



## Ohio Wound Care Study Spotlights Need for Skin and Wound Care Specialists

Competent, trained wound care specialists and other clinicians can have an enormous impact on quality of care. Did you know that nationwide, over 2.5 million people will develop pressure injuries, and of those, 60,000 will die?<sup>1</sup> Did you also know that wound care education is not routinely taught either in school or in practice?

Long-term acute care and long-term care settings can see pressure wound rates as high as nearly 30 percent of patients. Home health fares a bit better, but still treats chronic wounds at a rate of up to 17 percent of their clients.<sup>2</sup>

The costs associated with pressure injuries, including value-based purchasing penalties and uncompensated care, are upwards of \$11.6 billion annually.<sup>3</sup>

- The impact on patients and families is tremendous.
- This is a wide-ranging, very expensive issue.

### Do Wound Care Certified Nurses Increase Quality?

In order to gain more visibility into the impact question, the Ohio Healthcare Association sought to demonstrate that Quality Measures (QM) related to pressure injury rates could improve by leveraging Wound Care Certified (WCC®) nurses.

*“The Ohio Department of Medicaid (ODM) manages the grant process and money in Ohio for CMS. It requires approval through both ODM and then CMS. Additionally, the Ohio Health Care Association (OHCA) contributed our time and staff, who were involved in the collection and analysis of data for the study.”*

— Mandy Smith, CEAL, LNHA, LMT, LPTA, RAC-CT, WCC, regulatory director with OHCA in Lewis Center, Ohio.

A formal study began in 2016 under the auspices of a Centers for Medicare and Medicaid Services (CMS) program known as the Hospital Improvement Innovation Network (HIIN).

The HIIN study was funded by a grant program through CMS using Civil Monetary Penalty Funds, which are used to fund projects that benefit patients and residents of nursing homes, with the goal of improving the quality of care they receive. It was a joint venture with the Ohio Health Care Association (OHCA) and the Ohio Department of Medicaid (ODM).



### Study Design

The study and analysis process was designed by dividing the 46 participating SNFs by their level of baseline performance. In order to have comparative data, OHCA divided the facilities involved in the study into two different groups, group A and group B. Group A facilities were those performing in the bottom 25 percent with regards to their pressure injury rates at baseline. Group B facilities were those performing in the top 75 percent.

The Wound Care Education Institute® (WCEI), a Relias company, delivered Skin and Wound Care Management training to 199 long-term care nurses in Ohio.

*“In addition to monitoring of the pressure ulcer rates, the other data collected on a routine basis was to confirm if the WCC® nurse was still employed at each facility involved in the study. The tracking and reporting of data were done by the OHCA, and results were reported to the ODM.”*

— John LeDell, CWCMS, client executive, Relias

All nurses attended the face-to-face, five-day wound care certification course and subsequently took the WCC® certification exam offered by the credentialing board, The National Alliance of Wound Care and Ostomy.

In all, 140 nurses (70 percent) passed the exam and became certified, according to John LeDell, CWCMS, client executive with Relias, the parent company of the WCEI.

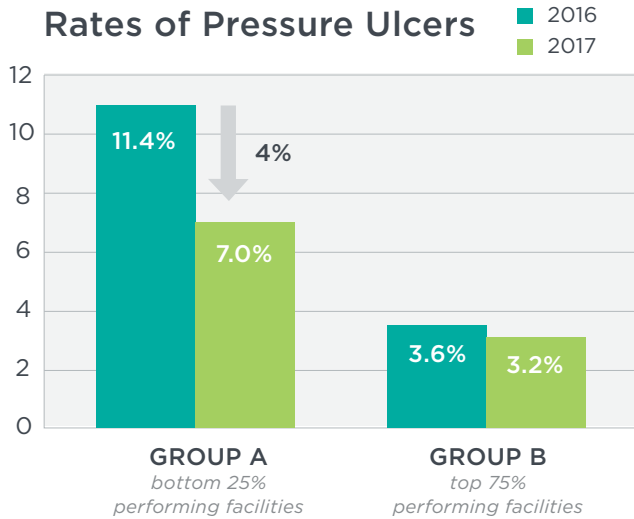
Once the training and examination process was complete, the study formally began using the fourth quarter of 2016 as the baseline, followed by the tracking of high-risk pressure injury rates at Ohio SNFs involved in the study.

### The Results

At baseline, Group A facilities had an 11.4 percent pressure ulcer rate. Group A saw that rate drop to 7 percent in 2017—a notable improvement.



## Rates of Pressure Ulcers



Group B facilities, which were already high performers with their QM, initially had a pressure ulcer rate of 3.61 percent. They saw their rate drop down even further to 3.2 percent in 2017, as per data compiled by the OHCA and reported to the ODM.

Even more dramatic is the data for Group A when comparing the baseline rate in 2016 to 2018. Group A went from their starting rate of 11.4 percent in 2016 and dropped to 2.44 percent in 2018—close to a 9 percentage point drop.

Group B's decrease was less when comparing the same timeframe, going from their baseline of 3.61 percent in 2016 and ending at 3.45 percent in 2018, as per the same final analysis performed by the OHCA and reported to the ODM.

In the end, the study revealed the fact that the reduction in high-risk pressure injury rates was significant for facilities that had WCC® staff.<sup>4</sup>

When looking at all the data from this study, Bob Applebaum, PhD, director of the Ohio Long-Term Care Research Project, professor in the Department of Sociology and Gerontology and a Scripps Research Fellow at Miami University in Oxford, Ohio, said:

“In a vast majority of cases, pressure injuries are avoidable with the appropriate care. The results of this study are encouraging and a good first step as a pilot program on the topic.”

### Financial Ramifications of Better Wound Care

No national study of wound care has been conducted to date. However, statistically significant differences do exist between patients with and without pressure injuries. These statistics reveal a median length of stay (LOS) of seven days versus three days.<sup>5</sup> Patients with pressure injuries also see a higher mortality rate of 9.1 percent versus 1.8 percent for those without pressure injuries.

A study evaluating 2009 Medicare FFS claims data from post-acute care facilities can be drawn upon to extrapolate some financial ramifications for providers. The Medicare FFS claims data revealed 9,939 secondary diagnosis claims of Stage 3 or Stage 4 pressure injuries in SNFs.

Care costs for pressure injuries range from about \$20,000 on the low side to about \$120,000 on the higher range.

If there were 9,939 Stage 3 or 4 pressure injuries reported in SNFs, and that number was reduced by 7 percent (696 injuries) and each pressure injury resulted in about \$120,000 in costs, the estimated savings could be as large as \$83.5M overall.

Even at the lower end of the cost spectrum, those same numbers above at about \$20,000 in direct costs (not including LOS) yield an estimated savings of roughly \$13.9M overall.<sup>6</sup>

***At an individual organizational level, preventing even just one Stage 3 or Stage 4 pressure injury would save about \$20,000 in direct costs or up to about \$120,000 in total costs.***



The nominal cost of one nurse certified in wound care is about \$3,127, including coursework and an accrediting body exam fee—a good investment, as can plainly be seen. When factoring in quality of life issues for residents and patients, staff engagement in further education, potential certification, the ability to mentor others, and other cultural positives, wound care education provides great value.

### Our Ongoing Community of Practice

Nancy Morgan, a founding partner of WCEI, states, “We also provide ongoing clinical education in the ever-changing world of wound care” by providing all alumni with:

- Live seminars nationwide
- Live webinars and on-demand webinars
- Wild on Wounds annual convention

The Wild on Wounds convention provides sessions for any level of WC clinicians—beginners to advanced level—including hands-on labs and an exhibitor showcase so clinicians can see, touch and feel new products and technologies. This is instrumental in WCC nurses’ ability to support others on their treatment team in best practices in wound care.

Providing an increased quality of care focused on providing and formalizing wound care education is an area of practice where important gains can be made for a nominal cost.

The Wound Care Education Institute (WCEI), now a part of the Relias family, provides live and online education based on current standards of care and evidence-based research for healthcare professionals who are passionate about excellence in wound care.

**Start incorporating wound care education in your organization.**

**GET STARTED**

#### References:

- <sup>1</sup> <https://www.ahrq.gov/professionals/systems/hospital/pressureulcertoolkit/index.html>
- <sup>2</sup> <https://www.ncbi.nlm.nih.gov/books/NBK2650/>
- <sup>3</sup> <https://www.ahrq.gov/professionals/systems/hospital/pressureulcertoolkit/putool1.html>
- <sup>4</sup> <https://www.medicaid.ohio.gov/Portals/0/Resources/CMP/WWC-FinalReport.pdf>
- <sup>5</sup> <https://www.o-wm.com/article/pressure-ulcers-united-states-inpatient-population-2008-2012-results-retrospective>
- <sup>6</sup> [https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/SNF-QRP-Measure-Specifications\\_October-2016.pdf](https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/SNF-QRP-Measure-Specifications_October-2016.pdf)

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