

8872 COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

Table 1. Prescriptions Dispensed by County* Pharmacies in a Mid-Atlantic State in 1968

Prescriptions, no.	111 982 (57%)
Refills, no.	84 873 (43%)
Total	196 855
Total dosage units dispensed, no.	9 002 188
Average number units per prescription (capsules, tablets, or liquid units)	.46
Total retail cost	\$ 677 466
Average cost per prescription	\$ 3.44

* Population 112 000.

medical center in the county and 91 practicing physicians, of whom 47 practice a specialty.

The population studied comprised those patients who received a prescription from a doctor and presented it to a community pharmacy to be filled. If they presented it to a hospital pharmacy, an out-of-county pharmacy, or did not fill it at all, our prescription recording system did not capture it. An estimated 15% of all outpatient prescriptions were thus unrecorded in this study.

The prescription recording system permits the storage and retrieval of the following information:

1. *Patient Drug Profile for Individual Patients:* This is a list of all prescriptions dispensed, by therapeutic category and specific name, that includes: refills, quantity prescribed, dosage form, expenditures, and code name of prescribing physician.

2. *Physician Prescribing Profile for Individual Physicians:* This is a list of all prescriptions presented to the community pharmacies, by therapeutic category and specific name, including refills, cost of the prescriptions issued, quantity and dosage forms prescribed, number of different drugs prescribed, and the most frequently prescribed drugs.

3. *Community Drug Consumption Profile for the Community:* This gives the total prescriptions issued, including refills, total expenditures for drugs, and selected characteristics of persons receiving the greatest number of drugs.

Results

OUTPATIENT DRUG USE IN THE COMMUNITY

All of the data presented have been tabulated and summarized for the calendar year 1968 (Table 1). During that year, nearly 200 000 prescriptions (including refills) issued by the 91 doctors practicing in the community were dispensed by local pharmacies. Forty-three percent of all prescriptions presented to pharmacies were refills, however, and therefore patient-initiated to some extent. The average prescription price was \$3.44, a retail cost similar to that found in most marketing research surveys. The total community expenditure for outpatient prescriptions came to \$678 000, and for this amount more than 9 million dosage units were dispensed (capsules, tablets, or liquid units).

THE MOST FREQUENTLY PRESCRIBED DRUGS

When the most frequently used drugs are tabula-

ted by therapeutic class, it is seen that antibiotics were by far the most commonly dispensed, with tranquilizers in second place. The sympathomimetic anorexients (largely amphetamines) were the eighth most frequently dispensed class of drugs in 1968: the Food and Drug Administration has recently narrowed the permissible indications for these agents. If the psychotropic drugs are grouped together (tranquilizers, hypnotics and sedatives, and anorexients) they account for almost 17% of total prescriptions (Table 2 and Figure 1).

Librium® (chlordiazepoxide) and Valium® (diazepam) were the first and third most frequently prescribed drugs in the county and the average prescription prices were \$4.64 and \$5.52, respectively. Almost 4000 Librium and 3000 Valium prescriptions were filled in this county. The estimated community expenditure for these two drugs alone came to almost \$35 000, or 5% of the total retail drug cost. Our figures on the use of these two drugs compare with national estimates for the same year, 1968, when an estimated 24 million Librium and 18 million Valium prescriptions were dispensed.

Darvon Compound® (propoxyphene, aspirin, phenacetin, and caffeine) was the second most frequently prescribed drug, and the estimated total cost to the community was more than \$11 000. Chloromycetin® (chloramphenicol) was the 64th most frequently prescribed drug, with only three physicians accounting for one third of the prescriptions issued. General practitioners accounted for almost all of the Chloromycetin prescriptions.

In view of the current concern with drug costs it is of great interest that only 5½% of all prescriptions were written by the generic form. Penicillin, phenobarbital, thyroid, prednisone, tetracycline, and digitalis head the list of generically prescribed drugs. The average retail cost of the generic form is usually lower than the average cost of the equivalent proprietary-name counterparts, and some saving to the consumer is usually evident.

Table 2. Psychotropics Dispensed in a Mid-Atlantic State County* in 1968

	Percent of Total Prescriptions	Percent of Total Patients Receiving Drugs
Tranquilizers	7.7	5.4
Hypnotics and sedatives	3.6	2.9
Amphetamines	3.4	2.9
Psychomotor stimulants	2.1	1.6
Total	16.8	12.8
Total prescriptions, no.	33 273	
Total cost	\$144 590	

* Population 112 000.