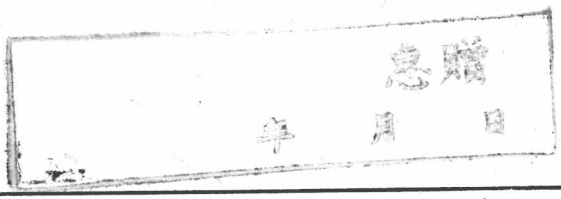
Report on the dental program of the ILWU-PMA.

U.S. Public Health Service. Division of Dental Public Health and Resources.

REPORT ON THE
dental program
of the
ILWU-PMA

the first three years



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Division of Dental Public Health and Resources
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January 1962

Public Health Service Publication No. 894

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1962

DEDICATION

To Mr. Elliott H. Pennell, outstanding dental statistician and analyst, who devoted most of the last 10 years of his career to the field of dental care economics. Mr. Pennell began this study in 1956. He supervised the data collection and made the preliminary analyses prior to his untimely death on February 6, 1961.

ACKNOWLEDGMENTS

The authors wish to express their sincere gratitude to the Administrators of all the dental plans participating in the ILWU–PMA program for their cooperation and assistance during the preparation of this report.

Special thanks are due Mrs. Goldie Krantz, Secretary of the ILWU–PMA Welfare Fund, for her continuous help and guidance in assembling and interpreting the data.

Preface

From its earliest beginnings the dental care program of the International Longshoremen's and Warehousemen's Union–Pacific Maritime Association (ILWU–PMA) has been a focus of attention for a large audience of persons and organizations concerned with the provision and financing of health services. The program and its initial development have been described in several publications, and it has been a topic of discussion in many conferences throughout the country.

In 1956 the American Dental Association published a study made by its Bureau of Economics and Statistics, covering the first year of operation of the ILWU–PMA dental program. The report included analyses of program utilization, costs, service patterns, and types of care provided. The study was a valuable statistical monograph, providing a yardstick against which future developments might be measured. In itself, however, it was not useful as a measuring device because it covered only a single year of activities. Evaluative measurement was precluded by the very nature and scope of the study.

The data in this report cover 3 years of operation. In order to demonstrate new developments and distinguish first-year characteristics from the pattern of succeeding years, the first 12 months of actual operation of each type of plan included in the program will be considered as the pilot year for the particular plan. Because some of the plans began in October 1954 and others at a later date, the pilot year varies from plan to plan with respect to the calendar months it covers.

The other two periods referred to in this report are the second year (fiscal 1957) and the third year (fiscal 1958). Data covering the period from the end of the pilot year through June 1957 are omitted. All of the data refer to children who joined the program during the pilot year; in this way it is possible to measure the costs and services provided for one group over a 3-year span.

The dynamics of a changing group and the effects thereof will be assayed in a future report.

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I. Historical Summary[1]

In February 1954, the International Longshoremen's and Warehousemen's Union announced its decision to request that a dental care program be included among the employment benefits of west-coast longshoremen. Negotiations between the ILWU and the Pacific Maritime Association (PMA), its employer group, led to an agreement to establish a 1-year pilot program of dental care for children under 15 years of age who were the dependents of longshoremen. The program was to be arranged and operated through the ILWU–PMA Welfare Fund. A maximum first-year budget allowance of $750,000 was established for the purpose, and a target date of October 1, 1954, was set for beginning the program.

Welfare Fund officials proceeded to implement these plans by arranging exploratory meetings with representatives of the dental care committees of the State dental associations of Washington, Oregon, and California (California has two accredited State dental associations). At these conferences, Fund representatives formally requested the associations' aid in setting up a good dental care program.

The following guidelines set forth by the Fund for its officials charged with the responsibility for bringing the program into being indicate the spirit and depth of these conferences:

1. There would be complete cooperation with the dental societies.

2. The program would cover preventive dentistry, dental education, and as much restorative work as feasible.

3. Insofar as possible, the parents of eligible children would be given a choice of dental plans so that experience could be gained about several possible systems.

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[1] Further details on the development of this program are reported in several publications. See bibliography, items 1–19.

4. The insurance company plan [2] should be considered as a mechanism for paying dentists.

5. The program would attempt to provide equal benefits to eligible children regardless of what type of plan the parents chose.

6. The Fund would be concerned with the quality of care, the incidence of need, and the utilization of the program.

7. Dental care educational material would be distributed by the Fund office. All material used in connection with the dental care education program would be cleared with the dental society, and all statistical data would be made available to the dental society.

8. Orthodontics would be excluded from the program.

9. Children would be eligible for service up to their 15th birthday.

10. The program would be considered a pilot program; it would proceed slowly; and one of the chief objectives would be to develop plans to provide needed dental service, rather than just to spend money filling cavities.

From this beginning the pilot dental care program evolved, encompassing three methods of dental care administration—the dental service corporation, the group practice plan, and an indemnity plan operated through an insurance company.

Why three methods? At the time of the decision to provide these dental care benefits there was no facility in existence capable of providing a program of the scope envisioned. Nevertheless, all groups involved in the planning felt that the program should be a sound one and agreed to work toward that end.

Within the legal framework of their charters, the dental associations themselves could not contract with the Fund for service, nor was it possible for them to supply services directly. It was necessary, therefore, to form legal affiliates (dental service corporations) to act as the business arms of the associations in negotiating contracts and setting up plans by which dental services might be furnished. Dental service corporations in Washington and Oregon were operational in the ILWU–PMA program by February 1955. Because of a number of special circumstances in California, a dental service corporation was not established until 1957. Even then, its activities were limited to the northern part of the State and only members of the California State Dental Association (as the northern California dental society is called) were participating in it. Practitioners from southern California did not join the corporation until July 1961.

Recognizing that the deliberations on starting a statewide dental service corporation plan in California were likely to be prolonged, the Welfare Fund contracted for dental care with two group practices, the Naismith-

[2] Discussed later.

Jan Dental Group in the San Francisco Bay area and the Schoen Dental Group in the Los Angeles area.

To assure full opportunity and choice for its beneficiaries, the Fund also established an indemnity program, operated originally through the Continental Casualty Co., as a supplement to the other plans. This move was admittedly an expediency which permitted eligible children to receive benefits in areas where the dental service corporation plans were not fully operational and the group practices inaccessible. It also assured, in the absence of a dental service corporation, that beneficiaries could make their own choice of dentist.

As a pilot project the entire dental care program proved very popular with the longshoremen and their families, so that it now has become a regular part of the Welfare Fund benefits. Of course, there have been modifications since the pilot year. Notable among these is that except for a few special cases the indemnity plan is no longer used. For all practical purposes the indemnity program was discontinued in Oregon and Washington in 1956, in northern California in 1957, and in southern California in 1961.

II. The Three Basic Plans

During the first year of the Welfare Fund program, there were three types of plans serving nine distinct groups: (1) Dental service corporation plans—one in Washington and one in Oregon; (2) group practice plans—one in the San Francisco Bay area and one in the Los Angeles Harbor area; and (3) an indemnity plan serving groups in Oregon, Washington, the San Francisco Bay area, the Los Angeles Harbor area, and a number of small ports in California. The groups served by the indemnity plan in Washington and Oregon were changed over to the service corporation plans during the second year. Those under the indemnity plan in the San Francisco area and some participants in California small ports were converted to the California service corporation plan in the third year. (Detailed data from the experience of seven of the nine groups will be found in Appendix Tables D and E—data are not shown for persons under the indemnity plan in Washington and Oregon because of the very limited experience involved.)

From the outset, none of the plans was considered as the final or ideal arrangement. The program itself was an experimental venture, in the course of which it was hoped that much useful information and know-how would be acquired. It served, in effect, as a national laboratory for testing dental care programs and procedures.

As the experiment progressed, the weaknesses and strength of the various plans began to reveal themselves and, through experimentation and improvisation, solutions and techniques evolved. But inasmuch as the program itself was a pilot program, all the plans used in it must be regarded, at least in the initial stages, as trial plans.

In the group practice plans, services were provided by a limited number of dentists and dental specialists operating in a group setting. Under these plans no limitations were placed on the amount of allowable types of service each child could receive as long as the total allocation of funds to a plan (based on a predetermined amount per child) had not been exceeded.

The dental service corporation plans offered an almost unrestricted choice of dentists. Any dentist who was a member of the State dental associa-

tion or was qualified for membership could function within the corporation framework. Dentists were free to render whatever care was needed and allowable under the program, and they billed the service corporation in accordance with prearranged fee schedules.[3] Because there was a centralized administrative mechanism, a portion of money which had been allocated for a child with minimal treatment needs could be applied to services for another child who might require maximum care. As a result of this fund-spreading, children were not subject to monetary limitations on the amount of dental treatment they could receive as long as the services were of types authorized under the program.

This does not mean that the program was totally without service limitations. Had program costs exceeded the amount allotted for the operation, curtailments in dental services would have been necessary until the Fund could be reconstituted.

It is notable that in the beginning both the dental service corporations and the group practices maintained operating funds through a system of advance payment from the Welfare Fund. An agreed-upon advance of funds was made for each child reporting for examination in the initial year and a somewhat lower amount for subsequent years. This approach naturally eased the financial burden on the vendors of service and also served to solidify a mutual feeling of good will between them and the Welfare Fund.

Procedures under the indemnity plan were much the same as in the service corporations except that there were limits on the dollar amount of care a child could receive. The insurance company paid charges only up to preestablished amounts for the initial year of care and for each subsequent year. The parents of the child were responsible for any charges in excess of these amounts and their permission was needed before services entailing such charges could be rendered. In addition, dentists operating under the indemnity plan could charge more for specific services than the fee schedule allowed, and the burden of responsibility for payment of the additional charges rested with the children's parents. A specific feature of coverage found only in the indemnity plan was payment for services required as a result of accidental injury to natural teeth up to a cost of $150 per tooth. But, of course, services for accidentally injured teeth were provided under all the plans.

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[3] In addition to service costs the dental service corporations were authorized to charge up to 8 percent for administrative overhead.

III. The Beneficiaries

In the pilot year, 10,860 children were enrolled in the program, about one-third in each of the 3 types of plans. In order to depict the experiences and effects of the program as clearly as possible, this report, in text and tables, will deal only with those children who were members of this study group during a 3-year period. Because some of the children reached the age of 15 (the automatic cutoff date for eligibility) during the study period and some became ineligible for other reasons, the number of children in the group will show a decrease from year to year.

Table 1 indicates the numbers of children covered in this study by year and by age group in year. Note that from the inception of the program to fiscal year 1958, a total of 2,165 children were lost from the study group. Although this depletion is reflected primarily in the lowest age group (under 3), the losses were due chiefly to children dropping out as they reached the age of 15.

Children retained their eligibility for a full year's treatment under the program regardless of the employment or union membership status of their fathers. That is, if a child were receiving dental care under the program

Table 1. Children enrolled in the program, by year and age

Age group	Average year	Pilot year	1956–57	1957–58
All ages	9,711	10,860	9,582	8,695
Under 3	620	1,329	501	30
3 to 5	1,795	2,017	1,779	1,590
6 to 11	4,546	4,807	4,496	4,338
12 to 14	2,750	2,707	2,806	2,737

and his father changed the nature of his employment or otherwise became ineligible for Welfare Fund benefits, the child would continue to receive care for the remainder of the contract (fiscal) year. The only factor which resulted in children being dropped from the program before the end of a contract year was the attainment of the age of 15. In many cases where the 15th birthday was imminent, needed dental care was rendered at an accelerated rate so that what might normally have been a full year's treatment was completed in a shorter length of time.

IV. Total Experience

UTILIZATION RATES

Over the 3-year period, the average annual rate of utilization of the dental program was 70 percent (table 2). That is, in the average year, 70 out of every 100 children who were eligible received some kind of dental service for which a charge was made. (Services for which no charges were made are not included in the data.) The rate was slightly higher in the pilot year than in the 2 succeeding years; 72 percent in the first year compared with 69 percent in each of the other years.

Utilization rates varied considerably from one age group to another. Children in the 6–11-year category recorded the highest annual utilization level—77 percent. In the pilot year, 83 percent of the children in this age group used the program. As might be expected, the lowest average rate (24 percent) was registered by the children under 3 years of age, who normally require little dental care. An average of 66 percent of the children

Table 2. Percent of children receiving service, by year and age*

Age group	Average year	Pilot year	1956–57	1957–58
All ages	70	72	69	69
Under 3	24	22	31	.....
3 to 5	66	69	65	62
6 to 11	77	83	74	73
12 to 14	72	81	70	67

*Any use of service, including appointments made but broken.

in the 3–5-year age bracket came for treatment. Except for children under 3, the highest utilization rates were recorded in the pilot year and the lowest in the third year.

SERVICE PATTERNS AND COSTS

The General Picture

Table 3 reveals the frequency with which various services were provided under the program. In 3-year averages fillings dominate as the most frequent service at 419 per 100 children receiving service. Examinations and radiographic services are next most frequent but actually each averaged little better than one per child. Surprisingly, prophylaxes averaged only 77 per 100 children. Broken appointments represented a relatively substantial item at 44 per 100.

Table 3. Dental services per 100 children receiving service

Type of service	Average year	Pilot year	1956–57	1957–58
Examinations	105.4	115.0	98.8	100.1
Radiographs	134.8	137.7	122.4	144.6
Prophylaxis	76.5	73.5	71.7	85.5
Topical fluoride	14.0	16.3	12.0	13.3
Fillings	419.1	576.3	305.0	338.2
Extractions	40.3	65.3	24.7	24.7
Interceptive orthodontics	21.7	14.9	23.0	29.2
Endodontics	11.3	19.2	5.5	7.1
Crowns	3.9	5.0	3.3	3.2
Dentures	.7	1.3	.2	.5
Broken appointments	44.0	38.6	45.7	49.1
All other	3.8	4.9	2.8	3.3

Extractions at 40 per 100 children, interceptive orthodontics at 22 services per 100 children, topical fluoride treatments [4] at 14, and endodontic services at 11 per 100 represent the only other substantial items of care. Crowns, dentures, and other services were provided in relatively insignificant amounts.

For the initial year of operation, the data reflect the treatment of the backlog of dental needs existing among the program participants. In that year more than 45,000 teeth were filled, representing an average of almost

[4] All data in this report pertaining to topical fluoride treatments refer to series of applications. However, in some instances charges were recorded for series of less than the usual four applications.

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