

The State of Hemoglobin Correction in the United States

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The use of recombinant erythropoietin (EPO) for treatment of anemia in ESRD patients was introduced in June 1989. Using national Medicare EPO claims data, we assessed trends in hemoglobin levels and EPO doses from January 1991 through January 2005.

Since January 1991, average hemoglobin levels have increased from 9.67 g/dL to almost 12 g/dL in January 2005. This increase was relatively consistent, with the exception of the period from mid 1997 to early 1998, coinciding with the period of introduction of the Hematocrit Measurement Audit (HMA) policy, which was in conflict with the newly introduced DOQI guideline recommendation of a target hemoglobin of 11-12 g/dL. The pattern of EPO dosing has followed a similar trend over time, rising from 2,778 units per administration in 1991, to 7,327 units per administration in January 2005. Since 1998, Hb levels and EPO doses have increased except for the most recent period through January 2005 (n=172,751) where EPO doses have declined. These decreases appear to be coincident with the new proposed HMA EPO payment policies by CMS. The decline in EPO doses are similar to the fall that occurred during the last change in CMS payment policy in 1997. Additional data will be needed to determine if Hb levels are maintained or decline as happened in 1997.

Mean Hb and EPO Dose per Administration,
By Month, Jan 1991- Jan. 2005

