

New Jersey Home Health Readmission Report

Goals and Objectives

The main goal of this analysis was to determine the effectiveness of home health care services in preventing a 30-day hospital readmission following an inpatient hospital discharge. More specifically, this analysis aimed to elucidate differences in 30-day hospital readmission rates between individuals who were referred for home healthcare and received it, and those who were referred for home health care but did not receive it, following an inpatient hospital discharge. It was hypothesized that individuals who were referred to home health care and received it would have a lower 30-day readmission rate than those who were referred to home health care but did not receive it post-discharge.

Study Population and Data Source

This analysis examined Medicare Fee-for-Service claims among New Jersey Medicare beneficiaries who were discharged from a New Jersey hospital in 2014. In order to accurately examine the effects of initial home health care episodes post-inpatient hospital discharge, inpatient hospital stays where individuals were receiving home health care at the time of admission were excluded from the analysis. Of 210,865 distinct Medicare beneficiaries, 2,992 were excluded from the analysis due to receiving home health care utilization at the time of the inpatient hospital admission. In addition to this criteria, it was required that each beneficiary's Medicare number, as it appears within the 2014 Medicare Fee-for-Service claims, could be linked with 2014 Medicare enrollment data in order to determine dual-eligible status. Of 207,873 distinct beneficiaries who had an inpatient hospital discharge in 2014, 87.62 percent (182,149) were able to be linked to enrollment data and were included within this analysis.

Figure 1: Distribution of the Number of Days Until New Jersey Medicare Beneficiaries Utilized Home Health Care Services, Post-Discharge, Among Those Who Received This Service, 2014

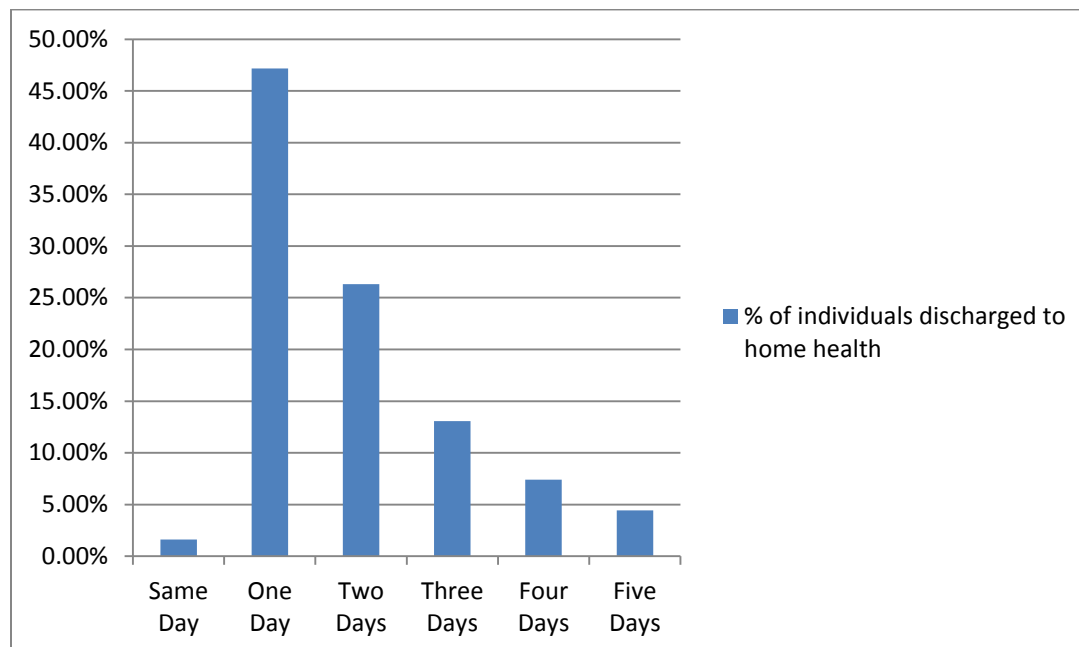
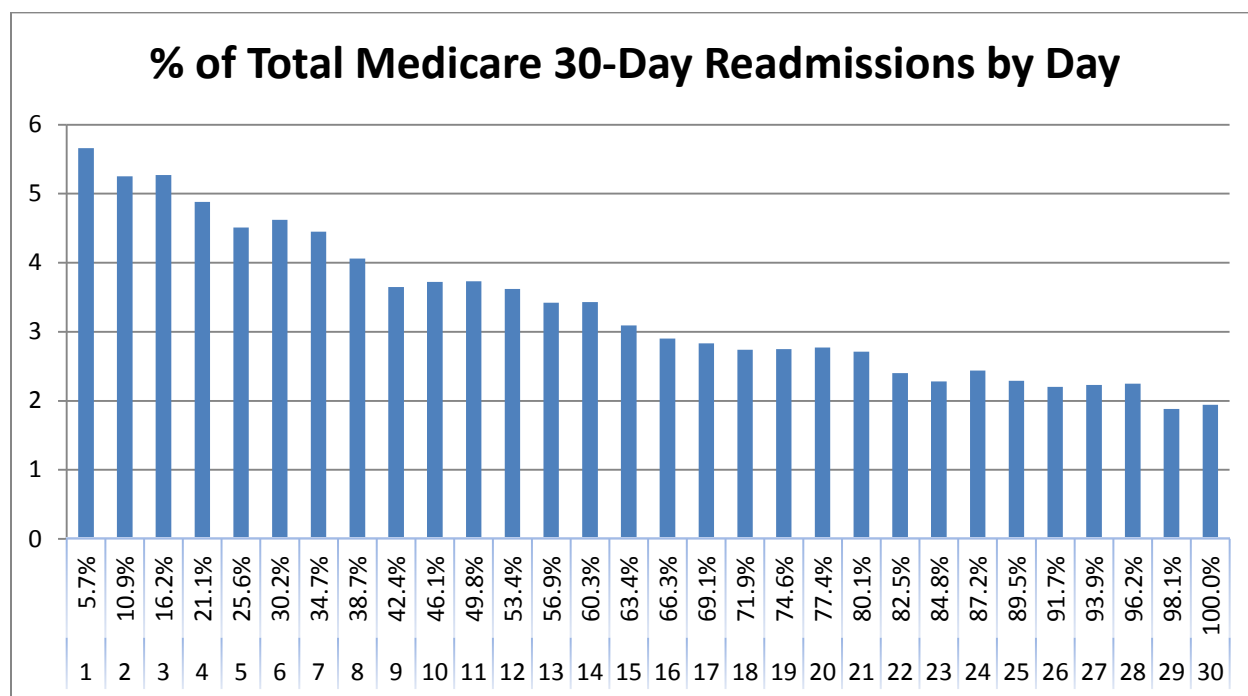


Figure 1 reveals that nearly 75 percent of New Jersey Medicare beneficiaries who utilized home health services, post-discharge receive this service by the second day after their initial inpatient hospital discharge. For the purpose of this analysis, Medicare beneficiaries are considered to have utilized home health services if Medicare Fee-for-Service claims reveal that they began this service within 5 days post-discharge.

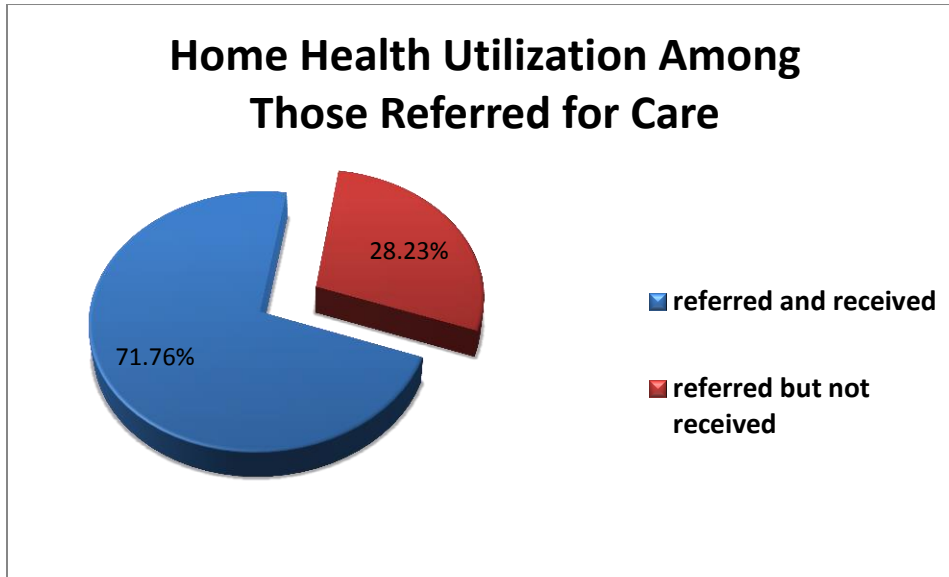
Figure 2: 30-Day Readmissions Among New Jersey Medicare Beneficiaries, 2014



of Days Until Readmission and Cumulative % of Readmissions

As shown in Figure 2, over 25 percent of 30-day hospital readmissions occur by the fifth day after an individual's initial inpatient discharge.

Figure 3: Post-Discharge Home Health Services Utilization Among Those Medicare Beneficiaries Referred for Home Health Care Post Inpatient Discharge in 2014



Note: For the purpose of this analysis we are considering individuals as being referred to home health care if the disposition code on their inpatient hospital claims indicates so.

Table 1: Comparison of 30-Day Hospital Readmission Rates

Home Health Services Referred at Discharge by Hospital				
	And Received		But Not Received	
	(n ¹)	% Readmitted	(n ²)	% Readmitted
30-day readmissions overall	26,332	17.2%	10,362	24.5%
30-day readmissions among dual-eligibles	2,839	19.8%	1,586	24.9%
30-day readmissions among Whites	22,035	16.5%	8,066	23.7%
30-day readmissions among Blacks	2,936	21.9%	1,655	27.7%
30-day readmissions among Hispanics	511	24.26%	299	29.0%
30-day readmissions among patients with 4+ chronic diseases	15,505	23.7%	6,446	31.8

n¹ = the total number of inpatient hospital discharges where beneficiaries were referred to home health care and received it.
n² = the total number of inpatient hospital discharges where beneficiaries were referred to home health care but did not receive it.

Study findings revealed a stark contrast in 30-day readmission rates between New Jersey Medicare beneficiaries who were referred for home health services and received them and those who were referred to home health services but did not receive them. This disparity was observed in all subgroups analyzed, including dual-eligible beneficiaries, Whites, Blacks, Hispanics, and those with greater than 4 chronic diseases. It should also be noted that in 2014 the overall 30-day readmission rate among all New Jersey Medicare beneficiaries was 19.7 percent while the 30-day readmission rate among those who were referred and received home health care was only 17.2 percent.

Costs

The median cost of 30-day hospital readmissions among those who were referred for home health services but did not receive them was \$9,127. The total cost of 30-day hospital readmissions among this group was \$30,081,440. Considering that the 30-day readmission rate among individuals who were referred for home health services but did not receive them was 7.3 percent greater than the rate among those who were referred for home health services and did receive them (24.5 percent vs. 17.2 percent), it is possible that at least \$6,903,900 could have been saved if this population would have utilized the home health services for which they were referred. While these findings suggest home health utilization to have a protective effect on 30-day hospital readmissions, we cannot conclude that home health utilization is directly correlated to 30-day hospital readmissions due to the nature of this analysis.