

Prescription Drug Formularies: Friend or Foe?

Paul Houchens



Paul Houchens graduated Summa Cum Laude from Ball State in May 2002 with a major in Actuarial Science and a minor in Foundations of Business. Paul served as the president of the Ball State Actuarial Science Club. He does health consulting as an Associate Actuary at Milliman USA in Indianapolis, IN. Curtis Gary Dean was his honors thesis advisor.

In the past 20 years, spending in all areas of health care has increased dramatically. In 1980, the national health expenditure per capita was \$1,067. In 2000, our country spent \$4,681 per person on health-care [6]. Expenditures on prescription drugs have played a major role in driving up our country's health care costs, in fact, increasing at a rate twice as great as overall health care costs [6]. My honors thesis examined the reasons for skyrocketing prescription drug spending, methods to create less expensive prescription drug delivery systems, and economic and ethical issues within the pharmaceutical industry. The following is a brief summary of the main points in my paper.

Spending on prescription drugs in the last 20 years has increased largely due to drugs being more effective and replacing more costly procedures done in a hospital or by a physician [1]. Many of the newer drugs on the market are known as "lifestyle" drugs. People who are taking these medications are not facing a life or death situation, but may be suffering from arthritis, concerned about high cholesterol, or may be battling depression. Pharmaceutical companies are spending large sums of money advertising such drugs in magazines, on television, and at sporting events. Such advertising is known as direct-to-consumer advertising, which can be beneficial for consumers because it makes them more aware of cures for their health concerns, but arguably artificially drives up the demand for the drug by people who might not really need the medication [4].

The cost in terms of time and money to develop a new drug and meet all regulations is enormous. The Tufts Center for the Study of Drug Development found a pharmaceutical company typically spends about \$800 million over a period of ten to fifteen years to develop a new drug [5]. A new drug must undergo rigorous clinical studies under the watchful eye of the Food & Drug Administration, and volunteers must test the drug to assure that there will be no harmful effects once it reaches the market place [5]. Naturally, a pharmaceutical company will want to be rewarded if it creates a product that is

benefiting consumers. Therefore, for each new drug that reaches the market, the company benefits from having the exclusive right to sell the drug for 20 years. Although patents drive up the costs of prescription drugs, they must be used as a financial incentive to motivate development of new drugs [2, p. 451].

Managed care organizations and pharmacy benefit managers have been developing methods of controlling prescription drug expenditures, but at the same time making sure patient care is not being sacrificed. A primary method used today is the prescription drug formulary. The Managed Care Handbook defines a drug formulary by the following: a preferred list of medications developed by the health plan or pharmacy benefit manager to guide physician prescribing and pharmacy dispensing. The purpose of a drug formulary is to control inventory and encourage the use of the most cost-effective products [3]. There are several factors a drug must satisfy in order to be placed on a formulary. The following criteria are considered: source of supply, reliability of manufacturer and distributor, drug class, similarity to existing drugs, clinical advantages, dosage ranges, and cost comparisons [3].

Pharmacy benefit managers and other health care plans are able to manage a drug benefit for a large group of people, and therefore have the leverage to negotiate with retail pharmacies and manufacturers for discounts [7]. Pharmaceutical companies are willing to give discounts and rebates to large pharmacy benefit plans in return for an increase in market share for their drug. Pharmacy benefit plans will often make the consumer pay more out-of-pocket for a drug that is not on the formulary and costs more, thus giving the consumer incentive to choose the drug on the formulary. These additional costs are usually added through a higher copay (amount paid by the consumer) upon purchase of a prescription at the pharmacy [7].

It is probable that formularies will continue to be incorporated in the prescription drug benefit sections of health plans. Americans want the best drugs possible for their ailments, but at a price that they can afford. With our added dependence on prescription drugs for our health needs, a well developed and managed formulary can help our society by serving two of our basic prescription drug wishes: access and affordability.

References

- [1] E. Berndt, *The U.S. Pharmaceutical Industry: Why Major Growth in Times of Cost Containment?*, Health Affairs **20** (2) (2001) 100-114.
- [2] E.K. Browning and M.A. Zupan, *Microeconomic Theory and Application* (6th Ed.), Addison-Wesley (1999).
- [3] R.P. Navarro, *Prescription Drug Benefits in Managed Care*, The Managed Health Care Handbook (Fourth Ed.), Aspen Publishers (2001) 413-447.
- [4] L.M. Schwartz, J. Tremmel, H.G. Welch, and S. Woloshin, *Direct-to-consumer Advertisements For Prescription Drugs: What Are Americans Being Sold?*, The Lancet **358** (2001).

- [5] Tufts Center for the Study of Drug Development, How New Drugs Move through the Development and Approval Process (November 2001): <http://www.tufts.edu/med/csdd/Nov30CostStudyPressRelease.html>.
- [6] United States, Health Care Financing Administration, National Health Expenditures Projections: 2000–2010.
- [7] United States, Department of Health & Human Services, Prescription Drug Coverage, Spending, Utilization, and Prices. Prescription Drug Prices, April 2000.