Supplementary Material for

Potential for point-of-care tests to reduce chlamydia-associated burden in the United States: a mathematical modeling analysis.

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Figure S1. Impact of POCT in Analysis 1. Outcomes of chlamydia burden among women aged 25-39 presented under different assumptions about POCT sensitivity (varied between 90-99%), proportion of patients treated immediately (30-100%), baseline proportion of LTFU (5-20%) and average baseline delay between testing positive and being treated (1-3 weeks). Prevalence reductions (A) relative to baseline, annual infections (B), and annual PID cases averted (C) are shown. Sample of 8000 simulations is plotted for each scenario.

LTFU: Loss to follow up; PID: Pelvic inflammatory disease; POCT: Point-of-care testing; wk: week
**Figure S2.** Impact of POCT in Analysis 1. Outcomes of chlamydia burden among women aged 40-54 presented under different assumptions about POCT sensitivity (varied between 90-99%), proportion of patients treated immediately (30-100%), baseline proportion of LTFU (5-20%) and average baseline delay between testing positive and being treated (1-3 weeks). Prevalence reductions (A) relative to baseline, annual infections (B), and annual PID cases averted (C) are shown. Sample of 8000 simulations is plotted for each scenario.

**Legend:**
- LTFU: Loss to follow up
- PID: Pelvic inflammatory disease
- POCT: Point-of-care testing
- wk: week
Figure S3. Impact of POCT if testing frequency is increased by 20% In Analysis 2. Outcomes of chlamydia burden among women aged 25-39 are presented under different assumptions about POCT sensitivity (varied between 90-99%), proportion of patients treated immediately (30-60%), baseline proportion of LTFU (5-20%) and the average baseline delay between testing positive and being treated (1-3 weeks). Prevalence reductions (A) relative to baseline, annual infections (B), and annual PID cases averted (C) are shown. Sample of 8000 simulations is plotted for each scenario.

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**Figure S4.** Impact of POCT if testing frequency is increased by 20% in Analysis 2. Outcomes of chlamydia burden among women aged 40-54 are presented under different assumptions about POCT sensitivity (varied between 90-99%), proportion of patients treated immediately (30-60%), baseline proportion of LTFU (5-20%) and the average baseline delay between testing positive and being treated (1-3 weeks). Prevalence reductions (A) relative to baseline, annual infections (B), and annual PID cases averted (C) are shown. Sample of 8000 simulations is plotted for each scenario.

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