Repair The Tear — Value Analysis Of A Skin Tear Protocol

How CWCNs changed clinical and financial management of wounds for a homecare agency

Authors: Christina Barrows, BSN, CWCN; Maura McQueeney, MPH, CNA; Liz Lemiska, BSN, CWOCN, Middlesex Hospital Homecare, Middletown, CT

INTRODUCTION:

A hospital-based homecare department was faced with the challenge of modifying the existing system wide skin tear protocol in order to enhance patient outcomes and reduce cost for the home care environment. The existing protocol consisted of antibiotic ointment covered with non-adherent gauze and secured with a sterile gauze wrap, changed every other day. The average length of time for treating a skin tear in the home care setting with this protocol was 3 weeks. The evidence-based recommendation would be to utilize soft-silicone wound contact layer* with a 0.9% sodium chloride hydrogel* to promote moist wound healing, covered with non-sterile gauze wrap. The proposed dressing change protocol would show a significant reduction in nursing costs affording the agency greater potential for profitability.

DEMOGRAPHICS:

The average age of a homecare patient is 78, which places them at high risk for skin tears from mild mechanical trauma. Normal skin changes due to aging include decreases in: dermal thickness, fatty layers, collagen and elastin fibers, rete ridge size, sensation, circulation, subcutaneous tissue and healing rate. Services for home care patients are often provided through Medicare approved agencies and reimbursement is based on the Prospective Payment System (PPS) through the patient's Medicare Part A benefit. The average Medicare homecare reimbursement for a 60-day episode of care is \$2,500. This reimbursement includes visits from all service disciplines and supplies used to deliver care throughout the episode of care.

PLAN OF ACTION:

The homecare CWCN identified that the Hospital Value Analysis Team would need data to support authorizing a change in products and practice, particularly since the proposed dressing was a greater cost per unit..."a hard sell." The homecare CWCN and an acute care colleague realized that the Value Analysis Team would require strong evidence and a convincing cost analysis to grant support and authorize a change in practice. The implication of nursing time in addition to supply cost would have to be considered for product selection in the home care/non-acute setting. The team and ordering physicians would require data and education to drive this change. The CWCNs undertook an educational approach, which included financial and clinical data to support their position.

PATIENT HISTORIES:

The patient example was the example we used for training purposes. This patient healed in 10 days, less then the 2 week average, even with the following co-morbidities: Diabetes • Emphysema • Chronic anemia • Coronary artery disease • ETOH abuse



Skin tear with complete tissue loss.



Skin tear cleansed, soft-silicone wound contact layer* in place. (0.9% sodium chloride hydrogel* and Kling applied over soft-silicone wound contact layer*)



Second follow up visit. soft-silicone wound contact layer* removed for assessment and image purposes only.



Third follow up visit (10th day).

Skin tear healed.

REFERENCE:

- 1.) Baranoski, S. Ayello, E. Wound Care Essentials: Basic Principles. Philadelphia, PA: Lippincott Williams and Wilkins; 2004.
- 2.) Nursing Times, 2003 Award Essence of Care in Wound Care. 89 (44): 36-37
- 3.) Bradley L. Practical issues in the management of superficial pretibial skin tears in the older person. Nurse2Nurse Magazine. 2003; 3(3): 42-44.

PRODUCT NOTATION

* Mepitel®, and Normlgel® Mölnlycke Health Care, Norcross, GA. FINANCIAL ASSISTANCE/DISCLOSURE

Mölnlycke Health Care, Inc. provided assistance with poster design.

COST ANALYSIS:

Skin tears are not generally the primary reason that a patient is admitted for home care services. However, they are frequently seen and may require nursing resources in excess of the admitting diagnosis needs. The practice of frequent dressing changes can significantly increase the financial burden for any episode of care and reduce available time of the skilled nursing personnel. This cost analysis will compare the dressing costs and nursing visit costs for the treatment of a skin tear episode, only.

EXISTING PROTOCOL			
Dressing: Antibiotic ointment, non-adherent gauze and roll gauze. Changed 3.5 times weekly (qod) x 3 weeks.			
Product costs per dressing:			
Telfa 3" x 4"	\$0.04		
Abx Oint. (Foil pack)	0.36		
Kerlix roll gauze (sterile)	<u>9.61</u>		
	\$10.01		
	3.5 visits weekly x 3 weeks (10.5):	\$105.11	Product cost per event
Cost per skilled nursing visit	: \$120.00		
	3.5 visits weekly x 3 weeks (10.5):	\$1260.00	Nursing costs per event
Total expenditure per skin tear event:		\$1365.11	EXISTING PROTOCOL
Average reimbursement for episode of care (60 days):		\$2500.00	
Financial resources available for remainder of episode:		\$1135.00	

PROPOSED PROTOCOL Dressing: Soft-silicone wound contact layer*, 0.9% sodium chloride hydrogel* and roll gauze. Secondary dressing changed Product costs - intial dressing: soft-silicone wound contact layer* 3" x 4" 0.9% sodium chloride hydrogel* 1.85 0.12 Product costs - follow-up visits (3): Normlgel® 0.12 \$1.97 x 3 Klina \$5.91 Total for 4 visit (initial + follow-up) \$13.11 Product cost per event Cost per skilled nursing visit: 2 visits weekly x 2 weeks (4): \$480.00 Nursing costs per event \$493.11 PROPOSED PROTOCOL Total expenditure per skin tear event: Average reimbursement for episode of care (60 days): \$2500.00 Financial resources available for remainder of episode:

MIDDLESEX HOSPITAL Homecare

OUTCOMES/CONCLUSION:

Reduced pain and trauma for the patient

33% reduction in healing time

62% reduction in dressing change frequency/skilled intervention

\$872.00 average cost savings per skin tear

Considering that the average Medicare home care reimbursement for an episode of care is \$2,500.00 it was determined that to enhance patient outcomes and improve profit margins for the agency, the practice of treating skin tears would be changed to the proposed soft-silicone wound contact layer* protocol.

This poster presentation demonstrates that CWCNs can be successful in improving patient outcomes and changing the decision criteria for a Value Analysis Team that assists a system with reducing cost and maximizing resources. The process of data collection, education and implementation of a pilot test will be clearly displayed as one that can be duplicated by others.

