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Evolving Issues in Medicare Part D

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Overview



- Background
- Standard Benefit & Pricing
- Financial Reporting
- Risk-Based Capital

Background



- Traditional Medicare program (1965) has two “Parts”:
 - Part A = Hospital Insurance
 - Part B = Supplementary Medical Insurance
- A 1997 law introduced Medicare Part C, which took effect in Jan 1999
 - Privately administered program in lieu of traditional Medicare
 - Also known as Medicare+Choice, now Medicare Advantage
- A 2003 law introduced Medicare Part D, which took effect in Jan 2006
- “Part” refers to Title XVIII of Social Security Act

Background



- When Medicare was enacted in 1965, few private insurance plans included a prescription drug benefit; 93% of all drug spending was out-of-pocket
- Hence, failure to provide a prescription drug benefit in Medicare was understandable at the time
- In real-dollar terms, overall prescription drug spend was stable from 1965 through early 1980s, but has increase five-fold over past 20 years

Background



Existing options for prescription drugs:

- Post-employment drug benefits; but not guaranteed, and many employers have eliminated or reduced those benefits
- Some Medicare Supplement policies offer drug benefits; but low annual benefit caps
- Many Medicare+Choice plans offered drug benefits; but some plans withdrew the drug benefits, left the market, or dramatically increased premiums
- Medicaid (for low-income seniors only)
- Discount cards? Buses to Canada?

Background



- Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) created Medicare Part D, “Voluntary Prescription Drug Benefit Program”, effective Jan 2006
- PDP: Standalone prescription drug coverage for Medicare-eligibles, provided by private carriers, but subsidized by the Federal government
 - Standard benefit design, but some flexibility for innovation in product development
- MA-PD: Integrated medical/drug programs

Background



- Medicare Part D reflects a Republican approach to addressing the situation:
 - Voluntary, not compulsory
 - Administered privately, not by “government bureaucracy”
 - Consumers have choice among private market alternatives
 - No direct government role in controlling drug costs
- Nevertheless, Part D is a costly program
 - During MMA debate, CBO estimate was \$395B over 10 yrs
 - Did government prevent Medicare Chief Actuary from sharing his cost estimate (\$534B) with Congress?

<http://www.contingencies.org/novdec04/coverstory.pdf>

Background



- People living in Illinois can choose from 42 different Part D products, offered by 17 different carriers
 - Major local players (e.g., BCBS IL, Humana, UnitedHealth, UniCare)
 - Major national players without a strong local presence (e.g., Coventry, PacifiCare)
 - Senior markets specialists (e.g., Universal American, Sterling, WellCare)
 - New entrants associated with major PBMs (e.g., Medco, Caremark/Silverscript)
- People living in Cook County can also choose from 13 different MA-PD plans, from 4 different carriers

Standard Benefit & Pricing



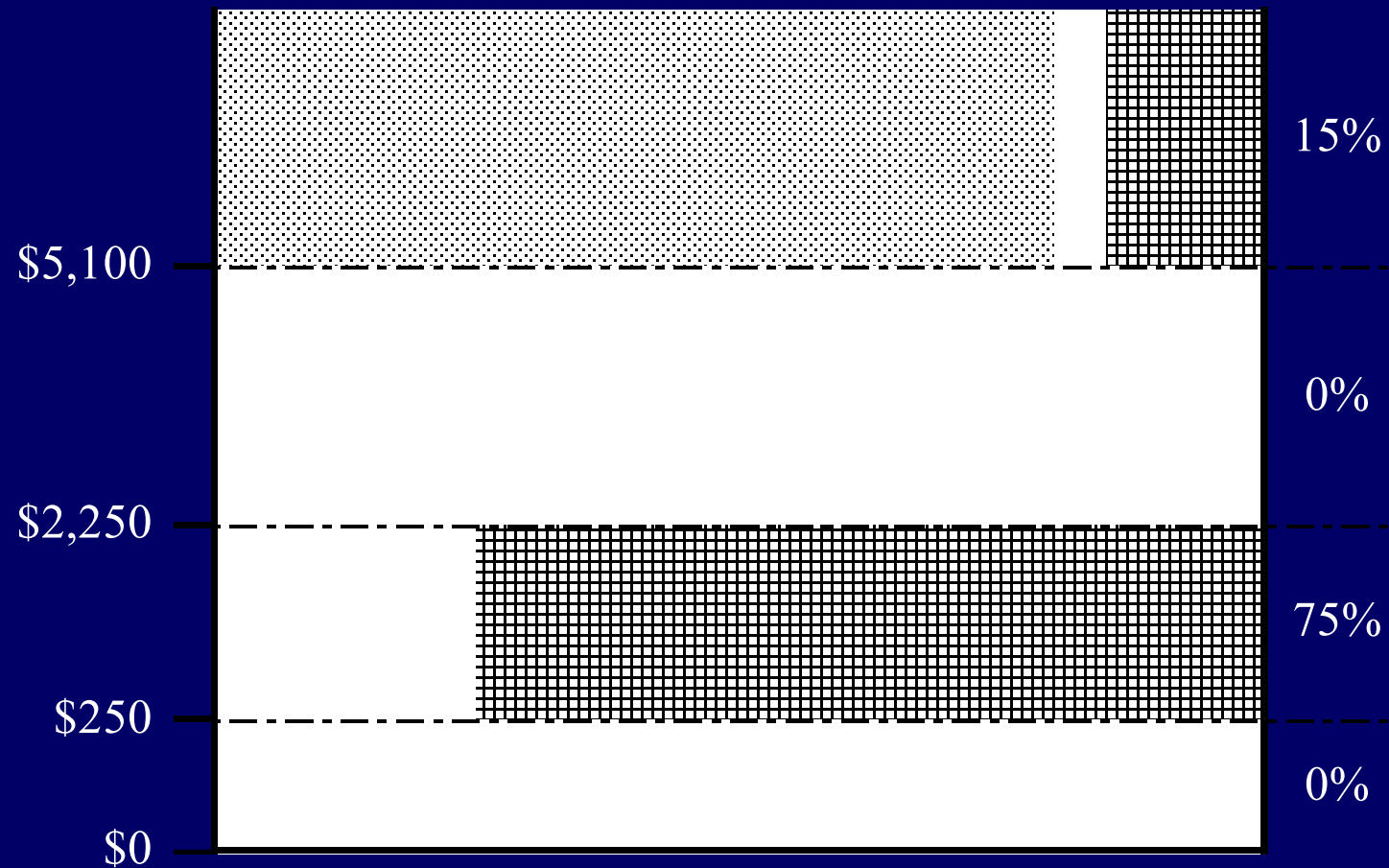
- Calendar year program, \$250 deductible
- After deductible has been satisfied:
 - For next \$2000, enrollee pays 25% and carrier pays 75%
 - After that, enrollee pays 100%, until....
- Once enrollee has borne \$3600 in out-of-pocket costs:
 - Enrollee pays only 5%
 - Carrier pays 15%
 - Federal government pays remaining 80%
- These are 2006 limits; indexed with inflation

Standard Benefit & Pricing



- Can think of the standard benefit as having four layers:
 - Deductible
 - Initial Coverage
 - “Donut Hole” (the region where insurance benefits stop)
 - “Cat Layer” (the region above the donut hole, where insurance benefits resume and become more generous)
- Graphically, this is shown on the next slide (cross-hatching shows carrier liability, dots show government liability)

Standard Benefit & Pricing



Standard Benefit & Pricing



- Extended “thought exercise”
- Suppose that there are only three types of potential enrollees:
 - Type A enrollees consume \$60 of drugs per month
 - Type B enrollees consume \$300 of drugs per month
 - Type C enrollees consume \$750 of drugs per month
- How would the standard benefit design affect each of these types of enrollees?

Standard Benefit & Pricing



Type A

Annual drug costs = $12 * \$60 = \720

Consumes deductible, doesn't reach donut hole

Carrier's share = $75\% * (\$720 - \$250) = \$352$

Government's share = $\$0$

Enrollee's share = $\$720 - \$352.50 = \$368$

Standard Benefit & Pricing



Type B

Annual drug costs = $12 * \$300 = \3600

Reaches donut hole, doesn't reach cat layer

Carrier's share = $75\% * (\$2250 - \$250) = \$1500$

Government's share = $\$0$

Enrollee's share = $\$250 + 25\% * (\$2250 - \$250)$
 $+ (\$3600 - \$2250) = \$2100$

Standard Benefit & Pricing



Type C

Annual drug costs = $12 * \$750 = \9000

Reaches cat layer

Carrier's share = $75% * (\$2250 - \$250)$
+ $15% * (\$9000 - \$5100) = \$2085$

Government's share = $80% * (\$9000 - \$5100) = \$3120$

Enrollee's share = $\$3600 + 5% * (\$9000 - \$5100) = \3795

Standard Benefit & Pricing



- Now assume that the population is distributed among the three types as follows:
 - Type A = $7/15^{\text{ths}}$
 - Type B = $1/3^{\text{rd}}$
 - Type C = $1/5^{\text{th}}$
- Assume for the moment that everyone enrolls in the standard benefit design
- What premium will the carrier charge for the product?

Standard Benefit & Pricing



- PMPY claim cost to carrier
 - = $(7/15) * \$352 + (1/3) * \$1500 + (1/5) * \$2085$
 - = \$1082
- Assuming that the carrier needs a 10% load for administration and profit, these assumptions produce a premium of \$100 PMPM ($\$1082 \div 90\% \div 12$).
- But, would these enrollees want to pay \$100 per month for this benefit?

Standard Benefit & Pricing



- Type A enrollee gets only \$29 per month ($=\$352 \div 12$) in insurance benefits
- Type B enrollee gets \$125 per month in benefits
- Type C enrollee gets \$174 per month in benefits
- In a voluntary program with no subsidy, enrollees that know they are Type A have no reason to enroll
- If carrier builds the premium assuming the Type A's will enroll, heavy losses; so, carrier re-builds the premium assuming no Type A's will enroll
- But, now the premium is so high the Type B's opt out...

Standard Benefit & Pricing



Conclusion from thought exercise:

Assuming that potential enrollees have reasonable ability to predict their drug needs over the coming year: A voluntary, guaranteed-issue standalone drug program will be unsustainable due to adverse selection, unless participation in the program is subsidized

Standard Benefit & Pricing



- Primary solution: In addition to subsidizing claims costs in the cat layer, the government is also subsidizing the premiums
 - Target is that the government would pay 74.5% of enrollee premiums
- Secondary solution: Late enrollment fees apply to people who delay purchasing coverage
 - Creates a mild incentive for people to enroll now in case their drug needs increase later

Standard Benefit & Pricing



- Returning to the previous example, now assume that the enrollee's share of the premium is only \$25 per month instead of \$100
- All three enrollee types are now better off with insurance than without, so the program “works”
 - Type A enrollee gets \$29 of benefits at a cost of \$25
 - But actually, true gain to Type A enrollee might be higher!
 - Enrollees may gain access to drugs at preferential prices, thanks to the influence of private-market PBMs
 - Hence, out-of-pocket costs may be lower for enrollees than they would otherwise have been

Standard Benefit & Pricing



- In reality, the exercise of pricing this product is much more complex and much more uncertain
- What is the actual morbidity distribution of the underlying population?
 - Will the benefit design itself influence utilization?
- Which slices of the population will actually enroll?
 - Interesting situation in behavioral economics
- Pricing for calendar year 2007 needs to be submitted to government by early June 2006, so little ability to learn from emerging 2006 experience
 - 2008 may be first year to benefit from credible pricing data

Financial Reporting



6 types of cash inflows associated with Part D:

1. *Base Beneficiary Premium* – The portion of the monthly premium paid directly by the enrollee (in the previous example, \$25 PMPM)
2. *Direct Subsidy* – The portion of the monthly premium paid by the government (in the previous example, \$75 PMPM)

Financial Reporting



6 types of cash inflows associated with Part D:

3. *Premium Subsidies* – For low-income enrollees, the government will pay part or all of the beneficiary premium

4. *Cost-Sharing Subsidies* – For low-income enrollees, the government will pay part or all of the deductible and coinsurance

Financial Reporting



6 types of cash inflows associated with Part D:

5. *Reinsurance Subsidies.* The government pays a monthly capitation to the carrier to cover the expected value of the government's 80% share of claims in the "cat layer". At the end of the contract, there is a true-up mechanism, based on actual claims payments in the cat layer.

Financial Reporting



- In the previous example, we had computed that the expected PMPY cost to the government of its 80% share of cat layer claims was \$624
- So, the government would pay the carrier \$52 PMPM in “reinsurance subsidies”, in addition to the \$75 PMPM in “direct subsidies”
- As cat layer claims are incurred, the government’s share comes out of the subsidy payments that the carrier has already received (rather than the carrier having to pay first and get reimbursement later)

Financial Reporting



6 types of cash inflows associated with Part D:

6. *Risk-Sharing*. If actual experience for the contract year is worse than pricing expectations, the government will share some of the losses with the carrier. (This is intended to mitigate much of the uncertainty regarding pricing.) Conversely, if actual experience is better than pricing, the carrier will share some of the gains with the government.

Financial Reporting



Cash outflows associated with Part D:

- Benefit payments for which the carrier has the ultimate responsibility
- Benefit payments that the carrier makes but for which the government has the ultimate responsibility (cat layer claims; cost-sharing amounts for low-income enrollees)
- Gain-sharing payments to government

Financial Reporting



Key financial reporting questions:

- Which inflows should the carrier recognize as being revenue, and when?
- Which outflows should the carrier recognize as being incurred claims, and when?

Financial Reporting



Why are these questions of interest with Part D?

- Part D has a more varied and complex set of cash flows than most health contracts
- There are significant intra-year mismatches in the timing of inflows and outflows

Financial Reporting



- To understand the intra-year timing issue, we return to our previous example and look at how the cash flows evolve from quarter to quarter
- Simplifying assumptions:
 - No claim reporting lag, i.e. the carrier knows about all claims on the day that they are paid
 - Assuming that actual experience is equal to expected experience; ignoring risk-sharing for now
 - Ignoring premium subsidies and cost-sharing subsidies, i.e. assuming no enrollees are low-income

Financial Reporting



1st Quarter Cash Flows (PMPQ basis)

IN:

- Beneficiary Premiums = \$75
- Direct Subsidies = \$225
- Reinsurance Subsidies = \$156

OUT:

- Carrier-responsible Benefits = \$463
- Government-responsible Benefits = \$0

Financial Reporting



2nd Quarter Cash Flows (PMPQ basis)

IN:

- Beneficiary Premiums = \$75
- Direct Subsidies = \$225
- Reinsurance Subsidies = \$156

OUT:

- Carrier-responsible Benefits = \$262
- Government-responsible Benefits = \$0

Financial Reporting



3rd Quarter Cash Flows (PMPQ basis)

IN:

- Beneficiary Premiums = \$75
- Direct Subsidies = \$225
- Reinsurance Subsidies = \$156

OUT:

- Carrier-responsible Benefits = \$225
- Government-responsible Benefits = \$264

Financial Reporting



4th Quarter Cash Flows (PMPQ basis)

IN:

- Beneficiary Premiums = \$75
- Direct Subsidies = \$225
- Reinsurance Subsidies = \$156

OUT:

- Carrier-responsible Benefits = \$131
- Government-responsible Benefits = \$360

Financial Reporting



Carrier experience under pricing assumptions
Cash-basis reporting (on PMPQ basis)

	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Ben Prem/Dir Sub	\$300	\$300	\$300	\$300
Reins Subsidies	\$156	\$156	\$156	\$156
Carrier Benefits	\$463	\$263	\$225	\$131
Gov. Benefits	\$0	\$0	\$264	\$360
Cash L/R – Qtr	101%	58%	107%	108%
Cash L/R – YTD	101%	80%	89%	94%

Financial Reporting



- Statutory accounting principles for Medicare Part D are found in NAIC INT 05-05 (adopted in Dec 2005)
- Under INT 05-05, beneficiary premiums, direct subsidies, and low-income subsidies are all considered to be premium, and are earned ratably
- However, reinsurance subsidies and cost-sharing subsidies are not considered to be premium
 - In particular, the carrier's administration of the government's responsibility for 80% of the cat layer claims is viewed as being the uninsured portion of a partially insured contract, so no revenue is recognized relative to this piece

Financial Reporting



- Under INT 05-05, claims expense is defined commensurate with how premium is defined
- Thus, the only items that are reported as claims expense are those benefits for which the carrier is ultimately responsible
- Other benefit amounts that the carrier pays out (cost-sharing items for low-income enrollees; government's share of cat layer claims) do not constitute claims expense
- GAAP treatment follows SAP, presumably

Financial Reporting



Carrier experience under pricing assumptions
INT 05-05 reporting (on PMPQ basis)
[Ignoring risk-sharing]

	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Premium	\$300	\$300	\$300	\$300
Claims	\$463	\$263	\$225	\$131
L/R – Qtr	154%	88%	75%	43%
L/R – YTD	154%	121%	106%	90%

Financial Reporting



- What about risk-sharing?
- INT 05-05 indicates that the risk-sharing aspect of the contract is to be treated like any other retrospectively rated contract
- Hence, gain-sharing payments made represent a return of premium, and loss-sharing payments received represent additional premium
- At interim periods, accruals need to be made of estimated premium adjustments attributable to the risk-sharing arrangement

Financial Reporting



Returning to our example: Suppose actual experience as of the 1st quarter is exactly equal to pricing assumptions.

What risk-sharing accrual, if any, should the carrier make at the end of the 1st quarter?

No crystal-clear guidance; two potential schools of thought....

Financial Reporting



One school of thought:

- If the pricing assumptions hold for the entire year, then there will be no risk-sharing payment
- Pricing assumptions have held so far, so our best estimate is that they will continue to hold
- Thus, our best estimate is that we will neither receive nor make a risk-sharing payment for this year
- Hence, we have neither an asset nor a liability, so an accrual of zero is appropriate

Financial Reporting



Another school of thought:

- SAP accounting shows an incurred loss ratio of 154%
- If we ultimately had an incurred loss ratio of 154%, we would receive a significant risk-sharing payment
- SSAP 66 states that “assumptions used in estimating retrospective premium adjustments shall be consistent with the assumptions made in recording other assets and liabilities necessary to reflect the underwriting results of the reporting entity”
- Hence, we should accrue a large premium receivable

Financial Reporting



- This “non-zero expected accrual” approach significantly mitigates the intra-year volatility of Part D earnings, by effectively accelerating revenue recognition
- At least one major carrier (UnitedHealth) has announced that it will be following the “non-zero expected accrual” approach for GAAP; see page 5 of http://www.unitedhealthgroup.com/invest/2005/FAS_123R_and_Part_D_Slides.pdf
- The same carrier also indicated that it will be using a non-GAAP approach for management reporting purposes, keeping revenue level but deferring claims expense to future quarters

Financial Reporting



Carrier experience under pricing assumptions

GAAP Reporting (PMPQ basis)

[Uses “non-zero expected accrual” approach to risk-sharing]

	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Premium	\$300	\$300	\$300	\$300
Chg in Retro Prem	\$148	(\$11)	(\$42)	(\$95)
Claims	\$463	\$263	\$225	\$131
L/R – Qtr	103%	91%	87%	64%
L/R – YTD	103%	99%	96%	90%

Financial Reporting



Carrier experience under pricing assumptions
Non-GAAP “Management Reporting” (PMPQ basis)
[Claims deferral approach]

	<u>1st Qtr</u>	<u>2nd Qtr</u>	<u>3rd Qtr</u>	<u>4th Qtr</u>
Premium	\$300	\$300	\$300	\$300
Claims	\$463	\$263	\$225	\$131
Chg in Def Clms	(\$192)	\$7	\$45	\$140
L/R – Qtr	90%	90%	90%	90%
L/R – YTD	90%	90%	90%	90%

Risk-Based Capital



- Historically, the NAIC Health RBC formula has treated Medicare+Choice business in the same way as Major Medical: a claims-based H2 factor starting at 15% and grading down to 9%
- The formula also treats “standalone drug” coverage as part of the “Other Health” category, which gets a claims-based H2 factor of 13%, regardless of volume
- Hence, without formula changes, Part D products could have a higher capital charge, as a percentage of premium, than Medicare Advantage products

Risk-Based Capital



- Widespread recognition among both carriers and regulators that this doesn't make sense
 - Part D should have less fluctuation risk than MA, thanks not only to the government risk-sharing, but also to the government's assumption of most of the cat layer risk
 - The 13% factor for existing standalone drug coverage is probably conservative, but very little standalone drug coverage has been written in recent history, so the factor was not relevant in practice
- NAIC issued charge to AAA in early 2005 to make recommendations on Part D RBC

Risk-Based Capital



- AAA final report sent to NAIC in Dec 2005:
http://www.actuary.org/pdf/medicare/rbc_dec05.pdf
- NAIC acted on report in 1st quarter 2006, and the AAA recommendations are being incorporated into the 2006 NAIC Health RBC and Life RBC formulas
- Note that the RBC activity indirectly led to the issuance of SAP guidance on Part D (INT 05-05)
 - In order to develop factors to be applied against premium and/or claims, the AAA needed direction from the NAIC as to what “premium” and “claims” would represent

Risk-Based Capital



- The original Health RBC work used a model that analyzed historical volatility to estimate the fluctuation risk in medical products
- Without any history for Part D, cannot calibrate that model in a meaningful way
- Instead, AAA took an interesting approach: It surveyed the industry actuaries who were involved in pricing Part D, and asked their expert assessment of the volatility inherent in the product
- Intent to revisit factors once mature data exists

Risk-Based Capital



AAA conclusions:

- If there were no risk-sharing and no reinsurance subsidies, the appropriate premium-based H2 factor for Part D would be 14.1%, grading down to 10.9%
- The presence of both risk-sharing and the reinsurance subsidies reduces the carrier's risk by 65%
- Hence, net premium-based H2 factor for Part D is 4.9%, grading down to 3.8%
- MA-PD will be treated same as Major Medical

Risk-Based Capital



- Some carriers have elected to participate in a “Reinsurance Demonstration Program”, in which they bear 95% of the risk in the cat layer instead of 15%
- Under INT 05-05, the monthly payments from the government for 80% of the expected cat layer claims are reported as premium for demonstration program carriers, since they actually bear the risk
- For such carriers, the H2 factor is 50% of the base factor (instead of 35% of base), and is applied against a higher volume of premium