

# APPENDIX B:

## SUMMARY AND ENUMERATION OF DIFFERENT SCREENING TOOLS USED TO IDENTIFY SOCIAL DETERMINANTS OF HEALTH

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### SCREENING FOR SOCIAL DETERMINANTS OF HEALTH: A FRAMEWORK AND CROSS-WALK OF SELECT SCREENING TOOLS AND QUESTIONS

At every age, a person's health is affected by many factors – including ones which extend beyond clinical diagnoses and their medical responses. A person's physical environment – including its safety from accidents and injury and environmental toxins – impacts health. A person's economic environment – the ability to meet essential housing, clothing, food, and other needs and to be able to invest in the future – impacts health. A person's social environment – friends and mentors, persons who can provide support, overall friendly environments – impacts health. External stresses, adversities and mediating supports to mitigate them – in the home, neighborhood, workplace, and educational settings – impact health.

Further, a person's own lifestyle – diet and exercise, use of alcohol and drugs, use of tobacco, exercise of self-control and avoidance of risky behaviors – not only impacts the person's own health but the health of others. While sometimes considered personal behaviors and responsibilities, this lifestyle is often shaped by environment, even at a very early age where young children's brains are developing and shaping executive function and self-control.

All these represent different “social determinants of health” (SDOHs) as distinguished from bio-medical ones. They have profound impacts upon health at all ages, starting at birth (and even before, in utero). Health practitioners have the opportunity to screen for such determinants, particularly during routine physical examinations or well-child visits, either in the questions they pose to patients or the information they gather in the practice office or through surveys completed before the visit.

Screening for such social determinants also implies that that the practitioner will be able to initiate some response, when the screening suggests that there is a social determinant that can jeopardize health. This can be in the form of direct practitioner advice to the patient, referral for more detailed assessment and diagnosis with someone who can then prescribe or conduct treatment, or connection with other resources in the field that can provide help. Screening without any response or referral can violate the practitioner dictum of “do no harm,” suggesting a need or deficit that the patient may be experiencing but then doing nothing to cure or ameliorate it.

As the name implies, screening also is something that should involve minimal time and be used to identify possible concerns, not definitive diagnoses. Practitioners have only so much time they can spend with patients, and it is not a good use of their professional expertise to spend extended time identifying and responding to concerns outside their medical expertise.

The following table provides a framework for screening for social determinants of health, based upon the framework provided by the World Health Organization (with slight adaptation). The WHO has identified ten social determinants of health (social gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food, and transport). These have been further categorized in three general domains – material well-being, personal well-being, and social ties and well-being. While it might be captured under one of these headings, added here is a fourth domain and additional social determinant – environmental safety (home and community well-being). It further

incorporates specific questions used from a number of different scales and surveys which have been developed to screen for social determinants. Some have been developed specifically for particular age groups (pediatric, adolescent, adult, senior) and some to measure specific social determinants. The questions employed in these scales are provided underneath the different social determinant domains, in some instances further broken down by subcategories.

Under Medicare, the first annual wellness visit (AWV) represents a “Welcome to Medicare” visit that provides for a personalized prevention services plan and is paid at a higher rate than subsequent annual visits. Under the Affordable Care Act, a complete family history is required as part of the “Welcome to Medicare” visit. In addition to the complete family history, the healthcare practitioner completes: (1) a screen for risk of depression or other mood disorders, and (2) a screen for functional abilities and level of safety. Most often used by practitioners for depression is the Patient Health Questionnaire Screening for Depression or its two-item subset. Included here are a Functional Activities Questionnaire and a Home Safety Questionnaire which have been employed for the second screen.

The following are the screening tools or surveys used in constructing this table, with the acronym used to identify them in the table.

- Institute of Medicine Core Domains and Measures of Social and Behavioral Determinants of Health for Electronic Medical Records – IOM
- NACHC Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences – PRAPARE
- Survey of Wellbeing of Young Children Family Questions – SWYC
- Medical Legal Partnership Screening Questions – MLP
- Devereux Adult Resiliency Survey – DARS, with subsections on relationships – R; internal beliefs – IB; initiative – I; and self-control – SC
- General Self-Efficacy Scale – GSE
- Trait Hope Scale – THS, with two subscales of agency – A; and pathways – P
- Patient Health Questionnaire Screening for Depression – PHQSE
- Screening, Brief Intervention, and Referral to Treatment preliminary screen (which can lead to additional screening for alcohol use (AUDIT) and drug use (DAST)) -- SBIRT
- RAND Social Support Survey Instrument – SSSI, with subscales for emotional/informational support – EI; tangible support – T; affectional support – A; and positive social interaction – PS, (plus one additional item)
- Mindful/Attention Awareness Scale – MAAS
- Primary Care PTSD Screen -- PTSD
- Parent Screening Questionnaire from Safe Environment for Every Kid (SEEK) – PSQ
- Bright Futures Pediatric Intake Form – BFPIF
- Hope Teen Survey – HTS
- 100 Million Lives Measures for Adult Well-Being – 100ML
- Functional Activities Questionnaire – FAQ
- Home Safety Questionnaire—HSQ
- VA Homelessness Screening Clinical Reminder – VA
- Oregon Family Well-Being Assessment Pregnancy (see Appendix 5, questions not included in Table)

Of these, the IOM and PRAPARE are the most comprehensive screening/assessment tools on this list which apply to patients generally, while many of the others either are more specific to a particular social determinant domain (e.g. resiliency, housing and homelessness, functional status) or specific population of patient (young children, seniors, adolescents, pregnant women). The first two Appendices elaborate on the IOM and PRAPARE tools.

This cross-walk and its appendices represent an effort to provide options, including specific questionnaire language, for developing social determinants screening tools, with a particular emphasis upon use by primary health

practitioners. There is a great deal of overlap in questions raised across these different tools, but none currently contain the full range of questions and there are some small variations in how specific questions are asked.

Next Steps: 1. Develop a common core set of questions to be considered as a basis for inclusion in a general SDOH screening tool, starting with the PRAPARE and IOM screens, and 2. Develop a set of questions for specific populations (young children and their families, adolescents, young adults without children, pregnant women, seniors, etc.) that adapt and expand upon that core set based upon the particular life course issues for those populations.

## TABLE: DOMAINS OF SOCIAL DETERMINANTS AND CROSS-WALK OF SCREENING TOOLS

The ten social determinants of health have been organized into three domains: material well-being (the social gradient, unemployment, food, transport), personal well-being (stress, work, and addiction), and social ties and well-being (early life, social exclusion, social support). A fourth domain, environmental safety (home and neighborhood) has been added. While the screening questions cover most aspects of the determinants, there are areas (transport, earnings, and experiencing exclusion/discrimination) which largely were not covered by the screening instruments. The cross-walk does show a good deal of overlap, however, in how questions are framed to screen for different social determinants.

### Material Well-Being

**The Social Gradient.** Life expectancy is shorter and most diseases are more common further down the social ladder. Health policy must tackle the social and economic determinants of health.

**Unemployment.** Job security increases health, well-being and job satisfaction. Higher rates of unemployment cause more illness and premature death.

**Food.** Because global market forces affect the food supply, healthy food is a political issue.

**Transport.** Healthy transport means less driving and more walking and cycling, backed up by better public transport.

- Poverty/ability to make ends meet (below 50 percent, 100 percent, and 200 percent)
- Household savings/ economic capacity to respond to emergencies
- Adequate transportation to make and keep appointments/engagements
- Food security
- Housing safety, stability, affordability

### Questions:

How hard is it for you to pay for the very basics like food, housing, medical care, and heating? Would you say it is ... very hard, somewhat hard, not hard at all. [IOM]

In the past year, have you or any family members you live with been **unable** to get any of the following when it was **really needed**? 1. Food 2. Utilities 3. Medicine or any health care need (Medical, Dental, Mental Health, Vision), 4. Phone 5. Clothing 6. Child Care 7. Other (please write) [PRAPARE]

Which of the following describe a concern you have about your income or benefits: (a) Medicare/Medicaid/health insurance, (b) disability benefits, (c) Family First, (d) SNAP/WIC, (e) unemployment benefits/compensation, (f) child support, (g) pension, (h) other [MLP]

Are you unable to earn income as a result of a disability? [MLP]

On a 0-10 scale, where 10 represents the best financial situation for you and 0 represents the worst financial situation for you, where on the scale do you stand right now? [100ML]

Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living? [PRAPARE]

Which of the following describes the amount of food your household has to eat ... enough to eat, sometimes not enough to eat, often not enough to eat [IOM]

In the past month was there any day when you or anyone in the family went hungry because you did not have enough money for food? [SWYC]

In the last year, did you worry that your food would run out before you got money or Food Stamps to buy more? [PSQ]

In the last year, did the food you bought just not last and you didn't have money to get more? [PSQ]

What is your housing situation today? Have housing. Do not have housing (staying with others, in a hotel, in a shelter, living conditions outside on the street, etc.) Are you worried about losing your housing? [PRAPARE]

1. In the past 2 months, have you been living in stable housing that you own, or stay in as part of a household? 2. Are you worried or concerned that in the next 2 months you may NOT have stable housing that you own, rent, or stay in as part of a household? [VA]

What address do you live at? [IOM and PRAPARE]

### **Personal Well-Being**

**Stress.** Stressful circumstances, making people feel worried, anxious and unable to cope, are damaging to health and may lead to premature death.

**Work.** Stress in the workplace increases the risk of disease. People who have more control over their work have better health.

**Addiction.** Individuals turn to alcohol, drugs, and tobacco and suffer from their use, but use is influenced by the wider social setting.

- Depression/mental health
- ACEs and AAE's (adverse adult experiences – including domestic violence and other victimization)
- Substance use/addiction
- Sense of personal efficacy, resilience, hope, mindfulness

### **Questions:**

#### Depression/mental health/stress

Over the last two weeks, how often have you felt little interest or pleasure in doing things. [IOM, PHQSD, SWYC; PSQ]

Over the last two weeks, how often have you found yourself feeling down, depressed or hopeless. [IOM, PHQSD +7 more, SWYC, PSQ]

In general, how would you rank your mental health, including your mood and ability to think? [100ML]

Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his/her mind is troubled all the time. Do you feel this kind of stress these days? Not at all, A little bit, Somewhat, Quite a bit, Very much. [IOM]

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 [PRAPARE]

Do you often feel under extreme stress? [PSQ]

#### Adverse experiences, PTSD, and domestic situations

When you were a child, (1) did either parent have a drug or alcohol problem, (2) were you raised part or all of the time by foster parents or relatives, (3) do you feel you were physically abused, (4) do you feel you were neglected, (4) do you feel you were hurt in a sexual way, (5) did your parents hurt you when they were out of control. [BF-PIF]

How often: (1) did your parents ground you or put you in time out, (2) did your parents ridicule you in front of friends or family, (3) were you hit with an object such as a belt, board, hairbrush, stick, or cord, (4) were you thrown against walls or down stairs. [BF-PIF]

In your life, have you ever had any experiences that were so frightening, horrible, or upsetting that, in the past month, you: (1) have had nightmares about it or thought about it when you did not want to? (2) tried hard not to think about it or went out of your way to avoid situations that reminded you of it? (3) were constantly on guard, watchful, or easily startled? (4) felt numb or detached from others, activities, or your surroundings? [PTSD]

Are you afraid of someone you love? Do you have guardianship or custody issues? Are you concerned about the welfare of one of your children or a child you live with? [MLP]

In general, how would you describe your relationship with your spouse/partner (tension)? [SWIC]

Do you and you partners work out arguments (difficulty) [SWIC]

In the past year, have you ever felt threatened in your home? [BFPIF]

In the past year, has your partner or other family member pushed you, punched you, kicked you, hit you, or threatened to hurt you? [BFPIF]

In the past year, have you been afraid of your partner? [PSQ]

Within the last year, have you been humiliated or emotionally abused in other ways by your partner or ex-partner? Yes No 2. Within the last year, have you been afraid of your partner or ex-partner? Yes No 3. Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner? Yes No 4. Within the last year, have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner? Yes No [IOM]

In the past year, have you been afraid of your partner or ex-partner? [PRAPARE]

### Substance Use

In the last year, have you ever drunk alcohol or used drugs more than you meant to? [SWYC]

Have you felt you wanted or needed to cut down on your drinking or drug use in the last year? [SWYC]

Has a family member's drinking or drug use ever had a bad effect on your child? [SWYC]

In the past year, have you ever had a drinking problem? Have you tried to cut down on alcohol in the past year? How many drinks does it take for you to get high or get a buzz? Do you ever have five or more drinks at one time? [BF-PIF]

Have you ever had a drug problem? Have you used any drugs in the last twenty-four hours (and which). Are you in a drug or alcohol recovery program now? Would you like to talk with other parents who are dealing with alcohol or drug problems? [BF-PIF]

In the past year, have you had a problem with drugs or alcohol? In the past year, have you felt the need to cut back on drinking or drug use? [PSQ]

1. How often do you have a drink containing alcohol? a. Never b. Monthly or less c. 2–4 times a month d. 2–3 times a week e. 4 or more times a week 2. How many standard drinks containing alcohol do you have on a typical day? a. 1 or 2 b. 3 or 4 c. 5 or 6 d. 7 to 9 e. 10 or more 3. How often do you have six or more drinks on one occasion? a. Never b. Less than monthly c. Monthly d. Weekly e. Daily or almost daily [IOM]

A drink is defined as: 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of spirits. 1. How often do you have a drink containing alcohol? a. Never b. Monthly or less c. 2–4 times a month d. 2–3 times a week e. 4 or more times a week 2. How many drinks containing alcohol do you have on a typical day when you are drinking? a. 1 or 2 b. 3 or 4 c. 5 or 6 d. 7 to 9 e. 10 or more 3. How often do you have five or more drinks on one occasion? a. Never b. Less than monthly c. Monthly d. Weekly e. Daily or almost daily // How many times in the past you have you used an illegal

drug or used a prescription medication for non-medical reasons? (If asked what non-medical reasons means you can say because of the experience or feeling the drug caused) [SBIRT]

### Faith, Meaning, Purpose, Self-Worth

How strongly do you agree with this statement: I lead a purposeful and meaningful life? [100ML]

How strong are your family's religious beliefs or practices? [BF-PIF]

How true (yes/sometimes/not yet) are these true for you: (1) my role as a caregiver is important, (2) I have personal strengths, (3) I am creative, (4) I have strong beliefs, (5) I am hopeful about the future, (6) I am lovable. [DARS-IB]

How much do these statements describe you: (1) I expect good things to happen to me, (2) I feel excited about my future, (3) I trust my future will turn out well. [HTS]

### Personal Efficacy

How often is the following true: I can solve most problems if I invest the necessary effort? [GSE]

How often is the following true for you: I am confident that I could deal efficiently with unexpected events [GSE + 8 other items]

How often is the following true for you: I energetically pursue my goals [THS-A]

How often is the following true for you: I've been pretty successful in life [THS-A + 2 other items]

How often is the following true for you: I can think of many ways to get the things in life that are important to me. [TSA-P]

How often is the following true for you: Even when others get discouraged, I know I can find a way to solve the problem. [TSA-P + 2 other items]

How true (yes/sometimes/not yet) are these true for you: (1) I communicate effectively with those around me, (2) I try many different ways to solve a problem, (3) I have a hobby that I engage in, (4) I seek out new knowledge, (5) I am open to new ideas, (6) I laugh often, (7) I am able to say no, (8) I can ask for help. [DARS-I]

### Functional Activities and Capacity

Please circle yes or no: (1) can you get out of bed by yourself, (2) do you dress yourself without help, (3) can you prepare your own meals, (4) do you do your own shopping, (5) do you write checks and pay your own bills, (6) do you drive or have other means of transportation for traveling outside your neighborhood, (7) are you able to keep track of appointments and family occasions, (8) are you able to take medicine according to directions, dosing, etc.?, (9) are you able to keep track of current events, (10) are you still able to play games of skill that you enjoy or work on a favorite hobby? [FAQ]

### Emotional stability/mindfulness

How true (yes/sometimes/not yet) are these true for you: (1) I express my emotions, (2) I set limits for myself, (3) I am flexible, (4) I can calm myself down [DARS-SC]

How frequently or infrequently do you currently have these (everyday) experiences: (1) I could be experiencing some emotion and not be conscious of it until some time later, (2) I find it difficult to stay focused on what's happening in the present, (3) it seems I am 'running on automatic,' without much awareness of what I'm doing, (4) I find myself preoccupied with the future or the past. [MAAS + 11 other items]

### Social Ties and Well-Being

**Early Life.** A good start in life means supporting mothers and young children; the health impact of early development and education lasts a lifetime.

**Social Exclusion.** Life is short when its quality is poor. By causing hardship and resentment, poverty, social exclusion and discrimination cost lives.

**Social Support.** Friendship, good social relations and strong supportive networks improve health at home, at work and in the community

- Parenting confidence and competence
- Social supports
- Engagement in positive activities
- Experiences of exclusion, bullying, discrimination

### **Questions:**

#### Parenting confidence and competence

Are you ever afraid you might lose control and hurt your child? [BF-PIF]

Do you often feel your child is difficult to take care of? Do you sometimes find you need to hit/spank your child? Do you wish you had more help with your child? [PSQ]

#### Social supports and relationships

How often do you get the social and emotional support you need? [100ML]

How often is the following support available when you need it: someone you can count on to listen to you when you need support? [SSSI-EI]

How often is the following support available when you need it: someone to turn to for suggestions about how to deal with a problem [SSSI-EI + 6 others]

How often is the following support available when you need it: someone to help you if you were confined to bed [SSSI-T + 3 others]

How often is the following support available when you need it: someone to love and make you feel wanted [SSSI-A + 2 others]

How often is the following support available when you need it: someone to have a good time with [SSSI-PSI + 2 others]

How true (yes/sometimes/not yet) are these true for you: (1) I have good friends who support me, (2) I have a mentor or someone who shows me the way, (3) I provide support to others, (4) I am empathetic to others, (5) I trust my close friends [DARS-R]

Whom can you count on to be dependable when you need help (provide initials) and how satisfied are you with their support? [BF-PIF]

Who accepts you totally, including both your best and work points (provide initials) and how satisfied are you with their support? [BF-PIF]

Whom do you feel truly loves you deeply and how satisfied are you with their support? [BF-PIF]

1. In a typical week, how many times do you talk on the telephone with family, friends, or neighbors? 2. How often do you get together with friends or relatives? 3. How often do you attend church or religious services? 4. How often do you attend meetings of the clubs or organizations you belong to? [IOM]



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) Less than once a week 1 or 2 times a week, 3-5 times a week, 5 or more times a week. [PRAPARE]

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### **Environmental Safety (Could also be under Material Well-Being)**

**Home and Neighborhood.** Housing stability, free from environmental hazards and toxins, and safe neighborhoods contribute to health. [Note: This is a new category and description and is not in the WHO's list of social determinants.]

- Adequacy and stability of housing
- Safety within neighborhood

### **Questions:**

Which of the following describe a problem with your housing situation: (a) bugs or rodents, (b) general cleanliness, (c) landlord disputes, (d) lead paint, (e) unreliable utilities, (f) medical condition that makes it difficult to live in current house, (g) mold or dampness, (h) overcrowding, (i) threat of eviction, (j) other. [MLP]

Circle yes or no: (1) do you have throw rugs on hardwood floors in your house, (2) do you have pets that stay indoors, (3) does your house have smoke alarms and carbon monoxide detectors in good working order, (5) is the area in front of your bathtub either carpeted or protected by a bath mat with rubber backing, (6) do you have night lights in your house, (7) do you have loose or frayed cords or overloaded electrical sockets in your house, (8) do you unplug household appliances when not in use, (9) do you keep medicines in a safe place and have their directions clearly labeled, (10) do you keep knives and other sharp objects put away in a safe place, (11) do you keep poisons, chemicals or other toxic substances put away in a safe place, (12) do you have furniture, such as a coffee table with sharp corners, or a rickety chair, that could cause injury. [HSQ]

How many times have you moved in the last year? [BF-PIF]

Does anyone smoke tobacco in the home? [SWYC; BFPIF; PSQ]

How often does your child use a seatbelt (car seat)? [BFPIF]

What kinds of guns are in your home? If you have a gun, is it locked up? [BFPIF]

Do you need a smoke detector in your home? Do you need the number for poison control? [PSQ]

Do you feel you live in a safe place? [BFPIF]

Do you feel physically and emotionally safe where you currently live? [PRAPARE]

## Attachments

1. Institute of Medicine (IOM) Core Domains and Measures.
2. PRAPARE Assessment.
3. Patient Centered Assessment Method.
4. Abstract from *Pediatrics* article: A Randomized Trial on Screening for Social Determinants of Health: the iScreen Study.
5. Oregon Family Well-Being Assessment – Pregnancy.
6. Review of three comprehensive reports on screening for social determinants and four screening tools developed specifically for primary care.

All screening tools referenced in this article are available in their full form. The IOM recommendations are provided in the first Appendix; and the report itself is among the most extensive in the field in both identifying and examining different measures in use.

The PREPARE Assessment is in use in Iowa, as well as select other states, and its similarities to and differences from the IOM are noted in the second Appendix.

Most screens for social determinants (and all those covered in this report) rely upon patient (or parent) reporting, either from direct questioning or through completing, by hand or electronically, a screening tool. The third Appendix describes the Patient Centered Assessment Method, which offers a somewhat different approach, where the physician completed the assessment based upon the encounter with and questions the physician asks of the patient/parent.

The fourth Appendix offers an abstract of a study contrasting screening via direct questioning or survey completion by the patient, suggesting that the latter elicits more responses of social concerns, particularly in sensitive areas, than does direct interviewing. The tool used for this study is also provided, as, while focused upon families with children, it has a single opening question and then contains a fairly inclusive set of questions around social determinants.

Some instruments focus upon particular populations, such as children and their families, adolescents, or seniors, with resulting different emphases in questions. The fifth Appendix includes some of the questions used with pregnant women to identify social determinants of health.

## **Attachment 1 – Institute of Medicine (IOM) Core Domains and Measures: Social and Behavioral Determinants of Health for Electronic Health Records**

### Sociodemographic Domains

*Race/ethnicity*

*Highest educational attainment*

*Financial resource strain* (1 Q –How hard is it for you to pay for the very basics like food, housing, medical care, and heating? Would you say it is ... Very hard, Somewhat hard, Not hard at all)

### Psychological Domains

*Stress* (1 Q – Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his/her mind is troubled all the time. Do you feel this kind of stress these day? Not at all, A little bit, Somewhat, Quite a bit, Very much)

*Depression* (2 Qs – Over the past two weeks, how often have you been bothered by any of the following problems: 1. Little or no interest in doing things: Not at all, Several days, More than half the days, Nearly every day; 2. Feeling down, depressed or hopeless: Not at all, Several days, More than half the days, Nearly every day)

### Behavioral Domains

*Physical activity* (2 Qs – 1. On average, how many days per week do you engage in moderate to strenuous exercise (like walking fast, running, jogging, dancing, swimming, biking, or other activities that cause a light or heavy sweat)? 2. On average, how many minutes do you engage in exercise at this level?)

*Tobacco use and exposure* (2 Qs – 1. Have you smoked at least 100 cigarettes in your entire life? Yes No If yes: 2. Do you NOW smoke cigarettes every day, some days or not at all? Every day Some days Not at all)

*Alcohol use* (3 Qs -- 1. How often do you have a drink containing alcohol? a. Never b. Monthly or less c. 2–4 times a month d. 2–3 times a week e. 4 or more times a week 2. How many standard drinks containing alcohol do you have on a typical day? a. 1 or 2 b. 3 or 4 c. 5 or 6 d. 7 to 9 e. 10 or more 3. How often do you have six or more drinks on one occasion? a. Never b. Less than monthly c. Monthly d. Weekly e. Daily or almost daily)

### Social Relationships and Living Conditions Domains

*Social connections and isolation* (4 Qs -- 1. In a typical week, how many times do you talk on the telephone with family, friends, or neighbors? 2. How often do you get together with friends or relatives? 3. How often do you attend church or religious services? 4. How often do you attend meetings of the clubs or organizations you belong to?)

*Exposure to intimate partner violence* (4 Qs -- Within the last year, have you been humiliated or emotionally abused in other ways by your partner or ex-partner? Yes No 2. Within the last year, have you been afraid of your partner or ex-partner? Yes No 3. Within the last year, have you been raped or forced to have any kind of sexual activity by your partner or ex-partner? Yes No 4. Within the last year, have you been kicked, hit, slapped, or otherwise physically hurt by your partner or ex-partner? Yes No

### Neighborhoods and Communities Domain

*Compositional characteristics* (2 measures – residential address and census tract-median income)

Source: Committee on the Recommended Social and Behavioral Domains and Measures for Electronic Health Records (2014). *Capturing Social and Behavioral Domains and Measures in Electronic Health Records: Phase 2*. Board on Population Health and Public Health Practice of Institute of Medicine. The National Academies Press: Washington, D.C. This 300+ page volume includes a review and analysis of over thirty different possible domains and measures before making recommendations on a core set for use in electronic medical records from eleven domains (with two measures for neighborhood) and twelve measures.

## **Attachment 2 – Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE)**

The Protocol for Responding to and Addressing Patients’ Assets, Risks, and Experiences (PRAPARE) was developed by the National Association of Community Health Centers, Inc., the Association of Asian Pacific Community Health Organizations, and the Oregon Primary Care Association and is a proprietary tool intended for

use by NACHC, its partners, and authorized recipients. PRAPARE is currently in its first iteration and being tested in select community health centers, including, through the Primary Care Association, ones in Iowa.

PRAPARE and the IOM measures have much in common, and both are designed to be incorporated into electronic medical records.

What IOM Includes that PRAPARE Does Not Currently Include

Two-item depression index

Four-item exposure to partner violence [PRAPARE has one item]

Physical activity

Tobacco use

Alcohol use

What PRAPARE Includes that IOM Currently Does Not Include

Housing situation and worry about housing

Sense of safety in the home

Lack of transportation

Financial resource strain specific to – medicine, clothing, child care, phone, and dental/vision/mental health care

Seasonal or migrant farm work, discharge from armed forces, incarceration experience, refugee status

Language most comfortable speaking

Additional Demographic Data Both Include

Highest education level completed

Race/Ethnicity

Employment status

Health insurance

Family/Household configuration

Practices making use of PRAPARE might also considering adding additional questions or queries around those measurement areas from the IOM – as they continue to test the first iteration of PRAPARE.

In addition to the specific questions, PRAPARE offers additional tools and resources, including (within Chapter 9: Act on Your Data) sections on each of the questions and descriptions of: 1. Why It's Important, 2. Ways to Address It in a CLINICAL Setting, 3. Simple, Low-Cost Ways to Ameliorate It in a NON-CLINICAL Setting, and 4. Ways to Mitigate It in Community.

Resources on PRAPARE are available at: <http://nachc.org/PRAPARE>.

### Attachment 3 – Patient Centered Assessment Method (PCAM)

Instructions: Use this assessment as a guide, ask questions in your own words during the consultation to help you answer each question. Circle one option to each section to reflect the level of complexity related to this client. To be completed either during or after the consultation.

#### Health and Well-being

1. Thinking about your client's **physical health needs**, are there any symptoms or problems(risk indicators) you are unsure about that require further **investigation**?
2. Are the client's **physical health problems** impacting on their **medical well-being**?
3. Are there any problems with your client's **lifestyle behaviors** (alcohol, drugs, diet, exercise) that are impacting on **physical** or **mental well-being**?
4. Do you have any **other concerns** about your client's **mental well-being**? How would you rate their severity and impact on a client?

#### Social Environment

1. How would you rate the **home environment** in terms of **safety and stability** (including domestic violence, insecure housing, neighbor harassment)?
2. How do **daily activities** impact on the client's well-being? (include current or anticipated unemployment, work, caregiving, access to transportation or other)
3. How would you rate their **social network** (family, work, friends)?
4. How would you rate their **financial resources** (including ability to afford all required critical care)?

#### Health Literacy and Communication

1. How well does the client **now understand** their health and well-being (symptoms, signs or risk factors) and what they need to do to manage their health?
2. How well do you think your client can **engage** in healthcare discussions? (Barriers include language, deafness, aphasia, alcohol or drug problems, learning difficulties, concentration)

#### Service Coordination

1. Do **other services** need to be involved to help this client?
2. Are current services involved with this client **well-coordinated**? (Include coordination with other services you are now recommending.

NOTE: Each of the questions is followed by four possible responses, contextualized to the question to indicate concern or need. The PCAM had its origin in the Minnesota Complexity Assessment Method, which was developed to bring a broad range of aspects of health into patient assessments. A group of clinicians and academicians in Minnesota and Scotland are advancing its work both through conducting research and providing training and resource materials to support implementation. A variety of materials are available on its website:

<http://www.pcamonline.org/home.html>

## **Attachment 4 – A Randomized Trial on Screening for Social Determinants of Health: the iScreen**

### Abstract

*Methods:* We conducted a randomized trial of electronic versus face-to-face social screening formats in a pediatric emergency department. Consenting English-speaking and Spanish-speaking adult caregivers familiar with the presenting child’s household were randomized to social screening via tablet computer (with option for audio assist) versus a face-to-face interview conducted by a fully bilingual/bicultural researcher.

*Results:* Almost all caregivers (98.8%) reported at least 1 social need, but rates of reporting on the more sensitive issues (household violence and substance abuse) were significantly higher in electronic format, and disclosure was marginally higher in electronic format for financial insecurity and neighborhood and school safety. There was a significant difference in the proportion of social needs items with higher endorsement in the computer-based group (70%) than the face-to-face group (30%).

*Conclusions:* Pediatric clinical sites interested in incorporating caregiver reported socioeconomic, environmental, and behavioral needs screening should consider electronic screening when feasible, particularly when assessing sensitive topics such as child safety and household member substance use.

Gottlieb L, Hessler D, Long D, Amaya A, & Adler N (2014). A Randomized Trial on Screening for Social Determinants of Health; the iScreen Study. *Pediatrics* Vol 134, No. 6, December.

### Instrument

The instrument used included 23 individual items on 16 psychosocial domains. Likert response options were 1 = not at all stressful, 2 = a little stressful, 3 = moderately stressful, 4 = very stressful 5 = extremely stressful and 0 “= issue listed is not applicable to my family.

How stressful is each of these issues to your family:

1. Lack of health insurance or inadequate insurance
2. Concerns about getting health care (visits, medications) when your child needs it.
3. Dealing with your child’s behavioral or mental health problems
4. Dealing with your own mental health or mental health care
5. Your child not getting the services they are supposed to learn
6. Your child’s exposure to tobacco smoke
7. Concerns about your child getting enough physical activity (60 min/day+)
8. Concerns about finding activities for your child during the summer/after school
9. Concerns about the physical condition of your household
10. Concerns about the cost or stability of your housing
11. Concerns about not having enough money at the end of the month
12. Concerns that food will run out before you get money or food stamps to get more
13. Concerns about not having enough healthy food
14. Difficulty getting benefits and services for yourself or your child
15. Concerns about finding affordable and reliable child care
16. Concerns about affording transportation or getting around
17. Difficulties finding or keeping a job
18. Threats to your child’s safety at school or in the neighborhood
19. Adults in the home who are physically violent or threaten your child
20. Use of drugs or alcohol by yourself or family members
21. Past or current incarceration of one of your child’s household members
22. Problems with child support or custody
23. Concerns about a family member’s immigration status

## **Attachment 5. Oregon Family Well-Being Assessment – Pregnancy**

The Oregon Family Well-Being Assessment Interview Guide is a 6 page assessment incorporating 66 different questions. Many of the questions are similar to those in other SDOH screening tools, but some are different and, in

particular, recognize issues and concerns that may be of particular pertinence to women experiencing pregnancy. The following are some of these questions and show the opportunity to customize general SDOH questions for different populations. In addition, the form itself offers cues to the practitioner on recommending actions, based upon specific responses (e.g. counseling, referral to parenting support, encouraging cessation, etc.)

14. When you got pregnant with this current pregnancy, were you trying to get pregnant? If no, how do you feel about being pregnant?
15. Does your partner agree with you about whether or not to continue this pregnancy?
16. How would you describe the involvement of the father of the baby?
17. Do you feel that you have the social and emotional support you need for pregnancy and parenting?
22. Do you intend to breastfeed?
23. Do you have at least one person you can count on if things become too difficult for you to handle alone?
24. Do you know where to turn if you need help with managing your feelings or getting other types of support?
25. Are you interested in parenting education or parenting support groups?
26. Have you ever been diagnosed with depression, post-partum depression, anxiety, bipolar disorder, an eating disorder, or ADHD?
31. Did your parents have a problem with alcohol or drugs?
42. Does your partner talk to you in ways that make you feel bad?
43. Does your partner control where you go, who you talk to, or how you spend money?
45. Does your partner mess with your birth control or try to get you pregnant when you don't want to be?
53. In the past 3 months, how often have you worried about having good care for your child or children?

## **Attachment 6: Review of three comprehensive reports on screening for social determinants and four screening tools developed specifically for primary care.**

There are three reports, in particular, that have been developed, based upon reviews of available research, to suggest screening questions for use in general and adult health practice to gather information on social and behavioral determinants of health.

1. The Institute of Medicine's *Capturing Social and Behavioral Domains in Electronic Health Records, Phase 2*, selected 19 specific questions (as well as additional demographic information) to recommend for inclusion in electronic medical records. The lengthy report also includes a great deal of information on the identification, use, and usefulness of the measures.
2. The National Association of Community Health Centers, the Association of Asian Pacific Health Organizations, and the Oregon Primary Care Association developed a questionnaire "Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences" (PRAPARE), with 21 overall questions that also include a number of demographic questions, that is being tested in a number of FQHCs, along with guidance on how to act on the data collected – in the clinical setting and in the community.
3. A discussion paper by staff in the Center for Medicare and Medicaid Innovation has developed a 10-item "Standardized Screening Tool for Health-Related Social Needs in Clinical Settings" with Accountable Care Organizations in mind.

In addition to these three reports, there are four screening tools developed specifically for pediatric care that are designed to identify family issues and social determinants that impact child development, all of which have either uses or adapted in the field.

1. The Bright Futures Pediatric Intake Form not only has questions about the child and family medical history, but also has questions about family health habits, drinking and drugs, parental experiences as a child, family activities, and help and support.
2. The Survey of Well-Being for Children at Tufts University has developed a set of 9 Family Questions that relate to issues that affect the healthy development of children.
3. The Safe Environment for Every Kid (SEEK) Initiative developed a Parent Screening Questionnaire with 15 questions that can be answered with a "yes" or "no" that has been used in a number of practice settings to identify social concerns that deserve attention.
4. The Well-Visit Planner is an online screening tool to support families as they plan for well-child visits, which contains a number of different questions that are used to provide feedback to the family on what questions to ask during the visit and what other things parents might do. Many of the questions relate to the child's development and are asked for specific well-child visits, but some also are about the family and relate to social determinants of health.

The screening questions recommended specifically for pediatric care are more likely to have questions specific to parenting and parent-child interactions, but there is a good deal of overlap across the different screens. Most screens have some questions regarding material well-being and meeting basic needs, although these vary in the extent of their focus upon housing and issues beyond food security. Most have some screening questions related to adult depression, alcohol and drug use, and smoking, but some also include stress and the wording of questions often differs. Many ask about social ties and specifically about partner relationships and safety, but only those specific to pediatrics have questions about parent and child relationships (and these are the most varied in their focus of all the question areas)

The Table on the next page summarizes the questions included in each of the six reports described above, broken out into three general broad domains (material well-being or meeting basic needs, personal well-being or parental lifestyle, and social well-being or relationships and family interactions).



**TABLE: SURVEY QUESTIONS BY TOPIC AND DOMAIN IN SIX SCREENING TOOLS TO IDENTIFY SOCIAL (MATERIAL, PERSONAL, SOCIAL) DETERMINANTS OF HEALTH**

<b>Screening Tool</b>	<b>Material Well-Being/Basic Needs</b>	<b>Personal Well-Being/Lifestyle</b>	<b>Social Well-Being/Relationships</b>
Institute of Medicine Emergency Medical Records – Core Measures	Basic Needs (1) Food (1)	Stress (1) Depression (2) Alcohol/Drugs (3) Smoking (2) Exercise (2)	Social Ties and Support (4) Interpersonal Safety (4)
PRAPARE	Housing (2) Food (1) Transportation (1) Other (6)	Stress (1)	Social Ties and Support (1) Safe Home (1) Partner Relationship & Safety (1)
Accountable Care CMMI Article	Housing (2) Food (2) Transportation (1)		Partner Relationship & Safety (1)
Bright Futures Pediatric Intake Form		Depression (3) Alcohol/Drugs (6) Smoking (2) Guns (2) Adverse experiences in childhood (10)	Social Ties and Support (3) Faith (2) Safe home (2) Partner Relationship & Safety (2) Family Routines (2) Coping with Parenting (1)
SWYC – Family Questions	Food (1)	Depression (2) Alcohol/Drugs (3) Smoking (1)	Partner Relationship & Safety (2)
SEEK – Parent Screening Questionnaire	Food (2) Smoke detector (1)	Stress (1) Depression (2) Alcohol/Drugs (2) Smoking (1)	Partner Relationship & Safety (1) Difficulties with Child (3)
Well-Visit Planner	Basic Needs (1) Change (1)	Depression (2) Alcohol/Drugs (2) Smoking (1)	Social Ties and Support (2) Partner Relationship & Safety (3) Coping with Parenting (1)

One option is for our TWG to go through these area by area or subarea to

Basic Needs: General, Housing and Basic Needs, Food,

Personal Well-Being/Lifestyle: Stress, Depression, Alcohol/Drugs, Smoking, Mindfulness/Resiliency

Social Well-Being/Relationships: Social ties and Support, Partner Relationships, Family Routines, Child-Parent Concerns

## QUESTION COMPARISONS

### PHYSICAL WELL-BEING/BASIC NEEDS

#### *IOM*

How hard is it to pay for the very basics like food, housing, medical care, and heating? Would you say it is ... Very hard, Somewhat hard, Not hard at all.

Which of the following describes the amount of food your household has to eat ... Enough to eat, Sometimes not enough to eat, Often not enough to eat.

#### *PRAPARE*

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 care, or in a park)

Are you worried about losing your housing? ... Yes, No

In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? Check all that apply

- Food... Yes, No
- Clothing... Yes, No
- Utilities... Yes, No
- Medicine or any health care (medical, dental, mental health, vision)... Yes, No
- Phone... Yes, No
- Other (please write):... Yes, No

Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living? Check all that apply.

- Yes, it has kept me from medical appointments or from getting my medicines
- Yes, it has kept me from non-medical meetings, appointments, work, or from getting things I need.
- No

#### *CMMI*

What is your housing situation today?

I do not have housing (I am staying with others, in a hotel, in a shelter, living outside on the street, in a car or beach, abandoned building, bus, or train station, or in a park)

I have housing today, but I am worried about losing housing in the future

I have housing.

Thinking about the place you live. Do you have 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

Within the past 12 months, you worried that your food would run out before you got money to buy more. ... Often true, Sometimes true, Never true

Within the past twelve months, the food you bought just didn't last and you didn't have money to get more. ... Often true, Sometimes true, Never true

In the past 12 months, has lack of transportation kept you from medical appointments, meetings, work or from getting things needed for daily living?

Yes, it has kept me from medical appointments or getting medications

Yes, it has kept me from non-medical meetings, appointments, work, or getting things that I need

No

In the past 12 months has the electric, gas, oil, or water company threatened to shut off services in your home? ... Yes, No, Already shut off

### *BRIGHT FUTURES*

None

### *SWYC*

In the past month was there any day when you or anyone in your family went hungry because you did not have enough money for food? ... Yes, No

### *SEEK*

In the last year, did you worry that your food would run out before you got money or Food Stamps to buy more? ... Yes, No

In the last year, did the food you bought just not last and you didn't have the money to get more? ... Yes, No

Do you need a smoke detector for your home? Yes, No

### *Well-Visit Planner*

Do you have trouble paying for supplies like food, clothes, and shoes?

Have there been any major changes in your family? Check all that apply ... None, Move, Job Change, Separation, Divorce, Death in the Family, Other

## **PERSONAL WELL-BEING: STRESS AND DEPRESSION**

### *IOM*

Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his/her mind is troubled all the time. Do you feel this kind of stress these days? ... Not at all, A little bit, Somewhat, Quite a bit, Very much

Over the last two weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things ... Not at all, Several days, More than half the days, Nearly every day

Feeling down, depressed or hopeless ... Not at all, Several days, More than half the days, Nearly every day

### *PRAPARE*

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

*CMMI*

None

*BRIGHT FUTURES*

How often in the last week have you felt depressed? ... 0, 1-2, 3-4, 5-7 days

In the past year, have you had two weeks or more during which you felt sad, blue, or depressed, or lost pleasure in things that you usually cared about or enjoyed? ... Yes, No

Have you had two or more years in your life when you felt depressed or sad most days, even if you felt OKAY sometimes? ... Yes, No

*SWYC*

Over the past two weeks, how often have you been bothered by any of the following problems?

Having little interest or pleasure in doing things ... Not at all, Several days, More than half the days, Nearly every day

Feeling down, depressed or hopeless ... Not at all, Several days, More than half the days, Nearly every day

*SEEK*

Do you often feel under extreme stress? ... Yes, No

In the past month, have you often felt down, depressed, or hopeless? ... Yes, No

In the past month, have you felt very little interest or pleasure in things you used to enjoy? ... Yes, No

*Well-Visit Planner*

Over the past 2 weeks, how often have you been bothered by: little interest or pleasure in doing things?

Over the past 2 weeks, how often have you been bothered by: feeling down, depressed or hopeless?