**Appendix 1: Qualitative Methods and Semi-Structured Interview Guide**

**Qualitative Methods**

Interviews followed a semi-structured interview guide (see below) and included open-ended questions designed to elicit rich responses to assess participants’ perceptions of the VAST, including barriers and facilitators to antimicrobial stewardship activities. The conceptual framework used to develop the semi-structured interview guide was the Systems Engineering Initiative for Patient Safety (SEIPS 2.0), a human factors model geared towards improving patient safety which proposes that the following five components of a work system continuously interact and influence one another: tools and technologies, organizational conditions, person(s), tasks and the physical environment.1

Telephone interviews (20 to 60 minutes in length and digitally recorded) were conducted by a trained interviewer and follow up probes were used to elicit specific examples and ensure sufficiently rich data. For the qualitative analysis, interview data were analyzed using deductive (with *a priori* codes based on the SEIPS 2.0 model) and an iterative, inductive content analysis methodology² in which an open coding approach was used (i.e., *a priori* codes were not defined for this portion of the analysis).2 Two trained qualitative analysists coded transcripts independently utilizing audio recordings to compliment the verbatim transcripts. Analysis was conducted using NVivo software (QSR International, Melbourne, Australia). Emergent codes were iteratively added throughout the analysis process to reflect quotations that did not adequately fit previously developed codes. The analytic pair met regularly to review meanings of codes in order to ensure groundedness and consistent usage and discuss interviews, notes, themes, and the emerging conclusions. Categories were developed by identifying broad themes based on representative interview responses and then grouped under higher order headings in order to describe distinct aspects of participants’ experiences.

References:

1. Holden RJ, Carayon P, Gurses AP, et al. SEIPS 2.0: a human factors framework for studying and improving the work of healthcare professionals and patients. *Ergonomics*. 2013;56(11):1669-1686. doi:10.1080/00140139.2013.838643
2. Elo S, Kyngas H. The qualitative content analysis process. *Journal of advanced nursing.* Apr 2008;62(1):107-115.

**Interview Guide**

**VAST Semi-Structured Interview**

Thank you for agreeing to talk with me. We want to get your opinions and feedback about the weekly videoconference antibiotic stewardship team (VAST) meetings. As we discussed, I would like to record our talk today; is it still ok for us to record? Other than those on the call today, no one on the research team will know who you are. If you do slip and say someone else’s name, that won’t be included in the transcription. The research team will only know your role (i.e. physician, nurse) and whether your primary setting is acute-care or long-term care. Otherwise, this is anonymous.

I’m going to start the recording now.

**General Questions**

1. Please tell me about your experiences with the VAST program.
2. Which aspects and/or sessions of VAST worked particularly well?
3. Anything you would change about the VAST program?
4. What was one of your most memorable sessions?

Okay, we are going to drill down into various aspects of VAST. These questions are bit more focused; however, please feel free to provide as much detail as you would like.

1. Can you tell me about the format of VAST sessions?
2. How did you prepare for a VAST session? (work)
3. To what extent did you participate? (team/participation)
4. Did you ever: (work)
   1. Identify patients to discuss (if no, how did they get identified?)
   2. Prepare a patient to present at a VAST session ahead of time
   3. present patients at a VAST session?
   4. Place a consult
   5. Write notes
   6. What tasks were you involved in?
   7. What was the work load like for you? Or effort to prepare/participate?
   8. To what extend did you have to assist with the technology?
5. How did the participants in the VAST meetings interact? (team/participation)

Probes:

1. What roles were represented?
   1. Were there roles missing? (nurse, someone from urgent care)
2. To what extent did everyone get a chance to speak?
3. To what extent did the room accommodate the meeting?
4. To what extent did the technology facilitate or distract from the meeting?
5. Can you tell me what you thought about the video format
6. To what extent do you think the VAST sessions have affected or changed your

(If possible, please try to have them give very specific answers-- Shorter courses of abx, ordering more diagnostic tests, narrow therapy, better at at talking to patients or family members)

* 1. practice?
  2. work at your facility?
  3. culture at your facility?
  4. patient care?
  5. is there a sense of team among the VAST members? Are they working together? (is the whole greater than the sum of the parts?)

1. To what extent have you shared your knowledge and experiences of the VAST program with others?
2. How many different ID physicians were a part of your VAST?
3. Please discuss the Infectious Disease (ID) physicians that were part of your VAST?
   1. What they did well?
   2. What could have been done differently?
   3. How were the recommendations handled?
   4. Tell me about the didactic portion – how relevant were the slides/ papers and formal presentations?
4. What is your role in VAST?
5. How many VAST sessions have you attended? How frequently did you attend?
6. How should the VAST will continue on from here? (do they view themselves as part of a team making advice for their patients?)
   1. Can the VAST function without the ID physician involved. (Do they view this as a team process with ID MD as one member or as a consult to an ID physician. Or hybrid. )

Is there anything else you would like us to know about VAST that we haven’t talked about?

Do you have any other comments or feedback for us?