Hemoglobin (Hb) Measurements, Dose Titrations, Erythropoiesis-Stimulating Agent (ESA) Use and Hb Target Achievement in Patients on Dialysis

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**Purpose:** Frequent Hb measurements may lead to increased dose titration. The following analysis was performed to better understand the relationship between Hb measurement frequency, dose titrations and Hb outcomes.

**Methods:** 2010 data from a large US dialysis provider (1,630 dialysis facilities; 141,631 patients on dialysis) was analyzed to evaluate the relationship between Hb measurements, dose titrations, ESA utilization, and the % of patients within Hb 10-12 g/dL. Hb measurements (grouped into <2, 2 to <3, and ≥3 per patient-month), dose titrations (dose changes >10%), average monthly ESA use and average monthly % of patients within Hb range over 1 year were analyzed.

**Results:** Facilities with frequent Hb monitoring (mean of 1.8 vs 3.6) were associated with a 50% increase in dose titrations and a 25% increase in ESA use, with no increase in the percent of patients within Hb 10-12 g/dL (Table). Mean Hb measurements and dose titrations were 2.8 and 1.08 per patient-month, respectively, with 67% of sites having at least 1 dose titration per patient-month. Distribution of comorbidities and hospitalizations were similar across low and high frequency Hb-measurement facilities.

**Conclusion:** Frequent Hb monitoring and ESA dose titration may be associated with increased drug utilization without improved Hb target achievement.

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