

# Effects of a Non-Powered Dynamic Surface on Reducing Facility-Acquired Pressure Ulcers\*

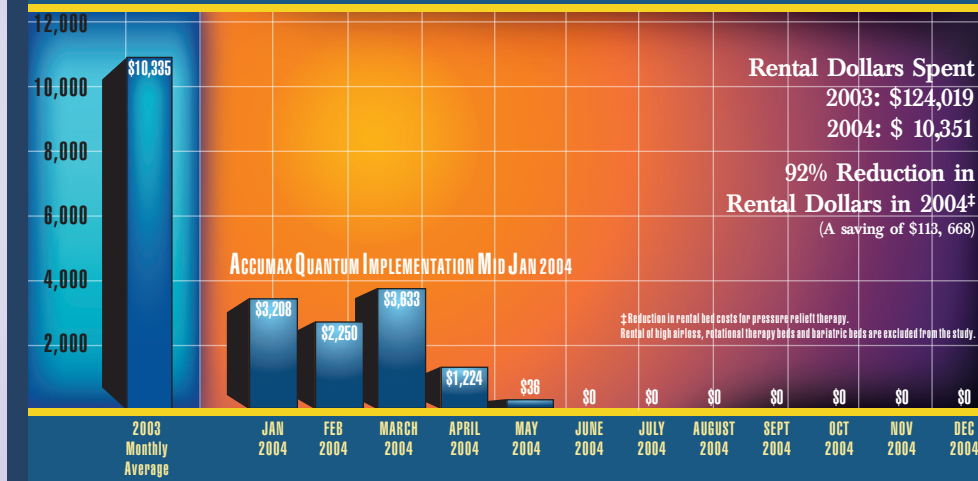
PO Box 135 Hamilton Qld 4007 Australia  
Telephone: (07) 3265 9999 Facsimile: (07) 3260 6079  
Web: www.sexton.com.au Email: sexton@sexton.com.au

Becky Strilko, RN CWOCN, Judith Morey RN CWOCN, Alison Barna RN MSN CWOCN, Provena St. Joseph Medical Center, Joliet, IL.

## PURPOSE:

The standard foam mattresses in our facility needed to be replaced on all medical-surgical units due to wear and tear. Along with rising costs in specialty bed rentals and concern over nosocomial pressure ulcers, our hospital opted to purchase pressure relief mattresses to replace the old foam mattresses. After clinical evaluation of several dynamic pressure relief mattresses, both powered and non-powered, we chose a mattress designed with a newer technology of atmospheric air. Excluding the ICU's, our facility was 90% converted to non-powered and will be 100% converted in 2005.

## Monthly Rental Costs: 2003 Monthly Average vs. 2004



## CONCLUSION:

With the replacement of the standard foam mattress to the non-powered dynamic surface, we were able to decrease our facility-acquired pressure ulcers by 61.5% in an eight-month time period. Quarterly pressure ulcer prevalence studies will continue to be performed to evaluate the effectiveness of the mattress.

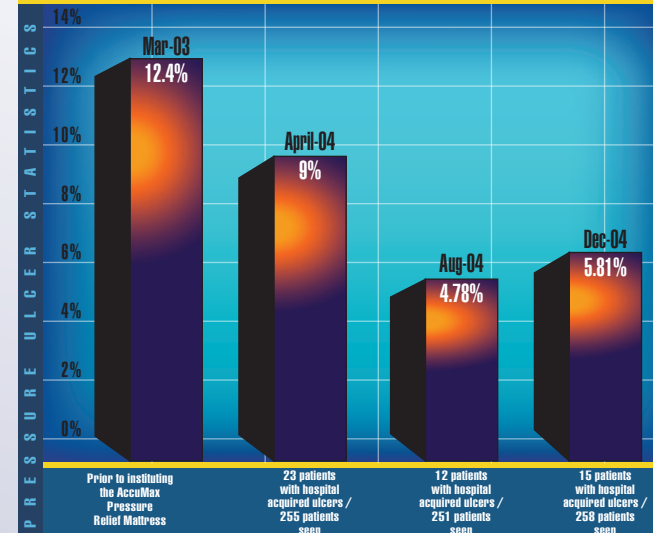
## SETTING/SUBJECTS:

350-bed hospital with an average of 253 patients assessed at time of pressure ulcer prevalence studies.

## METHODOLOGY:

The new pressure relief mattresses were placed on the medical-surgical beds in January 2004. A comparative percentage of patients with facility-acquired pressure ulcers (12.4%) were obtained from pressure ulcer prevalence study data last performed in March 2003. A repeat prevalence study was performed three-month post-new mattress application in April 2004 with 255 patients assessed. The data revealed a 9% rate of patients with facility-acquired pressure ulcers. This study was again repeated in August 2004 with 251 patients assessed revealing a rate of 4.78%

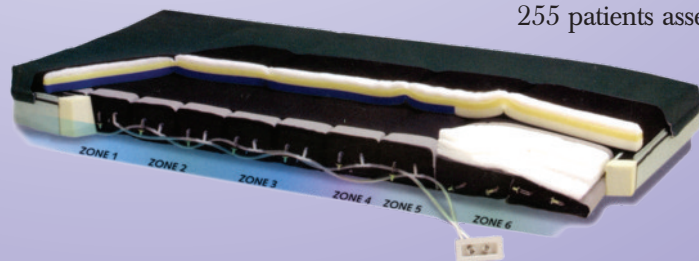
## Pressure Ulcer Trending Patients with Facility Acquired Wounds



The forgoing clinical study was conducted using the AccuMax Quantum Convertible. While the AccuMax Quantum Convertible and other AccuMax mattresses, such as the AccuMax JPN, the AccuMax Quantum PC II, etc., are intended to be used for the same purposes and are of only somewhat different construction, there can be no guarantee that the same results can or will be achieved as those indicated by the study since hospital conditions and patients will always vary.

## FINANCIAL ASSISTANCE/DISCLOSURE:

No financial assistance was received for the study. Poster development, registration and travel to be provided by BG North America.



\*The AccuMax Quantum™ Convertible by BG North America

