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# ` Quick Review of Model System Research

## Evaluation of Patient-Reported Outcomes in Burn Survivors Undergoing Reconstructive Surgery in the Rehabilitative Period

### What is the study about?

### This study aims to characterize the use of reconstructive surgery following hospitalization and determine whether patient-reported outcomes change over time. Health-related quality of life is decreased in burn survivors, with scars being one of the causes. Reconstructive surgery has the potential to significantly improve health-related quality of life for burn survivors.

### What did the study find?

This study found that participants requiring more operations during index admission (the original admission for treating the burn) were more likely to undergo reconstructive surgery months to years later. There were improvements in scores for those undergoing scar operations more than 6 months after injury, although contracture operations were not associated with significant differences in scores. Also, participants with Medicaid insurance were significantly less likely to undergo reconstructive operations compared to individuals with private insurance.

### Who participated in the study?

Individuals with burn injuries (n=1359) enrolled in the 5 U.S. burn centers (Burn Model System). Of the 1359 participants, 372 (27.4%) underwent one or more reconstructive operations within 24 months of injury.

### How was the study conducted?

This study was a prospective, longitudinal study using data from adult burn survivors undergoing reconstructive surgery within 24 months after injury. Researchers classified the problem through three categories: scar, contracture, and open wound. Survey outcomes at 6, 12, and 24 months were compared at follow-up intervals and matched with non-operated participants using propensity score matching.

### How can people use the results?

### Individuals with burn injuries and their families can use the results of this study to better understand patient outcomes and expectations surrounding reconstructive surgery, particularly with timing. Practitioners can use these results to think about how to better understand and mitigate issues around access to reconstructive surgery, and the benefits of reconstructive surgery on health-related quality of life in burn survivors.

### Reference

Sheckter, C.C., Carrougher, G.J., McMullen, K., Bamer, A., Friedstat, J., Pham, T.N., & Gibram, N.S. (2020). Evaluation of patient-reported outcomes in burn survivors undergoing reconstructive surgery in the rehabilitative period. *Plastic and Reconstructive Surgery,* *146*(1), 171-182. doi:10.1097/PRS.0000000000006909

**Disclaimer**

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