

Cost-effectiveness of testing for *Mycoplasma genitalium* among men who have sex with men in Australia

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Background:

Mycoplasma genitalium (MG) disproportionately affects men who have sex with men (MSM). We determined the cost-effectiveness of testing strategies for MG using a healthcare provider perspective.

Methods:

We used a dynamic transmission model of MG among MSM living in Australia to evaluate the impact of four testing scenarios on MG incidence: 1) no one tested; 2) symptomatic MSM; 3) symptomatic and high-risk asymptomatic MSM; 4) all MSM. We calculated the incremental cost-effectiveness ratios (ICERs) using a willingness to pay threshold of \$50,000 AUD.

Results:

Offering testing to all men is dominated (i.e. not recommended because of higher costs and lower QALYs gained compared to other strategies). Testing symptomatic and high-risk asymptomatic MSM is cost-effective (ICER \$46,232 per QALY gained). However, when an AMR tax of \$20 per person treated was included, testing only symptomatic MSM became the more cost-effective than testing symptomatic and high-risk asymptomatic MSM.

Conclusion:

Testing only symptomatic MSM is the most cost-effective option when the potential costs associated with AMR are accounted for. For pathogens like MG where there are anticipated future costs related to AMR, we recommend models to test the impact of incorporating these costs as they can change the conclusions of cost-effectiveness studies.

Disclosure of Interest Statement:

No conflicts of interest to declare