Patient-Centric Care Management

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ABSTRACT

OBJECTIVE: To review managed care’s current cost management trends and the consumerism movement; to elucidate the pros and cons of key issues; and to describe the philosophy of focusing on the patient, also called patient-centric care, while improving the patient’s care through value-based purchasing and plan design.

SUMMARY: Managed care is sometimes practiced using a silo approach with little concern for the consumer. In this model, medical and pharmaceutical issues are addressed in silos, and value is narrowly defined. Increasingly, cost and responsibility is shared with or shifted to the patients. Patients may be unable or unwilling to assume these costs or responsibilities. Several studies have demonstrated that they may react with noncompliance. Managed care’s definition of value must expand and integrate across silos to consider the needs and interests of the patient’s overall care, in particular, addressing key cost drivers in terms of diseases that cause recurring costs. Using predictive modeling can result in cost savings. A case study (Pitney Bowes) is included in this article.

KEYWORDS: Cost management, Silos, Pharmaceuticals, Consumers, Consumerism, Predictive modeling, Key cost drivers

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Health Care

A discussion of managing cost is necessary and appropriate because managed care was market-driven to manage cost. Managing cost has 3 components: lowering unit price, reducing the number of units used (utilization), and examining the product/service mix. In terms of lowering the unit price, managed care plans frequently use volume purchasing as a strategy. In the medical management area, they often restrict networks or hospital physicians to increase leverage for discounts. To address utilization via medical management, they implement plan designs with disincentives that target physicians and patients to decrease service utilization and unnecessary service use. Some systems require patients to schedule care through an advice nurse. The strategy employed to address the mix of services is often cost-based substitution. Plans may prefer that patients see primary care physicians who are reimbursed at a lower rate than specialists. When gatekeepers increasingly assume more responsibility, point-of-care providers are leveraged and rewarded to reduce overall costs.

Pharmacy has sometimes evolved in a silo that is completely separate from the medical model, but its strategies and tactics used to address unit pricing, utilization, and therapeutic mix are exactly the same. Pharmacy networks are akin to hospital networks, and formularies provide leverage and reduce unit cost. Mandating generic substitution is akin to using prior authorization; it simply reduces accessibility to more-costly brand-name drugs.

These cost-management strategies have been effective in reducing cost trends. In the early stages of their evolution, between 1992 and 1994, premiums did fall each year. However, after remaining flat for 2 years, and during the last few years, premiums have increased steadily (See Figure 1). Medical directors and health benefits managers have had to justify double-digit increases that exceed inflation rates of only 2% or 3%. Managed care’s business people have to control costs, however.

As cost continues to rise and the focus on pharmacy costs, in particular, increases, the trend has been to increase the carve-out (specialty health services obtained by contracting with a company that specializes in that service) to leverage unit prices down further, make prior-authorization criteria stricter, and implement...
automated processes to limit utilization. Market and regulatory pressures are driving increased consumer involvement through pricing transparency (allowing consumers to see the cost strategy, disclosure of rebates and future drug purchase credits, acknowledgment of fees received from networks or pharmacies, and disclosure of real and potential conflicts of interest) and shifting more cost to consumers. Increasingly, the philosophy is if consumers want something, they should pay for it. At the same time, under the mantra of consumer advocacy, regulators have imposed more restrictions on prior-authorization regulations, defined fraud and abuse much more broadly, and created different kinds of pricing transparency regulations, thereby delegating the decision making to the ultimate consumer.

As cost pressures increase, there is increased focus on carve-outs to intensify cost management, thereby making overall care management difficult. Even specialty pharmacy is being carved out by therapeutic class and by disease state. Increasingly, carve-outs like pharmacy and mental health are riders on basic catastrophic plans to reduce premium trends. Shifting cost and responsibility to the consumer makes sense in a market economy since consumers are the ultimate beneficiaries of health care choice. They can help control costs through demand management and demand for market pricing. However, merely shifting cost and responsibility without appropriate consideration for access can marginalize the patient’s overall cost, care, and outcome.

Cost shifting is not a new concept. Examples include the 3-tier copay and new consumer-directed health plans. California now allows $5,000 deductibles, making it the first state to allow the first $5,000 of health care costs to come completely from the patient’s pocket.

So what is wrong with this? The vast majority of consumers do not have the skills necessary to manage their own health care, and many have no interest.

### Need Versus Choice

Blatant examples confirm that consumers may make poor choices and are not always accountable. Despite decades of campaigns to educate Americans about the dangers of smoking, almost 25% of women and 33% of men still smoke. Similarly, people are well aware of the dangers of being overweight and the benefits of exercise, but many sustain unhealthy, irresponsible lifestyles. Thirty percent of U.S. adults aged 20 years and older—more than 60 million people—are obese. Ultimately, someone else is financially responsible for the risks smokers and obese individuals assume because, in catastrophic cases, the individual will be unable to afford medical costs. In fact, health care expenses are now the number one reason for personal bankruptcy in the United States.

Each patient is different, not only clinically but also in his or her ability to pay, and, historically, plan designs have been “one size fits all.” All patients, regardless of income, have paid the same copayment. Further, consumers are unclear about available choices; they receive information from multiple carve-outs that is not always aligned or consistent. Considering that consumers receive information from pharmacists, physicians, their utilization management component, compliance and disease management departments, and direct-to-consumers advertisements, their inability to make sense of cost and quality is understandable. Then, payers implement plan designs that make it harder and harder for consumers to access the products that they want or need.

Payers continue to increase funding for compliance programs while increasing copayment amounts. What kind of message is that sending? When tracking compliance, or noncompliance, the copayment amount is quite relevant in terms of income level. Coincidentally, the population with the lowest income often tends to be the population with the highest health risk in this country, for a number of different reasons.

Taylor and Leitman conducted an interactive telephone survey to determine if out-of-pocket copayments required to fill prescriptions were a compliance barrier. They asked respondents to report if they had (1) not filled a prescription in the previous year because of cost, or (2) taken medication in doses smaller than prescribed to save money, or (3) taken medicine less frequently than prescribed as a cost-savings mechanism. They also gathered household income information, recognizing that the average household income in the United States approaches $40,000. They found that 79% of patients earning less than $25,000 annually had failed to fill prescriptions because of out-of-pocket cost. In patients from households at or above the national income average, approximately 18% of respondents reported not filling prescriptions because of cost. Among all adults, regardless of income, 22% did not fill a prescription, 14% took less medication than prescribed, and 16% took medication less often than prescribed because of cost. Rates were significantly higher in all

![FIGURE 1](https://www.amcp.org/Vol. 12, No. 1/January 2006/JMCP/S11)

**Figure 1.** HMO/POS Rates: Annual Change in Premiums, per Employee.

HMO = health maintenance organization; POS = point of service.
3 types of noncompliance among people with disabilities (35%, 27%, and 28%, respectively). Thus, unaffordable copayments represent a compliance barrier. Patients may take no medication rather than switch to a generic medication or pursue a less-costly alternative.

Discontinuation rates also increase, sometimes dramatically, when payers switch preferred products. Huskamp et al. examined the repercussions of implemental changes in formulary administration for angiotensin-converting enzyme (ACE) inhibitors, proton pump inhibitors (PPI), and 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors (statins) in 2 employer-sponsored health plans. They compared groups of enrollees covered by the same insurers. One plan switched from a 1-tier to a 3-tier formulary and increased all enrollee medication copayments simultaneously. The second switched from a 2-tier to a 3-tier formulary but changed only the tier-3 copayment amount.

More dramatic formulary changes reduced the probability that enrollees used ACE inhibitors, PPIs, or statins and markedly shifted spending from the plan to the enrollee. Among the enrollees who were initially taking tier-3 statins, 21% stopped taking statins entirely compared with 11% in the comparison group. Similar patterns were observed for ACE inhibitors and PPIs. Enrollees covered by the employer who implemented more moderate changes were more likely to switch to tier-1 or tier-2 medications but not to discontinue these medications altogether than were the comparison enrollees. Copayment changes can alter enrollees’ out-of-pocket spending considerably, cause unauthorized medication discontinuation, and possibly alter the quality of care.

In any employer or health plan population risk pool, a small percentage of patients tend to account for the overwhelming amounts of cost. Approximately 20% to 25% of patients tend to account for 85% of costs, and, in the Medicare population, the statistics are more dramatic. Clinically, this means that if, as the previous studies suggest, 15% to 16% of patients may stop taking medication pursuant to cost-shifting strategies implemented by plans, if they happen to be the sickest 15% or 16%, the outcomes in terms of morbidity and mortality might be disastrous. In the context of metabolic syndrome for diabetes, experts estimate that the global economic burden of illness for diabetes is 2.7 to 3 times greater than that for healthy individuals. They also estimate that the burden of illness for metabolic syndrome is higher (from 3 to 4 times greater) because of its comorbidities; it may consumes 21% to 40% of the U.S. health care budget.

### Silo Disconnects
Managing medical care separate from managing pharmacy cost can result in a significant disconnect. Unfortunately, Medicare legislation further intensifies the silo cost management by shifting risks to the pharmacy benefits manager (PBM) by therapeutic class. However, we need to be concerned about the overall cost of health care to the payer. As such, “value” needs to be redefined. It needs to encompass overall cost, including total medical costs, disability costs, lost productivity, and liability costs. It also needs to address quality outcomes: clinical improvement, increased productivity, decreased population risk, and patient satisfaction.

To do so, the paradigm much shift from a “pharmaco-centric” model to a “payer-centric” model. A pharmaco-centric model assesses the value of a product within therapeutic classes in silos. A payer-centric model assesses a product based on its contribution to the payer’s goals—decreasing overall cost, improving overall outcomes, and increasing productivity. Value-based purchasing and plan designs may vary based on specific populations’ needs in terms of their demographics and health risks. But in order to meet specific population needs, a patient-centric model is necessary. Our goal in managed care is ultimately to improve overall outcomes and overall satisfaction, not specific silos, trade-offs, different products, and carve-outs.

In this context, pharmaceuticals should not be considered as a separate silo but as a part of the value-added chain of health care benefits that include prevention, primary, secondary, and tertiary health care; mental health, and overall health care (see Figure 2).

### Case Study
In 2001, Pitney Bowes faced numerous threats to its health care benefit. Chronic disease was pushing unit cost and utilization upwards, and its members had an unexpected number of recurring medical problems and changing diagnoses. The company developed an innovative plan design and has tracked outcomes since its implementation. Using a predictive modeling tool (technology employing rules-based algorithms or artificial intelligence to predict future expenses), the company identified the key cost drivers in its population in terms of medical costs: asthma, diabetes, and cardiovascular disease, primarily hypertension. It found a strong association between chronic condition progression and a lack of screening or prevention and also low possession rates for medications necessary to treat the condition. Thus, it concluded that poor medication compliance was a key
driver of increasing costs.\(^8\)

Pitney Bowes changed its overall plan to incorporate more disease management and to approach pharmaceuticals differently. It used a coinsurance as opposed to a strict copayment, so although there was a small differential between brand and generic medications, it was not cost prohibitive. Generic medications were not mandatory. They made all first-tier medications accessible and made all medications to treat asthma, diabetes, and hypertension first tier. They also limited prior authorizations.\(^8\)

Since these allowances designed to benefit patients have been made, there has been an interesting migration to combination products. (This is unlike general trends among PBMs, wherein combination products tend to migrate to the top tier. Rebate contracting for combination products is difficult; it reduces the number of claims and, thus, reimbursement.) Patients were more likely to adopt new drugs early, and tier-1 generic drug users were more likely to discontinue medication than others.\(^8\)

Drug possession among patients, a compliance indicator, improved significantly, particularly for patients with asthma and diabetes who switched to brand products.

Compliance with combination oral hypoglycemics increased significantly. Preliminary data indicated that the annual cost of chronic disease care decreased 6% for diabetes and 15% for asthma during fiscal years 2002 and 2003, although the prevalence of these conditions increased. (The savings are not adjusted for this trend.) These savings were sustained in 2004. Pharmacy costs decreased 7% for asthma and 19% for diabetes, probably because of decreased reliance on medications to treat complications and exacerbations. “Controller” drugs became more important than “rescue” drugs. Savings in short-term disability and absenteeism were also posted. It took approximately 3 years to see a return on investment for hypertension, in keeping with its longer lag time to impact medical cost.\(^8\)

\section*{Summary}

The overall picture for plan design is one of conflicting messages and ample challenge. Business incentives and management incentives have rewarded short-term reduction of cost trends within silos. At the same time, high copays are strong disincentives for consumers to access and adhere to therapies. Change will require a fundamental shift in managed care.

The issues are not insignificant, but they must be addressed if we are to attain affordable cost and quality outcomes. The process must begin with a recognition of and appreciation for value. This country struggles with some health care reform issues like integrated financial quality accountability, pay for performance, consumer physician decision support with information technology systems, and physician reimbursement and documentation. Rewarding and promoting access to value are driven through benefit design. It is central to driving consumer access, using lower out-of-pocket expense and, ultimately, improving the consumer’s behavior and compliance.