

### Supplemental eFigure 1. PCP interview guide

Number of patients/week:

Practice site:

Patient demographics characteristics:

Number of years in practice as attending:

Number of years at current practice:

Clinical/Research FTE distribution (% clinical / % research / % admin):

Clinical interests:

Research interests:

Average time spent per patient (new/follow up):

What do you think PROMs are?

Patient reported outcome measures (PROMs) are measurements based on a report that comes directly from the patient about the status of a patient's health condition without amendment or interpretation of the patient's response by a clinician

- Do you currently use information from PROMs that are collected before the clinic visit?
  - If yes, tell me more about how you use it.
- Do you review PROMs with every patient or do you use it selectively?
- Which PROMs tools do you use? Why?
  - Can you provide an example of when you used PROMs?
  - Can you provide an example of when you pay extra attention to PROMs data?
- How do you think PROMs meaningfully changes patient care, if at all?
  - What is the value of PROMs for clinical decision-making?
  - What is the value of PROMs for clinic efficiency?
  - What is the value of PROMs for engaging patients?
  - What is the value of PROMs for the institution/hospital?
- What are some barriers to your using PROMs? Can you provide an example?
  - Admin barriers? IT barriers?
  - Are there patients for whom PROMs are not helpful, or even harmful?
- What makes PROMs easy to use? Can you provide an example?
- In your opinion, how can PROMS be improved?
  - What would motivate you to use it more?
- Any other comments?

Supplemental eFigure 2. The MGH Primary Care Screening Bundle (PCSB) is given to all new patient visits and annual physical visits

PRIMARY CARE SCREENING BUNDLE							
ASSIGNED TO PATIENTS AGED 18+ AT AN ANNUAL OR NEW PATIENT VISIT. AVAILABLE IN ENGLISH.							
<p><b>A. PHQ2, REFLEXING TO 9 IF SCORE OF <math>\geq 3</math></b></p> <p>Over the last 2 weeks, how often have you been bothered by any of the following problems?</p> <ol style="list-style-type: none"> <li>Little interest or pleasure in doing things</li> <li>Feeling down, depressed or hopeless</li> <li>Trouble falling or staying asleep, or sleeping too much</li> <li>Feeling tired or having little energy</li> <li>Poor appetite or overeating</li> <li>Feeling bad about yourself - or that you are a failure or have let yourself or your family down</li> <li>Trouble concentrating on things, such as reading the newspaper or watching television</li> <li>Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</li> <li>Thoughts that you would be better off dead, or of hurting yourself in some way</li> </ol> <p>Answer choices for each (scoring): Nearly Every Day (3) / More than Half the Days (2) / Several Days (1) / Not at All (0) /</p> <p>PHQ Scoring (sum):</p> <p>0-4 Minimal Depression      5-9 Mild Depression      10-14 Moderate Depression</p> <p>15-19 Moderate-Severe Depression      20-27 Severe Depression</p> <p><b>B. FALLS SCREENING</b></p> <ol style="list-style-type: none"> <li>Have you Fallen and hurt yourself in the past year?</li> <li>Are you afraid of falling?</li> <li>Have you fallen 2 or more times in the past year?</li> </ol> <p>Answer choices: Yes/No</p> <p><b>C. MEDICARE AWV HEALTH RISK ASSESSMENT (Medicare patients only)</b></p> <ol style="list-style-type: none"> <li>On your own, can you bathe yourself?</li> <li>On your own, can you dress yourself?</li> <li>Are you able get around on your own?</li> </ol> <p>Answer choices: Yes/No</p>							
<ol style="list-style-type: none"> <li>During the past week, how many days did you do at least moderate physical activities like walking, yoga, tai chi, stretching classes?</li> <li>Do you always fasten your seat belt when you are in a car?</li> <li>Do you have difficulty with eating?</li> </ol> <p>Answer choices: Yes/No</p> <ol style="list-style-type: none"> <li>Over the last week, how many days have you eaten a serving of fruits or vegetables?</li> <li>Over the last week, how many days have you eaten fast food for a meal or snack?</li> <li>On average, how many servings of fish, poultry, lean meat, cooked dry beans, peanut butter, or nuts do you eat per day?</li> <li>Does your home have loose rugs?</li> <li>Does your home have poor lighting?</li> <li>Is the tub or shower floor in your home slippery?</li> <li>Do you have difficulty maintaining your balance when bathing, dressing or getting in and out of a chair?</li> <li>Do you use a cane, walker or other device when walking inside or outside your home?</li> </ol> <p>Answer choices: Yes/No</p> <ol style="list-style-type: none"> <li>How would you rate your health in general?</li> <li>Who is completing this questionnaire?</li> </ol> <p><b>D. PAIN INTENSITY</b></p> <p>In the past 7 days...</p> <ol style="list-style-type: none"> <li>How would you rate your pain on average? (0=No pain, 10=Worst imaginable pain)</li> </ol> <p><b>E. DOMESTIC VIOLENCE</b></p> <ol style="list-style-type: none"> <li>Are you currently or in the past 12 months have you been in a relationship with a person who physically hurts, threatens or tries to control you?</li> <li>Are you denied basic needs such as food, clothing, or medical care?</li> </ol> <p>Answer choices: Yes/No</p> <p><b>F. GAD2, REFLEXING TO GAD7 IF SCORE OF <math>\geq 3</math></b></p> <p>Over the last 2 weeks, how often have you been bothered by the following problems:</p> <ol style="list-style-type: none"> <li>Feeling nervous, anxious, or on edge</li> </ol>							
<ol style="list-style-type: none"> <li>Not being able to stop or control worrying</li> <li>Worrying too much about different things</li> <li>Feeling afraid as if something awful might happen</li> <li>Having trouble relaxing</li> <li>Becoming easily annoyed or irritable</li> <li>Being so restless that it is hard to sit still</li> </ol> <p><b>G. AUDIT-C</b></p> <ol style="list-style-type: none"> <li>How often do you have a drink containing alcohol?</li> </ol> <p>Answer choices (scoring): 4 or more times a week (4) / 2-3 times a week (3) / 2-4 times a month (2) / Monthly or less (1) / Never (0)</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Skip logic</th> </tr> </thead> <tbody> <tr> <td>=0 (Never)</td> <td>END</td> </tr> <tr> <td><math>\neq 0</math> (Never)</td> <td>Proceed to questions 2 and 3</td> </tr> </tbody> </table> <ol style="list-style-type: none"> <li>How many standard drinks containing alcohol do you have on a typical day when drinking?</li> </ol> <p>Answer choices (scoring): 1 or 2 (0) / 3 or 4 (1) / 5 or 6 (2) / 7 to 9 (3) / 10 or more (4)</p> <ol style="list-style-type: none"> <li>How often do you have six or more drinks on one occasion?</li> </ol> <p>Answer choices Never, Less than monthly, Monthly, Weekly, Daily or almost daily</p> <p>The Audit-C (SUM 1-3)</p> <p>[Note: When the points are all from Question #1 alone (#2 &amp; #3 are zero), it can be assumed that the patient is drinking below recommended limits and it is suggested that the provider review the patients alcohol intake over the past few months to confirm accuracy.]</p> <p>AUDIT Scoring</p> <p>0-3 Negative Screen      4-12 Positive Screen</p> <p><b>H. SUBSTANCE ABUSE DISORDER QUESTIONNAIRE</b></p> <p>The following question(s) concern information about your possible involvement with drugs not including alcoholic beverages during the past 12 months. "Drug abuse" refers to (1) the use of prescribed or over-the-counter drugs in excess of the directions, and (2) any nonmedical use of drugs. Please answer every question. If you have difficulty with a statement, then choose the response that is mostly right.</p>	Response	Skip logic	=0 (Never)	END	$\neq 0$ (Never)	Proceed to questions 2 and 3	<ol style="list-style-type: none"> <li>How many times in the past year have you used an illegal drug or prescription medication for non-medical reasons?</li> </ol> <p>Answer choices: 0 (0) / 1 (1) / 2+ (1) branch to DAST 2-10 if response &gt;0</p> <ol style="list-style-type: none"> <li>Do you use more than one drug at a time?</li> <li>Are you always able to stop using drugs when you want to? (If never use drugs, answer "yes.")</li> <li>Have you had "blackouts" or "flashbacks" as a result of drug use?</li> <li>Do you ever feel bad or guilty about your drug use?</li> <li>Does your spouse (or parents) ever complain about your involvement with drugs?</li> <li>Have you ever neglected your family because of your use of drugs?</li> <li>Have you engaged in illegal activities in order to obtain drugs?</li> <li>Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?</li> <li>Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?</li> </ol> <p>Answer Choices: Yes (1), No (0) [except question 3 where (yes) (0) No (1)]</p> <p>Score Degree of Problems Related to Drug Abuse Suggested Action</p> <p>1-2 Low level Monitor, re-assess at later date</p> <p>3-5 Moderate level Further investigation</p> <p>6-8 Substantial level Intensive assessment</p> <p>9-10 Severe level Intensive assessment</p> <p><b>I. REVIEW OF SYSTEMS</b></p> <p>Have you had concerns regarding any of the following recently?</p> <ol style="list-style-type: none"> <li>Change in weight</li> <li>Change in hearing</li> <li>Change in vision</li> <li>Cough</li> <li>Shortness of breath</li> <li>Chest pain</li> <li>Palpitations</li> <li>Abdominal pain</li> <li>Diarrhea</li> <li>Constipation</li> <li>Problems with urinating</li> <li>Joint pain</li> <li>Persistent rash</li> <li>Headaches</li> <li>Dizziness</li> <li>Swollen glands</li> <li>Bruising or bleeding easily</li> <li>Confusion</li> <li>Sleep disturbance</li> </ol> <p>Answer choices: yes/No</p>
Response	Skip logic						
=0 (Never)	END						
$\neq 0$ (Never)	Proceed to questions 2 and 3						

Supplemental eFigure 3. The Social Determinants of Health (SDOH) questionnaire is given to all Medicaid patients for new patient visits and annual physical visits

<b>Social Determinants of Health</b>	
<p><b>SOCIAL DETERMINANTS OF HEALTH</b></p> <p>ASSIGNED TO MASSHEALTH ACO PATIENTS AT ANNUAL, NEW PATIENT, AND NON-URGENT FOLLOW UP VISITS</p> <p>PARENT/GUARDIAN OF PATIENTS UNDER 15 YEARS OLD WILL COMPLETE THE QUESTIONNAIRE BELOW:</p> <ol style="list-style-type: none"> <li>HAS THE LACK OF TRANSPORTATION KEPT YOU FROM BRINGING YOUR CHILD TO MEDICAL APPOINTMENTS OR FROM GETTING YOUR CHILD'S MEDICATIONS? Answer Choices: Yes/No</li> <li>WITHIN THE PAST 12 MONTHS WE WORRIED WHETHER OUR FOOD WOULD RUN OUT BEFORE WE GOT MONEY TO BUY MORE Answer Choices: 1. Never True 2. Sometimes True 3. Often True</li> <li>WITHIN THE PAST 12 MONTHS THE FOOD WE BOUGHT JUST DIDN'T LAST AND WE DIDN'T HAVE MONEY TO GET MORE. Answer Choices: 1. Never True 2. Sometimes True 3. Often True</li> <li>WHAT IS YOUR FAMILY'S HOUSING SITUATION TODAY? ANSWER CHOICES: 1. I/WE HAVE HOUSING 2. I/WE DO NOT HAVE HOUSING (STAYING WITH OTHERS, IN A HOTEL, IN A SHELTER, LIVING OUTSIDE ON THE STREET, ON A BEACH, IN A CAR OR IN A PARK.) 3. I CHOOSE NOT TO ANSWER</li> <li>HOW MANY TIMES HAS YOUR FAMILY MOVED IN THE PAST 12 MONTHS? ANSWER CHOICES: 1. ZERO (I DID NOT MOVE) 2. ONE TIME 3. TWO OR MORE TIMES 4. I CHOOSE NOT TO ANSWER</li> <li>ARE YOU WORRIED THAT IN THE NEXT 2 MONTHS YOUR FAMILY MAY NOT HAVE THEIR OWN HOUSING TO LIVE IN? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Do you have trouble paying your heating or electricity bill? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Do you have trouble paying for your child's medicines? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Are you currently unemployed and looking for work? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Are you interested in more education? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>DO YOU HAVE TROUBLE WITH CHILDCARE OF THE CARE OF A FAMILY MEMBER? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> </ol>	<ol style="list-style-type: none"> <li>IN THE PAST SIX MONTHS, HAVE YOU EVER FELT UNSAFE OR AFRAID OF YOUR PARTNER OR FORMER PARTNER? Answer Choices: 1. Yes 2. No 3. I choose not to answer (If yes, would you like help with this? 1. Yes 2. No) (If at any time in the future you would like help with this, you can discuss this information with your provider at appointments.)</li> <li>WOULD YOU LIKE INFORMATION ABOUT ANY OF THE FOLLOWING TOPICS? ANSWER CHOICES: TRANSPORTATION 2. FOOD 3. HOUSING 4. PAYING UTILITY BILLS 5. PAYING FOR MEDICATIONS 6. JOB SEARCH OR TRAINING 7. EDUCATION 8. CHILDCARE 9. CARE FOR ELDER OR DISABLED</li> <li>IN THE LAST 12 MONTHS, HAVE YOU RECEIVED ASSISTANCE FROM AN ORGANIZATION OR PROGRAM TO HELP YOU WITH ANY OF THE FOLLOWING? ANSWER CHOICES: TRANSPORTATION 2. FOOD 3. HOUSING 4. PAYING UTILITY BILLS 5. PAYING FOR MEDICATIONS 6. JOB SEARCH OR TRAINING 7. EDUCATION 8. CHILDCARE 9. CARE FOR ELDER OR DISABLED</li> </ol> <p>PATIENTS 15 YEARS OLD AND OLDER WILL COMPLETE THE QUESTIONNAIRE BELOW:</p> <ol style="list-style-type: none"> <li>Has the lack of transportation kept you from medical appointments or from getting medications? Answer Choices: Yes/No</li> <li>Within the past 12 months we worried whether our food would run out before we got money to buy more. Answer Choices: 1. Never True 2. Sometimes True 3. Often True</li> <li>Within the past 12 months the food we bought just didn't last and we didn't have enough money to get more. Answer Choices: 1. Never True 2. Sometimes True 3. Often True</li> <li>What is your housing situation today? Answer choices: 1. I have housing 2. I do not have housing (staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, or in a park) 3. I choose not to answer.</li> <li>How many times have you moved in the past 12 months? Answer choices: 1. Zero (I did not move) 2. One time 3. Two times 4. Three or more times</li> <li>Are you worried that in the next 2 months, you may not have your own housing to live in? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Do you have trouble paying your heating or electricity bill? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Do you have trouble paying for medicines? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Are you currently unemployed and looking for work? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> </ol>
<ol style="list-style-type: none"> <li>Are you interested in more education? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Do you have trouble with childcare or the care of a family member? Answer Choices: 1. Yes 2. No 3. I choose not to answer</li> <li>Would you like information about any of the following topics? Answer Choices: 1. Transportation 2. Food 3. Housing 4. Paying utility bills 5. Paying for medications 6. Job search or training 7. Education 8. Childcare 9. Care for elder or disabled</li> <li>In the last 12 months, have you received assistance from an organization or program to help you with any of the following: Answer Choices: 1. Transportation 2. Food 3. Housing 4. Paying utility bills 5. Paying for medications 6. Job search or training 7. Education 8. Childcare 9. Care for elder or disabled</li> </ol>	