

# Assessment of Patient Outcomes of Rehabilitative Care Provided in Inpatient Rehabilitation Facilities and After Discharge

## Study Highlights

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## Synopsis of Key Findings

We found that patients treated in IRFs had better long-term clinical outcomes than those treated in SNFs following the implementation of the revised 60% Rule. We used Medicare fee-for-service claims data to compare the clinical outcomes and Medicare payments for patients who received rehabilitation in an inpatient rehabilitation facility (IRF) to clinically similar matched patients who received services in a skilled nursing facility (SNF).

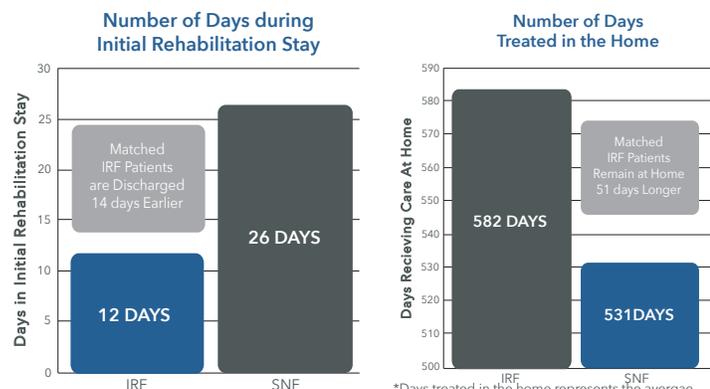
Over a two-year study period, IRF patients who were clinically comparable to SNF patients, on average:<sup>1</sup>

- Returned home from their initial stay **two weeks earlier**
- Remained home nearly **two months longer**
- Stayed alive nearly **two months longer**

## Of matched patients treated:<sup>2</sup>

- IRF patients experienced an **8% lower mortality rate** during the two-year study period than SNF patients
- IRF patients experienced **5% fewer emergency room (ER) visits per year** than SNF patients
- For five of the 13 conditions, IRF patients experienced **significantly fewer hospital readmissions per year** than SNF patients

Better clinical outcomes could be achieved by treating patients in an IRF with an additional cost to Medicare of \$12.59 per day (while patients are alive during the two-year study period), across all conditions.<sup>1</sup>



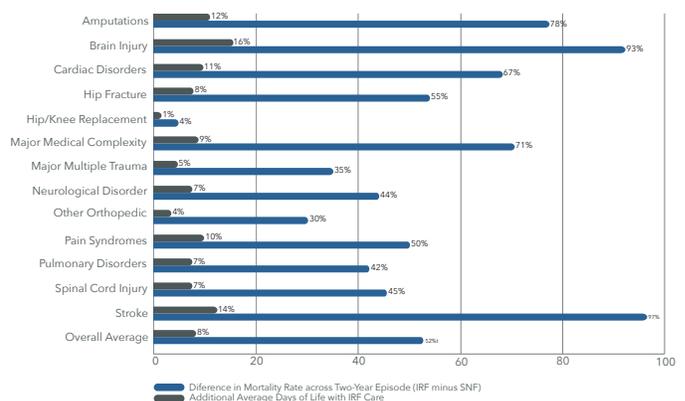
<sup>1</sup>Days treated in the home represents the average number of days per patient over two year study period not spent in a hospital, IRF, SNF, or LTCH.

This study serves as the most comprehensive national analysis to date examining the long-term clinical outcomes of clinically similar patient populations treated in IRFs and SNFs, utilizing a sample size of more than 100,000 matched pairs drawn from Medicare administrative claims.

The focused, intense, and standardized rehabilitation led by physicians in IRFs is consistent with patients achieving significantly better outcomes in a shorter amount of time than patients treated in SNFs.

When patients are matched on demographic and clinical characteristics, rehabilitation in IRFs leads to lower mortality, fewer readmissions and ER visits, and more days at home (not in a hospital, IRF, SNF, or LTCH) than rehabilitation in SNFs for the same condition. This suggests that the care delivered is not the same between IRFs and SNFs. Therefore, different post-acute care settings affect patient outcomes.

## Matched IRF and SNF Patients: Difference In Mortality Rates Across Two-Year Study Period and Resulting Additional Days Alive During Episode \*



\* Difference in the mortality rate of matched IRF patients to matched SNF patients over the two year study period. As a result of the lower mortality rate, additional average days of life represent the difference in the average group episode length (after accounting for mortality) across groups (IRF average episode length in days minus SNF).

<sup>1</sup> Differences are statistically significant at p<0.0001.

<sup>2</sup> Differences are statistically significant at p<0.0001 with the exemption of the number of readmissions per year, which are significant at p<0.01 for five of the 13 conditions.

<sup>3</sup> Differences are statistically significant at p<0.0001 with the exemption of major multiple trauma, which is significant at p<0.01.

Source: Dobson/DaVanzo analysis of research identifiable 20% sample of Medicare beneficiaries, 2005-2009. ©2014 Dobson DaVanzo & Associates, LLC. All Rights Reserved.