Nearly 1 in 5 patients on Medicare, the primary public insurer of patients aged 65+ (n = 883,985), were readmitted within 30 days of hospital discharge at a cost of $36 billion per year.

A growing body of evidence suggests that oral nutritional supplements (ONS), which deliver macronutrients and micronutrients to patients receiving ONS were on average over 9 months older (p < 0.001). After excluding episodes involving tube feeding, a 1:1 matched sample of 65,001 ONS episodes of CHF and 333,842 ONS episodes of any diagnosis was generated to estimate the effect of ONS.

Among the aged 65+ publicly insured population, there were 19,209 ONS episodes of CHF and 33,493 ONS episodes with any diagnosis.

- Patients receiving ONS were on average over 9 months older (p < 0.001).
- ONS episodes were matched 1:1 with non-ONS samples for comparison.

- Length of stay: N regression analysis indicated that ONS use reduced CHF by 2.1 days (95% CI: 1.34, 2.86 days, p < 0.001).
- ONS use significantly lowered episode cost in CHF patients by 14.20% with reduction of $1,266 (p < 0.01).
- The average cost to provide ONS was US$1,266 per episode (including associated capital and labor expenses), implying a decrease of $1,266 for every CHF patient provided ONS.
- CHF patients had a 10.1% (p = 0.001) decrease in the probability of 30-day readmission among patients over readmitted.

Limitations

The nature of the present dataset imposed several limitations, including potential for selection bias due to the nature of the hospital discharge data and following the discharge, and the inability to distinguish between avoided readmissions due to recovery, death or transfer to a non-hospital facility.

References


