Variation in Medicare Prospective Payment System Drug Costs by Dialysis Organization and Projection to 2014

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Introduction

- Beginning in 2011, injectable, dialysis-related medications and their oral equivalents were included in the Centers for Medicare & Medicaid Services (CMS) End-Stage Renal Disease (ESRD) Prosp－ective Payment System (PPS) for outpatient maintenance dialysis services.
- According to most recent estimates (SCRD 2012 Annual Data Report), roughly 73% of Medicare hemodialysis patients and 81% of peritoneal dialysis patients are enrolled in Medicare Part D and receive higher of their home medications through Part D plans. Beginning in 2014, calcimimetics (i.e., cinacalcet) and phosphate binders will no longer be provided to dialysis patients through Part D, but are ESRD PPS Prospective Payment providers.
- Consequently, the costs of calcimimetics and binders will be shifted to the ESRD PPS.
- Because of differences in patient mix (i.e., in race, income, and current prescribing patterns for calcimimetics and binders), we hypothesized that dialysis providers may be heterogeneously impacted by this cost shift.
- We examined variation in ESRD PPS drug costs across dialysis providers, according to the 2011 and 2014 PPS designs, as well as variation in total Medicare drug costs and gross Part D drug costs.

Methods

- The cohort comprised ESRD patients who were alive during all of 2009.
- Patients received dialysis treatment, carried Medicare Parts A and B as primary payer of healthcare expenses, and were enrolled in Medicare Part D during all of 2009.
- Only patients who were enrolled in standardize Part D plans were retained for analysis.
- Total Medicare and ESRD PPS drug costs were ascertained from Part B claims and, as was applicable, Part D prescription events. Part B costs included Medicare payment amounts; Part D costs included plan payment and low-income subsidy (LIS) amounts.
- Analyses of gross Part D drug costs also included out-of-pocket payments.
- Injectable drugs in the ESRD PPS included epoetin alfa, darbepoetin, intravenous (IV) iron formulations, deferasirox, IV vitamin D analogs, bisphosphonates, levoctamnase, dipeptidylpeptidase IV, vancomycin, and thrombolytic agents.
- Oral agents added to the ESRD PPS in 2011 include calcimimetics, desmopressin, paricalcitol, and levoctamnase.
- Oral agents previously prescribed to the ESRD PPS in 2014 included cinacalcet, calcium acetate, lanthanum carbonate, and lanthanum (carbonate or hydrochloride).
- Costs were stratified by dialysis provider and directly adjusted for age, race, and sex; costs were not inflation-adjusted.

Results

- Patient populations of the dialysis providers were similar with respect to age, sex, and LIS receipt, but not with respect to race.
- Total Medicare drug costs by in 2009 ranged from $10,312 to $12,201 per person per year (PJPY) in non-LIS patients (maximum-to-minimum ratio, 1.05) and from $15,359 to $18,074 in patients (ratio, 1.16).
- Total Medicare drug costs for DaVita patients were higher than for patients with other dialysis providers, regardless of race, independent, or hospital-based.
- For all dialysis providers, black patients had the highest total Medicare drug costs.
- ESRD PPS drug costs in the 2011 and 2014 designs were highest for DaVita patients and lowest for general physicians organizations and independent providers.
- Part D drug costs were highest for DaVita patients and lowest for hospital-based.
- When calcimimetics and phosphate binders are included in the ESRD PPS, the largest of shifts in Part D drug costs are projected to occur in DaVita patients: $2,409 and $5,020 PJPY will shift from Part D to the PPS in non-LIS and LIS patients, respectively.
- Residual Part D drug costs (to be added in 2014 PPS design) were similar across dialysis providers.
- Part D drug costs per medication per day were lowest in DCI patients, regardless of LIS receipt. Costs per medication per day were highest in DaVita and hospital-based patients.

Conclusions

- There is significant variation in Part D drug costs across dialysis providers.
- Shifting coverage of calcimimetics and phosphate binders from Part D to ESRD PPS will substantially increase costs for providers. DaVita providers, who are dually enrolled in Medicare and Medicaid may face relatively higher costs in 2014. New race or socioeconomic status (e.g., median income subsidy (LIS) amounts. Costs per medication per day were lowest in DCI patients, regardless of LIS receipt. Costs per medication per day were highest in DaVita and hospital-based patients.
- Finally, some patients (e.g., non-LIS patients) may face higher out-of-pocket costs in 2014 if marginal increases in Part B copayments that occur when phosphate binders and calcimimetics shift to bundle exceed Part D copayments for these agents, as might be expected if reaching catastrophic coverage becomes less likely.