

The Effects of Medicare
Beneficiaries' Secondary
Insurance Coverage

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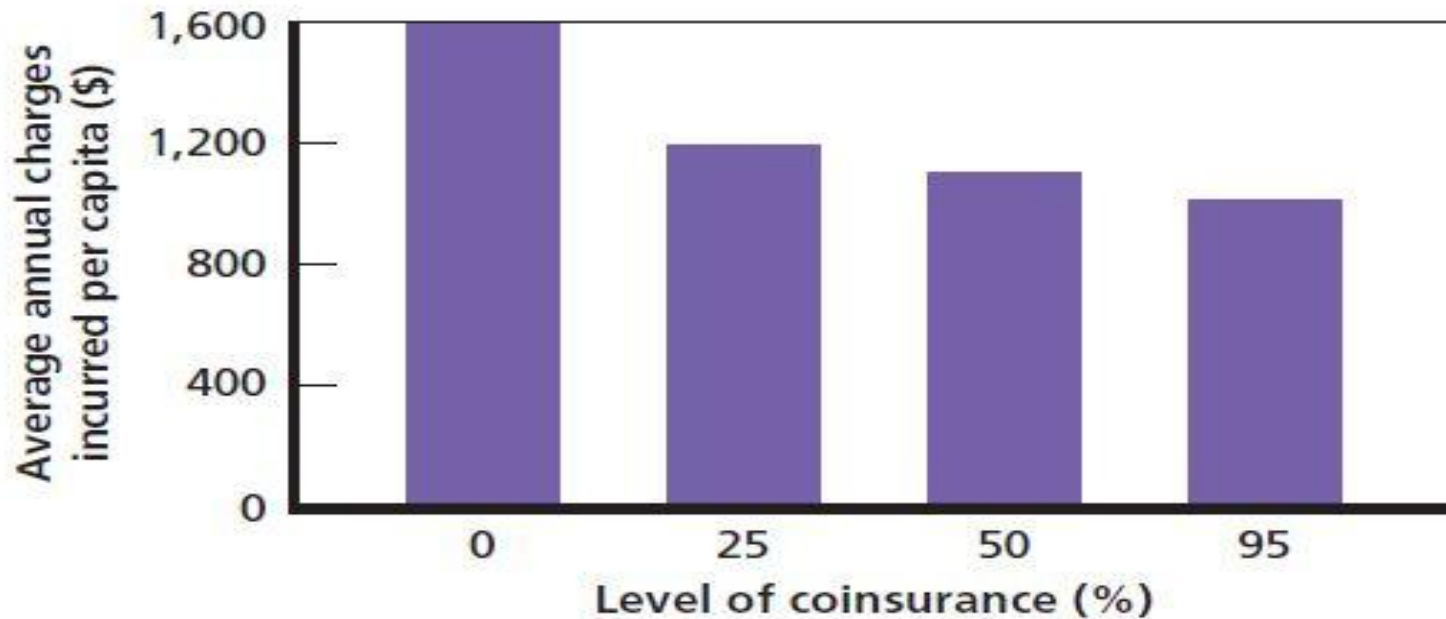
Outline of Talk

- Out-of-pocket payments reduce use.
- Some services more than others.
- In Medicare, most of the reduction appears to occur for modest coinsurance levels.

National Health Insurance Experiment (NHIE)

Coinsurance and Spending, 1970s, Under 65

Source: RAND (www.rand.org/pubs/research_briefs/RB9174/index1.html)



SOURCE: Newhouse and the Insurance Experiment Group, 1993, Tables 3.2 and 3.3.

NOTES: Spending numbers include both adults and children. Spending numbers have been adjusted to 2005 dollars using all-items Consumer Price Index.

Relevant NHIE Findings

- Coinsurance impact was not linear
 - 25% coinsurance, 20% spending reduction.
 - 95% coinsurance, 30% spending reduction.
- Affected all types of care
 - Acute or chronic, highly effective or rarely effective.
- Quality of care?
 - “ ... cost sharing did not significantly affect the quality of care received by participants.”
- Health status?
 - “ ... In general ...cost sharing had no adverse effect on participants’ health. However ... the poorest and sickest 6 percent of the sample ... had better outcomes under the free plan ...”

What about Medicare?

(Genesis of this study)

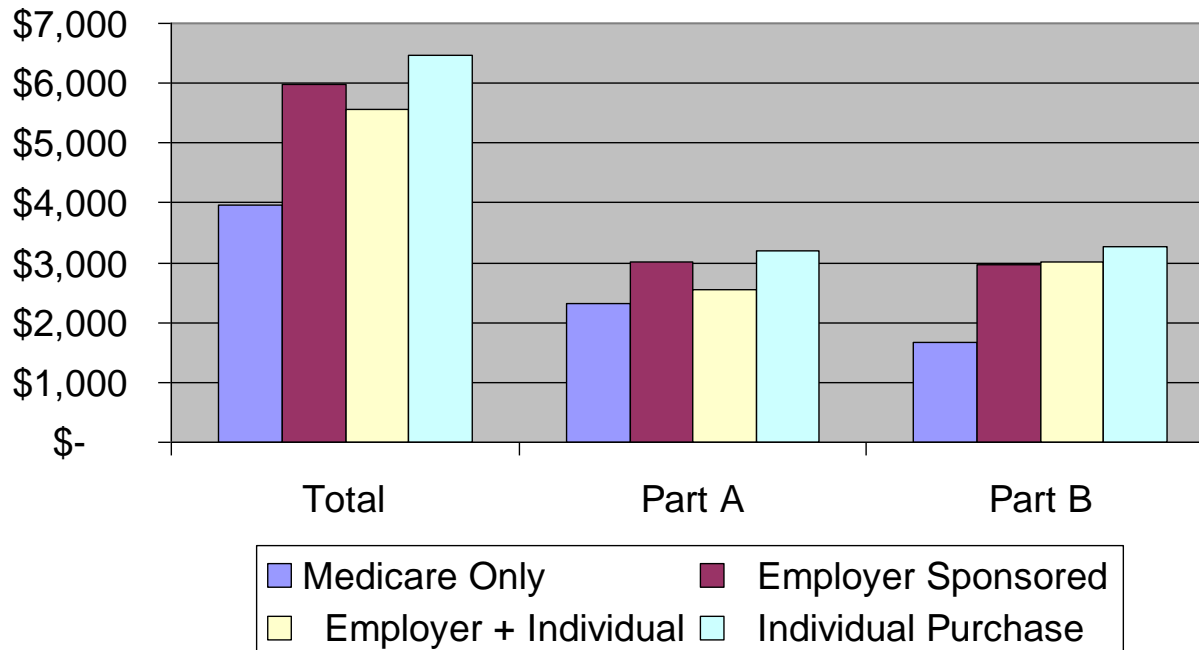
- CBO, PPRC looked secondary insurance impact in 1990s.
 - Persons with secondary insurance spent ~25% more than others.
 - Impact highest for Part B; highest for Medigap
 - Estimates appeared robust(different data sources, methods, times).
- Lemieux et al (2008) disagreed.
 - Prior estimates overstate due to VA coverage.
 - Corrected estimate much smaller.
- MedPAC asked for re-analysis of impact of secondary insurance, 2009.

Methods

- MCBS 2003-2005 cost and use files (survey and claims).
- Aged (65+), non-institutionalized, no VA use, have Part A and Part B, no HMO enrollment.
- Apply MedPAC/CMS insurance coverage definitions.
- ~34,000 observations, ~1500 with no secondary insurance.
- Contrast beneficiaries by type of secondary insurance
- Adjust for demographics, health status (several ways), functional status, disability, education, income.
- Attribute any remaining use and spending difference to insurance impact.
- Re-analyze by apparent depth of insurance coverage.

Beneficiaries With Secondary Coverage Have Higher Medicare Spending

Medicare Outlays by Secondary Insurance Status, 2003-2005 MCBS



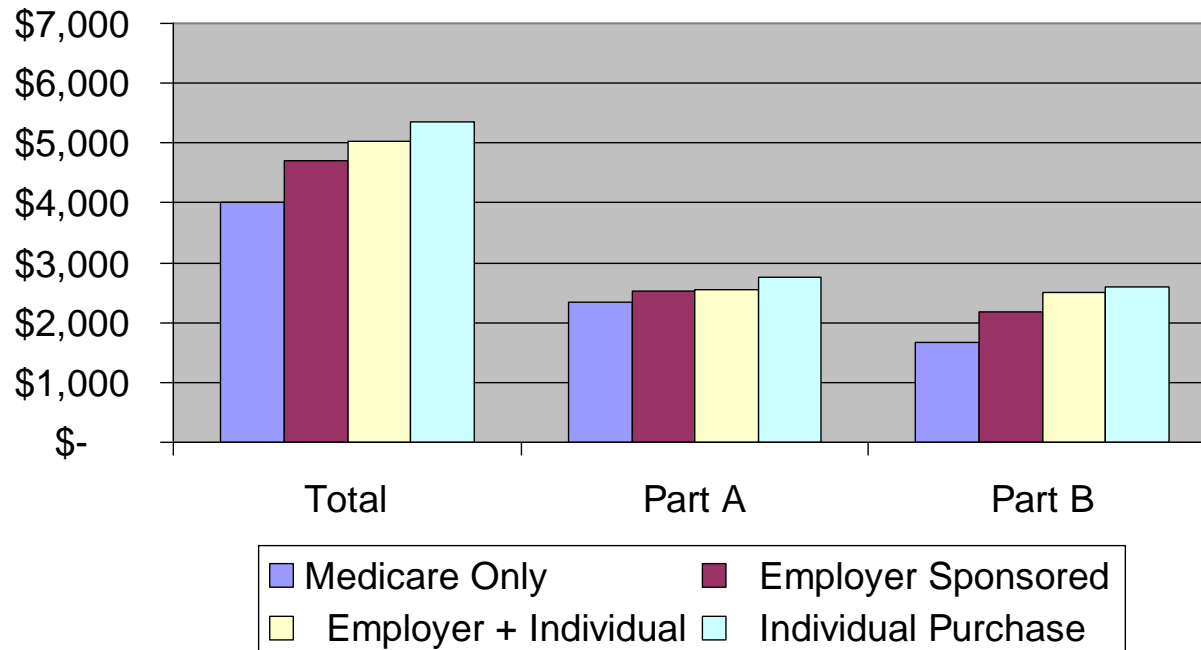
Beneficiaries With Secondary Coverage are Wealthier, Better-Educated, ...

	Medicare Only	Any Supplemental	
Average Part B out-of-pocket %	29.7%	7.7%	*
No Part B Use	20.0%	5.1%	*
Age	73.9	75.3	*
Male	47.8%	40.1%	*
Married	43.9%	59.8%	*
Caucasian	77.3%	92.5%	*
High_School_Dropout	45.5%	20.7%	*
Number of ADL limitations	51.3%	52.9%	
Health very good or excellent	49.7%	49.1%	
HCC risk score	91.7%	109.1%	*
Currently_Working	17.4%	12.8%	*
Income per Adult	\$ 14,711	\$ 22,676	*

Source: MCBS 2003-2005 Pooled. "*" indicates $p < .05$, adjusted for MCBS design effects.

But Spending is Higher Even After Accounting for That

Medicare Outlays by Secondary Insurance Status, REGRESSION ADJUSTED



What Services do They Use?

- Drill down by type of service.
- Everything regression-adjusted as before.
- **CAVEATS**
 - No standard way to do this
 - So these are “targets of opportunity”
 - Services come in episodes, not individually
 - Different slides show different services.
 - Small sample

Regression-Adjusted Spending Increase: Carrier (Physician) Spending by Site of Service

	Per-capita spending, no secondary insurance	% Increase With Supplemental Insurance	
Other Sites (not hospital, ASC, office)	\$ 127.29	23%	*
Inpatient	\$ 280.56	32%	**
OPD/ASC	\$ 260.67	33%	***
Office	\$ 643.44	75%	***
Notes: * = p < .05, ** = p < .01, *** = p < .001			
Source: Analysis of MCBS 2003-2005 Cost and Use files.			

Regression-Adjusted Spending Increase: Carrier (Physician) Spending by Specialty

	Per-capita spending, no secondary insurance	% Increase With Supplemental Insurance	
Radiologists	\$ 118.79	30%	
Generalists	\$ 315.50	36%	***
Surgical specialists	\$ 328.97	50%	***
Medical specialists	\$ 341.39	89%	***
Notes: * = p < .05, ** = p < .01, *** = p < .001			
Source: Analysis of MCBS 2003-2005 Cost and Use files.			

Regression-Adjusted Spending Increase: Carrier (Physician) Spending by BETOS Category

Betos Category	Per-capita spending, no secondary insurance	% Increase With Supplemental Insurance	
Emergency Visits (M3)	\$ 57.84	0%	
Major Procedures, Cardiovascular (P2)	\$ 74.20	30%	
Office Visits (M1)	\$ 243.84	45%	***
Imaging, Standard (I1)	\$ 92.10	55%	***
Imaging, Advanced (I2)	\$ 77.59	62%	***
Specialist Visits (M5)	\$ 56.63	78%	***
Minor procedures (P6)	\$ 92.84	89%	***
Endoscopy (P8)	\$ 53.63	100%	***
Notes: * = p < .05, ** = p < .01, *** = p < .001			
Source: Analysis of MCBS 2003-2005 Cost and Use files.			

Regression-Adjusted Spending Increase: Inpatient (Facility) Spending by Admission Type

	Per-capita spending, no secondary insurance	% Increase With Supplemental Insurance	
Emergency	\$ 1,220.59	-6%	
Urgent	\$ 404.89	6%	
Elective	\$ 405.17	90%	***
Notes: * = p < .05, ** = p < .01, *** = p < .001			
Source: Analysis of MCBS 2003-2005 Cost and Use files.			

Regression-Adjusted Spending Increase: Screening and Preventive Services *2003-5*

	Per-capita spending or use rate, no secondary insurance	% Increase With Supplemental Insurance	
Preventive services payments	\$ 21.30	97%	***
Fraction with some preventive svc.	0.37	60%	***
Notes: * = p < .05, ** = p < .01, *** = p < .001			
Source: Analysis of MCBS 2003-2005 Cost and Use files.			

What Services do They Use, Summary

Effect of Secondary Insurance	
Bigger Effect	Smaller Effect
Office	Hospital inpatient
Elective admissions	Emergency admissions
Office visits	Emergency visits
Medical specialists	Primary care physicians
Minor procedures	Major procedures
Preventive services	

Increase in Spending by Presence of Chronic Condition and Decedent Status

Spending Increase With Secondary Insurance					
Beneficiary Category	Total		Part A		Part B
Diabetes	6%		-4%		22% **
Cancer	13%		-1%		32% **
Cardiovascular Other Than CHF	14%		4%		34% ***
Congestive Heart Failure (CHF)	20%		13%		36% ***
Chron. Obst. Pulm. Dis.	23%		13%		41% ***
Decedents	25%		20%		44% **
None of the above	67%	***	51%		76% ***
Notes: * = p < .05, ** = p < .01, *** = p < .001					
Source: Analysis of MCBS 2003-2005 Cost and Use files.					
Note: This is total spending for beneficiaries with these conditions					

Dose-Response Relationship, From Depth of Coverage to Increased Spending?

- No detailed data on secondary coverage.
- Only information is revealed by spending (what fraction of actual payment is made out-of-pocket).
- **CAVEAT: Not a clean method for estimating true depth of coverage.**
- But, more “signal” than “noise” if restricted to persons with higher spending.
- Cut the data by total Medicare spending level to eliminate some of the “noise”.

Is Free a Four Letter Word?

Part B Spending Relative to Beneficiaries With No Secondary Insurance						
For various cutoffs on Medicare Part B reimbursement						
Observed Coinsurance Rate	\$1000 cutoff		\$3000 cutoff		\$5000 Cutoff	
20% or more	-\$88		\$365		\$480	
10% to 20%	-\$295		\$165		\$247	
5% to 10%	\$60		\$599		\$960	
Under 5%	\$1,131	***	\$1,496	***	\$1,962	***
Notes: *** = statistically significant, p < .001						

Conclusions

- Secondary insurance raises Medicare's costs substantially.
- I cannot address the medical impact of that.
- Difficult to describe impact on service mix succinctly.
 - Non-emergency, preventive, minor, medical specialist, ...
 - But affects use even for those with serious chronic illness.
- Evidence suggests that modest coinsurance reduces service use.
- Not very different from 30-year-old NHIE findings.