# Disposable Blood Pressure Cuffs: A Safer Alternative

Jessica Goeckner, BSN, RN


## Background

- Health care acquired infections (HAI) are avoidable and not only cause patient suffering but are also costly to the hospitals.
- These unintentional infections cost hospitals approximately 35-45 billion dollars per year.
- Blood pressure (BP) cuffs are potential reservoirs for bacteria, and using disposable cuffs could eliminate one route of transmission of infection from patient to patient.

## Clinical Question

Does the use of disposable BP cuffs as opposed to reusable BP cuffs decrease infection rates in inpatient adults during their hospital stay?

## Best Evidence

A search on Medline, Academic Search Premier, and CINAHL revealed:
- One randomized control trial
- One controlled trial
- Four case control studies
- One qualitative study

## Appraisal of Evidence

The evidence supported:
- The use of disposable BP cuffs to decrease the spread of bacteria
- Disposable cuffs as being cost effective with financial benefits for the hospitals.

## Cost

- The average cost of treating one HAI is between $20,000 and $26,000.
- Students did research and found companies that sold disposable BP cuffs for less than $7.
- This means hospitals could invest in over 3,200 disposable cuffs for the average cost of one HAI.

## Practice Integration

- Students presented findings to an orthopedic unit at a regional hospital in 2014. Many Registered Nurses were in attendance as well as a manager, human resources representatives, Chief Nursing Officer of the hospital and the Vice President of Operations.
- Students proposed, based on evidence, to change practice by adopting disposable BP cuffs.
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- Information and suggestions were considered by the Lean Six Sigma Department.
- The hospital’s microbiologist was prompted to conduct a more extensive literature search.
- BP cuffs were replaced on some units to increase sanitation.
- The nursing students gained knowledge of evidence based practice principles as well as the power of evidence in affecting change in the clinical setting.