Abraham Ortelius, 1570

5 Part D prescription drug coverage in patients with chronic kidney disease

The Medicare Part D prescription drug benefit has been in place since January, 2006. In December, 2011, over 29 million Medicare-enrolled elderly and disabled people, as well as individuals with ESRD, were enrolled in a Medicare Part D prescription drug plan (PDP). Before 2006, these patients obtained drug coverage through various insurance plans, state Medicaid programs, or pharmaceutical assistance programs, received samples from physicians, or paid out-of-pocket. After 2006, however, the majority obtained Part D coverage. Sixty-two percent of general Medicare patients, and 60 and 70 percent of CKD and ESRD patients, were enrolled in Part D in 2011.

Part D benefits can be managed through a stand-alone PDP or through a Medicare Advantage (MA) plan, which provides medical as well as prescription benefits. CKD patients can choose to enroll in an MA plan; ESRD patients, in contrast, are precluded from entering an MA plan if they are not already enrolled in one when they reach ESRD. Most data presented in this chapter encompass both types of plans.

Medicare-enrolled CKD patients obtain outpatient medication benefits through Part B, Part D, retiree drug subsidy plans, or other creditable coverage (equivalent to or better than Part D), including employer group health plans, Veterans Administration benefits, Medicaid wrap-around programs, and state kidney programs. Some also pay out-of-pocket for plan expenses and copayments, over-the-counter medications, and low-cost generic agents at retailers.

The percentage of CKD patients with Part D coverage increased from 58 to 60 percent between 2010 and 2011. A higher proportion of CKD patients have retiree drug subsidy coverage, at 20 compared to 13 percent among general Medicare patients. The percentage of CKD patients with no known coverage increased from 7.8 to 11.2 between 2010 and 2011, but this is lower than the 14 percent seen in the general Medicare population.

Part D does not cover every medication prescribed to Medicare enrollees. Several drug categories — including over-the-counter medications, barbiturates, benzodiazepines, anorexia and weight loss or gain medications, prescription vitamins (except for prenatal vitamins), and cough and cold medications — were excluded from the Part D program by law in 2011. This means that some drugs commonly used in CKD patients (oral iron, ergocalciferol, cholecalciferol) are not currently covered; oral calcitriol, doxercalciferol, and paricalcitol, however, are covered. In January, 2013, Medicare Part D coverage was expanded to benzodiazepines (no restrictions) and barbiturates (for specific indications).

Prior to the start of the Medicare Part D program in 2006, patients dually-enrolled in Medicare and Medicaid received prescription benefits

The sea is everything. It covers seven tenths of the terrestrial globe. Its breath is pure and healthy. It is an immense desert, where man is never lonely, for he feels life stirring on all sides. The sea is only the embodiment of a supernatural and wonderful existence. It is nothing but love and emotion; it is the "Living Infinite," as one of your poets has said.

Jules Verne
Twenty Thousand Leagues Under the Sea

under state Medicaid programs. The Part D program, however, offers a substantial low-income subsidy (LIS) benefit to enrollees with limited assets and income, including those who are dually-enrolled. The LIS provides full or partial waivers for many out-of-pocket cost-sharing requirements, including premiums, deductibles, and copayments, and provides full or partial coverage during the coverage gap ("donut hole"). Forty-nine percent of CKD patients enrolled in Part D have the LIS, compared with only 37 percent of general Medicare patients and 69 percent of ESRD patients. Eighty-seven percent of Asian patients with CKD have the LIS, compared to 79 percent of blacks/African Americans and 40 percent of whites. In general, CKD patients thus pay proportionally lower out-of-pocket costs than general Medicare patients for their Part D prescriptions. CKD patients enrolled in Part D and without the LIS, however, pay higher premiums for their plans than do general Medicare patients, and monthly premiums for non-LIS patients have increased substantially since 2006.

The net Part D payment for identified CKD patients rose from $2.9 billion in 2007 to $5.3 billion in 2011 — an increase of 81 percent, compared to growth of 37 and 59 percent for general Medicare and ESRD patients, respectively. This can be at least partially explained by increased identification of CKD; recognized CKD prevalence has increased 47 percent since 2007.

Out-of-pocket (OOP) Part D costs for CKD patients are higher than for general Medicare patients, at $613 versus $417 per person per year in 2011 (PPPY). This reflects a greater mean number of Part D prescriptions for CKD patients and/or higher costs per prescription. CKD patient OOP costs relative to total Part D costs are proportionally lower than those in the general Medicare population; a higher percentage of CKD patients enrolled in Part D have the LIS, which lessens their OOP costs. A higher percentage of non-LIS CKD patients reach the coverage gap as compared to general Medicare patients, (37 versus 19 percent), and the catastrophic coverage phase (7 versus 3 percent). OOP costs, however, decreased in all non-LIS patients in 2011 compared to 2010. In 2011, pharmaceutical manufacturers started giving a 50 percent discount on the price of brand-name drugs, and Part D plans covered some of the cost sharing for generic drugs when non-LIS patients reached the coverage gap. In addition, generic versions of some blockbuster brand-name drugs, including atorvastatin and olanzapine, became available in 2011.

In the 2012 ADR, we reported the top 15 drug classes used in CKD patients, looking at days supply in order to give weight to those drugs prescribed for chronic conditions. This year, the top 15 classes are ranked based on the percentage of patients with at least one claim for a drug. Not surprisingly, the list is led by cardiovascular therapies (diuretics, statins, beta blockers, angiotensin-converting enzyme inhibitors, calcium channel blockers). Opioid analgesics, however assume a more prominent position, with 47 percent of CKD patients receiving at least one prescription in 2011. ◆ **Figure 5.1;** see page 146 for analytical methods. *CKD patients in the Medicare 5 percent sample.*

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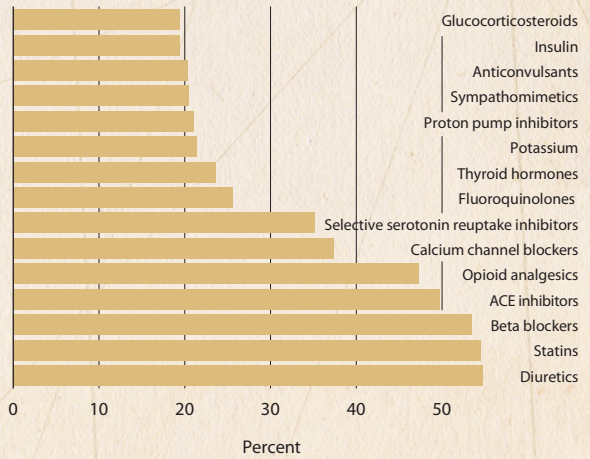
Top 15 drug classes used by Part D enrollees with CKD, by percent of patients & drug class, 2011



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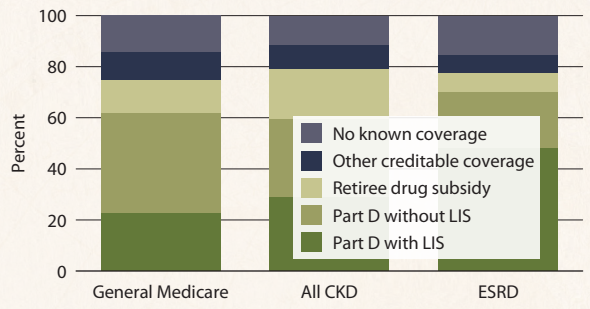
Sources of prescription drug coverage in Medicare enrollees, by population, 2011



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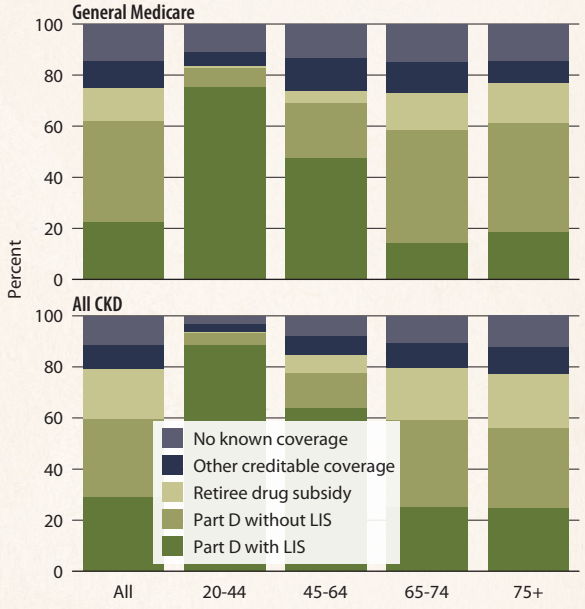
Sources of prescription drug coverage in Medicare enrollees, by age, 2011



Approximately 60 percent of CKD patients are enrolled in Medicare Part D, a number similar to that found in the general Medicare population. A higher percentage of CKD patients, however, have the low-income subsidy (LIS). Among both general Medicare beneficiaries and those with CKD, the percentage enrolled in Part D generally declines with age, although, in the general Medicare population, it is higher among those age 75 and older than for those age 65–75.

Eighty-nine percent of CKD patients age 20–44 receive the LIS. It is important to note that most patients in the two younger age groups are disabled. In the two older age groups, similar proportions of general Medicare and CKD patients are enrolled in Part D, at 56–61 percent. The proportion of patients with LIS declines with age in both populations (with the exception of those age 75 and older in the general Medicare population), but CKD patients in each age category are more likely to receive this subsidy.

Patterns of coverage by race are similar in the general Medicare and CKD populations. Compared to whites, a higher portion of Asian patients and patients other races have Part D coverage with the LIS. Across all races, the percentage of patients with the LIS is higher for CKD patients than among their general Medicare counterparts. ✦ **Figures 5.2–4;** see page 146 for analytical methods. *Point prevalent Medicare enrollees alive on January 1, 2011.*

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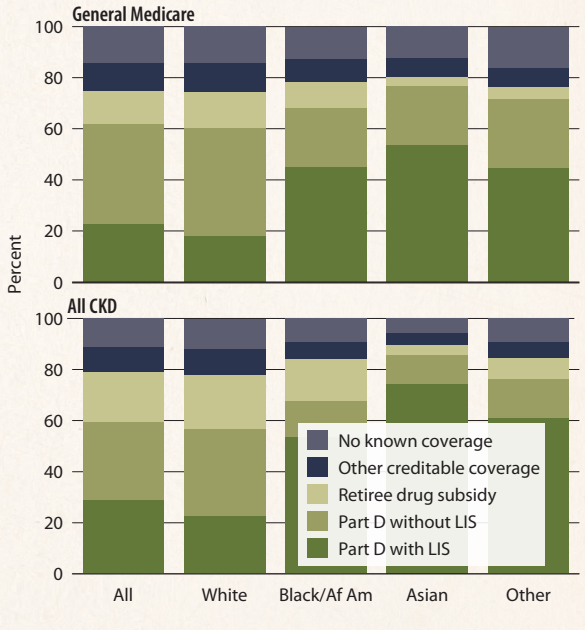
Sources of prescription drug coverage in Medicare enrollees, by race, 2011



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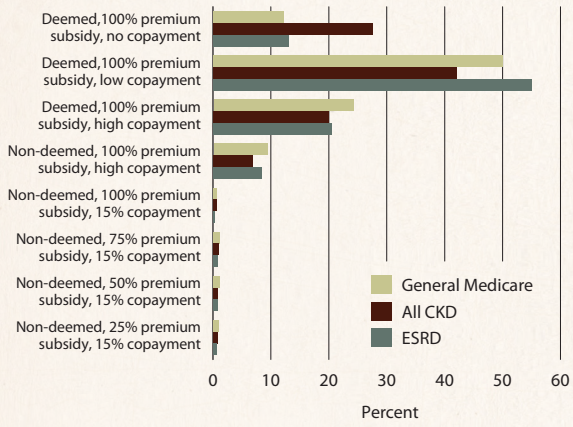
Distribution of low income subsidy (LIS) categories in Part D general Medicare, CKD, & ESRD patients, 2011



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5.a

Percent of Medicare Part D enrollees with or without low income subsidy (LIS), by age & race, 2011

	General Medicare		All CKD	
	Part D w/LIS	Part D w/o LIS	Part D w/LIS	Part D w/o LIS
White				
All ages	29.9	70.1	40.2	59.8
20-44	90.3	9.7	94.3	5.7
45-64	65.2	34.8	78.5	21.5
65-74	18.2	81.8	33.8	66.2
75+	24.3	75.7	35.8	64.2
Black/Af Am				
All ages	66.2	33.8	79.1	20.9
20-44	94.5	5.5	96.7	3.3
45-64	82.1	17.9	88.8	11.2
65-74	51.2	48.8	71.8	28.2
75+	60.0	40.0	78.0	22.0
Asian				
All ages	69.8	30.2	86.8	13.2
20-44	91.3	8.7	93.3	6.7
45-64	75.1	24.9	90.2	9.8
65-74	63.6	36.4	84.0	16.0
75+	73.7	26.3	87.7	12.3
Other				
All ages	62.4	37.6	79.9	20.1
20-44	88.1	11.9	94.5	5.5
45-64	72.5	27.5	89.1	10.9
65-74	54.0	46.0	74.6	25.4
75+	60.9	39.1	79.4	20.6

The Medicare low income subsidy (LIS) provides extra help to Medicare Part D beneficiaries with limited income and resources to help them pay for their Medicare Part D drug plan premiums, annual deductible and co-payments. There are several categories of Medicare beneficiaries that automatically qualify for LIS and are automatically eligible for benefits (deemed). These individuals include full-benefit dual eligible individuals, partial dual eligible individuals (Qualified Medicare Beneficiaries (QMB-only), Specified Low-Income Medicare Beneficiaries (SLMB-only), Qualifying Individuals (QI), and people who receive Supplemental Security Income (SSI) benefits but not Medicaid. Other Medicare beneficiaries with limited incomes and resources that do not automatically qualify for LIS (non-deemed) can apply for LIS and have their eligibility determined by their State Medicaid agency or the Social Security Administration."

There are several levels of the low income subsidy (LIS). Compared to general Medicare patients, those with CKD are more likely to be in LIS categories with a 100 percent premium subsidy and low or no copayments.

Among both general Medicare beneficiaries and those with CKD, and in each race category, the proportion of patients with the LIS generally declines with age, though it is greater for patients age 75 and older than for those age 65–74. In each age group within each race category, patients with known CKD are more likely to have the LIS than their general Medicare counterparts. And in both the general Medicare and CKD populations, Asians are the most likely by race to have the LIS, and whites the least. ✦ **Figure 5.5 & Table 5.a;** see page 146 for analytical methods. *Point prevalent Medicare enrollees alive on January 1, 2011.*

CKD populations exclude patients receiving dialysis.

CMS provides prescription drug plans (PDPs) with guidance on structuring a "standard" Part D PDP. The upper portion of Table 5.b shows the standard benefit design for PDPs in 2007 and 2011. In 2011, for example, beneficiaries shared costs with the PDP (as co-insurance or copayments) until the combined total reached $2,840 during the initial coverage period. After reaching this level, beneficiaries went into the coverage gap, or "donut hole," where they paid 100 percent of costs.

Since 2010, the government has been providing those reaching the coverage gap with more assistance each year. In 2011, patients received a 50 percent brand discount from manufacturers, and plans paid 7 percent of generic drug costs in the gap.* Beneficiaries who paid a yearly out-of pocket drug cost of $4,550 reached the catastrophic coverage phase, in which they paid only a small copayment for their drugs until the end of the year.

PDPs have the latitude to structure their plans differently from what is presented here; companies offering non-standard plans must show that their coverage is at least actuarially equivalent to the standard plan. Many have developed plans with no deductibles or with drug copayments instead of the 25 percent co-insurance, and some plans provide generic and/or brand name drug coverage during the coverage gap. ✦ **Table 5.b;** *http://www.q1medicare.com/PartD-The-2011-Medicare-Part-D-Outlook.php. *http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8237.pdf*

vol 1 **5.b** **Medicare Part D benefit parameters for defined standard benefit, 2007 & 2011**

	2007	2011
Deductible After the deductible is met, beneficiary pays 25% of covered costs up to total prescription costs meeting the initial coverage limit.	$265	$310
Initial coverage limit Coverage gap (donut hole) begins at this point. (The beneficiary pays 100% of prescription costs up to the out-of-pocket threshold.)	$2,400	$2,840
Total covered Part D drug out-of-pocket spending including the coverage gap	$5,451.25	$6,447.50
Catastrophic coverage starts after this point.		plus a 50% brand discount
Out-of-pocket threshold This is the total out-of-pocket costs including the donut hole.	$3,850	$4,550
2011 example		
$310 (deductible)	$265	$310
+ (($2,840 – $310) * 25%) (initial coverage)	$533.75	$632.50
+ (($6,447.50 – $2,840) * 100%) (coverage gap)	$3,051.25	$3,607.50
= $4,550 (maximum out-of-pocket costs prior to catastrophic coverage, excluding plan premium)	$3,850.00	$4,550.00
Catastrophic coverage benefit		
Generic/preferred multi-source drug	$2.15	*$2.50
Other drugs	$5.35	*$6.30

*The Catastrophic Coverage is the greater of 5% or the values shown in the chart above. In 2010, beneficiaries would be charged $2.50 for those generic or preferred multisource drugs with a retail price under $50 and 5% for those with a retail price greater than $50. As to Brand drugs, beneficiaries would pay $6.30 for those drugs with a retail price under $130 and 5% for those with a retail price over $130.

Among general Medicare beneficiaries, those with CKD, and those with ESRD, enrollment in Medicare Part D rose between 2006 and 2011. In each of the first two years of Part D, enrollment was slightly higher for those with CKD than in the general Medicare population. In 2008–2011, however, the reverse was true. And in each year since the inception of Part D, enrollment has been greatest for patients with ESRD. ✦ **Table 5.c;** see page 146 for analytical methods. *Point prevalent Medicare enrollees alive on January 1, excluding those in Medicare Advantage Part D plans.*

vol 2 **5.c** **General Medicare, CKD, & ESRD patients enrolled in Part D (%)**

	General Medicare	All CKD	ESRD
2006	54.6	55.1	62.6
2007	57.0	57.2	65.5
2008	58.6	57.7	67.0
2009	59.8	58.2	68.0
2010	60.4	58.4	68.9
2011	62.1	59.5	70.1

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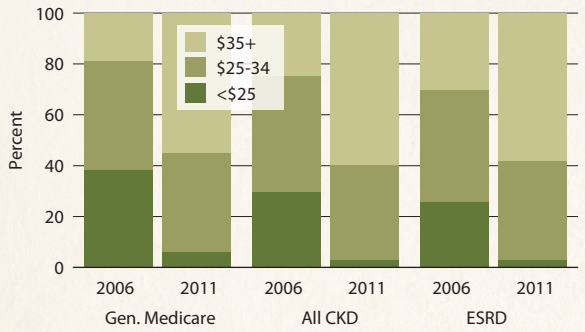
5.6 **Part D non-LIS enrollees with specified monthly premium, 2006 & 2011**



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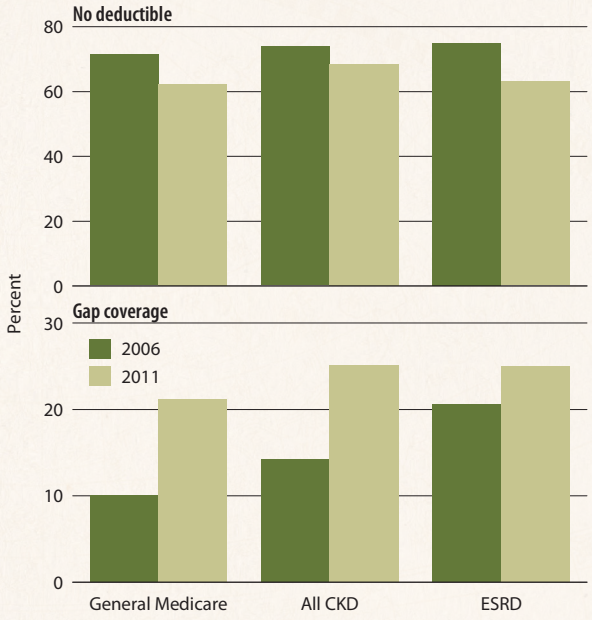
5.7 **Part D non-LIS enrollees with no deductible or with gap coverage, 2006 & 2011**



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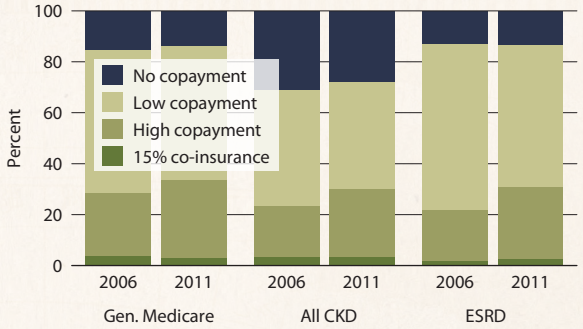
5.8 **Part D LIS enrollees with specified co-insurance/copayment, 2006 & 2011**



Copayments, per generic & branded medication, respectively
High: 2006: up to $2.00 & $5.00 Low: 2006: up to $1.00 & $3.10
2011: up to $2.50 & $6.30 2011: up to $1.10 & $3.30

Patients without the low-income subsidy (LIS) pay full monthly premiums. Between 2006 and 2011, the weighted average premium for Medicare Part D stand-alone prescription drug plans (PDPs) increased from $25.93 to $38.29.*

In 2011, 59 percent of CKD patients were enrolled in plans with premiums greater than $35 per month, compared to 55 percent of Medicare patients. The overall percentage of CKD patients with premiums less than $35 increased from 31 percent in 2010 (2011 USRDS ADR) to 41 percent 2011, probably due to several factors including patient enrollment in the new Humana Walmart-Preferred Rx plan, which had the lowest premium in every region, as well as an overall decrease in MA prescription drug plan premiums from 2010 to 2011.*

The percentage of Part D non-LIS enrollees with no deductible is higher among CKD patients than in the general Medicare and ESRD populations, and has declined since 2006. Gap ("donut hole") coverage is more common in CKD and ESRD patients, at 25 percent compared to 21 percent in general Medicare patients. In 2011, most PDPs (73 percent) offered little or no gap coverage.*

Most Part D LIS enrollees (full-benefit dual-eligible patients) pay no monthly premium, but non-institutionalized LIS patients do pay drug copayments or co-insurance based on income and assets. Seventy percent of CKD patients with LIS have low or no copayments for their Part D medications, compared to 66 percent of general Medicare patients. Only 3 percent pay 15 percent co-insurance for their medications. Twenty-seven percent of CKD Part D beneficiaries with the LIS paid high co-payments, which amounted to a maximum of $2.50 per generic and $6.30 for branded medications in 2011.

• **Figures 5.6–8;** see page 146 for analytical methods. *Point prevalent Medicare enrollees alive on January 1, excluding those in Medicare Advantage Part D plans. *http://kaiserfamilyfoundation.files.wordpress.com/2013/01/8237.pdf.*

CKD populations exclude patients receiving dialysis.

In 2011, the total net Part D payment for patients with identified kidney disease (CKD patients not on dialysis, and ESRD patients) was $7.4 billion — about 10 percent of total Part D prescription drug costs, and a $1 billion increase from 2010. These costs do not include drugs contained under the ESRD prospective payment system in 2011 (e.g. ESAs, IV vitamin D, iron) or billed to Medicare Part B (e.g. immunosuppressants). ◆ **Figure 5.9;** see page 146 for analytical methods. *General Medicare totals include Part D claims for all patients in the Medicare 5 percent sample enrolled in Part D. CKD totals include Medicare CKD patients, as determined from claims. ESRD totals include all Part D claims for Medicare ESRD patients enrolled in Part D.*

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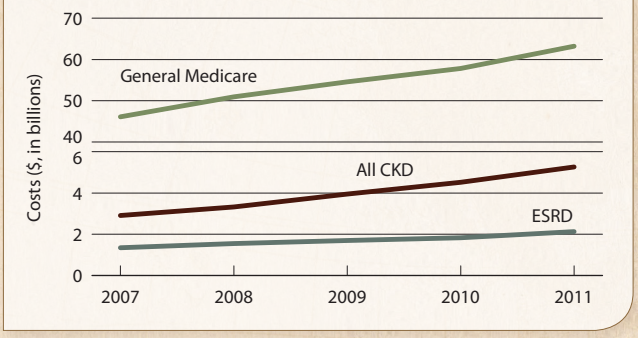
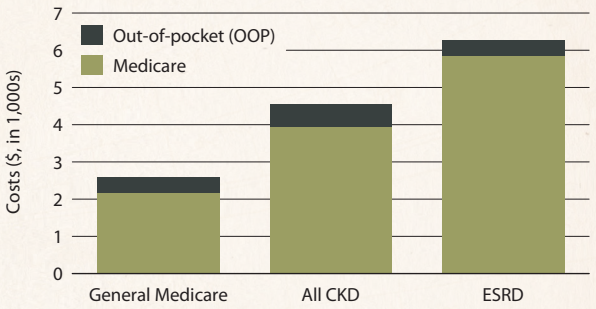
5.9
Total estimated net Medicare Part D costs for enrollees



At $4,562, Medicare's per person per year (PPPY) total cost of medications covered by Medicare Part D in 2011 was 1.8 times higher for CKD patients than for general Medicare patients. Proportional to total Part D costs, however, out-of-pocket costs were lower in CKD patients, representing 13 percent of their PPPY costs compared to 16 percent for the general Medicare population. ◆ **Figure 5.10;** see page 146 for analytical methods. *General Medicare totals include Part D claims for all patients in the Medicare 5 percent sample enrolled in Part D. CKD totals includes Medicare CKD patients, as determined from claims. ESRD totals include all Part D claims for Medicare ESRD patients enrolled in Part D. Costs are per person per year for calendar year 2011. Medicare total is the sum of Medicare net payment plus LIS amount.*

vol 1
5.10
Per person per year (PPPY) Medicare & out-of-pocket Part D costs for enrollees, 2011



Per person per year (PPPY) total Medicare costs for Part D-covered medications in 2011 were 3.4–4.0 times greater for patients with the LIS than for those without. Costs in LIS and non-LIS patients vary from $4,194 and $1,043 PPPY in the general Medicare population to $6,212 and $1,817 among patients with CKD, and to $7,549 and $2,215 among those with ESRD, up considerably from 2010 (2012 USRDS ADR). ◆ **Figure 5.11;** see page 146 for analytical methods. *General Medicare totals include Part D claims for all patients in the Medicare 5 percent sample enrolled in Part D. CKD totals include Medicare CKD patients, as determined from claims. ESRD totals include all Part D claims for Medicare ESRD patients enrolled in Part D. Costs are PPPY for calendar year 2011. Low income subsidy (LIS) status is determined from Part D enrollment. A person is classified as LIS if they are eligible for the LIS for at least one month during 2011.*

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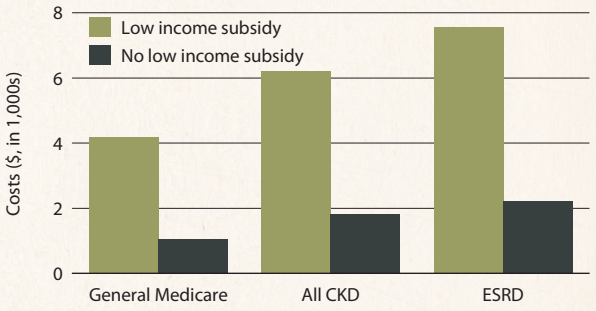
5.11
Per person per year (PPPY) Part D costs for enrollees, by low income subsidy (LIS) status, 2011



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5.d **Total per person per year (PPPY) Part D costs ($) for enrollees, by low income subsidy (LIS) status, 2011**

	General Medicare		All CKD		ESRD	
	LIS	No LIS	LIS	No LIS	LIS	No LIS
All	4,194	1,043	6,212	1,817	7,549	2,215
20-44	4,513	1,633	9,519	2,243	7,329	1,548
45-64	5,488	1,434	8,374	2,704	8,102	2,221
65-74	3,474	952	6,314	2,011	7,285	2,448
75+	3,451	1,055	5,050	1,654	6,293	2,029
Male	4,187	1,050	6,380	1,869	7,621	2,272
Female	4,199	1,038	6,114	1,771	7,482	2,178
White	4,449	1,058	6,408	1,831	7,469	2,294
Black/Af Am	3,855	938	5,753	1,523	7,684	1,981
Other race	3,567	894	6,083	1,971	7,341	2,041

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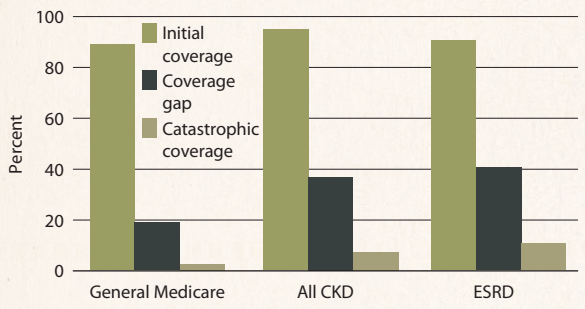
5.12 **Part D enrollees not receiving the low income subsidy (LIS) who reach each coverage phase, 2011**



Part D enrollees without the low income subsidy (LIS) may encounter three coverage phases, depending on total and out-of-pocket costs per year. In 2011, patients with total Part D drug costs up to $2,840 were in the initial coverage phase, while those with costs over that amount entered the coverage gap ("donut hole"), in which they were responsible for 100 percent of drug costs minus the 50 percent discount on branded drugs and 7 percent discount on generics. Compared to general Medicare patients, a higher percent of non-LIS patients with CKD or ESRD reached the coverage gap in 2011. ✦ **Figure 5.12;** see page 146 for analytical methods. *Point-prevalent Medicare enrollees alive on January 1, excluding those in employer-sponsored & national PACE Part D plans.*

Total per person per year (PPPY) Medicare Part D costs vary widely between those with and without the LIS. Overall, ESRD patients have the highest costs in both categories. By race, and regardless of LIS status, PPPY costs in the general Medicare and CKD populations are highest for whites, but in the ESRD LIS population are highest for blacks/African Americans. In the general Medicare and CKD populations, younger patients have higher Part D costs than older patients. ✦ **Table 5.d;** see page 146 for analytical methods. *All Medicare patients enrolled in Part D, 2011. CKD determined from claims. ESRD: period prevalent ESRD patients, 2011. Costs are per person per year for calendar year 2011. Medicare PPPY is the sum of Medicare payment amount & low income subsidy (LIS) amount. LIS status is determined from the Part D enrollment. A person is classified as LIS if they are eligible for the LIS for at least one month during 2011.*

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5.e **Twelve-month probability (%) of reaching the coverage gap in Part D enrollees not receiving the low income subsidy (LIS), 2011**

	General Medicare	All CKD	ESRD
All	19.2	36.9	40.6
45-64	24.2	39.2	39.8
65-74	17.0	39.9	45.2
75+	20.9	35.2	39.2
Male	19.1	36.7	38.3
Female	19.2	37.2	44.2
White	19.7	37.6	41.8
Black/African American	14.4	27.3	36.1
Asian	12.6	32.9	43.3
Other	15.3	36.5	36.5
Hypertension	27.9	37.9	41.2
CVD	32.5	40.5	42.7
Diabetes	36.7	46.4	45.3
Cancer	26.3	34.0	41.6

In 2011, 37 percent of non-LIS Part D enrollees with CKD reached the coverage gap within 12 months; this varied little by age or gender. Among the general Medicare and CKD populations, white patients were most likely, by race, to reach the gap, while in the ESRD population Asians were more likely to do so. By diagnosis, patients with diabetes reach the gap at the highest rate. ✦ **Table 5.e;** see page 146 for analytical methods. *Point prevalent Medicare enrollees alive on January 1, excluding those in employer-sponsored & national PACE Part D plans.*

CKD populations exclude patients receiving dialysis.

These figures examine, by CKD stage, medication use in older patients with identified CKD. Among Part D patients with CKD and a diagnosis of diabetes or hypertension, 60 and 54 percent use a renin-angiotensin system (RAS) agent. As CKD stage increases (and estimated glomerular filtration rate, or eGFR, declines), the percentage of patients on RAS agents falls, whether or not they have underlying diabetes or hypertension.

Beta blocker use in Part D patients with CHF or hypertension is 72 and 60 percent, and, in contrast to that of RAS agents, increases with CKD stage (and declining eGFR). Almost 80 percent of older patients with CKD of Stages 4–5 and congestive heart failure received beta blockers in 2011.

In patients with hypertension or cardiovascular disease, use of a dihydropyridine calcium channel blocker is more common in those with later stage CKD.

Potassium-sparing diuretics or combination diuretic products are rarely used in CKD patients. Thiazide and loop diuretics, in contrast, receive much wider use, with 28 percent of Medicare patients with Part D receiving a thiazide diuretic, and 43 percent a loop diuretic. Across all stages of CKD, loop diuretic use is more common in Medicare patients. • **Figures 5.13–16;** see page 146 for analytical methods. *Point prevalent Medicare CKD patients age 65 & older.*

icd-9-cm codes

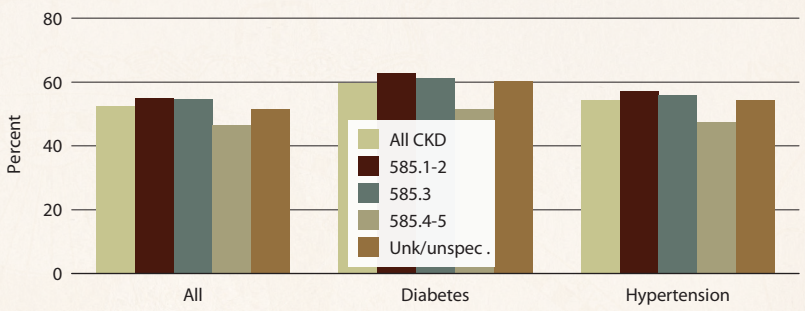
585.1	Chronic kidney disease, Stage 1
585.2	Chronic kidney disease, Stage 2 (mild)
585.3	Chronic kidney disease, Stage 3 (moderate)
585.4	Chronic kidney disease, Stage 4 (severe)
585.5	Chronic kidney disease, Stage 5 (excludes 585.6: Stage 5, requiring chronic dialysis.*)

CKD unspecified identified by multiple codes including 585.9, 250.4x, 403.9x, & others.

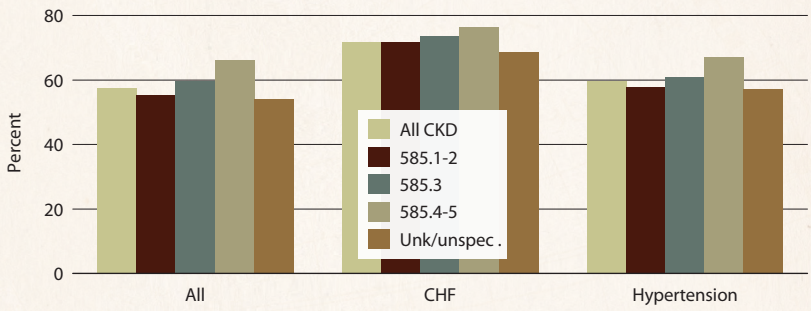
**In USRDS analyses, patients with ICD-9-CM code 585.6 & with no ESRD 2728 form or other indication of ESRD are considered to have code 585.5; see Appendix A for details.*

CKD stage estimates are from a single measurement. For clinical case definition, abnormalities should be present ≥3 months.

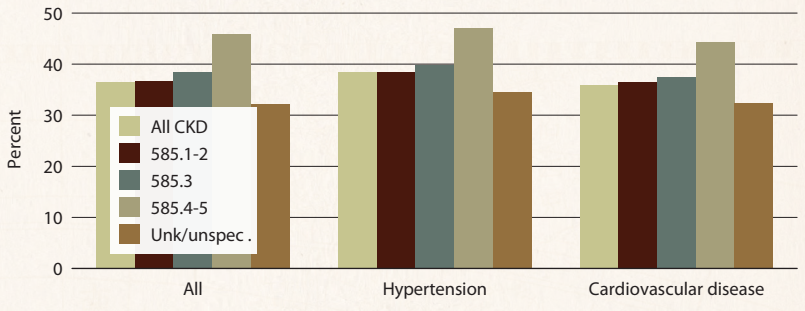
vol 1 **5.13** **Medicare Part D CKD patients with at least one claim for an ACEI/ARB/renin inhibitor (RAS agent) in the 12 months following the disease-defining entry period, by CKD diag. code, 2011**



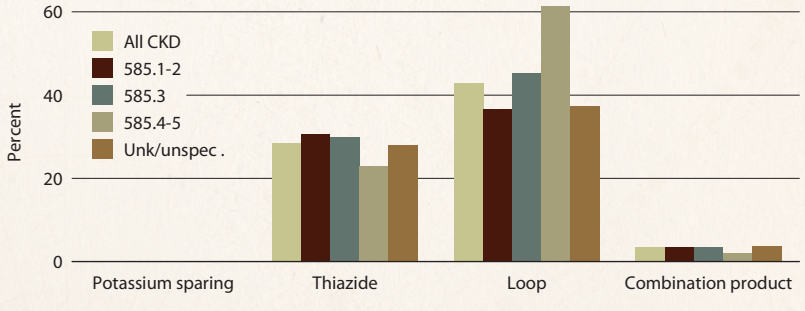
vol 1 **5.14** **Medicare Part D CKD patients with at least one claim for a beta blocker in the 12 months following the disease-defining entry period, by CKD diagnosis code, 2011**



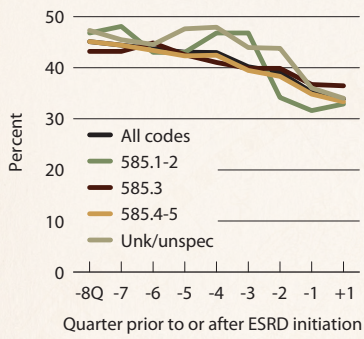
vol 1 **5.15** **Medicare Part D CKD patients with at least one claim for a DHP calcium channel blocker in the 12 months following the disease-defining entry period, by CKD diagnosis code, 2011**



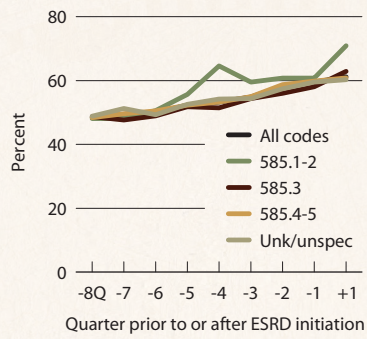
vol 1 **5.16** **Medicare Part D CKD patients with at least one claim for a diuretic in the 12 months following the disease-defining entry period, by CKD diagnosis code, 2011**



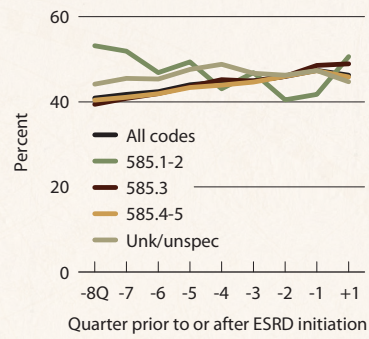
vol 1 5.17 **ACEI/ARB/renin inhibitor use in Part D enrollees in the transition to ESRD, 2011**



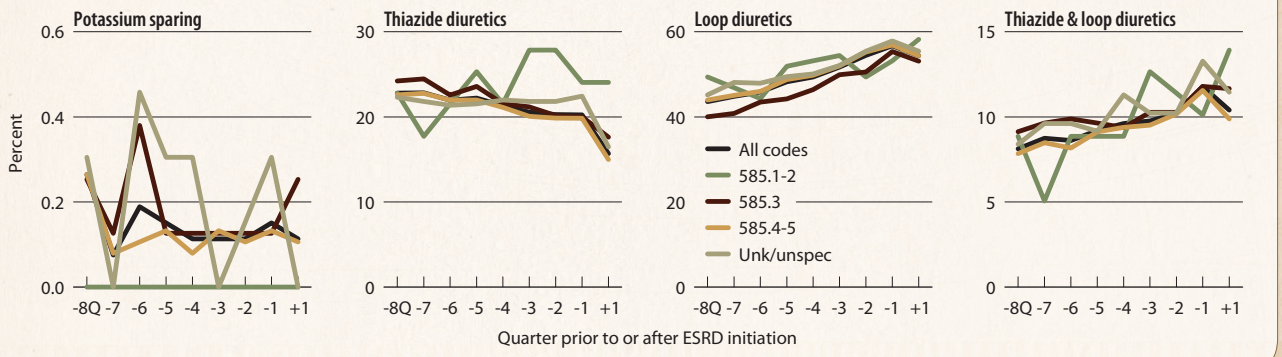
vol 1 5.18 **Beta blocker use in Part D enrollees in the transition to ESRD, 2011**



vol 1 5.19 **DHP calcium channel blocker use in Part D enrollees in the transition to ESRD, 2011**



vol 1 5.20 **Diuretic use in Part D enrollees during the transition to ESRD, by CKD diagnosis code, 2011**



vol 1 5.f **Top 15 drug classes in by Part D enrollees with CKD, by % of pts & drug class, 2011**

Medication class	% of pts with at least 1 prescription
Diuretics	54.8
Statins	54.5
Beta blockers	53.4
ACE inhibitors	49.7
Opioid analgesics	47.3
Calcium channel blockers	37.3
Selective serotonin reuptake inhibitors	35.2
Fluoroquinolones	25.6
Thyroid hormones	23.6
Potassium	21.4
Proton pump inhibitors	21.1
Sympathomimetics	20.5
Anticonvulsants	20.3
Insulin	19.4
Glucocorticosteroids	19.4

Among Medicare patients with recognized CKD, ACEI/ARB/renin inhibitor use falls from 43–47 percent at eight quarters before ESRD diagnosis to 33–37 percent in the quarter following initiation of ESRD therapy; use of beta blockers, in contrast, increases from 48 to 61 percent. The pattern of dihydropyridine calcium channel blocker use is similar, although the overall rate is lower. Use of loop diuretics and combination loop plus thiazide diuretics increases as ESRD approaches; in the quarter after ESRD diagnosis, use is variable.

In the 2012 ADR, we reported the top 15 drug classes used in CKD patients using days supply, which gives weight to those drugs prescribed for chronic conditions, rather than those that have intermittent use. In this report, the top 15 classes are ranked based on the percentage of patients who have at least one claim for a drug. Cardiovascular therapies (diuretics, statins, beta blockers, angiotensin-converting enzyme inhibitors, calcium channel blockers) continue to be ranked at the top. Opioid analgesics, however, assume a more prominent top position with this approach, with 47 percent of CKD patients receiving at least one prescription for an opioid in 2011. ✦ **Figures 5.17–20 & Table 5.f;** see page 146 for analytical methods. *Point prevalent Medicare CKD patients age 67 & older (5.17–20). CKD patients in the Medicare 5 percent sample (5.f).*

CKD populations exclude patients receiving dialysis.

part d enrollment patterns

SOURCES OF PRESCRIPTION DRUG COVERAGE AMONG MEDICARE ENROLLEES, 2011 (FIGURE 5.2)

	general Medicare	all CKD (no dialysis)	ESRD
Part D with low income subsidy	23%	29%	49%
Part D without low income subsidy	39%	30%	22%
retiree drug subsidy	13%	20%	8%

MEDICARE PART D ENROLLEES WITH OR WITHOUT THE LOW INCOME SUBSIDY (LIS), 2011 (TABLE 5.A)

	white	black/African American	Asian	other
general Medicare: with LIS	30%	66%	70%	62%
general Medicare: without LIS	70%	34%	30%	38%
all CKD: with LIS	40%	79%	87%	80%
all CKD: without LIS	60%	21%	13%	20%

costs of part d enrollment

PER PERSON PER YEAR MEDICARE & OUT-OF-POCKET PART D COSTS FOR ENROLLEES, 2011 (FIGURE 5.10)

	Medicare	out-of-pocket
general Medicare	$2,167	$417
all CKD	$3,949	$613
ESRD	$5,851	$422

PER PERSON PER YEAR PART D COSTS FOR ENROLLEES, BY LOW INCOME SUBSIDY (LIS) STATUS, 2011 (FIGURE 5.11)

	LIS	no LIS
general Medicare	$4,194	$1,043
all CKD	$6,212	$1,817
ESRD	$7,549	$2,215

terms used in the part d analyses

LOW INCOME SUBSIDY (LIS) For Medicare beneficiaries with limited income and/or assets, the costs of participation in Medicare Part D may be reduced by the LIS. Beneficiaries who are dually eligible for Medicare and Medicaid are automatically granted the LIS, while beneficiaries who are not dually eligible may apply for it. While the LIS may take eight different levels, with monthly premiums and copayments either eliminated or reduced, all dually eligible beneficiaries pay no monthly premiums.

CREDITABLE COVERAGE Prescription drug coverage that is actuarially equivalent to the standard Part D benefit, as defined annually by CMS. Beneficiaries with creditable coverage may forgo participation in Medicare Part D without having to pay increased monthly premiums upon future enrollment. Examples of creditable coverage include the Federal Employee Health Benefits Program, TRICARE, VA Health Care Benefits, State Pharmacy Assistance Programs (SPAPS), and private insurance that is eligible for the retiree drug subsidy. Private insurance for the working aged may or may not be creditable.

RETIREE DRUG SUBSIDY (RDS) A program designed to encourage employers to continue to provide prescription drug coverage to retirees eligible for Medicare Part D. Under the program, employers receive a tax-free rebate equal to 28 percent of covered prescription drug costs incurred by their retirees. The program is relatively simple to administer, but may ultimately be more costly than providing employees a type of Part D plan known as an "employer group waiver plan." Following passage of the Patient Protection and Affordable Care Act, the tax-free status of the subsidy is due to expire on December 31, 2012.

DEDUCTIBLE At the beginning of each calendar year, each non-LIS Part D enrollee is responsible for 100 percent of gross drug costs up to a set amount (i.e., the deductible), at which point cost sharing begins. In the standard benefit, the deductible was $250, $265, and $275 in 2006, 2007, and 2008, respectively.

INITIAL COVERAGE PERIOD The interval following the deductible phase, but preceding the coverage gap. During this time, the Part D enrollee without the LIS is normally responsible for 25 percent of gross drug costs (in the standard benefit).

COVERAGE GAP The interval following the initial coverage period, but preceding catastrophic coverage. During this time, non-LIS Part D enrollees are normally responsible for 100 percent of gross drug costs (in the standard benefit). In 2010, the Affordable Health Care Act made several changes to Medicare Part D to reduce the effect of the coverage gap, so that it phases out by 2020. In 2010, non-LIS enrollees received a $250 rebate from Medicare to partially cover costs during the coverage gap. In 2011, non-LIS enrollees were given a 50 percent discount on the total price of brand name drugs and a 7 percent reduction in cost of generic medications while in the gap.

CATASTROPHIC COVERAGE The interval following the coverage gap. During this time, the Part D enrollee without the LIS is normally responsible for 5 percent of gross drug costs (in the standard benefit).

MEDICARE ADVANTAGE PART D PLANS (MA-PDS) Medicare Part D plans that are offered only to participants in Medicare Part C.