

Actuarial Equivalence

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Actuarial Equivalence

- General term used for applying some measurement to two benefit plans to see if the resulting values are sufficiently close for the specified purpose
- No universal definition—the purpose will determine the specific method applied
- Purposes for comparing plans include:
 - To compare a given health plan with a standard plan design (e.g., does the plan cover at least as much as a standard plan?)
 - To compare the value of an employer plan (e.g., does the employer meet maintenance of effort requirements?)



Actuarial Equivalence Calculations: General

- Using a given population, compare average plan spending (or insured cost sharing) under different plan designs
- Potential plan design differences
 - Cost sharing levels (including deductibles, coinsurance, copayments, out-of-pocket limits, benefit limits)
 - Services covered
 - Cost sharing features can vary by service type



Actuarial Equivalence Calculations: Key Assumptions

- Typically, provider network differences are not included in actuarial equivalence calculations
- Depending on the goal of the actuarial equivalence analysis, utilization changes due to major plan design differences can be incorporated
- The specific population used matters



Actual premiums will vary across actuarially equivalent plans

- Premiums incorporate factors not included in actuarial equivalence calculations, including:
 - Expected selection when multiple plan choices are offered
 - Actual negotiated prices
 - Utilization management techniques



Applicability of Actuarial Equivalence Calculation Results

- Even among actuarially equivalent plans, specific individuals will likely face different out-of-pocket costs under different plans
 - Actuarial equivalence calculations are done on an average basis, not on an individual basis
- Actuarial equivalence comparisons are not as useful for helping consumers decide between different plan options



Example

Actuarial Equivalence Example

Plan #1		Plan #2	
Deductible	\$500	Deductible	\$250
Coinsurance	20%	Coinsurance	30%
OOP Max	\$2,000	OOP Max	\$2,500

	Total Spending	Plan 1			Plan Share	Plan 2			Plan Share
		Patient Cost Sharing				Patient Cost Sharing			
		Deductible	Coinsurance	Total		Deductible	Coinsurance	Total	
Person 1	25,000	500	1,500	2,000	23,000	250	2,250	2,500	22,500
Person 2	1,500	500	200	700	800	250	375	625	875
Person 3	800	500	60	560	240	250	165	415	385
Person 4	500	500	0	500	0	250	75	325	175
Person 5	400	400	0	400	0	250	45	295	105
Total	28,200	2,400	1,760	4,160	24,040	1,250	2,910	4,160	24,040
Average	5,640	480	352	832	4,808	250	582	832	4,808
Cost sharing as a share of total spending				15%				15%	
Plan spending as a share of total spending					85%				85%

Source: American Academy of Actuaries

Note: For illustrative purposes only. For this example, total spending is assumed to be constant, regardless of plan design. Depending on the purpose of the plan comparison, changes in utilization caused by plan design changes may be considered. In addition, this example assumes that coinsurance rates are the same, regardless of the service type (e.g., hospital inpatient, physician visit). Many plans will vary cost-sharing requirements by service. The highlighted areas show each person's total out-of-pocket spending, under the plan more beneficial to that person.



Other Issues

- The use of the word “equivalence” can be misleading because it overstates the sense of precision. Actuarial equivalence analysis is inherently an estimation exercise and is therefore somewhat inexact.
- Estimates depend on the data sources, projection methods, and assumptions.
 - A range of assumptions may be appropriate
- Plans that are deemed to be actuarially equivalent during one year, will not necessarily be actuarially equivalent in subsequent years.
- Offering multiple plan choices can result in selection, even among actuarially equivalent plans



Uses of Actuarial Equivalence Under Medicare Part D

- Certification of the actuarial value of the bid components
 - Must ensure that the value of the drug coverage equals or exceeds that of the standard drug plan (with some further tests that may limit plan variations)
- Determination of creditable coverage for late enrollment penalty
 - Must ensure that the value of the drug coverage equals or exceeds that of the standard drug plan
- Certification of actuarial equivalence for retiree drug subsidy payments
 - Gross Test (tied to the determination of creditable coverage) ensures value of the plan sponsor's program equals or exceeds that of the standard drug plan
 - Net Test (tied to the determination of a financial subsidy for plan sponsors) ensures portion of the benefit value paid for by the plan sponsor meets or exceeds the portion of the Part D value paid by Medicare



Questions?



Selected Plan Design Features, by Market Type

Individual Market 2006-2007 PPO/POS (non-HSA) Plan—Single Coverage (AHIP)		
% w deductible = 94% Avg deductible = \$1747	% w coinsurance = 82% Avg coinsurance = 24%	% w oop limit = 99% Avg oop limit = \$4054
Small Group Market (50 or fewer employees) 2008 PPO (non-HSA) Plan—Single Coverage (AHIP)		
% With Deductible = 88% Avg Deductible = \$1059	% With Coinsurance = 83% Avg Coinsurance = 21%	% w oop limit = 94% Avg oop limit = \$2636
Small Employers (3-199 employees) 2008 PPO—Single Coverage (KFF/HRET)		
% With Deductible = 73% Avg Deductible = \$917	Avg coinsurance = 16% hospital 17% outpatient surgery (small and large ers combined)	Median is about \$2000 (small and large ers combined)

Sources: AHIP, "Individual Health Insurance 2003-2007: A Comprehensive Survey of Premiums, Availability, and Benefits" (Dec 2007); AHIP, "Small Group Health Insurance in 2008: A Comprehensive Survey of Premiums, Product Choices, and Benefits" (March 2009); The Kaiser Family Foundation and Health Research & Educational Trust, *Employer Health Benefits, 2008 Annual Survey* (Sept 2008).

Notes: Average cost sharing values reflect the average among plans with these features. Plans may include additional cost sharing components.



Selected Plan Design Features (cont.)

Large Employers (200+ employees) 2008 PPO—Single Coverage (KFF/HRET)		
% With Deductible = 66% Avg Deductible = \$413	Avg coinsurance = 16% hospital 17% outpatient surgery (small and large ers combined)	Median is about \$2000 (small and large ers combined)
FEHBP National BCBS Standard Plan Single Coverage (OPM)		
Deductible=\$300	\$200 copay per hospital inpatient admission 15% coinsurance outpatient surgery	oop limit = \$5000

Sources: The Kaiser Family Foundation and Health Research & Educational Trust, *Employer Health Benefits, 2008 Annual Survey* (Sept 2008); U.S. Office of Personnel Management, 2009 Federal Employee Health Benefits Comparison Tool, <http://opm.gov/insure/health/search/plansearch.aspx> accessed on March 31, 2009.

Notes: Average cost sharing values reflect the average among plans with these features. Plans may include additional cost sharing components.

