

The True Cost of Gauze

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Dollars alone do not represent the true price of gauze or any other wound care product. Clinicians and purchasing agents must consider product performance, efficacy, patient safety, potential negative outcomes, and liability. To ensure that your clinical setting provides effective, safe gauze dressings, you must conduct an appraisal based on five criteria: quality, efficacy, safety, cost, and serviceability.

Clinicians need to complete a value analysis that comprises accurate estimates of total costs, including purchase price and labor, maintenance, risk ratio of patient complications, and comparison with potential benefits (eg, lowering rate of complications, morbidity, or mortality).

A product evaluation also must determine serviceability (ease of use and maintenance, user acceptability, and durability). Your product evaluation should address the following concerns:

- Will using the particular gauze dressing change the patient's treatment outcome?
- Will the gauze product alter practice or have an impact on clinical decisions related to patient care?
- Will the gauze dressing improve patient and provider satisfaction?
- What is an accurate estimate of total costs, including not only purchase price, but also cost of potential complications and additional product needed if optimal wear time is not achieved?
- What is the labor cost incurred due to the increased frequency of dressing changes?
- What is the incremental cost of the product versus the expected benefit to the patient?
- What is the anticipated increase or decrease of patient risk?

Taking the time to evaluate the true cost of a product can help ensure provision of cost-effective care and dispel historical assumptions of product efficacy. - OWM

Commentary from Ferris Mfg. Corp.

The use of gauze as a primary dressing is controversial; advanced dressings often are used in their place. Specific and well-known risks have been reviewed¹:

- Gauze dressings are time consuming and labor intensive. They have been shown to require frequent change and necessitate cleaning the loose fibers out of the wound bed
- Gauze creates an infection risk. Micro-organisms are capable of penetrating many layers of wet or dry gauze. A review of 3,047 wounds found the overall infection rate for wounds dressed with moisture-retentive dressings is 2.6%; whereas, the infection rate for gauze dressed wounds is 7.1%
- Gauze use can impede healing because it may be a factor in lowering the wound temperature
- The removal of gauze from the wound bed can cause pain and damage to healing tissues because it is a non-selective debrider
- Gauze has been shown to be an environmental infection control hazard because bacteria contained in dried gauze dressings have been shown to be dispersed in the air during the change process where they remain for up to 30 minutes.

PolyMem® QuadraFoam® dressings help support wound healing while helping reduce wound pain and trauma. PolyMem QuadraFoam dressings have been evaluated and compared to gauze dressings. In one study,² PolyMem wound dressings closed 3.2-cm, full-thickness incisions in 3 days; gauze-covered incisions were not closed at day three. In a randomized study³ of chronic diabetic foot ulcer patients, wounds managed with wet-to-dry saline dressing enlarged by 5% and wounds managed with PolyMem dressings decreased by 65% over a 2-month period. Of wounds managed with PolyMem dressings, 68% were completely closed in 6 months.

References

1. Ovington LG. Hanging wet-to-dry dressings out to dry. *Home Health Care Nurse*. 2001;19(8):477-483.
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3. Blackman JD, Senseng D, Quinn L, Mazzone T. Clinical evaluation of semipermeable polymeric membrane dressing for the treatment of chronic diabetic foot ulcers. *Diabetes Care*. 1994;17(4):322-325.

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