# Examination of Differences Between Nonprofit and For-Profit Inpatient Rehabilitation Facilities

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**DOI: 10.5014/ajot.2023.77S2-RP15**

Date presented: April 21, 2023

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**PURPOSE:** Rehabilitation services provided in Inpatient Rehabilitation Facilities (IRF) are critical for patients after illness, surgery, or injury. In recent years, the number of nonprofit IRFs has been declining while for-profit IRFs have been increasing. High quality care is a top priority for IRFs regardless of profit status, yet emerging evidence is showing that the care delivered to patients in IRFs may vary according to profit status. Identifying the impact of profit status (i.e., for-profit vs nonprofit) on quality outcomes would allow key stakeholders and policy-makers to provide targeted interventions to improve the quality of care provided to patients in IRFs.

**DESIGN:** Observational study using retrospective, facility-level data. Data sources for the study were the IRF Compare files and IRF Rate Setting files. Both data sources are managed by the Centers for Medicare and Medicaid Services (CMS). Data were collected between 2016-2021.

**METHOD:** IRF Compare files and IRF Rate Setting files are publicly available. A total of 1,257 facilities were eligible for analyses. Data in the IRF Compare files and IRF Rate Setting files were linked using the CMS certification number (CCN). IRF Compare variables included in the study were: (1) CCN, (2) facility name/address, and (3) 15 Inpatient Rehabilitation Facility Quality Reporting Program (IRF-QRP) measures. IRF Rate Setting variables were: (1) profit status (i.e., for-profit vs nonprofit), (2) number of discharges per facility, (3) teaching status (number of interns and residents divided by the average daily census), (4) freestanding (yes/no), and (5) average estimated weight per discharge (average value of the weight per case in the previous performance year using case mix groups and weights from the current performance year), and (6) census region. We performed bivariate analyses examining the differences between nonprofit and for-profit IRFs using t-tests and chi-squared tests for continuous and categorical variables, respectively. Then, we estimated generalized linear mixed models with fixed effects for profits status.

**RESULTS:** The number of nonprofit and for-profit facilities varied over the 6 years of data with 767-803 nonprofit facilities and 294-351 for-profit facilities. Nonprofit facilities had the highest concentration of facilities in Census Region 4 (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) and for-profit facilities in Census Region 7 (Arkansas, Louisiana, Oklahoma, and Texas). For-profit facilities had a significantly higher number of discharges every year of the study (536.5-565.3 discharges vs. 277.0-285.9, $p<.001$). Profit status was a significant explanatory variable for 11 of the 15 IRF-QRP measures. Nonprofit facilities had significantly lower potentially preventable 30-day post-discharge readmission rates ($\beta$=-0.137; 95% confidence interval (CI) -0.19, -0.09) and within stay readmission rates ($\beta$=-0.247; 95% CI -0.32,-0.18). For-profit facilities performed significantly better on all IRF-QRP functional measures and discharge to community ($\beta$=-1.965; 95% CI -2.60,-1.33).

**CONCLUSION:** Our findings demonstrate that significant variation in IRF-QRP quality measures exists between nonprofit and for-profit IRFs. This variation indicates opportunities for quality improvement. Effective policy making will require elucidation of the causes of these quality differences.

## References

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