can be found in Appendix 1.
Contained in Appendices 2, 3 and 4 are additional resources which did not go through the formal Technical Advisory Group (TAG) endorsement process but which could be used by PHPs or providers to add to the core set of questions, depending on the desire of the agency or setting. Appendix 2 provides an optional secondary tool that assists in better understanding a person’s housing needs and the right resources to address it. Appendix 3 offers optional tools for assessing Intimate Partner Violence. Appendix 4 offers suggestions of questions drawn from the other tools referenced in the development of the Department’s standardized questions.

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<thead>
<tr>
<th>Standardized SDOH Screening Questions</th>
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<td>There are programs to help people with needs that can affect their health, but they aren’t reaching everyone who may need them. Are there things you need help with?</td>
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**Food**
1. Within the past 12 months, did you worry that your food would run out before you got money to buy more? (Y/N)
2. Within the past 12 months, did the food you bought just not last and you didn’t have money to get more? (Y/N)

**Housing/Utilities**
4. Do you have housing? (Y/N)
5. Are you worried about losing your housing? (Y/N)
6. Within the past 12 months, have you or your family members you live with been unable to get utilities (heat, electricity) when it was really needed? (Y/N)

**Transportation**
7. Within the past 12 months, has lack of transportation kept you from medical appointments, getting your medicines, non-medical meetings or appointments, work, or from getting things that you need? (Y/N)

**Interpersonal Safety**
8. Do you feel physically and emotionally safe where you currently live? (Y/N)
9. Within the past 12 months, have you been hit, slapped, kicked or otherwise physically hurt by someone? (Y/N)
10. Within the past 12 months, have you been humiliated or emotionally abused in other ways by your partner or ex-partner? (Y/N)

**Optional to Add**
11. Are any of your needs urgent? For example, I don’t have food for tonight, I don’t have a place to sleep tonight, I am afraid I will get hurt if I go home today? (Y/N)

A. Food Insecurity

The U.S. Department of Agriculture (USDA) defines food insecurity as a lack of consistent access to enough food for an active, healthy life. North Carolina has the 8th highest rate of food insecurity overall and the 2nd highest rate of food insecurity among kids in the United States, with more than 1 in 5 children living in food insecurity.

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insecure households. In some North Carolina counties, one in three children live in food insecure households. Food insecurity has been shown to increase health care costs and decrease health outcomes among adults. In addition, food insecurity in young children contributes to developmental delays, impaired school function, emotional distress and health risks through adulthood.

Under the food insecurity domain, the SDOH standardized screening questions contain the Hunger Vital Sign—a validated, two-question screening tool that identifies food insecurity or risk of food insecurity. The TAG agreed on this set of questions due to the body of research and evidence demonstrating that this question identified people at high risk of food insecurity and, therefore, at risk for being in fair or poor health. For example, when compared to children under age 4 who screen as food secure using the Hunger Vital Signs questions, young children who screen as at risk for food insecurity were 56% more likely to be in fair or poor health, 17% more likely to have been hospitalized and 60% more likely to be at risk for developmental delays. When compared to mothers screening as food-secure, mothers screening at risk for food insecurity were almost twice as likely to be in fair or poor health and almost three times as likely to report depressive symptoms. The Hunger Vital Sign is already being recommended and used by many stakeholders including the American Academy of Pediatrics, the American Academy of Family Physicians, the Accountable Health Communities and the USDA U.S. Household Food Security Survey.

B. Housing Instability

In North Carolina, more than 1.2 million people cannot find affordable housing and one in 28 of our state’s children under age 6, or 26,000 children, is homeless (according to the broader U.S. Department of Education definition of homelessness). The 2017 “Point in Time Count for NC” found 8,962 persons experiencing homelessness (according to the U.S. Department of Housing and Urban Development definition of

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homelessness)—of these, 33% were people in families with children and 20% were children 17 and younger.24 There are over 10,000 homeless individuals, including over 1,110 families. In addition, there are over 240,000 people living with family, friends or others and at risk of homelessness.25 Nationally, 1 in 4 families spend more than 70% of income on rent and utility costs alone.

Unstable and unsafe housing for children and families is associated with worse health outcomes, increased use of medical care and increased cost. Children who experience homelessness are more likely to have been hospitalized since birth. The estimated total annual cost of hospitalizations attributable to homelessness among children ages 4 and under in 2015 were over $238 million nationally.26 Housing problems have been associated with a wide array of health conditions, including lead exposure, asthma and depression.27 Those experiencing homelessness are more likely to have multiple comorbidities and be high-users of health care and the emergency room. Housing stability can decrease health care costs and improve health.

Housing with utility needs is also linked with poor health outcomes. In North Carolina, more than 10,500 households go without heat in the winter. And more than 16,500 homes do not have indoor plumbing.28 Babies and toddlers who live in energy insecure households are more likely to be in poor health, to have a history of hospitalizations, and to be at risk for developmental problems.29 In addition, energy insecurity does not usually occur in isolation—families who received energy assistance through LIHEAP (Low Income Home Energy Assistance Program), for example, were 14% more likely to be housing secure than families not receiving energy assistance.30

The SDOH standardized screening questions contain three questions related to housing instability. All three questions are drawn from PRAPARE, a nationally validated assessment tool.31 Some stakeholders asked for additional screening questions for those who screened positive on one or more of these questions. Appendix 2 provides an optional secondary tool that assists users in better understanding a person’s housing needs and the right resources to address them. This secondary tool was not subject to the formal TAG endorsement process, but parallels assessment categories in the Homeless Management Information System (HMIS).

C. Transportation

Limited access to transportation is often cited as limiting access to health care as transportation barriers lead to missed appointments and delayed care, which, in turn, often lead to poorer management of chronic disease and worse health

Housing/Utilities Standardized Questions
1. Do you have housing? (Y/N)
2. Are you worried about losing your housing? (Y/N)
3. Within the past 12 months, have you or your family members you live with been unable to get utilities (heat, electricity) when it was really needed? (Y/N)

Transportation Standardized Question
Within the past 12 months, has lack of transportation kept you from medical appointments, getting your medicines, non-medical meetings or appointments, work, or from getting things that you need? (Y/N)

28 The Duke Endowment. “Expanding Affordable Rural Housing.”
29 Cook JT, Frank DA, Ettinger de Cuba S et al. Energy Insecurity is Positively Associated with Food Insecurity and Adverse Health Outcomes in Infants and Toddlers.
outcomes. In 25 separate studies, 10–51% of patients reported that transportation was a barrier to health care access.32

Transportation barriers also limit a person’s ability to access healthy food and community supports. In North Carolina, more than 1.85 million residents—almost 20% of the total state population—have low access to a grocery store. That number includes almost half a million children and about a quarter of a million seniors. Additionally, out of the total number of North Carolinians with low access to a store, 622,400 are low-income; and more than 100,000 North Carolina residents have low access to a store and no household vehicle, making it extremely difficult for them to purchase food on a regular basis.33 Older adults and individuals with disabilities who live in their community and do not have access to transportation report higher rates of social isolation. Research shows that socially isolated adults undergo early admission to residential or nursing care, and have an increased use of emergency rooms and physician visits. In addition, social isolated adults have increased risk for depression.34

The North Carolina SDOH standardized screening questions contain one question related to transportation that was drawn from the PRAPARE tool.

D. Interpersonal Violence

“Interpersonal violence” refers to violence between individuals and is subdivided into family and intimate partner violence, and community violence.35 Nationally, nearly 1 in 6 pregnant women in the United States has been abused by a partner. Almost 44% of North Carolina women experienced intimate partner violence in their lifetime—almost 25% more than the national average, ranking North Carolina 47th.36 Additionally, North Carolina ranks 30th in the United States in the prevalence of Adverse Childhood Experiences (ACEs), which include physical, sexual or emotional abuse or household dysfunction like living with someone struggling with a substance use disorder. In North Carolina, 24.3% of kids have experienced two or more ACEs and 21.9% of adults have experienced three or more ACEs.37

Violence against women is linked to many long-term health problems, including arthritis, asthma, chronic pain, digestive problems (e.g., stomach ulcers), heart problems, irritable bowel syndrome, problems sleeping, migraine headaches, stress and problems with the immune system. Many women also have mental health

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Women who experience intimate partner violence before and during pregnancy are at an increased risk of low maternal weight gains, infections and high blood pressure, and are more likely to deliver pre-term or low birth weight babies. Screening for intimate partner violence is recommended by the US Preventive Services Task Force.

The SDOH standardized screening questions contain three questions related to interpersonal safety. The first question is an overall general interpersonal safety question drawn from PRAPARE that may reflect family and intimate partner or community violence. The second question reflects interpersonal physical violence and was drawn from the Community Care of North Carolina (CCNC) Pregnancy Medical Home Pregnancy Risk Screening Form that has been used in North Carolina since 2011 and has been shown to be a strong predictor of health risk. This question is also used or recommended by the American College of Obstetricians and Gynecologists, public health Title X funded clinics, and the Health Begins screening tool. The third question was drawn from the Humiliation, Afraid, Rape, Kick (HARK) tool and screens for the emotional abuse aspect of intimate partner violence.

For some settings, especially OB/GYN or women’s health settings, full screens for intimate partner violence is recommended. Appendix 3 provides two full screens that could be used in those settings, if desired. The secondary screens did not go through the formal endorsement process of the TAG, but align with other North Carolina initiatives. The first tool given in Appendix 3 is the full set of Pregnancy Medical Home questions currently being used in the North Carolina Pregnancy Medical Home program. The second tool is the Humiliation, Afraid, Rape, Kick (HARK) tool that aligns with screening initiatives by the North Carolina Coalition Against Domestic Violence.

These three questions around interpersonal safety are not meant to be a proxy or replacement for a full ACE screening. Performing a full ACE screening allows for the timely recognition and efficient management of the emotional and physical consequences of adverse childhood experiences. Significant research has shown the relationship between ACEs and a variety of known risk factors for disease, disability and early mortality. While the Department recognizes the importance of performing an ACE screen, it is not the focus of this paper.

E. Optional Domains

Some stakeholders asked for example screening questions for other optional domains (e.g., unsafe housing and housing quality, child care, parent-child attachment, education, employment, health literacy) that could be added to the core screening questions, if desired by the agency or relevant to a specific population or setting. Possible questions for those domains are included in Appendix 4. As with the other appendices, these are included as optional resources, but have not been formally endorsed by TAG. Sources and resources for questions and implementation are found in Appendix 5.

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39 Community Care of North Carolina. “Pregnancy Medical Home.”
40 American Academy of Pediatrics. “Adverse Childhood Experiences and the Lifelong Consequences of Trauma.”
V. Implementation of Standardized Screening Questions within Managed Care

The Department plans to fully integrate the use of standardized SDOH screening questions into Managed Care from its inception in mid-2019.

In the early implementation of Managed Care, the Department will focus on ensuring that the Prepaid Health Plans (PHPs) integrate the questions into their care management approaches. In the concept paper entitled North Carolina’s Care Management Strategy under Managed Care, the Department set out a care management process flow—including standardized terminology for each stage of the process flow—that all Prepaid Health Plans (PHPs) will be required to use as a framework for how they conduct care management.

Figure 1: PHP Care Management Process Flow

The standardized SDOH screening questions will be implemented as part of the “Care Needs Screening” stage, which is a one-time universal screening. All PHPs will be required to make best efforts (at least two contact attempts) to screen all enrollees for their care needs within 90 days of enrolment.41 PHPs will be required to embed the standardized SDOH screening questions into their Care Needs Screening instruments. In all other respects, PHPs will be free to design their own Care Needs Screening questions so long as they capture chronic and acute conditions, behavioral health needs, substance abuse and other conditions (e.g., pregnancy) about which the PHP would need to be aware to arrange appropriate interventions. Therefore, Care Needs Screening instruments will be expected to vary by PHP but be identical as they relate to SDOH.

Once the Care Needs Screening is complete, the PHP care management process flow is intended to ensure that PHPs identify enrollees in need of care management and implement care management through multi-disciplinary teams, supported in each case by a written care plan.42 The Department’s policy intent is that inclusion of the standardized SDOH screening questions at the Care Needs Screening phase directly drives PHP

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41 For more detail on the Care Needs Screening and other stages of PHP care management, please see North Carolina’s Care Management Strategy under Managed Care, pp. 16-21

42 Note that Comprehensive Assessment and care management itself may – and often will – be delegated from the PHP to the provider setting, chiefly via the Advanced Medical Home program. Please see North Carolina’s Care Management Strategy under Managed Care for more detail.
action towards addressing unmet needs as part of care management for high needs enrollees. To ensure that this occurs, the Department has set up a number of requirements on PHPs at each stage of the care management workflow to ensure that social determinants are integrated into enrollee identification and care management itself.

- First, PHPs will be required to share the results of each Care Needs Screening—including the results of the standardized SDOH Screening Questions—with enrollees’ assigned primary care providers (including, but not limited to, Advanced Medical Homes) within 7 days of screening or 7 days of PCP assignment, whichever is sooner.

- Second, the Department will require each PHP to put forth a definition of “high unmet resource needs” that includes, at a minimum, individuals who are homeless, individuals experiencing domestic violence/lack of personal safety, and individuals screening positive on three or more of the four core SDOH domains on the standardized SDOH questions described in this paper.

- Third, PHPs will be required to incorporate their definitions of “high unmet resource needs” into the way that they identify individuals in need of care management, though risk scoring and stratification.

- Fourth, PHPs must include the four priority SDOH domains at the Comprehensive Assessment stage, during which individual enrollees’ needs are more deeply assessed to form a plan of care.43

- Finally, as part of care management itself, PHPs will be required to address unmet resource needs by having a comprehensive understanding of local community-based resources; by providing in-person assistance in securing health-related services that can improve health and family wellbeing (including assistance filling out and submitting applications); by having a housing specialist on staff or on contract who can assist individuals who are homeless in securing housing; and by providing access to medical-legal partnership for legal issues adversely affecting health.

In setting up requirements to integrate SDOH considerations at each stage of care management, beginning with the Care Needs Screening stage, the Department aims to make North Carolina a leader among states in addressing unmet resource needs through Medicaid managed care. The Department fully recognizes that the standardized SDOH screening questions will be a new operational process that will be rolling out for the first time at the same time as Managed Care is itself being newly implemented. Strong communication between PHPs, the Department, providers and other stakeholders will be necessary to refine how the standardized questions are used in practice and how they drive action towards addressing unmet needs.

The Department sees the time between today and mid-2019 as a valuable opportunity to refine and test the standardized SDOH screening questions. During this time, the Department will begin field testing the questions to better understand implementation elements, such as whether people being screened are interpreting questions as intended. As part of field testing, understanding how to operationalize the question administration in different settings and modalities will be explored. For example, administering the questions where a person would be providing answers on his/her own behalf may be different than a setting where a person would be answering the questions on behalf of someone else or a household (e.g., child enrollees). The differences between administration in-person or remotely by phone (as is likely to be the case for the Care Needs Screenings conducted by PHPs) will be explored; online or electronic completion of screening questions may also be explored. Finally, as part of the field testing, the Department will also explore the possibility of

43 At PHP option, exposure to adverse childhood events (ACEs) or other trauma may be added to the Comprehensive Assessment for adults only.
translating the questions into other languages commonly used in North Carolina. The Department is interested in comments and suggestions for different ways to simulate, in advance of Managed Care, how PHPs may interpret and implement the standardized screening questions as part of the Care Needs Screening.

Prior to implementation, the North Carolina standardized SDOH screening questions themselves may be further revised following the public comment period for this paper. Any revisions to the questions will be published on the Medicaid Transformation website at https://www.ncdhhs.gov/medicaid-transformation.

Finally, providers will play a critical role in the rollout of the standardized questions. Even though health care practices and providers (including Advanced Medical Homes) will not be required by the Department to use the standardized SDOH screening questions at the launch of managed care in 2019, they are strongly encouraged to do so. In the future, with evolving technical assistance, field testing results and resource availability, the Department may further require use of the standardized SDOH screening questions within the Advanced Medical Home (AMH) program, as that program evolves. Given the Department’s strong policy intent that the questions ultimately garner use by both payers (PHPs) and providers, the Department strongly welcomes feedback from providers at this stage and throughout early implementation.

**VI. North Carolina’s Resource Database and Social Services Integration Platform (NC Resource Platform)**

In addition to providing a screening tool to identify SDOH, the Department is working with partners to create a North Carolina Resource Platform that providers, care managers, community health workers or others can use to connect people that screen positive for an unmet resource need with available community resources.

Screening for SDOH without an established pathway to help people meet their resource needs will not help meet the goal of improving the health, safety and well-being of all North Carolinians—and will deter health care providers from engaging patients on the full set of factors that impact their health. There must be a system and infrastructure to connect patients to community resources if they screen positive for an unmet resource need. While the current resource landscape may not address all such needs, North Carolina has a strong network of existing services to meet these needs, and a growing workforce of care managers, community health workers and others who can help make those links if armed with the right tools to do so. The tool will not only be used to connect people with existing resources, but also to identify where resource gaps exist so additional resources may be targeted to align with those unmet needs.

The NC Resource Platform will be a robust, statewide resource open to all providers, PHPs, community based organizations and community members. While PHPs can use existing resource platforms to meet their obligations to address whole-person and SDOH needs, the Department strongly encourages the use of this new platform or requires that the PHP connect into it for data sharing and referral purposes. This Resource Platform is foundational to creating these resource connections and developing high-quality data regarding non-clinical factors impacting health outcomes and costs.

Based on research, demonstrations and lessons from accountable care organizations and other localities addressing SDOH across the country, core competencies emerged for the NC Resource Platform. These include a well-curated, regularly updated database of community organizations and resources that is accessible to the

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44 PHPs may in some cases choose to delegate the Care Needs Screening function to other entities who are willing and able to perform it, which could include provider organizations or Advanced Medical Homes.
public and user-friendly so that anyone can use it to learn about community resources available to them and self-refer through the website or call center. Additionally, the software platform must enable patient referrals to community organizations, provide a feedback loop from the community organization that the patient was served, and track utilization, need and timeliness of service data. Other features to enhance its effectiveness include: integration with electronic health records for a seamless integration into a provider’s workflow; ability to interface with local community and agency online resource directories; and the ability to connect community service providers with each other to promote efficient and coordinated social service delivery.

This platform has the potential to touch the lives of North Carolinians, across all payers and uninsured patients. The Department anticipates that this platform will be used by health systems, Medicaid PHPs, other health plans, clinically integrated networks (CINs), physician practices, care coordinators and community organizations across the state.
## Appendix 1: Technical Advisory Group

<table>
<thead>
<tr>
<th>MEMBER</th>
<th>AFFILIATION/ORGANIZATION</th>
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<tbody>
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Appendix 2. Optional Secondary Assessment for Housing Needs

Question 1: Where did you stay last night?

- **Literally Homeless Unsheltered**: (Go to Question 2)
  - Place not meant for human habitation
- **Literally Homeless Sheltered**: (Go to Question 3)
  - Emergency shelter
  - Hotel or motel paid for with emergency shelter/by another organization
  - Transitional housing for homeless persons
  - VA Grant Per Diem Programs
- **At Risk**: (Go to Question 4)
  - Psychiatric hospital/facility
  - Substance abuse treatment facility/detox center
  - Hospital/residential medical facility
  - Jail/prison/juvenile detention facility
  - Foster care home/group home
  - Long-term care facility/nursing home
  - Residential program/halfway house that is non-homeless specific
  - Hotel/motel paid for by individual
  - Staying or living with friends or family in room, apartment or house
  - Permanent supportive housing program through homeless system, VA (long-term rental assistance)
  - Rental or owned by individual with housing subsidy (long-term and short-term rental assistance)
  - Rental or owned by individual with no housing subsidy

Question 2: Do you need assistance in accessing shelter?

- Yes (Link to appropriate services and shelters in region and Go to Question 3)
  - Shelter information
  - Transportation
  - Other: __________________
- No (Go to Question 3)

Question 3: Do you know how to access housing services in your community? Are you currently working with someone to access housing services?

- Yes = No referral needed
- No = Refer to coordinated entry process in community

Question 4: What assistance do you need to stabilize or make more secure your current housing or find other housing? (Referrals made based on needs)

- Rental assistance
- Utilities assistance
- Legal aid services
- Medical services
- Mental health services
- Weatherization assistance
- Employment services
- Assistance with accessing other benefits (SSA disability benefits, SNAP, WIC)
- Other: __________
Appendix 3. Optional Additional Intimate Partner Violence Screens

Within the past 12 months, have you been hit, slapped, kicked or otherwise physically hurt by someone? (core screen)

Are you in a relationship with a person who threatens or physically hurts you?

Has anyone forced you to have sexual activities that made you feel uncomfortable?

(Pregnancy Medical Home, ACOG Public Health Title X)

Within the last year, have you been:

Humiliated or emotionally abused in other ways by your partner or ex-partner? (core screen)

Afraid of your partner or your ex-partner?

Raped or forced to have any kind of sexual activity by your partner or ex-partner?

Kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner?

(HARK)
Appendix 4. Possible Questions for Optional Domains

**Community Safety**
Are safety issues quickly addressed by authorities (landlord, community managers, law enforcement)?
Is there a visible law enforcement presence in your neighborhood?
Is there gang activity in your neighborhood?
Have you or your children been approached by gang members?
Is there visible drug traffic in your neighborhood?
Are there instances of gun violence or public fighting in your neighborhood?

**Housing Quality**
My living conditions are bad – Yes, Somewhat, No – (Duke Population Health)
In the last month, have you had concerns about the condition or quality of your housing? (Health Begins)
Are you worried that something in your home might be making people sick? For example, problems with mold, cockroaches, rodents, or other safety issues? (UNC)
Think about the place you live. Do you have any problems with any of the following (check all that apply)?
  - Bug infestation
  - Mold
  - Lead paint or pipes
  - Inadequate heat
  - Oven or stove not working
  - No or not working smoke detectors
  - Water leaks
  - None of the above (Accountable Health Community)
My air is clean and my water is safe. Yes, Somewhat, No (Duke Population Health)

**Health Care/Medicine**
In the past year, have you or the family members you live with been unable to get medicines or health care (medical, dental, mental health, vision) when it was really needed? Yes, No (PRAPARE)
Do you need help to get health insurance for you and your family? (Wake County Human Services)
In the last month, have you needed to see a doctor, but could not because of cost? Yes, No (VCU-Alliance)
I receive good health care. Yes, Somewhat, No (Duke Population Health)

**Mental Health, Substance Use**
Are you interested in receiving resources for emotional wellness? (Advance Community Health Center)
During the past week, how much trouble have you had with feeling depressed or sad? None, Some, A Lot (Duke Population Health)
Do you worry about your mental health or drug and alcohol use? (Wake County Human Services)
Are you concerned about your child’s learning, performance or behavior in school? (Health Begins)
Did any of your parents have a problem with alcohol or other drug use?
Do any of your friends have a problem with alcohol or other drug use?

Does your partner have a problem with alcohol or other drug use?

In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?

In the past month, how often did you drink any alcohol, including beer or wine, or use other drugs?

**Family and Social Supports (parent/child attachment, prenatal support, social isolation, care giver support)**


- Are you generally excited and confident, rather than stressed and worried, about your role as a parent?
- Do you generally feel you know what to do to take care of your child(ren) and respond to their needs and the way they are growing and behaving?
- Have there been any changes in your family life (housing move, change in household membership, relationships) that might affect your role as a parent?

Would you have someone to help you if you were sick and needed to be in bed? Yes, No (VCU-Alliance)

How often do you see or talk to people that you care about and feel close to? (For example: talking to friends on the phone, visiting friends or family, going to church or club meetings) (PREPARE)

People stress me more than they support me. Yes, Somewhat, No (Duke Population Health)

In a typical week, how many times do you: (Health Begins)

- talk on the telephone with family, friends, or neighbors?
- get together with friends or relatives?
- attend religious or faith based services?
- attend meetings of the clubs or organizations you belong to?

During the past week, how often did you socialize with people (talk or visit with friends or relatives) (Duke)

Are you involved with some type of group that causes/forces you to make decisions you are not comfortable with? (Triangle Family Services)

Do you have a hard time making friends? (Triangle Family Services)

Do you have friends that help you with making decisions? (Triangle Family Services)

**Child Care**

Do problems getting child care make it difficult for you to work or study? (Health leads, VCU, Alliance)

In the past year, have you or the family members you live with been unable to get child care when it was really needed? Yes, No (PRAPARE)

During the past two years have you had a child care subsidy taken away? (Children’s HealthWatch Survey)

Would availability of child care affect hours spent/attendance at schooling, training, employment or job search? (National Longitudinal Survey of Youth)

In the past three months, how often have you experienced child care breakdowns? (Survey for Adolescent and Child Wellbeing)

Do you need daycare for your child? If yes, would you like help finding it? (WE CARE)


**Emotional Wellness/Stress/Stressors**

My illnesses are a heavy burden for me. Yes, Somewhat, No (Duke Population Health)

I am basically a healthy person. Yes, Somewhat, No (Duke Population Health)

I feel discriminated against. Yes, Somewhat, No (Duke Population Health)

Stress is when someone feels tense, nervous, anxious or can’t sleep at night because their mind is troubled. How stressed are you? Not at all, a little bit, somewhat, quite a bit, very much, I choose not to answer this question. (PRAPARE)

Do you feel overwhelmed or exhausted? (Triangle Family Services)

Do you have problems falling asleep at night? (Triangle Family Services)

Do you find that going for a walk helps when you are stressed? (Triangle Family Services)

How important is exercise? A little, very important, not important (Triangle Family Services)

Do you have specific areas in your life that make you stressed over others? For example, your job or lack of education or job skills, bills. (Triangle Family Services)

Do you feel stuck in your situation and need help to map out a life strategy or steps to follow? (Triangle Family Services)

Do have a vision for yourself and are not sure how to get there? If yes, would you like someone to help you map out your vision? (Triangle Family Services)

Do you feel pressure during holidays? (Triangle Family Services)

Do you feel uneasy when seasons change? If yes, do you find yourself moodier during these times? (Triangle Family Services)

**Education (ESL, GED)**

Do you have a high school degree? If NO, would you like help to get a GED? (WE CARE)

What is the highest level of school you have completed? (Elementary, High, College, Graduate, Professional) (Health Begins, PRAPARE)

What is the highest degree you earned? (High school diploma, GED, Vocational certificate (post high school or GED), Associate’s degree (junior college), Bachelor’s degree, Master’s degree, Doctorate (Health Begins)

I don’t have enough education. Yes, Somewhat, No (Duke Population Health)

Does your child have learning problems at school or have trouble keeping up with other students? (UNC)

How is your child doing in school? Is he/she getting the help to learn what he/she needs? (IHELLP)

Is your child enrolled in Head Start, preschool or early childhood enrichment? (IHELLP)

**Health Literacy/Communication/Language/Culture**

How confident are you filling out medical forms by yourself? (Health Leads/The Short Test of Functional Health Literacy in Adults – 7th grade)

Do you ever need help reading hospital materials? (Health Leads, VCU-Alliance)

How often do you have a problem understanding what is told to you about your medical condition? (Health Leads /The Short Test of Functional Health Literacy in Adults)

Do you feel that when you look for help that there is a language barrier issue? (Triangle Family Services)
Do people tell you that they cannot understand what you are saying? (It is hard to get help when no one can understand what a person is trying to convey due to language or comprehension deficit) (Triangle Family Services)

Are you comfortable providing information? (May get nervous and need someone to help) (Triangle Family Services)

Do you understand the information/paperwork that is presented to you? (Triangle Family Services)

Are you able to follow through with required information, e.g., returning documents or filling out applications, forms? (Triangle Family Services)

Do you read to your child every night? (IHELPP)

How happy are you with how you read? (IHELPP)

**Employment**

During the last four weeks, have you been actively looking for work? (Health Leads)

Do you have a job? If No, would you like help with finding employment and/or job training? (WE CARE)

Do you have a disability that prevents you from accepting any kind of work during the next 6 months (US Census - Health Leads)

Last week, did you work for pay at a job? (US Census – Health Leads)

What is your current work situation? Unemployed and seeking work; Part time or temporary work; Full time work; Otherwise unemployed, but not seeking work (ex-student, retired, disabled, unpaid primary care giver); I choose to not answer this questions (PRAPARE)

Which best describes your current occupation? (Homemaker, not working outside the home; Employed (or self-employed) full time; Employed (or self-employed) part time; Employed, but on leave for health reasons; Employed but temporarily away from my job (other than health reasons); Unemployed or laid off 6 months or less; Unemployed or laid off more than 6 months; Unemployed due to a disability; Retired from my usual occupation and not working; Retired from my usual occupation but working for pay; Retired from my usual occupation but volunteering (Health Begins)

I want to work but cannot find a job. (Duke Population Health)

**Income**

Do you have trouble making ends meet? (IHELPP)

I don’t have enough money to pay my bills. (Aldana & Liljenquist)

Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you? (The Organisation for Economic Co-operation and Development)

Do you ever have problems making ends meet at the end of the month? (Health Begins)

I have enough money for my basic needs. (Duke Population Health)

How hard is it for you to pay for the very basics like food, housing, medical care and heating? (Health Begins)

In the last 12 months, was there a time when you needed to see a doctor but could not because of cost? (Health Leads)

In the last 12 months, have you skipped doses of medication to make it last longer? (Advance Community Health Center)
In the last 12 months, did you skip medications to save money? (Medical Expenditure Panel Survey – Health Leads)

Suppose that you have an emergency expense that costs $400. Based on your current financial situation, how would you pay for this expense? If you would use more than one method to cover this expense, please select all that apply. (Federal Reserve)
   a. Put it on my credit card and pay it off in full at the next statement
   b. Put it on my credit card and pay it off over time
   c. With the money currently in my checking/savings account or with cash
   d. Using money from a bank loan or line of credit
   e. By borrowing from a friend or family member
   f. Using a payday loan, deposit advance, or overdraft
   g. By selling something
   h. I wouldn’t be able to pay for the expense right now

Do you have a budget? (Triangle Family Services)

Does the thought of bills overwhelm you? (Triangle Family Services)

Do you have a problem juggling bills and not sure what to pay and how? (Triangle Family Services)

Do you spend more money when you are not feeling good about yourself or situation? (Triangle Family Services)

Do you find that you have to borrow money from friends and family? (Triangle Family Services)

**Immigration**

Do you have concerns about any immigration matters for you or your family? (Health Begins)

Do you have questions about your immigration status? Do you need help accessing benefits or services for your family? (IHELLP)

At any point in the past 2 years, has seasonal or migrant farm work been your or your family’s main source of income? (PRAPARE)

Are you a refugee? (PRAPARE)

**Legal/Correctional**

In the past year, have you spent more than 2 nights in a row in a jail, prison, detention center or juvenile correctional facility? Yes, No, I choose not to answer this question. (PRAPARE)
Appendix 5. Select Tools, Resources and Links


