

Impact of a Reduced-Charge Drug Benefit in a Prepaid Group Practice Plan

MERWYN R. GREENLICK, M.S., and ERNEST W. SAWARD, M.D.

SINCE October 1962 a reduced-charge out-of-hospital drug benefit has been available to the membership of the Oregon region of the Kaiser Foundation Health Plan. The out-of-hospital drug benefit was an attempt to broaden the plan's scope and to increase its value to the membership.

The plan, which presently has more than 83,000 members enrolled, provides comprehensive medical care services in a prepaid group practice setting. Its membership in the Oregon region is quite diverse, including the full range of occupational and socioeconomic groups, and has grown from 25,000 in the last 10 years.

Services are centered at a hospital complex. The hospital was opened in 1959 and has 141 beds for short-term patients. A building project is underway to increase the hospital's capacity by 36 beds for short-term patients and to add a 72-bed extended care unit. The complex provides the full range of ancillary services for both inpatients and clinic patients including pharmacy, X-ray, physical therapy, optical, audiology, and laboratory services.

Physicians' services are provided at a central clinic integrated into the hospital complex and at two neighborhood clinics located in population centers in outlying parts of the metropolitan area. A pharmacy is operated as an adjunct to each clinic. The Permanente Clinic,

a partnership of full-time physicians providing the physicians' service, includes more than 60 board-certified or board-eligible specialists in all major specialties, including psychiatry. The Permanente Clinic is paid a negotiated capitation fee per member per month by the health plan, and its total income is redistributed in a manner determined by its partners.

Health plan benefits include physicians' care in the hospital, home, or office, hospitalization, surgery, special nursing, laboratory, X-ray, physical therapy, emergency service, immunizations, routine physical examinations, and some mental health services. However, before October 1962 the members had to pay out of pocket nearly full market price for all drugs prescribed for outpatients.

The plan's management has been concerned with the members' drug costs since totally prepaid drugs coverage had been dropped from the plan in the early days of its struggle for survival and growth. In the 17 years between the end of World War II and the inception of this benefit, drug costs obviously had become more burdensome for many members.

Prescription price discounting had little effect in the Portland area and therefore drug prices had been maintained at a relatively high level. The plan pharmacies, by pricing prescriptions only slightly below the general market level, were earning considerable revenue for the plan—\$112,000 during 1961 or 18 cents per member per month.

During 1962 it was decided to reduce the cost

Mr. Greenlick is director of medical care research and Dr. Saward is medical director, Kaiser Foundation Hospital, Portland, Oreg.

Table 1. Prescriptions dispensed in central clinic pharmacy per physician visit in central clinic by month, 1960-64

Month	1960	1961	1962	1963	1964
January.....	0. 501	0. 426	0. 437	0. 472	0. 475
February.....	. 464	. 431	. 433	. 456	. 482
March.....	. 458	. 448	. 418	. 456	. 498
April.....	. 449	. 443	. 394	. 460	. 486
May.....	. 456	. 439	. 406	. 471	. 467
June.....	. 454	. 445	. 427	. 494	. 531
July.....	. 426	. 421	. 417	. 492	. 533
August.....	. 415	. 406	. 408	. 482	. 508
September.....	. 407	. 420	. 396	. 455	. 496
October.....	. 427	. 425	¹ . 424	. 483	. 510
November.....	. 444	. 420	. 457	. 496	. 532
December.....	. 444	. 445	. 475	. 490	. 565

¹ First month at reduced charges.

of drugs for plan members by lowering the price of all out-of-hospital prescriptions written by plan physicians and dispensed in plan pharmacies. The intent was to pare prices to a point where the pharmacy would barely break even. The medical group voluntarily decided to reduce its capitation fee so this benefit could be offered at no additional cost to the members and with no great loss in net revenue to the plan. On October 1, 1962, the plan pharmacies began

pricing prescriptions at Blue Book cost plus 60 cents, with a minimum price of \$1.25. This price was further reduced on June 1, 1963, to Blue Book cost plus 30 cents, with the same minimum.

Table 1 shows the trend of the relationship between the total prescriptions dispensed (both new and refilled) by the pharmacy at the central facility and the number of physician visits at that facility before and after the drug benefit was established. The trend shown on table 1 is downward before the benefit began and upward thereafter.

The assumption underlying this phase of the analysis is that any change in the ratio does not result from a change in the physicians' prescribing patterns but rather results from an increasing proportion of members' prescriptions being dispensed from plan pharmacies because the prices are lower. It is certain that a portion of the prescriptions prescribed by plan physicians is dispensed at outside pharmacies. However, the increasing ratio of prescriptions to physicians' visits is a measure of the magnitude of total savings to plan members as it reflects the extent to which members' prescriptions are increasingly being dispensed at plan pharmacies at lower than market prices.

Table 2. Pharmacy operations (all facilities), 1961 and 1964

Factor	1961	1964	Percent increase or decrease
Revenue.....	\$250, 720. 17	\$383, 340. 30	-----
Direct cost.....	138, 454. 94	308, 845. 32	-----
Drugs and supplies.....	105, 422. 48	238, 610. 09	-----
Salaries, wages, and benefits.....	33, 032. 46	70, 235. 23	-----
Net income.....	112, 265. 23	74, 494. 98	-----
Gross revenue per prescription.....	\$3. 689	\$2. 968	- 19. 5
Cost per prescription.....	2. 037	2. 391	17. 4
Drugs and supplies.....	1. 551	1. 847	19. 1
Salaries, wages, and benefits.....	. 486	. 544	11. 9
Net income per prescription.....	1. 652	. 577	- 65. 1
Average health plan membership.....	51, 803	69, 727	34. 6
Total physicians' office visits.....	172, 435	235, 494	-----
Physicians' office visits per 1,000 members per year.....	3, 101	3, 149	-----
Total prescriptions.....	67, 963	129, 159	-----
Prescriptions per physician visit.....	. 394	. 548	39. 1
Prescriptions per member per year.....	1. 312	1. 852	41. 2
Gross revenue per member month.....	\$0. 403	\$0. 458	13. 6
Total cost per member month.....	. 223	. 369	65. 5
Net income per member month.....	. 180	. 089	- 50. 6

SOURCE: Berniece Oswald, comptroller of the Oregon region, Kaiser Foundation Health Plan.

Table 2 provides financial and use data for further analysis of the reduced drug prices and facilitates assessment of the reduction in the price of prescriptions. This table includes data from the central and the two peripheral pharmacies to provide information for the total plan. In 1961 the average cost of each prescription was \$2.04. The mean price of each prescription was \$3.69 for a gross return of \$1.65 (44.7 percent). If this same pricing formula had been applied to the 1964 mean drug costs of \$2.39 per prescription, the selling price would have been \$4.32. However, under the new pricing system the price averaged only \$2.97, a reduction in price per prescription to the member of \$1.35 (31.3 percent).

It can be seen from table 2 that the net income per prescription was reduced by 65.1 percent. However, the net income per member month was only reduced by 50.1 percent. This benefit apparently was well received and an increasing proportion of the members' prescriptions were filled in the plan pharmacies. A 39.1 percent increase in prescriptions dispensed per physicians' office visit is evidence to support the concept. Although the number of physicians' office visits per year increased from only 3.101 to 3.149

per member, the number of dispensed prescriptions per member per year increased from 1.312 to 1.852, an increase of 39.1 percent.

Partly because of the increased use of the pharmacy and partly because of overly cautious initial estimates, the pharmacies continued to return net revenue to the plan. The reduction in revenue to the plan was only about 9.1 cents per member per month, from 18 cents to 8.9 cents. This, however, amounted to more than \$75,000.

The members and managers of the plan consider the additional benefit an overall success. Drug costs for the members have been reduced in a manner which has not changed any form of medical care use.

Two possible developments of this benefit are contemplated. The first is a proposal to add the reduced-charge out-of-hospital drug benefit to the plan's standard contract, guaranteeing its provision over time. The second is a proposed further reduction in the pricing formula which would increase the members' benefit. Also being discussed are plans to allow for further study of the effect of the provision of this interesting medical care benefit in a comprehensive medical care plan.

Grants to Improve Nursing Education

Fourteen awards totaling \$1,174,351 for projects to improve nursing education programs have been made by the Public Health Service. These awards, authorized by the Nurse Training Act of 1964 and administered by the Service's Division of Nursing, bring the number of such projects to 65. Located in 30 States, the District of Columbia, and Puerto Rico, the projects represent a Federal investment of \$4.5 million.

Specific ways in which the new projects will attempt to alleviate the shortage of nurse teachers and provide better nursing education include the following:

- producing a library of teaching tapes to share with hospitals, health agencies, and other schools;
- preparing transparencies for demonstration of nursing skills and teaching of science

courses, including chemistry and microbiology;

- replacing limited resources for psychiatric experience with a new program stressing current concepts in mental health;
- developing conveniently located resources for public health experience in a school of nursing 130 miles from the main campus of a grantee institution;
- replacing obstetrics and pediatrics course work with a new maternal and child health program;
- conducting a study to determine the future direction of a nursing education program, as, for example, length of program and administrative control; and
- analyzing different teaching methods and learning experiences to determine which best prepare students for routine tasks and which for decision-making in nursing.