Potential for Racial Disparities in the Proposed Medicare Dialysis Prospective Payment System

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INTRODUCTION

In 2011, the Centers for Medicare and Medicaid Studies (CMS) will implement an ESRD prospective payment system in which injectable medications, laboratory tests and other currently separately billable costs will be 'bundled' into the dialysis composite rate.

In the United States, numerous studies, including analyses contained in the CMS notice of proposed rule making, have shown that black dialysis patients utilize more health care resources and incur greater costs than other racial groups. For example, blacks require higher doses of epoetin alfa to achieve equivalent hemoglobin outcomes; higher vitamin D to achieve comparable PTH; and have lower rates of AV fistulas. Despite substantial evidence that race is a significant predictor of cost, race was not included in the proposed list of case mix adjusters.

Our objective was to determine if a race case mix adjuster could reduce or eliminate the racial bias that exists in the proposed payment system.

METHODOLOGY

Data sources

- CY2011 Proposed ESRD PPS Facility Level Impact File
- DaVita Clinical Data Warehouse

Variables

- Change in CMS-estimated clinic reimbursement:

$$\frac{\text{(2011 payment under current payment rules} - \text{2011 payment under NPRM)}}{\text{2011 payment under current payment rules}}$$

- Race: Black; White; Asian/Pacific Islander (API); Native American/Alaskan Native (NA/AN)

Analyses

- We assigned race to Hispanic/Other patients proportionally using non-Hispanic racial make-up from USRDS (38% Black; 57% White; 3% API; 2% NA/AN)
- Adjuster weights were taken from the CMS REMIS analysis:
  1.00 for API, 1.126 NA/AN, 1.142 for whites, and 1.207 for blacks
- We ran linear regression analyses at the clinic level, regressing percent race onto CMS-estimated change in payment with and without a racial adjuster
- To make the race adjuster budget neutral, we calculated the resulting mean increase in payment with the adjuster and subtracted this from the base payment for each clinic
- Initial analyses showed the black racial adjuster over-corrected in this population. We conducted a limited Monte Carlo simulation, solving for a CMS with no significant relationship between percentage of blacks in a clinic and change in payment, and the slope of the regression line closest to zero

RESULTS

Figure 1. Dialysis Units Receiving a Lower Payment under the Proposed Prospective Payment System Based on CMS Projections, by County Percent Blacks/African Americans (U.S. Census, 2008 Projections)

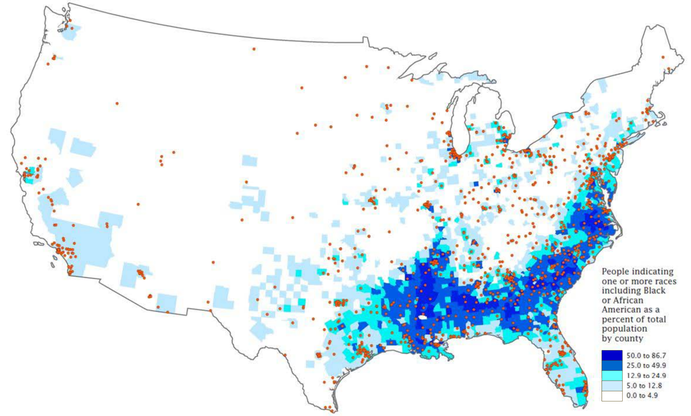
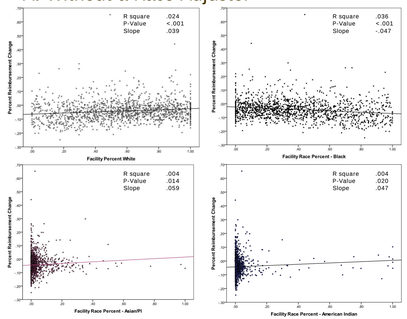
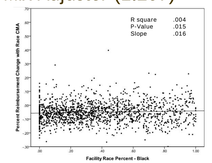


Figure 2. Association between clinic percent race and percent change in CMS estimated 2011 reimbursement under current and proposed payment rules

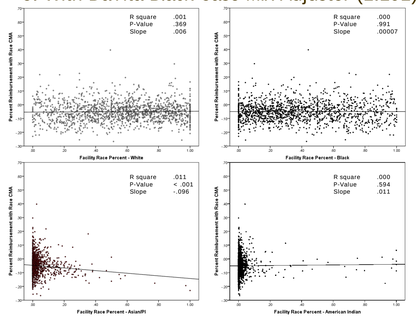
A. Without a Race Adjuster



B. With REMIS Black Case Mix Adjuster (1.207)



C. With DaVita Black Case Mix Adjuster (1.191)



CONCLUSIONS

- Mapping produced clear patterns, in which facilities in areas with high percentages of blacks are more likely to experience decreases in CMS-estimated 2011 payments under the proposed prospective payment system (Fig. 1).
- The new payment system will increase payments (relative to current payments) for clinics with a higher percent of whites, APIs and NA/ANs. Clinics with a higher percentage of blacks will receive lower payments. (Fig. 2A).
- The addition of the race adjuster eliminates the association between white and NA/AN race and payment change, but over-corrected for blacks. Reducing the black adjuster to 1.191 eliminated this over-correction (Fig. 2B and 2C).
- Limitations:
  - This analysis included only DaVita patients. The original REMIS race adjusters may eliminate racial bias in the complete dialysis population.
  - Units with >50% API will receive lower payments, both with and without a race CMA. The addition of a race adjuster magnifies the loss in a financially meaningful way (from a mean loss of -6% to a mean of -17%).
  - USRDS analyses are required to understand if this incremental risk exists outside of large chains, and the magnitude of that risk.

KEY LEARNINGS

- ✓ There is both a scientific and legislative mandate to include patient-reported race as an adjuster in the proposed ESRD prospective payment system.
- ✓ Excluding race as a case mix adjuster will result in racial and geographic disparities in ESRD payments and thereby limit the availability of therapies needed to maintain equity in health outcomes.

We thank the patients who participated in this study and 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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