

Trends in Pressure Injury Prevalence Rates and Average Days to Heal Associated with Adoption of a Comprehensive Wound Care Program and Technology in a National Skilled Nursing Organization

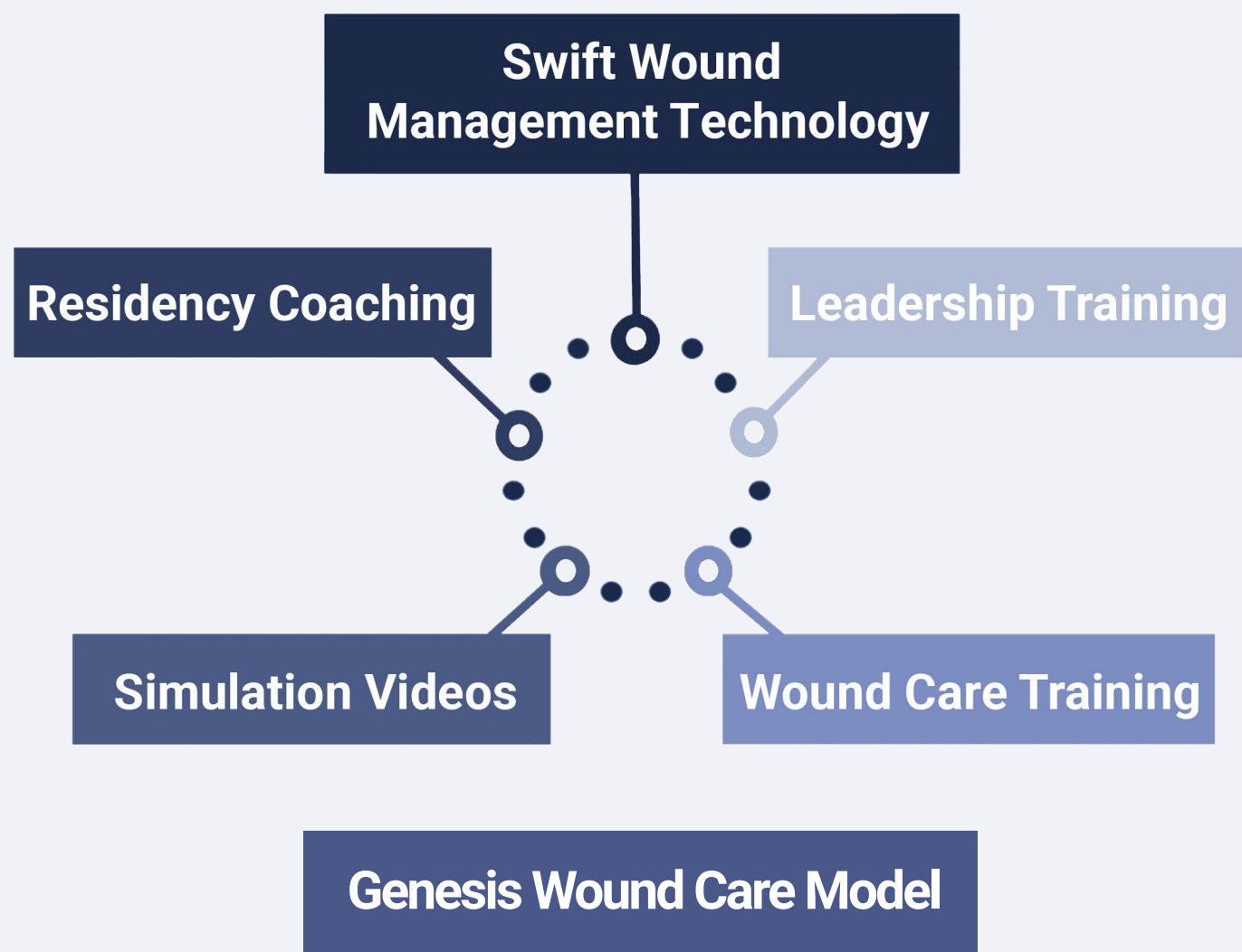
Overview

The Pressure Injury Challenge

- Pressure injuries (PIs) are a major acquired, yet avoidable, complication across clinical settings,^{1,2} estimated to impact 1.3-3 million adults in the US annually.³
- The cost of treatment of each PI in the US ranges between \$500 - \$70,000, depending on the stage,^{4,5} which accounts for at least 3.6% of the annual health setting budget.⁶

Genesis New Innovative Model in Wound Care

- Genesis HealthCare (Genesis) - a large skilled nursing facility (SNF) organization offers healthcare services in 250+ centers across 22 states in the US.
- Recently, Genesis has adopted a holistic wound care management model within its facilities that includes team leader residency coaching, community calls, team training simulation videos, teaming observations, leadership training, wound care training and the adoption of an artificial intelligence (AI) wound care management solution (Swift Medical).



Digital Technology in Wound Care Model

- Swift Medical's solution enables standardized wound assessment that accurately measures wounds and track healing factors to optimize care management plans.
- There is limited research whether adopting wound management technology as a part of a comprehensive wound care program leads to improvements in PI rates and healing time.

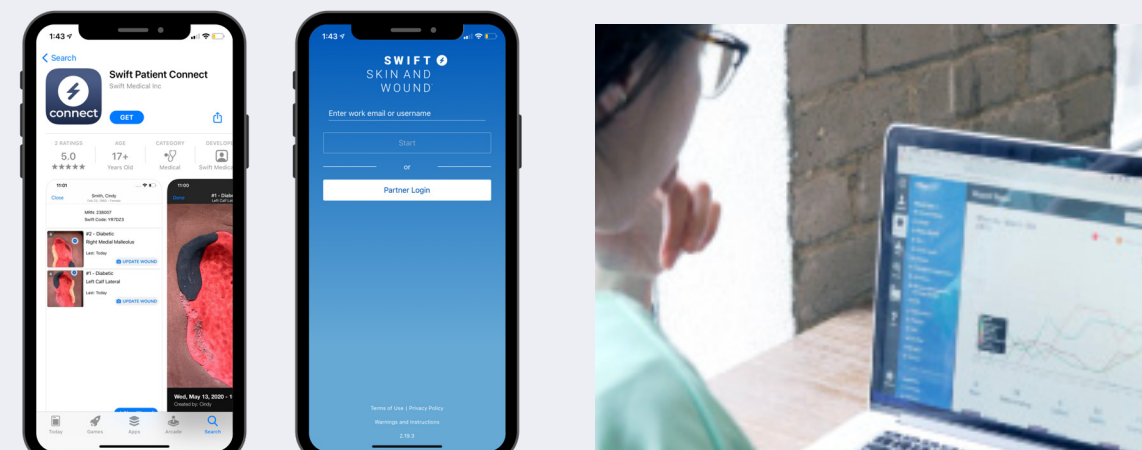


Objective

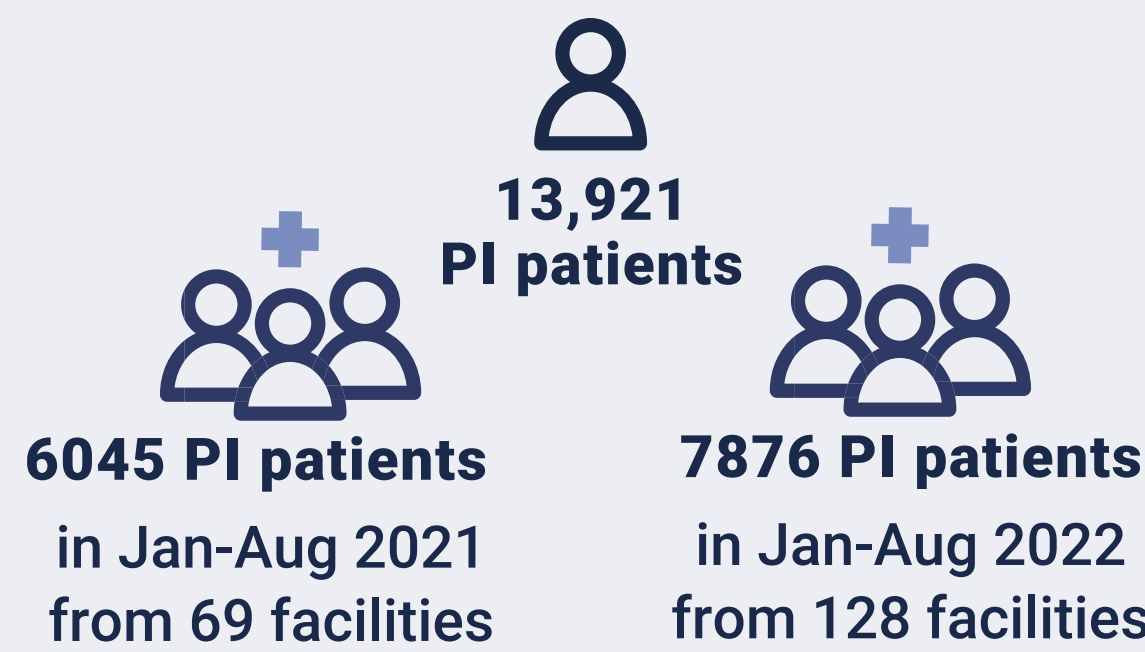
- This evaluation study aimed at comparing the trend in PI prevalence rates and average days to heal in the year 2021 vs 2022 in a cohort of SNF who has adopted Swift's solution.
- We also assessed the rate of F686 citations (penalties associated with PIs) in the year 2021 vs. 2022 in SNFs that adopted the solution compared to those that did not.

Methodology

This descriptive study used Swift's database to access all stages of anonymous PI patients assessed at facilities that adopted the technology during the study period.



Genesis Wound Care Model Target Population



Outcomes Included:

PI Prevalence

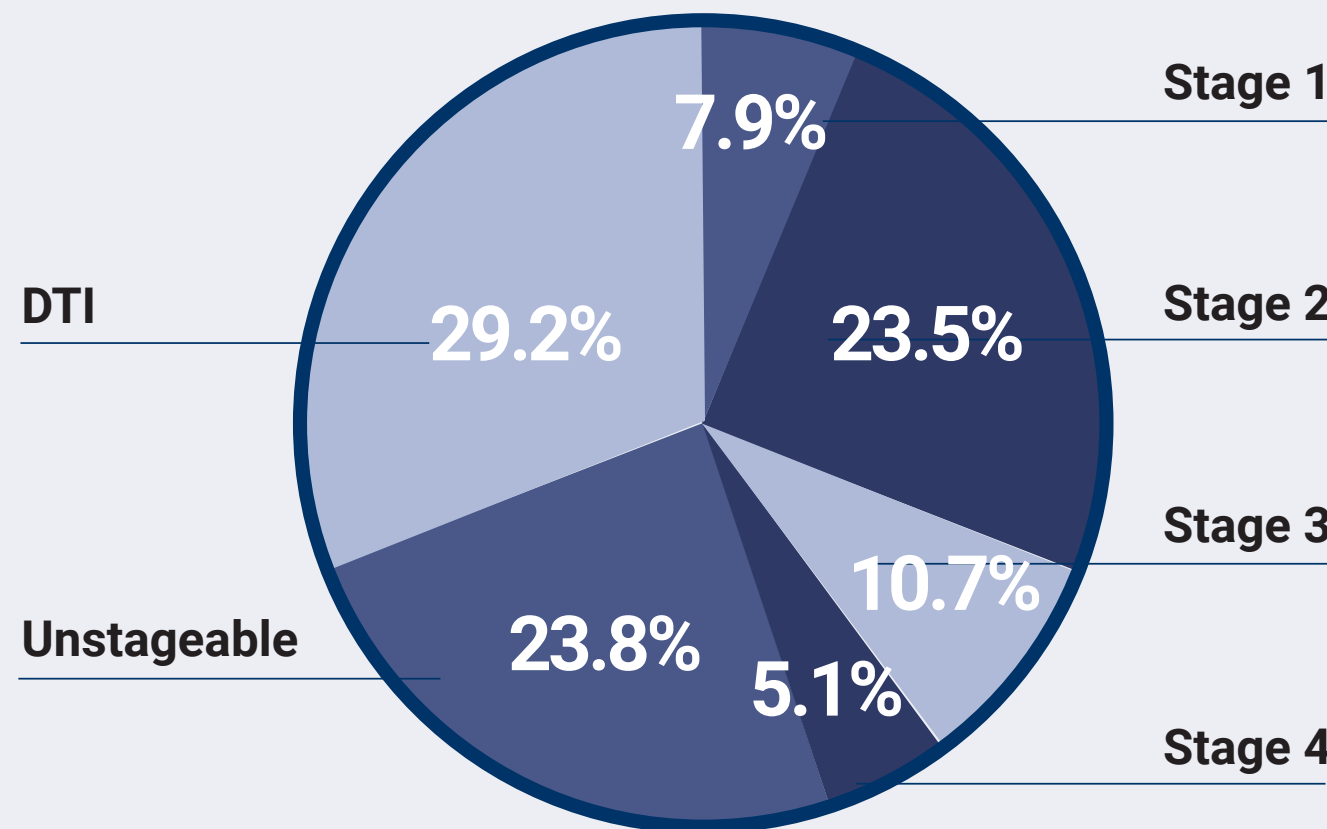
PI Days To Heal

F686 Citations

Results

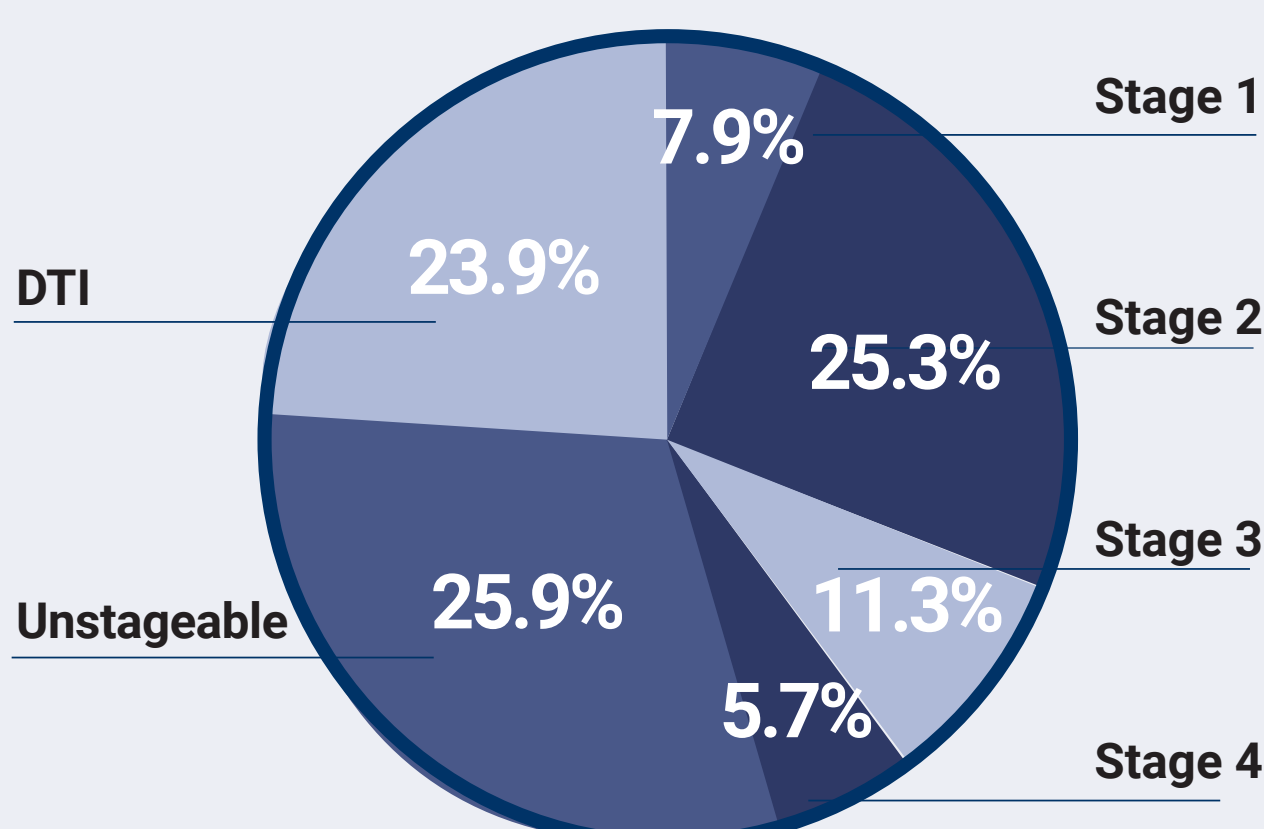
Descriptive Statistics 2021

A total of 6,045 PI patients were included. Of these 49.6% were females. The mean age was 76 years

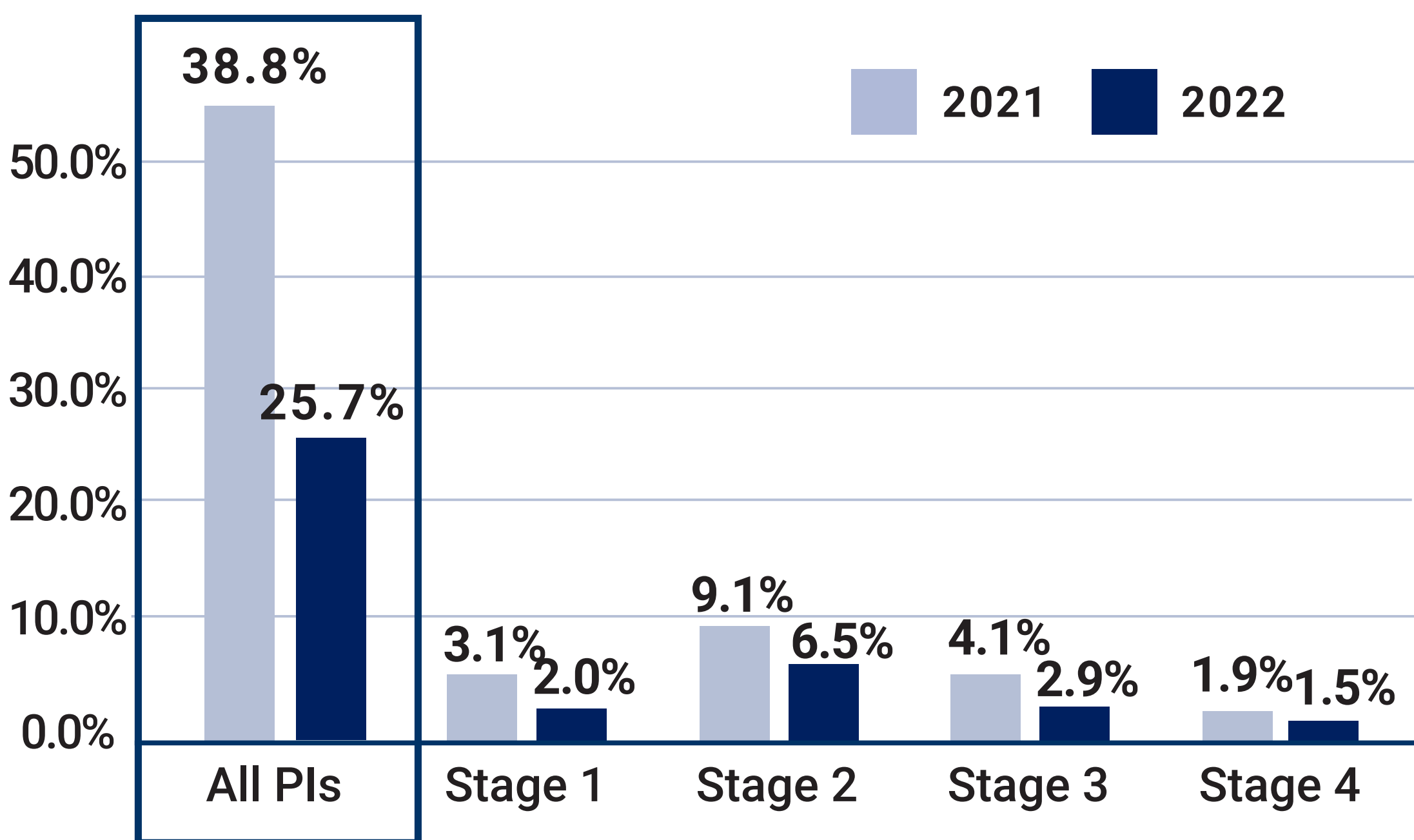


Descriptive Statistics 2022

A total of 7,876 PI patients were included. Of these 51.7% were females. The mean age was 74 years

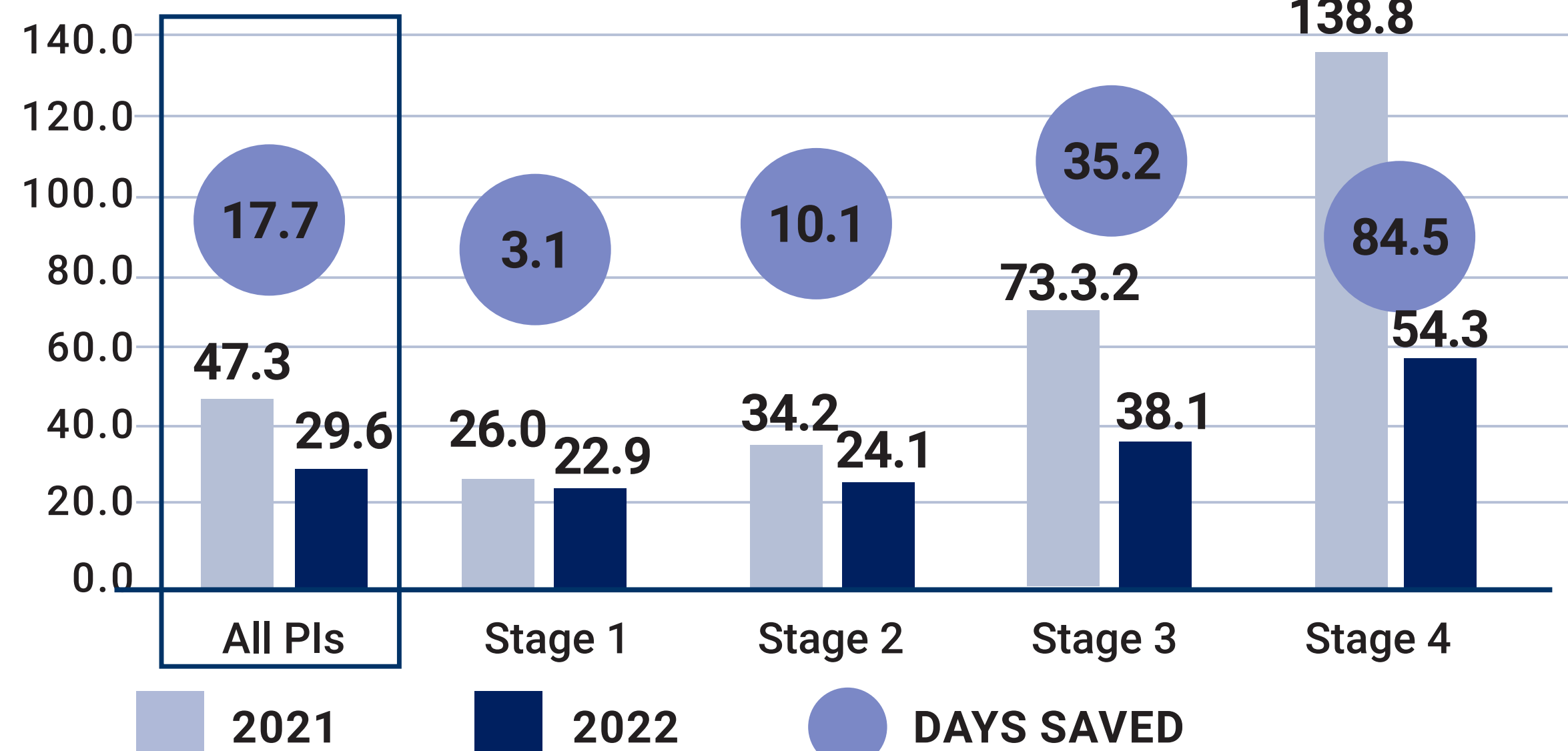


PI Prevalence Rate



- There was a 13.1% reduction in PI prevalence from 2021 to 2022
- In sites that have been live with Swift for more than one year, the reduction in prevalence was 15.9% more compared to those used Swift for less than one year
- 1.2% improvement in Stage 3 PI prevalence 2022 vs. 2021
- 0.4% improvement in Stage 4 PI prevalence 2022 vs. 2021

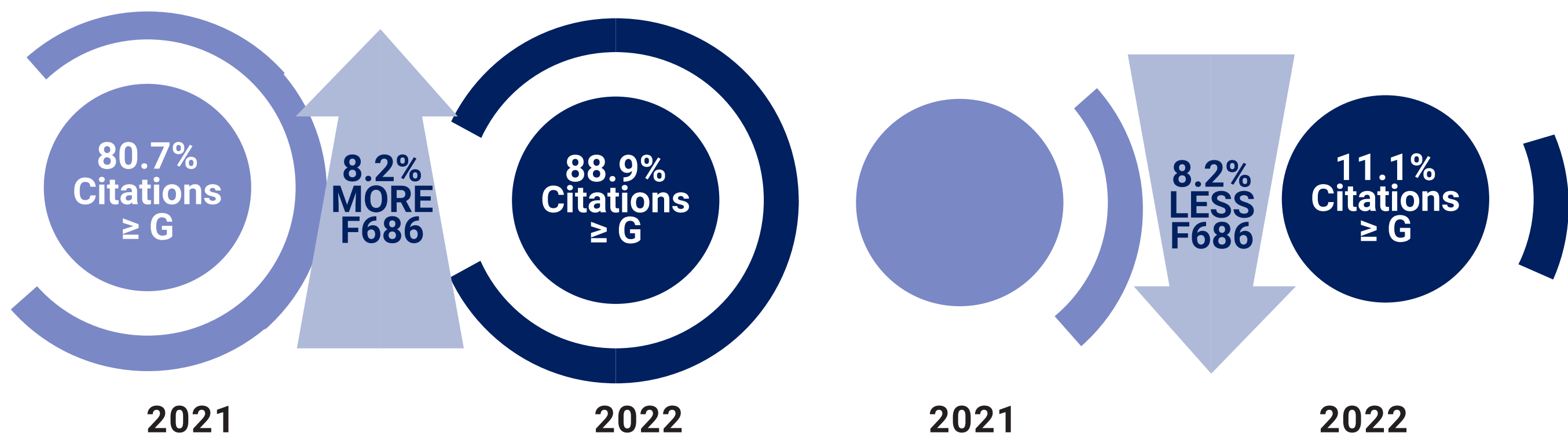
Average Days to Heal* PIs



* Day to heal is the time between the first and last assessment date for wounds that are marked as "healed".

- A significant reduction of 37.4% in the average days to heal a PI was detected ($P < 0.001$)
- There were significant decreases in stage 3 and 4 pressure injuries where costs to heal are the highest ($P < 0.001$)

Avoidable PI Citations (F686)



Facilities did not adopt Swift

Facilities adopted Swift

Only three facilities using the technology in 2022 received a citation (of the 167 facilities) - a total of only 1.8% compared to 16.5% in the control group (where 30 SNFs received citations out of 181).

Discussion

- The recent quality improvement initiatives to enhance wound care at Genesis, supported by adopting Swift Medical's solution, played a vital role in the observed clinical benefits.
- Clinical benefits associated with adopting a digital wound care technology as part of the comprehensive wound care model are linked to potential cost savings.
- The calculated 1.9% decrease in the prevalence of PI stages 3 and 4 would result in a projected cost savings of about \$846,618 to \$1,410,000 annually.
- With an average saving of 17.7 days to heal a PI, a projected cost savings of 44,808 hours of clinicians' time per year that could be better spent on other patient care activities.
- Reduction in citations ≥ G using Swift approximately equals \$947,250 in savings.
- Adopting a comprehensive wound care program where clinicians fully utilize digital tools would maximize productivity, improve clinical outcomes and reduce costs in managing PI.

References

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- 6 Pham B, Stern A, Chen W, et al. Preventing pressure ulcers in long-term care: a cost-effectiveness analysis. Arch Intern Med. 2011; 171: 1839-47. doi:10.1001/archinternmed.2011.473

