

Estimation of Direct Cost Savings from WHO Surgical Safety Checklist Implementation in the United States

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If the WHO Surgical Safety Checklist is implemented in all operating rooms across the United States, the potential cost-savings from the prevention of major complications is estimated to be \$15 to \$25 billion. Based on data from the four pilot sites in the developed world, we generalized the results of the checklist to the United States and estimated that it would reduce major complications by 30%. Rates of major complications in the United States were obtained from previously published estimates from the Patient Safety in Surgery Study (Henderson et al, Fink et al). We estimated the rate of surgery performed per year in the United States based on the National Center for Health Statistics (NCHS) report on ambulatory and inpatient procedures. To establish the cost of major complications, we summed the costs associated with additional inpatient care, outpatient care, and malpractice costs. Inpatient hospital costs associated with major complications were based on a previously published estimate (Dimick et al). The cost of outpatient care was determined from the Medical Expenditure Panel Survey. We assumed that a major complication would result in one additional office visit and one visit from a home healthcare nurse. Using data from closed claims and the Harvard Medical Practice Study, we obtained the average payout from malpractice claims and calculated the mean malpractice cost per complication.

All medical costs were adjusted for medical price inflation, non-medical costs were adjusted for inflation based on the Consumer Price Index.

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