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Drug Therapy: The Impact of Managed Care

I. Introduction

Health-care costs are high and rising. In the United States, estimates for health-care expenditures in 1993 exceeded $900 billion, approaching 15% of the Gross Domestic Product (GDP). In 1995, the cost of drugs and other medical nondurables was projected to be $84.7 billion, 7.1% of total national health expenditures (Burner and Waldo, 1995). Overall, the United States spends over $3000 per person per year on health care (Smith, 1996).

A reorganization of health-care delivery is occurring. New activities of health-care consumers, providers, purchasers, and regulators now surround the core relationship between patients and providers (Fig. 1). In recent years, old paradigms of drug therapy have dramatically changed as alternative financing mechanisms for health care aimed at controlling cost have emerged. These changes are fueled by the rapid growth in national health expenditures, coupled with a decay in employer and public program confidence that pro-

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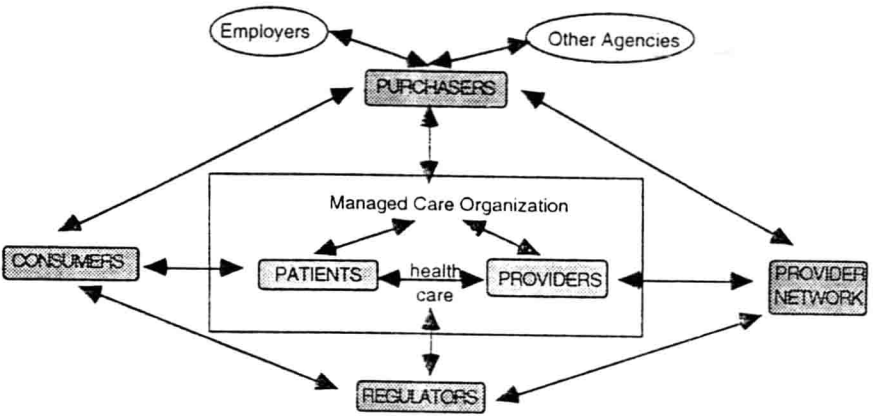

FIGURE 1 Key participants in the managed-care setting. Multiple individuals and groups participate in the managed care framework: Purchasers, who may represent employers or other agencies, contract with managed-care organizations to provide health and medical care to enrollees, who come from the larger group of potential consumers of the services. The managed-care organization contracts with some physician Providers from a larger provider network. The key players are all subject to guidelines issued by regulators, who in turn impact both consumers and provider networks with both options and constraints.

viders alone would or could effectively address this problem. Under the generic label of "managed care," these methods include discounted fee-for-service arrangements, incentives for patients to use lower cost "preferred providers," and capitation of providers who are paid a fixed, prepaid amount each month to provide care for a defined group of patients. Collectively, these changes have led to a significant blunting of the annual rate of increase in real national health expenditures, to the point of approximating the rate of increase in the GDP for all goods and services in some recent years (Burner and Waldo, 1995).

Not surprisingly, drug costs, like other health-care costs, are being increasingly scrutinized for savings. A variety of strategies have successfully reduced drug price inflation from 6.9% in 1991 to 2.1% in 1995 (Santell, 1996). Many of these interventions seek to influence physician prescribing patterns. In surveys conducted at recent meetings of the American College of Physicians and the American College of Obstetricians and Gynecologists, two-thirds of physicians interviewed indicated they had received calls from their managed-care organizations and/or pharmacists asking them to change their prescribing habits (Anonymous, 1996b).

The focus of managed care on physicians' prescribing is likely to intensify in the future, driven by two trends. First, technological advances will continue to bring new and expensive products to market, and, second, the progressive aging of the population will drive up medical-care utilization and costs (Burner and Waldo, 1995).

Despite the frequently negative press, careful review of studies of managed care has provided reassurance that systematic, organized approaches to care preserve or improve quality while reducing costs (Miller and Luft, 1994). The data supporting net benefit from pharmacy cost-containment strategies are much more limited, especially in assessing overall impact on longer term outcomes and overall costs. To assist physicians and pharmacists as active and informed participants in change, this chapter examines the array of practices aimed at control of drug costs to determine which may be the most desirable strategies.

II. Current Strategies to Contain Drug Costs

Approximately 60 to 70% of all drug utilization flows through a managed care organization. This is projected to increase to about 90% by the year 2000 (Covington, 1993). Multiple strategies are currently employed to contain drug costs at every level, from the purchase of pharmaceuticals from manufacturers, through distribution channels, to prescribing and dispensing. The strategies include the use of pharmacy benefits managers (PBMs), formularies, generic prescribing and substitution, therapeutic interchange, drug-use review, academic detailing, disease-state management (DSM), financial incentives, and new roles for pharmacists.

A. Pharmacy Benefits Managers

Increasingly, pharmaceutical companies market their products to managed-care companies instead of to physicians. In turn, managed-care insurance companies and provider groups, who have assumed financial risk under capitation payments, seek to reduce costs directly or contract with PBMs to assist them in structuring their pharmacy benefits and managing expenditures (Fig. 2).

PBMs initially developed as a way to implement prescription drug benefit programs for major employers, but by continually adapting and expanding their services, they have become nearly ubiquitous in managed care (Schulman *et al.*, 1996). PBM development was driven not only by unrest over escalating medical expenses and health-care reform, but also by the potential for using large computerized databases in standardized treatment protocols and pricing (Taniguchi, 1995; Weinstein *et al.*, 1996).

Pharmacy benefit management typically includes formulary management, generic-drug policies, drug-use review, counterdetailing, aggressive pricing contracts with the pharmaceutical industry, and mail-order prescription services (Taniguchi, 1995). Organizations can use these elements to manage cost and utilization (Schulman *et al.*, 1996). In the future, PBMs may have the ability to enter into risk-sharing contracts and compliance–

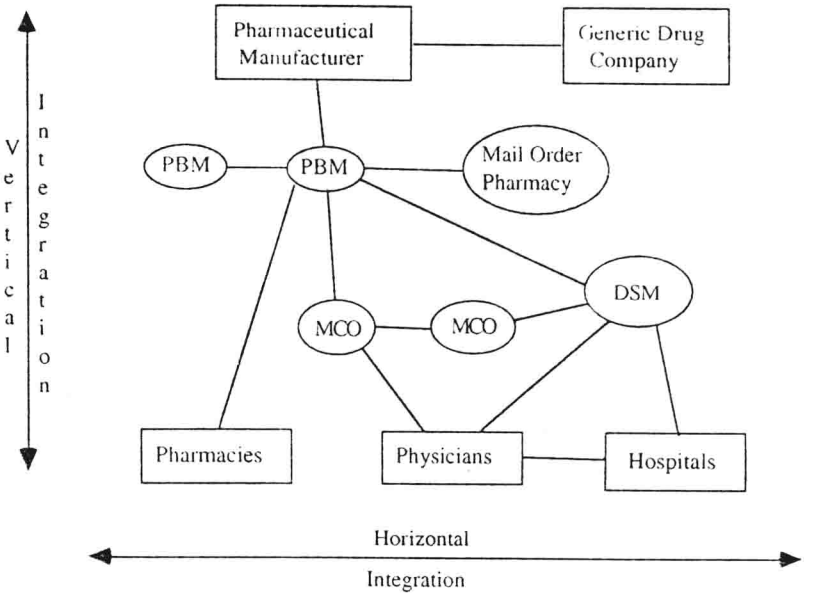

FIGURE 2 Managed pharmacy services. New orgnizations, activities, and programs (shown in ovals) have been added to the traditional participants (shown in boxes) in the delivery of pharmacy services. Mergers, aquisitions, affiliations, and contractual arrangements are creating increasing horizontal and verticle integration. PBM, pharmacy benefits manager; MCO managed-care organization; DSM, disease-state management.

management programs and to employ sophisticated management information systems and DSM protocols (Siegel *et al.*, 1996; Taniguchi, 1995; Thomas, 1996).

In response, some pharmaceutical manufacturers have initiated different strategies, such as acquiring or merging or forming alliances with many of the intermediaries in the drug distribution industry (Navarro, 1994). In 1993, Merck & Co. determined that vertical integration through the purchase of Medco could preserve its threatened market share and profits and give itself access to patient-level outcomes databases (Larson and Bjornson, 1996; Muirhead, 1994; Taniguchi, 1995). This move led to a series of similar mergers (Pollard and Tilson, 1996). Within less than a year, the largest pharmaceutical benefits managers had been purchased by or formally allied with pharmaceutical manufacturers: (1) Eli Lilly acquired PCS Health Systems; (2) SmithKline Beecham purchased Diversified Pharmaceutical Services; (3) Caremark allied with Pfizer and Rhone-Poulenc Rorer; and (4) ValueRx allied with Pfizer. The pharmaceutical industry appears to be poised for further consolidation, in which companies integrate horizontally with each other and vertically with other members of the drug distribution and health-care system (O'Leary, 1995).