



Bibliography and Summaries of Cost-Sharing Literature

(as of December 26, 2011)

This chart highlights select literature on the impact of cost-sharing features on consumer behavior, finances and health care outcomes, including several articles or research that specifically focus on seniors and other Medicare beneficiaries. It provides a brief summary of the key findings and observations, as well as includes a hyperlink to access the full text, of the article, report or survey.

Report/Study	Background	Summary of Findings / Key Observations
<p>New England Journal of Medicine (December 2011)</p> <p>Choudhry, Niteesh K. Ph.D.; Avom, Jerry, M.D.; et. al. "Full Coverage for Preventive Medications after Myocardial Infarction," available at http://www.nejm.org/doi/full/10.1056/NEJMsa1107913</p>	<p>The objective of this study was to determine if the elimination of out-of-pocket costs would result in more patients using medication appropriately and ultimately help these patients stay healthier.</p> <p>The population examined in this study included patients who received both medical and RX benefits through Aetna and had been discharged from the hospital after myocardial infarction.</p> <p>In this Commonwealth Fund–supported study, researchers assigned patients who</p>	<ul style="list-style-type: none"> • Enhanced RX coverage improved medication adherence and rates of first major vascular events and decreased patient spending without increasing overall health costs. <ul style="list-style-type: none"> – Heart attack patients discharged from the hospital were more likely to take RX medications for their condition when co-pays were eliminated, compared with patients who had co-pays. – Patients who had their co-pays waived also experienced fewer heart attacks, strokes, and other vascular events over the course of the study period. • The elimination of co-pays reduced patients' financial burdens, did not change the insurer's overall spending, and may have provided clinical benefits. <ul style="list-style-type: none"> – This is "a rarity in health care," the authors write, "and suggests that eliminating cost-sharing for secondary prevention after myocardial

Report/Study	Background	Summary of Findings / Key Observations
	<p>had been discharged from the hospital after heart attack into two groups: (1) those with no co-pays for routinely prescribed drugs, such as statins, angiotensin-converting enzyme (ACE) inhibitors, and beta blockers (i.e., the full-coverage group) and (2) those with traditional RX benefits that require co-pays (i.e., the usual-coverage group).</p> <ul style="list-style-type: none"> - The researchers compared rates of medication adherence, health outcomes, and health spending for the two groups. 	<p>infarction may be cost-effective.”</p> <ul style="list-style-type: none"> - Still, overall adherence rates in the study remained low. <ul style="list-style-type: none"> ➤ Even in the full-coverage group, less than half of patients were fully adherent with their prescribed therapies. ➤ Interventions to address other factors that contribute to non-adherence -- such as education about prescriptions, attitudes, and the complexity of prescribed regimens --are likely necessary. <ul style="list-style-type: none"> • In conclusion, eliminating co-pays for evidence-based medications can improve adherence to treatment, decrease patient spending without increasing overall health costs, and improve health outcomes.
<p>Health Affairs (November 2011)</p> <p>Shah, Nilay D.; Naessens, James M.; et. al., “Mayo Clinic Employees Responded to New Requirements for Cost Sharing By Reducing Possibly Unneeded Health Services Use,” available at http://content.healthaffairs.org/content/30/11/2134.abstract</p>	<p>In 2004, Mayo Clinic’s self-funded health plan increased cost-sharing for specialty care visits (adding a \$25 co-pay to the high-premium option) and other services such as imaging, testing, and outpatient procedures (adding 10% or 20% coinsurance, depending on the plan option).</p> <ul style="list-style-type: none"> - It also removed all cost-sharing for primary care visits and for certain preventive services (e.g., colorectal screenings and mammography). <p>This article evaluates the long-term effects of Mayo Clinic’s benefit change on the use of physician and ancillary services, including imaging and testing.</p> <p>The population evaluated included employees and dependents who were</p>	<ul style="list-style-type: none"> • The result of Mayo Clinic’s benefit change was large decreases in the use of diagnostic testing and outpatient procedures that were sustained for four years, and an immediate decrease in the use of imaging that later rebounded (possibly to levels below the expected trend). Beneficiaries decreased visits to specialists but did not make greater use of primary care services. • The results of this study have three main implications: <ol style="list-style-type: none"> 1. A modest amount of cost-sharing had a sustained effect on use. 2. There was no effect on primary care. 3. There was no adverse affect on preventive services. • It is important to note that part of Mayo Clinic’s success in managing utilization was the communication of benefit changes to providers working in an integrated, multispecialty group practice. This may have affected both patients’ and providers’ decisions related to ordering services. <ul style="list-style-type: none"> - For example, with a majority of their patients affected by increased coinsurance, some primary care providers preferred watchful waiting to ordering further testing. • The continued lower utilization rates are especially interesting because this is

Report/Study	Background	Summary of Findings / Key Observations
	continuously enrolled from 2002 to 2007.	<p>a cohort study, and the entire study population has aged. Increased utilization would be anticipated in an aging population. This study has provided evidence of a sustained impact of benefit changes without adversely affecting needed services.</p> <ul style="list-style-type: none"> - The authors believe that the continued reduction in utilization was encouraged by the coordinated care delivery provided in Mayo Clinic’s multispecialty group practice. <ul style="list-style-type: none"> • The authors do note, however, that future work is needed to better evaluate the effects of such benefit changes on vulnerable subgroups such as the chronically ill, as well as on larger and more general population samples.
<p>America’s Health Insurance Plans (October 2011)</p> <p>Capps, Cory; Dranove, David; “Intended and Unintended Consequences of a Prohibition on Medigap First-Dollar Benefits,” available at http://www.protectmedigap.org/pdf/Capps%20and%20Dranove%20-%20Medigap%20cost%20sharing.pdf</p>	<p>Concerned about the solvency of Medicare in the 21st century, some policymakers are now suggesting that Medigap insurance should be prohibited from providing first-dollar coverage benefits.</p> <p>The authors reviewed recent research on the effects of higher cost-sharing on vulnerable subpopulations to determine whether the findings of the 1984 RAND HIE still apply and to evaluate the likely effects of a ban on first-dollar Medigap benefits.</p>	<ul style="list-style-type: none"> • The authors outline the important reasons to that RAND study does not suggest that eliminating the option of first dollar coverage in Medigap will significantly reduce healthcare costs and not lead to adverse health outcomes: <ul style="list-style-type: none"> - Most significantly, the RAND study only examined the effects of lower cost-sharing on the under-65 population, but the proposed ban would affect the Medicare-eligible population, which—as noted above—generally has lower incomes and higher rates of chronic conditions. - The RAND study itself, as well as subsequent research, suggest that for vulnerable populations, such as many Medigap beneficiaries, any reductions in expenditures (e.g., from fewer physician visits) are offset, at least in part, by subsequent expenditures for care that would otherwise have been unnecessary (e.g., hospital visits to address the same, but more severe, issue). - Further the RAND HIE was conducted in an environment of indemnity health insurance, meaning that reimbursement was relatively generous and there were few other controls on utilization. In contrast, the current proposals would be coupled with other cost containment efforts. Interactions between increased cost-sharing and other policy changes are not well studied and might result in adverse unanticipated consequences.

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> • The authors’ conclusions are informed by their review and discussion of research (subsequent to the RAND HIE) on the effects of higher cost-sharing. Based on this subsequent research, the authors found that an across-the-board prohibition on first-dollar Medigap coverage might achieve some aggregate cost savings, but those savings would likely be less than anticipated, because spending would likely increase for some Medigap enrollees: <ul style="list-style-type: none"> – Increased cost-sharing reduces <i>both</i> necessary and unnecessary care. Forgoing necessary services today would result in higher acuity and more expensive services tomorrow. – In the case of vulnerable subpopulations, such as the chronically ill, dual eligible enrollees, and low-income seniors, research shows that the offsets can exceed the savings, meaning that higher cost-sharing can cause aggregate spending to increase even as health outcomes worsen. – Moreover, to the extent that a ban on first-dollar Medigap benefits is implemented at the same time as other new cost containment efforts, the scope for realizing aggregate savings from the ban would again be reduced. • The authors concluded that, particularly in comparison to more refined or targeted approaches, an across-the-board ban on first-dollar coverage Medigap plans is an overly blunt tool for lowering healthcare expenditures and invites adverse, unintended consequences particularly for vulnerable subpopulations.
<p>National Association of Insurance Commissioners (NAIC) (October 2011)</p> <p>NAIC Medigap PPACA (B) Subgroup, “Medicare Supplement Insurance First Dollar Coverage and Cost</p>	<p>As Congress began looking at changes to Medicare and Medigap (as part of proposals for deficit reduction), the NAIC Medigap PPACA (B) Subgroup was given an expanded charge to develop this discussion paper for policymakers.</p> <p>The goal of this paper is to promote the critical policy recommendation that any</p>	<ul style="list-style-type: none"> • The Subgroup found that proposals being considered by Congress and the Administration fail to consider the following three key points: <ol style="list-style-type: none"> 1. In response to increased costs, beneficiaries may avoid necessary services in the short term that may result in worsening health and a need for more intensive care and higher costs to the Medicare program in the long term. 2. Research indicates that once beneficiaries seek care, doctors and other medical providers, not patients, generally drive the number and types of services delivered to beneficiaries.

Report/Study	Background	Summary of Findings / Key Observations
<p>Shares,” available at http://www.naic.org/documents/committees_b_senior_issues_111101_medigap_first_dollar_coverage_discussion_paper.pdf</p>	<p>changes to Medigap should be considered in the broader context of changes to Medicare.</p>	<p>3. The proposals do not address the fact that Medicare determines which services are reimbursed and therefore, by law, covered by Medigap insurance policies.</p> <ul style="list-style-type: none"> • Policymakers should examine ways to ensure that the Medicare program is incentivizing and paying for appropriate care and not focus solely on discouraging the use of all care by increased cost-sharing. To the end, the Subgroup recommends the following: <ol style="list-style-type: none"> 1. The underlying data and assumptions used in formulating Medigap alternatives must be made public so that they can be reviewed by all to ensure a transparent and thorough debate about the proposals. 2. Any potential changes in Medigap benefits should be carefully tailored and only applied prospectively. 3. In considering benefit changes, attention should focus on the potential adverse impact on vulnerable Medicare beneficiaries (especially those in rural areas and/or with low-income). 4. The improper utilization of Medicare covered services should be addressed by reviewing, adjusting and implementing the program’s policies and procedures that determine whether a service is covered. 5. The existing process for developing/implementing changes to Medigap benefit design with input from all parties with knowledge and experience of Medicare and Medigap insurance must continue.
<p>Health Affairs (September 2011)</p> <p>Cassidy, Amanda, et. al., “Health Policy Brief: Putting Limits on Medigap,” available at http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_51.pdf</p>	<p>Studies have found that Medicare enrollees who have Medigap or other supplemental insurance policies that provide first-dollar coverage use more medical services than do those enrolled in traditional Medicare alone.</p> <p>This brief explains how Medigap works and explores the arguments for and against changing its coverage options.</p>	<ul style="list-style-type: none"> • Policymakers and economists who support limiting supplemental coverage believe such a change would lead to less use of health care services and lower overall Medicare spending, thereby helping to reduce federal budget deficits. Specifically the goal is to deter Medicare spending that is of limited value, even though it meets the program’s standards for being considered “medically necessary.” • Critics of limits on Medigap maintain that factors such as advances in medical technology, the rising prevalence of chronic conditions, and increased medical need constitute far bigger drivers of increased use of medical services than any incentives provided by first-dollar coverage.

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> - Critics also contend such a change would hurt vulnerable Medicare beneficiaries, for example, an analysis by the Kaiser Family Foundation found that higher out-of-pocket spending would disproportionately impact those with more modest incomes and those in relatively poor health. - Some critics believe that the effect of limiting Medigap’s first-dollar coverage could drive down some costs in the short term in Part B but increase costs over the long term in Part A as beneficiaries forgo needed outpatient care resulting in more costly inpatient care. <ul style="list-style-type: none"> • In conclusion, policy makers will have to continue to engage in a juggling act—balancing the desire to provide good benefits under Medicare with the desire to rein in federal spending on the program. Whatever they decide, it’s a reasonable bet that any changes they adopt will affect Medigap coverage in some way.
<p>PLoS Medicine, Vol. 8, Issue 8 (August 2011)</p> <p>Polinski, Jennifer, M., et. al. “Changes in Drug Utilization during a Gap in Insurance Coverage: An Examination of the Medicare Part D Coverage Gap,” available at http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001075</p>	<p>The researchers examine the impact of entering the coverage gap on drug discontinuation, switching to another drug for the same indication, and drug adherence (whether patients take their prescribed drugs regularly).</p> <p>The target population for this study is Medicare beneficiaries.</p>	<ul style="list-style-type: none"> • In a drug-level analysis, exposed beneficiaries were twice as likely to discontinue a drug and slightly more likely to have reduced drug adherence than unexposed beneficiaries but 40% less likely to switch a drug after reaching the threshold. <ul style="list-style-type: none"> - Similar results were obtained in a beneficiary-level analysis in which discontinuation, switching, and adherence rates were considered in terms of the complete drug regimen of individual beneficiaries. • These findings show that, among the Medicare beneficiaries investigated, a lack of financial assistance to pay for drugs after reaching the coverage gap spending threshold led to a doubling in the rate of drug discontinuation and a slight reduction in drug adherence. <ul style="list-style-type: none"> - Surprisingly, lack of financial assistance resulted in a decrease in drug switching even though CMS advised patients to consider switching to generic or low-cost drugs. - Importantly, the researchers estimate that, for the whole Medicare population, the lack of financial assistance to pay for drugs could result in an additional 18,000 patients discontinuing one or more drugs per

Report/Study	Background	Summary of Findings / Key Observations
		<p>year.</p> <ul style="list-style-type: none"> Although this study did not directly investigate the effect of the coverage gap on patient outcomes, these findings suggest that this and other blunt cost-containment approaches could adversely affect health outcomes through their effects on drug utilization. Thus, insurance strategies that specifically promote the use of drugs with high benefit but low-cost might be a better approach for governments seeking to improve the health of their citizens while reigning in drug costs.
<p>Kaiser Health News (August 2011)</p> <p>Vladeck, Bruce, PhD., “Proposals to Forbid First-Dollar Coverage for Medicare Beneficiaries,” available at http://www.kaiserhealthnews.org/Columns/2011/August/differe-ent-takes-080111-vladeck.aspx</p>	<p>The author of this column provides perspective on issue of first-dollar coverage for the target population of Medicare beneficiaries.</p>	<ul style="list-style-type: none"> Insured Americans already have the highest out-of-pocket liabilities in the developed world, and use fewer services initiated by consumers. In the absence of supplemental coverage, Medicare beneficiaries would have still higher out-of-pocket liabilities than other insured Americans. While overuse of some services in some communities is inarguably a part of the Medicare cost problem, there is no compelling evidence that consumer-generated demand is a significant part of the problem. During the past decade, Congress has eliminated cost-sharing for most Medicare preventive services in response to concerns about the underuse of such services, and because of evidence that out-of-pocket costs were a significant deterrent, especially for less affluent and minority beneficiaries. While the evidence has been clear since the RAND experiments that out-of-pocket costs reduce health care use, it's also been clear that their effect is inversely related to disposable income: the less income a person has, the greater the effect of copayments and deductibles, not to mention the greater likelihood of poor health. <ul style="list-style-type: none"> For this reason, Medicaid historically forbade deductibles, and now permits them at only nominal levels. The growth in out-of-pocket costs for health care consumers during the last decade has provided an abundance of illustrations that consumers deterred

Report/Study	Background	Summary of Findings / Key Observations
		<p>from seeking health care for economic reasons are just as likely to forego needed services as "discretionary" ones, and that this phenomenon is further correlated with income.</p> <ul style="list-style-type: none"> Proposals to forbid first-dollar coverage for Medicare beneficiaries would have seriously adverse consequences for the sickest and most needy Medicare beneficiaries. A more rational approach to concerns about unnecessary or inappropriate use of specific services would be to refuse payment for those services.
<p>Kaiser Family Foundation (July 2011)</p> <p>Merlis, Mark, "Medigap Reforms – Potential Effects of Benefit Restrictions on Medicare Spending and Beneficiary Costs," available at http://www.kff.org/medicare/upload/8208.pdf</p>	<p>This brief examines the potential effects of three different Medigap reform proposals on Medicare program spending and on beneficiaries' out-of-pocket (OOP) costs.</p> <ul style="list-style-type: none"> Option 1: Enrollees pay first \$550 in cost sharing for covered A/B services and 50% of additional required cost sharing up to \$3,025 OOP limit. Option 2: Enrollees pay 25% of Part A and 100% of Part B deductibles; 25% of required cost sharing up to \$2,070 OOP limit. Option 3: Enrollees pay Part B deductible; copayments for physician visits and emergency room visits. <p>The target population for this brief was Medicare beneficiaries with Medigap coverage.</p> <p>Data used in the modeling are derived from the 2006 Medical Expenditure Panel Survey (MEPS).</p>	<ul style="list-style-type: none"> Each of the three Medigap reform options would be expected to achieve Medicare savings – primarily by inducing Medigap enrollees to curtail their use of Medicare-covered services, which in turn reduces federal Medicare spending. <ul style="list-style-type: none"> The first option is estimated to reduce Medicare spending for Medigap enrollees by 7 percent or \$4.6 billion dollars in fiscal 2011, reducing by 0.9 percent total spending for Medicare benefit payments under Parts A and B. The second option would save about half that amount, because of its lower annual deductible and the lower limit on out-of-pocket spending. The third option achieves smaller savings than the other two; it might deter some enrollees from initiating care, but would have little effect on use of services once care began. Under all three options, most Medigap enrollees could see their direct costs rise as their Medigap policies become less generous, imposing higher deductibles and cost-sharing requirements. However, as enrollees' costs increase, Medigap insurers' claims costs would drop, and insurers would be likely to reduce premiums. <ul style="list-style-type: none"> If premium reductions were fully proportionate to the drop in expenses, the savings for the <i>average</i> beneficiary would more than offset his or her new direct outlays for Medicare cost sharing. All three options would have a disproportionately negative impact on enrollees in relatively poor health and those with any inpatient hospital

Report/Study	Background	Summary of Findings / Key Observations
		<p>utilization. Beneficiaries reporting fair or poor health would experience an increase in total out-of-pocket costs, because their premium savings would not be enough to offset their new spending for direct cost-sharing.</p> <ul style="list-style-type: none"> • Similarly, a greater share of Medigap enrollees with incomes below 300 percent of the federal poverty level than of those with higher incomes would experience an increase in out-of-pocket spending. • Moreover, the savings that could accrue to Medicare, and some of the net savings for Medigap enrollees, would result from reductions in medical service utilization. There is no way of ensuring that enrollees who might reduce their utilization would forgo only services of questionable value. • Changes in Medigap plan designs should be considered in the context of a broader reevaluation of the structure of Medicare benefits and a possible realignment of overall financial incentives for both providers and beneficiaries.
<p>Health Affairs Blog (June 2011)</p> <p>Mendelson, Dan, “Establishing Sensible Cost-Sharing for Medicare Cancer Patients,” available at http://healthaffairs.org/blog/2011/06/24/establishing-sensible-cost-sharing-for-medicare-cancer-patients/print</p>	<p>The authors review a recent Avalere Health study with the objective was to assess the effects of cost-sharing on the abandonment of medications used to treat oral cancer.</p> <p>The target population for the study was commercially-insured and Medicare patients who required oral therapy for cancer.</p>	<ul style="list-style-type: none"> • The analysis showed that 25 percent of patients who face a cost share of greater than \$500 abandoned their oral cancer therapy. <ul style="list-style-type: none"> – This is in contrast to an abandonment rate of 6 percent for patients with cost-sharing of less than \$100, making cost a dominant factor in predicting abandonment. • The role of cost-sharing should be to deter unnecessary utilization, not to serve as de-facto discrimination against patients with serious illness.
<p>Kaiser Family Foundation (June 2011)</p>	<p>This data brief examines the financial burden of out-of-pocket health expenses among Medicare beneficiaries and the</p>	<ul style="list-style-type: none"> • With incomes rising more slowly than health care costs, out-of-pocket health spending is consuming an increasing share of Medicare beneficiaries’ income, despite the important coverage provided by Medicare and

Report/Study	Background	Summary of Findings / Key Observations
<p>Neuman, Tricia; Cubanski, Juliette, et. al.; “How Much ‘Skin in the Game’ is Enough: The Financial Burden of Health Spending for People on Medicare,” available at http://www.kff.org/medicare/upload/8170.pdf</p>	<p>characteristics of beneficiaries with the greatest financial burden relative to their income.</p> <p>The findings are based on an analysis of the Medicare Current Beneficiary Survey (MCBS) Cost and Use Files, 1997-2006.</p>	<p>supplemental insurance, and the Medicare Part D RX benefit.</p> <ul style="list-style-type: none"> - Median out-of-pocket health spending as a share of income increased from 12% in 1997 to 16% in 2006. It is projected to exceed 25% in 2020. <ul style="list-style-type: none"> • Seniors consistently spend a larger share of their income on health care than younger people. <ul style="list-style-type: none"> - In 2006, Medicare beneficiaries collectively spent \$191 billion out of pocket for their medical, long-term care, and premium expenses. - Average out-of-pocket health expenses per beneficiary totaled \$4,241 in 2006. - Premiums comprised the largest share (40%) of beneficiaries’ total out-of-pocket spending. One-fourth of out-of-pocket spending was for benefits and services for which Medicare generally provides minimal coverage: long-term care (19%) and dental services (6%). - In 2006, Medicare began providing coverage for prescription drugs. In the first year of the drug benefit, prescription drugs accounted for 12% of out-of-pocket spending, slightly less than the share of total out-of-pocket spending accounted for by RX drugs in 2005 (14%). • As health costs continue to rise, average out-of-pocket costs do so as well, requiring people on Medicare to put even more “skin in the game” to pay for their health expenses. The financial burden of out-of-pocket health spending is much larger for some segments of the Medicare population, including: (a) beneficiaries ages 85 and older, (b) those in relatively poor health, (c) those with incomes below 200% of poverty, and (d) those with Medigap policies. <ul style="list-style-type: none"> - One in 4 Medicare beneficiaries spent 30% or more of their income on health expenses in 2006; 1 in 10 beneficiaries spent more than half their income on health expenses. - Nearly 7 in 10 Medicare beneficiaries spent more than 10% of their income on premiums and other health expenses in 2006; 4 in 10 spent more than 10% of their income on premiums alone. - The median spending burden among beneficiaries with Medigap policies was 25.1%, higher than all other beneficiaries, including those with Medicaid (9%), employer coverage (14.8%), Medicare Advantage (15%), or no supplemental coverage (16.9%).

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> • In conclusion, as policymakers consider options to rein in federal spending, including proposals that would increase costs for some or all people on Medicare, this analysis raises important questions about how much – and how much more – of their incomes Medicare beneficiaries can reasonably be expected to spend on their health care.
<p>Journal of Economic Perspectives, Vol. 25, No. 2 (Spring 2011)</p> <p>Baicker, Katherine, Goldman, Dana, “Patient Cost-Sharing and Healthcare Spending Growth.” pp 47 – 68, available at http://www.aeaweb.org/article.s.php?doi=10.1257/jep.25.2.47</p>	<p>The authors evaluate the effect of demand-side cost-sharing on healthcare spending.</p> <p>The report reviews a broad range of existing studies regarding the effects of cost-sharing for this paper which included studies focused on:</p> <ul style="list-style-type: none"> • the under 65 population, • the over 65 population, and • the retired public employees in California. <p>In addition, it also analyzes the impact of cost-sharing for pharmacy benefits.</p>	<ul style="list-style-type: none"> • Evidence suggests that while patients do indeed respond to financial incentives, cost-sharing does not uniformly improve value; rather, cost-sharing provisions must be deliberately structured and targeted to reduce care of low marginal value. <ul style="list-style-type: none"> – Cost-sharing is a blunt tool as currently deployed in most health insurance plans. – Deploying demand-side cost-sharing in a more sophisticated way holds some promise both to slow the growth of healthcare spending and to increase the health that spending buys. – Value-based insurance design is one such approach. The idea is to set up guidelines that would reduce copayments for patients who are most likely to benefit from a service, as determined using available clinical evidence. Patients for whom the therapeutic benefit is modest—or the evidence is mixed—would face higher cost-sharing. Optimal copayment structures would take own-price and cross-price elasticities into account. If raising copayments for a drug would reduce pharmaceutical use but increase hospital use, an insurer covering both of those services should set copayments accordingly. • Other mechanisms may be helpful in targeting particular populations or types of utilization. <ul style="list-style-type: none"> – First, considerable research needs to be done on what guidelines should be used to classify patients and to set the level of copayments or deductibles; in particular, it would help to look at a variety of contexts other than pharmaceuticals used for treatment of chronic conditions. Identifying high- and low-risk patients across a wide array of clinical conditions can be expensive and at times imprecise.

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> - Second, any party offering value-based insurance design must be concerned about risk segmentation. For example, a health plan that provides outstanding treatment for heart disease or heart attacks, and that makes this expertise widely known, could find itself at a competitive disadvantage because it would tend to attract a population with severe heart disease. • The spillover effects between privately insured and publicly insured populations as well as market imperfections suggest a potential role for public policy in promoting insurance design that slows spending growth while increasing the health that each dollar buys. <ul style="list-style-type: none"> - The federal government has an important policy lever in its role as employer: with about eight million covered lives in the Federal Employee Health Benefit Plan, there is an opportunity to implement more sophisticated insurance design. - On the private insurance side, there may be regulatory barriers to adjusting copayments in the ways the value-based insurance design literature suggests. In addition, the short-term nature of annual private health insurance contracts leads to underprovision of coverage of those services that save money in the long-run.
<p>Center for Medicare Advocacy, Inc. (April 2011)</p> <p>Gottlich, Vicki; Ruiz, Xenia, "The Burden of Out-of-Pocket Costs on Medicare Beneficiaries," available at http://www.medicareadvocacy.org/2011/02/the-burden-of-out-of-pocket-costs-on-medicare-beneficiaries/</p>	<p>The authors review existing studies regarding Medicare beneficiary health care spending and the effect of cost-sharing on this population.</p>	<ul style="list-style-type: none"> • Increases in cost-sharing and out-of-pocket spending place a heavy burden on beneficiaries and have great implications for their health and daily living. • Though some policy makers contend that requiring Medicare beneficiaries to pay more out-of-pocket for their health care makes them better health care consumers and reduces "unnecessary" care, studies conducted over the past decade show that increased cost-sharing in fact often has serious adverse effects on beneficiaries. • Proposals to further shift the burden of costs for health care to beneficiaries who are already reeling from the economic downturn and other rising costs are short-sighted, risk the health and wellness of Medicare beneficiaries, and place a further financial burden on them and their families. Strengthening

Report/Study	Background	Summary of Findings / Key Observations
		<p>the traditional Medicare program through other cost-saving approaches while avoiding further cost-shifting to beneficiaries is key to ensuring that Medicare remains accessible and reliable for future generations.</p>
<p>The American Journal of Managed Care, Vol. 17, No. 3 (March 2011)</p> <p>Buntin, Melinda Beeuwkes, Haviland, Ameila M., et. al., “Healthcare Spending and Preventive Care in High-Deductible and Consumer-Directed Health Plans,” available at http://www.rand.org/pubs/external_publications/EP20110048.html</p>	<p>A team led by RAND Health researcher Amelia Haviland conducted the largest assessment of high-deductible health plans (HDHPs) and consumer-directed health plans (CDHPs) to date.</p> <p>The report compares spending patterns and the use of preventive care by HDHP/CDHP enrollees with those of employees from firms offering only traditional plans.</p>	<ul style="list-style-type: none"> • Health spending for families with a deductible of \$500 per person or more dropped an average of 14 percent when compared with similar families in traditional health plans. <ul style="list-style-type: none"> – However, cost savings were significant only for enrollees in plans with a deductible of at least \$1,000 per person. – Cost savings in these high-deductible plans held, even when employers made moderate account contributions to help offset the additional costs associated with a \$1,000 deductible plan. • As families reduced medical spending, they also eliminated some beneficial care. <ul style="list-style-type: none"> – Childhood vaccination rates dropped among families in high-deductible plans, while at the same time they increased among families in traditional health plans. – Rates of mammography, cervical cancer screening, and colorectal cancer screening also fell among those with high-deductible health plans relative to those in traditional plans. – The drop in preventive care occurred even though high-deductible plans waive the deductible for such care. • Overall, the team’s findings show that in the first year of enrollment, high-deductible plans significantly reduce health care spending but also lead consumers to cut back on their use of preventive health care. <ul style="list-style-type: none"> – These findings suggest that policymakers may wish to explore additional ways to promote preventive service use. The federal Patient Protection and Affordable Care Act, enacted in 2010, requires health plans to waive deductibles for preventive treatments. This fact needs to be clearly communicated so that Americans increase their use of preventive care.

Report/Study	Background	Summary of Findings / Key Observations
<p>California Health Advocates (March 2011)</p> <p>Burns, Bonnie, “Medicare Costs and People with Supplemental Coverage,” available at http://www.cahealthadvocates.org/advocacy/2011/medicare-costs.html</p>	<p>The author examines the history of cost sharing in the Medigap program and reviews existing studies regarding the effects of cost-sharing on Medicare beneficiaries with supplemental coverage.</p>	<ul style="list-style-type: none"> • While studies may show higher use of medical benefits for people with supplementary coverage, there has not been much research into why that may be the case. Nor have any studies been done to determine if the greater use of Medicare covered services produces better long term outcomes, or whether the services were worth the extra cost or not. Without that data it is hard to argue that supplementary coverage in general, and Medigap policies in particular, drive demand for unnecessary medical services. • One reason Medicare costs may be higher for this group is that people with supplementary benefits may feel protected enough to get care early and therefore have better health outcomes as a result. Another is that people who buy a Medigap policy may anticipate future health conditions based on their knowledge of their family histories or their own physical problems and investigate symptoms earlier than they might do otherwise, or take greater advantage of preventive care services. However, just because beneficiaries with supplemental coverage use more services should not inevitably lead to a conclusion that their care was unnecessary.
<p>The Bureau of National Affairs (BNA) Health Insurance Report (February 2011)</p> <p>Schiffbauer, William G., Esq., “Medigap Insurance and the Fiscal Commission’s Fantastical First Dollar Coverage Folly,” <i>link unavailable</i></p>	<p>The author examines existing studies regarding the impact of increased cost-sharing for Medicare beneficiaries.</p>	<ul style="list-style-type: none"> • There is no proven causal relationship between Medigap coverage and Medicare use, or the “unnecessary” nature of the medical services utilized. • By its contract terms, Medigap insurance only pays benefits for Medicare-eligible expenses deemed medically necessary. As a result, the restriction of Medigap coverage would reduce the use of services for seniors that have been determined to be “medically necessary” by Medicare itself. • If Medicare beneficiaries forgo needed health services, there may be a short-term reduction in Medicare spending but a long-term increase if beneficiaries must be treated later for an otherwise avoidable or more serious illness.
<p>Robert Wood Johnson</p>	<p>This brief examines how cost-sharing</p>	<ul style="list-style-type: none"> • Cost-sharing may not be an effective tool to reduce the rate of growth of

Report/Study	Background	Summary of Findings / Key Observations
<p>Foundation Research Synthesis Report No. 20 (December 2010)</p> <p>Swartz, Katherine, Ph.D., “Cost-Sharing: Effects on Spending and Outcomes,” available at http://www.rwjf.org/pr/product.jsp?id=71583#</p>	<p>affects the use of services, whether some patients are more sensitive to cost-sharing than others, and whether reduced use of services as a result of cost-sharing has an effect on health outcomes.</p> <p>The authors examine existing studies regarding the impact of increased cost-sharing on healthcare spending for:</p> <ul style="list-style-type: none"> • the under 65 population, • the over 65 population, • the poor and elderly population, • low-income adult Medicaid beneficiaries, and • Oregon Health Plan members. <p>In addition, the authors review studies regarding the impact of cost-sharing for pharmacy benefits.</p>	<p>health care costs. Most people are healthy and reductions in their service use likely would only modestly affect total spending.</p> <ul style="list-style-type: none"> • Patients do not accurately discriminate between essential and nonessential services when responding to changes in cost-sharing. Although patients reduced the inappropriate use of emergency department services when cost-sharing was increased, they also reduced the use of preventive care and essential drugs. • Cost-sharing increases are associated with adverse outcomes for vulnerable populations. Elderly, chronically ill, and welfare patients had increased expenditures for emergency department visits and hospitalizations when cost-sharing for prescription drugs was increased.
<p>AHIP Center for Policy and Research (December 2010)</p> <p>“Low-Income and Rural Medigap Beneficiaries, 2008” available at http://www.ahipresearch.org/pdfs/MedigapLowIncomeRuralReport2010.pdf</p>	<p>This purpose of this study was two-fold:</p> <ol style="list-style-type: none"> 1. describe the characteristics of Medicare beneficiaries with Medigap supplemental coverage; and 2. compare Medigap policyholders’ characteristics to those of Medicare beneficiaries with other types of supplemental coverage or no supplemental coverage. <p>Data for this study came from the 2008 CMS Medicare Current Beneficiary Survey (MCBS) Access to Care files.</p>	<ul style="list-style-type: none"> • Thirty-one (31) percent of Medigap policyholders resided in rural areas in 2008; by comparison, only 24 percent of all Medicare beneficiaries resided in rural areas. • Nearly two-thirds (62 percent) of rural Medigap policyholders and 54 percent of all Medigap policyholders had incomes below \$30,000. • The most common income range for Medigap policyholders was \$10,000 to \$20,000. <ul style="list-style-type: none"> – 26 percent of Medigap policyholders overall had incomes within this range. – 29 percent of Medigap policyholders living in rural areas had incomes within this range.

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> • The second most common income range for Medigap policyholders was \$20,000 to \$30,000. <ul style="list-style-type: none"> - 21 percent of Medigap policyholders overall had incomes in this range. - 26 percent of Medigap policyholders living in rural areas had incomes within this range. • The Medigap Plan F is the most popular policy, accounting for 50 percent of all policy types, followed by Plan C, at 14 percent. Both policy types covered nearly all of Medicare’s deductibles and coinsurance.
<p>AHIP Center for Policy and Research (September 2010)</p> <p>“Characteristics of Medigap Policies, 2009” available at http://www.ahipresearch.org/pdfs/Medigap2009.pdf</p>	<p>This paper presents findings from an analysis on enrollment trends in Medicare supplement (Medigap) insurance coverage, using year-end data for 2009 from the NAIC.</p>	<ul style="list-style-type: none"> • In December 2009, most Medicare beneficiaries with standard Medigap plans purchased Plan F (45 percent). Plan C, the second most popular plan, had 17 percent of the Medigap standard plan market. Plans F and C cover 100 percent of the deductibles and coinsurance charged by Medicare. • Standard plans, which were introduced in the Omnibus Budget Reconciliation Act of 1990 (OBRA 1990), accounted for over 90 percent of Medigap purchasers in 2009. • Up to now, only one percent of Medigap policyholders have purchased the new standard Plans K or L, which became available in 2006. These plans have lower premiums than Plans A through J and higher out-of-pocket costs, but with annual out-of-pocket limits. Plans A through J do not have annual out-of-pocket limits.
<p>American Economic Review, Vol. 100, No. 1 (March 2010)</p> <p>Chandra, Amitabh, Gruber, and McKnight, “Patient Cost-Sharing and Hospitalization Offsets in the Elderly,” (March</p>	<p>The authors provide new evidence on the issues related to using demand-side approaches to constrain the growth of Medicare spending by studying a policy change that raised patient cost-sharing for the California Public Employees Retirement System (CalPERS) in 2001.</p>	<ul style="list-style-type: none"> • Physician office visits and prescription drug utilization are modestly price sensitive among the elderly, with implied arc-elasticities that are similar to those found in the HIE for the nonelderly. • Unlike the HIE, this study found significant "offset" effects in terms of increased hospital utilization in response to the combination of higher copayments for physicians and prescription drugs. These offset effects are

Report/Study	Background	Summary of Findings / Key Observations
<p>2010), pp 193–213, available at http://www.aeaweb.org/article.s.php?doi=10.1257/aer.100.1.193</p>	<ul style="list-style-type: none"> Importantly, these changes occurred not just for active employees, but for retirees receiving supplemental insurance through the plans as well. <p>This study examines the impact of increased cost-sharing for members of the California Public Employees Retirement System (CalPERS).</p>	<p>concentrated in patients with a chronic disease, suggesting that, for chronically ill populations, there is little financial gain from higher copayments.</p> <ul style="list-style-type: none"> Additionally, any savings from increased cost-sharing accrue mostly to the supplemental insurer, while the costs of increased hospitalization accrue mostly to Medicare. The findings of this study suggest that optimal insurance would be tied to underlying health status, with chronically ill patients facing lower cost-sharing.
<p>The New England Journal of Medicine, Vol. 362, No. 4 (January 2010)</p> <p>Trivedi, Amal N., Mooloo, Husein, M.P.H., et. al., “Increased Ambulatory Care Copayments and Hospitalizations Among the Elderly,” pp 320 – 328, available at http://www.nejm.org/doi/full/10.1056/NEJMsa0904533</p>	<p>Economic theory and empirical evidence suggest that patients will use fewer health services when they have to pay more for them.</p> <ul style="list-style-type: none"> However, there have been remarkably few studies of the consequences of increasing copayments for ambulatory care, and even these studies have been limited because they have excluded elderly patients. <p>This study examines the effect of increasing copays for ambulatory care on the use of acute care in the hospital among a large, nationally representative cohort of elderly Medicare enrollees in managed-care plans.</p>	<ul style="list-style-type: none"> Raising cost-sharing for ambulatory care among elderly patients may have adverse health consequences and may increase total spending on health care. In the year after the rise in copayments, plans that increased cost-sharing had (as compared with concurrent trends in control plans, whose co-pays remained unchanged): <ul style="list-style-type: none"> 19.8 fewer annual outpatient visits per 100 enrollees, 2.2 additional annual hospital admissions per 100 enrollees, 13.4 more annual inpatient days per 100 enrollees, and an increase of 0.7 percentage points in the proportion of enrollees who were hospitalized. The effects of increases in copayments for ambulatory care were magnified among enrollees living in areas of lower income and education and among enrollees who had hypertension, diabetes, or a history of myocardial infarction.
<p>Direct Research LLC / MedPAC (June 2009)</p>	<p>This research was undertaken at the request of the MedPAC with two main</p>	<ul style="list-style-type: none"> The results of this research show that secondary insurance has a substantial impact on Medicare spending, consistent with the prior literature in this area.

Report/Study	Background	Summary of Findings / Key Observations
<p>Hogan, Christopher, “Exploring the Effects of Secondary Coverage on Medicare Spending for the Elderly,” available at http://www.medpac.gov/documents/Jun09_SecondaryInsurance_CONTRACTOR_RS_REVISI SED.pdf</p>	<p>tasks:</p> <ol style="list-style-type: none"> 1) First, to examine a recent reanalysis that showed a much smaller impact of secondary insurance on health care spending; and 2) second, to look closely at which services appear most strongly affected by out-of-pocket spending, as well as whether the impact of insurance differs by beneficiary characteristics such as income and health status. <p>The main source of data is the CMS Medicare Current Beneficiary Survey (MCBS) cost and use files, pooling the years 2003 to 2005.</p> <p>The analysis consists of a series of contrasts between the elderly fee-for-service beneficiary population with private secondary insurance and those with no secondary insurance.</p>	<ul style="list-style-type: none"> - After removing beneficiaries with any Veterans Affairs (VA) use and adjusting for differences in health status, income, education, and demographics, individuals with Medigap coverage had Medicare costs 33 percent higher than those with no secondary insurance. Other private secondary insurance was associated with smaller increases in spending. - Essentially all of the additional spending by those with secondary insurance came from beneficiaries with first-dollar or nearly-first-dollar coverage. - There was no statistically significant difference in Part A spending, but a large and statistically significant increase in Part B spending. <ul style="list-style-type: none"> • The treatment of VA coverage made little difference in this study’s estimates of the impact of secondary insurance. • It is not possible to use observational (non-experimental) data to prove <i>beyond a doubt</i> that a causal relationship exists between secondary insurance and spending. For several reasons, however, this analysis strongly suggests secondary insurance (reduced out-of-pocket costs) genuinely <i>causes</i> higher spending, and is not merely <i>associated with</i> secondary insurance due to some other factors affecting both insurance demand and health care use. The following factors suggest that this is a causal relationship. <ul style="list-style-type: none"> - First, beneficiaries themselves report that out-of-pocket costs are a significant reason for delaying care. Nearly 20 percent of beneficiaries without secondary insurance reporting delaying care due to concerns over cost, versus 5 percent of beneficiaries with private secondary insurance. Thus, survey data provide direct evidence that out-of-pocket cost is a mechanism by which secondary insurance increases demand for care. • This analysis does not address whether the increased spending is desirable or undesirable, or whether reduced spending leads to poorer outcomes. That question -- whether the value of additional care exceeds its cost -- cannot be answered from the analysis of spending data alone, if it can be answered at all.

Report/Study	Background	Summary of Findings / Key Observations
<p>The Annual Review of Public Health, Vol. 30 (April 2009)</p> <p>Remler, Dahila, K.; Greene, Jessica; “Cost-Sharing: A Blunt Instrument,” pp 293 - 311, available at http://www.annualreviews.org/doi/abs/10.1146/annurev.publhealth.29.020907.090804</p>	<p>In this review, the authors analyze the empirical evidence on cost-sharing since the mid-1980s.</p> <p>The authors focused specifically on several subgroups of the population including the chronically ill, low-income individuals, minorities, and the elderly.</p>	<ul style="list-style-type: none"> • Overall, the authors found that cost-sharing can usefully reduce low-value care, but it can also reduce valuable, cost-effective care and cause excessive financial harm. • The most strikingly favorable evidence for cost-sharing is for emergency department (ED) copayments. Strong and consistent evidence demonstrates that ED copayments up to \$100 reduce ED visits with no resulting adverse consequences. • On the other hand, cost-sharing for preventive care reduces some cost effective preventive care such as mammograms. Office visit co-pays have also reduced both high- and low-priority care. • The impact of cost-sharing differs by subgroup: <ul style="list-style-type: none"> – No evidence has shown that modest pharmaceutical copayments harm the health of basically healthy, nonelderly people, despite reducing their utilization. In contrast, pharmaceutical cost-sharing for the chronically ill reduces the use of cost-effective drugs. – Some evidence suggests that cost-sharing among the chronically ill somewhat increases subsequent hospitalizations and office visits. – The elderly may also be affected differently. Some evidence suggests that the health of even relatively healthy elderly individuals may be hurt by cost-sharing-induced reductions in care. The negative effects seem to rise with age among the elderly. – Surprisingly, evidence of cost-sharing sensitivity variation by income is mixed, but the authors cannot draw strong conclusions because of study limitations. • In conclusion, all cost-containment techniques have their drawbacks. Modest cost-sharing can be used judiciously, particularly if it is value based. However, cost-sharing should never be our only cost-containment technique. We also need techniques that are better suited to the value of care in individual circumstances.

Report/Study	Background	Summary of Findings / Key Observations
<p>The American Journal of Managed Care, Vol. 14, No. 7 (July 2008)</p> <p>Chernew, Michael E., PhD; Newhouse, Joseph P., PhD; “What Does the Rand Health Insurance Experiment Tell Us About the Impact of Patient Cost Sharing on Health Outcomes?”, pp 412 – 414, available at http://www.ajmc.com/publications/issue/2008/2008-07-vol14-n7/Jul08-3414p412-414/</p>	<p>The authors examine the results of the Rand Health Insurance Experiment (HIE) and review more current studies in an effort to analyze the impact of patient cost sharing on health status.</p> <p>The authors reviewed a broad range of existing studies, including studies focused on: the over-65 population, the under-65 population, individuals with chronic disease (with a special focus on low-income patients), and studies that focused specifically on the impact of cost sharing for pharmacy benefits.</p>	<ul style="list-style-type: none"> • It is likely, based on the results of the HIE, that the negative effects of higher cost sharing are most significant for treating chronic disease and certain preventive services. <ul style="list-style-type: none"> – Fewer effective treatments for chronic disease were available in the 1970s; thus, the adverse consequences of cost sharing may be greater now than they were in the past. – Over time diseases that were once untreatable have become chronic in nature as technology has advanced, exacerbating the negative consequences associated with higher cost sharing. • Concern should be greatest for low-income individuals. <ul style="list-style-type: none"> – The HIE itself found a few adverse health effects for low-income individuals with chronic disease. This is consistent with more recent evidence finding greater price sensitivity for important maintenance medications among low-income individuals with chronic disease. • The authors believe it is possible to reduce the adverse consequences of cost sharing by adopting the principles of value-based insurance design (VBID), which argues that copayments or cost sharing more generally should be kept low for high-value healthcare services. <ul style="list-style-type: none"> – VBID is possible in many important areas, as illustrated by disease management programs and quality improvement initiatives (including pay for performance) that have identified high-value services for appropriate patients.
<p>Health Services Research, Vol. 43, No. 2 (April 2008)</p> <p>Wallace NT, McConnell KJ, Gallia CA, Smith JA, “How Effective Are Copayments in Reducing Expenditures for Low-Income Adult Medicaid</p>	<p>The objective of this study was to determine the impact of introducing copayments on medical care use and expenditures for low-income, adult Medicaid beneficiaries in Oregon.</p> <p><i>Note: In 2003, the Oregon implemented changes to its Medicaid program, the</i></p>	<ul style="list-style-type: none"> • Total expenditures per person remained unchanged despite reductions in use. • Use and expenditures per person decreased for pharmacy but increased for inpatient and hospital outpatient services. • Ambulatory professional and emergency department use decreased, yet expenditures remained unchanged as expenditures per service user rose.

Report/Study	Background	Summary of Findings / Key Observations
Beneficiaries? Experience from the Oregon Health Plan,” pp 515 – 530, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2442363	<i>Oregon Health Plan (OHP), incorporating substantial co-pays for some of its adult beneficiaries.</i>	<ul style="list-style-type: none"> Applying co-pays under the Oregon Medicaid program shifted treatment patterns but did not provide expected savings. Policymakers should use caution in applying copayments to low-income Medicaid beneficiaries.
<p>Health Affairs / AHIP Center for Policy and Research, Vol. 27, No. 2 (March / April 2008)</p> <p>“Medigap Coverage and Medicare Spending: A Second Look,” pp 469 – 477, available at http://content.healthaffairs.org/content/27/2/469.abstract</p>	<p>The report uses detailed diagnosis data provided by three large Medigap insurers, information from the CMS Medicare Current Beneficiary Survey (MCBS), and the Medicare 5 percent sample file to reexamine the impact of Medigap coverage on Medicare spending.</p>	<ul style="list-style-type: none"> Previous studies might have overestimated the impact of Medigap coverage on Medicare costs and that past projections of potential Medicare cost savings from restrictions on Medigap coverage probably are overstated. Nearly half of the increase in Medicare spending that prior studies have reported among beneficiaries with Medigap disappeared when controlled for use of services received through the VA or at military facilities. Detailed analyses of beneficiaries’ health status based on actual diagnosis rather than on the self-reported data used in previous studies found that beneficiaries with Medigap are more likely than those with FFS-only coverage to have high-cost chronic conditions. Therefore, much of the difference in health costs between the two groups may stem from differences in health status rather than differences in insurance coverage. Ultimately, the results of this report and the CalPERS study suggest that policymakers should call into question prior assumptions about the magnitude of the impact of Medigap coverage on Medicare claims, at least absent a much more probing examination of the past research and a careful look at the new CalPERS study.
<p>National Bureau of Economic Research (NBER) Working Paper No. 13747 (January 2008)</p>	<p>The authors investigate the impact of Medicare HMO penetration on the medical care expenditures incurred by Medicare fee-for-service enrollees.</p> <ul style="list-style-type: none"> Their objective is to determine 	<ul style="list-style-type: none"> The authors found that increasing penetration leads to reduced health care spending on fee-for-service beneficiaries. In particular, a one percentage point increase in Medicare HMO penetration reduces such spending by .9 percent.

Report/Study	Background	Summary of Findings / Key Observations
<p>Chernew, Michael; DeCicca, Phillip; Town, Robert; “Managed Care and Medical Expenditures of Medicare Beneficiaries,” available at http://www.nber.org/papers/w13747</p>	<p>whether the effects of HMO penetration spill over into fee-for-service Medicare.</p> <p>The target population of the study is the Medicare beneficiary population.</p> <p>The authors used data from the annual Cost and Use files of the Medicare Current Beneficiary Survey (MCBS) for the years 1994 to 2001, inclusive.</p>	<ul style="list-style-type: none"> • Further, the authors estimated similar models for various measures of health care utilization and found penetration-induced reductions, consistent with their spending estimates. • Finally, the authors present evidence that suggests their estimated spending reductions are driven by beneficiaries who have at least one chronic condition. <ul style="list-style-type: none"> – By contrast, the authors found no evidence of a systematic relationship for beneficiaries without any reported chronic conditions.
<p>National Bureau of Economic Research (NBER) Working Paper No. 12972 (March 2007)</p> <p>Chandra, Amitabh, Gruber, Jonathan, et. al., “Patient Cost-Sharing, Hospitalization Offsets, and the Design of Optimal Health Insurance for the Elderly,” available at http://www.nber.org/papers/w12972</p>	<p>The authors examine the issues related to using demand-side approaches to constrain the growth of Medicare spending by studying a policy change that raised patient cost-sharing for the California Public Employees Retirement System (CalPERS) in 2001.</p> <ul style="list-style-type: none"> • Importantly, these changes occurred not just for active employees, but for retirees receiving supplemental insurance through the plans as well. <p>This study examined the impact of increased cost-sharing for members of the California Public Employees Retirement System (CalPERS).</p>	<ul style="list-style-type: none"> • Physician office visits and prescription drug utilization are very price sensitive; the price sensitivity appears to greatly exceed that of the famous RAND Health Insurance Experiment (HIE). • Unlike the HIE, this study found large “offset” effects in terms of increased hospital utilization in response to the combination of higher copayments for physicians and prescription drugs. These offset effects are concentrated in patients with a chronic disease. These offset effects may mitigate any costs savings from lower office visit or drug utilization. • Additionally, any savings from increased cost-sharing accrue mostly to the supplemental insurer, while the costs of increased hospitalization accrue mostly to Medicare. As a result, when supplemental insurance cost-sharing rises, the net fiscal benefits for Medicare are much smaller than previously recognized. • The findings of this study suggest that optimal insurance would be tied to underlying health status, with chronically ill patients facing lower cost-sharing.

Report/Study	Background	Summary of Findings / Key Observations
<p>Health Services Research, Vol. 41, No. 5 (October 2006)</p> <p>Hsu, John, Mary Price, Richard Brand, G. Thomas Ray, Bruce Fireman, Joseph P. Newhouse, and Joseph V. Selby, “Cost-Sharing for Emergency Care and Unfavorable Clinical Events: Findings from the Safety and Financial Ramifications of Emergency Department (ED) Copayments Study,” pp 1801 – 1820, available at http://www.ncbi.nlm.nih.gov/pubmed/16987303</p>	<p>The objective of this study was to evaluate the effect of co-pay levels on Emergency Department (ED) use and unfavorable clinical events.</p> <p>Specifically, the authors report on the impact of the ED co-pay level on ED visits, hospitalizations, ICU admissions, and deaths between 1999 and 2001 for populations with Medicare and with commercial insurance.</p>	<ul style="list-style-type: none"> • Among commercially insured subjects, ED visits decreased 12% with the \$20–35 co-pay and 23% with the \$50–100 co-pay compared with no co-pay. <ul style="list-style-type: none"> – Hospitalizations, ICU admissions, and deaths did not increase with co-pays. – Hospitalizations decreased 4% and 10% with ED co-pays of \$20–35 and \$50–100, respectively, compared with no co-pay. • Among Medicare subjects, ED visits decreased by 4 percent with the \$20–50 copayments compared with no copayment. <ul style="list-style-type: none"> – Unfavorable clinical events did not increase with copayments, e.g., hospitalizations were unchanged with \$20–50 ED copayments compared with no copayment. • In conclusion, relatively modest levels of patient cost-sharing for ED care decreased ED visit rates without increasing the rate of unfavorable clinical events.
<p>Kaiser Family Foundation (October 2006)</p> <p>Gruber, Jonathan, Ph.D, “The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond,” available at http://www.kff.org/insurance/upload/7566.pdf</p>	<p>The objective of this report is to cut through these conflicting interpretations of the RAND HIE.</p> <p>Target populations for more recent studies analyzed by the author included the under 65 population, the over 65 population, and studies focused on the impact of cost sharing for pharmacy benefits.</p>	<ul style="list-style-type: none"> • Recent work confirms the main conclusion of the HIE: higher patient co-pays reduced medical utilization. • Available studies also suggest there may be adverse health consequences for reducing prescription drug use, particularly among the chronically ill: <ul style="list-style-type: none"> – One study examined the introduction of a \$5 co-pay for state employees enrolled in an HMO in Washington State, relative to federal employees. It found a sizeable reduction in office visits. – Another examined the introduction of an emergency room co-pay for some firms insured by a Kaiser Permanente HMO plan in the early 1990s, relative to a control group of those firms who did not see this co-pay increase. It found a significant decline in emergency room utilization, with no evidence of adverse impacts on health. – A third followed the experience of elderly enrollees in the supplemental insurance plan offered by CalPERS to former state employees in California. It found that outpatient care use by the elderly is price-

Report/Study	Background	Summary of Findings / Key Observations
		<p>responsive as well.</p> <ul style="list-style-type: none"> The powerful evidence from the HIE, as confirmed in more recent studies, shows that health insurance should have three features: (1) co-insurance for the typical patient; (2) an income-related out-of-pocket limit; and (3) evidence-based design of co-insurance that targets co-insurance to places where care is least effective.
<p>Medical Care Research and Review, Vol. 61, No. 4 (December 2004)</p> <p>Rice, Thomas and Karen Y. Matsuoka, “The Impact of Cost-Sharing on Appropriate Utilization and Health Status: A Review of the Literature on Seniors,” pp 415 – 452, available at http://www.ncbi.nlm.nih.gov/pubmed/15536208</p>	<p>The authors conducted a literature search with a focus on studies that examine the impact of cost-sharing for both medical services and prescription drugs on the utilization and health status of seniors.</p> <ul style="list-style-type: none"> The authors found 22 relevant studies: 16 focused on cost-sharing for prescription drugs and 6 on cost-sharing for medical services. 	<ul style="list-style-type: none"> Nearly all of the 22 studies examined conclude that increased cost-sharing reduces either or both the utilization and health status of seniors. Some form of supplemental insurance is associated with more appropriate health care use, particularly when such supplemental insurance provides coverage for prescription medication: <ul style="list-style-type: none"> Nine studies examined the effect of having supplemental insurance (compared to having Medicare only) on appropriate health care use. In only two of those studies did seniors with just Medicare fare just as well- or better than- seniors with supplemental insurance. <ul style="list-style-type: none"> In the other seven of the nine studies, inappropriate health care use was found to be associated with lack of supplemental insurance. Nine studies examined the effect of specific cost-sharing features on health outcomes and/or appropriate healthcare use. Two examined the effect of payment caps and seven examined the effect of copayments. <ul style="list-style-type: none"> Payments caps appear to lead to inappropriately low service usage. With regard to the effect of copayments, the findings are more mixed. Of the seven studies that examined copayments, four suggest that they resulted in inappropriate health care usage while three found that co-pays had no statistically significant. Authors caution about drawing strong policy conclusions from the literature review because most of the studies rely on cross-sectional and self-reported data. Therefore, further research -- employing stronger study designs as well as clinical and administrative data -- is necessary before drawing more definitive conclusions.

Report/Study	Background	Summary of Findings / Key Observations
<p>National Academy of Social Insurance (January 2003)</p> <p>Eichner, June and Blumenthal, David, eds., “Medicare in the 21st Century: Building a Better Chronic Care System,” available at http://www.nasi.org/usr_doc/Chronic_Care_Report.pdf</p>	<p>This report focuses on how Medicare could improve care for beneficiaries with chronic conditions.</p> <p>The target population for this report is Medicare beneficiaries.</p>	<p>The panel was charged with determining the health care and related needs of Medicare beneficiaries with chronic conditions, how well Medicare meets their needs, features of the current Medicare program that support or impede good chronic care, and the experience of other chronic care models.</p> <p>The panel also set a new long-term vision for Medicare to improve care and financing for beneficiaries with chronic conditions. In its vision, Medicare would provide beneficiaries with access to needed services and financial protection from health care costs that pose barriers to needed care.</p> <ul style="list-style-type: none"> ➤ This would involve significant changes to Medicare’s current benefit structure -- adding coverage for chronic care services and setting reasonable limits for beneficiaries’ health-related out-of-pocket expenditures. <p>The panel’s top three recommendations that it believed would have the largest impact on chronic care were:</p> <ol style="list-style-type: none"> 1. limits on cost-sharing requirements by adding an annual cap for out-of-pocket expenditures; 2. support for new models of care by risk-adjusting Evaluation and Management (E&M) codes; and 3. implementation of information systems that track beneficiaries across multiple providers and care settings.
<p>International Journal of Health Care Finance and Economics Vol. 2, No. 2 (June 2002)</p> <p>Atherly, Adam, “The Effect of Medicare Supplemental Insurance on Medicare Expenditures,” pp 137-162, available at</p>	<p>The purpose of this study is to estimate the effect of Medigap plans on Medicare expenditures, controlling for unobserved selection.</p> <ul style="list-style-type: none"> • Specifically, this study addresses the possibility that the relationship between supplemental insurance and expenditures varies depending on policy source (i.e., employer versus individual purchase) and policy depth 	<ul style="list-style-type: none"> • The authors found that higher levels of coverage are associated with increased expenditures through higher probabilities of incurring a medical expense and increased levels of expenditures. • For individual plans, there was unobserved adverse selection into plans with drug benefits and unobserved favorable selection into plans without. <ul style="list-style-type: none"> – Individual supplemental plans without prescription drugs increased Medicare expenditures by \$914 annually, while those with drugs increased Medicare expenditures by \$491.

Report/Study	Background	Summary of Findings / Key Observations
<p>http://www.springerlink.com/content/k832720002134763/</p>	<p>(e.g., prescription drug coverage).</p> <p>The target population for this study was Medicare Beneficiaries. The main source of data used in this paper is the Medicare Current Beneficiary Survey (MCBS).</p>	<ul style="list-style-type: none"> • For employer-sponsored policies, there was significant unobserved favorable selection into plans with and without prescription drug coverage. <ul style="list-style-type: none"> – Employer policies also significantly increased Medicare expenditures (\$207 without drug coverage and \$447 with drug coverage), but the increase was less than that associated with individual policies. • This study suggests that it may be appropriate to modify the ten model policies to minimize Medicare costs. • In this study, it has been shown that employer supplements have a far lower impact on Medicare costs than do individually purchased supplements. Employer policies also tend to retain some degree of cost sharing, whereas the individual policies tend to create first dollar coverage. • The optimal level of cost sharing (accounting for the gain from risk reduction and the loss from increased use) has been shown in other studies to be non-zero (Manning and Marquis, 1996). <ul style="list-style-type: none"> – This suggests that one way to retain the current supplementary insurance structure, while reducing the cost of the policies to Medicare, would be to redesign the model policies to increase cost sharing.
<p>Medical Care Research and Review, Vol. 58, No. 2 (June 2001)</p> <p>Atherly, Adam, “Supplemental Insurance: Medicare Accidental Stepchild,” pp 131 – 161, available at http://mcr.sagepub.com/content/58/2/131.full.pdf+html</p>	<p>This article was the first to systematically examine the sometimes contradictory literature on supplemental insurance and identify and discuss the major areas of agreement and disagreement.</p> <p>The focus is on the Medicare beneficiary population, specifically those with supplemental coverage.</p>	<ul style="list-style-type: none"> • The only consistent finding across past studies is that supplemental insurance policies are associated with increased Medicare expenditures. However, the size, nature, and cause of the effect differ from study to study. Some studies attribute the increase to adverse selection of policies; others to the moral hazard effect of insurance. • Past studies differ in three key areas: the sample date, the characterization of the policy types, and the approach to self-selection. The differing results with regard to selection lead to differences in the estimated effect of supplemental insurance. <ul style="list-style-type: none"> – There may be several reasons for the varying results in these past studies. First, although most studies use national data, a handful use the sampled population. Second, major reforms of the supplemental

Report/Study	Background	Summary of Findings / Key Observations
		<p>insurance industry were enacted in 1980 and 1990. Many of the studies used samples from before 1980 and most used samples from before 1990. As the market matured and the reforms took effect, the relationship between supplemental insurance and Medicare may have changed.</p> <ul style="list-style-type: none"> • Reforming Medicare by lowering, but not eliminating, cost sharing may lead to a reaction in private supplemental insurance. If reducing cost sharing eliminates or reduces supplemental insurance, then lowering cost sharing paradoxically could increase the out-of-pocket price faced by most beneficiaries. • A different approach to reform would be to modify the 10 model policies to minimize Medicare costs. It has been found that ESSI policies have a smaller impact on Medicare costs than do IPSI policies; ESSI policies tend to retain some degree of cost sharing, whereas the IPSI policies tend to provide first dollar coverage for Part A and Part B services. This suggests that one way to retain the current supplementary insurance structure while reducing the cost of the policies to Medicare may be to redesign the model policies to include some cost sharing. • One other alternative that has been suggested is to levy a tax on supplemental insurers equal to the increase in Medicare expenditures associated with the policy. While this may increase economic efficiency, it would also risk undermining the supplemental insurance market if the tax is passed on to consumers as higher premiums. • There has been extensive regulation in the supplemental insurance market; the major reforms enacted in 1980 and 1990 and the myriad of regulations states have imposed on top of the existing federal regulations. However, there is limited information available regarding the effectiveness of these policies. This would be a fruitful area for further research, particularly in light of the double-digit increases in premiums during the past several years.

Report/Study	Background	Summary of Findings / Key Observations
<p>Journal of American Medical Association Vol. 285, No. 4 (January 2001)</p> <p>Tamblyn, Robyn, et al., “Adverse Events Associated with Prescription Drug Cost-Sharing among Poor and Elderly Persons,” pp 421 – 429, available at http://jama.ama-assn.org/content/285/4/421.full.pdf+html</p>	<p>The objectives of this study were to determine:</p> <ol style="list-style-type: none"> 1. the impact of introducing prescription drug cost-sharing on use of essential and less essential drugs among elderly persons and welfare recipients, and 2. the rates of Emergency Department (ED) visits and serious adverse events associated with reductions in drug use before and after policy implementation. <p>The target population for this study was elderly persons and adult welfare recipients.</p> <p>The authors analyzed data from 32 months before and 17 months after the introduction of a prescription coinsurance and deductible cost-sharing policy in Quebec in 1996.</p>	<ul style="list-style-type: none"> • After cost-sharing was introduced, use of essential drugs decreased by 9.12% in elderly persons and by 14.42% in welfare recipients; use of less essential drugs decreased by 15.14% and 22.39%, respectively. • The rate (per 10,000 person-months) of serious adverse events associated with reductions in use of essential drugs increased from 5.8 in the pre-policy control cohort to 12.6 in the post-policy cohort in elderly persons (a net increase of 6.8) and from 14.7 to 27.6 in welfare recipients (a net increase of 12.9). • ED visit rates related to reductions in the use of essential drugs also increased by 14.2 per 10000 person-months in elderly persons (pre-policy control cohort, 32.9; post-policy cohort, 47.1) and by 54.2 among welfare recipients (pre-policy control cohort, 69.6; post-policy cohort, 123.8). <ul style="list-style-type: none"> – These increases were primarily due to an increase in the proportion of recipients who reduced their use of essential drugs. – Reductions in the use of less essential drugs were not associated with an increase in risk of adverse events or ED visits. • In conclusion, in the study, increased cost-sharing for prescription drugs in elderly persons and welfare recipients was followed by reductions in use of essential drugs and a higher rate of serious adverse events and ED visits associated with these reductions.
<p>Archives of Family Medicine, Vol. 9 (March 2000)</p> <p>Doescher, M. P., P. Franks, J.S. Banthin, and C.M. Clancy. “Supplemental insurance and mortality in elderly Americans: Finding from a national cohort,” pp 251-57,</p>	<p>The objective of this study is to assess the relationship between risk for out-of-pocket expenditures and mortality in elderly persons with private supplemental insurance.</p> <p>This study is based on the 1987 National Medical Expenditure Survey (NMES), a representative cohort of the US civilian population, linked to the National Death</p>	<ul style="list-style-type: none"> • After 5 years, 18.5 percent of persons at low risk for out-of-pocket expenditures, 22.5 percent of those at intermediate risk, and 22.6 percent of those at high risk had died. • The observations of this study suggest that strategies aimed at increasing out-of-pocket health care expenditures to contain Medicare costs may result in adverse health outcomes. Because these observations reveal an adverse association between liability for out-of-pocket expenditures in the event of catastrophic illness and mortality after adjustment for covariates, support is provided for policies that would reduce, rather than increase, financial

Report/Study	Background	Summary of Findings / Key Observations
<p>available at http://archfami.ama-assn.org/cgi/reprint/9/3/251</p>	<p>Index data, with 5 years of mortality follow-up.</p> <p>The focus of this study is a relatively homogeneous subset of the elderly - those with supplemental health insurance.</p> <ul style="list-style-type: none"> The sample included a total of 3751 persons aged 65 years and older. 	<p>barriers to care for elderly Americans.</p> <ul style="list-style-type: none"> Although the findings reported herein provide evidence that cost-sharing in the elderly is adversely associated with mortality, alternative strategies to reduce the growth of Medicare could also result in undesired outcomes. <ul style="list-style-type: none"> Relying on reducing payments to providers such as physicians, hospitals, and HMOs ultimately would reach limits beyond which additional cutbacks would become impossible. Medical savings accounts would be more likely to be used by relatively affluent persons, whereas the sickest persons would likely remain in the traditional fee-for-service programs, driving up fee-for-service costs. Although Medicare HMO enrollment offers relatively greater protection against out-of-pocket costs, cost savings appear to occur through biased selection of relatively healthy enrollees. If Medicare HMOs eventually were to begin enrolling elderly Americans nonselectively, an increased reliance on cost-sharing would almost certainly result. The impending bankruptcy of the Medicare Part A Trust Fund and Congressional overtures to limit Medicare eligibility to those older than 67 years suggest that Medicare coverage will be eroded further and that cost-sharing will increase. This trend may have an adverse impact on the health of elderly persons in our society, especially low-income individuals who bear the greatest burden of out-of-pocket expenditures relative to income.
<p>Health Services Research Vol. 34, No. 6 (February 2000)</p> <p>Solanki G, Schauffler HH, Miller LS. "The Direct and Indirect Effects of Cost-Sharing on the Use of Preventive Services," pp 1331 – 1350, available at http://www.ncbi.nlm.nih.gov/p</p>	<p>The objective of this study was to test empirically a model for estimating the direct and indirect effects of different forms of cost-sharing on the utilization of recommended clinical preventive services.</p> <p>The data source for this study was a stratified random sample of 10,872 employees, 18-64 years, who had</p>	<ul style="list-style-type: none"> Both forms of cost-sharing in both plan types had negative and significant indirect effects on preventive counseling (from -1% to -7%). The direct effect of cost-sharing was negative for preventive counseling (-5% to -9%) and Pap smears (from -3% to -9%) in both HMOs and PPOs, and for mammography only in PPOs (-3% to -9%). The results of the effects on blood pressure screening are inconclusive. In conclusion, the authors found that both the direct and indirect effects of cost-sharing negatively affected the receipt of preventive counseling in

Report/Study	Background	Summary of Findings / Key Observations
mc/articles/PMC1089084	<p>belonged to their plan for at least one year, from seven large companies that were members of the Pacific Business Group on Health (PBGH) in 1994.</p>	<p>HMOs and PPOs.</p> <ul style="list-style-type: none"> - As predicted, the direct negative effect of cost-sharing was greater than the indirect effect for Pap smears and mammography. - Eliminating cost-sharing for these services may be important to increasing their utilization to recommended levels. <ul style="list-style-type: none"> • The findings have important policy implications for cost-sharing reforms as cost-sharing features appear to play an important role in the use of recommended preventive services. <ul style="list-style-type: none"> • The findings suggest that removing cost-sharing for targeted clinical preventive services may be important to increasing appropriate utilization of recommended preventive care.
<p>Medical Care Research and Review, Vol. 56, No. 2 (June 1999)</p> <p>Khandker, Rezual K.; McCormack, Lauren A.; “Medicare Spending by Beneficiaries with Various Types of Supplemental Insurance,” pp 137 - 155, available at http://mcr.sagepub.com/content/56/2/137</p>	<p>The purpose of the study was to examine the extent to which supplemental insurance status of Medicare beneficiaries contribute to variations in Medicare spending.</p> <p>The target population for this study was elderly, non-institutionalized Medicare beneficiaries with and without supplemental insurance such as Medigap, employer-sponsored plans, and Medicaid.</p>	<ul style="list-style-type: none"> • Results from this study strongly suggest that supplemental insurance coverage is associated with a higher probability of utilization of Medicare covered services by elderly noninstitutionalized beneficiaries. <ul style="list-style-type: none"> - This was true for both Medicare Part A and Part B, although the effect was stronger for Part B services. - Supplemental insurance was also found to lead to an increase in the level of spending for Part B services by elderly noninstitutionalized beneficiaries. • The authors hypothesize that Medicare spending may be sensitive to supplemental insurance simply because of moral hazard as a result of the removal of cost-sharing requirements. • The results of this study are consistent with the findings of the Physician Payment Review Commission (PPRC 1996 and 1997). Higher utilization for those with supplemental insurance was explained by PPRC as a direct consequence of having such insurance. PPRC’s descriptive findings and this study’s multivariate results are indicative of the fact that Medicare effectively subsidizes the claims cost of private insurance supplements (Morrisey 1993; Dowd et al. 1992).

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> - As a result, some researchers have considered the option of taxing the purchase of supplemental insurance. However, such taxes may not be the best option since supplementary insurers would probably shift the tax burden to the beneficiary through higher premiums. Raising supplementary insurance premiums not only generates a cost spiral and deterioration of beneficiary access to care, but it leaves the fundamental problem of payer cross-subsidy and unnecessary utilization unsolved. • This study’s results also indicate that beneficiaries with both Medigap and employer plans had the highest level of Medicare spending. • In conclusion, continuing attempts to streamline supplemental insurance, experiment with alternative payment arrangements, and make beneficiary information a priority illustrate the need for change. <ul style="list-style-type: none"> - Any approach to solving Medicare’s financial woes resulting from supplementary insurance should weigh the consequences of reducing access versus eliminating unnecessary care.
<p>Health Insurance Association of America (HIAA) (January 1999)</p> <p>Anderson, Gerald, “Concerns about the Theory of Increased Cost-Sharing for Medicare Beneficiaries and Its Policy Implications for the Medicare Program,” <i>link unavailable</i></p>	<p>Medicare includes both supply- and demand-side cost controls. There is concern among some economists, however, that Medicare supplemental insurance policies have shielded most beneficiaries from demand-side controls resulting in “overuse” of services and an increase in Medicare expenditures.</p> <p>This analysis presents concerns with the proposed demand-side reforms.</p>	<ul style="list-style-type: none"> • Proposals to increase the impact of Medicare cost-sharing target aged, chronically ill, and poor beneficiaries. <ul style="list-style-type: none"> - Based on Medicare data from 1996, the burden of cost-sharing increases as Medicare beneficiaries become older, develop chronic illnesses, or have catastrophic illnesses. - Without the risk-spreading effects of supplemental insurance, a small proportion of the Medicare population would pay most of the cost-sharing. This is because a small proportion of Medicare beneficiaries are responsible for most of Medicare spending. • Significant increases in the impact of Medicare copayments and deductibles would reduce physician visits and use of preventative services. <ul style="list-style-type: none"> - The literature suggests that Medicare beneficiaries’ price sensitivity is greatest for preventive and physician services. In 1995, Medicare beneficiaries without supplemental insurance were much less likely to have flu shots, mammograms, pap smears or even a single physician

Report/Study	Background	Summary of Findings / Key Observations
		<p>visit.</p> <ul style="list-style-type: none"> - Given the high cost of treating preventable diseases (hypertension, diabetes, etc.) discouraging preventive care through cost-sharing may be “penny-wise, pound foolish.” <ul style="list-style-type: none"> • Medicare beneficiaries are risk averse and value Medigap insurance. <ul style="list-style-type: none"> - Medicare beneficiaries derive a great deal of financial and personal security from their supplemental insurance policies. They have expressed overwhelming support for Medigap insurance in numerous surveys. - According to recent polls, increased cost sharing for Medicare beneficiaries is the least popular alternative among the options under consideration. • Proposals to significantly increase the impact of Medicare’s cost-sharing requirements would bring fewer savings than anticipated. <ul style="list-style-type: none"> - It is inappropriate to compare the cost and utilization of Medicare beneficiaries who do and do not purchase Medigap insurance. No amount of statistical manipulation can distinguish between a person who anticipates using the system and therefore buys insurance and a person who expects to remain healthy and decides to self-insure. - The result is that comparisons of Medicare expenditures by those who have supplemental coverage and those who do not overestimate the effect of supplemental insurance on Medicare spending.
<p>The New England Journal of Medicine, Vol. 334, No. 10 (March 1996)</p> <p>Selby, Joe V., M.D., M.P.H.; Fireman, Bruce, M.A.; and Swain, Bix E., M.S.; “Effects of a Copayment on Use of the Emergency Department in an</p>	<p>The authors studied the effect of a copayment on emergency department use in a group-model HMO.</p> <ul style="list-style-type: none"> • The target population of the study was Kaiser Permanente HMO members. 	<ul style="list-style-type: none"> • After adjustment for age, sex, socioeconomic status, and use of the emergency department in 1992, the decline in the number of visits in 1993 was 14.6 percentage points greater in the copayment group than in either control group. • Visits for urgent care did not increase among subjects in any stratum defined by age and sex, and neither did the number of outpatient visits by adults and children.

Report/Study	Background	Summary of Findings / Key Observations
<p>HMO,” pp 635 - 642, available at http://www.nejm.org/doi/full/10.1056/NEJM199603073341006</p>		<ul style="list-style-type: none"> • The decline in emergency visits for presenting conditions classified as “always an emergency” was small and not significant. • For conditions classified as “often an emergency,” “sometimes not an emergency,” or “often not an emergency,” the declines in the use of the emergency department were larger and statistically significant, and they increased with decreasing severity of the presenting condition. • The authors clarified that although their ability to detect any adverse effects of the copayment was limited; there was no suggestion of excess adverse events in the copayment group, such as increases in mortality or in the number of potentially avoidable hospitalizations. • In conclusion, the authors found that among members of an HMO, the introduction of a small co-pay for the use of the emergency department was associated with a decline of about 15% in the use of that department, mostly among patients with conditions considered likely not to present an emergency.
<p>The New England Journal of Medicine, Vol. 332, No. 17 (April 1995)</p> <p>Blustein, Jan, M.D., Ph.D; “Medicare Coverage, Supplemental Insurance, and the Use of Mammography by Older Women,” pp 1138 – 1143, available at http://www.nejm.org/doi/pdf/10.1056/NEJM199504273321706</p>	<p>The author examines the use of mammography in women covered by Medicare during the first two years that the screening benefit was offered.</p> <ul style="list-style-type: none"> • Specifically, the article explores the extent to which supplemental insurance was associated with the use of mammography. 	<ul style="list-style-type: none"> • A total of 36.9 percent of older U.S. women had mammography during the first two years of the Medicare benefit for screening mammography. This use of mammography was substantially below recommended levels. Women lacking supplemental health insurance were at particularly high risk of failing to undergo mammography. <ul style="list-style-type: none"> – Only 14.4 percent of the women lacking supplemental insurance had mammography, as compared with 44.7 percent of those with employer-sponsored supplemental insurance, 40.1 percent of those with self-purchased supplemental insurance, and 23.9 percent of those with Medicaid supplemental insurance. • Having supplemental insurance was also strongly associated with the use of mammography in subgroups defined by age, race, income, and education. <ul style="list-style-type: none"> – Because these variables are likely to be strongly correlated with knowledge, attitudes, and beliefs about preventive care, this evidences

Report/Study	Background	Summary of Findings / Key Observations
		<p>the importance of supplemental insurance in increasing access to mammography for women spanning a range of levels of knowledge about and attitudes toward mammography.</p> <ul style="list-style-type: none"> • In addition, supplemental insurance was strongly associated with the probability of having mammography in a multivariate analysis adjusted for age, race, income, education, self-reported health status, usual source of care, smoking status, living arrangement, place of residence, and total Medicare Part B reimbursement. • For policy makers, these findings reinforce previous studies showing that cost-sharing decreases the use of preventive services, even for populations with “basic benefit packages.” Requiring copayments for preventive services is an obstacle to the effective mass screening of older women for breast cancer. <ul style="list-style-type: none"> – But more important, this report demonstrates that within present U.S. health care–financing arrangements, the burden of cost-sharing for preventive services often falls on those least able to share costs and on those most vulnerable to preventable disease and preventable premature death.
<p>Applied Economics Vol. 24, Issue 5 (1992)</p> <p>Cartwright, William S., et. al., “Impact of Varying Medigap Insurance Coverage on the Use of Medical Services of the Elderly,” pp 529 – 539, available at http://dx.doi.org/10.1080/00036849200000066</p>	<p>This paper presents a microeconomic study of the Medigap insurance market and the determinants of health expenditures.</p> <p>The target population for this study was elderly individuals (65 and over).</p> <p>For data sources, the authors used the 1977 National Medical Care Expenditure Survey (NMCES) and the Health Insurance Employers’ Survey (HIES).</p>	<ul style="list-style-type: none"> • The authors found that higher levels of coverage are associated with increased expenditures through higher probabilities of incurring a medical expense and increased levels of expenditures. • Those with poor health had a smaller likelihood of having insurance than those with better health status, contrary to the notion of adverse selection. However, those in poor health status who obtained health insurance tended to purchase more insurance coverage than those with better health status, consistent with adverse selection. • Controlling the costs of Medicare is an important policy question for the operation of the insurance and medical care markets. Medigap policies tend to create an external cost on Medicare through overuse of services.

Report/Study	Background	Summary of Findings / Key Observations
		<ul style="list-style-type: none"> - The favorite device to remedy this effect is through taxing Medigap premiums; in effect increasing the price of Medigap insurance. Alternatively, as suggested by Christensen et al. (1987), coinsurance requirements could be combined with a stop-loss provision. Any policies written to cover coinsurance or deductibles would have these excess benefits taxed. Thus, health insurance for the elderly would be moved towards a more logical insurance structure, rather than the current illogical first dollar coverage. • For further research, more careful attention must be paid to the collection of health insurance data. A premeditated focus on policy design would lead to an improvement in the data collected, and better assessment of the efficiency and equity of medical care consumption. • Another area of important policy interest is the outcome in non-white, elderly medical expenditures and Medigap insurance ownership. Additional work is needed to improve our understanding of how markets and individual behavior result in the observed differences.
<p>RAND Health Insurance Experiment (“HIE”) Series (December 1984)</p> <p>Brook, Robert H., Ware Jr., John E., et. al., “The Effect of Coinsurance on the Health of Adults: Results from the Rand Health Insurance Experiment,” available at http://www.rand.org/pubs/reports/2006/R3055.pdf</p>	<p>The RAND HIE was a large-scale experiment conducted between 1971 and 1982 that randomly assigned a sample of 5,800 non-institutionalized, <i>non-elderly</i> participants to five types of fee-for-service health insurance plans created specifically for the experiment.</p>	<ul style="list-style-type: none"> • As coinsurance increased, the number of outpatient visits and total spending decreased. • Cost-sharing affected the number of visits, but not the intensity of services provided during the visit, suggesting that cost-sharing has little effect once a person initiates a medical contact. • People reduced their use of ineffective care, but also reduced their use of medically appropriate care. • Cost-sharing did not adversely affect health outcomes for the average person. • In the RAND experiment, persons who had to pay an annual deductible for outpatient care made fewer outpatient visits and also had fewer inpatient

Report/Study	Background	Summary of Findings / Key Observations
		admissions than did persons who received free care, suggesting that increased cost sharing for outpatient care does not promote greater use of hospital care.