**Supplemental Digital Content 1. Text**

*Pathogen panel analysis*

Briefly, 1 mL of NucliSENS easyMAG lysis Buffer, 10 μL of bacteriophage MS2, and 100–150 mg of fecal sample were added to a SK38 tube, vortexed for 5 min, and allowed to stand at room temperature for 10–15 min prior to centrifugation at 14,000 rpm. A QIAamp MinElute Virus Spin kit (Qiagen Inc, CA) was used for nucleic acid extraction, and an internal control sample (phage MS2) was added to each test sample prior to extraction. Multiple primers were labeled with different dyes via magnetic beads; a red 635-nm LED filter was used to distinguish different types of beads, and a green 525-nm LED filter was used to identify those with fluorescence. Luminex xPONENT 4.2 software (Luminex Corp, Austin, TX) was used to acquire and analyze the data.