What Medical Providers Should Know about the Adverse Childhood Experiences Study (ACE)



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AGENCY OF HUMAN SERVICES

The Adverse Childhood Experiences Study

- Largest study of its kind more than 17,000 participants
- Mostly white, middle to upper-middle class
- Joint project, Kaiser-Permanente and CDC
- Published in 1998, on-going
- Demonstrated strong and graded relationship between ACE & chronic disease (including addiction)
- http://www.cdc.gov/ace/

ACE Across the Lifespan



http://www.cdc.gov/ace/

Adverse Childhood Experiences Score

The number of categories of adverse childhood experiences are summed

(types of adversity, not incidents)

ACE score	Prevalence in ACE study	VT ACE data 2011
0	36.1%	42%
1	26%	23%
2	15.9%	12%
3	9.5%	9%
4 or more	12.5%	14%

ACEs among Vermont Children

Adverse Child or Family Experiences	Vermont Prevalence	US Prevalence
Child had > 1 ACE	50.6%	47.9%
Child had <u>></u> 2 ACE	23.3%	22.6%
Socioeconomic Hardship	24.9%	25.7%
Divorce/Parental Separation	26.2%	20.1%
Lived w/someone w/alcohol or drug problem	14.5%	10.7%
Domestic Violence Witness	5.7%	7.3%
Parent Served Time in Jail	5.9%	6.9%
Treated unfairly due to race/ethnicity	1.8%	4.1%
Death of parent	3.0%	3.1%

Child & Adolescent Health Measurement Initiative (2013) www.childhealthdata.org

A Biodevelopmental Framework

- Early experiences leave a chemical "signature" on our genes that determines whether and how the genes are turned on or off.
- This is known as "epigenetic adaptation,"
- It shapes how our brains and bodies develop.
- This is a biological mechanism
 - The environment of relationships, physical, chemical, built environments, and early nutrition cause the physiological adaptations and disruptions that can influence a lifetime of wellbeing.

How Early Experiences Get into the Body: A Biodevelopmental Framework



Impact of Neglect on a Developing Brain



Bruce Perry (2004). Maltreated Children: Experience, Brain Development, and the Next Generation

The Trauma Screening Pilot



Trauma Screening Pilot

- Why Trauma Screening in Primary Care
- Willing Primary Care Clinician
- Screening Tool/EMR/Structured Data
- Staff Education & Support
- Community Resources
- Patient Health Outcomes

Trauma Screens

- Functional Screens
 - Less on event or events more on impact of event
 - Samples
 - TSI Belief Scale (Traumatic Stress Institute, South Windsor, CT.)
 - Primary Care PTSD Screen (PC-PTSD) (Prins, Oulmette, Kemerling et al., 2003)
 - Child Stress Disorders Checklist-Screening Form (CSDC_SF) (Glenn N. Saxe, M>D> & Milchelle Bosquet, Ph.D. NCTSN & BU School of Medicine)
 - Screening questions
 - a. Have you ever been in a situation when you thought that you might die or be seriously injured (hurt very badly?)
 - b Have you ever seen something terrible happen to someone else and you thought that the person might die or be seriously injured?

Event based Screens

• An Interview for Children: Traumatic Events Screening Inventory (TESI-C) (The Nat'l Ctr for PTSD, Dartmouth Child Trauma Research Group, 2008)

Primary Care PTSD Screen (PC-PTSD)

Instructions

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

Have had nightmares about it or thought about it when you did not want to?

YES / NO

Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?

YES / NO Were constantly on guard, watchful, or easily startled?

YES / NO Felt numb or detached from others, activities, or your surroundings?

YES / NO

Current research suggests that the results of the PC-PTSD should be considered "positive"

if a patient answers "yes" to any three items. Prins, Ouimette, & Kimerling, 2003 http://www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp

Who Should Screen?

- Ongoing relationship is central
- If we ask the question we 'own the answer'
- Knowing your community's resources is essential
- Strategies for managing our response part of a trauma informed system

Pilot Implementation

- Nurse Practitioner/RN Team
- PC-PTSD 4 Question Questionnaire
- Patients 17-30
- Annual Visits, New Patient, & PRN
- Embedded MH Clinician Designated Hours
- LINCS Program Screener Onsite

Pilot Practice Implementation

- Nurse Reviews Provider Schedule for Annual Visits & New Patient Visits
- Nurse Introduces Paper PTSD Screening Tool
- Provider Assesses & Addresses Responses
- Structured Data Responses Entered Into HER
- Referral to Embedded Mental Health Clinician
- Screening for LINCS Program

Results/next steps

Implementation September 29, 2014

age: 17-30

annuals

new clients

10 screens administered

4 positive

1 seeking services in home area

1 refused further services

1 agreed to further services

1 considering next steps

Next steps:

As of October 14 increase age range to 17-45 New clients annuals chronic medical conditions

Considerations

Screens should be given periodically: how to track last screen and flag for next one due

Which chronic medical conditions should flag a screen?

Tracking now done manually, EHR should be able to track

Rolling out to entire practice would be facilitated by embedding the screen in the forms

Pilot Support Services

- Community Partnerships
 - Vermont Department of Health
 - Vermont Department of Mental Health
 - Washington County Mental Health
 - CVMC Community Health Team

Next Steps

- Health Outcomes Data
 - Use of Services
 - Emergency Room, Inpatient, Primary Care, Specialty Care, Substance Use/Rehabilitation
- Patient Satisfaction Surveys
- Clinician Satisfaction Surveys