

The Effect of Pre-ESRD Care on Incident Patient Outcomes

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INTRODUCTION

Starting in 2007, significant changes to erythropoiesis stimulating agent (ESA) product labeling and new data have decreased ESA use in the pre-dialysis setting. However, this has had an unintended effect on outcomes for incident end-stage renal disease (ESRD) patients. The Medicare Evidence Development & Coverage Advisory Committee (MEDCAC) recently discussed lower Hb targets in CKD. We sought to understand how anemia management in pre-ESRD has changed and to quantitate the impact that such potential revisions in payment policy may have on ESRD outcomes.

METHODOLOGY

- Patients receiving 12 ICHD treatments and no other modality treatments in the 1st 30 days of dialysis were identified in a large US dialysis provider's database (Table 1).
- We performed an analysis using Hb results in both the first 30 and next 30 days (n=77,299).
- Initial Hb levels were grouped into 0.5g/dL increments and charted over time, and a matched analysis for Hb increment to first month's ESA dose was completed.
- Initial Hb levels and ESA requirements were compared by Chi square test.

RESULTS

Table 1. Patient Demographics

Mass CD	
Mean ± SD	Patients
N	77,299
Age (yr)	63.3 ± 15.5
% Male	56.4%
Race and Ethnicity	
% African American	29.7%
% Hispanic	14.1%
% Asian, Pacific Islander	3.7%
% Native American	1.1%
% Unknown	0.1%
% Diabetic	70.3%
Vintage (yr)	1.6 ± 1.0
BMI	26.1±7.1

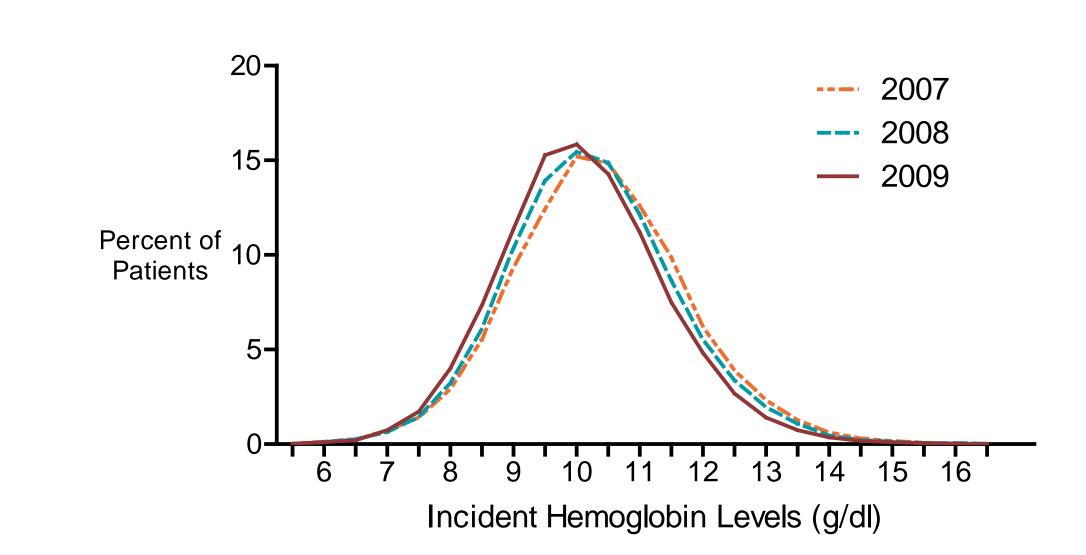


Figure 1. Incident Hemoglobin Levels, 2007-2009

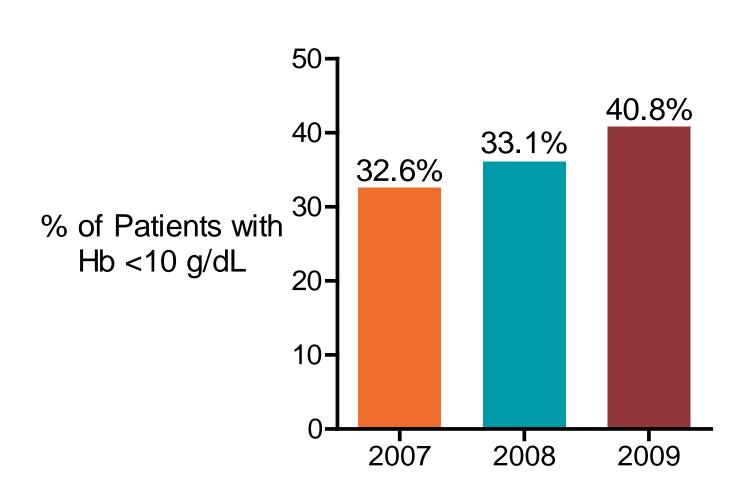


Figure 2. Patients with <10 g/dL Hb

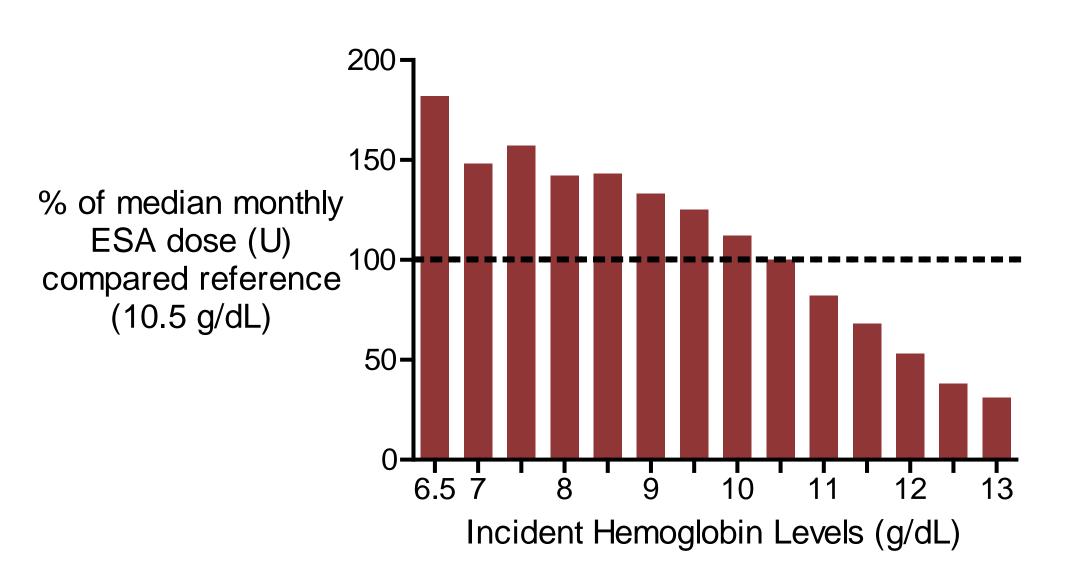


Figure 3. Incident ESA Requirements

SUMMARY of RESULTS

- The changes to pre ESRD-related ESA use in the last 3 years have had a predictable decline in incident Hb outcomes for patients new to dialysis (Figure 1).
- The % of patients entering dialysis with Hb levels of <10 g/dL has increased in the past 3 years, p<0.0001 between each set of years (Figure 2).
- The dose prescribed to those patients has also declined year over year for the same incident Hb increment.
- The amount of ESA required in the 1st month of dialysis correlated with incident Hb, with lower Hbs requiring higher doses (Figure 3).

KEY LEARNINGS

- Over time both 1st hemoglobin on dialysis and 1st month ESA dose have decreased.
- This downward trend in progressively lower Hb is likely to continue given the current controversies in ESA use.
- ✓ Significant changes in pre-ESRD ESA coverage may have an effect on anemia outcomes for new ESRD patients

We express our sincere appreciation to the teammates in our nearly 1600 clinics who work every day, not only to take care of patients, but also to ensure the extensive data collection on which our work is based. We thank DaVita Clinical Research® for support in preparing this poster. DCR is committed to advancing the knowledge and practice of kidney care.

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