

Anemia Correction After Hospitalization

Craig A. Solid, MS¹, David T. Gilbertson, PhD¹ and Allan J. Collins, MD, FACP^{1,2}. ¹Chronic Disease Research Group, MMRF, Minneapolis, MN and ²Medicine, University of Minnesota, Minneapolis, MN.

Achieving and maintaining the Kidney Disease Outcomes Quality Initiative (K/DOQI) target hemoglobin (Hb) level of 11-12 g/dl may be difficult, particularly for patients who are hospitalized with acute medical complications. The objective of this analysis is to investigate the effect of hospitalization on Hb.

The study population was a subset of all patients who initiated hemodialysis (HD) between 1998 and 2003, and who had a hospitalization during their incident year. Outpatient EPO claims were used to track Hb and EPO dose prior to and following the hospitalization event. The type of hospitalization was identified from the principle diagnosis code on the hospitalization claim.

Graphs of Hb and EPO dose by year indicate that the overall level of Hb has steadily increased over the years, while the magnitude of the drop in Hb during the month of hospitalization seems similar across all of the years (mean=-0.52, SD= 1.29). The number of months required to achieve the pre-hospitalization Hb is similar across the years (range: 2.04-2.34). EPO doses during the month of hospitalization and the first month post-hospitalization have increased by about 10% between 1998 to 2003, similar to the increase in Hb levels during that same time period. Analyses of Hb and EPO by the type of hospitalization show infections and bleeding events cause the biggest drop in Hb level (Infections: 0.55, 1.26; bleeds: 0.73, 1.63) and require the most EPO post-hospitalization.

Anemia management has improved during the last few years. However, significant drops in Hb levels surrounding inpatient hospital stays, especially for infections and bleeding events, continue to be an issue. Achieving and maintaining target Hb levels consistently in patients will be influenced by intercurrent hospitalization events.

Mean Hb

