# Age as a Prognostic Tool in Outcomes of Advanced Pressure Ulcers

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#### Background

Pressure ulcers (PU) continue to disproportionately affect chronically ill patients with limited mobility.

#### **Purpose**

- Understand the factors that impact pressure ulcer closure.
- Equip providers with data to guide informed discussion of treatment options, postoperative quality of life, and anticipated duration of treatment.

#### Methods

We performed a retrospective chart review of patients.

Patients diagnosed with stages 3 and 4 PU of the sacrum, ischium, trochanter, leg, chest, and back were identified: <20 years old (1.3%), 20-29 (1.3%), 30-39 (15.8%), 40-49 (9.0%), 50-59 (18.4%), 60-69 (15.8%), 70-79 (21.1%), 80-89 (13.2%), and 90-99 (3.9%). Their subsequent care was tracked.

These patients underwent urgent surgical debridement of their PU by the Acute Care Surgery Service at Rush University Medical Center between 2017 and 2022.

#### Classification





Stage 3 Stage 4\*

### 100% 90% 80% 70% Follow Up (%) ■1 Month ■3 Months ■ 6 Months 40% 9 Months ■1 Year 30% ■ 2 Years 20% 10% <20 20-29 30-39 50-59 60-69 70-79 Age (Years)

Figure 1. Percentage of patients who followed up after pressure ulcer treatment across age groups

#### Results

- 76 patients fit the inclusion criteria for the study.
- Follow up at 1 month, 3 months, 6 months, 9 months, 1 year, and 2 years is presented in Figure 1, by age group.
- One PU achieved closure by 3 months among those 50-59yr One PU achieved closure by 6 months among those 50-59yr One PU achieved closure by 6 months among those 40-49yr

#### Conclusion

- With increasing patient age, likelihood of healing decreased.
- This study highlights the low likelihood of closure of advanced pressure ulcers with increasing age. No patients ages 60+ had achieved PU closure by 2 years post-debridement, despite those patients representing >50% of the population examined.
- Long-term follow up was poor across all age groups. The greatest rates of short-term follow up were observed in those 40-49 and 50-59, which may coincide with their success in PU closure.
- The ulcer becomes a chronic problem that most patients will live with for years to come.
- Advanced pressure ulcer closure is a rare event.

\*Photos from Mervis, J.S., Phillips, T.J.: Pressure ulcers: Pathophysiology, epidemiology, risk factors, and presentation. JAAD 2019; 81: pp. 881-890.