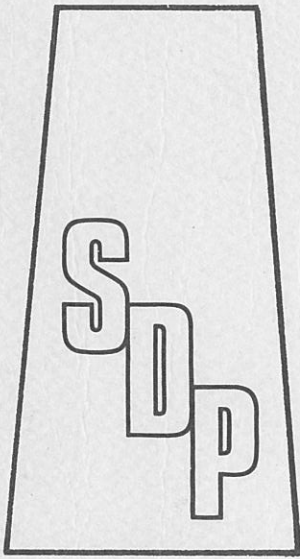


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SASKATCHEWAN DENTAL PLAN

AUGUST 1977

SASKATCHEWAN DENTAL PLAN,
SASKATOON DENTAL REGION,
140 AVENUE F. NORTH,
SASKATOON, Saskatchewan
S7L 1V8

ISSN 0382-3644

Saskatchewan

Dental

Plan

Report

Third Year of Operation

September 1, 1976 to August 31, 1977

(583-2)

PROVINCE OF SASKATCHEWAN
DEPARTMENT OF HEALTH
3211 ALBERT STREET, REGINA
S4S 0A6

DEPARTMENT OF HEALTH

Regina, March, 1978

TO THE HONOURABLE C. I. McINTOSH,
Lieutenant Governor of Saskatchewan

MAY IT PLEASE YOUR HONOUR:

I beg to present herewith for your consideration the Report of the Saskatchewan Dental Plan for the year ending August 31, 1977.

Respectfully submitted,

E. L. TCHORZEWSKI,
Minister of Health.

DEPARTMENT OF HEALTH

Regina, March, 1978

TO THE HONOURABLE E. L. TCHORZEWSKI
Minister of Health

SIR:

I have the honour to present herewith the Report of the Saskatchewan Dental Plan for the year ending August 31, 1977.

Respectfully submitted,

M. B. DERRICK,
Deputy Minister.



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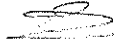
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EXECUTIVE DIRECTOR'S REMARKS

The Saskatchewan Dental Plan commenced in September, 1974 and has now completed three years of operation. The objective of the Plan is to improve the dental health of young people in Saskatchewan by providing comprehensive dental care to children between the ages of 3 and 12. This care is provided by teams of dentists, dental nurses, and dental assistants in clinics which have been set up in elementary schools and special clinics across the province.

After three years of operation the Dental Plan is providing care to children between the ages of 5 and 9, and approximately 83% of eligible children are enrolled in the program. Of the enrolled children, 90% had all of their dental treatment needs completed.

The increased number of children enrolled in the program combined with growing efficiencies has resulted in a reduction of the average cost per child from \$158.00 in the first year to \$83.00 in the current year despite the high rate of inflation during this three year period. 

The Saskatchewan Dental Plan operates through school clinics and its activities are more closely related to the school year than to the government fiscal year. In order that the activities of the Saskatchewan Dental Plan can be more meaningfully presented and its costs and services more closely correlated, Dental Plan reports are based on the operational year September 1 to August 31.

M. H. Lewis, D.D.S., D.D.P.H.,
Executive Director,
Saskatchewan Dental Plan.

BACKGROUND

In 1968, the Saskatchewan Department of Health conducted surveys in Regina and Saskatoon which showed that the level of dental health of children in these cities was far from satisfactory. On the basis of the survey results, the Dental Division of the Department of Health proposed that the federal government allocate funds for a dental pilot project in the province. The project was to provide dental health education, preventive services, and treatment services to children through a dental team consisting of a dentist, two dental nurses, three dental assistants and one receptionist-recorder.

The dental nurses were formally trained to provide educational, preventive, and treatment services to children, including deciduous tooth extractions and amalgam and composite restorations in deciduous and permanent teeth. The three dental assistants were formally trained to provide chairside assistance, simple prophylaxis, and application of anticariogenic agents.

Services were made available to children from 3 to 12 years of age in the Oxbow area of Southeastern Saskatchewan. The dental team was housed in a mobile clinic equipped with four dental units, an X-ray machine, a laboratory and a reception room. The project lasted for three years. It demonstrated that high quality care could be provided by such a program and also that parents were prepared to enroll their children in a dental program in which care was provided by dental nurses. It was important to establish that a dental program making use of dental nurses could be successful because one of the main reasons for testing such a program was the chronic shortage of dentists in the province, especially in the rural areas.¹

On the basis of the successful Oxbow pilot project, the Government of Saskatchewan announced in March, 1972 that a province-wide dental program would be established to provide comprehensive dental care to children between the ages of 3 and 12. The program commenced in September, 1974 and during the first year of operation it provided dental care to children born in 1968. In September, 1975 children born in 1969 and 1970 were added. Children born in 1967 and 1971 were introduced in September,

1976. Other age groups will be integrated into the program in subsequent years. All children enrolled in the program are first examined by a fully qualified dentist, who prescribes necessary treatment and decides how often a child should be examined. Dental nurses, supported by dental assistants, provide most of the dental services under the supervision of the dentist. Services provided by the program, but beyond the scope of the dental nurse, are provided by the dentist.

In 1976 a study was conducted to evaluate the quality of care provided by the Saskatchewan Dental Nurse. In February of that year three dentists from outside the province — one specialist in children's dentistry and two specialists in restorative dentistry — surveyed 410 children in grades Kindergarten to Grade Two. A total of 2,107 amalgam restorations and 97 stainless steel crowns were assessed. Later analysis of these fillings showed that 1,503 fillings were placed by the Saskatchewan Dental Nurses and 604 by dentists. Overall the restorations were rated as follows:

	<i>Dentist</i>	<i>Dental Nurse</i>
Unacceptable	21.1 %	3.7 %
Adequate	62.4 %	48.6 %
Superior	16.5 %	47.7 %

Quality assessment of stainless steel crowns showed that the Saskatchewan Dental Nurses and dentists performed to the same standard. In conclusion, the study stated that after two years it appeared that the Saskatchewan Dental Nurse was providing basic restorative treatment at a high level of coverage and quality.

With the co-operation of the Department of Education and local school boards, dental clinics have been located in schools to make access more convenient for children and parents. More clinics will be added as the program expands. In cases where space for clinics is not available in schools, portable dental equipment can be set up temporarily in the school or a mobile dental clinic can be used. Occasionally, children are transported from a school with no clinic to a nearby school that is equipped with a clinic.

1. Saskatchewan has an average of one dentist for every 3,500 people. In rural areas the ratio is one dentist for every 7000 people. These figures compare with a national dentist-to-population ratio of 1:2,600.

ORGANIZATION AND ADMINISTRATION

Legislative and Regulatory Authority

In 1973 *The Saskatchewan Dental Nurses Act* was passed. This act created a Saskatchewan Dental Nurses Board to establish and maintain rules for the licensing of dental nurses, to set standards of professional conduct for dental nurses, to advise the Minister of Health on matters referred to the Board, and to ensure that the regulations and standards of professional conduct are met by all registrants. The first Board was appointed on September 25, 1973 and held three meetings during the year to develop regulations concerning the registration and licensing of dental nurses and to define the scope of dental nursing services. The Board now meets at the call of the Chairman to approve the registration of dental nurses and to rule on standards and questions referred to the Board.

In the following year, *The Dental Care Act, 1974* was passed. This Act gives the Department of Health broad authority to operate a children's dental care program. The act authorizes the Minister of Health to enter into agreements with or to employ dentists, dental nurses, and certified dental assistants and to do whatever else is necessary for the establishment and operation of the dental care program.

Administrative Structure

The administrative organization is outlined in the Organizational Chart on page 10. The Saskatchewan Dental Plan is administered through a central headquarters staff consisting of an Executive Director, an Associate Director, administrative staff, and warehouse and stores personnel. The province is divided into six administrative regions. Regional Headquarters are located in Swift Current, Regina, Yorkton, Saskatoon, Prince Albert and North Battleford.¹ The Saskatchewan Dental Plan does not provide coverage to children in the northern part of the province. The Department of Northern Saskatchewan operates its own dental plan for children in this area, but receives consultation services and advice from the Saskatchewan Dental Plan.

A separate Dental Technical Review Board has been established to recommend methods by which the clinical aspects of the Saskatchewan Dental Plan may be improved and to advise on quality control of services provided.

Health Region No. 1 in Swift Current has had a Dental Program for almost 30 years. The program has been modified to avoid duplication of the Saskatchewan Dental Plan. The Swift Current Regional Health Board now provides services to those resident children up to the age of 14 who are either too old or too young for the Saskatchewan Dental Plan. The Regional Board has applied to the Minister of Health for permission to expand its program to cover children up to the age of 18.

1. The six Dental Plan administrative regions and headquarter locations for dental nurses are shown on the map on page 11.

Figure 1

SASKATCHEWAN DENTAL PLAN ADMINISTRATIVE ORGANIZATION

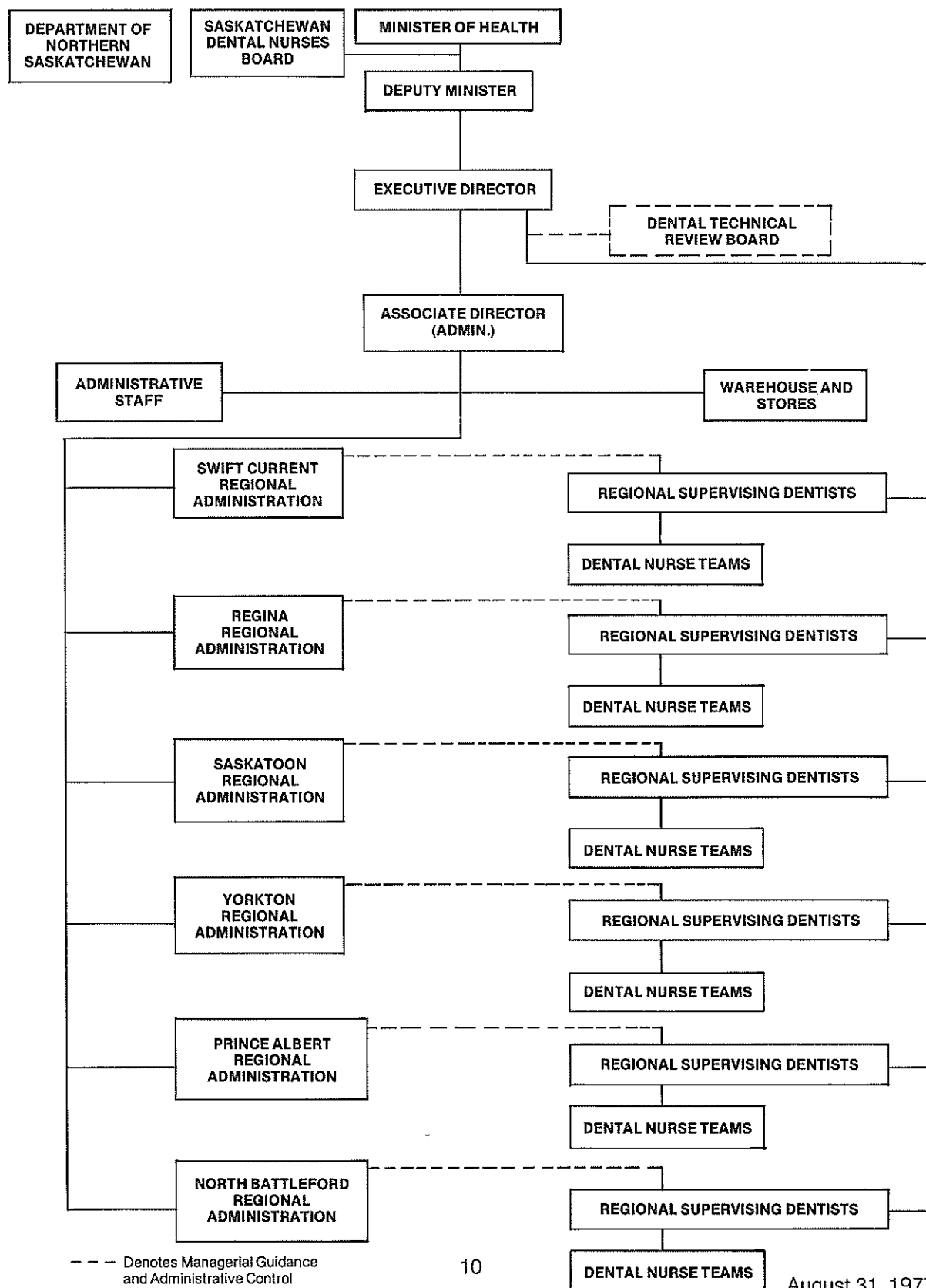


Figure 2

SASKATCHEWAN DENTAL PLAN ADMINISTRATIVE REGIONS



KEY TO ADMINISTRATIVE REGIONS

NO. 1 SWIFT CURRENT	NO. 4 YORKTON
NO. 2 REGINA	NO. 5 PRINCE ALBERT
NO. 3 SASKATOON	NO. 6 NORTH BATTLEFORD

PROFILE OF SASKATCHEWAN DENTAL PLAN PERSONNEL

Clinical Personnel

1. SUPERVISING DENTIST

The supervising dentist performs a variety of duties in close co-operation with the seven or eight dental nursing teams assigned to each area. The dentist spends a great deal of time examining and formulating treatment plans for enrolled children and carries out services which are beyond the scope of the dental nurse. Lines of communication are always open between the team and the dentist in order to provide the team with immediate consultation or assistance when necessary. As supervisor, the dentist constantly monitors the quality and quantity of work being performed by the teams, and sees that priorities and schedules are being arranged and met.

The dentist meets constantly with parents, superintendents, principals, teachers and local officials and thus plays a significant role in public relations. All field staff are essentially public relations officers but it is the supervising dentist (together with the regional administrator) who must assess and deal with the specific difficulties and judge public sentiment.

2. DENTAL NURSE

The Saskatchewan Dental Nurse is a graduate of a two-year Dental Nursing Program and is trained to deal with children in both clinical and classroom situations.

The dental nurse provides diet and oral hygiene instruction to children and parents, cleans and polishes teeth, applies topical fluorides and takes radiographs. The dental nurse restores primary and permanent teeth with silver amalgam, composite resins and stainless steel crowns as well as performing pulpotomies and placing space maintainers. The dental nurse also extracts primary teeth.

3. DENTAL HYGIENIST

The Saskatchewan Dental Plan employed two dental hygienists during 1976-77. The hygienists provide a comprehensive and concentrated preventive dentistry program to children with especially serious oral hygiene problems. The hygienists also provide group oral hygiene instruction and perform a general public relations function by addressing home and school associations and similar groups. Each hygienist works throughout a dental

region and occasionally moves from one region to another in the course of duties.

4. CERTIFIED DENTAL ASSISTANT

The certified dental assistant, who is a graduate of a one-year course, plays a dual role within the dental team. She performs many chairside duties for the nurse, such as instrument transfer, suctioning, retraction, preparation of restorative materials and sterilization; she also takes radiographs, cleans and polishes teeth, applies topical fluoride and provides oral hygiene instruction.

With the long-term benefits of preventive dentistry in mind, dental teams also provide classroom instruction to children in age groups not yet enrolled in the Saskatchewan Dental Plan. The educational sessions vary greatly, depending on the age of the children in the class. Puppet shows are often staged for the young children, while the older children receive classroom talks with question-and-answer periods. The instructional sessions stress the cause of dental disease, diet, professional preventive measures and, most important, daily home care. Sessions may be followed by active participation of children in a fluoride brush-in, followed by a fluoride rinse.

Non-Clinical Personnel

1. REGIONAL ADMINISTRATOR

The Regional Administrator maintains records on personnel, equipment, materials, supplies, and services. He works in close co-operation with supervising dentists in assigning service areas for dental nurse teams.

He is responsible for identifying locations for dental clinics, monitoring program progress, identifying operational problems and initiating corrective action. He shares with the Supervising Dentists, responsibility for public relations in the area and deals with specific difficulties affecting parents, staff and members of the public.

2. EQUIPMENT TECHNICIAN

The equipment technician is a graduate of a one-year course in instrument technology. He installs dental equipment in new clinics including the X-ray machines. He repairs and maintains all dental equipment both in the clinic and in the repair shop.

Preventive maintenance is practised by all staff under the supervision of the equipment technician. This maintenance eliminates a great deal of lost time because of malfunctioning dental equipment. The equipment technicians' regular visits to dental clinics involve them in considerable travel.

Staff Employed

As of June 30, 1977, the Saskatchewan Dental Plan employed the following staff. Figures for June 30, 1976 are given for comparison.

	<i>June 30, 1976</i>	<i>June 30, 1977</i>
TOTAL	207	270
Dentists	16	13
Dental Nurses	84	115
Dental Assistants	96	133
Dental Hygienists	4	2
Equipment Technicians . .	7	7

Attrition among dental nurses from September 1, 1975 to August 31, 1977 was as follows:

DENTAL NURSES				
	<i>On Staff</i>	<i>Hired</i>	<i>Resigned</i>	<i>Total</i>
September 1, 1975 to				
August 31, 1976	40	53	14 ¹	79
September, 1976	79	44	1	122
October	122	—	1	121
November	121	1	—	122
December	122	—	—	122
January, 1977	122	—	4	118
February	118	1	—	119
March	119	—	2	117
April	117	—	1	116
May	116	—	1	115
June	115	2	2	115
July	115	1	1	115
August	115	34	6 ²	143

1. One dental nurse transferred to Wascana Institute of Applied Arts and Sciences in Regina as a dental nurse instructor.

2. Four dental nurses transferred to Wascana Institute of Applied Arts and Sciences in Regina as dental nurse instructors.

TRAINING OF DENTAL NURSES IN SASKATCHEWAN

In September, 1972, a two-year Dental Nursing Program was established at the Wascana Institute of Applied Arts and Sciences in Regina. The two-year program prepares the students to provide dental care to pre-school and school-age children through the Saskatchewan Dental Plan. Great emphasis is placed on prevention of dental disease, but in addition the dental nurses are fully trained in basic clinical restorative dentistry for children and are able to provide most of their dental needs. The training program consists of co-ordinated classroom and clinical experience. Total scheduled time exceeds 2,300 hours in the two years of the program. In July, 1977, 51 students graduated from the training program.

Entrance Requirements

EDUCATION —

complete Grade XII with two of the three sciences at the Grade XII level.

HEALTH —

applicants should be medically and dentally fit.

PERSONAL QUALITIES —

applicants should have a liking for and an understanding of children and a genuine desire to do dental work. Manual dexterity and ability to do fine work with the hands are desirable, especially if supported by an understanding of simple mechanical principles.

Applicants may be single or married, female or male.

Curriculum

YEAR 1

SEMESTER 1

Anatomy and Physiology (including Histology), Dental Histology and Dental Morphology, Coordination and Skills Development, and Preventive Dentistry.

SEMESTER II

Preventive Dentistry, General Pathology, Communication Skills (including Child Psychology and Behavioral Sciences, Public

Speaking, Dental Health Project Development, Education), Pharmacology and Therapeutics, Dental Pathology, and Restorative Dentistry for Children (including dental materials and maintenance and use of dental equipment.

YEAR II

BOTH SEMESTERS

Clinical experience in Restorative Dentistry, Radiography and Preventive Dentistry techniques.

Other classes include recognition of Dental Pathology and Public Health Dentistry.

ORGANIZATION OF DELIVERY

The Saskatchewan Dental Plan uses a team approach to provide dental services in the elementary school setting. Each team consists of a dental nurse and certified dental assistant. Associated with each dental nursing team is a supervising dentist who works in close conjunction with seven or eight teams.

A great deal of preliminary work in developing schedules within each dental region is undertaken to ensure that a timetable can be developed to provide dental care to all enrolled children with as little disruption to the school system as possible. School principals are contacted to discuss suitable times for the teams to visit their schools and to inform them of the number of children enrolled in their particular area. The dental nurse teams explain the operation of the Plan to the teachers involved and discuss the schedule within each particular school. A few days before the child's initial visit to the dental clinic parents are contacted by phone or letter.

On the first clinical visit the child's medical history is checked to see if there are any medical conditions that might affect the provision of dental care. A simple examination of the child's mouth is performed to determine if diagnostic X-rays are required. The required radiographs are taken and immediately processed to make certain that they are of good diagnostic quality.

On the second visit, the patient is given a full clinical examination by the examining dentist or dental nurse. Parents are encouraged to be present for this visit so that pertinent diagnostic findings and treatment planning can be discussed directly with them. At this time, diet and oral hygiene are also

discussed with the parent and child. The prevention of dental disease is of great importance and the dental team stresses preventive measures with the parents and patient throughout the course of treatment. Treatment visits are scheduled according to the dental needs of each individual child.

Except for emergencies and urgent problems, the actual dental treatment usually commences at the third clinical session. A dental nurse and certified dental assistant carry out treatment in accordance with the treatment plan prescribed. As treatment progresses, any necessary modifications in the treatment plan are made in consultation with the examining dentist. Dental teams are encouraged to perform quadrant dentistry, so that all necessary treatment in any quarter of the mouth is performed during one visit. All restorative treatment is performed with the use of rubber dam, a technique which provides visibility and control of the operating field for the dental nurse and comfort and protection for the patient.

Treatment schedules of dental teams vary from region to region. However, in most cases teams work for one or two weeks at a school and then move to the next school. The schools in any particular area are therefore visited several times during the school year.

This schedule is followed for several reasons:

- (a) it allows a greater number of children to be seen early in the year and receive priority care sooner;
- (b) it minimizes classroom disruption;

- (c) it gives the children a longer rest time between clinical sessions, which is especially important in small schools where a few children would be seen too frequently if rotation were not used; and
- (d) it allows the dental teams to identify work loads earlier in the year and thus permits better long-range scheduling by dental teams, principals and teachers.

Dental regions hold staff meetings every six to eight weeks. These meetings last one full day and normally one or two hours of the day are put aside for a review of certain clinical procedures or to review aspects of oral diagnosis, radiographic techniques or techniques in the effective use of chairside dental assistants.

Summer Activities

During the summer school holidays, clinics are operated throughout the province on a regular basis, though because of school vacations dental teams frequently find it difficult to organize full work schedules. During this period, staff are expected to take their vacation and also to participate in continuing education courses.

Continuing Education

In July, 1977, Dr. Keith Davey, D.D.S., M.S.D., F.R.C.D., Director of the School of Dental Therapy, Fort Smith, Northwest Territories, gave lectures on "Oral Diagnosis and Treatment Planning."

In August, 1977, Dr. Robert E. Frolich, M.D., Professor and Chairman of Psychiatry, and Dr. S. Marian Bishop, Ph.D., M.S.P.H., Professor and

Chairman of Community Dentistry, University of Alabama, gave lectures on "Effective Communication in the Saskatchewan Dental Plan."

Both of the above courses involved lectures and demonstrations. To keep the classes at a reasonable size, to reduce the travel costs, both courses were given twice; once in Regina and once in Saskatoon.

Dental Health Education

Saskatchewan Dental Plan clinical staff are involved in community dental health education. Whenever possible, staff participate on television information shows, open-line radio shows and community and school association meetings to promote the importance of dental health and explain the methods of preventing the onset of dental disease.

Saskatchewan Dental Plan staff are always prepared to present displays on preventive dentistry, new dental equipment and techniques, and careers in dentistry. During the year, numerous presentations were made in shopping malls, open house days in elementary schools, career days in high schools, and the health fair at the University of Regina.

During July and August, a number of Saskatchewan Dental Plan staff were involved in summer fairs. The mobile dental clinic was entered in a number of parades with staff later manning a booth to answer questions about the Saskatchewan Dental Plan and to promote home care of teeth.

Dental staff also promote, whenever possible, the importance of fluoridation of community water supplies as a practical and effective health measure for safely and economically reducing the incidence of dental decay.

DENTAL CLINICS

Permanent Dental Clinics

Most of the dental work provided by the dental teams is performed in permanent dental clinics. As of August 31, 1977, there were 355 such clinics located in elementary schools throughout Saskatchewan. Additional clinics will be established as other age groups are phased into the Plan. Appendix I lists the location of dental clinics alphabetically by dental region.

Permanent clinics have been established in schools with the greatest number of children eligible for enrollment in the Saskatchewan Dental Plan. Because of declining school enrollment, most of these schools had an extra room or a vacant classroom in which a dental clinic could be established. Patients in schools adjacent to permanent clinics walk to the clinic if it is within one block or they are transported by car by the parent or dental team. Permanent clinics are frequently shared with the school public health nurse and may also be used as a rest area for children who become ill at school.

The permanent dental clinics, where possible, consist of a large, bright, well-painted room, often with adjoining waiting room and washroom. All the clinics have increased overhead fluorescent lighting, a ventilation fan and extra electrical plug-ins. Each clinic has a lockable cupboard with a stainless-steel sink and counter work area. Located in the school as close as possible to the clinic is a large fixed air compressor. A portable, self-contained dental unit is attached to the compressed air line by means of a quick-connect coupler in the clinic.

Each permanent clinic is furnished with a motorized dental chair and attached light, operator and assistant stools, mobile dental cabinet, autoclave, amalgamator, X-ray machine, wall bracket, and lead shielding.

All instruments and supplies are carried from clinic to clinic by the dental teams and dentists. For this purpose a large metal instrument and supply case is furnished.

Temporary Dental Clinics

Portable equipment in temporary space is used to provide dental services in small village schools without clinics. Temporary clinics have also been established in those few larger schools in which permanent clinic space is not presently available.

A vacant classroom, a make-ready room, or an infrequently used home economics room is the usual location for a temporary clinic. Using portable equipment, the dental team can provide high quality dental care for children in virtually any well-lit, clean school area. A temporary clinic consists of a portable dental chair, fiberoptic light, portable stools, dental unit, portable compressor, and autoclave, all set up within an adequate room.

Clinic Design Rationale

The Saskatchewan Dental Plan uses one-chair clinics as the principal type of permanent clinic. In the cities of Prince Albert, Regina and Saskatoon, multiple-chair clinics are in operation. These clinics are being used to test the feasibility of transporting patients to larger clinics as opposed to treating them in one or two-chair clinics in each school. Prince Albert has a ten-chair clinic to which all the city children are transported for treatment. Regina and Saskatoon each have a four-chair clinic to which children are transported as well as several one-chair permanent clinics.

During the first year of the program many children were transported from their school to one of the multi-chair clinics. As additional age groups have been phased into the program it has become apparent that the one-chair dental clinic situated in an elementary school has many advantages over a multi-chair clinic. A dental nurse working in an elementary school can arrange treatment times to coincide with school activities so that a minimum of disruption occurs. Children also stay in the familiar surroundings of their own school.

Equipment

The Saskatchewan Dental Plan has several major items of equipment in service. The equipment has been centrally assigned to each region on an allotment basis determined by the number of clinics. Within each region every individual piece of major equipment is under a serial number control system. All equipment is located with the dental nursing team, in a permanent clinic or in the regional office.

Located in each permanent dental clinic is a fully motorized dental chair. For the purposes of the Saskatchewan Dental Plan, the gear drive is the mechanism of choice for a dental chair. Hydraulic drives tend to be much heavier than gear drives and hydraulic oil tends to spill and eventually leak from worn hydraulic cylinders. In addition, hydraulic oil has a tendency to solidify when accidentally subjected to sub-zero temperatures during a power failure. Fixed to each motorized chair is an operating light with a fully articulated arm.

The dental nursing teams use a folding portable dental chair in the temporary dental clinics. This chair is fabricated from aluminum; its light weight (35 pounds) facilitates transport by Plan personnel. Mounted laterally on the portable chair is an operating light which utilizes a large fiberoptic bundle to conduct an intense white light from the quartz iodide bulb to the oral cavity.

The Plan uses a dental X-ray machine modified to allow it to be separated into two easily portable components — controls and head. In each permanent clinic and most temporary clinics a metal bracket is attached to the wall to support the assembled X-ray machine. Patients are protected from scattered radiation by a full lead apron. In order to shield the operator and other personnel in a school clinic, screens are used. The exact location of each portable X-ray machine and precise placement of lead screens are sanctioned by the Radiation Safety Unit of the Saskatchewan Department of Labour. X-ray films are processed in each clinic by means of a portable semi-automatic processing machine that uses standard processing solutions.

Sterilization of instruments is accomplished by two means. An autoclave is used to sterilize all items except those fabricated from plastic. Plastic items are sterilized in a cold disinfectant solution. In an autoclave, sterilization is accomplished through a combination of heat and a chemical vapour. All instruments or sets of instruments are sterilized in

sealed bags and are opened only upon use. The autoclave is quite light in weight (35 pounds) and thus can be easily transported to a temporary clinic.

All clinics employ a completely mobile and portable self-contained dental unit. Located on the unit are five instruments used in the delivery of dental care. Two of the instruments are dynamic. One is an ultra high speed, low torque handpiece and the other is a handpiece of low speed, high torque design. A three-way syringe on the dental unit provides a stream of compressed air, pressurized water or a combination of both. Two forms of suction are provided on the unit. The first suction is a low volume, high vacuum type for purposes of saliva ejection and surgery. The other, a high volume suction, provides good suction for the rubber dam washed field technique used by all dental nurses. The unit also has its own distilled water supply and two separate waste traps for the low and high volume suction.

The dental unit is completely powered by compressed air conducted through one line at 90 PSI. The compressed air is supplied in a permanent clinic by a large, twin cylinder, verticle air compressor. When necessary, these compressors can quite adequately supply four dental units. In temporary clinics, the compressed air is supplied by small, portable, horizontally opposed, twin cylinder air compressors. The compressor is placed outside the clinic area and the air is conducted through plastic lines to the dental units.

Located in each permanent clinic is a mobile instrument cabinet. The cabinet has multiple drawers for storage of instruments and supplies. The top of the mobile cabinet, when used in conjunction with the top of the dental unit, provides an adequate work surface for the dental assistant. In a temporary clinic small portable tables are used to provide the required chairside work surface.

All of the dental equipment is of the most modern design, and extensive testing to ensure its durability and suitability was undertaken before it was selected for the Saskatchewan Dental Plan. All of the dental materials and supplies used are approved by the American Dental Association Council on Materials and Devices.

The following table summarizes the equipment contained in each permanent and portable clinic. The total cost of equipment in a permanent clinic is \$4,897.97, and in a portable clinic \$3,679.49. This equipment was all purchased in 1974 and 1975.

Table 1.

**EQUIPMENT IN PERMANENT AND PORTABLE CLINICS,
SASKATCHEWAN DENTAL PLAN**

Equipment Item	Number per clinic	Manufacturer (model)
<i>Permanent Clinic</i>		
Air Compressor	1	Webster (402-3)
Amalgamator*	1	Toothmaster (300)
Dental chair (fixed)	1	Vacudent (P-60-AIBS)
Dental light (fixed)	1	Pelton * Crane (Light Fantastic)
Dental cabinet	1	Denco (7 drawer)
Dental unit*	1	Adec (Sask-Cart)
Autoclave (Chemiclave)*	1	Harvey (4000)
X-ray machine*	1	Siemens (Heliodent 60)
X-ray developer*	1	Procomat (II)
Dental stools (portable)*	2	Office Specialty (708M)
Dental X-ray viewer*	1	Illuminator (14 1/8 x 5 3/8)
<i>Portable Clinic</i>		
Air compressor	1	Scripline (3/4 HP Motor, 6 gal. tank)
Amalgamator*	1	Toothmaster (300)
Dental chair (portable)	1	Adec (c/w Light Post)
Dental light (portable)	1	Roland (Fibreoptic)
Dental unit*	1	Adec (Sask-Cart)
Autoclave (chemiclave)*	1	Harvey (4000)
X-ray machine*	1	Siemens (Heliodent 60)
X-ray developer*	1	Procomat (II)
Dental stools (portable)*	2	Office Specialty (708M)
Dental X-ray viewer*	1	Illuminator (14 1/8 x 5 3/8)

* These items are common to both permanent and portable clinics and need not be duplicated except in situations where they may be required in two different locations simultaneously.

Table 2.

**ENROLLMENT OF ELIGIBLE CHILDREN
SASKATCHEWAN DENTAL PLAN
ENROLLMENT AS AT AUGUST 31, 1977¹**

Age group	Number eligible	Number enrolled	Percent enrolled	Number refused	Percent refused	Number noresponse	Percent noresponse
Total ²	70,462 (44,801)	58,789 (37,032)	83.4 (82.7)	4,726 (2,936)	6.7 (6.5)	6,947 (4,833)	9.9 (10.8)
Born 1967	14,127	10,633	75.3	1,221	8.6	2,273	16.1
Born 1968	13,779 (14,406)	12,274 (12,268)	89.0 (85.2)	638 (773)	4.6 (5.3)	867 (1,365)	6.3 (9.5)
Born 1969	14,083 (14,460)	12,026 (11,676)	85.4 (80.7)	979 (1,079)	7.0 (7.5)	1,078 (1,705)	7.7 (11.8)
Born 1970	13,900 (14,268)	11,957 (11,490)	86.0 (80.4)	877 (1,033)	6.3 (7.2)	1,066 (1,763)	7.7 (12.4)
Born in 1971	13,996	11,322	81.0	1,011	7.2	1,663	11.9
Others (Oxbow) ³	577 (1,649)	577 (1,598)	100.0 (96.9)	— (51)	— (3.1)	— —	— —

1. Figures in parentheses are as at August 31, 1976. Decrease in the number of eligible children is due to refinement in data processing which allowed us to identify and delete duplicate registrations for some children, and to delete those children who have moved out of the province and consequently are no longer eligible for enrollment or to receive services.
2. In addition to these totals 1,442 registered Indians are enrolled in the plan (539 in 1975-76). All Indian children aged 5 - 9 were eligible to enroll. However, before services can be provided the children must attend dental clinics in the non-segregated schools. Because of a number of circumstances peculiar to this group of children their participation is minimal. Their enrollment figures have been excluded to avoid distortion.
3. Previous year figures include children aged 4 and 8 - 18. Present year figures include children aged 10 - 12. Children aged 10 - 12 are only eligible for services if they were previously enrolled in the Oxbow demonstration project.

DENTAL HEALTH OF ENROLLED CHILDREN

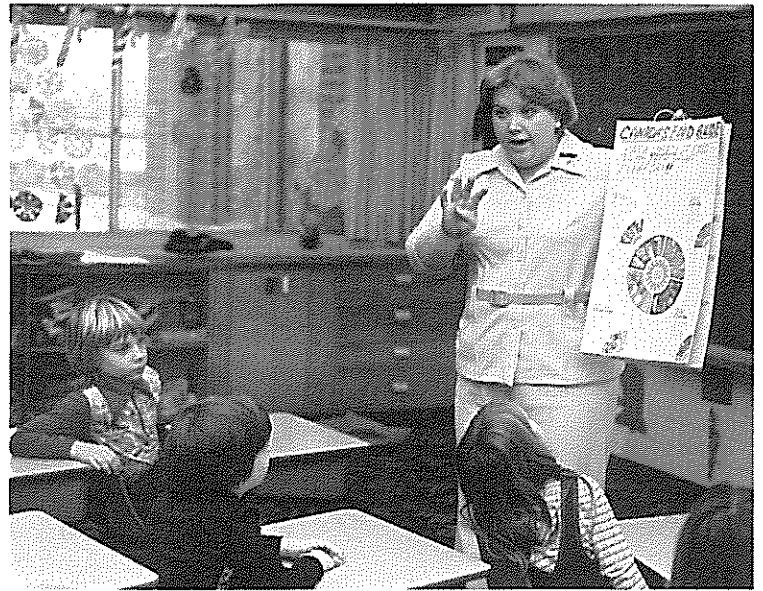
Every child enrolled in the Saskatchewan Dental Plan is examined once a year to record in detail his dental health. The results of these examinations are compiled and averaged to present the dental health of enrolled children by age groups. These statistics are presented in Table 3.

This table reveals that children born in 1971 and newly enrolled in the Dental Plan have on the average 3.94 decayed teeth. This poor dental health

demonstrates the need in future years for the Dental Plan to see children at a younger age before the onset of this high level of decay.

As Table 4 shows, the dental health of children born in 1968 is much improved, but does reflect the large amount of restorative care the children have received. Extraction of permanent teeth, however, has almost been eliminated, with only 115 extractions required for 12,274 children.

ORAL HYGIENE INSTRUCTION



CONTINUING EDUCATION



Table 3.

**DENTAL HEALTH OF ENROLLED CHILDREN
SASKATCHEWAN DENTAL PLAN**

**September, 1975 - August, 1976
AND September, 1976 - August, 1977**

Dental health indicators	Average number or percent per child							
	September, 1975 - August, 1976 by year of birth			September, 1976 - August, 1977 by year of birth				
	1968	1969	1970	1967 ¹	1968	1969	1970	1971
Decayed, extracted, filled — deciduous teeth (DEF) .	5.51	5.56	4.94		5.29	5.20	5.02	5.02
Decayed	1.58	3.89	3.88		0.93	1.34	1.84	3.94
Extracted	0.72	0.46	0.25		0.81	0.62	0.33	0.20
Filled	3.20	1.19	0.79		3.55	3.23	2.84	0.87
Decayed, missing, filled — permanent teeth (DMF) . .	1.95	0.80	0.15	3.10	2.71	1.81	0.72	0.18
Decayed	1.13	0.73	0.13	2.03	1.05	1.11	0.57	0.16
Extracted	0.02	0.01	0.00	0.04	0.01	0.01	0.00	0.00
Filled	0.79	0.06	0.01	1.01	1.63	0.69	0.14	0.02
Total DEF + DMF	7.47	6.36	5.09		8.01	7.02	5.74	5.21
Children with DMF of 0 . . .	33.58 %	65.89 %	91.87 %	15.22 %	18.12 %	35.80 %	68.68 %	90.71 %
Children with DMF + DEF of 0	7.68 %	13.43 %	19.26 %		5.18 %	8.98 %	14.07 %	20.14 %
Decayed deciduous and permanent teeth	2.72	4.63	4.02		1.99	2.45	2.42	4.10
Filled deciduous and permanent teeth	4.00	1.25	0.81		5.18	3.93	2.98	0.89
Ratio filled deciduous and permanent teeth to DMF + DEF	0.53	0.19	0.15		0.64	0.56	0.52	0.17
Ratio missing and extracted to filled teeth . . .	0.18	0.37	0.32	0.43	0.16	0.16	0.11	0.23
Permanent teeth erupted and not decayed	6.60	3.39	0.75	10.66	8.76	6.95	3.87	1.05
Deciduous teeth filled and rede decayed.	0.19	0.18	0.12		0.15	0.14	0.14	0.09
Permanent teeth filled and rede decayed.	Not Reported			0.07	0.03	0.01	0.00	0.00

1. Dental Health indices on deciduous teeth for 10 year old children have not been reported since too high a proportion of deciduous teeth have already been shed.

Table 4.

SERVICES PROVIDED BY CLINICAL STAFF¹
SASKATCHEWAN DENTAL PLAN
September, 1975 to August 1976
AND September, 1976 to August 1977

Services	Number					Number						
	September, 1975 — August, 1976 (By year of birth)					September, 1976 — August, 1977 (By year of birth)						
	1968	1969	1970	OTHER ²	TOTAL	1967	1968	1969	1970	1971	OTHER ³	TOTAL
Parent contacts												
In person.	6,848	11,855	13,976	156	32,835	11,722	7,522	8,440	8,126	16,936	112	52,858
By phone.	9,596	14,166	13,348	247	37,357	13,914	10,467	11,138	10,107	15,015	132	60,773
By letter	7,414	8,678	6,833	24	22,949	15,134	14,551	15,224	13,809	13,130	355	72,203
Diagnostic services												
Initial oral examination .	1,560	10,643	10,080	315	22,598	8,788	943	1,303	1,615	9,103	—	21,752
Emergency oral examination	249	186	113	62	610	255	228	267	284	204	6	1,244
Specific oral examination	625	368	225	248	1,466	845	1,473	1,240	648	266	48	4,520
Recall examination	10,231	727	551	897	12,406	1,943	11,399	10,909	10,062	1,644	496	36,453
Diagnostic models	—	—	—	—	—	387	314	312	120	51	10	1,194
Radiographic services												
Periapical radiographs .	2,170	6,423	2,593	493	11,679	2,104	1,422	1,461	935	785	117	6,824
Bitewing radiographs (single film)	6,817	17,697	15,891	784	41,189	12,715	5,075	4,507	4,467	12,065	301	39,130
Panoramic radiographs	8	7	3	—	18	23	16	10	7	1	—	57
Preventative services												
Dental prophylaxis	10,669	10,741	9,705	1,388	32,503	9,620	10,905	10,784	10,527	9,445	475	51,756
Polish amalgam	5,223	5,674	4,564	1,144	16,605	6,539	6,611	6,681	5,868	5,530	291	31,520
Topical fluoride	9,855	10,029	9,008	1,138	30,030	9,444	10,748	10,568	10,255	9,273	320	50,608
Nutritional counsel (individual)	302	382	402	13	1,099	3,418	3,421	3,492	3,392	3,462	95	17,280
Oral hygiene instruction (individual)	11,636	13,755	11,809	1,197	38,397	13,021	12,725	12,881	12,271	12,667	525	64,090
Restorative services												
TOTAL amalgam restorations (silver)	26,144	39,833	30,845	3,548	100,370	33,467	21,524	24,898	20,829	29,701	594	131,013

Table 4. SERVICES PROVIDED BY CLINICAL STAFF¹ (Cont.)

Services	Number					Number						
	September, 1975 — August, 1976 (By year of birth)					September, 1976 — August, 1977 (By year of birth)						
	1968	1969	1970	OTHER ¹	TOTAL	1967	1968	1969	1970	1971	OTHER ¹	TOTAL
Amalgam — primary one surface. two surface. three surface four surface five surface.	5,185	9,795	9,858	160	24,998	3,477	2,639	3,922	4,980	9,231	44	24,293
	8,104	19,326	16,954	327	44,711	7,208	5,156	6,685	8,350	16,901	124	44,424
	1,235	3,187	2,706	67	7,195	1,635	650	709	760	2,134	5	5,893
	103	300	241	6	650	193	45	55	44	153	—	490
	16	29	12	—	57	3	7	6	5	17	1	39
Amalgam — permanent one surface. two surface. three surface four surface five surface.	8,115	5,174	779	1,707	15,775	13,215	9,326	9,833	5,132	951	253	38,710
	3,219	1,876	273	1,037	6,405	6,724	3,429	3,436	1,457	292	143	15,481
	155	125	21	208	509	906	249	223	89	21	23	1,511
	11	19	1	29	60	98	20	23	11	1	1	154
	1	2	—	7	10	8	3	6	1	—	—	18
Composite restorations (white).	407	491	418	547	1,863	1,440	598	320	231	360	71	3,020
Stainless steel crowns .	1,913	4,482	3,722	30	10,147	3,010	2,003	2,607	3,084	6,289	26	17,019
Caries control — removal of decay — place	—	—	—	—	—	2,259	1,205	1,176	975	1,277	35	6,927
sedative dressing . . .	—	—	—	—	—	—	—	—	—	—	—	—
Pulp therapy services	101	380	332	23	836	259	69	57	39	82	3	509
Direct pulp cap.	206	507	444	11	1,168	466	173	191	132	242	2	1,206
Indirect pulp cap.	1,712	4,737	4,156	47	10,652	2,083	1,100	143	1,728	4,655	14	11,033
Pulpotomy.	—	—	—	—	—	14	9	9	17	36	—	85
Root canal therapy	—	—	—	—	—	323	242	157	—	—	—	722
Periodontal services.	—	—	—	—	—	—	—	—	—	—	—	—
Surgical services	2,594	3,740	1,748	260	8,352	4,860	2,346	2,357	1,875	1,954	105	13,497
Removal of erupted tooth	(included in removal of erupted tooth)											
Extraction of primary tooth												
Removal of residual roots (soft tissue coverage)	125	200	70	9	404	409	68	121	89	110	3	800
Extraction of permanent tooth	(included in removal of erupted tooth)					497	115	69	24	4	14	723
Frenectomy	—	—	—	—	—	1	2	1	3	1	—	8

Table 4. SERVICES PROVIDED BY CLINICAL STAFF¹ (Cont.)

Services	Number					Number						
	September, 1975 — August, 1976 (By year of birth)					September, 1976 — August, 1977 (By year of birth)						
	1968	1969	1970	OTHER ²	TOTAL	1967	1968	1969	1970	1971	OTHER ³	TOTAL
Space maintainers and minor ortho services												
Unilateral space maintainer	1	8	—	—	9	203	192	416	433	729	1	1,974
Bilateral space maintainer ⁴	103	61	14	7	185	112	107	113	60	44	—	436
Tooth movement and space regaining	95	59	30	7	191	252	210	192	90	52	5	801
Prevention of thumb sucking	12	11	9	2	34	19	20	16	10	2	1	68
Occlusal adjustment. . .	26	19	14	4	63	18	35	25	14	17	—	109
Number of children — treatment plans completed	—	—	—	—	—	9,754	11,504	11,481	11,239	9,890	473	54,341
Number of children — percent treatment completed.	—	—	—	—	—	89.8	91.4	93.1	91.5	85.3	82.0	90.2

1. Includes services to enrolled registered Indians.
2. Includes children aged 4 and aged 8 - 18 participating in the Oxbow School Demonstration Project.
3. Includes children aged 10 - 12 previously served by the Oxbow School Demonstration Project.
4. Includes SS crown and loop type and removable acrylic type.

Table 5.

**NUMBER OF PREVENTIVE SERVICES PROVIDED BY GRADE,
SASKATCHEWAN DENTAL PLAN,
September, 1975 - August, 1976
AND September, 1976 - August, 1977**

September, 1975-August, 1976 ¹ September, 1976-August, 1977 ¹				
School grade	Number of classrooms instructed	Approximate number of children instructed	Number of classrooms instructed	Approximate number of children instructed
Total	672	13,440	1,719	34,380
Kindergarten	107	2,140	433	8,660
Grade I	125	2,500	236	4,720
Grade II	111	2,220	228	4,560
Grade III	154	3,080	236	4,720
Grade IV	126	2,520	411	8,220
Grade V	24	480	85	1,700
Grade VI	17	340	61	1,220
Grade VII	4	80	16	320
Grade VIII	4	80	13	260

¹. Instructions were recorded on the basis of classrooms visited and of all children in the classroom receiving instruction in oral hygiene, proper brushing and flossing procedures. The estimated average number of children per classroom is 20.

REFERRALS AND EMERGENCY SERVICES

The costs of services provided by private practitioners to children enrolled in the Dental Plan are not covered by the Plan. There are two exceptions: referred services and emergency services.

Referrals to private practitioners are of two types. A permanent referral is given to a patient when the examining dentist feels that the management of the patient is beyond the capability of the dental nurse. Into the category of patient management fall individuals with such problems as mental or physical handicaps, and medical or emotional problems. Dental Plan dentists are qualified to deal with such situations, but intensive treatment of special cases is not their primary role in the Plan. Rather, their role is to examine all enrolled children and to supervise treatment. It is therefore considered preferable to refer children requiring extensive management to a private practitioner, who can devote more time to them and provide more intensive care.

Enrolled children are also given specific referrals to private practitioners for specific dental problems

beyond the capability of the dental nurse. Into this category fall such services as treatment of minor orthodontic problems and extensive surgical procedures.

Private practitioners also provide emergency services to enrolled children. Emergency services are defined as the relief of pain, treatment of infection, or control of haemorrhage. In emergency cases, the patient does not need to be referred by a Dental Plan dentist in order for service costs to be covered.

In addition, in 1976-77 five private practitioners provided dental care to enrolled children on a contract basis. This arrangement was made in certain rural areas of the province.

The following table outlines the types and costs of referred and emergency services provided by private practitioners to children enrolled in the Saskatchewan Dental Plan in 1975-76 and 1976-77.

Table 6.

**REFERRALS AND EMERGENCY SERVICES PROVIDED BY PRIVATE
PRACTITIONERS TO CHILDREN ENROLLED IN THE
SASKATCHEWAN DENTAL PLAN
September, 1975 - August, 1976
AND September, 1976 - August, 1977**

Type of service	September 1975 - August, 1976 ¹						September 1976 - August 1977 ²					
	Total			Referral			Emergency			Total		
	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)
TOTAL.....	2,368	32,361.36	1,390	13,520.42	978	9,820.33	4,035	68,067.11	3,243	60,596.26	792	7,470.85
Initial oral examination . . .	165	1,333.65	159	1,293.20	6	40.45	310	2,603.25	310	2,603.25	—	—
Specific oral examination.	97	767.75	94	750.25	3	17.50	181	1,574.65	181	1,574.65	—	—
Initial oral examination (Specialist)	—	—	—	—	—	—	29	371.50	29	371.50	—	—
Periapical X-rays.....	267	875.05	158	456.75	109	418.30	516	1,791.45	345	1,074.80	171	716.65
Occlusal X-rays.....	—	—	—	—	—	—	1	7.50	1	7.50	—	—
Bite-wing X-rays.....	96	350.25	82	303.60	14	46.65	134	553.30	122	502.90	12	50.40
Panoramic X-rays.....	18	272.00	14	218.00	4	54.00	66	891.00	65	877.50	1	13.50
Diagnostic models	5	44.75	5	44.75	—	—	39	343.50	39	343.50	—	—
Topical fluoride and dental prophylaxis	56	576.50	50	516.00	6	60.50	128	1,337.10	128	1,337.10	—	—
Oral Hygiene Instruction..	15	92.00	15	92.00	—	—	16	103.70	16	103.70	—	—
Fissure Sealants.....	4	25.50	1	6.75	3	18.75	14	94.50	14	94.50	—	—
Caries control — removal of decay — place sedative dressing	—	—	—	—	—	—	7	62.65	3	30.65	4	32.00
Amalgam restorations . . .	659	7,449.60	420	4,548.50	239	2,901.10	649	7,792.60	573	6,869.35	76	923.25
Composite restorations ..	54	933.05	39	608.75	15	324.30	108	2,010.35	80	1,415.90	28	594.45
Stainless steel crowns . . .	86	1,651.60	52	1,016.40	34	635.20	213	4,447.60	195	4,097.00	18	350.60
Crowns — porcelain, plastic, cast metal	—	—	—	—	—	—	27	2,307.00	27	2,307.00	—	—
Pulpotomy.....	88	703.20	25	204.50	63	498.70	79	698.35	79	698.35	—	—
Root canal therapy	—	—	—	—	—	—	48	1,786.35	48	1,786.35	—	—
Partial denture maxillary..	—	—	—	—	—	—	4	253.15	4	253.15	—	—
Removal of erupted teeth.	701	6,224.35	233	2,033.47	368	4,190.88	961	9,375.60	480	4,615.30	481	4,760.30

Table 6. REFERRALS AND EMERGENCY SERVICES PROVIDED (Cont.)

Type of service	September 1975 - August, 1976'						September 1976 - August 1977'					
	Total		Referral		Emergency		Total		Referral		Emergency	
	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)	No.	Cost (\$)
Surgical removal of tooth (Specialist)	4	166.50	4	166.50	—	—	133	3,509.00	132	3,479.30	1	29.70
Tooth movement and/or space regaining	20	1,205.00	19	1,145.00	1	60.00	105	5,757.28	105	5,757.28	—	—
Bilateral space maintainer	—	—	—	—	—	—	85	5,112.21	85	5,112.21	—	—
Unilateral space maintainer	—	—	—	—	—	—	63	2,054.90	63	2,054.90	—	—
Prevention of thumb sucking	7	518.00	—	—	7	518.00	6	478.50	6	478.50	—	—
Observation orthodontics.	26	152.00	20	116.00	6	36.00	113	714.10	113	714.10	—	—
Other services unidentified	—	9,020.61	—	—	—	—	—	12,036.02	—	—	—	—

An additional \$27,036.81 was paid to 7 dentists in private practice working on a contract basis providing examination services and writing treatment plans for the children examined. The total amount paid to private practitioners was \$59,398.17 (see Statement 1).

² An additional \$17,426.94 was paid to 5 dentists in private practice working on a contract basis providing examination services and writing treatment plans for the children examined. The total amount paid to private practitioners was \$85,494.05 (see Statement 1).

EXPENDITURES

In a review of the following financial statements certain points should be noted:

1. During the first year of the Dental Plan, administrative and other costs associated with implementing a new program represented an average per child expenditure of \$25.99. The total administrative costs have increased in each of the two following years; however, the increase in enrollment has resulted in a decrease in the administrative cost per child to \$7.30, despite high inflation rates during the same period.
2. The decision to phase in the program by age group across the province rather than by all age groups region by region results in equality of benefits in all regions. It also results in higher staff travel and sustenance costs per beneficiary and lower productivity. This will decrease proportionately as additional age groups are enrolled in the program.
3. The financial statements include only those expenditures incurred directly by the Saskatchewan Dental Plan, including the provision of secretariat services to the Saskatchewan Dental Nurses Board. Costs related to the Saskatchewan Dental Plan which were incurred by other agencies have been excluded.
4. Expenditure statements do not include approximately \$170,000 in start up costs incurred between November 1, 1973 and August 31, 1974. Such costs should be capitalized over the life of the program, in which case the average cost per child per year would be very small.
5. Revenue from the activities of the Saskatchewan Dental Plan has not been applied to offset expenditures. The \$67,283.13 revenue realized during the year included \$3,015.00 from registration and licensing of dental nurses by the Saskatchewan Dental Nurses Board and \$58,134.90 in reimbursement from the Department of National Health and Welfare in respect of dental care provided to 539 enrolled Indian children during the period September 2, 1975 to August 31, 1976.

Statement 1.

SASKATCHEWAN DENTAL PLAN STATEMENT OF PAYMENTS — OPERATING EXPENSES SEPTEMBER 1, 1975 TO AUGUST 31, 1976 AND SEPTEMBER 1, 1976 TO AUGUST 31, 1977

September 1, 1975 to August 31, 1976 September 1, 1976 to August 31, 1977

ADMINISTRATION (Regina Central Office)

Salaries and honoraria	\$ 255,823.00	\$ 295,657.94
Travel	15,015.05	15,552.07
Public information and advertising	34,166.07	36,818.05
Professional dues and staff training	910.00	1,319.89
Office expenses	20,416.25	17,823.88
Other expenses	72,620.67	72,323.65
Sub Total	\$ 398,951.04	\$ 439,495.48

PROGRAM EXPENSES

Salaries	\$2,689,449.21	\$3,511,425.82
Travel	365,953.85	482,292.64
Public information and advertising	488.36	1,544.24
Professional dues and staff training	7,725.84	9,119.28
Office expenses	68,819.81	83,618.07
Private practitioner services	59,398.17	85,494.05
Laboratory supplies and services	4,473.23	25,624.11
Dental supplies	146,006.63	308,490.97
Repairs	24,669.29	18,609.97
Taxes and licences	26,305.68	13,235.42
Grants and contributions	66,603.15	33,892.41
Other expenses	43,289.43	41,536.45

Sub Total	\$3,503,182.65	\$4,614,883.43
Total operating expenditure	3,902,133.69	5,054,378.91 (see statement 3)
Capital equipment purchases	252,898.39	14,320.89
TOTAL EXPENDITURE	\$4,155,032.08	\$5,068,699.80 (see statement 2)

Statement 2.

EXPENDITURE STATEMENT RECONCILIATION TO PUBLIC ACCOUNTS¹

	Public Accounts	Program Year
Expenditure September 1/74 - March 31/75	Not Applicable ²	\$1,598,184.49
Expenditure April 1/75 - August 31/75	\$1,229,157.84	1,229,157.84
Total expenditure 1974-75 program year		<u>\$2,827,342.33</u>
Expenditure September 1/75 - March 31/76	2,604,396.46	2,604,396.46
Public Accounts (page F156) 1975-76.	<u>3,833,554.30</u>	
Expenditure April 1/76 - August 31/76	1,550,635.62	1,550,635.62
Total expenditure 1975-76 program year (see statement 1).		<u>4,155,032.08</u>
Expenditure September 1/76 - March 31/77	2,965,057.57	2,965,057.57
Public Accounts 1976-77	<u>4,515,693.19</u>	
Expenditure April 1/77 - August 31/77	2,103,642.23	2,103,642.23 ³
Total expenditure 1976-77 program year (see statement 1).		<u>\$5,068,699.80</u>

1. This reconciliation is included because the Saskatchewan Dental Plan operates on the school year (begins September 1) rather than on the Government fiscal year (begins April 1).
2. The figures for this period apply to the fiscal year 1974-75 and were reported in previous reports. The figure is not reported here to avoid confusion.
3. These expenditures, obtained from Department of Finance monthly expenditure statements relating to the Saskatchewan Dental Plan, will be included in Public Accounts for the fiscal year 1977-78.

Statement 3.

**ADJUSTMENT TO CASH EXPENDITURE
STATEMENTS SHOWN IN STATEMENT 1 TO
DETERMINE ACTUAL COST OF SERVICES
RENDERED TO ENROLLED CHILDREN,
SEPTEMBER 1, 1975 TO AUGUST 31, 1976
AND SEPTEMBER 1, 1976 TO AUGUST 31, 1977**

	Program Year September 1/75 - August 31/76	Program Year September 1/76 - August 31/77
TOTAL OPERATING EXPENDITURE		
(from statment 1)	\$3,902,133.69	\$5,054,378.91
ADD dental supplies opening inventory	\$216,183.67	\$171,843.98
LESS dental supplies closing inventory	(171,843.98)	(295,732.91)
ADD repair parts opening inventory	14,875.96	19,387.73
LESS repair parts closing inventory	(19,387.73)	(36,529.61)
ADD equipment losses	2,026.46	676.79 ¹
LESS grant to Swift Current Health Region for preventive dental health services to children not enrolled in S.D.P. @ \$6.00 ea. (28,134.00)		(14,082.00) ²
LESS preventive dental services provided by S.D.P. to children not enrolled in the Plan @ \$6.00 ea. (39,480.00) . .		(21,000.00) ³
Sub Total	3,876,374.07	4,878,942.89
ADD depreciation	175,919.80	151,578.44 ⁴
ACTUAL COST OF SERVICES	<u>4,052,293.87</u>	<u>5,030,521.33</u>
Number of enrolled children (from table 2)	37,571	60,231
Average cost per enrolled child.	107.86 ⁵	83.52 ⁵

1. Losses are the result of break-in and theft in Thornton School in Saskatoon in April, 1977 (\$616.21) and in Argyle School in Regina in January 1977 (\$60.58).

2. This grant was discontinued effective June 30, 1976. This grant in respect to services provided between January 1, 1976 and June 30, 1976 was paid in September 1976.

3. Services provided to 175 classrooms of grades 5 - 8 inclusive at an estimated average enrollment of 20 students per classroom.

4. Opening inventory depreciated fixed assets (\$1,172,798.65 - 175,919.80) \$ 996,878.85
 ADD Purchases during year 14,320.89
 LESS losses during year 676.79

Depreciable fixed assets \$1,010,522.95

Depreciation calculated at 15% of undepreciated value of fixed assets \$ 151,578.44

5. Calculated by dividing total cost of services by the number of children enrolled.

NOTE:

The Department of Education covered the cost of establishing dental clinics in elementary schools. \$1,332,253.70 was spent prior to August 31, 1976 and a further \$55,398.34 was spent during September 1/76 - August 31/77. These expenditures are capital in nature and should be amortized over the life of the facility. Based on a depreciation rate of 5% the depreciation would be approximately:

$$5\% \times \$1,387,652.04 = \$69,382.60 \div 60,231 \text{ children} = \$1.15 \text{ per child.}$$

APPENDIX

ESTABLISHED DENTAL CLINICS

By Dental Region and Location

SWIFT CURRENT DENTAL REGION

Location	School
Central Butte	Central Butte Elementary
Chaplin	Chaplin Elementary
Eastend	Eastend School
Gravelbourg	Gravelbourg Elementary
Gull Lake	Gull Lake Elementary
Herbert	Herbert Elementary
Hodgeville	Hodgeville Elementary
Lancer	Lancer Elementary
Leader	Leader Elementary
Maple Creek	Sidney Street Elementary
Morse	Morse Elementary
Ponteix	Ponteix Elementary
Richmound	Richmound School
Shaunavon	Shaunavon Public
Swift Current	Ashley Park Elementary
	Central Elementary
	James O. Begg Elementary
	Kinsmen/Oman Elementary
Total Clinics for 1976 - 1977	18

REGINA DENTAL REGION

Location	School
Arm River	Arm River Hutterite Elementary
Assiniboia	Assiniboia Jr. High
Balcarres	Balcarres School
Balgonie	Balgonie Elementary
Bengough	Bengough School
Bethune	Bethune School
Briercrest	Briercrest School
Brownlee	Brownlee School
Caronport	Caronport Elementary
Coderre	Coderre School
Coronach	Coronach School
Crane Valley	Crane Valley
Cupar	Cupar Elementary
Duval	Duval Elementary
Dysart	Dysart School
Edenwold	Edenwold Elementary
Fillmore	Fillmore School
Fort Qu'Appelle	Fort Qu'Appelle Elementary
Glenavon	Glenavon School
Grand Coulee	Grand Coulee
Gray	Gray Elementary

REGINA DENTAL REGION (cont.)

Location	School
Indian Head	Indian Head Elementary
Kelliher	Kelliher School
Kronau	Kronau Saar Elementary
Lake Alma	Lake Alma Elementary
Lipton	Lipton Elementary
Leross	Leross Elementary
Lestock	Lestock Elementary
Lumsden	Lumsden Elementary
Marquis	St. Mark Elementary
Midale	Midale School
Milestone	Milestone Elementary
Minton	Minton Elementary
Montmartre	Montmartre Elementary
Moose Jaw	Bushell Park
	Camlachie Hutterite Elementary
	Empire Elementary
	Lindale School
	Palliser Heights Elementary
	Prince Arthur Elementary
	Ross Elementary
	Westmount Elementary
	William Grayson Elementary
	St. Agnes Elementary
	St. Michaels Elementary
	Sacred Heart
Mortlach	Mortlach School
Mossbank	Mossbank Health Clinic
Ogema	Ogema School
Pense	Pense Elementary
Pilot Butte	Pilot Butte Elementary
Punnichy	Punnichy Elementary
Radville	St. Oliver's
Raymore	Raymore School
Regina	Argyle Elementary
	Athabasca Elementary
	Benson Elementary
	Birchwood Elementary
	Coronation Park Elementary
	Dr. A. E. Perry Elementary
	Dr. Hanna Elementary
	Elsie Dorsey Elementary
	Ethel Milliken Elementary
	George Lee Elementary
	Grant Road Elementary
	Kitchener Elementary
	Marion McVeety Elementary
	Massey Elementary
	McNab Elementary
	R. J. Davidson Elementary
	Regent Park Elementary
	Rosemont Elementary
	Transcona Elementary
	Wascana Elementary

REGINA DENTAL REGION (cont.)

Location	School
	W. C. How Elementary
	Wilfred Hunt Elementary
	Deshaye Elementary
	St. Augustine Elementary
	St. Bernadette Elementary
	St. Francis Elementary
	St. Gregory Elementary
	St. James Elementary
	St. Joan of Arc Elementary
	St. John Elementary
	St. Leo Elementary
	St. Luke Elementary
	St. Mary Elementary
	St. Matthew's Elementary
	St. Patrick Elementary
	St. Peter Elementary
	St. Philip Elementary
Rockglen	Rockglen School
Semans	Semans Elementary
Scuthey	Southey Elementary
Strasbourg	Strasbourg Elementary
Vibank	Vibank School
Weyburn	Haig Elementary
Willowbunch	Willowbunch School
Windthorst	Windthorst School
Wood Mountain	Wood Mountain
Total Clinics for 1976 - 1977	100

SASKATOON DENTAL REGION

Location	School
Aberdeen	Aberdeen Elementary
Allan	Allan School
Beechy	Beechy School
Borden	Borden School
Clavet	Clavet School
Colonsay	Colonsay School
Craik	Craik School
Davidson	Davidson School
Delisle	Delisle Elementary
Duck Lake	Stobart Elementary
Elbow	Elbow Elementary
Hague	Prince Philip Elementary
Hanley	Hanley School
Hepburn	Hepburn School
Holdfast	Holdfast School
Imperial	Imperial School
Langham	Langham Elementary
Lanigan	Lanigan Elementary
Leroy	Leroy Elementary
Lucky Lake	Lucky Lake School

SASKATOON DENTAL REGION (cont.)

Location	School
Martensville	Martensville Elementary
Nokomis	Nokomis School
Outlook	Outlook Elementary
Perdue	Perdue School
Radisson	Radisson School
Rosthern	Rosthern Elementary
Saskatoon	Albert Elementary
	Alvin Buckwold Elementary
	Bishop Klein Elementary
	Bishop Roborecki Elementary
	Boughton Elementary
	Brevoort Park Elementary
	Buena Vista Elementary
	Cardinal Leger Elementary
	Caroline Robins Elementary
	Caswell Elementary
	Churchill Elementary
	College Park Elementary
	Confederation Park Elementary
	Estey Elementary
	Father Vachon Elementary
	Greystone Heights Elementary
	Grosvenor Park Elementary
	Haultain Elementary
	Henry Kelsey Elementary
	Holliston Elementary
	Hugh Cairns Elementary
	John Lake Elementary
	King Edward Elementary
	Lester B. Pearson Elementary
	Lorne Haselton Elementary
	McNab Park Elementary
	Mayfair Elementary
	Montgomery Elementary
	North Park Elementary
	Pleasant Hill Elementary
	Prince Philip Elementary
	Princess Alexandra Elementary
	Queen Elizabeth Elementary
	Richmond Heights Elementary
	River Heights Elementary
	Roland Michener Elementary
	St. Anne Elementary
	St. Augustine Elementary
	St. Charles Elementary
	St. Edward Elementary
	St. Frances Elementary
	St. Gerard Elementary
	St. James Elementary
	St. Mark's Elementary
	St. Mary's Elementary
	St. Matthew Elementary
	St. Michael Elementary

SASKATOON DENTAL REGION (cont.)

Location	School
	St. Patrick Elementary
	St. Paul's Elementary
	St. Philip Elementary
	St. Thomas Elementary
	Sutherland Elementary
	Thornton Elementary
	Victoria Elementary
	Vincent Massey Elementary
	Westmount Elementary
	Wilson Elementary
Viscount	Viscount Elementary
Waldheim	Waldheim School
Warman	Warman Elementary
Watrous	Watrous Elementary
Young	McClellan School
Total Clinics for 1976 - 1977	88

YORKTON DENTAL REGION

Location	School
Alida	Alida Elementary
Archerwill	Archerwill School
Arran	Arran School
Bredenbury	Bredenbury School
Broadview	M. B. Cope Elementary
Buchanan	Buchanan School
Canora	Canora Junior Elementary
Carnduff	Carnduff Elementary
Carlyle	Carlyle School
Esterhazy	P. J. Gillam School
Estevan	Westview Elementary
Grenfell	Grenfell Elementary
Invermay	Invermay Elementary
Ituna	Ituna School
Kamsack	Victoria Elementary
Kelvington	Robert Melrose Elementary
Kipling	Kipling School
Lampman	Lampman School
Langenburg	Parkside Elementary
MacNutt	MacNutt School
Margo	Margo School
Melville	Melville Comprehensive
	Miller Elementary
Moosomin	Churchill School
Neudorf	Neudorf Elementary
Norquay	Norquay Elementary
Oxbow	Mobile Home (S.D.P. owned)
Preeceville	Preeceville School
Quill Lake	Quill Lake Elementary
Rama	Rama School
Redvers	Redvers School
Rocanville	Rocanville School

YORKTON DENTAL REGION (cont.)

Location	School
Rose Valley	Rose Valley School
Saltcoats	Saltcoats Elementary
Sheho	Sheho School
Stoughton	Stoughton School
Sturgis	Sturgis Elementary
Theodore	Theodore School
Wadena	Wadena Elementary
Wawota	Wawota School
Whitewood	Whitewood School
Wishart	Wishart School
Wynyard	Wynyard Elementary
Yorkton	Columbia Elementary
	Dr. Brass Elementary
	Simpson Elementary
	St. Paul's Elementary
Total Clinics for 1976 - 1977	47

PRINCE ALBERT DENTAL REGION

Location	School
Albertville	Albertville Elementary
Annaheim	Annaheim School
Arborfield	Arborfield School
Big River	Big River Elementary
Birch Hills	Birch Hills Elementary
Bjorkdale	Bjorkdale School
Bruno	Bruno School
Canwood	Canwood Elementary
Carrot River	Carrot River Elementary
Cecil S.D. No. 130	Prince Albert East Central
Christopher Lake	Christopher Lake School
Crystal Springs	Dixon Lake School
Cudworth	Cudworth School
Debden	Debden School
Domremy	Domremy School
Englefeld	Englefeld School
Garrick	Garrick Elementary
Gronlid	Gronlid School
Hudson Bay	Blake Beattie Elementary
Humboldt	Humboldt Elementary
Kinistino	Kinistino Elementary
Lake Lenore	Lake Lenore School
Meath Park	Meath Park Elementary
Melfort	Reynolds Central Elementary
Middle Lake	Middle Lake School
Mont Nebo	Mont Nebo Elementary
Muenster	Muenster School
Naicam	Naicam School
Paddockwood	Paddockwood Elementary
Pleasantdale	Pleasantdale School
Porcupine Plain	Porcupine Plain Elementary
Prairie River	Prairie River Elementary

PRINCE ALBERT DENTAL REGION (cont.)

Location	School
Prince Albert	Boucher Junior High
Prud'Homme	Prud'Homme School
Red Wing	Red Wing Elementary
Ridgedale	Ridgedale School
Sage Hill	Dana Elementary
Shellbrook	Shellbrook Elementary
Shell Lake	Shell Lake Elementary
Smeaton	Smeaton School
Spalding	Spalding School
Spruce Home	Spruce Home Central Elementary
Star City	Star City School
St. Brieux	St. Brieux School
St. Louis	St. Louis School
Tisdale	Tisdale Elementary
Wakaw	Wakaw School
Watson	Watson Elementary
Weekes	Weekes High School
Weldon	Weldon School
White Fox	White Fox School
Wild Rose	Wild Rose Central Elementary
Yellow Creek	Yellow Creek School
Zenon Park	Zenon Park School
Total Clinics for 1976 - 1977	54

NORTH BATTLEFORD DENTAL REGION

Location	School
Battleford	Battleford Central School
Biggar	Nova Wood Elementary
Blaine Lake	Blaine Lake School
Cando	Cando School
Cochin	Cochin Elementary
Cut Knife	Cut Knife Elementary
Denzil	Denzil Elementary
Dodsland	Dodsland Elementary
Dorintosh	Dorintosh Elementary
Edam	H. Hardcastle School
Elrose	Elrose School
Eston	Eston Elementary
Glaslyn	Glaslyn School
Hafford	Hafford School
Harris	Harris-Tessier School
Kerrobert	Mary Rodney Elementary
Kindersley	Kindersley School Unit Office
Landis	Landis School
Lashburn	J. H. Moore Elementary
Leask	Leask School
Leipzig	Leipzig School
Leoville	Leoville School
Livelong	Livelong Elementary
Lloydminster	Neville Goss Elementary
Loon Lake	Ernie Studer School

NORTH BATTLEFORD DENTAL REGION (cont.)

Location	School
Macklin	Macklin Elementary
Maidstone	Ratuszniak Elementary
Major	Major School
Marcelin	Marcelin School
Mayfair	Mayfair School
Maymont	Maymont Central School
Meadow Lake	Lakeview Elementary
Medstead.	Medstead Elementary
Milden	Milden Central School
North Battleford.	McKitrick Elementary
	Notre Dame Elementary
Paradise Hill	Paradise Hill Elementary
Pierceland	Pierceland Elementary
Rabbit Lake	Rabbit Lake Elementary
Rosetown.	Walter Aseltine Elementary
Sonningdale.	Sonningdale School
Spiritwood	Spiritwood Elementary
St. Walburg	St. Walburg Elementary
Tramping Lake.	Tramping Lake School
Turtleford.	Turtleford School
Unity	St. Peter's Elementary
Vawn	Vawn Elementary
Wilkie.	St. George School
Total Clinics for 1976 - 1977	48
Total number of clinics — all regions	355