Smith+Nephew

Automatic documentation with LEAF◇ Patient Monitoring System significantly increased the number of repositioning events in patients at risk of developing pressure injuries (PIs) compared with manual documentation

Available at: <u>Critical Care Nurse</u> 🔒

Key points

Use of the LEAF System resulted in significant differences compared with manual documentation:

⬆ **165%**
significant relative increase
in documentation adherence
for repositioning events
(82 vs 31%; p<0.001)

⬇ **4.2hrs**
significant reduction in mean
time between repositioning events
across hospital units (from 6.6 to
2.4hrs; p<0.001)

Significantly shorter
mean time between repositioning
events across all BMI categories
(p<0.001)

Overview

- A quality improvement program comparing patient repositioning documentation pre- and post-implementation of the LEAF System on the intensive care, telemetry or surgical units at a US community hospital

- Baseline was established from manual flowsheet documentation in electronic health records (2-month period in 2018; n=35; manual group) and compared with automated documentation from the LEAF System in the same 2-month period for two consecutive years (2019, n=38; 2020, n=32; sensor group)

- Patients (convenience sample) who had a consultation with the wound nurse practitioner and had ≥1 PI risk factor: high/low BMI, length of stay >48 hrs, Braden Scale Score <14, inability to self-reposition or pre-existing PI and use of traction were included

- Braden Scale Scores, BMI, length of stay and distribution of gender were similar in both groups

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Results

- Mean adherence with 2-hourly repositioning protocol was significantly greater in the sensor group (82%) compared with the manual group (31%); a relative increase of 165% (p<0.001)

- Mean number of repositioning events per shift was significantly greater in the sensor group compared with the manual group (4.9 vs 1.8 events; p<0.001)

- Mean time between repositioning events was significantly shorter in the sensor group (2.4hrs) compared with the manual group (6.6hrs; p<0.001)
    − The telemetry unit had the greatest improvement (2.3 vs 12.3hrs; p<0.001)

- On average, in patients with obesity, documented repositioning events were significantly more frequent in the sensor group compared with the manual group (p<0.001; Figure).

Figure. Mean time between repositioning events in the sensor group (n=70) and the manual documentation group (n=35) by BMI category

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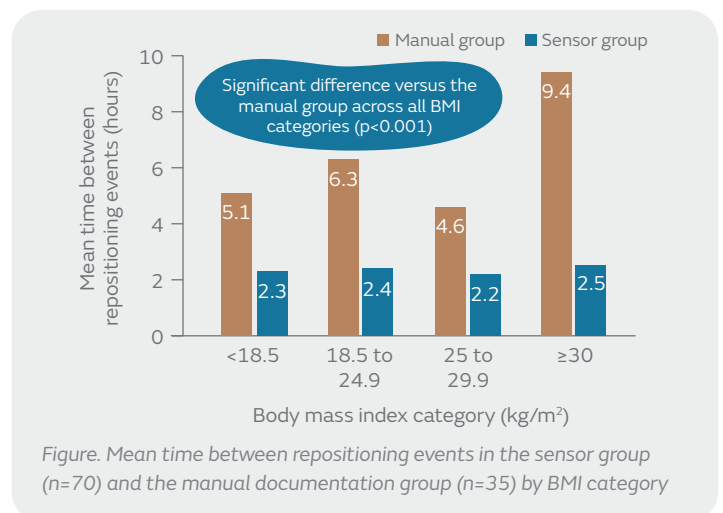
Conclusions

Implementation of the LEAF System increased repositioning adherence, provided a more comprehensive record of repositioning events and helped to eliminate patient weight bias compared with manual documentation.

For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product's applicable Instructions for Use (IFU) prior to use.