Analyses were conducted from both the societal and health care system perspective. Sensitivity analyses were performed.

RESULTS: Reduction in disease outcomes, disease sequelae and cost-of-illness by health state was observed in the time period post-Prevnar®, across all age groups. The total cost of the vaccination program to the Canadian health care system (including herd immunity effects), from a payer perspective amounted to $74,682,790; this decreased to $46,197,274 from a societal perspective. The total number of illnesses avoided was 86,164. The incremental cost-effectiveness ratio (ICER) was $28,551 and $17,661 per additional QALY from the health system and societal perspectives, respectively. When herd immunity effects were excluded from the analysis, the ICER increased to $166,560 and $115,995 per QALY, respectively. Sensitivity analysis indicated that total cost and ICER results were most sensitive to changes in the epidemiology and cost of otitis media. However, these changes did not considerably impact the results, indicating a robust model. CONCLUSION: Consistent with previous findings, vaccination with Prevnar® is cost-effective. Administration of Prevnar® results in a substantial reduction in pneumococcal disease in vaccinated children and unvaccinated adults.

COST-EFFECTIVENESS OF GARGLING FOR PREVENTION OF UPPER RESPIRATORY TRACT INFECTIONS

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OBJECTIVES: To investigate the cost effectiveness of gargling to prevent upper respiratory tract infections (URI) from a societal perspective. METHODS: The effectiveness of gargling for preventing URI has been demonstrated in a randomized controlled trial in which the participants recorded the frequency of gargling, incidence and severity of URI and duration of daily medicine. Costs of gargling, visiting physicians, medicine, and lost productivity were considered. The cost of gargling was estimated as the opportunity cost of the time required. The utility of severe and moderate URI was also considered. Average costs and utility during 60 days of observation in the trial were estimated as the sum of the average daily cost and utility of the participants remaining staying in the trial. The incremental cost effectiveness ratio (ICER) of gargling when compared with the absence of gargling was calculated, and bootstrap sampling generated an acceptability curve. RESULTS: The estimated unit cost of gargling was 49.2 yen. Assigned participants gargled 4.5 times per day on average. The gargling group had higher costs and utility than the group that did not gargle. The incremental cost and effectiveness for 60 days were 4750 yen and 0.43 quality-adjusted life days respectively. The gargling group required 8020 yen more for gargling, but saved 3270 yen by preventing URI respectively. The gargling group required 8020 yen more for gargling, but saved 3270 yen by preventing URI during 60 days of observation in the trial were estimated as the sum of the average daily cost and utility of the participants

THE CLINICAL AND ECONOMIC BURDEN OF COMPLICATED SKIN AND SKIN STRUCTURE INFECTIONS DUE TO STAPHYLOCOCCUS AUREUS: FINDINGS FROM A NATIONAL DATABASE

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OBJECTIVES: Complicated skin and skin structure infections (cSSSIs) are a common complication among hospitalized patients. There are limited national data on the costs of cSSSIs due to Staphylococcus aureus, a common hospital-acquired pathogen. METHODS: This retrospective cohort study used data from the 2004 Health care Cost and Utilization Project Nationwide Inpatient Sample (HCUP-NIS). Patients with S. aureus cSSSIs were identified based on ICD-9-CM diagnosis codes and compared to patients with cSSSIs due to S. aureus without skin infections. Excess mortality, length of stay (LOS), and costs were estimated for both groups. Multivariate models (with log transformation) were used to adjust costs for potential confounding factors, including age, gender, mortality, hospital region, and comorbidity. RESULTS: We identified 55,585 hospitalized patients with cSSSIs due to S. aureus. The comparison cohort consisted of 7,618,776 patients without skin infections. The mortality rates were similar for the S. aureus cSSSI and comparison cohorts (3.9% and 2.0%, respectively). For com-