The Hospital Admission Rate for Residents Serviced by PrevMED Programs in 2012

A Report Prepared by

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Purpose

This document discusses the Hospital Admission Rate for residents of a Skilled Nursing Facility who utilized the services of the PrevMED Program during calendar year 2012. That rate was calculated to be between 8.81% and 11.65%. By comparison, the Hospital Admission Rate for Skilled Nursing Facilities across the USA is over 25% (Grabowski, O’Malley and Barhydt 2007) and (Polniaszek, Walsh and Wiener 2011).

Discussion

The Hospital Admission Rate for a Skilled Nursing Facility over a fixed period is defined as the ratio of the number of actual hospital admissions in this period to the total distinct population of the facility in this period. For example, if there were 20 hospital admissions for a period of one year out of a total of 100 distinct residents who lived in the facility, then the Hospital Admission Rate for the year is 20/100, or 20%.

There are three components to this formula. First, the time period is usually fixed at one year (we have used counts of hospitalization and population over one calendar year in all calculations that follow).

Second, the numerator in the formula is the total number of hospitalizations in this period. It is the actual number of distinct times a resident is admitted to a hospital over the period. If a resident has multiple admissions to a hospital within the period, each separate admission is counted as a new and different admission.

Third, the denominator in the formula is the total number of distinct residents who occupied a Skilled Nursing Facility bed during the given period. This number can exceed the capacity of the home due to resident turnover. For example in a typical 120-bed Skilled Nursing Facility, it would not be unusual to have a total resident population of 200 over the course of one year. Then the denominator is 200 and the Hospital Admission Rate will be 20/200, or 10%.

PrevMED operates in the environment of a Skilled Nursing Facility but not every resident occupying a bed in a facility is enrolled in the PrevMED Program. The population of residents enrolled in the PrevMED Program experiences the same natural conditions as the un-enrolled segment at the facility. PrevMED attempts to see and treat every enrolled resident every month but this is not always accomplished due to various factors including hospitalization and the residents’ right to refuse treatment (See Table 4). PrevMED keeps accurate records of the reason why a resident was not treated in a particular month. Finally, depending on the duration of a resident’s hospital stay, it might happen that in a small number of cases, a resident is counted as being hospitalized twice.

Consequently, when we calculate the Hospital Admission Rate of the residents who utilize the services of the PrevMED Program using the data collected in 2012, we have to reduce the numerator in the ratio by the known number of double-counted patients, and adjust the denominator by considering the number of residents not serviced or not attempted to be serviced but enrolled in the PrevMED service. Reducing the
numerator reduces the calculated Hospital Admission Rate slightly while reducing the denominator increases the ratio.

Calculations

Table 1 shows for each month of calendar year 2012, the total resident population on the first day of the month, and the number of additions (approvals) and terminations for that whole month. There is a time lag between the date a person is approved and when that person actually takes up residence in a facility. Consequently, the number of approvals is slightly larger than the actual number of new people who take up residence in a month.

Referring to the table, the sum of the 5623 active PrevMED Residents on 12/31/2012 and the nominal total number, 3634, of PrevMED Resident terminations in 2012, is 9257 residents. The actual number of distinct residents invoiced in 2012, as reported by Group Benefits Services (a third party administrator for the PrevMED Program) is 9107. The discrepancy of 150 is due to two reasons:

(1) The resident was never invoiced or serviced. In this case, the resident became active but was terminated for some reason and was never serviced and the termination date was equal to the effective date of coverage.
(2) The termination took place early in 2012 but the effective date was retroactive to some date prior to 1/1/2012 and the resident was not serviced in 2012.

Table 2 shows data for active residents who were in the hospital when PrevMED attempted to provide services. The total number of cases where an active resident was in the hospital and could not be served is 884 for all of 2012. However, as mentioned earlier, in 81 cases, the resident’s hospital stay spanned across two visits by representatives of the PrevMED program and therefore the resident could not be served and was counted twice. Thus, the actual number of hospitalizations is 884-81, or 803. This number will be the numerator in our calculation of the Hospital Admission Rate.

We turn now to Table 3, which shows the various categories of active residents serviced as well as the number of active residents who were not serviced in a month in a facility. We see that 2777 residents were not serviced (for reasons mentioned earlier) and 563 were double-counted. Therefore, the number of distinct active residents not serviced or for whom no attempt to service was made, is 2777-563, which is 2214. When this figure is subtracted from the total number of invoiced patients and the denominator of our formula is 9107-2214, or 6893. If we do not subtract this figure from the total number of invoiced patients, then the denominator is unchanged, and stays at 9107.

Therefore, the PrevMED Hospitalization Rate is 803 total hospital admissions divided by either the adjusted 6893 distinct residents or the total number of invoiced residents. The ratios are 11.65% and 8.81% respectively.
Conclusion

The annual Hospital Admission Rate for residents enrolled in the PrevMED Program is in the range 8.81% to 11.65%, which is significantly lower than the 25% rate reported for all residents at all Skilled Nursing Facilities across the USA.

References


Note: To review the associated data, please contact El Harris at eharris@monthlyservice.com.

- Data intentionally not included.