RESULTS: Two months after stroke informal caregivers spent 22.7 hours a week (mean) on a range of different care tasks. Six months after stroke they spent 25.1 hours a week (mean) on the same tasks. Their mean EQ-5 score is 0.836 (n = 195) after two months and 0.816 (n = 138) after six months. After two months 40 percent reports pain and other complaints and 25 percent reports anxiety. Six months after stroke this is respective 45 percent and 25 percent. Health related quality of life results and time invested will be compared to the general population by sex and age.

MODELING ANTIBIOTIC EFFICACY BY INFECTIOUS AGENT AND PROBABILITY OF RESISTANCE
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Current cost-effectiveness models of antibiotic efficacy typically do not consider the variability in relative incidence of infectious agents or the probability of species-specific antibiotic resistance. A model that incorporates this variability in incidence and resistance will more accurately represent epidemiological variances and associated differences in treatment costs across patient populations.

OBJECTIVES: To create a model of antibiotic efficacy that generates population-specific cost-effectiveness ratios by including incidence and resistance rates of infectious agents and can be adjusted to reflect epidemiological data specific to different geographic regions.

METHODS: We constructed a decision tree model that represents a user-defined infection (i.e. acute exacerbation of chronic bronchitis). This model considers the relative incidence of infectious agents (bacterial and non-bacterial/viral), the incidence of resistance among the bacteria agents, and antibiotic efficacy against each infectious agent and level of resistance. The model can represent “all-or-none” resistance such as that associated with beta-lactamase production, or varying degrees of susceptibility associated with other methods of resistance. The model can represent clinical or in vitro efficacy, depending on the source of the data. In the event of insufficient data to populate the resistance branch, this branch can be collapsed out of the tree. The model will then represent antibiotic efficacy for all infectious agents included.

RESULTS: The model generates cost-effectiveness ratios identifying conditions where the antibiotic of interest is cost effective or cost saving versus other antibiotics. Ratios for individual infectious agents and levels of resistance also identify specific populations where the antibiotic of interest has an advantage.

CONCLUSIONS: This model can incorporate geographic diversity of and resistance in bacterial populations to generate cost-effectiveness ratios specific to different epidemiological and geographic populations.