

## Supplemental Digital Appendix 1

### Survey Instruments, From a Multi-Residency Study of Training Environment and Depression, 2012–2015

#### *Age question (baseline only)*

Date of birth (MM/DD/YYYY)

#### *Gender question (baseline only)*

Gender

- ☐ Male
- ☐ Female

#### *PHQ-9 (baseline and quarterly surveys)*

For each statement, please mark the response which best represents how often you have been bothered by any of the following problems over the PAST 2 WEEKS

	Not at all (0)	Less than half the days (1)	More than half the days (2)	Nearly everyday (3)
Little interest or pleasure in doing things (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling down, depressed or hopeless (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble falling asleep, staying asleep or sleeping too much (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling tired or having little energy (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor appetite or overeating (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling badly about yourself, or that you are a failure, or that you have let yourself or your family down (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble concentrating on things such as reading the newspaper or watching TV (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moving or speaking so slow that others could have noticed or the opposite, being so fidgety or restless that you have been moving around a lot more than usual (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thoughts that you would be better off dead or hurting yourself in some way (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### *Self-reported history of depression (baseline only)*

To the best of your recollection, have you EVER experienced an episode of depression (a two-week period of your life when you felt down or lost interest or pleasure in your usual activities and also had difficulty concentrating or noticed changes in sleep, appetite, energy or experienced thoughts of death or feelings of guilt)?

- ☐ Yes
- ☐ No

**Neuroticism** (baseline only)

For each statement, please mark the response which best represents your level of agreement with the statement. Please choose the response that CURRENTLY best describes you.

	Strongly agree (4)	Agree (3)	Neutral (2)	Disagree (1)	Strongly disagree (0)
I rarely feel anxious or nervous (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely experience strong emotions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not a worrier (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often worry about things that might go wrong (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frightening thoughts sometimes come into my head (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely feel lonely or blue (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Too often, when things go wrong, I get discouraged and feel like giving up (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am seldom sad or depressed (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often feel helpless and want someone else to solve my problems (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am having my favorite foods, I tend to eat too much (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At times I have been so ashamed that I just wanted to hide (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm under a great deal of stress, sometimes I feel like I'm going to pieces (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often feel inferior to others (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable in the presence of my bosses or other authorities (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Early life stress (baseline only)**

These are questions about your childhood and early adolescence (age 5 - 15). Please think about your family life while answering the questions in this section.

	1 Not at all (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 Very often (6)
How often did a parent or other adult in the household make you feel that you were loved, supported and cared for? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often did a parent or other adult in the household swear at you, insult you, put you down or act in a way that made you feel threatened? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often did a parent or other adult in the household express physical affection for you, such as hugging or other physical gestures of warmth and affection? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often did a parent or other adult in the household push, slap or shove you? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you say that the household you grew up in was well-organized and well-managed? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In your childhood, did you live with anyone who was a problem drinker or alcoholic or who used illicit drugs? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say that a parent or other adult in the household behaved violently toward a family member or visitor in your home? (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say that there was quarreling, arguing or shouting between your parents? (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say there was quarreling, arguing, or shouting between a parent and you? (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say there was quarreling, arguing, or shouting between a parent and one of your siblings? (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say there was quarreling, arguing, or shouting between your sibling(s) and you? (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you say the household you grew up in was chaotic and disorganized? (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often would you say you were neglected while you were growing up, that is, left on your own to fend for yourself? (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***Duty hours question (quarterly surveys)***

How many hours have you worked in the past week?

***Resident Questionnaire (12-month survey)***

Please indicate your level of agreement for each of the following statements as to how accurately they describe you and your residency program.

	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
The caseload in this program is about right (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The call schedule is too heavy (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time demands are reasonable and allow me to get my work done (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospital support services are sufficient to help me care for my patients (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The average number of workups on call is reasonable (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is enough clerical and administrative support provided by the program (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The workload is generally excessive in this program (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely have time to read (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get timely and appropriate feedback from faculty (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scheduled conferences are generally a valuable learning experience (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The in-patient ward rotations are generally a good learning experience (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have received sufficient counseling from faculty to help with career planning (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The degree of responsibility I have for the care of patients is appropriate (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full time faculty members contribute to a great extent to the teaching I have received (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally feel that other residents are helpful and “pull their fair share” (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have enough personal support from faculty (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have enough instructions on what is expected of me in each level of my training (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>