



# Assessing Knowledge Retention, Quality Patient Outcomes, and Empowerment of Nurses in Wound Care and Documentation via the Use of a Learning Management System

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## PURPOSE:

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In 2010, a comprehensive wound care and documentation program via a learning management system was implemented. The program's premise was to empower the bedside nurse to improve the patient's wound care outcomes and appropriately utilize WOCN consultation. After one year, a reassessment of post plan implementation took place.

## OBJECTIVES:

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- To reassess retention of knowledge of all nursing staff with the wound care and wound documentation modules
- To reassess the level of empowerment of the nurse with knowledge and tools for the staging, documentation, and bedside care of wounds
- To quantify the number of hospital acquired pressure ulcers (HAPU) via a pressure ulcer prevalence and incidence survey completed prior to retesting
- To quantify the number of appropriate and inappropriate WOCN consultation requests in the one year period

## METHODS:

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A prevalence and incidence pressure ulcer survey was completed immediately prior to the retesting of the staff regarding wound care knowledge and documentation.

Immediately following, all bedside nurses were tasked to complete the online wound care and documentation exam. The empowerment survey was distributed, completed and returned. The education department was tasked to track testing completion rates.

## RESULTS:

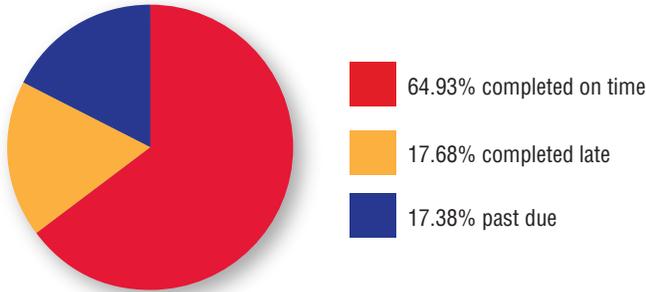
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After a one year period, results are as follows:

- Total assigned = 673 employees
- 82.62% employees assigned completed training, 64.93% completed on time, 17.68% completed late, 17.38% past due
- Retention of knowledge: 90% passed, less than 5% fail rates noted, 5% not completed
- Empowerment of the bedside nurse: 90% felt they were empowered
- Quality patient outcomes: hospital acquired pressure ulcers (HAPU) dropped by 80%
- Appropriate WOCN consultation increased by 95% in the one year period

This study shows that nursing empowerment via a learning management system will allow a greater possibility for knowledge retention and quality patient outcomes to occur.

**Table 1:**  
673 employees assigned - 82.62% completed training



**Table 2:**  
Model framework for quality change in outcomes and care.



The Learning Management System used in this study was a comprehensive interactive program. It allowed the WOCN to customize and assign educational modules based on evidence-based content and the learning needs of the staff. The ability to deliver, track, manage, and save time was key. This program provided that for our facility.

**Delivered**

- Modules were short, informative, and interactive
- Modules are evidence-based
- Modules gave bedside nurses the ability to work at an individualized pace

**Track**

- Education department was able to track the completion and exam scores with ease
- Reports assisted in staff adherence to completion timelines of modules assigned
- Able to track the missed questions and tailor the educational offerings to address the areas which required further education

**Managed**

- WOCN was able to use the catalog of modules to meet the learning needs of the bedside nurse

**Realized Benefits:**

- Decreased time in classroom setting
- Decreased time spent away from bedside
- Increased flexibility: Access 24/7 for nursing staff

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**REFERENCES:**

1. Bales, I. (2010). Testing a Computer-based Ostomy Care Training Resource for Staff. *Ostomy Wound Management*, 56(5), 60- 69.
2. Covell, C. L., Lemay, C. & Gaumone, D. (2004). Deployment of Computer -Based training Programs via a Hospital Intranet: Methods Used, Lessons Learned. *Journal for Nurses in Staff Development*, 20(5), 197-210.
3. Ledwell, E., Andrusyszyn, M.A., & Iwasiw Carroll. (2006). Nursing Students' Empowerment in distance Education: Testing Kanter's Theory. *Journal of Distance Education*, 21(2), 78-95.
4. Sariato, T., Laschinger, H.K., & Iwasiw C. (2004). Nurse Educators' Workplace empowerment, burnout, and job satisfaction: testing Kanter's Theory. *Journal of Advanced Nursing*, 46(2), 134-143.

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