

# A Pilot Structural Competency Curriculum for Family Medicine Residents

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## Introduction

Structural competency is the ability to recognize and address the policies, institutions, and economic systems that cause health inequities. It was first developed by Helena Hansen and Jonathan Metz in 2014 and has been taught in multiple disciplines and levels of training around the country. It focuses on the following five goals:

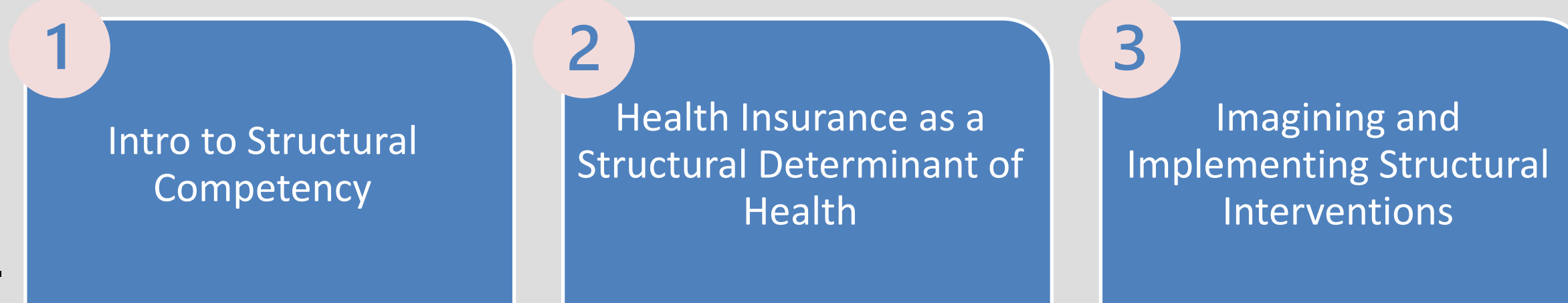
1. Identifying structural influences on patient health
2. Identifying structural influences on clinical interaction
3. Generating structural interventions in the clinic
4. Generating structural interventions beyond the clinic
5. Applying structural humility.

## Objectives

- Implement a pilot structural competency curriculum for a cohort of 11 family medicine residents
- Evaluate the effect of the curriculum on residents' learning, clinical practice, empathy and burnout, and advocacy
- Lay groundwork for longitudinal structural competency education in Family Medicine training

## Methods

- Curriculum adapted from materials developed by the Structural Competency Working Group
- Three 1-hour sessions were held over the course of 1 month, involving a mix of lecture, group discussion, reading, writing, and self-reflection (Figure 1)
- Anonymous pre- and post-course surveys administered to participants directly before and directly after the first and third sessions, assessing knowledge of the course material, feelings of burnout, and ability to advocate for patients using Likert-scale style answers
- Survey responses were qualitatively analyzed for group-level trends and feedback



## Results

- Total 11 residents participated: 6 residents in all 3 sessions, and 3 residents in 2/3 sessions

### Knowledge about structural determinants of health

- Fair to good pre-course understanding of structural determinants of health, with modest improvement post-course (Figure 3, question 1).
- Top five factors that, in their clinical experience, negatively impact health: poverty, insurance coverage, health literacy, lifestyle choices, and language barriers were ranked highest both pre- and post-course

- Overall, participants found the course educational and useful.
- Session 2 was mentioned by half of respondents as most useful and/or providing most new learning
- Others highlighted creating flow charts to think about multiple structural factors
- One response described the course as "a good way to open our perspectives to the community."
- Verbal feedback from two participating attendings noted high levels of engagement and interest in course material.

### Burnout and empathy

- Overall pre-course responses indicated low-moderate levels of burnout (feelings of exhaustion, helplessness, and frustration); and moderate levels of feeling appreciated, respected, and gratified (Figure 2).
- Post-course responses suggested modest decreases in feelings of burnout and increases in feelings of respect and gratification (Figure 2).
- One respondent highlighted the self-reflection portion of the first session as an element of the course that worked particularly well.

### Clinical practice and advocacy

- Pre-course, most respondents did not struggle to understand patient behavior/choices; felt they knew how to respond to social and economic problems; and were confident in their ability to advocate for patients (Figure 3, questions 4-6).
- Post-course responses showed a small to modest decrease in confidence in ability to respond to social/economic problems and advocate for patients.
- More than half of respondents identified Session 3 as being particularly educational or useful. Respondents intended to continue engaging in health advocacy and to screen for structural determinants of health as part of clinical practice.

## Results

Figure 2. Pre- and post- course frequency of emotions associated with burnout

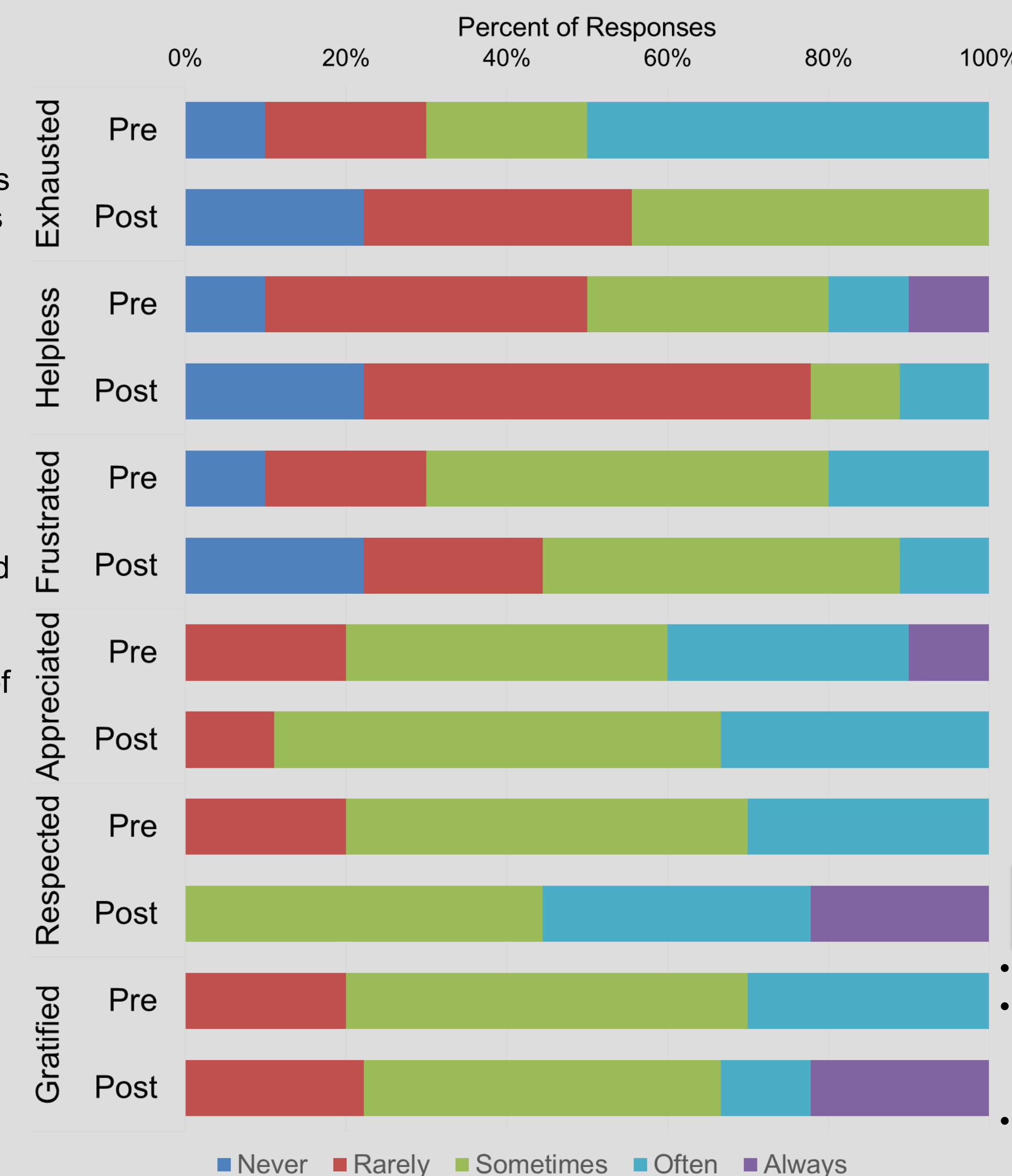
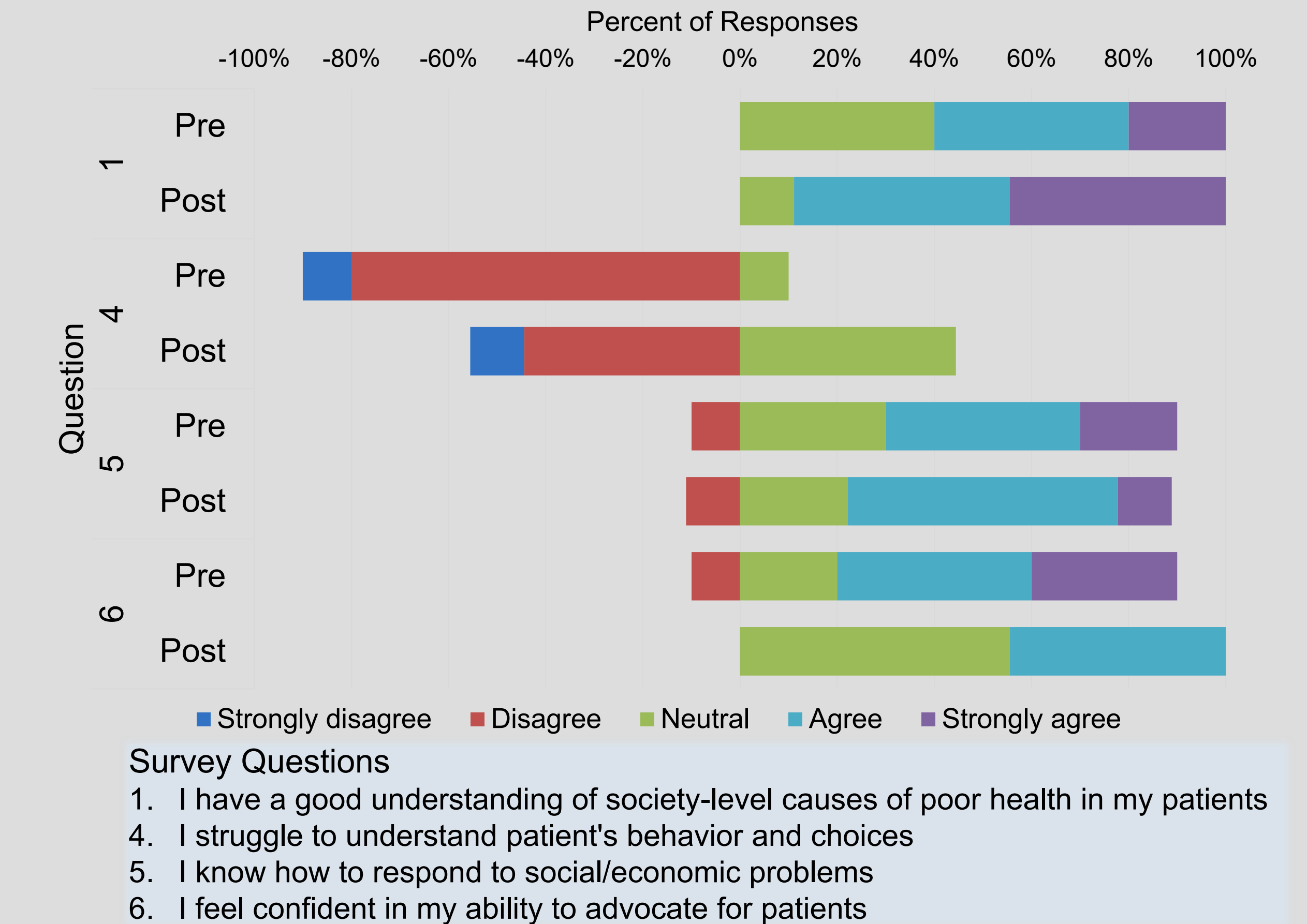


Figure 3. Pre- and post- course knowledge and advocacy



## Discussion and Conclusions

- Residents overall found the content useful and intended to apply it in and beyond the clinic.
- Though the study is limited by small sample size and short follow up interval, there was modest improvement in level of burnout, supporting the hypothesis that structural competency education can help mitigate burnout in residents providing primary care in an underserved community.
- More longitudinal structural competency education and research is needed to assess effect on resident well-being, engagement in structurally-informed advocacy, and quality of clinical care.
- Confidence in ability to advocate for patients and respond to structural problems moderately decreased after course completion. Increased awareness of the scale and depth of structural problems may be initially associated with lower confidence in addressing these problems.
- If true, this underscores the need for ongoing structural competency education to build on residents' skills and confidence in navigating the many structural influences on patient health.

## References

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