Social Determinants of Health; Screening and then what?

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The Johns Hopkins U Sch. of Medicine
President, Total Child Health and CHADIS

Disclosure

I have the following disclosure: I have a financial relationship with the manufacturer of a commercial product and/or provider of commercial services discussed in this CME activity:

I am one of the creators of CHADIS

I do not intend to discuss an unapproved/investigational use of a commercial product/device/medication in my presentation.
AAP Recommended Pediatric Screening and Assessment for Social Determinants of Health

"Poverty and Child Health" added to Agenda for Children by AAP in 2013 with mediators of known adverse outcomes for children including:

- Parental Depression
- Smoking
- Addiction
- Intimate Partner Violence
- Food Insecurity
  - Harsh Punishment
- (Racism
- Poverty
- Homelessness)

SDoH in the Age of COVID

- Even viruses are not equal opportunity
- Low income, often people of color:
  - Work on the front lines
  - Live in crowded homes or are homeless
  - Have less access to health care and testing
  - Have no sick leave or personal leave
  - Ride public transportation
  - Employed in jobs that cannot telework
  - Have employers less concerned for safety e.g. PPE
  - Are less likely to have internet access for work, schooling, information
  - Have more obesity and chronic conditions that increase COVID risk
Social Determinants of Health

• Past-
  • ACEs
  • Trauma
• Present-
  • More stressors, risks
  • Fewer protective factors

Adverse Childhood Experience (ACE) Outcome Studies

• Chronic Stress/Trauma associated with long term health problems (ACE study)
  • ACE outcomes with graded dose dependent response:
    • Adverse behaviors: e.g., smoking; substance use; early sex
    • Future violence
    • Unintended pregnancies
    • Adverse health: suicide, depression, obesity, heart disease, liver disease
    • Early death (6 ACE = 20 years)
    • Up to 40% of early deaths
Evidence for Mechanisms

• Gene-environment interaction can affect lifelong behavior, development, and health.
  • Animal Studies: varying nurturing affects neural functioning and later cognition, stress response and psychopathologic behavior with epigenetic (methylation, histones) DNA changes without affecting DNA sequence;
  • Even stress to the fetus has effects on later stress reactivity of the offspring and in subsequent generations

Early Stress: Neurophysiologic & Neuropathologic Changes

• Low birth weight
• Early postnatal exposure to maternal stress - future reactivity to stress; altering the developing neural circuits controlling neuroendocrine responses (e.g., the HPA Axis).
  • Can affect brain architecture esp. those high in steroid receptors
    • include more anxiety related hyperactivation of amygdala changes
    • less control as a result of PFC atrophy
    • impaired memory and mood control as a consequence of hippocampal reduction
    • affects regulating stress physiology, learning new skills, and developing the capacity to make healthy adaptations to future adversity
TOXIC STRESS = ACE

• “the excessive or prolonged activation of the physiologic stress response systems in the absence of the buffering protection afforded by stable, responsive relationships.”
  • Not just the adversity per se but absence of buffering
  • Produces “biological memories”
• Examples: Child abuse or neglect, parental substance abuse, maternal depression, racial discrimination
### ACEs experienced by Parent before age 18
**Adverse Childhood Experiences**

**ACEs experienced by child**

**ACE-Q from Center for Youth Wellness**

- 10 standard ACE items
- 7 additional environmental stresses
- **Forms:**
  - Parent report about child
  - Parent report about teen
  - Teen self-report
- **Two views of results:** one without details or events, one with
**ACE-Q from Center for Youth Wellness Standard ACE items**

**Questionnaire for: Ace Respondent**

<table>
<thead>
<tr>
<th>Of the statements in Section 1, HOW MANY apply to your child at any point since your child was born?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = no</td>
</tr>
<tr>
<td>Your child's parents or guardians were separated or divorced.</td>
</tr>
<tr>
<td>Your child lived with a household member who served time in jail or prison.</td>
</tr>
<tr>
<td>Your child lived with a household member who was depressed, mentally ill or attempted suicide.</td>
</tr>
<tr>
<td>Your child saw or heard household members hurt or threaten to hurt each other.</td>
</tr>
<tr>
<td>A household member swore at, insulted, humiliated, or put down your child in a way that scared your child OR a household member acted in a way that made your child afraid that s/he might be physically hurt.</td>
</tr>
<tr>
<td>Someone touched your child's private parts or asked your child to touch their private parts in a sexual way.</td>
</tr>
<tr>
<td>More than once, your child went without food, clothing, or place to live, or had no one to protect her/him.</td>
</tr>
<tr>
<td>Someone pushed, grabbed, slapped or threw something at your child OR your child was hit so hard that your child was injured or had marks.</td>
</tr>
<tr>
<td>Your child lived with someone who had a problem with drinking or using drugs.</td>
</tr>
<tr>
<td>Your child often felt unsupported, unloved and/or unprotected.</td>
</tr>
</tbody>
</table>

**ACE-Q from Center for Youth Wellness Environmental items**

**Questionnaire for: Ace Respondent**

<table>
<thead>
<tr>
<th>Section 2: At any point since your child was born...</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = no</td>
</tr>
<tr>
<td>Your child was in foster care.</td>
</tr>
<tr>
<td>Your child experienced harassment or bullying at school.</td>
</tr>
<tr>
<td>Your child lived with a parent or guardian who died.</td>
</tr>
<tr>
<td>Your child was separated from her/his primary caregiver through deportation or immigration.</td>
</tr>
<tr>
<td>Your child had a serious medical procedure or life threatening illness.</td>
</tr>
<tr>
<td>Your child often saw or heard violence in the neighborhood or in her/his school neighborhood.</td>
</tr>
<tr>
<td>Your child was often treated badly because of race, sexual orientation, place of birth, disability or religion.</td>
</tr>
</tbody>
</table>
ACE-Q CYW Alternative Results Views

#1. Not showing experiences. Score only

Priorities
No pre-visit concerns indicated.

Questionnaires

<table>
<thead>
<tr>
<th>Flags</th>
<th>Questionnaire</th>
<th>Completed Respondent</th>
<th>Provisional Result</th>
<th>Responses</th>
<th>Follow-Ups PST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CYW Adverse Childhood Experiences Questionnaire (ACE-Q Child) (Anonymous)</td>
<td>7/3/18 Clinician</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please verify that respondents are the appropriate individuals and the questions were understood

Show copy-and-paste-friendly version of these results

Questionnaire Results

CYW Adverse Childhood Experiences Questionnaire (ACE-Q) Child (Anonymous) (ACE-Q Child) [Remove these results]

- Number of ACES (out of 17): 5

ACE-Q CYW Alternative Views

#2. Showing experiences

Priorities
No pre-visit concerns indicated.

Questionnaires

<table>
<thead>
<tr>
<th>Flags</th>
<th>Questionnaire</th>
<th>Completed Respondent</th>
<th>Provisional Result</th>
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<tbody>
<tr>
<td></td>
<td>CYW Adverse Childhood Experiences Questionnaire (ACE-Q Child)</td>
<td>7/3/19 Clinician</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please verify that respondents are the appropriate individuals and the questions were understood

Show copy-and-paste-friendly version of these results

Questionnaire Results

CYW Adverse Childhood Experiences Questionnaire (ACE-Q) Child (ACE-Q Child) [Remove these results]

Submitted 7/3/19 by Barbara Howard

- Parents or guardians were separated or divorced.
- Failure: had a household member who was depressed, mentally ill, or attempted suicide.
- Failure: had some other problem in your neighborhood.
- Failure: was often seen or heard violence in the neighborhood or in her/his school neighborhood.
- Failure: had a bad relationship with your parents.
- Borderline: had a good relationship with your parents.
- Number of other social risk factors (out of 7, 7 is worst): 2
Helping Chart a Positive Parenting Course

- Parent’s Adverse Childhood Experiences (ACE)
  - AAP recommended Pre-visit screen
- Parent’s Positive Childhood Experiences (PCE)
- Connecting past to present as needed
- Teleprompter of suggested language for helping them decide what they wish to create for their child
  - Option for sharing a pictorial illustration of concepts
- Best at 2 – 4 weeks of age
Positive Childhood Experiences

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing up, would you say your relationship with your biological mother was:</td>
<td>Good</td>
</tr>
<tr>
<td>Growing up, would you say your relationship with your biological father was:</td>
<td>Nonexistent</td>
</tr>
<tr>
<td>How often did someone give you a hug when you did something well or when you were very good?</td>
<td>Often</td>
</tr>
<tr>
<td>How often were you told how great you were?</td>
<td>Sometimes</td>
</tr>
<tr>
<td>When I was little, a grown-up would sing songs to me.</td>
<td>Definitely True</td>
</tr>
<tr>
<td>When I was little, other people helped my mother and father take care of me and they seemed to love me.</td>
<td>Not Sure</td>
</tr>
<tr>
<td>I've heard that when I was an infant someone in my family enjoyed playing with me, and I enjoyed it, too.</td>
<td>Probably True</td>
</tr>
<tr>
<td>When I was a child, there were relatives in my family who made me feel better if I was sad or worried.</td>
<td>Not Sure</td>
</tr>
<tr>
<td>When I was a child, there were grown-ups who would read stories to me.</td>
<td>Probably Not True</td>
</tr>
</tbody>
</table>

Adverse Childhood Experiences/Positive Childhood Experiences - ACE/PCE

Helps conversation to reflect on parent’s own adverse and positive childhood experiences.

- Are any “still bothering”?
- Graphic for shared decisions
- Hints for clinician
- Resources automatically appear in Care Portal, available to print
- Patient text/email reminders of resources, parenting goals
## Current Social Determinants of Health

### Adverse Childhood Experiences (ACE)

<table>
<thead>
<tr>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE</td>
</tr>
<tr>
<td>ACE/PCE</td>
</tr>
</tbody>
</table>

### Potential Stressors

<table>
<thead>
<tr>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRAPARE</td>
</tr>
<tr>
<td>PRAPARE Lite</td>
</tr>
<tr>
<td>Protective Factors Survey (PFS)</td>
</tr>
<tr>
<td>ICC Psycho-Social</td>
</tr>
<tr>
<td>SEEK Plus</td>
</tr>
<tr>
<td>The Hunger Vital Sign</td>
</tr>
<tr>
<td>NCCARE360</td>
</tr>
</tbody>
</table>

### Protective Factors Survey (PFS)

<table>
<thead>
<tr>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTSS</td>
</tr>
<tr>
<td>MTTS-P</td>
</tr>
</tbody>
</table>

### Generalized Anxiety Disorder (GAD-2, 7)

### Depression tools

<table>
<thead>
<tr>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edinburgh Postnatal Depression Scale (EPDS)</td>
</tr>
<tr>
<td>Family Assessment of Safety and Stress (FASS Plus)</td>
</tr>
<tr>
<td>PRIME-MD PHQ-2 (PHQ-2)</td>
</tr>
</tbody>
</table>

### Substance tools

<table>
<thead>
<tr>
<th>Questionnaires</th>
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<tbody>
<tr>
<td>Alcohol Use Disorders Identification Test—Consumption (AUDIT-C)</td>
</tr>
<tr>
<td>CRAFTT+T</td>
</tr>
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</table>

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## Sample of Social Determinants of Health Questionnaires

<table>
<thead>
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<tbody>
<tr>
<td>ACE</td>
</tr>
<tr>
<td>ACE/PCE</td>
</tr>
<tr>
<td>PEARS</td>
</tr>
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<td>CRAFTT+T</td>
</tr>
</tbody>
</table>
Table 1. All Screening Tools – SEEK, FASS, MSPSS, PVS, Potential Stressors (PS), PRAPARE, HVS

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>SEEK + (Count)</th>
<th>FASS + (Count)</th>
<th>MSPSS + (Count)</th>
<th>PVS + (Count)</th>
<th>PRAPARE + (Count)</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Depression</td>
<td>412 (7%)</td>
<td>1014 (8%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1426</td>
</tr>
<tr>
<td>Parental Substance Use</td>
<td>36 (3%)</td>
<td>1538 (13%)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1594</td>
</tr>
<tr>
<td>Parental Stress</td>
<td>495 (2%)</td>
<td>410 (3%)</td>
<td>21985 (9%)</td>
<td>87 (13%)</td>
<td>-</td>
<td>4178</td>
</tr>
<tr>
<td>Harsh Punishment</td>
<td>335 (1%)</td>
<td>180 (2%)</td>
<td>219 (2%)</td>
<td>-</td>
<td>-</td>
<td>794</td>
</tr>
<tr>
<td>Intimate Partner Violence</td>
<td>46 (&lt;1%)</td>
<td>296 (3%)</td>
<td>2292 (6%)</td>
<td>15 (1%)</td>
<td>-</td>
<td>2649</td>
</tr>
<tr>
<td>Food Insecurity</td>
<td>304 (&lt;1%)</td>
<td>360 (3%)</td>
<td>-</td>
<td>-</td>
<td>1468 (12%)</td>
<td>2132</td>
</tr>
<tr>
<td>Low Social Support</td>
<td></td>
<td>15748 (28%)</td>
<td>-</td>
<td>91 (1%)</td>
<td>-</td>
<td>15839</td>
</tr>
<tr>
<td>Lack Access to Healthcare</td>
<td>-</td>
<td>-</td>
<td>- (&lt;1%)</td>
<td>37</td>
<td>-</td>
<td>37</td>
</tr>
<tr>
<td>Separation or Divorce</td>
<td>-</td>
<td>1216 (3%)</td>
<td>-</td>
<td>-</td>
<td>1216</td>
<td></td>
</tr>
<tr>
<td>Financial Problems</td>
<td>-</td>
<td>2719 (6%)</td>
<td>63 (&lt;1%)</td>
<td>-</td>
<td>2782</td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td>-</td>
<td>1717 (4%)</td>
<td>228 (&lt;2%)</td>
<td>9 (&lt;1%)</td>
<td>-</td>
<td>1945</td>
</tr>
<tr>
<td>Incarceration</td>
<td>-</td>
<td>-</td>
<td>- (&lt;1%)</td>
<td>-</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Refugee</td>
<td>-</td>
<td>-</td>
<td>- (&lt;1%)</td>
<td>12 (&lt;1%)</td>
<td>-</td>
<td>12</td>
</tr>
<tr>
<td>Housing Problems</td>
<td>-</td>
<td>617 (15%)</td>
<td>66 (&lt;15%)</td>
<td>-</td>
<td>683</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Safety</td>
<td>-</td>
<td>412 (13%)</td>
<td>-</td>
<td>-</td>
<td>412</td>
<td></td>
</tr>
</tbody>
</table>

Total Number of Questionnaire Submissions: 138,172

*PVS refers to Partner Violence Screen; HVS refers to Hunger Vital Signs
*Count refers to number of diagnoses made by the screening tools

Trauma Care Tools

Connecticut Trauma Screener - Caregiver Report (CTS - Caregiver Report)
Connecticut Trauma Screener - Child Report (CTS - Child Report)
CHADIS 0-3: Life Events
Potential Stressors
DIPA PTSD
DIPA RAD/Disinhibited Social Engagement Disorder
Then what?

- Trauma informed care
  - Entire team is sensitive to the fact that behavior during care may be due to trauma
  - Consider the patient with the lens of:
    Not
    “What is wrong with you”
    rather
    “What happened to you?”
- Determine current safety
- Provide nonjudgmental support and listening
- Ask “How much is this still bothering you now?”
- Be ready with mental health referrals

- Referrals
- Tracking and Follow Up

Referral resources

- Local Social Worker
- Health Leads
- Aunt Bertha
- United Way
- Help Me Grow
- NCCARE360
- UniteUS
- Keep your own list
Motivational Interviewing (MI)

- Talking to individuals in a way that helps them explore and resolve their ambivalence about making a behavior change
  - Focus: being empathetic, nonjudgmental, and supportive—which helps individuals express their own reasons for change and take responsibility for their own behavior
  - Evidence for positive health behavior change around substance abuse, oral health and diet and exercise

- Uses specific techniques:
  - asking open-ended questions
  - asking permission
  - reflective and empathic listening
  - sharing the agenda setting
  - eliciting pros and cons of change
  - providing information using the elicit-provide-elicit technique
  - inquiring about the importance and confidence of making a change
  - summarizing the conversation

Stages of Change: Prochasta

[Diagram showing the stages of change: Precontemplation, Contemplation, Preparation, Action, Maintenance, Relapse, Stable Lifestyle]
Challenges to use of MI in Primary Care

- Expectation of appropriate topics for the visit
- Training
- Time

CHADIS for Social Determinants of Health (SDoH)

- Validated SDoH screens to use in the course of regular care visits
- Reliable patient entered data
- Standard format of structured data
- Needs assessment done per patient, per system, per state
- Clinician patient-specific guidance on Motivational Interview to encourage getting help
- Local agency listings sent automatically to patient Care Portal
- One click referral with option of online consent
- Follow up on needs being met by scheduled patient reminder text or email
- Useful for Value Based Payments
- Data for negotiated rates and Population Health
CHADIS: A Clinical Process Support System

Pre-Visit
- Data collection from patients, parents and teachers using >600 tools, including all recommended by AAP

Visit:
- Moment of care decision support for clinicians
- Scored results
- Graphics
- Patient Specific Templates
- Documentation assistance
- Referral & Tracking

Post-visit:
- For Patients
  - Patient Education in MemoryBook Care Portal
  - Monitoring for tracking outcomes
  - Patient-specific resources
- For Clinicians
  - Clinician education
  - QI feedback with MOC-4 credits
  - Automated result charting

The CHADIS Solution
- Parent and teen separately take pre-visit online questionnaires
- Clinician reviews results, can share graphics with family
- Clinician may use decision support for documentation; “teleprompters”; treatment plans
- Clinician may select handouts, resources from links that go to Care Portal or print
- Clinician may exchange findings with school or mental health provider online
- Education materials automatically populate MemoryBook Care Portal
- Clinician bills insurance, earns Board credits
<table>
<thead>
<tr>
<th>INFANT &amp; YOUNG CHILD</th>
<th>SCHOOL AGE</th>
<th>GENERAL HEALTH</th>
<th>FAMILY / ENVIRONMENT</th>
<th>ADULT HEALTH/MENTAL HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages &amp; Stages Questionnaires’ Third Ed. (ASQ-3™)</td>
<td>Pediatric Symptom Checklist (17 items)</td>
<td>CHADIS Visit Priorities</td>
<td>Edinburgh Postnatal Depression Scale</td>
<td></td>
</tr>
<tr>
<td>Modified Checklist for Autism in Toddlers (M-CHAT) &amp; Following</td>
<td>Vanderbilt Parent Revised</td>
<td>Early Periodic Screening Diagnosis and Treatment (EPSDT)</td>
<td>McMaster Family Assessment Device, General Functioning Scale</td>
<td></td>
</tr>
<tr>
<td>Infant Development Inventory (IDI)</td>
<td>Vanderbilt Follow-up, Parent Informant</td>
<td>Family Medical History</td>
<td>Adverse and Positive Childhood Experiences</td>
<td></td>
</tr>
<tr>
<td>ASQ:Socioemotional-2</td>
<td>CHADIS - DSM 5</td>
<td>Family Cardiac History</td>
<td>NCCARE306</td>
<td></td>
</tr>
<tr>
<td>SCHOOL AGE</td>
<td>Strengths &amp; Difficulties Questionnaires &amp; FA</td>
<td>Safety &amp; Guidance Topics (Bright Futures)</td>
<td>Family Assessment of Safety &amp; Stress (SEEK+)</td>
<td></td>
</tr>
<tr>
<td>Provider-level Promoting Healthy Development Survey</td>
<td>SCARED: Parent and Child</td>
<td>Brenner FIT (Obesity and Nutrition)</td>
<td>Medicare Wellness</td>
<td></td>
</tr>
<tr>
<td>CBCL</td>
<td>Vanderbilt Teacher Revised &amp; Follow Up</td>
<td>Healthy Kids</td>
<td>Falls Risk</td>
<td></td>
</tr>
<tr>
<td>ADOLESCENT</td>
<td>School Intervention Questionnaire</td>
<td>PACCI, ACT and others (Asthma monitoring)</td>
<td>AUDIT</td>
<td></td>
</tr>
<tr>
<td>Pediatric Symptom Checklist - Youth</td>
<td>Teacher Data</td>
<td>PRAPARE</td>
<td>International Prostate Screen</td>
<td></td>
</tr>
<tr>
<td>Patient Health Questionnaire 2, 9, A</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRAFFT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kutcher Adolescent Depression Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES-D (depression)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHADIS (Adolescent Risk Behaviors)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Patient Input Options- Device & Language**

- Patient choose language- English, Spanish, French, others by request
- Clinicians see results in English (can see in language used as well)
Help Addressing Parental Risk and other Social Determinants of Health

- **FASS PLUS** (adapted from SEEK (Safe Environment for Every Kid))
- CHADIS provides the FASS Plus questionnaire and Patient Specific Template (PST) that has 14 items covering:
  - Food insecurity
  - Parental depression
  - Parental substance use
  - Life Stress
  - Harsh Punishment
  - Intimate Partner Violence (IPV)
- Two positive randomized trials in primary care pediatrics showed the effectiveness of the SEEK (Dubowitz, et. al.)
- SEEK has a top rating for strength of evidence in preventing child abuse from the California Evidence-Based Clearinghouse (CEBC)

Family Stress Patient Specific Template

- **Prepopulated** template of guidelines
- Links to **graphics** for shared decisions
- Provides **teleprompter** suggested Motivational Interviewing to motivate action
- Automatically creates **summary report which can be uploaded**
- Sends **educational materials** to family’s Care Portal automatically or by clinician selection
- **Quick print** option to allow MA/Nurse to generate and print parent handouts and decision support
Sample – Parent Screening for IPV

**CHADIS**

In the last year, have you been afraid of your partner?
- Yes
- No

Assess Severity

**CHADIS**

Lots of people have rough times in relationships. We’d like to help. Please tell us more. Please answer a few extra questions. In the last 2 months, which of the following have you experienced from a partner? Please check ALL that apply.

- Physical fighting
- Yells at me, puts me down
- Threatens to hurt me
- Threatens to hurt the children
- Controls what I do
- Forced sex
- Injury that did not require medical attention
- Injury that required medical attention
- Something else
- None of the above
- Prefer not to answer

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Assess Current Risk

How much contact do you have with this person?
- Every day or most days
- Every few weeks
- Less than once a month
- No contact
- Prefer not to answer

Determine Current Help

Are you getting help dealing with this problem with your partner?
- Yes
- No
If not wanting help, asks barriers and readiness “if things got worse”

Sample PST Teleprompter for MI-style Discussion During Visit
Reasons NOT to act...

* Partner might get mad
* Affection for partner

Reasons TO act...

* My sleep
* My friends
* My child/children
* Taking care of my child/children
Chadis - PST Care Portal Handout

Patient: Sam A. Jones aged 5 years
Last Updated: Fri Jun 21 09:40:00 EDT 2013
Doctor: Dr. Ray Brown MD
Office: Boston (508)

Dear Caregiver/ Guardian of Sam A. Jones,

All of the resources and tools listed below, including links to further information, are accessible through the CHADIS website. It is in the same place where you can find your child’s Memory Book. To access your child’s Memory Book, go to your child’s Memory Book on www.CHADIS.com, click on Sam A. Jones, and then click on the Memory Book Care Portal. Explore the “Find More” and “Resources” tabs on your Memory Book.

Care Portal Visit Notes:

- Dr. Ray Brown wants you to be sure you know how you can talk to someone by phone who can help you get help if parts of your child’s life are not going well. You can also find an orange bag if needed. Get confidential and free help at 1-800-999-9444 (TDD). Click on “Online Local Resources” to check and see if your area has recommended local professionals or programs that should be helpful. If not, call the office.

- Email a member to call if you need to be in your area, including all families who have

A. Families in the area, but not in the same family, can receive helpful tips.
B. If you feel unsafe in your home, or your child feels unsafe at school, call 911 or 1-800-999-9444 (TDD) to report.

Resources:

- A New Plan for Your Patient
- CHADIS Patient Resources
http://resources.chadis.org/resources/book_patientInfo

Domestic Violence

Do the best in your current relationship until you, your child, or a child of yours is not being treated fairly.

Domestic violence is when one person hurts another person in a relationship. It can cause serious problems now and in the future. It can also harm your child’s emotional and physical health.

Examples of domestic violence:

Individual MemoryBook/Care Portal for Education & Alerts

Mike’s Memory Book

3 years, 6 months
November 2013

3 Years, 6 Months
Wednesday, November, 10, 2011

Developmental Milestones | Edit the Info | Add a Comment | Suggestions

Baby’s First Time Grabbing At Clothes

The first time your baby grabbed or scratched at their clothes.

Comments:
- Susan Burgeson: “She was wearing a yellow flowered jumpsuit.”
You reported that in the past month you have felt very little interest or pleasure in things you used to enjoy. Many people go through periods of feeling this way. There are some steps you can take to help yourself improve how you feel. For instance, pushing yourself to spend a little time each day doing something you used to enjoy could help improve how you feel. Click here to read about more strategies you can try. Often times, people need outside help to help them find joy in life again. A good place to start is talking to your doctors and getting referrals for a mental health professional. Click Parental Depression Local Resources to check and see if your doctor has recommended local professionals or programs that should be helpful. If not, call the office.
Getting Help with Feeling Sad, Down, or Depressed: For Parents

Most people have times in their lives when they feel sad, down, or depressed. Sometimes these feelings pass over time and sometimes they develop into a depression problem that requires outside help. If you are struggling with feeling sad, down or depressed, there are things you can do. Do not be afraid to ask for outside help if needed. Depression is a treatable problem and you do not need to be embarrassed about it or suffer alone. It is so important to take care of yourself and is hard to be a good parent if you feel bad. Below is some information that may help you.

Things you can try right away to help yourself feel better:

- Get exercise. Moving your body releases chemicals in your brain that help make you feel good. Even if you cannot spend a lot of time exercising, try to at least go for a walk every day.
- Eat healthy food and avoid lots of carbohydrates, sugar, and greasy foods.
- Get out and do enjoyable things. Have time each week to do things you enjoy (or once enjoyed). Schedule fun activities in advance and push yourself to do them. Think about how you feel after doing an enjoyable activity compared to how you feel sitting at home alone.
- Confide in and talk to someone you trust, like a friend or family member.
- Ask for help from someone you trust with things that are causing you stress (for example, ask someone to pick your kids up from school or help with errands)

Signs you may need outside help from a professional:

- You feel sad most of the time
- You have problems with sleeping too much or not enough
- You do not feel like eating or eat more than normal
- You feel tired all the time
- You have lost interest in things you used to like
- You have a hard time concentrating, thinking, or making decisions
- You think about hurting yourself or want to die

Getting outside help:

- A good place to start is talking to your doctor who can help you find a mental health professional.
- Cognitive-behavior therapy is an effective form of therapy to treat depression. When finding a therapist, find one that is trained in cognitive-behavior therapy.
- There are medications that can help with depression, talk to your doctor about this option.

Referral and Care Coordination Tools

- Refer the pediatric patient and family members to medical providers or community agencies – receiving providers have approval to reach out to the patients
- Send and receive referrals by email or fax
- Document parent/guardian consent for referral (verbal or written)
- Share CHADIS reports, comments, status-of-service updates
- Automatic notifications regarding ongoing referrals
**Issue-Specific Referral Link**

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Prioritization</th>
<th>Completed</th>
<th>Respondent</th>
<th>Provisional Result</th>
<th>Responses</th>
<th>Follow-Ups</th>
<th>PST</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASS Depression/Stress</td>
<td>7.91.19 4:59 PM EDT</td>
<td>Clinician</td>
<td>2</td>
<td>1</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS Substance Use</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS Food Insecurity</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS IV</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS Parenting Issues</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS Other Issue</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
<tr>
<td>FASS Parent Exposure</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Refer</td>
<td>Refer</td>
<td></td>
</tr>
</tbody>
</table>

Please verify that respondents are the appropriate individuals and the questions were understood.

*Show copy-and-paste-friendly version of these results*

---

**Referral Fax form Preploaded with:**

- Office
- Referring clinician
- Fax for Infants and Toddlers
- Reason for Referral from screen
- Patient name
- Contact Name
- Contact phone
- Contact Email

*These can be edited, if needed*
Referral Fax form Prepopulated with:

Default Verbal consent
Default to not share records
Default message of reason for referral

These can be edited, if needed

Fax Cover Sheet

Patient/Family Referral from CHADIS

The following is information about a patient being referred to your practitioner or service via CHADIS. Instructions and contact information for CHADIS can be found at the bottom of this message.

Referring Provider / Practice
Barbara Howard
Baltimore, MD 21210 US

Reason for Referral
Fetal Developmental Assessments

Patient
Alan ASQ
Contact name: ASQ
Phone: 410-997-4557
Email: dad@f4ASQ.org

Consent
The referring provider has obtained written permission for you to contact the individual being referred by phone or email. A copy of the consent form is attached at the end of this message.

Instructions
In order to view this patient in CHADIS, you’ll need to visit the URL below and enter this referral code:
28J8 GQQM SMFP 2CD7 XJWF 707T

The URL for entering your referral code is:
https://coaching.chadis.org/10/1f

For your convenience, the QR code above can be used to go right to CHADIS and enter your referral code. You may be asked to login to CHADIS if you are not already logged in on your device.

If you have any questions about CHADIS, please contact CHADIS at support@chadis.com.

Thank you for assisting us in caring for this individual.
Barbara Howard, MD CHADIS

This message was sent by CHADIS on behalf of Barbara Howard.
For more information about CHADIS, please visit https://www.chadis.com/
Included Consent Form

Have parent type in name to sign

Maryland Infants & Toddlers Consent Form

Parent/Guardian Consent to Release Information for Maryland Infants & Toddlers Services:

I, [Parent or Guardian Name], give my permission for my pediatric health care provider, [Doctor Name] and the Maryland Infants and Toddlers Program to share and communicate any and all pertinent information regarding my child [Child Name].

(Digital Signature) [MOM] 2/19/20

(Parent/Guardian Name) [morn ASQ] Date

Status of Referral

Details for ADHD, Addie

Latest Reports

Title: WCASD Visits
Type: MD-WC
Date: 1/1/20

Referrals

Status: Referred By: Recipient

[Details and links related to referrals]
Flow for a SDoH System of Care

Database of needs, barriers and referrals automatically created

CHADIS Complements Telehealth

Pre-visit

• Collects patient data online from home
  • Comprehensive evidence-based tools
  • Positive results can trigger follow on tools
• Allows triage for earlier intervention or in person visits
• Documentation created for report
• Request for input from others by email initiated by patient or office

Within Visit - Free text clinician input; Graphics of results to share over teleconference

Post visit and Between visit

• Educational handouts, and patient-specific resources sent to Care Portal with SMS or email alert that they have been provided
• Private portal for teens
• Clinician can send private notes to Care Portal
• Schedule questionnaires to be assigned at any interval for monitoring
• eFax referrals directly from CHADIS
### Positive cases for Ages & Stages Questionnaires®

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Doctor</th>
<th>Patient</th>
<th>Date</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>25063</td>
<td>Howard, Barbara</td>
<td>Suppressed</td>
<td>2008-11-22</td>
<td>Child does not talk like peers. He does not seem to converse. He will answer factual questions but when we try to engage him in conversation, it is more frequent than not where he will begin to cry. He is very sad and is not following the rules of the house.</td>
</tr>
<tr>
<td>955</td>
<td>Kaspeh, Kevin</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Child does not talk like peers. He does not seem to converse. He will answer factual questions but when we try to engage him in conversation, it is more frequent than not where he will begin to cry. He is very sad and is not following the rules of the house.</td>
</tr>
<tr>
<td>4151</td>
<td>Kumar, Gaurav</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Child does not talk like peers. He does not seem to converse. He will answer factual questions but when we try to engage him in conversation, it is more frequent than not where he will begin to cry. He is very sad and is not following the rules of the house.</td>
</tr>
<tr>
<td>10649</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-12-09</td>
<td>Other outside limit for 6 months.</td>
</tr>
<tr>
<td>24652</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>24652</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>24652</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
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<tr>
<td>3733</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>2154</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-08</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>2562</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-06</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>2562</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-06</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
<tr>
<td>2562</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-06</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
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<td>2562</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-06</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
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<tr>
<td>2562</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-06</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
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<tr>
<td>25066</td>
<td>Silverstein, At</td>
<td>Suppressed</td>
<td>2008-11-10</td>
<td>Positive screen for fine motor delay (cut score &lt;= 3.7); Score: 10</td>
</tr>
</tbody>
</table>

### What is based for each patient?

#### Targeted Problem

<table>
<thead>
<tr>
<th>Problem</th>
<th>No &gt; Yes</th>
<th>No &gt; No</th>
<th>Yes &gt; Yes</th>
<th>Yes &gt; No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Insecurity</td>
<td>32 (.45%)</td>
<td>7015 (98.39%)</td>
<td>23 (.32%)</td>
<td>60 (.84%)</td>
</tr>
<tr>
<td>Child Problems</td>
<td>324 (4.54%)</td>
<td>6015 (84.36%)</td>
<td>330 (4.63%)</td>
<td>461 (6.47%)</td>
</tr>
<tr>
<td>Depression</td>
<td>173 (2.43%)</td>
<td>6551 (91.88%)</td>
<td>88 (1.23%)</td>
<td>318 (4.46%)</td>
</tr>
<tr>
<td>Partner Violence</td>
<td>27 (.38%)</td>
<td>7073 (99.2%)</td>
<td>8 (.13%)</td>
<td>22 (.33%)</td>
</tr>
<tr>
<td>Alcohol/Drug Problems</td>
<td>17 (.24%)</td>
<td>7076 (99.24%)</td>
<td>4 (.06%)</td>
<td>33 (.46%)</td>
</tr>
<tr>
<td>Extreme Stress</td>
<td>234 (3.28%)</td>
<td>6437 (90.28%)</td>
<td>166 (2.33%)</td>
<td>293 (4.11%)</td>
</tr>
<tr>
<td>Any Problem</td>
<td>472 (6.62%)</td>
<td>5435 (76.23%)</td>
<td>534 (7.49%)</td>
<td>688 (9.66%)</td>
</tr>
</tbody>
</table>

#### Change in Problem Count (All Ages)

<table>
<thead>
<tr>
<th>Delta Count</th>
<th>N</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>-4</td>
<td>9</td>
<td>0.13%</td>
</tr>
<tr>
<td>-3</td>
<td>56</td>
<td>0.79%</td>
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<tr>
<td>-2</td>
<td>155</td>
<td>2.17%</td>
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<tr>
<td>-1</td>
<td>594</td>
<td>8.33%</td>
</tr>
<tr>
<td>0</td>
<td>5720</td>
<td>80.22%</td>
</tr>
<tr>
<td>1</td>
<td>469</td>
<td>6.86%</td>
</tr>
<tr>
<td>2</td>
<td>90</td>
<td>1.26%</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>0.18%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>0.03%</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>0.03%</td>
</tr>
<tr>
<td>CPT Code</td>
<td>Definition</td>
<td>Examples</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>96110</td>
<td>Developmental Screening with scoring; documentation per standardized instrument</td>
<td>ASQ-3; M-CHAT</td>
</tr>
<tr>
<td>96127</td>
<td>Brief emotional/behavioral assessment with scoring; documentation per standardized instrument</td>
<td>Vanderbilt; PHQ-9; PSC</td>
</tr>
<tr>
<td>96160</td>
<td>Health risk of patient for patient</td>
<td>CRAFFT; ACT</td>
</tr>
<tr>
<td>96161</td>
<td>Health risk for caregiver for patient</td>
<td>EPDS; SEEK</td>
</tr>
<tr>
<td>96111</td>
<td>Standardized Diagnostic assessment by clinician</td>
<td>CARS</td>
</tr>
<tr>
<td>94664</td>
<td>Demonstration and/or evaluation of inhaler techniques</td>
<td>Asthma Inhaler video</td>
</tr>
<tr>
<td>99091</td>
<td>Monitoring between visits with consent of patient during a visit</td>
<td></td>
</tr>
</tbody>
</table>