Addressing Social Needs (ASN) Electronic Clinical Quality Measure (eCQM) Specifications Document for Public Comment

Prepared By:

Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation

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Executive Summary

Background

The purpose of this request for public comment is for the Yale Center for Outcomes Research and Evaluation (CORE) to gain feedback from a broad range of stakeholders (including technical experts, providers, patients, purchasers, and the public at large) on the development of an electronic clinical quality measure (eCQM) designed to measure screening of patients for social needs within four domains, food insecurity, housing insecurity, utility insecurity, and transportation insecurity, as well as if an intervention activity is performed. This measure, Addressing Social Needs (ASN) eCQM, aims to build upon existing measurement by making enhancements in the following:

1. Enhancing accuracy of measurement by refining social need domain definitions and requiring technical standards for endorsed screening tools;
2. Promote efficiency and alignment across the ecosystem through use of all-payer eCQMs ;
3. Alignment with national health information technology interoperability standards (USCDI); and
4. Encouraging follow-up when screening is positive.

The measure is initially being developed for the Inpatient Hospital Reporting (IQR) program, though CMS anticipates including the measure in additional programs such as the Merit-based Incentive Payment System (MIPS), Medicare, and Hospital Outpatient Quality Reporting (HOQR). Please keep possible program uses in mind when offering measure comments.

Request for Public Comment

Comments received will inform potential refinements to the measure which will begin pilot testing this fall in the hospital and Hospital-based Outpatient Department (HOPD) settings. Yale CORE seeks comment on the measure specifications within this document with specific attention to:

1. The list of currently included instruments (Appendix 1) as a result of the applied instrument inclusion criteria.
    a. Please note there are limitations to the inclusion of any additional instruments that may be identified through public comment:
        i. If an instrument is identified that is LOINC encoded and does not pass the measure criteria for inclusion, it cannot be added to the measure set.
        ii. If an instrument is identified that is LOINC encoded and passes the measure criteria for inclusion, it can be added to the final measure set but may not be pilot tested pending its use in already contracted testing sites.
        iii. If an instrument is identified that is not LOINC encoded, it cannot be considered until it is LOINC encoded. This process often takes over six months and therefore the instrument may not be considered until the first round of measure re-evaluation.
2. The proposed scoring approach using an ordinal scale across four social needs domains. (See Table 3)

To be considered, comments must be received by 11:59 PM EST on July 2, 2023 at cmsaddressingsocialneeds@yale.edu.

Project Overview

CMS has contracted with Yale New Haven Health Services Corporation (YNHHSC) CORE to develop measures to assess the quality of care provided to hospitalized Medicare beneficiaries. As part of this contract, CORE is developing a hospital-level eCQM to measure how hospitals are addressing the social needs of their patients.

Addressing social needs can improve health and wellness and advance health equity. This measure aims to support hospital initiatives to address the unmet needs of their patients through better screening and coordination with local and community-based resources and enable more public transparency and hospital accountability for whole-person care. The ASN eCQM calculates the percentage of eligible patients who received a social needs screening for at least four social needs (food insecurity, housing insecurity, transportation insecurity, utility insecurity) using a standardized, approved, screening instrument and among those with a positive screening, the percentage of eligible patients who received a follow-up plan documented prior to discharge. Of note, a documented assessment of a social need with domain-specific ICD-10-CM codes is under consideration in the measure to incentivize critical social ICD-10-CM utilization. An example of one possible use for administrative data would be as an alternative path to identifying a positive screening.

The ASN eCQM is intended for use in measuring hospital-level performance of eligible hospitals participating in the CMS Hospital Inpatient Quality Reporting (IQR) Program. The final hospital-level score is under development and is expected to reflect both screening and follow-up activities. The final quality measure will assess each hospital's performance rate relative to that of other IQR participating acute care hospitals. There is no risk adjustment used although peer grouping based on hospital patient population may be considered when reporting the results of this measure.

The contract name is Development, Reevaluation, and Implementation of Outcome/Efficiency Measures for Hospital and Eligible Clinicians, Option Period 3. The contract number is 75FCMC18D0042, Task Order 75FCMC19F0001. The measure is currently under development (anticipated completion is spring 2024), and the specifications are subject to revision based on stakeholder input and further conversations with CMS.

Information included is current as of April 28, 2023.

eCQM Title

ASN eCQM

eCQM Number

TBD

eCQM Version Number

TBD

Measurement Period

January 1, 20XX through December 31, 20XX

Measure Type

Process

Measure Description

This measure is currently under development. The measure as currently proposed calculates an ordinal score for each eligible patient for four social needs domains: food insecurity, housing insecurity, transportation insecurity, utility insecurity. The score will reflect whether the patient was screened for social needs or had social needs identified by ICD-10 Z codes, and among those with social needs, whether the patient received follow-up for the identified need within a specified time period. Social needs screening will require use of one of CMS-approved standardized screening instruments, although hospitals may receive some credit for identifying social needs through another mechanism (for example, in conversation with social worker). Patients with a positive screening and with an appropriate follow-up intervention documented in the electronic health records (EHR) will receive the highest score on an ordinal scale (for example, 6). The 4 domain scores will be summed up with a lowest score of 0 (no screening attempted by hospital) to a highest score of 20 (patient screened positive for all 4 domains and received follow-up for all 4). The final hospital-level score is also under development but is expected to reflect the average score across all 4 domains per eligible patient.

Hospitals may select from a list of qualifying standardized screening instruments to complete the quality measure. This eCQM is calculated using data from EHRs. Successful completion of the measure requires that hospitals encode information on screening, diagnoses, and follow-ups into structured data elements in accordance with the United States Core Data for Interoperability (USCDI), a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange. The measure will be initially authored using the Quality Data Model (QDM) standard with anticipated future translation to the HL7/FHIR standards.

Measure Definitions

Social Domains

For the purposes of this measure, *social needs* are defined as *non-medical patient needs that impact health*. **Table 1** below summarizes and describes the required domains and sub-domains for this measure.

Table 1: Social Domains and Definitions

Domain	Definition
Food Insecurity	Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food
Housing Insecurity	Screening for housing insecurity requires assessments for housing instability and homelessness,
Housing Instability	Currently housed but experiencing any of the following circumstances in the past 12 months: being behind on rent or mortgage, multiple moves, cost burden, or risk of eviction.
Homelessness	Living in a place not meant for human habitation. Includes living on the street, in cars, emergency shelters, transitional housing, or hotels and motels paid for by an organization or government program
Transportation Insecurity	A condition in which one is unable to regularly move from place to place in a safe and timely manner because one lacks the material, economic or social resources necessary for transportation.
Utility Insecurity	Limited or uncertain access to home utilities (such as energy, water, electricity) to sustain a healthy and safe life in the geographic area where a household is located.

Screening Instruments

Hospitals may satisfy the screening by instrument section of the numerator statement only if using a qualifying *standardized screening instrument*. A screening instrument is defined for the purposes of this measure, as an assessment, survey, tool, or questionnaire which has been qualified as meeting eligibility criteria for evaluating a single social need. Screening using a screening instrument that has not been qualified for the purposes of this quality measure will not satisfy the numerator statement. (Note the role of ICD-10 Z codes as equivalent to screening discussed otherwhere in this document.) For domains with specified/distinct sub-domains (i.e., housing insecurity) hospitals are required to screen for all sub-domains (homelessness, housing instability). When calculating the domain-level score for housing insecurity, each sub-domain is weighted equally.

Yale CORE has developed three criteria to guide the selection of screening instruments:

1. Included screening instruments must be *digitally encoded* in instrument terminology standards (At present this terminology is LOINC though in future versions SNOMED encoding may apply). The goal of this criterion is to promote digital measurement and alignment with US Health Information Technology (HIT) standards, and to align with the CMS dQM Strategic Roadmap.
2. The instruments must meet validation criteria. For most social risk domains, the base threshold of validity is *face validit*y as assessed by domain subject matter experts. If a domain has a recognized gold standard instrument, the threshold rises to require that screening instruments must demonstrate published evidence of being tested against the standard and meeting at least industry standards of sensitivity (70%) and specificity (70%). This is consistent with recent guidance from the National Quality Forum around social data collection.
3. Yale CORE recognizes that there may be cases where there are no validated instruments meeting the gold standard that are practical for clinical use. In those cases, the requirement to meet the gold standard may be postponed until pragmatic tools are available.

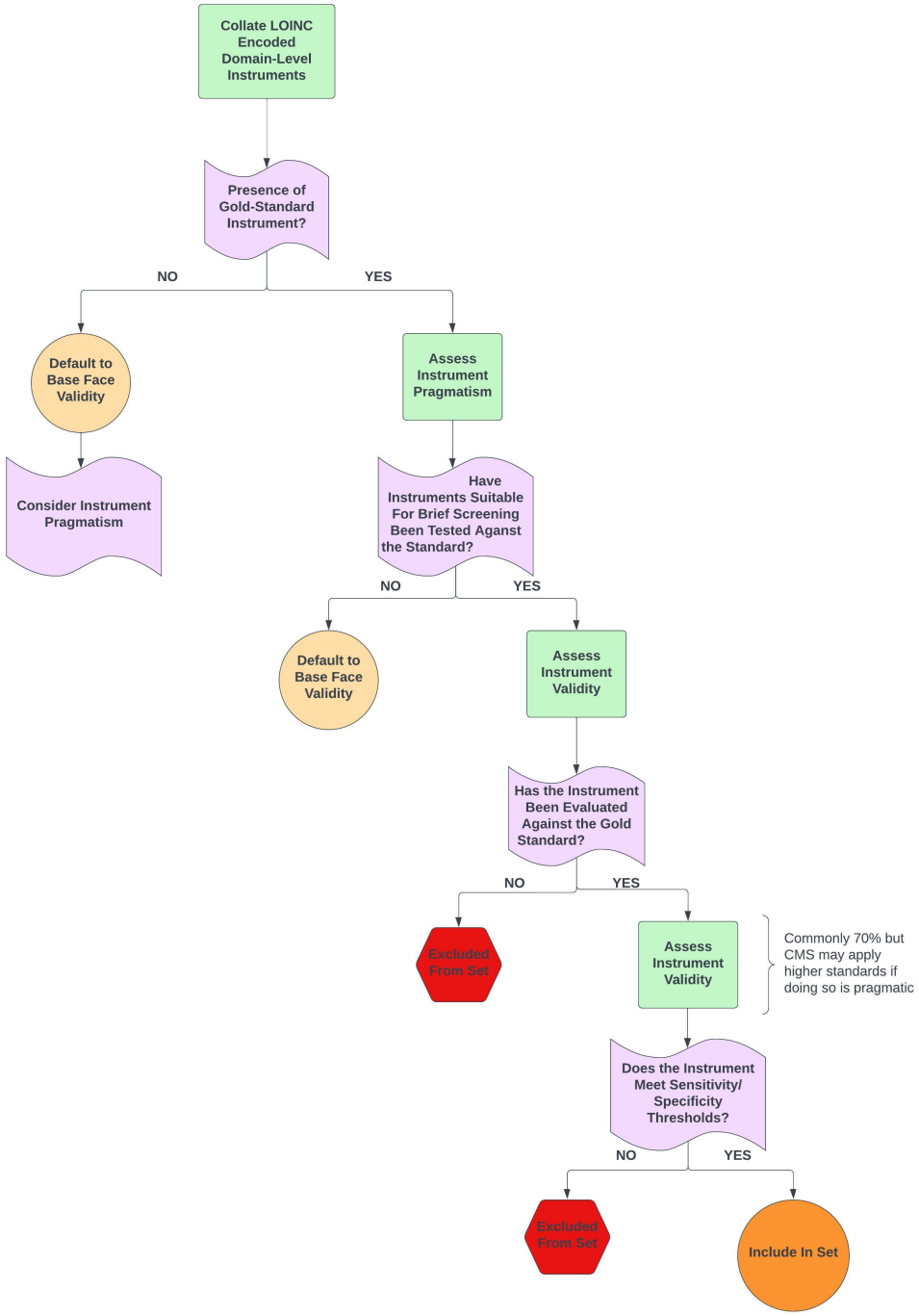
To implement the criteria above, the Yale CORE team and contracted subject matter experts further refined Gravity Project instrument value sets. The Gravity Project, a collaborative public-private initiative with the goal to develop consensus-driven data standards to support the collection, use, and exchange of data to address the social determinants of health (SDOH), assesses social risk domain instruments for face validity in line with the stewarding of USCDI aligned value sets in the National Library of Medicine Value Set Authority Center (VSAC) for the Office of the National Coordinator (ONC). Instruments that meet face validity as assessed by convened subject matter experts, and are encoded in LOINC, are maintained in domain and sub-domain level VSAC value sets.

The refinement occurred in three distinct steps.

1. Ensuring the food insecurity instrument value set is in line with the USDA gold standard by reviewing the literature and limiting to instruments that met the sensitivity and specificity thresholds noted above.
2. Further assessing domain-level instruments by whether they have the capacity for domain-level scoring resulting in a final set applicable to the ASN measure.

Figure 1 displays a flowchart graphic of application the criteria and process and **Appendix Table 4** lists the eligible individual domain screening instruments for each screening domain identified by Yale CORE utilizing these criteria and this process.

Figure 1: Criteria for Inclusion of a Screening Instrument in the ASN eCQM



To satisfy screening requirements for the measure, the hospital must encode positive and negative responses to each screening instrument domain using the standardized format defined by the screening instrument developer. Hospitals are encouraged to screen for additional social needs beyond those specified as required in this measure. The screening should be provided in the preferred written language of the patient and be administered prior to every qualifying discharge regardless of the date of the patient's most recent prior discharge, screening, or previously recognized unmet social need.

Follow-up

Follow-up is defined as the provision of a resource, education, direct provision of a service, or referral to a community-based or social services organizations in response to a patient's future desired condition or change in condition related to a social need. For example, a patient with identified food insecurity who identifies a goal of having adequate quality of meals and snacks, who receives a referral to a local food bank prior to discharge, would describe successful completion of the action step. **Table 2** lists the qualifying types of actions based on work by the Gravity Project. Because the Evaluation/Assessment reflects screening itself, any interventions in this category would not count as successful follow-up for a given domain. The follow-up interventions or actions represent a range of intensities or levels of effort. Note that at this point, CMS has decided not to account for differences in intensity of interventions implemented by hospitals in the measure score at this time. Actions must be documented in the health record prior to the date of hospital discharge.

*Table 2: Draft Qualifying Follow-Up Actions From Gravity Project**

Action	Definition
Adjustment	Activities that focus on altering clinical care to accommodate identified social barriers
Assistance/Assisting	To give support or aid to; help
Coordination	Process of organizing activities and sharing information to improve effectiveness.
Counseling	Psychosocial procedure that involves listening, reflecting, etc., to facilitate recognition of course of action/solution.
Education	Procedure that is synonymous with those activities such as teaching, demonstration, instruction, explanation, and advice that aim to increase knowledge and skills, change behaviors, assist coping and increase adherence to treatment.
Evaluation of eligibility	Process of determining eligibility by evaluating evidence.
Evaluation/Assessment**	Determination of a value, conclusion, or inference by evaluating evidence.
Provision	To supply/make available for use.
Referral	The act of clinicians/providers sending or directing a patient to healthcare professionals and/or programs for services (e.g., evaluation, treatment, aid, information etc.)

***** Gravity Project, https://confluence.hl7.org/display/GRAV/Food+Insecurity

**This action type will be excluded as it is satisfied by screening

Measure Specifications

Data Sources

This measure is calculated using data on social needs collected from hospital electronic health records (EHRs).

Risk Adjustment

None - TBD

Instructions

Hospital measure scores are to be calculated once per measurement period by hospitals with any eligible patients. This measure will consider all eligible discharges for patients with more than one discharge during the measurement period; multiple admissions for each patient will require screening and follow-up. The follow-up must be related to the identified social need if help is desired by the patient. This is an all-payer measure which includes all hospitalized patients regardless of insurance status.

Denominator Population:

The denominator (target population) includes patients of all ages who are discharged from an acute care hospital or critical access hospital (CAH) during the measurement period. The denominator includes all eligible discharges regardless of previous hospitalizations or previously identified social needs.

Exclusions:

Rationale Statement: Hospitals may have more limited ability to assess patients' needs if they meet any of the below exclusion criteria.

1. Discharged against medical advice;
2. Dies prior to discharge; or
3. Transferred to another acute care hospital.

Sampling

None

Minimum Case Count

TBD

Measure Scoring

The approach to measure scoring is under development. It is currently proposed to be the average score per patient at each hospital, calculated as the total score for each individual summed across 4 domains, then divided by the number of eligible patient admissions at the hospital. Alternatively, CMS could decide to set a threshold for patient scores and calculate the percentage of patients who meet the threshold criteria.

Measure Score Calculation

We attempted to account for the following measurement issues when developing a scoring algorithm. Note that we did not attempt to apply any differential weights based on a potential continuum of follow-interventions.

1. Differences in burden for hospitals with more patients with social needs.
2. Partial completion of screening or follow-up activities.
3. Patient declinations of screening or follow-up.
4. ICD-10 Z codes reflecting social needs.

The **Table 3** below reflects a proposed score for each patient for 4 social needs domains. Scores for each domain would be summed up for a total patient score. A patient's score could range from 0 to 20. At the hospital level, all total patient scores would be summed for each of the hospital's eligible patients, then divided by the total number of patients at the hospital to yield an average patient score per hospital.

CMS could decide to use an average score as the outcome or, alternatively, set a threshold for patient scores and calculate the percentage of patients who meet the threshold criteria.

Table 3: Proposed scoring for ASN measure

Scoring Criteria	Housing Domain Score	Food Domain Score	Transportation Domain Score	Utilities Domain Score
Did not screen or code Z code	0	0	0	0
Screening declined (and no Z code)	1	1	1	1
Not screened but has Z code (identifying social need) with no follow-up	2	2	2	2
Screened positive but no follow-up	3	3	3	3
Screened negative (and no Z code)	3	3	3	3
Screened positive (or has Z code) but follow-up declined	4	4	4	4
Screened positive (or has Z code) and followed up	5	5	5	5

Appendix 1

Table 4: Qualifying Screening Instruments for Each Domain

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Food Insecurity	United States Department of Agriculture (USDA) Modules 18-item Adult 6-item (short form)	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/survey-tools/	https://loinc.org/95361-2/ https://loinc.org/95353-9/ https://loinc.org/95361-2/	Open Use
Food Insecurity	Hunger Vital Sign ™ *Included in Accountable Health Communities (AHC) Health-Related Social Needs(HRSN) and American Academy of Family Physicians (AAFP) Social Needs Screening Tools*	https://childrenshealthwatch.org/public-policy/hunger-vital-sign/	https://loinc.org/88121-9/	"There is no fee or license required to use the Hunger Vital Sign™. We only ask that parties properly cite the tool as follows:" Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, T., Rose-Jacobs, R., Cook, J. T., Ettinger de Cuba, S. E., Casey, P. H., Chilton, M., Cutts, D. B., Meyers A. F., Frank, D. A. (2010). Development and Validity of a 2-Item Screen to Identify Families at Risk for Food Insecurity. Pediatrics, 126(1), 26-32. doi:10.1542/peds.2009-3146.

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Food Insecurity	Safe Environment for Every Kid (SEEK)	https://seekwellbeing.org/wp-content/uploads/2022/10/SEEK-PQ-R-English-9-22.pdf	https://loinc.org/95403-2	If you're interested in implementing SEEK, the SEEK Project requires a signed License Agreement which describes the copyright ownership and terms for using the copyrighted materials. https://seekwellbeing.org/seek-license/
Housing Instability	*Included in Centers for Medicaid and Medicare Services Accountable Health Communities Model 1 screener* (CMS-AHC1)	https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf	https://loinc.org/96777-8/	All questions drawn from PRAPARE require: "Any organization can use this screening question, as long as they reach out to the screening question author to notify them of their plan to use it, and cite the screening item appropriately"
Housing Instability	Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)	https://prapare.org/wp-content/uploads/2021/10/PRAPARE-English.pdf	https://loinc.org/93025-5/	Requires End User License
Housing Instability	AAFP (short)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99595-1/	"The EveryONE Project materials are copyrighted, and The EveryONE Project is a pending registered trademark of the American Academy of Family Physicians (AAFP). By downloading any of these

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Housing Instability	AAFP (long)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99593-6/	materials, you agree that you will only use The EveryONE Project materials for the purposes of education and advancing health equity. The EveryONE Project materials may not be modified in any way and may not be used to state or imply the AAFP's endorsement of any goods or services."
Housing Instability	Housing Stability Vital Sign™	-	https://loinc.org/98975-6/	As with HVS above
Housing Instability	WellRx	https://www.jabfm.org/content/29/3/414	https://loinc.org/93667-4/	Unknown
Housing Instability	Health Leads	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/	https://loinc.org/99549-8/	Creative Commons
Homelessness	CMS-AHC1	https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf	https://loinc.org/96777-8/	All questions drawn from PRAPARE require: "Any organization can use this screening question, as long as they reach out to the screening question author to notify them of their plan to use it, and cite the screening item appropriately"
Homelessness	PRAPARE	https://prapare.org/wp-content/uploads/2021/10/PRAPARE-English.pdf	https://loinc.org/93025-5/	Requires End User License

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Homelessness	AAFP (short)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99595-1/	"The EveryONE Project materials are copyrighted, and The EveryONE Project is a pending registered trademark of the American Academy of Family Physicians (AAFP). By downloading any of these materials, you agree that you will only use The EveryONE Project materials for the purposes of education and advancing health equity. The EveryONE Project materials may not be modified in any way and may not be used to state or imply the AAFP's endorsement of any goods or services."
Homelessness	Housing Stability Vital Sign™	-	https://loinc.org/98975-6/	-
Homelessness	WellRx	https://www.jabfm.org/content/29/3/414	https://loinc.org/93667-4/	Unknown
Homelessness	Health Leads	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/	https://loinc.org/99549-8/	Creative Commons
Transportation Insecurity	CMS-AHC1	https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf	https://loinc.org/96777-8/	All questions drawn from PRAPARE require: "Any organization can use this screening question, as long as they reach out to the screening question author to notify them of their plan to use it, and cite the screening item appropriately"
Transportation Insecurity	PRAPARE	https://prapare.org/wp-content/uploads/2021/10/PRAPARE-English.pdf	https://loinc.org/93025-5/	Requires End User License

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Transportation Insecurity	AAFP (short)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99595-1/	"The EveryONE Project materials are copyrighted, and The EveryONE Project is a pending registered trademark of the American Academy of Family Physicians (AAFP). By downloading any of these materials, you agree that you will only use The EveryONE Project materials for the purposes of education and advancing health equity. The EveryONE Project materials may not be modified in any way and may not be used to state or imply the AAFP's endorsement of any goods or services."
Transportation Insecurity	AAFP (long)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99593-6/	
Transportation Insecurity	Health Leads	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/	https://loinc.org/99549-8/	Creative Commons
Transportation Insecurity	WellRx	https://www.jabfm.org/content/29/3/414	https://loinc.org/93667-4/	Unknown
Transportation Insecurity	Outcome and Assessment Information Set (OASIS)	https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/homehealthqualityinits/oasis-data-sets	https://loinc.org/99160-4/ https://loinc.org/99178-6/ https://loinc.org/99131-5/ BUT 93030-5 Question from PRAPARE	All questions drawn from PRAPARE require: "Any organization can use this screening question, as long as they reach out to the screening question author to notify them of their plan to use it, and cite the screening item appropriately"

Domain	Tool Name	Tool Link	LOINC Link	Citation and Use Comments
Transportation Insecurity	Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI)	https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/irf-quality-reporting/irf-pai-and-irf-pai-manual#:~:text=IRF%20PPS%20webpage.-,IRF%2DPAI,Quality%20Reporting%20Program%20(QRP).	https://loinc.org/93128-7/ BUT 93030-5 Question from PRAPARE	
Transportation Insecurity	Comprehensive Universal Behavior Screen (CUBS)	https://mdlogix.com/bhworks-page/	https://loinc.org/89556-5	License and fees required
Utility Insecurity	CMS-AHC1	https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf	https://loinc.org/96777-8/	"Any organization can use this screening question, as long as they reach out to the screening question author to notify them of their plan to use it,and cite the screening item appropriately." Richard Sheward, MPP: richard.sheward@bmc.org
Utility Insecurity	PRAPARE	https://prapare.org/wp-content/uploads/2021/10/PRAPARE-English.pdf	https://loinc.org/93025-5/	Requires End User License
Utility Insecurity	AAFP (short)	https://www.aafp.org/family-physician/patient-care/the-everyone-project/toolkit/assessment.html	https://loinc.org/99595-1/	"The EveryONE Project materials are copyrighted, and The EveryONE Project is a pending registered trademark of the American Academy of Family Physicians (AAFP). By downloading any of these

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Utility Insecurity	Health Leads	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/	https://loinc.org/99549-8/	Creative Commons
Utility Insecurity	WellRx	https://www.jabfm.org/content/29/3/414	https://loinc.org/93667-4/	Unknown