Public Health Nutrition: 20(11), 2077

## Letter to the Editor

First published online 7 June 2017

# In response to 'Universal v. risk-based screening for food insecurity' by Steiner and Zeng

#### Madam

We wish to thank the authors for their excellent comments<sup>(1)</sup> on our paper<sup>(2)</sup>, with which we fully agree. It is indeed critical that clinicians use the positive predictive value in deciding whether to conduct a screening test, and the positive predictive value of a screening test falls as the prevalence falls. We offer two additional comments based on their feedback.

The first is related to the observation that screening for food insecurity in a private, multi-clinician practice with a 5% prevalence of food insecurity would yield a positive predictive value of 34%, which the authors suggest is too low to merit screening. However, some clinicians would interpret that positive predictive value as high enough; this is a value judgement. Another way of framing the 'need to follow up 1440 individuals in order to identify 490 who have food insecurity' is that for every three patients identified as needing follow-up, one of them will really be food insecure. The opportunity to intervene for that one patient who is really food insecure out of three identified by the screening test may be worth it for many clinicians.

Second, there is not complete concordance between patients who are food insecure and patients who desire support in accessing food. That is, some food-insecure patients have other priorities at the time of their food insecurity screening and do not wish to be referred to food resources, while some food-secure patients may be struggling to make ends meet or just above the threshold for food insecurity and desire a referral for food resources. There are many reasons for a false positive result, but in the case of this screening test it is important to understand that a single affirmative response is considered food insecurity. However, on the eighteen-item module used as the comparison, a single affirmative response is considered 'marginal food security', which the US Department of Agriculture groups with the food-secure population. It is therefore likely that many of these false positives are marginally food secure, struggling to maintain their food security, and therefore may also desire support from a social worker, nutritionist, volunteer, hunger hotline, etc. in accessing food resources even if they are not food insecure.

Finally, we agree with the need to consider risk-based screening in settings where universal screening is inappropriate or impractical. Clearly articulating for clinicians risk factors which should prompt screening will be critical to this effort.

#### Acknowledgements

*Financial support:* This research received no specific grant from any funding agency in the public, commercial or notfor-profit sectors. *Conflict of interest:* None. *Authorship:* All authors revised this response for critical content. *Ethics of human subject participation:* No patient data were used as part of this response.

Craig Gundersen<sup>1</sup>, Emily Engelhard<sup>2</sup>, Amy S Crumbaugh<sup>2</sup> and Hilary K Seligman<sup>2,3</sup>

<sup>1</sup>Department of Agricultural and Consumer Economics University of Illinois Urbana, IL, USA

> <sup>2</sup>Feeding America Chicago, IL, USA

<sup>3</sup>Division of General Internal Medicine University of California San Francisco and Center for Vulnerable Populations at San Francisco General Hospital Box 1364, San Francisco, CA 94143, USA Email: hilary.seligman@ucsf.edu

### References

- 1. Steiner JF & Zeng C (2017) Universal *v*. risk-based screening for food insecurity (Letter to the Editor). *Public Health Nutr* (Epublication ahead of print version).
- 2. Gundersen C, Engelhard EE, Crumbaugh AS *et al.* (2017) Brief assessment of food insecurity accurately identifies high-risk US adults. *Public Health Nutr* (Epublication ahead of print version).