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Issue Brief

Assessing Medicare Prescription Drug Plans in Four States: Balancing Cost and Access

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ABSTRACT: Success of the Medicare prescription drug benefit depends on private organizations offering beneficiaries appropriate access to medications while controlling costs. There is limited guidance, however, as to what constitutes best practice in benefit and formulary design. This issue brief examines Medicare stand-alone prescription drug plans in the four most populous Medicare states—California, Florida, New York, and Texas. While there are similar offerings in all four states, there is wide variation in the amount of drugs covered, how drugs are accessed by beneficiaries, and prior authorization requirements. Plans with lower premiums are more likely to have additional formulary tiers and no coverage in the "doughnut hole"—the gap faced by many beneficiaries between $2,250 and $5,100 in costs. Given the many choices facing beneficiaries, the Centers for Medicare and Medicaid Services should monitor experiences to determine whether plans are meeting the needs of Medicare beneficiaries, particularly the frail and disabled.

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INTRODUCTION

The success of the new Medicare prescription drug benefit, known as Medicare Part D, depends on private organizations offering Medicare beneficiaries appropriate access to medications while controlling costs. Congress and the Centers for Medicare and Medicaid Services (CMS) allow private organizations—stand-alone prescription drug plans (PDPs) and Medicare Advantage prescription drug plans (MA–PDs)—to develop their own benefit structures and formularies within the guidelines set in law.

Under this design, most Medicare beneficiaries can choose to enroll in a Part D plan in their state and pay a monthly premium.[1] However, in order to maintain continuity of care for the most vulnerable Medicare beneficiaries, CMS auto-enrolled those dually eligible for both Medicare and Medicaid—

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"dual-eligibles"—into Part D plans that have a monthly premium less than the average, or "benchmark," premium for the plans in that region.

Part D plans may offer a variety of benefit designs for beneficiaries.[2] While all plans must at least be actuarially equivalent to the standard benefit established by Congress, Part D plans have the discretion to use modified cost-sharing and employ utilization management tools, such as prior authorization (a procedure requiring the prescribing clinician to obtain authorization from the insurer before prescribing a medication) and step therapy (a prescription regimen that requires certain medications to be tried—and deemed unsuccessful—before approval for another products may be given) to manage medication use for enrollees.[3] Plans must balance the use of such mechanisms with appropriate access to medications to attract and maintain enrollment.

Congress has recognized the potential adverse consequences exposure to cost-sharing may have on low-income beneficiaries, especially dual-eligibles. Consequently, dual-eligibles and other low-income individuals will receive additional assistance through a subsidy that limits their cost-sharing by reducing or eliminating premiums, deductibles, and copayments for medications. In addition, the low-income subsidy maintains coverage of drugs throughout the doughnut hole—the coverage gap many beneficiaries face after reaching prescription drug costs of $2,250 until they reach a catastrophic limit of $5,100. Eligible beneficiaries only receive full premium subsidies if they enroll in Part D plans with premiums below the benchmark premium in their region. Those who enroll in plans above the benchmark will be required to pay the difference between their premium and the benchmark premium.

In addition to the low-income subsidy, states have stepped in to assist dual-eligibles and other low-income beneficiaries through state pharmacy assistance programs (SPAPs), which may offer "wrap-around" drug coverage for assistance with cost-sharing and premiums.[4] Finally, dual-eligibles can change Part D plans each month through a special enrollment period, which allows them the flexibility to find a new plan if their current plan does not meet their needs.

Managing the complex needs of the Medicare population is challenging, given the complex needs of this population and its high reliance on prescription drugs.[5] Consequently, it is increasingly important to understand which Part D plans—among the many available to Medicare beneficiaries—can effectively use benefit designs and formularies to balance costs with access to medications. This issue brief will assist policymakers in understanding the potential impact that Part D formularies and benefit designs have on enrollees' access and compliance with prescribed medications. It also recommends ways to use this information to improve the overall Part D benefit and performance of Part D plans.

Formulary Structure and Beneficiary Access

Recent studies of health plans and Medicaid prescription drug benefit designs indicate that cost-sharing, placement of drugs on formulary, and prior authorization rules can significantly affect medication use in covered populations.[6] In some cases, beneficiaries with chronic conditions or fixed incomes might forgo needed medications because of barriers imposed by copayments and formulary tiers, which group covered drugs into categories with different copayment requirements. This can potentially lead to adverse outcomes, such as emergency room visits.[7] By varying their formulary structures and benefit designs, Part D plans can directly affect medication access for enrollees and have the potential to affect other medical costs, such as emergency room visits or other costs due to foregone medication.

Despite the importance of developing appropriate benefit designs and formularies for Medicare beneficiaries, there is limited knowledge as to what constitutes best practices in formulary

management for the Medicare population. Research suggests that benefit management tools, including generics-only policies and caps on prescription drugs, can have an impact on utilization and outcomes.[8] CMS's formulary guidance for the 2006 benefit year required plans to provide access to medically necessary drugs and relied on best practices of existing drug benefits for seniors and people with disabilities to ensure non-discriminating, appropriate access for Medicare beneficiaries.[9] Although achieving a balance between plan cost and access is the predominant goal, there are no existing criteria for evaluating plan formularies for the Medicare population. The only available guidelines are based on best practices, rather than well-evaluated approaches. A review of the literature found only one published example of an effort to evaluate the formulary and benefit design of a prescription drug benefit.[10]

In 1998, Congress requested the Institute of Medicine (IOM) to evaluate the Department of Veterans Affairs (VA) National Formulary. This request was prompted by reports to members of Congress claiming the formulary was overly restrictive, rendering physicians unable to prescribe appropriately for veterans.[11] The IOM convened a committee of representatives from veterans organizations, along with physicians, nurses, and pharmacists to examine the VA National Formulary. The IOM committee identified several dimensions of formulary restrictiveness, including formulary size (i.e., the number or drugs covered), coverage and placement of drugs within therapeutic classes, appeals and exceptions policies, and review and appraisal of formularies.

This issue brief uses the dimensions specified by the IOM to examine Part D plans' benefit designs and formularies in the four most populous Medicare states—California, Florida, New York, and Texas—using data publicly available on the CMS PlanFinder Web site on October 22, 2005.[12] This analysis was restricted to stand-alone PDPs because it was expected that the majority of Part D enrollees will enroll in stand-alone PDPs and because more information is available on PDPs than on MA–PDs in 2006.[13] Since October 22, 2005, plans have had the opportunity to update their formularies; anecdotal information suggests that some formulary designs have been modified.

FINDINGS

In 2006, Medicare beneficiaries in California, Florida, New York, and Texas have the choice of 183 plans. This analysis includes 42 PDPs in California, 37 in Florida, 38 in New York, and 40 in Texas.[14] The remaining discussion examines three IOM dimensions of formulary restrictiveness—the scope of drug coverage, benefit design, and drug utilization management—for PDPs in these four states. It was not possible to review the complete set of IOM dimensions, including appeals and grievance policies, because the relevant Part D plan data are not publicly available.

This section compares the choices beneficiaries face in the four states. There is wide variation among plans in each state in the number of drugs covered, benefit structure, and use of prior authorization. However, the variation across each factor assessed is similar in each state. In other words, the variation was consistent across the states and consistently wide within each of the states.

Scope of Drug Coverage

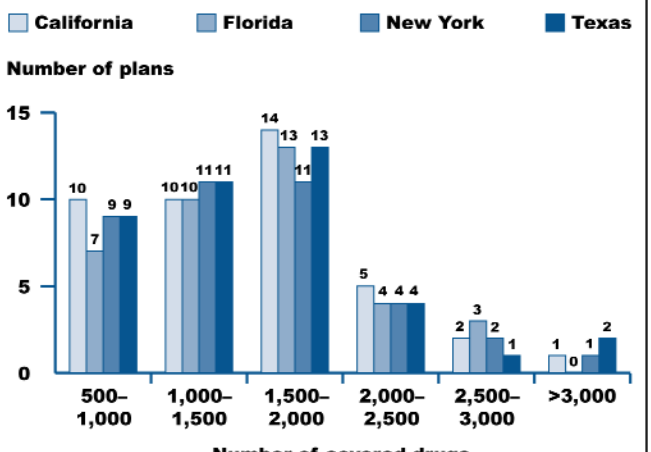
Scope of drug coverage was assessed by evaluating the number of covered drugs in the PDPs and coverage of the top 200 Medicare drugs, which represents the percent of the top 200 chemical compounds commonly prescribed to Medicare patients that a given plan covers, such as Lipitor, Lovastatin, and Prilosec. This measure was developed by CMS and includes drugs in a variety of therapeutic classes, such as statins and proton pump inhibitors. The analysis found Medicare beneficiaries in California, Florida, New York, and Texas face a wide range of choices among competing plans in terms of both the total number of drugs and the

percent of top 200 Medicare drugs offered on the plans' formularies.

There is a wide range in the total number of drugs covered by individual plans within each state; this variation is consistent across states. PDPs were similar in terms of the number of drugs covered (Figure 1). Across states, most plans offer between 1500 to 2000 drugs on their formularies. The average number of drugs covered by plans ranges from 1,504 in New York to 1,547 in Florida. Within a given state, there is a wide range in the number of drugs covered by Part D plans. The minimum number of drugs covered by a plan in all states is 626, while all the states examined, except Florida, have a plan that offers at least 3,000 drugs.

Most PDPs in the four states—including plans that charge lower premiums—cover the majority of the most commonly prescribed drugs for the Medicare population, but there are differences in the extent of coverage. Beneficiaries in each of the four states are able to choose from plans that cover a majority of the top 200 drugs. However, the extent of the coverage ranges from 73 percent to 96 percent of the top 200 drugs on formulary. The analysis found no differences in the coverage of top 200 Medicare drugs by plans with premiums below the benchmark, compared with plans with higher premiums.

Figure 1. Plan Formulary Coverage in Four States



Note: None of the plan formularies covered fewer than 500 drugs.
Source: Avalere analysis of October 2005 DataFrame.

Benefit Design

Benefit design describes the overall formulary structure in terms of formulary placement, cost-sharing amounts associated with different formulary tiers, the specific tier placement of drugs, and whether a plan provides coverage in the doughnut hole.

The number of tiers on a formulary is a measure of how well beneficiaries can access medication, since cost-sharing levels typically increase with each incremental tier level (i.e., copayments for drugs on tier two are generally less than those on tier three). Cost-sharing tiers are often used by plans to influence enrollees' selection of medications. For example, generics are often found on the first tier and have little or no copayments. Several studies have demonstrated that an increase in the number of tiers and the associated cost-sharing have a negative impact on medically necessary health utilization and outcomes.[15]

Beneficiaries in each state have wide choices in the number of formulary tiers, number of drugs per tier, and cost-sharing structures. In addition, systematic differences exist in benefit designs among PDPs with premiums above and below the benchmark.

There is substantial variability in benefit designs in plans in each of the four states. Table 1 shows the variation across states and between above-benchmark PDPs and below-benchmark PDPs for a variety of benefit design characteristics. (See Appendix Tables 1–4 for similar variation in each state in terms of formulary structure.) Formulary structures range from a maximum of two tiers to five tiers for PDPs. Beneficiaries in each state have choices of plans with a similar average number of tiers, formulary placement, copayments, and coinsurance structures.

Plans offer a wide range of copayment and cost-sharing arrangements, varying by tier. For example, average copayments for beneficiaries in New York range from $6 on tier one to $69 on tier four for plans with below-benchmark premiums. Plan deductibles within and across states range from $0 to $250; the average deductible

Table 1. Prescription Drug Plan Offerings Below and Above State Benchmark Premiums in Four States

State benchmark premium	California ($23.25)		Florida ($29.07)		New York ($29.83)		Texas ($31.68)		Across all four states
	Below	Above	Below	Above	Below	Above	Below	Above	overall
Number of plans	(11)	(31)	(6)	(31)	(15)	(23)	(12)	(28)	(157)
Basic cost-sharing elements									
Average premium	$19	$38	$22	$43	$23	$41	$27	$45	$36
Average deductible	$73	$71	$42	$81	$37	$83	$104	$55	$70
Tier 1									
Average number of drugs	592	663	521	705	601	665	688	665	658
Average copay	$5	$5	$5	$5	$6	$5	$5	$5	$5
Average coinsurance	—	0%	—	0%	—	0%	—	0%	0%
Tier 2									
Average number of drugs	410	489	273	508	416	538	342	500	470
Average copay	$26	$25	$24	$24	$26	$23	$26	$24	$25
Average coinsurance	—	25%	—	25%	25%	27%	25%	—	26%
Tier 3									
Average number of drugs	363	351	305	403	355	346	392	366	366
Average copay	$57	$51	$59	$49	$64	$48	$57	$49	$52
Average coinsurance	25%	33%	25%	36%	25%	43%	30%	35%	33%
Tier 4									
Average number of drugs	163	83	92	78	150	75	92	68	99
Average copay	$69	$40	$66	$65	$69	$55	$62	$65	$58
Average coinsurance	26%	28%	27%	28%	27%	28%	27%	28%	27%
Tier 5									
Average number of drugs	87	62	39	59	87	59	39	53	61
Average copay	—	—	—	—	—	—	—	—	—
Average coinsurance	29%	30%	31%	30%	28%	30%	33%	28%	29%

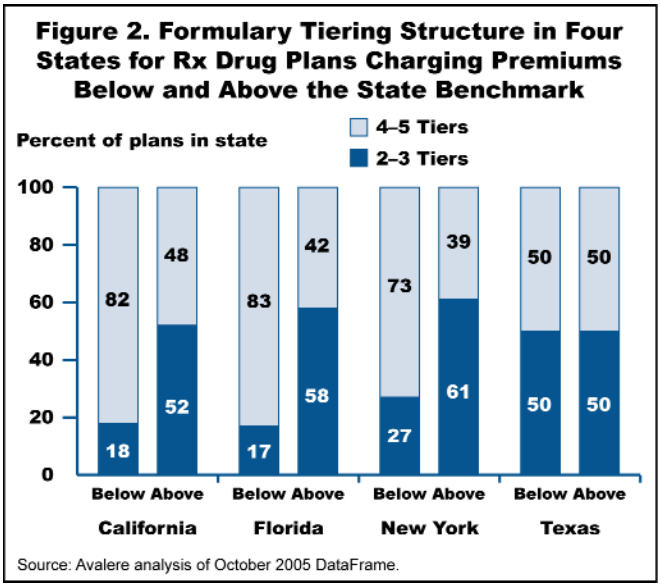
Note: A more detailed breakout of plan characteristics in each state broken out by plan formulary structure is available in Appendix Tables 1–4.

Source: Avalere analysis of October 2005 DataFrame.

across all states is $70. The average deductible is lower in Florida and New York plans with premiums below the benchmark. In California and Texas, the average deductible is higher for plans with premiums below the benchmark than for plans above the benchmark. Therefore, moderate-income beneficiaries who are not eligible for the low-income subsidies in California and Texas, and who are drawn to lower-premium plans, are more likely to face high deductibles.

Beneficiaries enrolled in lower-premium plans will tend to encounter formularies with more tiers than those enrolled in higher-premium plans. Figure 2 shows the breakdown by state for plans below and above the benchmark premium. In the commercial employer insurance market, 70 percent of employer health plans provide three-tier formulary structures to employees.[16] In comparison, PDPs with premiums above the benchmark offer a wide range of benefit designs, including more restrictive plans (i.e., those with more tiers) than the commercial market three-tier standard) and plans that are equivalent to or less restrictive than employer health plans.

In contrast, plans below the benchmark premium in three of the study states tend to have four or more formulary tiers. For example, in Florida, 83 percent of plans below the benchmark premium have four or more formulary tiers. This trend holds in California and New York, where 82 percent and 73 percent, respectively, of plans



below the benchmark have four or more tiers. Only in Texas were beneficiaries who enroll in higher- and lower- premium plans equally likely to have formularies with four or more tiers. The analysis identified significant differences in the percent of plans with many tiers (more than three) for offerings above and below the benchmark premiums (Table 2).

Few plans offer prescription coverage in the doughnut hole. Very few PDPs offer benefit structures that provide coverage in the Part D doughnut hole. Beneficiaries in each state encounter a similar range of options for PDPs that do offer doughnut hole coverage, with the number of plans offering generic-only coverage ranging from five, in New York and Texas, to six, in California and Florida. Each state has one plan, offered by Humana, that provides generic and brand drug coverage in the gap. The analysis found that no plans with below-benchmark premiums offer coverage throughout the doughnut hole. However, beneficiaries qualifying for the low-income subsidy or those who receive SPAP assistance likely have drug coverage in the doughnut hole.

Table 2. Restrictive Tiering Structures by Plan Benchmark Across Four States*

	Three tiers or less	More than three tiers
Part D plans		
Below benchmark (n)	30% (13)	70% (31)
Above benchmark (n)	55% (62)	45% (51)

* California, Florida, New York, and Texas.
Note: Chi-square statistically significant at the .01 level.
Source: Avalere analysis of October 2005 DataFrame.

Drug Utilization Management

CMS permits plans to use a wide array of benefit management tools, including step therapy, dosing limitations, and prior authorization. Due to the limitations of available data, only the use of prior authorization policies could be used as a measure of drug utilization management.

On average, 11 percent of drugs on plan formularies are subject to prior authorizations. This percentage is similar across plans regardless of the premium amount. PDPs in New York had higher overall use of prior authorization policies. New York plans apply this benefit management tool to an average of 205 drugs, followed by California (192 drugs), Florida (173 drugs) and Texas (153 drugs). The average number of drugs requiring prior authorization is higher in plans with premiums above the benchmark than for plans with premiums below the benchmark (186 drugs compared with 167 drugs), but this difference is not statistically significant.

There is wide variation of prior authorization use among plans. There is tremendous variation among specific PDPs. For example, in Texas, the percentage of drugs on formularies subject to prior authorization ranges from plans requiring prior authorization on 0.3 percent of drugs to those requiring it on 39 percent of drugs (Table 3).

POLICY IMPLICATIONS AND RECOMMENDATIONS

Although there are more similarities than differences in the Part D options, the analysis did find broad variability within states. Specifically, it revealed wide variation among plans in a given state in terms of the amount of drugs covered, how drugs are accessed by beneficiaries, and prior

Table 3. Number of Drugs on Formulary Requiring Prior Authorization in Four States

	California	Florida	New York	Texas	Overall
Average number of drugs	192	173	205	153	181
Percent of total drugs (range)	2%–39%	2%–39%	2%–39%	0.3%–39%	0.3%–39%
Average percent of total drugs	11.2%	10.7%	11.8%	10.0%	10.9%

Source: Avalere analysis of October 2005 DataFrame.

authorization requirements. The analysis also showed that plans with lower premiums are more likely to have restrictive formulary structures and no coverage in the doughnut hole, compared with those with higher premiums.

CMS and Congress have allowed for a wide range of variation in PDPs' benefit structures and designs to offer a range of choices for enrollees and to foster competition among plans. This variation may be a particularly important issue for beneficiaries enrolled in lower-premium plans and Medicare beneficiaries with multiple chronic illnesses, who average 22.7 prescriptions per year.[17] With a large number of plans to choose from, some Part D beneficiaries may not discover until after they are enrolled that their medications may not be on the first tier of the formulary or that there are significant copayments associated with filling their current prescriptions.

CMS and the states have implemented several protections for dual-eligible and lower-income beneficiaries, such as the low-income subsidy, assistance through SPAPs, and the ability for dual-eligible beneficiaries to enroll and disenroll in plans on a monthly basis. In addition, CMS has established several oversight mechanisms to protect beneficiary access, particularly for the most vulnerable beneficiaries—dual-eligibles and those with chronic conditions like diabetes or schizophrenia. For instance, in June 2005, the agency issued guidance urging plans to cover "all or substantially all" the medications in six therapeutic classes used by vulnerable beneficiaries (i.e., antidepressants, antipsychotics, anticonvulsants, antiretrovirals, immunosuppressants, and antineoplastics).[18] Despite these protections, wide variations exist. Thus, dual-eligibles and other beneficiaries may encounter challenges in selecting plans.[19]

CMS has taken steps to strengthen guidance around the Part D benefit, specifically around plan formularies. The agency continues to adjust the Part D benefit structure to respond to concerns that beneficiaries may not have access to necessary medications.[20] For example, in its 2007 Medicare Part D formulary guidance to plans, CMS upheld its protection of the aforementioned six classes of drugs. In addition, CMS prohibits plans from discontinuing or reducing coverage of drugs beneficiaries are currently using, except in cases where there are additional scientific and cost reasons, including the availability of a generic version or new FDA clinical information.

There has been debate about standardizing the Medicare Part D benefit structure. Senator Max Baucus (D–Mont.) recently introduced the Medicare Prescription Drug Simplification Act of 2006, which is intended to: simplify beneficiary choice in plans by developing uniform types of benefit packages; strengthen formularies by making them more consistent, stable, and transparent across all drug plans; protect and inform consumers by increasing marketing guidelines; and improve quality by making Part D plan performance measures available to beneficiaries.

In these early stages of the Medicare Part D benefit, an opportunity exists for CMS to better understand the health care experience of beneficiaries and respond to potential access problems. One approach could involve developing and reporting performance and quality measures for Part D. CMS is already deeply invested in assessing and reporting the performance and the quality of

care delivered by its other health care providers. For example, all Medicare Advantage plans are required to report outcomes to CMS on the Health Employer Data and Information Set (HEDIS) maintained by the National Committee for Quality Assurance (NCQA), the Medicare Advantage Consumer Assessment of Healthcare Providers and Systems (MA-CAHPS) survey, and the Health Outcomes Survey.

In a recent assessment of implementation activities, the Medicare Payment Advisory Commission (MedPAC) emphasized the importance of collecting information about beneficiary access in Part D.[21] MedPAC's survey of health plans and employers providing prescription drug benefits in the commercial market suggested access measures such as enrollee refill adherence, average rate of prior authorization requests and approvals, percentage of appeals overturned, and average out-of-pocket spending for enrollees are important to benefit management. The concept of beneficiary access measures is also supported by NCQA's HEDIS, the Agency for Healthcare Research and Quality, and the IOM report. CMS should review and consider these recommendations carefully.

CMS is currently in the process of defining Part D performance measures. Early activities indicate that these measures will focus on prescribing safety, disease-specific therapies, appropriateness of therapy measures, cost-effectiveness, quality assurance, fraud, waste, and abuse. However, there does not appear to be an explicit focus on understanding beneficiary access to medications. It may be possible for CMS to require PDPs to report their performance on access metrics as well as cost, quality, and safety measures through Part D plan performance measures. In addition to measuring performance, it will be important to develop a research agenda to evaluate the impact of PDP formulary designs on drug utilization and beneficiary outcomes.

The diversity in benefit structure and formularies found in this analysis underscores the need for CMS to identify ongoing processes to understand beneficiaries' access to medications. Although this analysis was limited to the structure of the Part D offerings, rather than data on utilization, the variations identified suggest potential problems for beneficiaries accessing medications. Evaluating access, along with other Part D performance measures, could help CMS and other federal policymakers improve appropriate access to care, increase competition among plans, and help CMS improve its Part D regulations and guidelines to protect beneficiaries.

Notes

[1] Henry J. Kaiser Family Foundation, "Fact Sheet: The Medicare Prescription Drug Benefit" (Washington, D.C., Kaiser Family Foundation, Sept. 2005).

[2] Ibid.

[3] Under the standard benefit, enrollees are responsible for an annual deductible of $250 and coinsurance of 25 percent for annual covered costs above $250 and below $2,250. The enrollee is then responsible for all covered costs between $2,250 and $5,100—the range commonly referred to as the "doughnut hole." Once covered drug costs reach the $5,100 catastrophic threshold (which corresponds to $3,600 in "true out-of-pocket costs"), the enrollee pays only 5 percent of additional covered drug costs. Plans may offer coverage that deviates from this structure, but it must be actuarially equivalent to the standard benefit.

[4] 42CFR§423.464(a).

[5] C. P. Thomas, G. Ritter, and S. S. Wallack, "Growth in Prescription Drug Spending Among Insured Elders," *Health Affairs,* Sept./Oct. 2001 20(5):265–77.

[6] Several studies have found a link between incentive-based formularies and prior authorization and changes to prescription drug utilization. See, K.V. Nair, P. Wolfe, R. J. Valuck et al., "Effects of a 3-Tier Pharmacy Benefit Design on the Prescription Drug Purchasing Behavior of Individuals with Chronic Disease," *Journal of Managed Care Pharmacy,* Mar./Apr. 2003 9(2):123–33; H. A. Huskamp, P. A. Deverka, A. M. Epstein et al., "The Effect of Incentive-Based

Formularies on Prescription-Drug Utilization and Spending," *New England Journal of Medicine,* Dec. 4, 2003 349(23):2224–32; D. P. Goldman, G. F. Joyce, J. J. Escarce et al., "Pharmacy Benefits and the Use of Drugs by the Chronically Ill," *Journal of the American Medical Association,* May 19, 2004 291(19):2344–50; T. Delate, D. E. Mager, J. Sheth et al., "Clinical and Financial Outcomes Associated with a Proton Pump Inhibitor Prior-Authorization Program in a Medicaid Population," *American Journal of Managed Care,* Jan. 2005 11(1):29–36; P. B. Landsman, W. Yu, X. Liu et al., "Impact of 3-Tier Pharmacy Benefit Design and Increased Consumer Cost-Sharing on Drug Utilization," *American Journal of Managed Care,* Oct. 2005 11(10):621–28.

[7] The following studies have explored the link between changes in cost-sharing and total health care costs or utilization: S. B. Soumerai, T. J. McLaughlin, D. Ross-Degnan et al., "Effects of Limiting Medicaid Drug-Reimbursement Benefits on the Use of Psychotropic Agents and Acute Mental Health Services by Patient with Schizophrenia," *New England Journal of Medicine,* Sept. 8, 1994 331(10):650–55; R. Tamblyn, R. Laprise, J. A. Hanley et al., "Adverse Events Associated with Prescription Drug Cost-Sharing Among Poor and Elderly Persons," *Journal of the American Medical Association,* Jan. 24–31, 2001 285(4):421–29; B. J. Wright, M. J. Carlson, T. Edlund et al., "The Impact of Increased Cost-Sharing on Medicaid Enrollees," *Health Affairs,* July/Aug. 2005 24(4):1106–16; T. B. Gibson, R. J. Ozminkowski, and R. Z. Goetzel, "The Effects of Prescription Drug Cost-Sharing: A Review of the Evidence," *American Journal of Managed Care,* Nov. 2005 11(11):730–40.

[8] J. Christian-Herman, M. Emons, and D. George, "Effects of Generic-Only Drug Coverage in a Medicare HMO," *Health Affairs* Web Exclusive (Sept. 29, 2004):W4-455–W4-468.

[9] Centers for Medicare and Medicaid Services, "Guidelines for Reviewing Prescription Drug Plan Formularies and Procedures" (Washington, D.C.: CMS, Jan. 2005). Available at http://www.cms.hhs.gov/PrescriptionDrugCovContra/Downloads/FormularyGuidance.pdf.

[10] D Blumenthal and R Herdman, eds., *Description and Analysis of the VA National Formulary* (Washington, D.C.: National Academies Press, 2000).

[11] Ibid.

[12] Henry J. Kaiser Family Foundation, http://www.statehealthfacts.org, data source: CMS Statistics, Medicare State Enrollment, Centers for Medicare and Medicaid Services, http://www.cms.hhs.gov/MedicareEnRpts/.

[13] Congressional Budget Office, "Comparison of CBO and Administration Estimates of the Effect of H.R. 1 on Direct Spending," Letter to Jim Nussle, Chairman, Committee on the Budget, U.S. House of Representatives, Feb. 2, 2004. Available at http://www.cbo.gov/showdoc.cfm?index=4995&sequence=0.

[14] Twenty-six (14%) of the initial PDPs were dropped because of missing information.

[15] The following studies have explored the link between changes in tiering structure, cost-sharing and total health care costs or utilization: Landsman et al., "Impact of 3-Tier," 2005; Tamblyn et al., "Adverse Events," 2001; Wright et al., "Increased Cost-Sharing," 2005; Gibson et al., "Effects of Prescription Drug," 2005.

[16] Henry J. Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits 2005 Annual Survey* (Washington, D.C.: Kaiser Family Foundation, 2005). Available at http://www.kff.org/insurance/7315/index.cfm.

[17] R. A. Berenson, and J. Horvath, *The Clinical Characteristics of Medicare Beneficiaries and Implications for Medicare Reform* (Baltimore, Md.: Partnership for Solutions, 2002). Prepared for the Center for Medicare Advocacy, Inc., Conference on Medicare Coordinated Care, Mar. 2002. Available at http://www.partnershipforsolutions.org/DMS/files/MedBeneficiaries2-03.pdf.

[18] Centers for Medicare and Medicaid Services, "Clarification—Formulary Review" (Washington, D.C.: CMS, June 2005).

[19] Avalere Health LLC, *The Medicare Drug Benefit: How Good Are the Options?* (Oakland, Calif.: California HealthCare Foundation, Mar. 2006). Available at http://www.chcf.org/topics/view.cfm?itemID=119451.

[20] Centers for Medicare and Medicaid Services, "Formulary Changes During the Plan Year" (Washington, D.C.: CMS, Apr. 2006).

[21] Medicare Payment Advisory Commission, *Report to Congress: Issues in a Modernized Medicare Program,* Chapter 1 (Washington, D.C.: MedPAC, June 2005).

Appendix Table 1. Number of Drugs on Formulary in California by Plan Tiering Structure
Plans Below and Above the State Benchmark Premium

	Two-tier plans		Three-tier plans		Four-tier plans		Five-tier plans	
Premium range	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**
(number of plans)	(1)	(2)	(1)	(14)	(7)	(9)	(2)	(6)
Average drug count (copay/coinsurance)								
Tier 1	792 ($10)	1148 ($6)	613 ($1)	758 ($4)	573 ($5)	575 ($7)	546 ($3)	413 ($7)
Tier 2	415 ($45)	444 ($30)	365 ($28)	683 ($26/25%)	398 ($27)	379 ($25)	473 ($13)	215 ($20)
Tier 3			106 (25%)	316 ($50/28%)	359 ($55/25%)	277 ($56/43%)	508 ($61)	544 ($45/25%)
Tier 4					100 (26%)	80 (27%)	380 ($69/25%)	90 ($40/31%)
Tier 5							87 (29%)	62 (30%)
Number of drugs requiring prior authorization								
Average	91	139	116	257	199	115	516	86
Percent of total drugs	7.5%	8.7%	10.7%	14.6%	13.9%	8.7%	25.9%	6.5%

Source: Avalere analysis of October 2005 DataFrame.

Appendix Table 2. Number of Drugs on Formulary in Florida by Plan Tiering Structure
Plans Below and Above the State Benchmark Premium

	Two-tier plans		Three-tier plans		Four-tier plans		Five-tier plans	
Premium range	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**
(number of plans)	(1)	(2)	(0)	(16)	(4)	(9)	(1)	(4)
Average drug count (copay/coinsurance)								
Tier 1	415 ($12)	444 ($6)	—	776 ($4)	508 ($4)	600 ($7)	302 ($0)	434 ($5)
Tier 2	792 ($38)	1148 ($30)	—	643 ($26/25%)	291 ($26)	407 ($24)	57 ($0)	229 ($15)
Tier 3			—	466 ($48/31%)	346 ($56/25%)	280 ($55/50%)	140 ($66)	425 ($41)
Tier 4					93 (27%)	75 (27%)	88 ($66)	89 ($55/32%)
Tier 5							39 (31%)	59 (30%)
Number of drugs requiring prior authorization								
Average	91	139	—	258	110	118	64	88
Percent of total drugs	7.5%	8.7%	—	13.7%	8.9%	8.7%	10.2%	7.1%

Source: Avalere analysis of October 2005 DataFrame.

Appendix Table 3. Number of Drugs on Formulary in New York by Plan Tiering Structure
Plans Below and Above the State Benchmark Premium

	Two-tier plans		Three-tier plans		Four-tier plans		Five-tier plans	
Premium range	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**
(number of plans)	(1)	(4)	(3)	(10)	(9)	(5)	(2)	(4)
Average drug count (copay/coinsurance)								
Tier 1	792 ($10)	870 ($6)	643 ($8)	724 ($3)	579 ($6)	571 ($6)	546 ($3)	434 ($5)
Tier 2	415 ($40)	407 ($30/28%)	451 ($33/25%)	767 ($25/25%)	392 ($26)	431 ($24)	473 ($13)	229 ($15)
Tier 3			274 ($89/25%)	355 ($48/32%)	348 ($57/25%)	266 ($58/60%)	508 ($62)	425 ($41)
Tier 4					99 (27%)	67 (27%)	380 ($69/25%)	89 ($55/32%)
Tier 5							87 (28%)	59 (30%)
Number of drugs requiring prior authorization								
Average	91	94	95	329	184	142	516	88
Percent of total drugs	7.5%	7.4%	6.9%	17.8%	13.0%	10.7%	25.9%	7.1%

Source: Avalere analysis of October 2005 DataFrame.

Appendix Table 4. Number of Drugs on Formulary in Texas by Plan Tiering Structure
Plans Below and Above the State Benchmark Premium

	Two-tier plans		Three-tier plans		Four-tier plans		Five-tier plans	
Premium range	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**	**Below**	**Above**
(number of plans)	(2)	(1)	(4)	(13)	(5)	(8)	(1)	(6)
Average drug count (copay/coinsurance)								
Tier 1	922 ($9)	1148 ($7)	821 ($4)	811 ($4)	567 ($6)	575 ($6)	302 ($0)	389 ($5)
Tier 2	422 ($34)	444 ($35)	414 ($35/25%)	675 ($26)	310 ($26)	409 ($25)	57 ($0)	253 ($19)
Tier 3			509 ($59/32%)	449 ($50/25%)	350 ($55/25%)	269 ($55/49%)	140 ($62)	312 ($43)
Tier 4					92 (27%)	73 (27%)	88 ($62)	61 ($65/32%)
Tier 5							39 (33%)	53 (28%)
Number of drugs requiring prior authorization								
Average	110	139	73	264	95	129	64	76
Percent of total drugs	8.2%	8.7%	4.2%	13.7%	7.7%	10.3%	10.2%	7.1%

Source: Avalere analysis of October 2005 DataFrame.

Methodology

Analysis of the Part D plan offerings in California, Florida, New York, and Texas was performed using Avalere's DataFrame database, a self-funded survey of the nearly 3,000 Medicare Part D plans. The DataFrame data are a "snapshot-in-time," based on data obtained from Part D plan data publicly available on the CMS PlanFinder Web site, October 22, 2005. This DataFrame analysis compared the benefit designs and formularies of PDPs in the sample and examined differences in benefit design between stand-alone PDPs with premiums below and above the benchmark premium in each sample state. Of the 183 PDPs in the DataFrame database for the four states in the sample, 26 were dropped from the analysis because the database contained insufficient information on formulary placement structures, bringing the total sample of PDPs across all four states to 157 PDPs. Using the IOM restrictiveness dimensions as guidelines, 11 elements of benefit design were examined: premiums, deductibles, number of formulary tiers, number of drugs, brand name drug coverage, generic drug coverage, drugs frequently used by Medicare beneficiaries, coverage in the doughnut hole, prior authorization, copayments, and coinsurance.

After producing descriptive analyses of across-state and above- and below-benchmark PDP variation, Chi-square tests were employed to determine if there were significant differences in the number of medications requiring prior authorization among PDPs, the level of copayments, and the number of formulary placement tiers used by PDPs. However, due to sample size, the testing did not result in any statistically significant findings for the measures of formulary restrictiveness across states. Any significant results noted in the analysis were conducted across the entire combined sample of PDPs (157) in the four states.

DataFrame data reflect the limitations of publicly available data on the CMS Web site. CMS's Web site does not list the exact copayment/coinsurance structure per tier for 151 PDPs and for 326 MA–PDs. Also, certain drugs are listed twice, presumably because different dosages or dosage forms are covered. However, these dosages and forms are not clearly listed. This is important to note, as it will possibly affect the tier assignment, and ultimately, the cost of the drug to the consumer. It is critical to note that the Part D marketplace is not static, and plan offerings captured in the DataFrame dataset are only its first iteration as captured in October 2005.

Several national PDPs operate in all four states, providing offerings with similar benefit structures (deductible and number of tiers), but with regional variation in premiums and cost sharing. Because the main unit of analysis was the state, these national plans were left in the analysis to display the complete universe of choices available to individual beneficiaries in each of the four states. However, this attributed to the overall lack of variation in the findings across states since national plan offerings generally use the same formulary in plans in each state.

About the Authors

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