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## The attributable cost of catheter-associated urinary tract infections in the United States: A systematic review

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### Article Info

Abstract **Full Text** Images References

### Highlights

- A systematic review of the literature identified only 4 studies that produced original estimates of the attributable cost of catheter-associated urinary tract infections (CAUTIs) in the United States since the year 2000.
- In 2016U.S. dollars, the reported attributable costs of CAUTIs are \$876 (inpatient costs to the hospital for additional diagnostic tests and medications); \$1,764 (inpatient costs to Medicare for non-intensive care unit [ICU] patients); \$7,670 (inpatient and outpatient costs to Medicare); \$8,398 (inpatient costs to the hospital for pediatric patients); and \$10,197 (inpatient costs to Medicare for ICU patients).
- The prevailing notion of a CAUTI costing approximately \$1,000 is an underestimate and an oversimplification of its true economic burden, because many factors such as patient population, patient acuity, infection etiology, and cost perspective can increase the cost well above \$1,000.
- Additional research is needed to accurately assess the full economic effect that CAUTIs have on hospitals and on the U.S. healthcare system.

### Background

Catheter-associated urinary tract infections (CAUTIs) are the most common healthcare-acquired condition. The attributable cost of CAUTIs is frequently cited to be approximately \$1,000. However, there is a paucity of recent literature that confirms this estimate. The purpose of this study was to perform a systematic review of the literature that estimates the attributable cost of CAUTIs in the United States.

### Methods

A systematic review was conducted using Pubmed. Studies conducted between the years 2000 and 2017, conducted at a facility within the United States, and that used novel patient-level cost data were included. Attributable cost estimates were adjusted for inflation to 2016U.S. dollars using the medical care component of the Consumer Price Index.

### Results

Only 4 articles met our inclusion criteria. Adjusted to 2016U.S. dollars, the attributable costs of a CAUTI as reported in these studies were: \$876 (inpatient cost to the hospital for additional diagnostic tests and medications); \$1,764 (inpatient cost to Medicare for non-intensive care unit [ICU] patients); \$7,670 (inpatient and outpatient costs to Medicare); \$8,398 (inpatient cost to the hospital for pediatric patients); and \$10,197 (inpatient cost to Medicare for ICU patients).

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## Conclusions

The cost of a CAUTI ranges widely depending on population, patient acuity, and cost perspective. Attributable costs likely exceed \$1,000. Additional research is needed to assess the full economic effect of CAUTIs.

## Key Words:

[Catheter-associated urinary tract infection](#), [Healthcare-acquired condition](#)

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