would be an increased concentration of the interacting drug (in 50% of hospitalizations), in 10% a serious toxicity could occur due to the DDI (QTc prolongation, rhabdomyolysis). CONCLUSIONS: We showed that the potential for moderate and severe drug-drug interactions is prominent in hospitalized persons who are treated with triazoles. These DDIs may impact on the outcomes of this patient population.

INFECTION (including HIV, CAP)

INFECTIONS (including HIV, CAP)—Methods and Concepts

COSTS AND EFFECTS OF CHLAMYDIAL SCREENING PROGRAMS: DYNAMIC VERSUS STATIC MODELING

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OBJECTIVES: To compare dynamic with static modeling for the economic evaluation of screening programs for asymptomatic genital Chlamydia trachomatis infections in sexually active women. METHODS: We compared a stochastic network simulation model (dynamic model) and a decision analysis model (static model) for estimating the cost-effectiveness of an opportunistic general practitioner-based screening program for the first 10 years of screening in The Netherlands. The influence of the model type on the requested data, the computed results and the sensitivity of model parameters were investigated. RESULTS: The dynamic model yielded diverging outcomes and identified different optimal screening strategies than the static model: Screening women aged 15–24 years results in net savings (dynamic model) or net costs (static model). Screening women aged 15–29 years or 15–34 years dominates (dynamic model) or is less cost-effective (static model) than screening women aged 15–24 years. These differences are caused by the fact that unlike the static model the dynamic model is able to consider population effects, i.e. changes in the force of infection (per-susceptible rate of infection) caused by screening. However, it is more complex and requires more data and time and thus is more costly than the static model. It is also more sensitive to parameter changes that affect the force of infection (e.g. partner referral rate). CONCLUSIONS: Dynamic models should be applied for the economic evaluation of prevention measures that have the potential to lower the force of infection in a population, such as large-scale screening programs for Chlamydia trachomatis.

METHODS AND CONCEPTS

BOOTSTRAP CONFIDENCE INTERVALS FOR THE ANGULAR TRANSFORMED ICER: ARE MORE SOPHISTICATED METHODS THE BETTER CHOICE?

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OBJECTIVES: Uncertainty in the estimation of the incremental cost-effectiveness ratio (ICER) is usually described by bootstrap confidence intervals. When bootstrap replicates cover more than one quadrant of the cost-effectiveness plane angular transformation of the ICER is appropriate. In a simulation study the performance of the most common bootstrap methods (normal, percentile, bias corrected with and without acceleration correction) is investigated. METHODS: Cost data were generated according to a lognormal distribution, effect data were drawn from normal distributions. The simulation frame work covers 180 settings differing in correlation between costs and benefits (0.9, 0.45, 0, 0.45, 0.9), in standardized mean difference of benefit and cost (each 0.2, 1, 5) and in sample size (50, 100, 200, 400). For each setting 10,000 samples were generated. The bootstrap procedures were based on 1000 replications. The performance of each procedure was described by the observed coverage probability of the 95%-confidence intervals. RESULTS: Overall, the percentile method demonstrates the highest robustness with miscoverage frequencies between 4% and 7%. The bias corrected methods perform also well in terms of miscoverage, but tend to show wider confidence intervals compared to the percentile method. The normal approach shows the smallest ranges given small effect differences. However in conjunction with small cost differences and in case of negatively correlated data up to 15% miscoverage is observed and a strong conservative behaviour is found in case of positive correlation. CONCLUSIONS: The more sophisticated methods result in wider confidence intervals compared to the normal and percentile approach. Recently developed methods as bootstrapping the bootstrap or (weighted) jackknife after bootstrap, which do not depend on parametric assumptions in accounting for median bias, may present a promising alternative. However, in order to avoid computationally intensive procedures the bootstrap percentile method is generally recommended.