

# Variation in Medicare Part D Prescription Drug Fill Rates and Coverage Phase Progression by Dialysis Organization

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## Introduction

- Medicare Part D is the voluntary prescription drug benefit for Medicare beneficiaries.
- According to most recent estimates (USRDS 2012 Annual Data Report), roughly 73% and 61% of Medicare hemodialysis and peritoneal dialysis patients, respectively, are enrolled in Part D.
- Part D enrollees with income greater than 150% of the Federal Poverty Level (FPL) do not qualify to receive the low-income subsidy.
- Such patients can progress through 3 coverage phases based on their total drug costs and out-of-pocket spending: the initial coverage phase, the coverage gap (a.k.a. the “donut hole”), and catastrophic coverage phase.
- The number of prescribed medications, refill rates, and drug costs collectively influence whether patients progress from the initial coverage phase, in which the patient typically pays about 25% of drug costs; to catastrophic coverage, in which the patient pays about 5% of drug costs.
- Due to case mix, prescribing patterns and medication use, progression through these phases may vary across dialysis providers.
- We investigated whether patterns of coverage phase progression and medication utilization were similar across dialysis organizations, in both hemodialysis (HD) and peritoneal dialysis (PD) patients.

## 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 health care services, and were enrolled in Medicare Part D during all of 2009.
- Only patients who were enrolled in standalone Part D plans and who did not receive the low-income subsidy (LIS) in any month of 2009 were retained for analysis.
- Both dialysis provider and dialytic modality (HD or PD) were ascertained on January 1, 2009, and were presumed to be unchanged during 2009.
- Dates of reaching the coverage gap and reaching catastrophic coverage were ascertained directly from the benefit phase field in the Part D event data.
- The cumulative incidence of reaching the coverage gap and reaching catastrophic coverage were estimated with the life-table (i.e., actuarial) method.
- Part D-covered medications taken per day were calculated as the mean number of medications taken per day over all calendar days spanned by the benefit phase at hand; medications taken per day were inferred from fill dates and the number of days supplied of each Part D event (i.e., dispensed drug).
- Results were stratified by provider and modality, but were otherwise unadjusted.

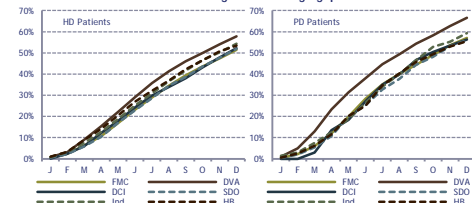
## Results

- In the subset of Part D enrollees who did not receive the LIS, patient populations of the dialysis providers were similar. Older age, white race, and male gender were all more common in this subset than in the broader cohort of dialysis patients enrolled in Part D.
- Across organizations, from 52 to 58% of HD and 55 to 67% of PD patients reached the coverage gap (CG) in 2009.
- From 12 to 17% of HD and 14 to 24% of PD patients reached catastrophic coverage (CC). In the subset of patients who reached the CG, from 22 to 31% of HD and 23 to 36% of PD patients reached CC.
- DaVita had higher percentages of HD and PD patients reach the CG than all other dialysis providers. DaVita also had the highest percentage of PD patients reach CC.
- Hospital-based HD patients were more likely to reach CC than HD patients with other dialysis providers.
- Both HD and PD patients with DaVita uniformly had the lowest mean number of Part D-covered medications taken per day in each coverage phase.
- Across all providers, in patients who reached the CG, but did not reach CC, medications per day decreased upon entry into the CG. In contrast, in patients who reached the CG and progressed to CC, medications per day increased with each coverage phase.

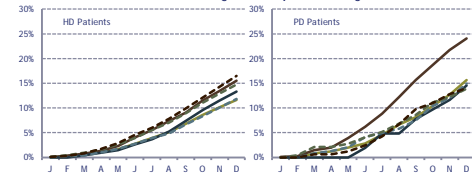
Characteristics of dialysis patients alive during all of 2009 and enrolled in Medicare Parts A, B, and D, stratified by provider

	Fresenius (FMC)	DaVita (DVA)	Dialysis Clinic, Inc. (DCI)	SDO	Ind.	HB
Sample size	9,142	6,738	963	2,306	3,392	4,389
Hemodialysis (HD)	749	760	103	241	467	164
Peritoneal dialysis (PD)						
Age (years)						
18-44	4.6%	4.2%	4.7%	5.1%	3.8%	4.7%
45-64	29.0%	27.4%	26.7%	26.1%	28.0%	29.0%
65-74	34.5%	34.9%	36.1%	35.0%	34.3%	31.8%
75+	31.9%	33.5%	32.5%	33.8%	33.9%	34.5%
Race						
White	70.4%	70.8%	68.9%	70.0%	76.6%	72.3%
Black	26.7%	25.8%	29.1%	22.3%	19.6%	24.1%
Native American	0.7%	1.0%	1.0%	0.4%	0.8%	0.8%
Asian	2.3%	2.4%	1.0%	7.2%	3.0%	2.9%
Sex						
Female	41.3%	41.9%	43.1%	42.4%	40.5%	42.1%
Male	58.7%	58.1%	56.9%	57.6%	59.5%	57.9%

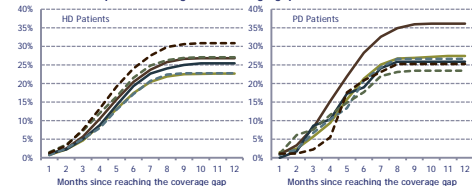
Cumulative incidence of reaching the coverage gap in 2009



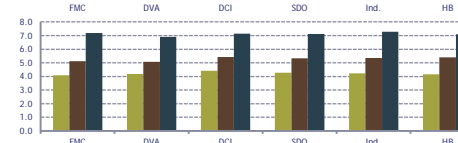
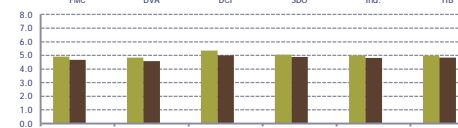
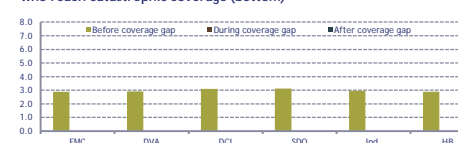
Cumulative incidence of reaching catastrophic coverage in 2009



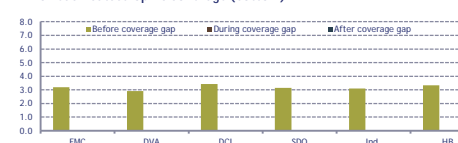
Cumulative incidence of reaching catastrophic coverage in 2009, conditioned upon reaching the coverage gap



Part D-covered medications per day in HD patients, in patients who do not reach the coverage gap (top); patients who reach the coverage gap, but do not reach catastrophic coverage (middle); and patients who reach catastrophic coverage (bottom)



Part D-covered medications per day in PD patients, in patients who do not reach the coverage gap (top); patients who reach the coverage gap, but do not reach catastrophic coverage (middle); and patients who reach catastrophic coverage (bottom)



## Conclusions

- Independent of dialytic modality, a higher percentage of DaVita patients without the LIS reached the coverage gap, despite the fact that these patients had the lowest mean number of Part D-covered medications taken per day.
- This combination is possible if Part D covered medications taken by DaVita patients are more costly, on average, than medications used by patients in other dialysis organizations.
- Brand-name medications are more costly than generic medications.
- According to the USRD 2012 Annual Data Report (ADR), calcimimetics and phosphate binders together represent almost 50% of gross Part D drug costs in Part D-enrolled dialysis patients.
- Furthermore, four exclusively brand-name products (Sensipar® [cinacalcet]; Fosrenol® [lanthanum carbonate]; Renvela® [sevelamer HCl]; and Renvela® [sevelamer carbonate]) are the most powerful drivers of Part D costs per person per year in dialysis patients, according to the USRD 2012 ADR.
- Studies are needed to assess whether higher Part D costs are associated with decreased costs of inpatient and outpatient care.
- Studies are also needed to assess whether dialysis patients who do not receive the LIS and who reach the coverage gap are at increased risk of poor outcomes.