As reform proposals begin to emerge, it appears that a continued combination of public and private sector solutions will be the framework for the health care system going forward. Government programs, employer sponsored coverage, consumer engagement/personal responsibility and market-based actions are all likely to continue playing a role, although structures and emphasis may change. In developing reforms, policymakers will examine each component of the current health care system. Among those components is the structure of health care benefits. Analyses will likely address a series of questions:

- Are benefits optimally designed to maximize beneficial coverage?
- Do current benefit structures create appropriate incentives for improved health and efficiency?

**HCFO Efforts**

The Robert Wood Johnson Foundation’s Changes in Health Care Financing and Organization (HCFO) program is conducting a series of activities to explore the role of benefit design in reform efforts. Recently, HCFO convened a work group, bringing together senior level policymakers, researchers and industry experts to explore market innovations in benefit design, describe how they are currently being implemented, and discuss the potential for expansion. The group also examined what organizations of varying sizes and sectors think about benefit design. Through this effort, HCFO seeks to build the research base and expert capacity to assist policymakers in developing health reform.

**Role of Benefit Design**

Benefit design is one of many components of reform. Others include delivery system and payment reform. Benefit design uses cost sharing to signal value and incent positive behavior by beneficiaries. However, providers delivering care face different incentives and imperfect information exists about the quality of care provided. For example, providers are most frequently paid to deliver services, and the incentives are therefore to deliver more, rather than better, services. The amount of payment relates to the complexity of the service and the amount of time and training it requires; the amount of payment does not vary according to how valuable the service is to the patient or the extent to which the service contributes to the patient’s improved health and functioning. Similarly, the payment amount does not vary by the quality of outcomes or services.
The employer-based system emerged during the most part, is obtained through employers. Insurance coverage in the United States, primarily on hospital and physician services.

Insurance coverage in the United States, for the most part, is obtained through employers. The employer-based system emerged during World War II when wage and price controls prevented competition for labor on the basis of increased wages but allowed for the establishment of employee insurance plans. The favorable tax treatment of employer contributions to employee health insurance plans further cemented this relationship. Employer-based insurance is more accessible for full-time employees and employees of larger firms. Small employers are less likely to offer coverage to their employees and, when they do, benefits are typically less comprehensive than those offered by large employers. The individual insurance market is small and is used most often as a bridge between spells of more affordable employer coverage. In the mid-1960s, the Medicare and Medicaid programs launched. Medicare provided the elderly with a uniform set of national benefits and eligibility standards. Under Medicaid, which was created to provide insurance for the poor and disabled, benefits and eligibility varied by state. More recently, public coverage for children was expanded through the State Children’s Health Insurance Program (SCHIP). Health maintenance organizations (HMOs), with their structured benefit designs and limited networks, took hold in the 1980s. HMOs expanded health care benefits to include pharmaceuticals and preventive care. The recognition that lifestyle is one of the primary contributors to health has led some employers to include wellness programs among their health benefit options. Smoking cessation programs and financial incentives for completing health risk assessments and enrolling in weight-loss programs are among benefits employers are starting to offer their employees. The take-up and success of these types of benefits are yet to be realized. Preventive care, care management, and pharmacy plans became more common in the last several years, even in indemnity plans, and in 2003 legislation provided for a pharmacy benefit under Medicare.

As health care costs have begun to rise more rapidly, employers are increasingly scaling back their employee and retiree insurance benefits. Deductibles are increasing, and copayments and other cost sharing are increasing as well. Individuals that purchase insurance in the individual market are also moving toward reduced coverage due to cost concerns.

A recent analysis of the individual and small group products offered by health plans responding to the AHIP survey in 2008 indicates that there is no single “average” or most-purchased benefit package. Rather, benefit choices are spread over five to seven relatively common deductible offerings. The most frequently purchased benefit package (about 25 percent of those in the survey) in the individual market included a $500 deductible. In fact, only 6 percent of policies had no deductible and more than 35 percent of policies had a deductible of $2,000 or more. The level of cost sharing for particular services does not appear to differ significantly, indicating that in the individual market policies trade off increased deductibles for lower premiums. While benefits in the small group market appear to be somewhat more generous, with 20 percent of covered lives facing no deductible coupled with a high hospital per admission copay (with a mean of $333 per admission and higher specialist physician copays) and only about 17 percent of covered lives facing a $2,000 or more deductible, a large number of individuals do face a significant deductible.

Tools to Address the Challenge of Increasing Health Care Costs

The rapid growth in health care costs has spawned innovations regarding benefit design and cost-sharing provisions as payers try to temper health care cost increases. This challenge of rapidly rising health care costs has resulted in a number of tools used by insurers and payers to better rationalize care. These include:

- Prior approval
- Second opinions
- Tiered pricing
- Lowest cost alternative
- Consumer-directed packages with high cost sharing
- Value based insurance designs

Information on guide decisions is also lacking. Information on the relative quality of providers is limited, as is information to help consumers determine which treatment options are most effective for them. However, consumer choices are influenced by providers who may also lack sufficient information or may have different incentives. The delivery system may also impose constraints on the available treatment options.

Because of the variety of economic and non-economic incentives inherent in the current health care system, benefit design is only one of the tools available to incent behavior. While it has the potential to be an important tool, its impact is likely to be modest unless it is accompanied by payment reform and delivery system change.

History of Health Care Benefits

While many European countries had some form of compulsory, nationalized health insurance by 1920, the United States did not. There was little support for such legislation and, in fact, strong opposition by physicians, pharmacists, and commercial insurance companies. However, as the demand and cost of medical care increased, insurance became an attractive solution to ensure that people could pay their medical bills. Blue Cross and Blue Shield led the way in providing group health coverage in the 1930s. Coverage focused primarily on hospital and physician services.

Insurance coverage in the United States, for the most part, is obtained through employers. The employer-based system emerged during

A recent analysis of the individual and small group products offered by health plans responding to the AHIP survey in 2008 indicates that there is no single “average” or most-purchased benefit package. Rather, benefit choices are spread over five to seven relatively common deductible offerings. The most frequently purchased benefit package (about 25 percent of those in the survey) in the individual market included a $500 deductible. In fact, only 6 percent of policies had no deductible and more than 35 percent of policies had a deductible of $2,000 or more. The level of cost sharing for particular services does not appear to differ significantly, indicating that in the individual market policies trade off increased deductibles for lower premiums. While benefits in the small group market appear to be somewhat more generous, with 20 percent of covered lives facing no deductible coupled with a high hospital per admission copay (with a mean of $333 per admission and higher specialist physician copays) and only about 17 percent of covered lives facing a $2,000 or more deductible, a large number of individuals do face a significant deductible.

Tools to Address the Challenge of Increasing Health Care Costs

The rapid growth in health care costs has spawned innovations regarding benefit design and cost-sharing provisions as payers try to temper health care cost increases. This challenge of rapidly rising health care costs has resulted in a number of tools used by insurers and payers to better rationalize care. These include:

- Prior approval
- Second opinions
- Tiered pricing
- Lowest cost alternative
- Consumer-directed packages with high cost sharing
- Value based insurance designs
Originally, tools were mostly administrative, preventing the use of “unnecessary” services. More recently developed tools try to focus incentives on beneficiaries/enrollees. For example, some employers are “thinning out” the coverage available to employees or moving to more catastrophe-focused benefit options. Others are developing packages which emphasize preventive and wellness services. Consumer-driven health plans and value based insurance designs (VBID) are two major directions that have caused consumers to focus on value and may serve to extract value (e.g. high quality at low cost) from the health care system.

Consumer-Driven Health Plans

Consumer-driven health plans (CDHPs) entered the market in the late 1990s and were designed to encourage consumers to take more direct control over their health care decisionmaking. Generally in CDHPs, a high deductible health plan is coupled with a health spending account, funded by a portion of employers’ health benefit contribution. The most common accounts are health reimbursement accounts (HRAs) and health savings accounts (HSAs). Consumers who spend down the monies in their account in a given year must pay out-of-pocket until reaching their deductible. A key feature of CDHPs is Internet-based information, available to consumers, about provider cost and quality.

Early results from CDHP have been modest. These plans appear to result in reduced pharmacy spending and physician office visits but that reduction in care is indiscriminant, affecting both high and low value care. In addition, there are indications that selection into the plans may play a large part in savings. That is, people who are healthier or more activated consumers may be more likely to enroll in CDHPs.

It appears that the success of this benefit structure is dependent on how the plans are structured and implemented; a number of variables can influence consumer engagement, spending and utilization, as well as potential savings. Newer benefit designs have attempted to exempt preventive services from the deductible in the hopes of reducing barriers to their use, subject to Treasury regulations. There is little empirical evidence about the impact of these new designs on utilization and health outcomes.

What is clear from these account-based insurance designs is that consumers are sensitive to economic incentives, and do reduce utilization when faced with significant cost sharing. However, the apparent inability of consumers to distinguish between necessary and unnecessary care is worrisome.

Value-Based Insurance Design

While innovation in health care will continue to drive new therapies, many experts believe that our capacity to pay for all new improvements simply does not exist. One solution: support those therapies that are shown to have value. Efforts are underway to shape insurance benefits to encourage the use of health care that provides value to the patient.

To date, the VBID framework has largely been applied in the context of encouraging the use of certain pharmaceuticals through reductions in consumer cost-sharing. The assumption underlying VBID is that, if cost-sharing is reduced, consumers will be more likely to engage in preventive behaviors and comply with chronic disease management. Pitney Bowes has been a leader in the development of these types of benefit structures. In 2002 they created a reduced cost-sharing incentive to promote better medication adherence; limited published results showed reduced emergency department use by diabetics and slower cost growth overall. A study of patients enrolled in a disease management program with Active Health showed adherence increases associated with co-payment elimination or reduction. More research will be needed to determine whether the limited early successes translate into sustained improved health outcomes or health care cost reductions.

Candidates for VBID are those services for which the clinical benefits are supported by evidence, financial incentives to patients can influence their use, and there is “value” to improve health outcomes or reduce costs. The pharmaceutical focus of the work to date on VBID is important but limited. VBID might also relate to increases in cost-sharing for low value services—either services that have little impact on quality or are not of high value. However, there are a number of challenges in identifying candidate therapies and services for VBID and operationalizing these policies.

Clinical effectiveness. While a large number of therapies and services have been identified that improve health outcomes, the extent to which they provide benefit depends on the clinical characteristics of the patient. Few therapies provide clinical benefit to everyone regardless of health or genetic status. Appropriately targeting therapies to the subset of the population who can most benefit is a difficult task in VBID, since the insurer often does not have enough clinical data to selectively apply differential cost sharing.

The time horizon is also important to consider in assessing clinical effectiveness. Most insurers consider short term effectiveness, since the standard insurance contract is one year. However, this underestimates the potential effectiveness of preventive services and chronic disease management, since these services often have a longer time horizon. Kaiser Permanente is one exception, covering preventive services and chronic disease maintenance better than most plans, because Kaiser Permanente maintains their enrollee relationships for a longer period of time.

While existing efforts at VBID have focused on pharmaceuticals particularly at encouraging the use of certain therapies, there is potential for designs that might discourage the use of services with low clinical effectiveness as well. However, identifying those therapies and appropriately targeting the incentives will be challenging. Initial steps have begun with the
recent passage of the stimulus package under which $1.1 billion has been allocated for comparative effectiveness research. This includes the establishment of a council to coordinate the research efforts and advise the administration.

Financial incentives influence use. The premise behind VBID is that reducing cost sharing will incent consumers to use certain therapies. While common sense would argue in favor of this, there is little empirical evidence justifying this assumption. Most of the evidence comes from research that demonstrates that consumers are price-sensitive, and are less likely to use services that are expensive. However, there is little evidence that consumers can respond to nuanced incentives promoting more of certain services or fewer of others. Further, given the reliance on professional determination, it may be unrealistic for financial incentives to counterbalance the physician’s recommendation. That is, financial incentives to patients may not be sufficient to counter financial incentives to providers to drive utilization. However, VBID may be more successfully used to incent entry into the system, or to reinforce the recommendations of physicians for therapeutic care.

Value (benefits exceed costs). Determining value is difficult. First, the perspective of value must be clarified. Should value be considered in the context of the insured individual, the payer, or society? While the individual should be in the best position to assess the benefit of a service to improved health, the individual often does not have enough clinical information to assess benefit, nor does the individual have an accurate assessment of the cost, and so the “value” determination is skewed. In addition, the individual must incorporate their own preferences with medical advice and other societal input (such as direct to consumer advertising). A number of initiatives have tried to provide more information to individuals to aid in the decision-making, with limited success. Further, payers may not have sufficient information to gauge benefit to individuals, and must make decisions about benefit at the aggregate.

Another issue to consider in determining value is that individual circumstances can influence the dollar amount people can attach to value. For example, low and modest income individuals may find that even modest cost sharing can place some benefits out of reach, while higher income individuals will not be deterred by even significant cost sharing. Individuals with significant health care needs that require frequent services may also be more cost-sensitive than individuals with few health needs, and yet it may be more cost effective to encourage them to receive services. Creating benefit structures for different groups will take great discipline. Policymakers developing future insurance designs need to consider how to target cost sharing differentially for at-risk groups who struggle even with coverage.19

More Information Is Needed
While policymakers can shape multiple innovative benefit designs, resources used in doing so will not be well spent unless appropriate targets are identified in advance. Shaping benefits to work in concert with an efficient delivery system and a payment system with appropriate incentives will be a challenge and will require more information. Currently, there is a critical lack of information on high and low value services, which is needed to assist consumers in making what will likely be difficult trade-offs. Also needed, but more difficult to produce, is information on who benefits from particular treatments.

Information must then reach providers and consumers must be educated to make high value health care choices. One challenge is reaching consensus among the provider community on what constitutes high quality care. Even more challenging may be creating the right incentives to encourage individuals to make the hard decisions about services and care for which they are willing to pay.

Although provocative research from the Dartmouth group suggests that 30 percent of care is of low value, identifying that low value care will be difficult. It will require studies of the effectiveness of new treatments as well as of existing treatments that are an accepted part of care delivery but have never been subjected to research on effectiveness. In addition, it will require the ability to target those individuals who derive the most benefit from those treatments.

Information on the resources used and benefits achieved for alternative treatments exists, although certainly additional studies will be necessary. However simply researching resource allocation will not be sufficient. What is missing is a mechanism for applying the results of these studies, including discouraging the use of low-value services. The recent American Recovery and Reinvestment Act (ARRA) created a Federal Coordinating Council for Comparative Effectiveness Research; in addition to coordinating federal expenditures, the Council will make recommendations regarding infrastructure needs for comparative effectiveness research. While this Council is not directly mandated to examine how the information from comparative effectiveness research can be translated into insurance design, it is clear that such an effort is needed. Their efforts will likely use a consensus process to ensure their recommendations are socially and politically acceptable.

While comparative effectiveness research is clearly one tool that policymakers can use, it will not be sufficient on its own. Benefit design, including cost-sharing, will be important as will other policy levers, such as provider reimbursement. Indeed, it will be politically challenging to change behavior, especially when large dollars are at stake. However, the need to control the rapid growth in health care costs makes this necessary.

Conclusion
Benefit design is an important tool that is likely to be used in reforming the health care system. Payers and insurers have developed and used a number of tools to better rationalize care. Early tools were mostly administrative, and included prior
approval and second opinions. More recently, tools have been developed to make consumers more aware of health care costs and to provide incentives for high value care. VBID is one tool that has been used to incent high value care, but it has mostly been used in the context of encouraging the use of certain pharmaceuticals for treating chronic conditions through reductions in cost sharing. While the potential exists for expanding VBID, including the development of designs that discourage the use of low clinical effectiveness, identifying those therapies and appropriately targeting incentives will be challenging. Further, VBID is likely to be most effective at incenting the point of entry into the health care system or removing barriers to compliance with clinical recommendations; it is less likely to be effective at countering physician recommendations. Thus, benefit design strategies are likely to be most effective when they are paired with other policies, such as payment and delivery system reform.

About the Authors
Sharon B. Arnold, Ph.D. is director of the HCFO program. She can be reached at sharon.arnold@academyhealth.org. Bonnie J. Austin, J.D. is deputy director of the HCFO program. She can be reached at bonnie.austin@academyhealth.org. Both can also be reached at 202.292.6700.

Endnotes
5  The State Children’s Health Insurance Program (SCHIP), established in 1997, was reauthorized in February 2009 for four and a half years and is now referred to as CHIP.
8  Presentation by John Bertko and Jeff Lemieux on an analysis of the current benefits offered in the individual and small group market, November 18, 2008.
13  Ibid.
16  HCFO has commissioned Niteesh K. Choudhry, M.D., Ph.D., and colleagues Meredith B. Rosenthal, Ph.D. and Arnold Milstein, M.D. to prepare a paper defining VBID and its structure, distinguishing it from related concepts, reviewing the evidence supporting the impact of VBID on quality and cost, estimating the prevalence of its and discussing implications for reform. This paper was presented at a HCFO meeting on November 18, 2008.
18  Choudhry et al, unpublished.