

Supplemental content for the manuscript: The use of mathematical models of chlamydia transmission to address public health policy questions: a systematic review

Table S2. Methodology used in the 45 publications (excluding the 2 model comparison studies). Studies may have incorporated several measures and frameworks, and variables may exceed 100%.

Variable measured	Number of studies (%)	References
Modeling framework		
Deterministic compartmental, <i>frequency dependent</i> partner change	25 (56%)	20–30, 31s–44a
Deterministic compartmental, <i>pair formation</i> explicitly modeled	4 (9%)	29,38s,39s,45s
Deterministic compartmental, <i>triple formation</i> explicitly modeled	1 (2%)	39s
Individual based model	21 (47%)	44s,46s–64s
Natural immunity included	17 (38%)	21,24,26–28,30,34s,37s,38s,40s–43s,45s–48s
Risk heterogeneity^a		
No risk stratification	9 (20%)	24,27–29,34s,38s,41s,44s,45s
Included risk groups	14 (31%)	22,23,25,31s–33s,35s,36s,39s,40s,46s–48s,63s
Included age groups	2 (4%)	30,37s
Included both risk and age groups	20 (44%)	20,21,26,42s,43s,49s–62s,64s
Intervention		
Screening, no PN	12 (27%)	21,24,26–28,31s–35s,37s,40s
Screening and PN	27 (60%)	20,22,23,25,30,36s,38s,39s,44s–47s,49s–62s,64s
PN only ^b	1 (2%)	63s
Vaccine	3 (7%)	21,40s,48s
Condom use	4 (9%)	29,42s,43s,49s
Periodic presumptive treatment	1 (2%)	41s
Syndromic management	2 (4%)	42s,43s
Outcome		
Chlamydia infection ^c	38 (84%)	21–29,31s–51s,53s–56s,59s,61s,63s,64s
Chlamydia sequelae ^d	20 (44%)	20,22–25,30,33s,35s,36s,40s,46s,48s,51s–53s,57s–60s,62s
Costs	21 (47%)	20,22–25,30,33s,36s,37s,40s,44s,46s,51s–53s,57s–60s,62s,63s
QALY	11 (24%)	22,25,30,33s,36s,40s,46s,57s,58s,62s,63s
Sequelae incorporated		
In the dynamic model	10 (22%)	20,24,25,30,35s,36s,46s,48s,59s,60s
Outside the dynamic model ^e	10 (22%)	22,23,33s,40s,51s–53s,57s,58s,62s,63s

Footnote for table 2:

^a For simplicity, we did not stratify further whether the model stratification was for one or two sexes (in heterosexual models).

- ^b PN only included testing of symptomatic individuals.
- ^c Prevalence, incidence, reported cases.
- ^d Adverse event due to chlamydia infection.
- ^e Using outputs from a dynamic model (such as incidence) in further analysis.