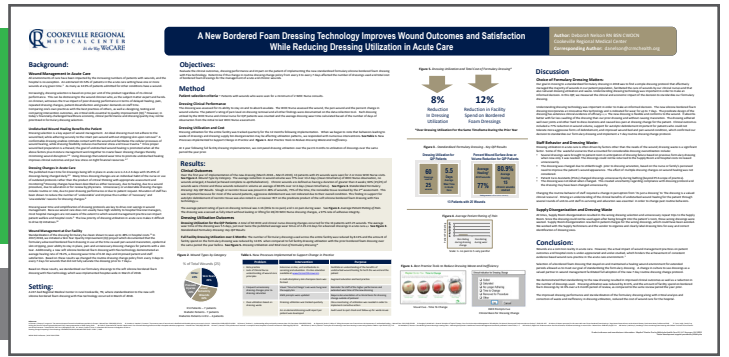


A New Bordered Foam Dressing Technology Improves Wound Outcomes and Satisfaction While Reducing Dressing Utilization in Acute Care¹

Author: Deborah Nelson, RN BSN CWOCN, Cookeville Regional Medical Center



Background



247-bed Regional Medical Center in rural Cookeville, TN



Research shows the average dressing wear time in acute care hospitals **ONLY** 2.4 - 2.6 days^{2,3}

35%-45% of dressings being changed daily in most acute care hospitals^{2,3}

Previous Successful QIP⁴ 10/2017 to 04/2018

Purchasing Manager Perspective: **Cost Outcomes over Clinical Outcomes**

Wound type studied: Skin tears
Formulary: Allevyn[®] Gentle Border
Caused: maceration, premature detachment, skin flap stripping

New Dressing: Mepilex[®] Border Flex Implemented

Results: **78.2%** average healing rate
6.02 days average dressing wear time

After first QIP, Mepilex[®] Border Flex was fully implemented house wide for use over acute and chronic wounds

+ Dressing protocol change: 3 days → 7 days

2nd QIP Clinical Outcomes: Mepilex[®] Border Flex

60% of wounds were **CHRONIC** (15/25)

Those wounds reduced in volume an average

80.9%

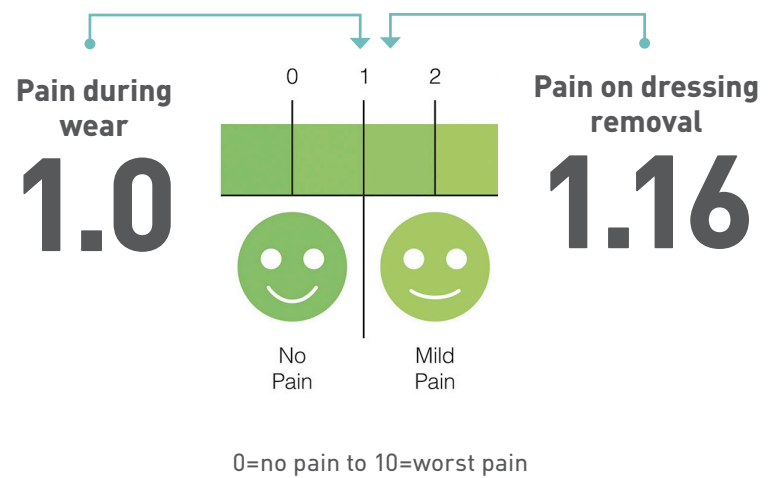
Over the average number of days of WOC Nurse care for these patients: 12.3 (Wound volume measured by L x W x D)

Necrotic tissue was present in about **1/2** of wounds

75% of the time, the **nonviable tissue resolved** by the 2nd WOC Nurse assessment

Finding supports results from a crossover RCT on Flex's predicate product **Mepilex[®] Border⁴**

The average patient rating of pain with Mepilex[®] Border Flex



Utilization and Financial Outcomes

97%

Rate of adhesive integrity 28/29 dressing changes fully intact without leaking or lifting

Average wear time of the dressing **5.5 days**

The number of dressings used across the entire facility was reduced by **8.11%** vs.

The amount of facility spend was reduced by almost **13%** vs.

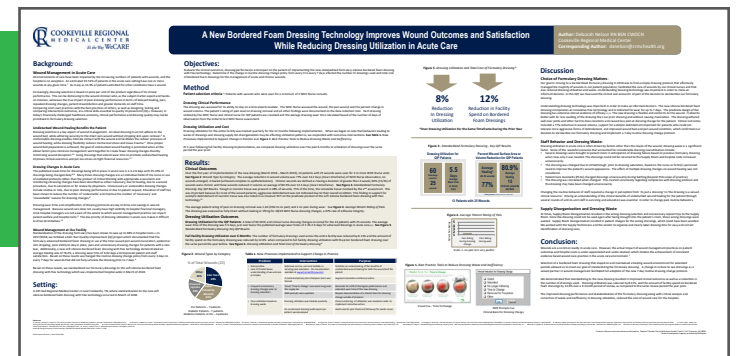
Allevyn[®] Gentle Border, which initially cost less at time of contract for this medium-sized hospital

Allevyn[®] Gentle Border, over the same period the year before

Changing the routine behavior of staff as well as perception updates were necessary:

- 1 Change in thinking from 'it's just a dressing' to 'the dressing is a valued clinical resource'
- 2 Understanding of the clinical benefits of undisturbed wound healing for the patient
- 3 Supply room disorganization resulted in avoidable patient charges for the wrong dressings, so reorganizing and labelling dressing bins for easy and correct identification of dressing size reduced waste

New QIP FAQs:



1. What was the competitor product of focus in Deborah Nelson's QIP, "A New Bordered Foam Dressing Technology Improves Wound Outcomes and Satisfaction"?

Allevyn® Gentle Border

2. What Mölnlycke product was the focus of this QIP?

Mepilex® Border Flex

3. What kinds of wounds were managed in this study?

Acute and chronic wounds. In Deborah Nelson's first QIP, the only wound type studied was skin tears.

4. How was the QIP designed?

Cookeville Regional Medical Center patients with acute and chronic wounds who were seen at least twice by the WOC Nurse were included in the study, from March 2018-March 2019. There were 13 patients with 25 wounds included. During the previous year, Mepilex Border Flex was integrated onto formulary, beginning with skin tears. Dressing waste and supply problems were identified and corrected.

5. What are the details about wound healing from this project?

- The average reduction in wound volume was 77% over an average of 13.2 days of WOC Nurse observation
- No wounds enlarged, 4 achieved complete re-epithelialization
- Fifteen of the 25 wounds were chronic wounds, defined as having a duration of greater than 4 weeks, and showed a reduction in wound volume an average of 80.9% over an average of 12.3 days
- Some slough or necrotic tissue was present in 48% of wounds, and 75% of the time, the nonviable tissue resolved by the 2nd assessment
 - o Aggressive debridement was not indicated for many of the patients due to their overall condition
 - o Support of autolytic debridement of necrotic tissue was also noted in a crossover RCT on the predicate product, Mepilex Border⁴

6. What are the details about dressing utilization and cost from this project?

- For the 60 WOC Nurse and clinical nurse dressing changes occurring for the 13 patients with 25 wounds, average dressing wear time was 5.5 days, just over twice the published average wear times for advanced dressings in acute care [2.29-2.6 days]^{2,3}
- Dressing utilization was compared during the same 6 months (September 2017-February 2018, September 2018-February 2019) in two consecutive years: switching to Mepilex Border Flex allowed reduction in number of dressings used by 8.11%
- Facility spend on dressings was reduced by 12.6% by switching to Mepilex Border Flex from Allevyn Gentle Border

7. What else did the investigator learn during the QIP?

Dressing utilization in acute care is often driven by factors other than the needs of the wound:

- Dressings brought to patient room in anticipation of dressing failure, unable to be restocked
- Dressing was changed due to strikethrough prior to dressing saturation
- Patient Care Assistants (PCAs) changed dressings during bathing (unnecessary as well as beyond PCA scope of practice)
- Undated dressings: dressing may have been changed unnecessarily
- Routine behavior of staff required a change in perception from 'its just a dressing' to 'the dressing is a valued clinical resource'

REFERENCES:

1. Nelson, A New Bordered Foam Dressing Technology Improves Wound Outcomes and Satisfaction While Reducing Dressing Utilization in Acute Care, Poster presented at WOCNext 2019
2. Smith G, Greenwood M, Searle R. Ward nurses' use of wound dressings before and after a bespoke education programme. J Wound Care. 2010;19(9):396-402.
3. Hurd T, Posnett J. Point prevalence of wounds in a sample of acute hospitals in Canada. Int Wound J. 2009 Aug;6(4):287-93
4. Woo, K; Coutts, P; and Price, P.A Randomized Crossover Investigation of Pain at Dressing Change Comparing 2 Foam Dressings. ADVANCES IN SKIN & WOUND CARE & VOL. 22 NO. 7

Allevyn is a registered trademark of Smith & Nephew, Inc.

The Mölnlycke, Mepilex trademarks, names and logo types are registered globally to one or more of the Mölnlycke Health Care Group of Companies. Distributed by Mölnlycke Health Care US, LLC, Norcross, Georgia 30092. © 2019. Mölnlycke Health Care AB. All rights reserved. 1-800-843-8497. MHC-2019-48137

