Pharmacy Benefit Management:
The Right Rx?

Pharmacy benefit management (PBM) has become one of the most rapidly growing of the new managed care technologies. Using purchasing techniques such as pharmacy networks, negotiated discounts and rebates, lists of preferred drugs, and online utilization review, PBM enhances the ability of employers and health plans to deal with pharmaceutical prices, physician prescribing practices, and rising drug expenditures. Leading firms are also pioneering new methods of disease management. Already, the growth of PBM-based purchasing has spurred fundamental reorganization of the pharmaceutical industry, including some $45 billion of acquisitions and mergers in the past 18 months. But few of the potential benefits (or concerns about adverse effects) have yet to be adequately documented.

A summary of information about pharmacy benefit management and its potential impacts on health care, this paper covers the following:

- A description of the structure of the PBM industry, including the dominant role played by just three large firms—Medco, PCS, and Diversified Pharmaceuticals—that have all been acquired by pharmaceutical companies.

- A description of the major PBM managed care tools; how PBM works; how it changes relations among patients, physicians, employers, health plans, pharmacists, and pharmaceutical manufacturers; and the economic dynamics and business strategies that appear to shape its development.

- An overview of concerns that have called forth "shots across the bow" by the Food and Drug Administration (FDA), the Federal Trade Commission (FTC), and the DHHS Inspector General.

- Information and speculation about the use of PBM methods via public sector arrangements, such as the Blue Cross Blue Shield Federal Employees Plan (the nation's largest PBM user); state Medicaid programs; and options for the Medicare program's elderly and disabled beneficiaries.

The information has been derived from a variety of sources and conversations. But the reader should be cautioned that reliable data are scarce and that the industry is both diverse and changing rapidly.

PHARMACEUTICAL SPENDING AND PBM

Private sector payers are using pharmacy benefit managers to help control the rising costs of their pharmacy insurance benefits. National spending for outpatient prescription drugs rose rapidly from $21.4 billion in 1985 to $38.2 billion in 1990 and $48.8 billion in 1993. The payment share by third-party insurers also rose rapidly, from 35% of outpatient prescription drug spending in 1980 to 57% in 1993. Over 80% of outpatient pharmacy spending is from private funds; Medicaid is the largest public payer, with about a 15% share of national spending.1

The pharmacy benefit management business is now dominated by three large firms: PCS Health Systems, Medco Containment Services, and Diversified Pharmaceutical Services. According to recent Wall Street Journal and New York Times stories, these firms manage drug benefits for an estimated 100 million to 115 million persons. They account for 70% of prescriptions paid by pharmacy benefit managers and one-third of prescriptions paid by third parties.2 Within the past year and a half, all three firms were purchased by pharmaceutical companies: Merck paid $6.6 billion for Medco, Eli Lilly spent $4 billion for PCS, and SmithKline Beecham acquired Diversified Pharmaceuticals for $2.3 billion.

A second tier of about a dozen firms, led by Caremark, Value Rx, and Express Scripts, each handle 1% to 5% of the PBM business. Health insurance companies such as Prudential, Aetna, Metropolitan, and CIGNA also provide managed pharmacy services. About 90% of HMOs and 57% of PPOs offer managed pharmacy benefits, either directly or through contract with a PBM company.3

1HCFA estimates.


It is difficult to be sure how many companies are now involved in managed pharmacy benefits; estimates suggest about 40 PBM specialty firms and about 100 insurers, HMOs and other managed care providers, a total of perhaps 150 companies.

EVOlUfON OF PbM

The management of pharmacy benefits, as a specialized purchasing technology, has been evolving along a continuum that is similar to the development of other aspects of managed care:

- a first phase that emphasizes improvements within a traditional insurance system, including various forms of coverage and benefit rules (formularies and generic substitution), co-payments, utilization control through prior approval and claims review, and electronic claims submission;

- a second phase that takes advantage of purchasing power to negotiate pharmacy discounts, develop preferred pharmacy networks, obtain manufacturer rebates from volume purchasing, enlist dispensing pharmacists in efforts to alter prescribing patterns, and evolve a variety of new risk-sharing and incentive arrangements; and

- a third phase that emphasizes disease management technologies, including outcomes reporting and cost-effectiveness studies, identification of best practices, development of protocols and clinical practice guidelines, and improved prevention strategies.

Although leading PBM companies now have activities in all of these areas, most of their efforts today are in the second phase. In developing RFPs, evaluating proposals, and the negotiation/selection process, large employers usually turn to benefit consulting firms that offer specialized pharmacy consulting services.

THE BASIC PBM PACKAGE

The features described below are now a basic package for which major employers expect PBM companies to compete aggressively, with quantifiable measures and performance guarantees:

- Pharmacy network. The PBM firms offer contracts with a network of preferred pharmacies. Among the areas in which they compete are access standards (for example, maximum travel time to a participating pharmacy), negotiated pharmacy discounts (for example, average wholesale price [AWP] minus 10%), and dispensing fees to these pharmacies. For the largest national accounts, PBM companies need to have contracts with many thousands of pharmacies, covering most U.S. zip codes.

- Product substitution. The PBM companies offer generic and formulary options so a health plan can save directly by using less expensive drugs as its preferred products. PBM firms also negotiate rebates from pharmaceutical companies for shifting market share to their products; portions of these rebates are passed on to the health plan. PBM companies use a variety of financial arrangements to compensate pharmacists for contacting physicians about changing prescriptions to their preferred drugs and generics and counselling patients. It is this large-scale attempts to shift prescribing practices—Merck reports that its Medco direct-mail pharmacists alone made 2 million calls to physicians last year—that are the most important recent developments in the evolution of pharmacy management practices.

- Quality and utilization review. PBM proposals normally include online prospective screening for quality issues, such as drug-drug interactions, dosage and frequency problems, and a variety of prior approval and other utilization screens. These checks seek to identify and reduce overuse and inappropriate use of pharmaceuticals.

- Claims administration. With over 90% of pharmacies now computerized, most administrative steps—verifying if a prescription is for a preferred drug, quality screens, prior authorization, patient co-payment calculation, and submission

4Generic drugs have chemically identical active ingredients, are available from multiple manufacturers, and are not patent-protected. A formulary is a list of preferred drugs in each therapeutic class, selected on the basis of patient care and cost considerations, that is intended to influence prescribing choices among drugs that have chemically different active ingredients.
and approval of claims—are normally done online as the prescription is filled out. This sharply reduces paperwork hassles compared to traditional insurance coverage, where patients have to submit their own claims. Claims processing costs are among the most price-competitive aspects of PBM competition.

- Mail order pharmacy. Mail-order pharmacies provide still greater savings opportunities, particularly for patients with therapies which involve longer-term use of expensive drugs. Such mail order pharmacies also offer PBM companies an opportunity to use their own pharmacists to contact physicians and patients with regard to product substitutions.

EFFECTS ON PARTICIPANTS

This new system of purchasing prescription drugs affects patients and other participants in a variety of ways.

Patients

A patient using the typical arrangement described above would go through the following process. An enrollee receives a pharmacy benefit card from the PBM company. For coverage to be paid, he or she takes a prescription to a participating pharmacy, which is available within certain travel time or distance parameters specified in the health plan’s contact. The pharmacist’s computer shows information about whether the drug is on the health plan’s formulary, the patient’s co-pay responsibilities, and the patient’s past prescriptions.

Whether or not a prescription is dispensed as written depends on the health plan’s rules about generic and therapeutic substitution and state laws. If there are generic substitutes available, PBM agreements typically call for pharmacists to dispense the (lower-priced) generic product. Pharmacists can usually make such generic substitutions at their own discretion, unless a physician explicitly notes that a prescription must be "dispensed as written" (DAW). To make therapeutic substitutions to preferred (price-discounted/rebated) products on a health plan’s formulary, pharmacists are normally required to obtain the approval of the prescribing physician, which they most often do by phone. PBM firms use a variety of pharmacist incentives to encourage such phone calls and other mechanisms, such as mailings to physicians before refill dates, as part of product-switching efforts.

The patient usually pays a flat co-pay to the pharmacist and has no other paperwork; the pharmacist’s bill is automatically submitted electronically by computer as the sale is made. Mail order works similarly, except that the prescription is mailed to the PBM company and filled by its pharmacists.

Patient choices may be expanded by payment rules, analogous to the "point of service" option—that is, a health plan will reimburse for a prescription at the cost of a generic product cost, but a patient may choose a prescribed brand name if he or she wishes to pay the price difference. There are usually procedures for physicians to request health plan authorization for a nonformulary product for one of their patients.

There are apparently no wide-scale, objective studies of the extent to which PBM companies actually shift prescriptions and the extent to which these substitutions result in clinical benefit or harm to patients.

Pharmacies

PBM has raised many concerns for pharmacies. Indeed, the nation’s pharmacies initiated and are important advocates in the push for "any willing provider" and "freedom of choice" statutes to restrict the ability of health plans to contract with selected providers. Such state laws are reported to affect pharmacy contracting by HMOs in more than 15 states. Drug stores can find themselves under a great deal of pressure to offer product price discounts and fixed dispensing fees or face being excluded from a preferred network. Estimates are that up to 50% of total sales in retail drug stores are for customers who come in to fill

Some HMOs obtain written authorization by physicians for formularies so that pharmacists may make product substitutions without individual physician contacts.
a prescription but then also pick up other items, for example, razor blades and shampoo. Chain drug stores may fare better in such negotiations than “mom and pop” independent stores. Pharmacies also have to carry the generics and therapeutic equivalents listed on formularies arranged by PBM firms, rather than negotiate the best deals for themselves on substitutable products. To help its members compete, the National Association of Chain Drug Stores started its own PBM organization (Pharmacy Direct Network) last year. Some 1,300 pharmacies in 15 states also joined last year in lawsuits against 27 pharmaceutical manufacturers to counter what they deemed to be unfair pricing practices, such as providing much larger discounts to HMOs, mail order pharmacies, and hospitals than to community pharmacies.

Pharmacists

Pharmacists participate in a variety of financial arrangements with PBM companies and drug manufacturers that can increase their incomes for activities such as getting a physician to approve a prescription change or counselling a patient on switching products or how best to use a new product. Increasingly, these activities expand pharmacists’ marketing function in a way that sometimes conflicts with their other professional roles. Pharmacists have two distinct advantages in carrying out this function: Polls show that they have a high degree of patient trust. And a pharmacist calling to discuss a patient prescription that he or she is filling is more likely than a pharmaceutical marketing representative to get the doctor on the phone. For pharmacists, these can be financially attractive features of recent PBM developments.

Pharmaceutical Manufacturers

For the manufacturers of pharmaceuticals, the development of effective purchasing of pharmacy benefits is profoundly altering their industry and their individual companies. The acquisition of the three largest PBM firms within the past year and a half, giving the purchasing pharmaceutical companies’ ability to influence prescriptions for more than 100 million persons, has stimulated a number of preparations for a tougher health plan purchasing environment and greater competition among drug companies. Other multi-billion dollar mergers, diversifications, and consolidations that have occurred just in the last six months include, Sandoz-Gerber ($3.7 billion), Roche-Syntex ($5.3 billion), SmithKline & Bayer-Sterling Winthrop ($2.9 billion), American Home Products-American Cyanamid ($9.7 billion), Ciba Geigy-Chiron ($2.1 billion), Glaxo-Wellcome ($14.0 billion), and Hoechst-Marion Merrell Dow ($7.2 billion, in negotiation).

Several economic factors join to create a strong buyers’ market for pharmacy products. First, pharmaceutical products increasingly compete in a marketplace with substitutable drugs, including therapeutic interchange for patent-protected products and generic equivalents for off-patent products. The trend is even more in this direction, as some 60 brand-name drugs, with $10 billion of sales, are reported to be coming off-patent in the next several years. Secondly, the marginal production costs of most drugs are low; that is, it costs very little to produce another bottle of pills. As a result, there is a potential for vigorous price cutting competition among substitutable products, if purchasers can offer higher volume or shift market share. Third, the marketing and distribution costs of pharmacy products using traditional sale approaches—individual physician visits by drug company representatives—have been quite high, up to 50% of retail costs.

The formation of the three new super-PBM/manufacturing firms reflects strategies to capitalize on these economic factors. A key dynamic is the ability of large PBM purchasers to shift market share among therapeutically substitutable drugs and to leverage steep rebates from a drug’s manufacturer in return for the shifted volume. Given the low marginal production costs, each dollar shifted to a product goes almost directly to its manufacturer’s bottom line—that is, each dollar represents a dollar increase not only in sales but also in profits—and drops the sales and profitability of its competitor by an equal amount. The price competition may

be just beginning. PBM companies also offer their preferred suppliers reduced marketing and distribution expenses by substituting health plan formulary decisions for marketing to individual physicians and by using calls by dispensing pharmacists to target individual physicians who prescribe competitor products. Once a physician has shifted to using a PBM-favored drug over its competitors for one patient, he or she may be more likely to follow that prescribing pattern for other patients as well. In light of such considerations, recent acquisitions and mergers among drug companies reflect a new economic imperative to find production, sales, and marketing economies. There are those who believe that only a handful of broad-based companies will survive an increasingly competitive drug marketplace.

Physicians

Some of physicians' traditional responsibility for selection of prescription drugs is being taken over by formulary committees of managed care plans, PBM companies, and pharmacists. Given the inadequacies of getting unbiased prescription drug information to physicians through visits by drug company representatives, as is evident in studies on physician prescribing, these shifts may be desirable. Probably much depends, for the patient, on the ability of the individual physician to insist on a prescribed product if it is better for that patient and for a physician to be advised of what drugs and dosages have been dispensed to his or her patient. On this topic, as on other questions of how PBM works in practice, there is still a scarcity of objective, published information. Physicians probably also experience increased hassles from the large numbers of phone calls from pharmacists seeking approval for a prescription change.

Employers and Health Plans

The major advantages offered by PBM firms to employers and health plans are greater economies compared to traditional indemnity insurance. The rapid growth of PBM services would be difficult to explain without significant savings in employer "per member/per month" (PMPM) expenses for pharmacy benefits. A major caveat to this generalization, however, has been the "shoebox effect," that is, the tendency for a pharmacy card system to capture all pharmacy claims whereas, with traditional pharmacy benefits, a number of prescriptions that patients paid out-of-pocket were never submitted for payment. Indeed, two benefit consulting firm studies of employer experience have reported that a majority of firms saw higher initial costs from switching from indemnity coverage to a pharmacy card system, as well as higher trend rates.7

THE LEADING EDGE OF PBM PRACTICE

At the leading edge of PBM practice—beyond today's basic features—are a number of new services and arrangements that could strongly influence the next generation of managed care and the entire health system. It is, of course, too soon to tell how well these concepts will work in practice. Among these next generation products, which are already pioneered in large employer RFPs, are developments such as disease management, capitation and risk-sharing, and point-of-care or point-of-prescribing arrangements.

Disease Management

About 5% of the population uses about 50% of health care spending each year, and about 20% uses about 80% of health care spending. Among these high-expense populations are important subgroups of patients with chronic conditions, which usually require the use of drugs. The hope of disease management initiatives is that new efforts to target such patients may produce better health outcomes and lower total health costs. Such initiatives build on a range of information about prevention and best clinical practices, as well as studies about inappropriate prescribing and patient compliance. Interventions include education of patients to change their behavior with respect to diet, exercise, and regular use of medications, as well as working with their physicians. To these efforts, the large PBM companies, allied with research-oriented manufacturers,

protocols where the use of drug therapy or more expensive drugs must be preceded by less expensive interventions.

These emerging disease management initiatives in PBM may converge with other leading-edge efforts to develop a valid clinical basis for managed care’s next phase, such as efforts to define “best practices” and to identify “centers of excellence.” An optimistic view would see all of these efforts coming together.

Capitation and Risk-Sharing

To compete for employer accounts, PBM companies are now experimenting with going at-risk for pharmacy costs of an entire enrolled population. They are also experimenting with guarantees such as one specifying that if their product is chosen for a formulary the employer’s health expenses will go down, because the specified drug produces fewer adverse reactions requiring hospitalizations than competing products or has higher patient compliance because of taste, frequency with which it must be taken, or side effects.

Supplementing these efforts is a growing emphasis by pharmaceutical manufacturers—partly driven by employer RFPs to the PBM firms—to produce cost-effectiveness and outcomes studies that show the return from use of their products in comparison to nonpharmaceutical therapies (such as surgery, diet, and exercise) or competing pharmaceutical products. As yet, there are few such studies and no standard methodologies to substantiate claims. Also evolving are step therapy

---


that have elected to work on disease management but not to acquire a PBM company—point out that, if new disease management technologies are successful, the PBM companies are not necessarily the best-positioned to apply them.

**CONCERNS AND ISSUES**

Set against these potential benefits and rapid growth of managed pharmacy are a number of questions about how PBM actually works and its potential for adverse impacts. There seems to be enough cause for worry that the FDA, the FTC, and the DHHS Inspector General have sounded cautionary notes.

**Anticompetitive Practices**

One focus of concern is that the "forward integration" of the three large drug manufacturers (Merck, Eli Lilly, and SmithKline Beecham) to control the three dominant pharmacy-purchasing companies (Medco, PCS, and Diversified Pharmaceuticals) gives them an unfair marketplace advantage vis-à-vis other drug manufacturers. Employers and health plans expect PBM companies to purchase on their behalf and to offer other manufacturers’ products to compete with those of their parent company. But is it reasonable to assume that the PBM firms extract the same concessions from their parent companies as they do from competitors? Or that they cannot find creative ways to reduce competitive pressures on their parent companies, while undercutting the prices, volume, and profitability of competing manufacturers’ products? Responding to such concerns, the FTC has recently required Eli Lilly to accept certain strictures in connection with its purchase of PCS and has re-opened its previous approval of the Merck-Medco and SmithKline Beecham-Diversified Pharmaceuticals acquisitions. Among the Eli Lilly requirements are that it must provide a "fire wall" to keep the parent company from gaining proprietary information about the pricing and other bid features submitted by its competitors and that PCS must offer an independently developed “open formulary” option for customers who do not want to be tied to Lilly’s products.

Nevertheless, there are those who worry that the advantages of already-assembled purchasing power are now so great, in terms of being able to extract discounts and shift business, that these provisions will be of little value; that PCS, Medco, and Diversified Pharmaceuticals will capture an even larger share of the PBM business; and that their parent companies will become increasingly dominant in pharmaceutical manufacturing. Other observers, however, note that the PBM business, even if dominated by a "big three" (like the auto industry), still appears to be highly competitive. They also note that the ability of PBM firms to switch prescriptions, which is the key to the competitive edge they are believed to possess, will be limited by potential resistance of physicians, patients, formulary committees and health plan administrators to repeated switching campaigns, particularly attempts at re-switching. Some analysts also argue that, regardless of how many PBM firms there are and who owns them, the basic competition in the drug industry is among pharmaceutical products within a therapeutic class and that no one company is now close to dominating across all therapeutic classes.

**Amount of Savings**

Industry experts caution that trying to assess true PBM savings for purchasers from the oft-quoted discounts or rebates based on average wholesale price is quite uncertain. Few purchasers apparently actually pay the AWP, and there are various repackaging and other practices by which reported wholesale prices can be inflated before a discount is applied. A number of drug price deals thus may be comparable to fare quotes in the deregulated airline industry, where an industry analyst on a recent McNeill-Lehrer show reported that over 90% of airline travel is now at "discount" fares, with an average discount off a full price ticket of about 60%. One has to wonder whether the acquired PBM firms, in particular, are focused more on reallocating pharmacy spending toward their parent companies or on achieving maximum economies for employers. It is questionable whether discounts being received by employers yet match the price rebates obtained by the Medicaid program or the payment rates which pharmaceutical companies still find profitable for their products in other countries.
Off-Label Use

There are a number of drugs for which much use is "off-label," that is, for conditions or types of patients for which the drug has not been proved safe and effective. While FDA must approve a drug as safe and effective (for some condition, for some population) before it is allowed on the market—and this is clearly noted in labelling and product information—once a drug has been approved, it may be prescribed by physicians at their discretion. Manufacturers may not, themselves, market their products for such off-label use, but there are drugs—particularly cancer drugs—for which such off-label use is common. Similarly, relatively few drugs have been tested in children, so most drug prescribing by pediatricians is off-label in that it is for a population group for which it has not been FDA-certified as safe and effective. But the lines on marketing for off-label use begin to blur when a PBM firm owned by a drug company is developing its formularies and may be listing its off-label products as the preferred drug in such instances. FDA Commissioner David Kessler recently published an article in the New England Journal of Medicine cautioning about such practices. Similar concerns may also arise if pharmacy company-sponsored education foundations develop patient management information and programs that would not be acceptable if they were direct marketing efforts by a pharmacy company.

Coordination of Care

The evolution of carved-out PBM benefits raises questions of how the pharmacy benefit managers will coordinate with those who manage the other more than 90% of health plan spending. Who is accountable for the health of the enrolled population and for seeing that the enrollees get optimal health care when these responsibilities are split? Coordination issues are likely to become more salient as the PBM companies move into disease management.

Financial Conflicts of Interest

The involvement of pharmacists in the efforts to switch prescriptions and change physicians prescribing is a new, large-scale phenomenon. If a pharmacist, who the patient may well think is acting in his or her best interest, is paid by a PBM company to switch products, should the pharmacists be expected to disclose this arrangement? When is a financial payment for such services an illegal kickback, violating Medicaid statutes? Concerns about practices that may violate federal anti-kickback laws were recently the subject of a DHHS Inspector General advisory letter.

Outcomes and Cost-Effectiveness

Although PBM firms will increasingly use claims of improved outcomes and cost-effectiveness, there is little standard methodology to support such claims. How can employers, consumers, the FDA or others sort out what is valid from what is not? What are the respective roles for medical groups, employers, managed care plans, patient-oriented disease groups (such as Alzheimer’s, diabetes, asthma, and cancer), leading medical journals, benefit consultants, the federal government, and others in developing such standards? These questions also arise for other areas of managed care, where there are a variety of initiatives under way to advance outcomes reporting and other measures.

Impact on R&D and Innovation

Given the economics of the pharmaceutical industry, it seems likely that the companies that depend on me-too drugs will find their profit margins and their ability to finance future research and innovation squeezed. Yet the large, sophisticated PBM purchasers may also speed adoption of true breakthrough products—and thus increase the returns to successful product development. At this point, it is not clear just what the longer-term effects of stronger pharmacy purchasing will be on the drug industry’s R&D and innovation.

Who Looks After the Patient?

In last place—for emphasis rather than lack of importance—is the issue of the welfare of patients. Like other developments in managed care, PBM—

if done well—may improve health status, achieve economies, and foster better service. When done poorly, PBM may have the opposite effects. Some questions have been raised, for example, about issues such as delays or mixups in prescription deliveries by mail-order PBM pharmacies and the suitability of some therapeutic equivalents for certain populations, such as the elderly. Clearly, stronger employer purchasing, with critical assists from the benefit consulting industry, has a key role in maximizing PBM's benefits. Stronger input and monitoring by patient disease-oriented groups may be of assistance; physician groups, as well as some sort of accrediting organization for PBM, may also have future roles. Key issues should include whether PBM companies improve prescribing practices and patient health and the extent to which patient health may be compromised to improve the bottom line of health plans, PBM firms, and drug manufacturers that have purchased them. To serve all of these purposes, better reporting on current practices and objective studies are needed.

PBM FOR PUBLIC PROGRAMS

PBM has developed primarily as a private sector purchasing tool. It may also have major applications for government program beneficiaries—particularly among the high-use Medicaid and Medicare populations. How that might work is a major topic in its own right, but a quick sketch can at least suggest some of the possibilities.

Federal Employees Plan

The federal government, which, it may surprise some to learn, has been a pioneer in making available managed pharmacy benefits for federal workers and their families and annuitants, relies on private insurance companies and PBM firms. Indeed, the federal government offers the largest employer-based PBM program in the country: the BCBSA Federal Employees Plan (FEP). It includes a national plan that provides a pharmacy benefit card, pharmacy network and discounts, as well as a mail order option, and other features. The PBM subcontractors are PCS (pharmacy network) and Medco (mail order). The FEP program provides an interesting model for how pharmacy benefits can be publicly financed but provided in a way which also takes advantage, for government and enrollees, of the flexibility and competition that is possible from private sector purchasing and administration. About half of the FEP pharmacy beneficiaries are annuitants, so the program also offers a test-bed for various disease management strategies targeted to older and disabled populations. For those interested in questions such as "Could I have a benefit as good as my congressperson and senators have?" there is a working model for managed pharmacy benefits.

Medicaid

State Medicaid programs financed about $7.7 billion of outpatient pharmacy spending in 1993, roughly 15% of national expenditures. In the 1989 to 1993 period, Medicaid drug expenditures grew by 116%, and per recipient spending rose by 46%. Although the programs are complex and varied, they rely primarily on "first-generation" managed care, built around benefit design (formularies and generics), discounts and required rebates, drug utilization review (DUR), and numerous rules on matters such as prescriptions per month, refill and quantity limits, unit dose packaging, and mandatory substitution. Most states limit pharmacy payments (for example, AWP minus 10% for the drug, plus a dispensing fee); federal law also mandates that manufacturers pay rebates to Medicaid, for example, at least 15% of AMP (average manufacturer's price) for single-source drugs, a rate which approximates the discounts provided to HMOs and large group purchasers. Various federal requirements for utilization review, enacted in the Omnibus Budget Reconciliation Act (OBRA) of 1990, were fully effective as of January 1995. Most states, however, do not yet have online pharmacy utilization review and billing, although 90% federal matching funds are provided. Two states (California and Pennsylvania) are reported to have actively considered PBM solicitations for their Medicaid pharmaceutical benefit. Most states applying for Section 1115 waiver or other capitated

---

Medicare beneficiaries enrolled in an HMO may obtain managed pharmacy benefits as part of the benefit, and there are proposals to build on this approach to encourage their further shifts to HMOs. (PBM-type coverage may also be available in the 3 [of 10] NAIC-model medigap policies that cover prescription drugs or in employer-provided retiree benefits.) It seems unlikely that a stand-alone Medicare drug benefit would be enacted in the near future, unless it were as a quid pro quo for program savings. Another way in which PBM-type advantages could be made available to elderly and disabled Medicare beneficiaries would be for the federal government to issue an RFP and competitively select, in each region, one or more pharmacy discount cards that could be made available to Medicare beneficiaries. These cards—like PEP pharmacy discount cards—would entitle the Medicare beneficiaries to at least the same discounts at participating network pharmacies as now enjoyed by their congressmen and senators, as well as having such other PBM-type benefits as online drug-drug interaction checks, red flags for drugs that geriatric experts believe should be avoided in the elderly, and access to mail-order pharmacy benefits. The resulting data base could be one avenue for evolving disease-management demonstrations for Medicare elderly and disabled persons, as PBM firms are now pioneering for the under-65 population. This approach could save money for the elderly and improve their quality of care with de minimus federal expense.

Medicare systems are reported to be carving out the pharmacy benefits or including in managed care plans groups that are low-utilizers of pharmacy benefits, such as AFDC recipients, rather than the high-user SSI populations.

The potential application of PBM-type technologies for the Medicaid program requires further assessment. Whether PBM companies could match the (net) prices now paid by the Medicaid program is still an unresolved issue, and it is difficult to assess how effective advanced PBM models are, compared to current Medicaid management. In many ways, Medicaid pharmacy benefit payment is still a separate market, with separate contractors, such as EDS and First Health. If emerging disease management technologies prove effective, the Medicaid populations might be among those with high payoff in improved health from their application.

Medicare

Finally, the Medicare population could be major beneficiaries of effective PBM-type programs. The elderly account for one-third of prescription drug use, and problems in prescribing for the elderly are widely acknowledged in the medical literature. For example, adverse drug reactions in this group occur at two to three times the rate found in young adults. A recent study reported in the Journal of the American Medical Association showed that prescription drugs that, in the consensus of geriatric experts, should be avoided entirely in elderly patients were being prescribed for one-quarter of elderly people living in the community, about 6 million individuals. Elderly persons pay for about 60% of their pharmacy expenses out-of-pocket.

Medicare beneficiaries enrolled in an HMO may obtain managed pharmacy benefits as part of the benefit, and there are proposals to build on this approach to encourage their further shifts to HMOs. (PBM-type coverage may also be available in the 3 [of 10] NAIC-model medigap policies that cover prescription drugs or in employer-provided retiree benefits.) It seems unlikely that a stand-alone Medicare drug benefit would be enacted in the near future, unless it were as a quid pro quo for program savings. Another way in which PBM-type advantages could be made available to elderly and disabled Medicare beneficiaries would be for the federal government to issue an RFP and competitively select, in each region, one or more pharmacy discount cards that could be made available to Medicare beneficiaries. These cards—like PEP pharmacy discount cards—would entitle the Medicare beneficiaries to at least the same discounts at participating network pharmacies as now enjoyed by their congressmen and senators, as well as having such other PBM-type benefits as online drug-drug interaction checks, red flags for drugs that geriatric experts believe should be avoided in the elderly, and access to mail-order pharmacy benefits. The resulting data base could be one avenue for evolving disease-management demonstrations for Medicare elderly and disabled persons, as PBM firms are now pioneering for the under-65 population. This approach could save money for the elderly and improve their quality of care with de minimus federal expense.

