BACKGROUND
In healthcare facilities, soft surfaces such as curtains, sheets, pillowcases, blankets and upholstered furniture may harbor bacteria and other pathogens. Fabrics and garments have been treated with antimicrobial agents with varying degrees of success. This study assesses the antimicrobial durability of a fiber embedded with silver after 100 home launderings as well as after 100 industrial launderings. Industrial launderings are considerably harsher on fabric than home launderings.

METHODS
This study was a 2 sample observational study. The fabric used for this study was medium strength silver embedded fiber woven into lab coats. One set of fabric samples was washed 100 times using standard home laundering methods a third party independent lab. A second set of identical fabric samples was washed 100 times using standard industrial laundering methods by a hospital laundry service. Duplicate samples with both Staph Aureus (6538) and Klebsiella Pneumoniae (4352) as well as non-laundered controls were tested with 24 hour contact times per AATCC 100. CFUs compared to time zero controls was the dependent variable. Testing for home laundered samples was performed by Manufacturing Solutions Center Conover, NC. Testing for industrial washed samples was performed by Antimicrobial Testing Laboratories, Round Rock Texas

RESULTS
Staph Aureus—For samples home laundered 100 times, a >4 log or 99.996% reduction in CFUs occurred, while samples industrial laundered 100 times, a >4.46 log or 99.997% reduction in CFUs occurred.
Klebsiella Pneumoniae—For samples home laundered 100 times, >5 log or 99.997% reduction in CFUs occurred, while samples industrial laundered 100 times, a >4.16 log or 99.93% reduction in CFUs occurred.

CONCLUSIONS
The fabric embedded with silver maintained antimicrobial activity with both the home and industrial launderings. Furthermore, the fabric showed very little difference in antimicrobial activity regardless of laundering method. In hospital or clinical environments that would benefit from soft surfaces with antimicrobial properties, fabrics of this type that are able to withstand hospital launderings may be preferable.