Actuarial Equivalence of Medicare Prescription Drug Plans

A Luncheon Briefing Sponsored By The American Academy of Actuaries And The Society of Actuaries





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Actuarial Equivalence of Medicare Prescription Drug Plans

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Presentation Goals

- Define and illustrate actuarial equivalence
- Summarize method used to determine actuarial equivalence under alternative Rx plan designs
- Provide examples of actuarially equivalent plans

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Actuarial Equivalence – What is it?

- For a given population and prescription drug spending pattern:
 - Total costs under each plan design are the same
 - Net plan per member per month (PMPM) costs (total costs less member cost sharing) are the same
 - Cost sharing for individual members could vary between plan designs
 - Plan designs cover the same services
- Key assumptions:
 - Same population is enrolled under each plan design
 - No changes to behavior based on the benefits provided under each plan design

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Example of Actuarial Equivalence

	Plan Design 1	Plan Design 2	
Cost sharing type	Coinsurance	Copayments	
Member cost sharing	30% generic	\$7.50 generic	
requirement	50% brand	\$30.00 brand	
Prescription average	\$25 generic	\$25 generic	
cost	\$60 brand	\$60 brand	
Average member cost	\$7.50 generic	\$7.50 generic (1)	
sharing	\$30.00 brand	\$30.00 brand (1)	

(1) Assumes all prescriptions cost more than the copayment or that the member pays the full copayment regardless of cost

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Actuarial Equivalence – What isn't it?

- Actuarially equivalent plan designs will not necessarily result in the same premiums because plans can develop their premiums to reflect:
 - Expected behavioral reactions to different plan designs (i.e. adverse selection)
 - Actual negotiated prices
 - Utilization management techniques (e.g. formularies, step therapies, etc.)

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Method Used to Examine Costs and Determine Actuarial Equivalence





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General Method

- Uses historical data adjusted to the time period being analyzed
- Calculates total allowed cost before applying plan design
- Applies the different plan designs to the total allowed cost to determine split between plan and members
- Adjusts alternative plan design until total member cost sharing under standard plan and alternative design are equal

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Data

- Medicare+Choice data for members with unlimited benefits (over 50,000 members)
- Calendar year 2001 data adjusted to 2006
- No adjustments made to reflect different spending behavior of FFS population from M+C population
- Adjustments applied to reflect the age/gender distribution in Medicare FFS population
- Data used for illustrative purposes only; actual costs of drug plans will differ

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Simplifying Assumptions

- Projected costs do not include:
 - PBM or pharmaceutical company rebates
 - PBM or other administrative fees
 - Any change in trend rates, generic/brand mix, or discounts/dispensing fees
 - Any plan design differences by income
- Data used for illustrative purposes only; actual costs of drug plans will differ

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Distribution of Gross Allowed Claims by Member (2006)

Claims threshold	Percent of members with claims above threshold	Percent of spending above threshold
\$0	89%	100%
\$100	85%	96%
\$250	79%	90%
\$500	72%	82%
\$1,000	59%	67%
\$2,000	40%	44%
\$4,500	13%	16%
\$7,500	4%	5%

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Impact of Deductible (2006)

- \$100 deductible eliminates 4% of total costs
- \$250 deductible eliminates 10% of total costs
- \$500 deductible eliminates 18% of total costs
- \$1,000 deductible eliminates 33% of total costs





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House and Senate Prescription Drug Plans





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Standard Plan Designs (2006)

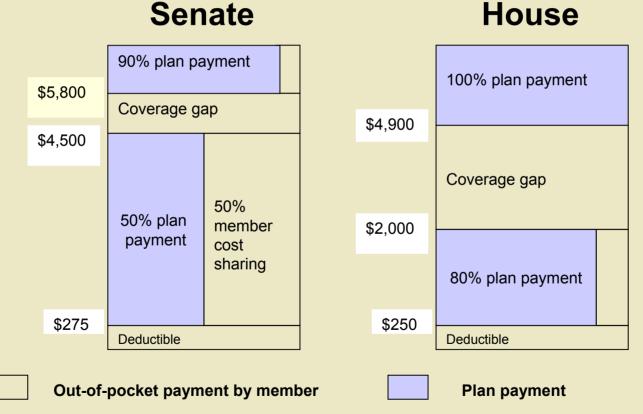
Cost sharing category	Senate Bill	House Bill
Deductible	\$275	\$250
Member coinsurance	50%	20%
Initial coverage limit	\$4,500	\$2,000
Out-of-pocket maximum	\$3,700	\$3,500 (means tested)
Approximate attachment point (total claims at which member hits out-of-pocket maximum)	\$5,800	\$4,900
Member coinsurance above out-of- pocket maximum	10%	0%

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Standard Plan Designs (2006)



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Estimates of Utilization and PMPM (2006)

Senate Bill

- 82% of prescriptions reimbursed at some level under standard plan
- Approximately \$102 net PMPM covered under standard plan (before member premium)
- House Bill
 - 59% of prescriptions reimbursed at some level under standard plan
 - Approximately \$113 net PMPM covered under standard plan (before member premium)

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Distribution of Gross Allowed Costs (2006)

	Percent of gross allowed costs		
Cost sharing category	Senate Bill	House Bill	
Deductible	11%	10%	
Between deductible and initial coverage limit	73%	45%	
Between initial coverage limit and out-of-pocket maximum	6%	31%	
Above out-of-pocket maximum	10%	14%	

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Current Bills and Actuarial Equivalence

- Requirements for offering alternative coverage
 - Actuarial value of total alternative coverage must meet or exceed that of of standard coverage
 - Unsubsidized value of alternative coverage must meet or exceed that of standard coverage
 - For members with costs equal to the initial coverage limit, value of alternative coverage must meet or exceed value of standard plan coverage

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Current Bills and Actuarial Equivalence - continued

- Requirements for offering alternative coverage (continued)
 - Senate bill only
 - Deductible and out-of-pocket maximum cannot vary from the standard plan
 - House bill only
 - Out-of-pocket maximum cannot vary from the standard plan

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Examples of Alternative Plan Designs Actuarially Equivalent to Senate Plan Design (2006)

Cost Sharing Category	Senate Bill	Plan 1	Plan 2	Plan 3
Deductible	\$275	\$275	\$275	\$275
Member coinsurance	50.0%	52.4%	40.0%	30.0%
Initial coverage limit	\$4,500	\$6,800	\$2,830	\$2,210
Out-of-pocket maximum (OOP max)	\$3,700	\$3,700	\$3,700	\$3,700
Approximate attachment point (total claims at which member hits OOP max)	\$5,800	\$6,800	\$5,230	\$5,055
Member coinsurance above OOP max	10%	10%	10%	10%
Approximate "doughnut hole" amount (attachment point less initial coverage limit)	\$1,300	\$0	\$2,400	\$2,845

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Examples of Alternative Plan Designs Actuarially Equivalent to House Plan Design (2006)

Cost Sharing Category	House Bill	Plan 1	Plan 2	Plan 3
Deductible	\$250	\$250	\$250	\$250
Member coinsurance	20.0%	30.0%	40.0%	47.8%
Initial coverage limit	\$2,000	\$2,450	\$3,300	\$7,050
Out-of-pocket maximum (OOP max)	\$3,500	\$3,500	\$3,500	\$3,500
Approximate attachment point (total claims at which member hits OOP max)	\$4,900	\$5,040	\$5,330	\$7,050
Member coinsurance above OOP max	0%	0%	0%	0%
Approximate "doughnut hole" amount (attachment point less initial coverage limit)	\$2,900	\$2,590	\$2,030	\$0

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Caveats

- These estimates are for illustrative purposes only.
- Due to data limitations and simplifying assumptions, actual costs of prescription drug plans will likely differ from those presented here.





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Questions

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