

BUILDING A POST-ACUTE PRESSURE ULCER REGISTRY: THE LIFT OFF REGISTRY

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BACKGROUND

- ❖ According to Agency for Healthcare Research and Quality (AHRQ), **pressure ulcers** affect more than 2.5 million people in the United States, cost the healthcare system \$9.1-11.6 billion, resulted in 17,000 lawsuits, and results in 60,000 deaths per annum.
- ❖ Pressure ulcers remain the least studied and understood of wound etiologies, even though they are the most expensive to manage

THE LIFTOFF REGISTRY

- ❖ The **LiftOff Registry** is a national collection of high-quality/longitudinal pressure ulcer data of patients primarily in the post-acute setting, launched in Q1 of 2024.
- ❖ The purpose of the registry is to **simultaneously facilitate research ideation, research process needs (such as subject matching), while providing insights that can be used by clinicians at the bedside:**
 - To support patient-centered outcomes research to learn more about the patient journey and discover unmet needs.
 - To aid in the development of new therapies, and to assess current therapies for efficiency and efficacy.
- ❖ The significance of relevance of the Registry design, implementation, and management is maintained through **OWR's team, consisting of clinician scientists, researchers, data scientists and advisors.**
- ❖ The registry is hosted in a secure platform on SOC compliant infrastructure.

METHODS

- ❖ Anonymized data is collected from a partner EMR; data is non-patient identifiable and secured at source.

WOUND DATA
- Date of onset
- Date(s) of observation
- Stage
- Length, width, depth, area
- Exudate
- Undermining

CLINICAL
- BMI
- Comorbidities
- StO2

LONGITUDINAL DATA
- Normalized longitudinal data
- optional Bayesian imputation for missing values

SOCIAL DETERMINANTS OF HEALTH
- Race
- Ethnicity
- Economic context
- Education
- Physical infrastructure
- Healthcare context

COMING SOON:

PHOTOGRAPHY
- sequential high quality wound photos

STUDY MATCHING
- create synthetic matching cohorts using censored exact matching (CEM)

ADVANCED STATISTICAL MODELING

10K+	23K+	16	125K+
Total Patients	Total Wounds	Total Treatment Types	Total Clinical Notes

FEATURES OF SUBJECTS

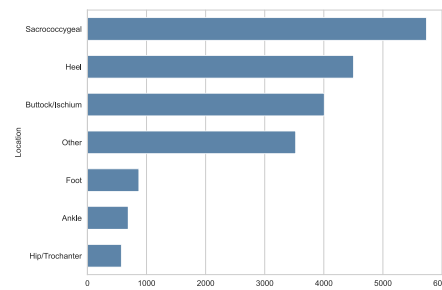


Figure 1: Pressure Injuries by Location

From a total of 19,906 documented wounds, the locations showed 23% on the heel, 18% on sacral region, 17% on buttock, 11% on coccygeal region, 4% on the foot and 27% on other locations

7,306 Patients had only one wound documented, while 4,303 patients had multiple wounds documented

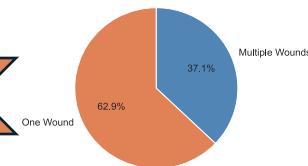


Figure 2: Amount of Pressure Injuries documented

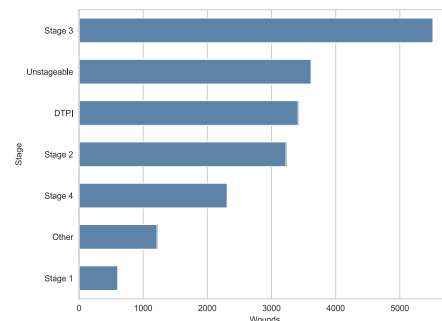


Figure 3: Pressure Injuries by Stage

From a total of 19,906 documented wounds, the starting stages were 3% Stage 1, 16% Stage 2, 28% Stage 3, 12% Stage 4, 18% Unstageable, 17% DTP1, and 6% documented as other

CONCLUSION

The Lift Off Registry is an invaluable resource for researchers specializing in wound care, offering an unparalleled opportunity to delve into the intricacies of pressure ulcers. Its versatility allows for exploratory analyses and facilitates cross-comparisons among categorical variables. Designed with speed and user-friendliness in mind, it boasts flexible visualization capabilities. The ultimate objective is to propel our understanding of pressure ulcers, and improve the lives of countless patients affected by pressure ulcers.

References:

- [https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressure-ulcer/too/pu1.html#:~:text=Cost%3A%20Pressure%20ulcers%20cost%20\\$249.1to%20\\$51%2C700%20per%20pressure%20ulcer.](https://www.ahrq.gov/patient-safety/settings/hospital/resource/pressure-ulcer/too/pu1.html#:~:text=Cost%3A%20Pressure%20ulcers%20cost%20$249.1to%20$51%2C700%20per%20pressure%20ulcer.)
- <https://www.ahrq.gov/sdch/data-analytics/sdch-data.html>