



HHS Public Access

Author manuscript

Med Care Res Rev. Author manuscript; available in PMC 2017 August 01.

Published in final edited form as:

Med Care Res Rev. 2016 August ; 73(4): 383–409. doi:10.1177/1077558715617381.

Cost-sharing in Medicaid: Assumptions, Evidence, and Future Directions

Victoria Powell, MD,

Department of Internal Medicine, Johns Hopkins University School of Medicine

Brendan Saloner, PhD, and

Department of Health Policy and Management, Johns Hopkins University School of Public Health

Lindsay M. Sabik, PhD

Department of Healthcare Policy and Research, Virginia Commonwealth University School of Medicine

Abstract

Several states have received waivers to expand Medicaid to poor adults under the Affordable Care Act using more cost-sharing than the program traditionally allows. We synthesize literature of the effects of cost-sharing, focusing on studies of low-income US populations from 1995–2014.

Literature suggests cost-sharing has a deterrent effect on initiation of treatments, and can reduce utilization of ongoing treatments. Further, cost-sharing may be difficult for low-income populations to understand; patients often lack sufficient information to choose medical treatment; and cost-sharing may be difficult to balance within the budgets of poor adults. Gaps in the literature include evidence of long-term effects of cost-sharing on health and financial wellbeing, evidence related to effectiveness of cost-sharing combined with patient education, and evidence related to targeted programs that use financial incentives for wellness. Literature underscores the need for evaluation of the effects of cost-sharing on health status and spending, particularly among the poorest adults.

Keywords

cost sharing; Medicaid; health literacy; Affordable Care Act

INTRODUCTION

The recent Medicaid expansion under the Affordable Care Act (ACA) is projected to reach 13 million low-income, non-elderly adults by 2016 (Congressional Budget Office, 2015). One of the goals of the ACA is to improve access to care for this population, many of whom previously had sparse or intermittent contact with the health system. Before the ACA, almost half the adults targeted by the Medicaid expansions lacked a usual source of care other than the emergency room and those with chronic diseases were much less likely than Medicaid beneficiaries already enrolled in the program to have control of their conditions (Decker, Kostova, Kenney, & Long, 2013). It is hoped that by reducing financial barriers to receiving health care, the ACA will ultimately reduce the onset and impact of chronic and acute health conditions.

In expanding coverage to poor, underserved adults, states have grappled with the question of whether to make Medicaid services entirely free for beneficiaries or to require some cost-sharing, in the form of copayments or monthly premiums. This debate over cost-sharing has unfolded in the aftermath of the 2012 United States Supreme Court decision holding that states could not be required to expand Medicaid in order to maintain their existing federal Medicaid funding (*National Federation of Independent Business v Sebelius*, 2012). To encourage states that might not otherwise expand Medicaid to participate, the Centers for Medicare and Medicaid Services (CMS) has indicated a greater willingness to consider alternative proposals from states to modify their expansion programs on a waiver basis (Kliff, 2013). These waivers allow states to place beneficiaries into health insurance plans that may deviate from traditional Medicaid in their benefit design and use of incentives. Plan costs per beneficiary must not exceed those of traditional Medicaid. These waivers are provided by CMS on a demonstration basis until 2017 (Rudowitz, Artiga, & Musumeci, 2014).

By early 2015, CMS had approved waiver requests from Arkansas, Iowa, Indiana, Michigan, and Pennsylvania that would include cost-sharing in Medicaid for adults eligible for coverage under the ACA. Additionally, cost-sharing was included in expansion proposals in Missouri, Tennessee, Utah, Virginia, and other states (Cardwell, Sheedy, & Christie-Maples, 2014). Common elements of these requests include the use of copayments for medications and office visits; increased penalties for non-emergency use of the emergency department; and monthly required premiums for some enrollees, in some states tied to wellness incentives for participation in health screenings and smoking cessation programs.

Cost-sharing has been allowed on a limited basis in Medicaid since the 1980s, and was part of CHIP programs for non-poor children since the program's inception in 1997. Cost-sharing has become more widespread since the 2005 Deficit Reduction Act (DRA), which allowed states to institute cost-sharing to all Medicaid beneficiaries with incomes above 100% of the federal poverty level (FPL), capping total cost-sharing at up to 5% of the beneficiary's household income, and setting a formula for allowable copayments for specific services (Rosenbaum & Markus, 2006). The ACA expansion waivers allow for cost-sharing beyond the DRA, for example by imposing cost-sharing starting at 50% FPL in Iowa and Arkansas (Dickson, 2015). Waivers in some cases have sought to increase the amount of cost-sharing. In Indiana beneficiaries will pay up to \$25 for a second visit to the emergency department for "non-emergency care" (Centers for Medicare and Medicaid Services, 2015).

This article reviews literature related to cost-sharing primarily in Medicaid, with a particular emphasis on recent experiences insuring low-income adults. We focus on cost-sharing at the point of care (e.g. copayments for prescriptions or office visits). Effects of cost-sharing in the form of premiums is likely to be quite different than cost-sharing at the point of care, since premiums are most likely to influence enrollment decisions whereas cost-sharing at the point of care directly influences the setting and type of care sought by beneficiaries once they are enrolled.

NEW CONTRIBUTION

We update prior literature reviews of cost-sharing (Artiga & O'Malley, 2005; Baicker & Goldman, 2011; Ku & Wachino, 2005; Remler & Greene, 2009; Snyder & Rudowitz, 2013; Swartz, 2010), with a focus on low-income adults. We also include a selective review of key studies on related areas, including a growing body of research related to health literacy and medical decision-making. Current proposals, with increasingly complex cost-sharing structures and discounts for engaging in wellness behaviors, place a greater burden on enrollees to understand and react to new incentives. We outline key assumptions implicit in current cost-sharing proposals and summarize literature related to these assumptions. We present a framework for considering the role of cost-sharing in Medicaid and synthesize the most relevant studies in a number of related areas to draw implications for policy implementation and future research.

CONCEPTUAL FRAMEWORK

In a traditional insurance market, health insurance is valued by consumers because it allows them to transfer income from time periods when they are healthy to those when they are sick and need the money to purchase medical care. However, individuals also consume more health care than they otherwise would if they had to pay the full cost simply because the out-of-pocket price is lower when the insurer bears some or all of the cost. The traditional justification for including cost-sharing in insurance plans is to limit this additional consumption, also known as “moral hazard” (Cutler & Zeckhauser, 2000). The fact that an individual would not have purchased services if he or she had to pay the true price is taken as evidence that such consumption is inefficient. Cost-sharing is therefore seen as a tool to reign in health care consumption without entirely sacrificing the risk protection value of health insurance, especially for protecting individuals against large or unexpected expenditures. The RAND Health Insurance Experiment of the 1970s provided the most influential demonstration that patients respond to cost-sharing by reducing their use of services (Manning et al., 1987; Newhouse & Rand Corporation, 1993). However, the assumption that more generous coverage necessarily leads to more inefficient health care use has been challenged. John Nyman (2003; 2004) has argued that health insurance has a value similar to income for individuals experiencing an illness, increasing their ability to purchase critical health services that they could not otherwise afford. For people with moderate incomes, the access value of insurance applies to acute medical crises (such as the need for an organ transplant or lifesaving cancer drugs), but for people with incomes below poverty, health insurance coverage may have access value for more routine medical expenses that would otherwise fall outside of their budgets.

The access value of insurance is especially relevant for Medicaid, where increasing consumption of health services for people who would otherwise lack health insurance is the explicit goal of the program. By design, Medicaid functions as a transfer program that redistributes income from people with higher incomes to those in poverty, and especially to the poor with greater health needs and limited access to care. Although the social purpose of Medicaid is to facilitate access to services, Medicaid programs operate within relatively restrictive budgets. Within this context, cost-sharing may be a tool for programs to conserve

limited resources by steering beneficiaries toward those treatments that have the greater “value” (typically defined in terms of cost-effectiveness) and encouraging them to reconsider using lower-value care, without completely eliminating access to those services. In theory, informed consumers interested in improving their health will prioritize those treatments that provide the greatest amount of health benefit relative to the cost. Relatedly, those services for which consumers are most price-sensitive will be those that consumers perceive to be of relatively low value. Additionally, in order for cost-sharing to achieve the goal of cost control, the practical aspects of implementing and overseeing new policies (e.g., employing staff to answer questions and ensure compliance) must not result in costs to the system in excess of cost reductions from reduced utilization.

This view of cost-sharing is built on a number of important assumptions that may or may not hold for Medicaid beneficiaries. Four key assumptions (Table 1) include:

- Cost knowledge: beneficiaries understand the out of pocket costs that they face under their health insurance plans;
- Clinical knowledge: beneficiaries understand the relative benefits of different services and will forgo services that are of lower value to them;
- Autonomy: decisions about whether to seek care and what types and quantity of healthcare services to receive are either made directly by beneficiaries, or through shared decision-making between patient and health care provider;
- Affordability to the consumer: beneficiaries have the financial resources to contribute to routine medical expenses for treatments that would be considered cost-effective within the goals of Medicaid programs.

After describing our methods, we provide a high-level overview of the cost-sharing literature focusing on different domains where cost-sharing has been imposed. We then evaluate key evidence related to the four cost-sharing assumptions. We close by discussing future directions and policy implications.

METHODS

We searched the peer-reviewed literature using the following databases: PubMed/Medline, CINAHL, and ISI Web of Science. The search terms included various combinations of the following: socioeconomic factors, Medicaid, medical assistance, state health plans, low-income, poor, poverty, cost-sharing, copay, and coinsurance. We focused on publications from January 1995 – May 2014. We then reviewed abstracts to identify key studies focused on low-income populations which explored the association between cost-sharing and health care utilization and spending. The bibliographies of seminal studies were reviewed to ensure potentially relevant studies were not excluded from the review if they were not identified in the original search. This initial search yielded 791 unique studies. Studies were excluded if they focused on low or middle-income countries, did not include information on non-elderly adults, focused only on individuals with specific or rare diseases, studies that did not include

primary data (i.e. simulation-only studies), and those with methodological flaws that made it difficult to interpret study results (e.g. omitting description of population characteristics).

These initial criteria narrowed the search to 125 potential studies, which were then individually reviewed by each author and discussed. In keeping with our focus on the ACA, we gave preference to peer-reviewed studies that included low-income adults (age 18–64) up to 138% of the federal poverty line who are citizens of the US. We included other publications in the review if they represented the only studies of their kind, were frequently cited by other influential studies, or otherwise uniquely illustrated an important point using reliable data and methods. While our main focus is peer-reviewed literature, we also discuss some foundation reports and state-initiated evaluations of Medicaid/CHIP programs. Because of the important role of the assumptions underlying cost-sharing in the policy debate, we also provide discussion of the evidence underlying these assumptions. While the latter section was not based on a single systematic review, the search process was similar and we provide a narrative review of the most relevant evidence.

When assessing quality of study design, we considered those that analyzed natural experiments (i.e., state government-initiated changes in cost-sharing) to be higher quality. We also gave preference to studies with larger sample sizes (>1,000 subjects), and included representative data from multiple states (or at least multiple geographic areas of the same state). Qualitative studies were included if they elucidated information that was otherwise difficult to capture (i.e., beneficiaries' attitudes toward and understanding of certain changes in cost-sharing, insurance plan specifics, etc.).

OVERVIEW OF THE COST-SHARING LITERATURE

We briefly review key recent studies in the empirical literature on the effect of cost-sharing programs for low-income adults (Table 2), and refer interested readers to other comprehensive reviews for additional citations. Artiga and O'Malley (2005) discuss select evidence from Medicaid prior to the Deficit Reduction Act. Similarly, Ku and Wachino (2007) describe select literature on low-income populations, including the RAND insurance experiment. Remler and Greene (2009) provide an overview of cost-sharing as it pertains to specific types of services and populations, and discuss implications for consumer-directed health plans. Swartz (2010) also provides a concise synthesis of the literature emphasizing subgroup differences. Baicker and Goldman (2011) provide an economic framework for cost-sharing, and consider trends in the population with private insurance. Finally, Snyder and Rudowitz (2013) describe cost-sharing in the Medicaid program with several studies in the post Deficit Reduction Act era.

The effects of cost-sharing on utilization are heterogeneous – while most studies find that patients respond to increased cost-sharing by lowering their use of care (i.e. demand is somewhat price elastic) – the responses vary substantially across settings, populations, and programs. There are also differences in the degree to which cost-sharing for one type of service may lead to offsetting changes in another type, which has implications for total program spending. Relatively little is known about consequences of cost-sharing for long-term health status outcomes.

Effects on Prescription Medication Use

The effects of cost-sharing on use of prescription drug use has been extensively studied (Cunningham, 2002; Lexchin & Grootendorst, 2004; Sinnott, Buckley, O’Riordan, Bradley, & Whelton, 2013; Stuart & Zacker, 1999), and a consistent finding is that increasing copayments results in decreased utilization of drugs and higher rates of non-adherence. However, the size of the effect varies across subgroups. While some studies have considered select groups of Medicaid enrollees (such as individuals with schizophrenia or cancer), relatively less attention has focused on non-disabled, low-income adults that are targeted for Medicaid expansion under the ACA.

For patient groups with relatively high need for medical services and prescription drugs, most studies find that increased copayments resulted in decreased adherence. A study of Mississippi’s 2002 Medicaid prescription drug copayment increase from \$1 to \$3 found that patients with schizophrenia were approximately 20% more likely to experience treatment gaps than patients in control states (Farley, 2010). A study of privately insured adults with diabetes and congestive heart failure found those living in the lowest median income areas (<\$30,000 annual income) were much more likely to reduce medication use after copayment increases than those living in higher income areas. The effect was especially large for those with heart failure, with 10% increases in copayments resulting in 10–13% decreases in utilization of essential medications (Chernew et al., 2008).

Reduced use of prescription drugs from non-adherence has been linked to adverse consequences. A study of Medicaid beneficiaries with cancer found that after relatively small copayments were imposed (\$0.50 – \$3.00) in Georgia in 2002, days supply of medication decreased and odds of an emergency department visit increased, leading to a total cost increase of approximately \$2,000 per patient over a 6 month period in 2004 (Subramanian, 2011). Two 2001 changes to North Carolina’s Medicaid program (an increase in copayments of brand name medications from \$1 to \$3 and reduced days supply of prescriptions from 100 to 34 days) led to decreased adherence for individuals with a variety of chronic conditions (Domino et al., 2011). While there were some reduced expenditures, those exposed to only the copayment increase actually experienced increased spending overall. Outside of Medicaid, there is strong evidence from a natural experiment in Quebec where increased copayments for prescription drugs led to a spike in hospitalizations (Tamblyn et al., 2001). In Israel, phasing out copayments for low-income chronically ill adults led to improved disease management (such as reduced blood pressure among those with hypertension) (Elhayany & Vinker, 2011).

The effect of copayments in Medicaid may be modified by the simultaneous use of other policies to restrict access to prescription medications. One study evaluated the impact of combinations of five different medication cost-containment strategies used by state Medicaid programs, including copayments for prescription medications (Cunningham, 2005). Other methods evaluated included prior authorization requirements, generics, step therapy, and limiting number of prescriptions per month. The effect of copayments on its own had no significant effect on access. However, most states had multiple policies simultaneously, making this finding difficult to interpret. There is also some evidence that consumers may

substitute across classes of drugs (e.g. from branded to generic drugs) after copayment programs, although the change may take time to fully take place (Hartung et al., 2008).

Effects on Primary, Preventive, and Emergency Care

Several studies have examined the impacts of cost-sharing on primary and preventive care. One study finds no discernible changes in use of preventive care (e.g., cervical cancer screening, mammograms, and lipid testing) among low-income, childless adults after their states phased in Medicaid cost-sharing (Guy Jr., 2010). This study did not specifically identify which respondents were enrolled in Medicaid, potentially dampening the ability to detect an effect.

Studies that have focused on changes in cost-sharing for emergency care find mixed effects. There was no significant change in use of the emergency department (ED) in nine states that increased copayment amounts for non-emergent ED visits in the early 2000s. However, most of the increases were modest, at about \$3 for a visit (Mortensen, 2010). In Oregon, where the change in ED copayments was much larger – \$50 per visit for adults in the Oregon Health Program – use of the ED declined by 18% overall, but increased for illicit drug-related admissions (there was a simultaneous cutback in substance abuse treatment) (Lowe, Fu, & Gallia, 2010).

As noted above, while higher cost-sharing could lead some beneficiaries to avoid the ED if their condition is treatable in ambulatory settings, it is also possible that higher ED use could itself be a consequence of cost-related non-adherence for prescription drugs or other chronic disease management (the “offset effect”). Offsets for ED use were observed in Georgia among cancer patients who were more likely to visit the ED after an increase in prescription drug copayments led to decreased adherence (Subramanian, 2011). The potential offset effect observed in ED studies may be one reason why cost-sharing may not lead to large-scale reductions in total spending. In a different context, Chandra, Gruber, & McKnight (2010) found that when some Medicare supplemental plans increased cost-sharing, Medicare incurred higher costs due to increased hospitalization rates as a presumed result of decreased utilization of preventive/primary care services. These effects were concentrated in those with poor health/high utilizers.

Effects on Total Spending

Several studies evaluated changes in total spending for Medicaid and other payers following changes in copayments. The 2003 implementation of copayments for certain enrollees in Oregon’s Medicaid waiver population changed utilization overall, but it did not change overall expenditures, partially due to offsetting increases in use of some services such as inpatient care (Wallace, McConnell, Gallia, & Smith, 2008). These offsetting effects have also been found elsewhere (Von Korff, Oliver, Fishman, & Burbank, 2008).

EVIDENCE RELATED TO COST-SHARING ASSUMPTIONS

With the broad empirical literature on effects of cost-sharing as a backdrop, it is useful to consider evidence related to the four assumptions outlined earlier, since these assumptions may be considered necessary conditions for cost-sharing to meet its targeted objectives. We

provide a selective overview of relevant literature here and refer readers to some related bodies of research that reach beyond the scope of this review. Select studies related to health and health insurance literacy among low-income populations are summarized in Table 3. In Table 4, we summarize studies related to financial burden of cost sharing in these populations.

Cost knowledge

Cost-sharing is predicated upon the assumption that beneficiaries understand the out-of-pocket costs they will face when using different types of healthcare services under their health plan. On the eve of the ACA insurance expansions, a nationally representative survey found that many adults, particularly those with low incomes, expressed discomfort with insurance terminology (Long et al., 2014). Only 17.3% of adults targeted for expanded Medicaid (i.e. those with household incomes below 138% FPL) indicated they were “very” or “somewhat” comfortable with terms such as provider network, annual limits on services, premium, and copay (Kenney, Karpman, & Long, 2014). In a field experiment with a more affluent population, a majority of individuals said they understood cost-sharing terms, but only 14% could answer a set of basic questions about those terms correctly (Loewenstein et al., 2013). Using a semi-structured interview, Politi et al (2014) investigated uninsured, low-income individuals’ health insurance knowledge and insurance preferences. Most individuals had poor to modest understanding of cost-sharing terms such as “coinsurance” or “deductible.”

Critically, the ability to put cost-sharing to practical use may also be lacking. An experiment assessed individuals’ ability to calculate the annual price of a health insurance policy using a table that shows how the monthly cost varies based on income and family size; over 65% answered incorrectly (Yin et al., 2009). The lack of practical numeracy skills – particularly the ability to perform basic math calculations related to cost-sharing – is of particular concern within the Medicaid population, most of whom have a high school education or less (U.S. Bureau of the Census, 2011). It is difficult to convey important information about plan choices to Medicaid beneficiaries transitioning to managed care programs. For example, in 2006 Florida experimented with a Medicaid reform that required beneficiaries to select among plans with different levels of cost-sharing, benefit packages, and provider networks. About 20% were not even aware they had a choice in a plan, approximately 30% were not aware that different plans may have different benefits or new benefits, and fewer than half knew about critical plan features such as wellness benefits. These findings are striking given that Florida provided assistance in the form of counselors and a 24 hour call center to help enrollees best choose a plan, although half were not aware of this support (Coughlin & Zuckerman, 2008; Greene & Peters, 2009).

A qualitative study of Medicaid beneficiaries in a Mid-Atlantic state with two plans (one “enhanced” plan with extra benefits but requiring more paperwork and an additional physician office visit, and one “basic” plan with mandated minimum coverage) analyzed responses to the question, “Why did you choose your health plan?” (Walsh & Fitzgerald, 2012). Themes indicated that over half of participants did not understand the difference in plans. Almost one-fifth responded in a manner consistent with not choosing a plan and

defaulting to the basic plan. Of those that did choose, there were responses suggesting misunderstanding of the plan differences. Evidence from behavioral economics has shown that individuals have a tendency to choose the default option, delay making decisions, and fail to make any choice or make poor choices in the face of multiple options (Baicker, Congdon, & Mullainathan, 2012; Iyengar & Lepper, 2000; Rice, 2013), indicating the importance of accounting for known biases and heuristics in designing plans.

Clinical knowledge

The clinical knowledge assumption is that beneficiaries are able to make informed choices about which types of services are most likely to promote their health and wellness, and if faced with incentives related to health behaviors, can adhere to guidelines from a clinician. Health literacy is the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions (Kindig, Panzer, & Nielsen-Bohlman, 2004). According to the 2003 National Assessment of Adult Literacy, 30% of adults receiving Medicaid had below basic health literacy, much lower than the literacy of adults who received employer-sponsored health insurance (Kutner, Greenberg, Jin, & Paulsen, 2006), and literacy was particularly low among childless adults and poor adults (Yin et al., 2009). Individuals with below basic health literacy lack the ability to read and understand information in simple documents, or use information to solve simple, one-step problems such as “Give two reasons a person with no symptoms of a specific disease should be tested for the disease,” based on information in a clearly written pamphlet.

A lack of clinical knowledge can hamper one of the key goals of cost-sharing: encouraging a shift away from indiscriminate consumption of health services (some of which may only provide marginal health value to patients) to a shift toward only consumption that is likely to provide meaningful clinical benefits for patients. For this shift to occur, patients must be able to identify which services are likely to promote health and wellness over the long-term. A consistent finding, dating back to the RAND Health Insurance Experiment, is that as cost-sharing increases, patients are equally likely to decrease care that is of both high and low clinical value (Chernew & Newhouse, 2008).

Patients may continue to use treatments that are of low (or no) value because of misinformation, such as the belief that antibiotics effectively treat viral infections, an association that has been observed among low-income populations (Dunn-Navarra, Stockwell, Meyer, & Larson, 2012). Other studies suggest that patients are more likely to discount unobserved or hypothetical benefits than those with immediate, observable benefits. For example, Medicare patients are more likely to decrease medications that provide long-term benefits, such as cholesterol lowering drugs, for reasons of cost than to discontinue drugs that provide more immediate symptom relief (Williams, Steers, Ettner, Mangione, & Duru, 2013). This is in line with findings from behavioral economics that individuals tend to overly discount the future (Akerlof & Dickens, 1982; Rice, 2013). As we review in the concluding section, Value-Based Insurance Design (VBID) may be one method for using out of pocket costs to signal to patients which treatments are likely to promote their health and encourage use of cost-effective treatments.

Even when patients intend to use treatments that would likely provide meaningful clinical benefit, a lack of health literacy can reduce patient compliance with treatment protocols. Lower education is cited as one reason for non-compliance with complex medication regimens (such as antiretroviral treatments for HIV), and for growing disparities in adherence and health outcomes over time for those conditions that require patients to follow complex regimens (Goldman & Lakdawalla, 2005). These challenges may affect efforts to offer incentives (or penalties) through Medicaid cost-sharing programs for patients who follow (or fail to follow) clinical advice related to the management of chronic diseases.

In sum, cost-sharing programs require that beneficiaries understand a number of challenging concepts. In order for cost-sharing to influence behavior, patients must possess knowledge of the costs of seeking care in different settings; an understanding of the clinical benefit of different treatments; ability to perform cost-sharing related calculations; and have a reasonable ability to follow treatment regimens that will, in fact, provide clinical benefits. Such challenges are not unique to individuals with low-income or education, as literature underscores that health literacy challenges exist among numerous demographic groups (Kutner et al., 2006). However, this population may face some unique challenges in gathering relevant clinical information and responding to guidance from clinicians (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011). The literature reviewed in this section suggests that these tasks present challenges for many adults regardless of educational attainment or income level.

Autonomy

The effects of cost-sharing are likely to be mediated by the behavior of providers. Physicians and other frontline providers play the largest role in shaping how patients perceive the costs and benefits of treatments (McGuire, 2000), and in certain cases (i.e., critical illness) may exclusively make decisions for patients. In spite of this, cost-sharing is an intervention targeting the behavior of patients, and requires that patients have substantial choice in treatments (the autonomy assumption). Results from the HIE suggested that declines in spending came from declines in patient-initiated visits and services, not from a decreased amount of services once a patient was receiving care in the system (Newhouse & Rand Corporation, 1993). This could mean patients take cost-sharing into account when they make an initial decision regarding whether to seek care, but that they are subsequently likely to rely heavily on physician recommendations.

Since the HIE, several studies have emerged that highlight some of the challenges associated with increasing patient decision-making related to which procedures to receive and in providing patients with accurate information about costs. One broad literature underscores that patients often are not fully included as partners in making important health care decisions (a paradigm sometimes referred to as “shared decision-making”) (Bernabeo & Holmboe, 2013), often because of a lack of decision support tools in the clinical interaction (Elwyn et al., 2013). Cost is recognized as being one important aspect of the clinical conversation, but studies indicate that patients and physicians rarely discuss cost in the clinical interaction (Alexander, Casalino, & Meltzer, 2003; Alexander, Casalino, Tseng, McFadden, & Meltzer, 2004; Tarn et al., 2006). A lack of knowledge among clinicians about

the cost of different services and procedures has been cited as at least one reason why cost is not more frequently involved in clinical conversations (Riggs & Ubel, 2014). In order for patients to be able to make informed decisions requiring costs, they would at a minimum need information about how much a course of treatment or medication is likely to cost before consenting to initiate care.

Affordability

The use of cost-sharing assumes that individuals have the financial resources to contribute to their daily medical expenses to receive care that is of high clinical value (i.e. that if they have a strong need to seek health services they would have the money on hand to make a copayment). Under the proposals approved by CMS in 2013–2014, Medicaid cost-sharing (including premiums and co-pays) for a family was capped at five percent of the individual's family income per year (the standard used by the DRA). For the first time, cost-sharing at this level was authorized for individuals in households with incomes between 50–100% of the FPL in Arkansas and Iowa. As a reference point, for a family of four, the poverty line in 2015 was \$24,250, so annual cost-sharing in Medicaid should be capped at \$1,213 for this family (Center for Medicaid and CHIP Services, 2015). In many states, low-income families have historically been responsible for tracking these expenditures and reporting to the state when they have reached their cap (“shoebox method”), otherwise they would continue to incur out-of-pocket costs beyond the limit (Selden, Kenney, Pantell, & Ruhter, 2009).

Select key studies related to affordability are summarized in Table 4. There is some research indicating that the population affected by the ACA Medicaid expansion has limited financial resources. In general, a poverty income is less than what analysts have calculated is the “basic” family cost of living in most cities – covering food, clothing, and shelter – is higher than the poverty level (Gould, Withing, Sabadish, & Finio, 2013). At any given time, about one-third of poor families report experiencing material hardships such as food insecurity (problems affording enough food or worrying about food), crowding in the living area, and disruptions in utilities (Sherman, 2004). Even small copay amounts (such as \$2 for an office visit), when summed, can amount to a sizeable financial burden for the poorest and sickest (Families USA, 2012). An analysis of the budgets of older Medicaid beneficiaries found that after accounting for basic living expenses and medical costs, they were typically left with only a few dollars of discretionary income each week (Briesacher et al., 2009). About one in four of those with Medicaid and state coverage reported they were unable to obtain a prescription drug due to cost in a 2000–2001 nationally representative survey; this number rose to close to half among those with 2 or more chronic conditions (Cunningham, 2002). Another consideration is the potential burden of health care expenditures for other household members not enrolled in Medicaid. In a household with mixed coverage (i.e. not all members enrolled in Medicaid), it is possible for total family spending to considerably exceed the five percent threshold. Selden and colleagues (Selden et al., 2009) examined the impact of adding small levels of cost-sharing for a publicly-insured child to the total spending burden of a low-income household. Prevalence of high spending burden (defined as spending greater than 10% of income on health care) was 13% even without cost-sharing. However, it rose to around 21% with the addition of moderate levels of cost-sharing for the publicly insured child; burden increased the most for those families below poverty.

Prior literature indicates how cost-sharing can impact the ability of low-income families to meet basic needs due to financial burden. After the imposition of substantial cost-sharing in the Oregon health program, baseline program enrollees (including some who left the program) reported high levels of medical debt and of forgoing food and other basic needs to purchase medical care, particularly among the chronically ill (Solotaroff et al., 2005). Similarly, Artiga and colleagues (2006) found higher prevalence of problems paying for groceries, utilities, and rent among enrollees in a state-funded program in Utah with limited benefits and substantial out-of-pocket costs compared to demographically similar counterparts in a more comprehensive Medicaid program.

Despite this short-term evidence, less is known about how cost-sharing impacts family budgets over the long-term. Available evidence demonstrates that a lack of comprehensive health insurance increases medical spending risk and medical debt, and that these outcomes can have persisting effects on financial wellbeing (Bitler & Zavodny, 2014; Cook, Dranove, & Sfekas, 2010). Conversely, expanded access to public insurance has been linked to better financial outcomes, especially in the short-term. For example, adults that had an opportunity to enroll in Medicaid in Oregon reported lower levels of medical debt and had fewer collections in their first year in the program compared to those who were not able to initially enroll in the program (Finkelstein et al., 2011). Other public programs, including the introduction of Medicare in 1965, have been linked to reduced financial burden among those at greatest risk for high out-of-pocket spending (Finkelstein & McKnight, 2008). However, no study has examined the long-term impacts of cost-sharing versus free insurance on family finances. The findings from the research on public insurance expansions may not generalize to the effects of transitioning from some cost-sharing to free coverage.

FUTURE DIRECTIONS AND POLICY IMPLICATIONS

Our review supports four broad conclusions about the likely effects of cost-sharing in Medicaid, which has emerged as a central element of many recent Medicaid waivers, paralleling a trend in private insurance that may have contributed to the recent slowdown in national healthcare costs (Ryu, Gibson, McKellar, & Chernew, 2013). First, cost-sharing has a deterrent effect on initiation of new treatments and medications, and in some cases can reduce utilization of ongoing treatments for chronic conditions, potentially leading to avoidable complications. Second, cost-sharing may cause excessive financial burden on low-income families, leading beneficiaries to choose between health care services and other household necessities. Third, many low-income adults lack a basic understanding of how cost-sharing operates in their insurance plans and do not know the specifics of how costs vary by treatments or settings. Fourth, some Medicaid-eligible patients are unable to choose which treatments are most likely to positively impact their long-term health because of lack of knowledge.

There is a dearth of evidence-based policies to improve the effectiveness of cost-sharing. However, limiting the financial and informational burdens faced by enrollees and proactively addressing gaps in the knowledge and abilities of enrollees may be strategies supported by the literature. To improve comprehension of out of pocket costs, Medicaid programs can focus on reducing the complexity of cost-sharing incentives by limiting the variation in costs

across different service categories. Medicaid programs can also focus on making cost-sharing requirements within a plan more widely publicized at the time of enrollment, and requiring that all materials provided to beneficiaries are written for individuals with basic (grade school level) literacy. Cost-sharing would also likely be better understood if Medicaid programs used case managers or outreach workers at community clinics and other disproportionately Medicaid-serving providers. These professionals could explain changes in policies to individuals and communicate with beneficiaries how they can minimize their financial burden under new requirements. However, past efforts such as simplifying materials to improve understanding and providing resources such as a 24 hour call center and counselors resulted in only modest improvements (Coughlin & Zuckerman, 2008; Greene & Peters, 2009). Therefore, all attempts to improve understanding of plan details among Medicaid recipients should be rigorously evaluated before widespread implementation to ensure efficacy.

Limitations to clinical knowledge among Medicaid beneficiaries can be targeted both directly and indirectly. Increased use of case management in Medicaid programs could help enrollees better determine which treatments are of greater clinical value when faced with cost-sharing at the point of service as well as provide them with knowledge to help manage chronic diseases. In addition to this type of direct approach, coverage can be structured to guide enrollees toward choosing high-value care without directly educating them about individual treatments. This would include the development of cost-sharing structures that more directly target co-payments to discourage use of low-value services and encourage use of highly effective care. Value-Based Insurance Design (VBID) relaxes the standard economic assumption that patients will balance costs and expected clinical benefit optimally (Chernew, Rosen, & Fendrick, 2007). Instead of charging the same cost-sharing to all patients or on all services, VBID attempts to set copayment rates based on the costs and benefits of different clinical services to specific patient populations. In practice, this may require selectively altering copays for a limited set of services deemed to be of very limited clinical value or where there is likely to be an equally effective lower-cost alternative. There are limitations to this approach, as it requires trading off precise targeting of co-payments with administrative complexity and the need for clinical detail. Nonetheless, using elements of this approach is likely to be an improvement over the status quo of set cost-sharing required of all patients for broad categories of services. In order to design such policies, researchers should evaluate how low-income patients' out of pocket costs impact their health outcomes – not just their financial or utilization outcomes.

Considering that patients do not make health care decisions alone, other strategies could focus on making health care professionals more aware of the costs facing their Medicaid patients. Such efforts could include incorporating this into formal goals for health professional training, and indeed, are beginning to be recognized as important aspects of patient care. For example, Internal Medicine trainees are now evaluated on their ability to identify “forces that impact the cost of health care, and advocate for, and practice cost-effective care” (Iobst et al., 2013).

Given evidence that cost-sharing impacts some low-income individuals' and families' ability to afford other necessities, states can consider direct or indirect approaches to limiting

potential negative effects on health outcomes from forgoing necessary care. One important mechanism for protecting beneficiaries against excessive financial burden is implementing tracking systems that notify beneficiaries and providers about when a cost-sharing cap has been reached. Another possibility involves creation of a transparent and well-publicized process to apply for exemption from cost-sharing when the financial burden on enrollees is too great.

Evaluating the Success of Current Cost-Sharing Proposals

Cost-sharing is only one approach to cost-containment and future research should compare cost-sharing with other demand- and supply-side approaches to increasing program efficiency, estimating the effects of different policies on costs as well as the range of outcomes we have highlighted related to health, financial, and overall well-being of enrollees. As reliance on cost-sharing in Medicaid grows, it is important to continue to track patient and health system responses to new cost-sharing policies. The issues we have identified based on past experiences with cost-sharing in low-income populations suggest a number of general metrics categories on which policy makers and program officials should focus. At the individual level, these categories include: measures related to enrollee comprehension of cost-sharing rules; health insurance literacy; and utilization of key high value health care services.

Moreover, as cost-sharing is integrated with wellness incentives, it will be important to track how well Medicaid beneficiaries understand the outcomes required in order to obtain financial incentives (or conversely to avoid additional financial penalties). At the program and health systems levels it will be important to monitor administrative and implementation challenges, including accurate tracking of aggregate cost-sharing over the year and provider ability to collect required cost-sharing. Further research is also needed to better understand the implications of different cost-sharing provisions for overall spending and utilization among the Medicaid population, and well as the short- and long-term impacts on patient health and financial well-being. Finally, because improving the health of low-income Americans is the reason for Medicaid's creation, it is critical that future studies consider how changes in cost-sharing policies affect the actual health and wellbeing of low-income populations.

Acknowledgments

Dr. Saloner gratefully acknowledges funding from the Robert Wood Johnson Health and Societies Scholars Program. Dr. Sabik acknowledges funding from the National Institutes of Health (R01CA178980, co-funded by the National Cancer Institute and the Office of Behavioral and Social Sciences Research). We thank Andrew Barnes and Laura Wherry for excellent comments on an earlier draft of this paper.

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Table 1

Addressing four main assumptions about how individuals respond to cost-sharing.

ASSUMPTION	DESCRIPTION	EXAMPLE	POLICIES TO ADDRESS
Cost knowledge	Beneficiaries understand the out of pocket costs that they face under their health insurance plans	Patient understands that she will pay more to be seen for flu in the emergency room than in her primary care doctor's office	<ul style="list-style-type: none"> Requiring Medicaid programs to explain cost-sharing to all beneficiaries using materials written at grade school level Posting cost-sharing amounts at clinics serving Medicaid patients
Clinical knowledge	Beneficiaries understand the relative benefits of different services and will forgo services that are of lower value to them	Patient with asymptomatic hypertension takes low-cost medication daily in order to prevent costly cardiovascular event requiring expensive hospitalization	<ul style="list-style-type: none"> Using value-based insurance design to steer patients toward higher value medical services Increasing the availability of physician and caseworker counseling to educate enrollees about how to manage their diseases
Autonomy	Decisions about whether to seek care and what types and quantity of healthcare services to receive are either made directly by beneficiaries, or through shared decision-making between patient and health care provider	Doctor consults with patient before prescribing a brand name medication when there is a generic that would be cheaper for patient	<ul style="list-style-type: none"> "Academic detailing" to inform providers about cost-sharing for Medicaid patients Incorporating cost-sharing amounts for Medicaid in physician's electronic medical record
Affordability	Beneficiaries have the financial resources to contribute to routine medical expenses for treatments that would be considered cost-effective within the goals of Medicaid programs.	Patient with hypertension has enough money to pay for monthly prescription while also affording clothing, food, transportation, housing, and child care	<ul style="list-style-type: none"> Exempting individuals with financial hardships from cost-sharing requirements Providing more opportunities for enrollees to earn rebates or other in-kind benefits for health management

Table 2

Key references related to the impact of cost-sharing on utilization and total spending in low-income populations.

AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
Chernew et al., 2008	42,845 adults with employer-sponsored health insurance with diabetes or heart failure from 2002–2004	Used data from MarketScan Commercial Claims database. Medication adherence examined using regression model controlling for multiple demographic characteristics and area-level proxy for household income	<ul style="list-style-type: none"> Increased copayments decreased adherence for almost all medication classes among those in the lowest income group (<\$30,000/year), but much less so in all other income groups
Cunningham, 2002	39,000 American adults age 18–64, including about 1,800 with Medicaid or state coverage	Using the Community Tracking Survey in 2000–01, a nationally representative telephone survey, compared perception of participants' ability to obtain prescription drugs due to cost based on insurance status	<ul style="list-style-type: none"> 26% of adults with Medicaid/state coverage and 29% of uninsured adults were unable to obtain a prescription drug due to cost in the past year, compared to 8% of those with employer-sponsored insurance For those with 2 or more chronic medical conditions (e.g., diabetes, hypertension), this rose to 41% for those with Medicaid/state coverage and 61% uninsured, compared to 15% with employer-sponsored insurance
Cunningham, 2005	About 1,600 American adults aged 18+ enrolled in Medicaid	Data from Community Tracking Survey in 2000–01 and 2003 as well as state surveys regarding prescription drug policies in 2000 and 2003. Regression models examined effects of five state policies regarding prescription drugs (use of prior authorization, copayments, dispensing limitations, generic drugs, and step therapy) on respondents' perception of ability to obtain prescription drugs.	<ul style="list-style-type: none"> More than 1/5 unable to get prescription drugs due to cost; this is higher than other populations even when adjusted for income and chronic health status Participants in states with more of these policies about 10% more likely to report access problem due to cost When evaluated independently, copayments had no significant effects on access.
Domino et al., 2011	North Carolina Medicaid beneficiaries age 19–64 who experienced a \$2 prescription medication copay increase and reduction in days supply of meds in 2001.	Difference-in-differences design comparing adherence changes in those with North Carolina Medicaid (which implemented a copayment increase and days-supply limitation) with Georgia. Analysis using CMS claims data.	<ul style="list-style-type: none"> General decrease in adherence, with observed decreases larger in days allowed supply changes than in copayment increases only Lower adherence did not increase hospitalizations Overall Medicaid program spending declined but was attributed more to limiting days supply than copay increase
Farley, 2010	Mississippi Medicaid beneficiaries with schizophrenia who experienced \$2 prescription medication copayment increase among other changes in 2002	Difference-in-differences design comparing adherence changes in those with Mississippi Medicaid (which implemented a copayment increase) with Indiana and Minnesota which did not. Analysis using CMS claims data.	<ul style="list-style-type: none"> Patients significantly reduced their antipsychotic compliance Slight reduction in outpatient mental health visits No evidence of increased emergency department visits or hospitalizations
Guy, 2010	Low-income childless adults age 19–64	Difference-in-differences design using 1997–2007 data from the Behavioral Risk Factor Surveillance System, a nationally representative telephone survey. Study modeled changes in preventive care after insurance expansions with and without copayments.	<ul style="list-style-type: none"> Insurance coverage improved regardless of cost-sharing requirements when public insurance was expanded to childless adults Beneficiaries of programs with small (less than \$3/service) cost-sharing requirements had improved screening rates.

AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
Hartung et al., 2008	Oregon Medicaid beneficiaries who experienced new copayments in 2003, average age about 38 years old.	Interrupted time series analysis using aggregated Oregon Medicaid Fee-For-Service data focusing on a range of prescription drug and service use outcomes for three years after institution of copayments	<p>while those enrolled in programs with increased cost-sharing requirements (\$5–\$25) did not</p> <ul style="list-style-type: none"> Utilization of all prescription drugs decreased by 17% There was significantly decreased utilization for each therapeutic category to different extents No changes observed in outpatient service utilization
Lowe et al., 2010	Oregon Medicaid beneficiaries age 18–64 who experienced increased cost-sharing in 2003, including \$50 emergency department copayments.	Difference-in-differences design compared those who experienced increased cost-sharing (OHP Standard plan) with those who did not (OHP Plus plan) using state Medicaid claims data.	<ul style="list-style-type: none"> In the OHP Standard plan, adjusted rates of ED use fell 16% after cutbacks and rose 9% after partial restoration of benefits; in the OHP Plus plan, these rates rose over the same time periods ED use among OHP Standard enrollees fell 18% compared with OHP Plus enrollees When considering presumably more serious visits that resulted in hospitalization, OHP Standard enrollees had a 24% decrease
Mortensen, 2010	Adult Medicaid beneficiaries age 19–64 in multiple states	Difference-in-differences design comparing utilization in states who underwent copayment increases with those who did not. Used data from the Medical Expenditure Panel Survey (MEPS) from 2001–06, a nationally representative survey. Indicators are included for implementation of Medicaid copayment policy.	<ul style="list-style-type: none"> No evidence that those beneficiaries living in states which implemented a copayment increase decreased their non-emergent emergency department visits
Subramanian, 2011	10,241 adult Medicaid beneficiaries age 21–64 with cancer in Georgia, Texas, and South Carolina	Difference-in-differences design compared one state whose Medicaid beneficiaries experienced increased cost-sharing (Georgia) with those who did not experience increases to the same extent (Texas and South Carolina) using state Medicaid claims data linked to cancer registry data from 1999–2004	<ul style="list-style-type: none"> After implementation of copayment in Georgia, number of prescription days (number of prescriptions multiplied by days supply) decreased 17% while control states' prescription days increased Probability of ED visit increased in Georgia only Patients with multiple comorbidities in Georgia decreased their prescription use the most Total Medicaid cost increased in all states, but increased the most in Georgia
Von Korff et al., 2008	14,515 adults over 21 years old with family incomes up to 200% of FPL from western Washington state who were members of Basic Health Plan (BHP), which underwent increased cost sharing in 2004.	Difference-in-differences design compared individuals' out-of-pocket health costs due to increased cost-sharing in Washington's Basic Health Plan with age-sex-residence matched controls not enrolled in Medicaid or BHP.	<ul style="list-style-type: none"> Enrollees experienced a 100% increase in out of pocket costs over 2 years, compared with approximately 40% in non-BHP, non-Medicaid controls No increase in disenrollment with increased cost-sharing
Wallace et al., 2008	10,381 adult Oregon Medicaid beneficiaries age 18–64 with incomes <100% FPL who	Difference-in-differences design compared program expenditures and service use of those Medicaid beneficiaries who experienced program	<ul style="list-style-type: none"> Expenditures for pharmacy services, ambulatory services, and ED use decreased significantly

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AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
	experienced increased cost-sharing in 2003	changes including increased cost sharing with those who did not.	<ul style="list-style-type: none"> <li data-bbox="191 793 212 814">• Expenditures for inpatient and hospital-based services increased significantly <li data-bbox="250 793 272 814">• Total expenditures per person unchanged

Table 3

Select references related to health literacy and health insurance literacy in low-income populations.

AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
Coughlin et al., 2008	1,848 newly enrolled Medicaid beneficiaries in Florida between November 2006 – March 2007	Telephone survey of participants, oversampled those receiving Supplemental Social Security (SSI)	<ul style="list-style-type: none"> • 30% unaware they were enrolled in Medicaid reform plan • 30% unaware that different plans may have different benefits or new benefits • Over half reported difficulty understanding/choosing plan
Greene et al., 2009	59 Florida Medicaid beneficiaries in June 2007, 122 Florida Medicaid beneficiaries in May 2007.	Mixed qualitative and quantitative design. 1) Focus groups on Medicaid reforms conducted 10 months after state reforms. 2) Convenience sample was tested for understanding of program changes	<ul style="list-style-type: none"> • Participants generally endorsed plan choice as desirable • Comprehension of plan comparisons generally poor; simplification improved this for some with higher numeracy
Kenney et al., 2014	639 uninsured adults with family incomes at or below 138% FPL from June to July 2013	Cross-sectional observational design using the Health Reform Monitoring Survey (HRMS), a nationally representative survey of ongoing ACA implementation	<ul style="list-style-type: none"> • Most did not have prior experience with Medicaid • Of those with experience, most said they were not currently enrolled because of actual or perceived ineligibility • Most had both low confidence in their understanding of insurance terms and few sources of insurance information
Long et al., 2014	7,450 (1,233 uninsured) non-elderly adults of all incomes, including those with family incomes at or below 138% FPL in 2013	Cross-sectional observational design using the HRMS	<ul style="list-style-type: none"> • Fewer than one-fourth of uninsured adults very or somewhat comfortable with all health insurance terms examined, including cost-sharing terms • Except for “copy,” fewer than half of uninsured adults understood any one health insurance term
Politi et al., 2014	51 uninsured adults, mostly low-income and African American, in three locations (one urban, suburban, and rural) in Missouri	Semi-structured interviews	<ul style="list-style-type: none"> • Only slightly more than half of participants had “adequate” health literacy • For all key insurance terms except “premium,” fewer than half of participants demonstrated adequate understanding • The least understood cost-sharing term was “coinsurance”
Sentell, 2012	35,033 adults age 18–64 in California	Used self-reported measures of health literacy from the California Health Interview Survey, a representative telephone survey in 2007, and compared with demographic variables	<ul style="list-style-type: none"> • Those with low health literacy were more likely to be uninsured, sicker, and to meet criteria for coverage under Medicaid expansion
Walsh and Fitzgerald, 2012	1,073 Medicaid recipients in a mid-Atlantic state who chose between Medicaid Managed Care plans in 2008	Qualitative analyses of mail survey responses of a random sample of Medicaid enrollees	<ul style="list-style-type: none"> • Over half of participants did not understand difference in plans • Several chose plans based on misconceptions like perceived provider network differences (actually same for both plans)

AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
Yin et al., 2009	6100 parents in the United States	Using the National Assessment of Adult Literacy, a nationally representative survey in 2003, assessed self-reported health literacy, measured health literacy by a number of tasks/exercises, and compared these with a number of demographic variables using regression models	<ul style="list-style-type: none"> <li data-bbox="198 800 219 814">• Incomes below the poverty threshold predicted low health literacy, but not incomes 100–175% FPL <li data-bbox="256 205 302 814">• Approximately 2/3 of the parents were unable to calculate the annual price of a health insurance policy <li data-bbox="315 268 337 814">• Parents had higher health literacy than nonparents

Table 4
Key references related to the financial burden of cost-sharing in low-income populations

AUTHOR(S)	POPULATION	METHODS	MAJOR FINDINGS
Artiga et al., 2006	Low income newly-covered Utah Medicaid beneficiaries in a limited program and existing enrollees who experienced increased cost-sharing in 2002, age 21–64	Descriptive study using data from telephone survey of a representative random sample (N=737) of beneficiaries	<ul style="list-style-type: none"> • A large majority of both groups reported difficulty paying for at least one major category of basic needs • Negative effects of medical expenses were largest among adults in the limited coverage program
Briesacher et al., 2009	Adults age 51+ with incomes below 100% FPL and/or who are Medicaid beneficiaries	Descriptive comparison of spending patterns of low-income adults using spending data from the Health and Retirement Study, longitudinal panel survey since 1992	<ul style="list-style-type: none"> • Those with Medicaid allocated a larger share of their total resources (85%) to basic living expenses than did similar households without Medicaid • Medication costs accounted for the largest proportion of health care expenses • After paying for basic needs and health care costs, households had an average of \$16 left each week
Selden et al., 2009	Low-income families (N=7,885, 80% <150% FPL) with publicly insured children	Descriptive study using MEPS data from 2003–2004; authors developed various cost-sharing scenarios and estimated presence of high financial burden (defined as >10% of disposable income spent on health care costs)	<ul style="list-style-type: none"> • Because of other family health care spending, in zero cost-sharing scenario prevalence of high burden is 12.7% in families with publicly insured children • Increased prevalence of high financial burden in these families (21.5%) in lowest cost-sharing scenarios, while the highest scenario increased prevalence to 27.7% • Prevalence of high financial burden was highest in the poorest families (those at <100% of FPL)
Solotaroff et al., 2005	Oregon Health Plan Medicaid beneficiaries age 19–64 affected by increased cost-sharing in 2003	Descriptive analysis of mailed survey sent to stratified random sample of adults (n=1,374) affected by change in OHP Standard Plan	<ul style="list-style-type: none"> • Substantial percentages (from a quarter to almost half depending on the subgroup) reported inability to meet food budgets because of medical expenses • Chronically ill were significantly more likely than others to report difficulties in balancing medical care costs with other needs