

1966

ANNUAL

Report



SANATORIUM BOARD
OF MANITOBA

A Health Education Service of the

CHRISTMAS SEAL FUND

MANITOBA LUNG ASSOCIATION
SANATORIUM BOARD OF MANITOBA

629 McDERMOT AVENUE

WINNIPEG, MANITOBA R3A 1P6

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SANATORIUM BOARD OF MANITOBA

A Voluntary, Non-profit Corporation

OPERATING

TUBERCULIN AND X-RAY SURVEYS

CONSULTANT TUBERCULOSIS CLINICS

CENTRAL TUBERCULOSIS CLINIC – WINNIPEG

MANITOBA SANATORIUM – NINETTE

NORTHERN TUBERCULOSIS UNIT – THE PAS

MANITOBA REHABILITATION HOSPITAL – WINNIPEG

*PROSTHETICS AND ORTHOTICS RESEARCH
AND DEVELOPMENT UNIT – WINNIPEG*

SPECIAL REHABILITATION SERVICES



CO-OPERATING WITH

Other Health and Welfare Agencies in the Province

REPORT FOR THE YEAR 1966

WINNIPEG, MANITOBA

THE BOARD OF
EDUCATION
OF THE DISTRICT OF COLUMBIA
OFFICE OF THE SUPERINTENDENT
1900

REPORT OF THE BOARD OF EDUCATION

FOR THE YEAR 1900

1900



PRINTED BY THE DISTRICT OF COLUMBIA

1900



STATEMENT BY THE HON. C.H. WITNEY

Over the years, the Sanatorium Board of Manitoba has been forced by changing circumstances and responsibilities to make major adjustments in broad programs and services. The relative ease and quiet efficiency with which your organization has moved through each transitional phase is reflected in your success record to date and the effectiveness of on-going programs.

With respect to tuberculosis control we have seen this disease decline from epidemic proportions half a century ago to a present manageable level of approximately 200 cases in 1966. It is interesting to note that the Sanatorium Board of Manitoba has kept pace with this encouraging trend by implementing new programs of treatment and prevention. Treatment of hundreds of tuberculosis patients in their homes has been perhaps the most significant aspect of new progressive control measures supported by essential case finding work in "high risk" areas.

Turning to the field of general rehabilitation, the Manitoba Rehabilitation Hospital has enhanced its international reputation through expansion of services to provide a full spectrum of rehabilitation and physical medicine services for people suffering from all manner of debilitating conditions. We in this province are particularly impressed with the accomplishments of the Prosthetics and Orthotics Research and Development Unit, and of the steps taken in 1966 to organize a comprehensive hearing assessment and rehabilitation service for Manitoba.

On behalf of the Government and citizens of Manitoba, I would like to express my appreciation to the members of the Sanatorium Board and the staff for their efforts over this past year. And to Dr. Edward L. Ross, who will retire from the Medical Directorship of the Tuberculosis Control Program in 1967 following 42 years of dedicated service, I find it difficult to express our gratitude because of the magnitude of his contribution to tuberculosis control in this province. Consequently, I will wish him well in his retirement years with the certain knowledge that he is aware of the extent of our appreciation.

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SANATORIUM BOARD OF MANITOBA

EXECUTIVE

Chairman	Mr. Frank Boothroyd
Vice-Chairman	Mr. R.L. Bailey
Chairman - Manitoba Sanatorium and	
Preventive Services Committee.	Mr. John F. Baldner
Chairman - Manitoba Rehabilitation Hospital	Mr. S. Price Rattray
Members	Mr. R.H.G. Bonnycastle
	Mr. J.B. Craig

HONORARY LIFE MEMBERS

Mr. George Collins Dr. Ross Mitchell
Mr. J.W. Speirs

STATUTORY MEMBERS

Representing Provincial Department of Health:

Mr. John Gardner Mr. George Iliffe*
Dr. J.A. MacDonell Dr. E. Snell

ELECTED MEMBERS

Mr. R.L. Bailey	Mr. John F. Baldner	Mr. R.H.G. Bonnycastle
Mr. Frank Boothroyd	Mr. W.B. Chapman	Mr. J.B. Craig
Mr. Ed. Dow	Mr. D.M. Dunlop	Mr. G.W. Fyfe
Dr. T.W. Fyles	Dr. J.E. Hudson	Mr. S.A. Magnacca
Mr. H.L. McKay	Mr. F.O. Meighen, Q.C.	Mr. W.A. Paton
Mr. E.B. Pitblado, Q.C.	Mr. S. Price Rattray	Mr. R.J. Robinson
Mr. H.T. Spohn		Mr. E.P. Stephenson

MEDICAL ADVISORY COMMITTEE

Dr. F. Hartley Smith - Chairman

Dr. H. S. Evans	Dr. J.E. Hudson
Dr. K.D. McKenzie	Dr. R.O. McDiarmid
Dr. C.B. Schoemperlen	Dr. F.R. Tucker
Dr. P. Porritt	Dr. R.M. Cherniack

EXECUTIVE DIRECTOR AND SECRETARY-TREASURER

Mr. T.A.J. Cummings

AUDITORS

Riddell, Stead, Graham & Hutchison

* Deceased

MEDICAL STAFF

SANATORIUM BOARD OF MANITOBA

(as at December 31st, 1966)

Consultant, Tuberculosis Services

EDWARD LACHLAN ROSS, M.D.
Cert. Int. Med. (TB)

TUBERCULOSIS AND RESPIRATORY DISEASE SERVICE

(Established in March, 1967)

Medical Director

R.M. CHERNIACK, M.D., M.Sc.
(Med.), F.R.C.P. (Can.) F.A.C.P.,
Int. Med.

Associate Medical Director
(In-patient Services)

E.S. HERSHFIELD, M.D., F.R.C.P.
(Can.), F.C.C.P., Int. Med.

Consultants
(Out-patient Services)

LOUIS CHERNIACK, M.D., B.Sc.,
(Med.), M.R.C.P., (Lond.),
F.A.C.P., F.C.C.P., F.R.C.P.
(Can.), Int. Med.

C.B. SCHOEMPERLEN, M.D.,
F.C.C.P., F.A.C.P., Int. Med.

CENTRAL TUBERCULOSIS CLINIC

(As at December 31st, 1966)

Resident Medical Staff

Chief of Medical Services

DONALD L. SCOTT, M.D.,
Cert. Int. Med. (TB)
PAUL P. MARI, M.D.
EARL S. HERSHFIELD, M.D.,
F.R.C.P., (C), F.C.C.P.

Consultants

Broncho-Esophagology

C.B. SCHOEMPERLEN, M.D.,
F.C.C.P., F.A.C.P., Cert. Int.
Med.

Orthopaedics

W.B. MacKINNON, M.D., Ch.M.
(Man.), F.R.C.S. (Can.), Cert.
Orth. Surg.

Consultants - continued.

Pediatrics

HARRY MEDOVY, M.D.

F.R.C.P., (Can), Cert. Paed.

Radiology

R.A. MacPHERSON, M.D.

C.M., F.A.C.R., Cert. D. & T. Rad.

Urology

C.B. STEWART, M.D.

F.R.C.S. (Edin. & Can.), Cert. Urol.

MANITOBA SANATORIUM

Resident Medical Staff

Medical Superintendent

ALFRED L. PAINE, M.D.

Cert. Thor. Surg.

R.A. REILLY, B.A.,

M.B., B.Ch., G.M.C.

Consultants

Anaesthesiology:

H.P. CAMRASS, M.B., Ch.B.,
G.M.C.

S. O'BRIEN-MORAN, M.B.

B.Ch., G.M.C., D.A., R.C.P.
& S. (Eng.)

Cardiology

V.J.H. SHARPE, M.D.,
Cert. Int. Med.

Eye, Ear, Nose & Throat

R.O. McDIARMID, M.D.,
Cert. Ophth. Otol.

General Surgery

H.S. EVANS, M.D., F.R.C.S.,
(Edin. & Can.), F.A.C.A., Cert.
Gen. Surg.

Orthopaedics

W.B. MacKINNON, M.D., Ch.M.
(Man.), F.R.C.S. (Can.), Cert.
Orth. Surg.

Pathology

JAMES HENDRY, M.B., Ch.B.,
G.M.C., D.P.H.

Radiology

R.A. MacPHERSON, M.D., C.M.,
F.A.C.R., Cert. D & T. Rad.

Urology

C.B. STEWART, M.D., F.R.C.S.
(Edin. & Can.), Cert. Urol.

MANITOBA REHABILITATION HOSPITAL

Chief of Medical
Services

L.H. Truelove, M.A., M.B.,

B.Ch., M.R.C.P. (Lond.),

D. Phys. Med., Cert. Phys. Med.

Honorary Consultants

L.G. BELL, M.D., M.R.C.P., (Lond.), Int. Med., F.R.C.P. (Lond. & Can.),
F.A.C.P.

F.R. TUCKER, M.D., F.R.C.S. (Edin. & Can.), M.Ch., (Orth.), Cert. Orth.
Surg.

Chiefs of Service

Director of Physical Medicine

R.R.P. HAYTER, M.B., B.S., Cert.
Phys. Med., D. Phys. Med., R.C.P.
(England).

Medical Director, Prosthetics
& Orthotics Research and
Development Unit

F.R. TUCKER, M.D., F.R.C.S. (Edin.
& Can.), M.Ch., (Orth.), Cert. Orth.
Surg.

Medical Director, Paraplegic
Unit

B.J.S. GROGONO, M.B., B.S., G.M.C.
F.R.C.S. (Eng. & Can.), Cert. Orth.
Surg.

Chief of Anaesthetic Services

D.M. HUGGINS, M.D., Cert. Anaes.,
D.A.B.A., F.A.C.A.

Chief of Medical Electronics
Services.

M.G. SAUNDERS, M.Sc., M.B., Ch. B.,
V. U. (Manc.)

Consultants

Cardiology

LEON MICHAELS, M.B., B.S., PH. D.
F.R.C.P. (Can.), M.R.C.P. (Lond.)

Chest Disease

R.M. CHERNIACK, M.D., F.R.C.P.
(Can.), Cert. Int. Med., F.A.C.P.

Dermatology

R.A.L. DAVIS, M.B., B.S., G.M.C.,
M.R.C.S., (Eng.), L.R.C.P. (Lond.)
R.C.P.S. (Can.), Cert. Derm.

General Surgery

HARVEY CHOCHINOV, M.D., B.Sc.,
(Med.), F.R.C.S., (Can.), Cert. Gen.
Surg.

Gynecology

R.F. FRIESEN, M.D., Cert. Obst.
Gyn., F.R.C.S. (Can.).

Consultants continued

Internal Medicine

B.B.FAST, M.D., F.R.C.P.(Can.),
Cert. Int. Med.

F.D. BARAGAR, M.D., F.R.C.P.,
(Can.).

Neurology

M.J.D. NEWMAN, M.B., B.Ch.,
F.R.C.P.(Can.), M.R.C.P.(Lond.)
Cert. Neur.

Neurosurgery

DWIGHT PARKINSON, M.D., C.M.,
M.Sc., (Neur.Surg.), D.A.B.N.S.Cert.
Neur.Surg. F.A.C.S., F.R.C.S.,
(Can.).

Ophthalmology

G.M. KROLMAN, M.D., F.R.C.S.,
(Edin.), F.R.C.S.(Can.Ophth.).

Orthopaedics

P.N. PORRITT, M.D., F.R.C.S.,
(Eng. & Can.), M.R.C.S., (Eng.),
L.R.C.P.(Lond.), G.M.C., Cert.
Orth. Surg.

Otorinolaryngology

W. ALEXANDER, M.D., D.A.B.O.,
Cert. Ophth. Otol.

Pathology

J.G. FOX, M.D., Cert. Path.

Paediatric Anaesthesia

T.J. McCAUGHEY, M.B., B.Ch.,
D.A., Cert. Anaes.

Physical Medicine

J.F.R.BOWIE, M.B., Ch.B.

Plastic Surgery

D.A.KERNAHAN, M.B., Ch.B.,
G.M.C., F.R.C.S., (Edin. & Can.),
Cert. Plas. Surg.

Psychiatry

JOHN M. DOUGAN, M.B. B. Ch.,
D.P.M. (Eng.).

Radiology

R.A. MacPHERSON, M.D., C.M.,
Cert. D. & T. Rad.

Radiotherapy

R.J. WALTON, M.B., Ch.B.,
D.M.R. (Lond.), D.M.R.T.

Consultants - continued

Urology

C.A.SMYTHE, M.D., F.R.C.S.,
(Can.), Cert. Urol.

Active Staff

Dr. W. Alexander
Dr. F.D. Baragar
Dr. S. Blumenthal
Dr. J.F.R. Bowie
Dr. D.M. Brodovsky
Dr. R.M. Cherniack
Dr. H. Chochinov
Dr. R.A.L. Davis
Dr. M.H.L. Desmarais
Dr. J. Dougan
Dr. B.B. Fast
Dr. J.B. Frain
Dr. R.F. Friesen
Dr. B.J.S. Grogono
Dr. R.K. Hay
Dr. R.R.P. Hayter
Dr. D.M.H. Huggins
Dr. D.A. Kernahan
Dr. G.M. Krolman
Dr. M.J. Lehmann

Dr. T.J. McCaughey
Dr. R.H. McFarlane
Dr. L. Michaels
Dr. T.J. Mills
Dr. M.J. Newman
Dr. D. Parkinson
Dr. P.N. Porritt
Dr. M.G. Saunders
Dr. C.B. Schoemperlen
Dr. C.A. Smythe
Dr. I.K.H. Stevens
Dr. L.H. Truelove
Dr. F.R. Tucker
Dr. R.J. Walton
Dr. W.R. Welply
Dr. L.L. Whytehead
Dr. H.W. Hart (Faculty of
Dentistry)
Dr. J.W. Neilson (Faculty of
Dentistry)
Dr. A.G. Parnell (Faculty of
Dentistry)

NON-MEDICAL SENIOR STAFF

SANATORIUM BOARD OF MANITOBA

Executive Director
Executive Assistant
Comptroller
Purchasing Agent
Nursing Consultant and
Administrative Assistant
Director of Dietary Services
Director of Pharmacy Services
Supervisor, Special Rehabilitation
Services
Supervisor, Christmas Seal
Campaign
Surveys Officer

T.A.J. CUNNINGS
EDWARD DUBINSKI
ROBERT F. MARKS
K.J. ROWSWELL

MISS E.L.M. THORPE
MISS NAN. T. CHAPMAN*
TED SIMS

ROGER BUTTERFIELD

MISS MARY L. GRAY
J.J. ZAYSHLEY

* Resigned July, 1967

CENTRAL TUBERCULOSIS CLINIC

Director of Nursing
Radiographer
Senior Laboratory
Technologist

MISS E.G. COULL*
E.W. ACKROYD

MARVIN THORGEIRSON

MANITOBA SANATORIUM

Hospital Manager
Director of Nursing
Food Supervisor
Acting Chief Engineer
Radiographer

NICK KILBURG
MISS DERINDA ELLIS
MRS. VIOLET DUNSMORE
JOHN GUTRAY
WILLIAM C. AMOS

MANITOBA REHABILITATION HOSPITAL

Director of Nursing
Supervisor, Social Services
Chief Physiotherapist
Chief Occupational Therapist
Director, Department of
Communicative Disorders
Director of Volunteer Services
Senior Laboratory Technologist
Radiographer
Plant Superintendent

MISS E.G. COULL*
MISS MARY HAMILTON
MISS J.K. EDWARDS
MRS. JOY HUSTON
J. BRAYTON PERSON
MRS. W.E. BARNARD
MARVIN THORGEIRSON
E.W. ACKROYD
WILLIAM O.D. EVANS

CENTRAL TUBERCULOSIS REGISTRY

Supervisor

MISS JANET SMITH

PROSTHETICS AND ORTHOTICS RESEARCH AND DEVELOPMENT UNIT

Medical Director
Technical Director

DR. F.R. TUCKER
JAMES FOORT.

WE ARE INDEBTED TO OUR VOLUNTEER WORKERS



Christmas Seal Campaign Preparation



Tuberculosis Surveys



Donations for Hospital Equipment



Library Service for Patients



Operation of Hospital Gift Shop



Assistance to Clerical Staff

CHAIRMAN'S REPORT



Frank Boothroyd

Ladies and Gentlemen:

It is a pleasure today to welcome you to the 56th Annual Meeting of the Sanatorium Board of Manitoba. The year 1966 has been a time of consolidation and preparation for new relationships and developments that will be required to meet the Board's obligations in the future, and to enable us to continue to offer the highest standard of service in our various areas of responsibility.

THE BOARD

There have been 27 meetings of the Board or its Committees during the year and I should like to express my thanks to the members who have attended meetings so faithfully and contributed so substantially to the direction of our operations.

The only change in membership on the Board during the year was the resignation of Mr. W.C. Bowra, due to his transfer to Montreal, and his replacement by Mr. E.P. Stephenson, Vice-President of Canadian National Railways.

I would like to record our appreciation for the good counsel of Dr. Hartley Smith and the members of the Medical Advisory Committee of which he is chairman; and we appreciate the contribution to our work of Dr. Peter Porritt, President of the Medical Staff of the Manitoba Rehabilitation Hospital.

SERVICES

Copies of annual reports relative to divisions of our work have already been circulated to members of the Board and further details will be given to you in the reports today.

With the approaching retirement of our senior medical staff (Dr. E.L. Ross, Dr. D.L. Scott and Dr. A.L. Paine), it has been necessary to re-structure our medical staff in the Tuberculosis and Respiratory Disease Services, particularly with a view to maintaining an adequate on-going program in tuberculosis control, and to provide for closer liaison with the medical education program of the University of Manitoba. We have been fortunate in being able to appoint Dr. R.M. Cherniack, an Assistant Dean of the Faculty of Medicine, as Medical Director of the Tuberculosis and Respiratory Disease Services. Dr. Cherniack is internationally known for his clinical and research work in the field of pulmonary disease.

Manitoba Sanatorium has operated throughout the year at a somewhat higher occupancy than was anticipated. Three of the pavilions have been altered to accommodate 45 rehabilitants under our Special Rehabilitation Services, which were expanded during the year at the request of the appropriate government authorities.

It has been apparent for a number of years that it will be necessary to discontinue tuberculosis treatment at Manitoba Sanatorium and concentrate the service in one chest hospital in Winnipeg. On recommendation of the Medical Advisory Committee, preliminary studies are being made for an addition to the Manitoba Rehabilitation Hospital - Central Tuberculosis Clinic complex to provide the necessary beds, bearing in mind that the plans would be integrated with the University proposals for overall development of services in the Manitoba Medical Centre.

The Manitoba Rehabilitation Hospital has operated at capacity during the year and there is a waiting list of patients. It is essential to consider an early expansion of this facility.

The Prosthetics and Orthotics Research and Development Unit has continued to make an international contribution to improvement of design and function in the field of artificial limbs and other similar devices. You may be interested to know that a research team from the unit has been invited to hold a two or three day seminar on their new development in Geneva, Switzerland, in September to which interested persons from several countries in Europe will be invited.

As a study of the possible benefits of multiple screening tests in the prevention and early diagnosis of illness, the Board this year carried out tests for diabetes and two other conditions on more than 18,000 persons, along with the

tuberculosis surveys. We are grateful to Dr. John A. Moorhouse, Associate Professor of Physiology and Director of the Metabolic Laboratory of the University of Manitoba, for his co-operation in the medical direction of this project.

CONTRIBUTIONS

During the year, there have been contributions by way of bequests amounting to \$ 11,462.29, along with other special contributions in aid of our health and hospital program. We are deeply grateful for this generous support, which enables us to undertake work that would not otherwise be possible. All donors of \$ 500 or more are listed permanently in our annual reports. We have established a Manitoba Rehabilitation Hospital Research Fund to support research in the special field of the long term disabling conditions and we hope that this research fund will have the interest and support of contributors. Two or three research projects are already under way.

The Associated Canadian Travellers of both Winnipeg and Brandon have continued to benefit the people of Manitoba through their support of the services of the Sanatorium Board. The Associated Canadian Travellers Brandon Club, pledged an amount of \$ 17,000.00 to finance the Diabetic Survey referred to earlier. The Winnipeg Club and their Ladies Auxiliary have continued to give support to the Manitoba Rehabilitation Hospital in the provision of special equipment.

CHRISTMAS SEAL CAMPAIGN

Our Tuberculosis Preventive Services are basically financed by the Christmas Seal Sale. During the calendar year 1966, income from this source totalled \$ 179,805.78. This Christmas Seal Fund is made up of many thousands of gifts from citizens throughout the province and we are especially grateful for the wide-spread support that is evidenced by these contributions. We deeply appreciate the many hundreds of volunteers who assist us in the tuberculosis surveys and at the Manitoba Rehabilitation Hospital.

APPRECIATION

The Sanatorium Board of Manitoba has worked closely with both federal and provincial governments for many years in carrying out its responsibilities and we are grateful for the continued confidence they express, and the cordial relationships that exist. Mutual confidence is essential if the hospital and health services are to be carried out to best serve the people of the province.

We are fortunate in having a loyal and devoted staff, many of whom

during the year have achieved special recognition in their professional fields. It is only through their co-operative and dedicated efforts that we can successfully achieve our objectives. To each one of them, I express sincere thanks for their participation and their concern for the achievement of a high standard of service in all our undertakings.

Frank Boothroyd,
Chairman

THANK YOU - WE COULDN'T DO IT ALONE !

The Sanatorium Board of Manitoba expresses sincere thanks to the many people throughout the province who support our tuberculosis and other health programs. We are indebted to thousands of volunteer workers who have helped carry out tuberculin and x-ray surveys, our Christmas Seal Campaign, rehabilitation programs and the various extra services for our patients. And we are grateful to the many people in Manitoba who have contributed to both the building and equipping of our health facilities. We particularly appreciate the magnificent support of the Associated Canadian Travellers, Winnipeg and Brandon Clubs, who from 1945 to December 31, 1966, contributed \$486,946.05 to our work.

EXECUTIVE DIRECTOR'S REPORT



T.A.J. Cunnings

SUMMARY OF SERVICES TO INDIVIDUALS

	<u>1965</u>	<u>1966</u>
Admissions for Treatment	2,431	1,731
Out-patient Visits	53,549	49,839
Special Rehabilitation Services-Cases		802
Preventive Services-Examinations	157,811	101,551
Northern Tuberculosis Unit, The Pas - Examinations		463
Brandon Tuberculosis Clinic Examinations		886
Treatment Days for In-patients	208,163	121,503

The reductions in admissions and treatment days are accounted for by our discontinuance of the operations of Assiniboine Hospital and a decline in the average number of patients at Ninette from 181 in 1965 to 137 in 1966.

ASSETS AND LIABILITIES

Net value of assets held by the Board as at December 31st, 1966, including Special Funds, totalled \$ 4,230,272, after deducting accumulated depreciation and government construction grants of \$ 3,626,192. This represents an increase of \$ 7,152 over the preceeding year.

Analysis of Net Increase in Assets

<u>Increases in Assets</u> <u>1965 to 1966</u>		<u>Deductions from Assets</u> <u>1965 to 1966</u>	
Increase in Investments	\$ 117,795	Increase in Depreciation	\$ 58,370
Increase in Accounts Receivable	22,813	Decrease in Property Plant & Equipment	58,055
Increase in Cash in Bank	10,830	Decrease in Inventories	31,205
Prepaid Insurance and other Prepayments	7,644	Decrease in Unamortized Bond Discount	4,300
			<u>151,930</u>
		Net Increase in Assets	<u>7,152</u>
	<u>\$ 159,082</u>		<u>\$ 159,082</u>

The decrease in property, plant and equipment and inventories is largely attributable to the realization of assets pertaining to the Assiniboine Hospital operation. The investment of these funds is reflected in the increase in investments. With respect to the receivables, these include an amount of \$ 65,931 representing outstanding deficits, cumulative since 1965, payable by the Manitoba Hospital Commission relative to the Manitoba Rehabilitation Hospital.

In March of 1967, the Manitoba Hospital Commission proposed a final settlement for the year 1962 to 1964 inclusive that altered the distribution of capital costs, resulting in a decrease in deficit recoverable from the commission and making a corresponding increase in the amount payable by the province. In accordance with this ruling the province has been billed with \$ 37,700.73 which is included in the Accounts Receivable.

Liabilities of \$ 2,601,952 as at December 31st, 1966 were \$ 123,256 less than the preceeding year.

Analysis of Decrease in Liabilities

Debentures Redeemed	\$ 85,000
Accounts Payable	<u>38,256</u>
Decrease in Liabilities	<u>\$ 123,256</u>

INVENTORIES

As at December 31st, 1966, supplies on hand including medical stores, drugs, engineering supplies, fuel and miscellaneous items and food etc., totalled \$ 105,588,

a decrease of \$ 31,205 from the preceeding year. This decrease is largely attributable to the termination of the Assiniboine Hospital operation as at December 31st, 1965, and subsequent realization of the inventories.

HOSPITAL OPERATIONS

Central Tuberculosis Clinic with 65 beds, had an average occupancy of 83% and an average length of stay of 48.5 days. This is a reduction in average length of stay of 8.5 days compared to 1965.

Manitoba Sanatorium with 171 beds, had an average occupancy of 80%. Average length of stay of discharged patients was 236 days, compared to 364 days in the previous year. Occupancy was higher than expected due to the number of admissions of Indians and Eskimos. This plant is largely obsolete as a hospital facility. Maintenance and repair costs are relatively high. If a tuberculosis treatment hospital is built in Winnipeg it might be possible to utilize a substantial part of the plant at Ninette as a rehabilitation centre where among other rehabilitants, patients discharged from the Winnipeg Treatment Unit could be given basic rehabilitation along with supervised chemotherapy. This would offer a more productive program from the point of view of both treatment and rehabilitation.

Manitoba Rehabilitation Hospital with 160 beds, had an average occupancy of 89% and average length of stay of 49 days, compared to 53 days in 1965. There were 1,071 admissions to the wards, and 2,709 out-patients received treatment. We operated virtually at capacity for a large part of the year, and the demand for service generates constant pressure for additional space.

The hospital was again fully accredited by the Canadian Council on Hospital Accreditation following a visit and review by their surveyor, Dr. Irial Gogan, the Executive Director of the Holy Cross Hospital, Calgary. Dr. K.J.R. Wightman also made a survey of the Hospital on behalf of the Royal College of Physicians and Surgeons, following which we were again approved for training residencies in the specialty of Physical Medicine and Rehabilitation.

Other educational activities in the hospital include a Post-graduate Course in Rehabilitation Nursing for Registered Nurses; interne training in the departments for students in Occupational Therapy and Physiotherapy; a variety of contributions to the education of students in the School of Medical Rehabilitation; and on a less formal basis, we have a great many visitors who came to consult on various matters relative to the construction and operation of a rehabilitation hospital.

Volunteer Services: Special mention should be made of the Volunteer

Services at the Manitoba Rehabilitation Hospital, operating under the direction of Mrs. W. Barnard. A total of 12,537 hours of service were contributed in 1966, valued at \$ 8,193. In addition, through operation of the gift shop and other special projects, there was a cash donation of \$ 1,500 which was used to buy equipment for our audiology service.

Food Services: Meals served totalled 636,957 in 1966, with a reduction of 42,000 at Ninette and an increase in cafeteria meals at the Manitoba Rehabilitation Hospital of 25,000.

TUBERCULOSIS PREVENTIVE AND REHABILITATION SERVICES

The following are comparative direct expenditures for tuberculosis preventive and rehabilitation services:

	<u>Preventive Services</u>	
	<u>1966</u>	<u>1965</u>
X-ray Field Services	\$ 18,896	\$ 16,193
Indian Clinics	9,179	13,459
Travelling Clinics	1,114	3,999
Survey Services	42,671	39,647
Canada Manpower Service X-Ray Unit	3,706	3,528
Dauphin Survey and B.C.G. Project	292	1,571
X-Ray Follow-up Service	2,654	1,269
Tuberculin Surveys	24,803	20,167
Health Education	8,524	8,531
B.C.G. Vaccinations	2,038	4,818
Tuberculosis Clinic, Brandon and The Pas	24,287	16,482
Hospital Admission X-Rays	----	8,985
Diabetic Surveys	20,011	----
	<u>\$ 158,175</u>	<u>\$ 138,659</u>

In 1966, the Board spent \$ 28,603 on instructional services for patients in the Manitoba Sanatorium and the Central Tuberculosis Clinic.

SPECIAL REHABILITATION SERVICES

The Special (Vocational) Rehabilitation Service for Indians and Metis which the Board has operated since 1956 was expanded in 1966 at the request of government authorities. The residential part of this intensive and individualized rehabilitation program was established in vacant pavilion space at Ninette. Forty-five rehabilitants can be accommodated there for social orientation, basic assessment and counselling, and the course known as Basic Training for Skill

Development. In the total program of counselling, training, placement and follow-up, 802 rehabilitants were dealt with in 1966. The financial arrangements for this service are complex. There is a further complication in that on March 31st, 1967, the agreements between the province and the government of Canada were drastically revised, bringing a sharp change in both referral policies and methods of financing. The new conditions are under review and it is hoped that some satisfactory arrangement will be concluded to enable this valuable service to be continued.

Expenditures on Special Rehabilitation Services for Indians and Metis amounted to \$ 148,008 , an increase of \$ 36,674 over 1965. This increase is attributable to the expansion of the Pembina House Rehabilitation Unit during 1966.

NATIONAL HEALTH GRANTS

The appropriation available under Tuberculosis Control Grant from the Government of Canada for the fiscal year 1966-67 was \$ 91,475. This is a reduction of \$ 2,978 from the previous year. The following is a comparative statement of claims on the respective projects for the fiscal years ended March 31st, 1966 and 1967 respectively:

	<u>1967</u>	<u>1966</u>
Streptomycin and Other Antibiotics	\$ 37,347	\$ 34,796
Assistance to Sanatorium Board of Manitoba	18,109	18,622
Assistance to Manitoba Sanatorium	7,714	8,712
Extension of B.C.G. Vaccination Program	3,246	4,818
Tuberculin Surveys	23,867	19,590
	<u>\$ 90,283</u>	<u>\$ 86,538</u>

There was also a grant for the Prosthetics and Orthotics Research and Development Unit under which \$ 60,825 was expended.

INSURANCE

Fire insurance, including supplementary perils, was carried on the Board's property in the amount of \$ 4,754,000. Public liability, professional liability, boiler and steam vessel, motor vehicle, fidelity and robbery cover is carried in appropriate amounts.

PERSONNEL

Our staff numbered 552 at the year end, the only changes being an in-

crease of 10 at the Manitoba Rehabilitation Hospital, and a decrease of 6 at Ninette as compared to the previous year. There were 217 employees on the Pension Plan. Under our Group Insurance Plan, weekly indemnity benefits of \$ 8,407 were paid. This portion of the Plan was discontinued as at December 31st, 1966, in favour of a Sick-Leave Policy comparable to that generally in effect in other Manitoba Hospitals. Life insurance claims amounted to \$ 9,000 during the year, compared to \$ 1,000 in 1965.

APPRECIATION

A hospital and health service depends for its success on a highly skilled and competent staff, who work together with a deep sense of responsibility and a spirit of enthusiasm in their daily work. The Board is fortunate in having a loyal and conscientious staff, and I am deeply appreciative of their concern for maintaining a high standard of excellence and for their continued co-operation and support.

On behalf of myself and the members of the staff, I express appreciation to the chairman and members of the Board for their deep interest in our work, for their continued good counsel, and for the effective way in which they carry out their responsibilities to our organization and to the community. I am grateful to the chairman and members of the Medical Advisory Committee who have been helpful in establishing policies with regard to professional matters; and the guidance and service of the president and medical staff committees of the Manitoba Rehabilitation Hospital are deeply appreciated.

T. A. J. Cunnings
Executive Director



This mobile detection unit, equipped to provide multiple screening tests, was presented to the Sanatorium Board in September, 1966, by the Associated Canadian Travellers of Brandon.

TUBERCULOSIS CONTROL



Dr. E. L. Ross

Tuberculosis is still a world-wide health problem. In some parts it is a very serious problem; on this continent it is of major significance. In the United States, for example, 50,000 new cases and over 8,000 deaths were reported in 1965. In Canada there were 4,800 new cases in that year and close to 700 deaths. Here in Manitoba in 1966, there were 216 new active cases and 28 deaths.

Since the turn of the century there has been a remarkable decline in tuberculosis. For 50 years the incidence decreased gradually and steadily, then dropped dramatically after the discovery of anti-tuberculosis drugs between 1950 and 1955. During the past three years, however, we seem to have reached a plateau - this, despite the fact that there has been no slackening of control measures. It may never be possible to eradicate tuberculosis entirely but we do feel it should be possible to reduce the problem to the minor significance of some other infectious diseases. To accomplish this, all measures must be re-assessed, and research continued for more specific diagnostic, preventive and treatment measures. The problem is not only medical but also socio-economic. The very nature of tuberculosis makes eradication difficult. Disease and illness may not appear for many years after infection. It is insidious in onset and once established it is prone to re-activation. Three quarters of those breaking down received their infections many years ago. The organisms can remain dormant but viable in man for life. With increasing longevity many more people become ill in later years.

Fifteen to twenty per cent of our present population in Manitoba are infected with the tubercle bacillus, which means approximately 175,000 people. The National Tuberculosis Association of the United States estimates

that one out of 625 of those previously infected will develop clinical tuberculosis each year. For Manitoba, with our present infection rate, that could mean 240 cases each year. And if we are successful in reducing the present infection rate by half, it would mean still 120 new cases each year. Another method of forecasting is that during a normal life span five per cent of those now infected will develop demonstrable disease. This suggests about 7,500 cases during the next 60 years, or 125 new cases a year, and it is considered that every new case infects three others. A recent epidemiological study shows that the annual risk to those with a positive tuberculin test is one in one thousand. In Manitoba that would be 175 new cases. This number does not include reactivations or those developing disease early after infection.

These projections do not, however, take into consideration sudden outbreaks of tuberculosis, which do happen in schools and communities. Since 1960 Canada has had over 20 local epidemics of tuberculosis, two of which we are quite familiar with, namely, Eskimo Point and Thicket Portage. In Nova Scotia just recently 30 school children developed tuberculosis in one school and another 180 were infected.

The projection of probable tuberculosis into the future should be kept in mind in the planning of treatment facilities. However, fewer will require hospitalization as home treatment assumes greater importance.

The above is drawn to attention not in a pessimistic vein but simply to indicate that in the light of present knowledge tuberculosis will be with us for many years.

NEW ACTIVE CASES

<u>Year</u>	<u>Whites Active TB</u>	<u>Indians Active TB</u>	<u>Total</u>	<u>Eskimos Active TB</u>
1950	364	239	603	
1960	218	66	284	
1964	166	65	231	
1965	158	56	214	75
1966	160	54	214	23

Eskimos have not been included in our published reports of new cases in the past because they were not from Manitoba, and the Dominion Bureau of Statistics records their new cases and deaths separately. We may not be notified of all these cases. By including them there would be an additional 23 new cases.

In Manitoba in 1966 the number of new cases was exactly the same as in 1965. This gives a rate of 22.34 per 100,000 (whites 17.24, Indians 180). The National rate is 24.54 (1965).

There were fewer new cases among children in 1966 than in 1965 but the trend of an increasing number in the older age groups continues - 35% of the new cases were over 50. In fact, we admitted a women of 94 with new appearing disease.

Apart from the levelling off of new cases, a disturbing fact is that 48% of the patients had reached a moderately or far advanced stage in their disease. Most were infectious at least for weeks before treatment and isolation.

There were the same number of non-pulmonary tuberculosis cases, most being genito-urinary. The bacillary status of the new cases and re-activations is shown in the appended statistical data.

REACTIVATIONS

<u>Year</u>	<u>Whites</u>			<u>Indians</u>			<u>Grand Total</u>
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	
1955	40	57	97	21	19	40	137
1964	20	15	35	11	5	16	51
1965	15	14	29	13	13	7	20
1966	23	9	32	8	6	14	46

Fifteen per cent of the active cases were reactivations - that is relapses. This rate has not changed much during the last few years. Most were in the older age groups, especially among the non-Indians. Of interest is the time lapse since their last classification of active tuberculosis: that is, in most cases since their original treatment 15 to 20 years ago. This is particularly true of the whites, but the Indians tended to relapse earlier. Chemotherapy has greatly reduced the relapses.

TUBERCULOSIS DEATHS

There were 28 deaths attributed to tuberculosis in 1966, which is five less than the year before. This is a rate of 2.9 per 100,000, the lowest ever recorded. No deaths occurred under 20 years of age and 24 of the 28 (86%) were 50 or over. About half of the people dying of tuberculosis were over 70. More tuberculosis deaths occurred in general hospitals than in sanatorium.

Year	<u>White and Indians</u>		<u>Whites</u>		<u>Indians</u>	
	<u>Rate per 100,000</u>	<u>Total Deaths</u>	<u>Rate per 100,000</u>	<u>Total Deaths</u>	<u>Rate per 100,000</u>	<u>Total Deaths</u>
1950	22.8	181	12.8	102	438	79
1960	4.3	39	3.8	33	25	6
1965	3.4	33	2.7	25	28.6	8
1966	2.9	28	2.5	23	16.6	5

(The figures for 1966 are tentative and based on the estimated population for Manitoba of 958,000, which includes 30,000 Indians).

PREVENTION

Examinations by Clinics, Hospitals and Surveys

<u>Year</u>	<u>Stationary Clinics</u>	<u>Travelling Clinics</u>	<u>Chest Films Received from General Hospitals</u>	<u>Tuberculin & X-ray Surveys*</u>	<u>Total</u>
1960	8,003	1,977	69,686	145,681	225,347
1965	7,402	960	10,758	137,495	156,615
1966	7,664	407	12,199	122,212#	142,482

*Including Indian Surveys

# Tuberculin Test only	64,731
Tuberculin and X-ray	4,798
X-ray only	52,683

A total of 122,212 people in Manitoba were tuberculin tested or had chest x-rays or both on Sanatorium Board surveys. This includes 17,824 Indians and 1,800 Eskimos. If the 12,199 general hospital films sent for reading and the 7,664 examined at stationary clinics and the 407 on consultant clinics were added, the total receiving service through the Board's clinics would be 142,482. Of the 102,588 examined on white surveys, only nine new active cases were found: that is, one in 11,398 surveyed. An analysis of the nine positive findings in relationship to the number surveyed is more revealing. Three were Metis discovered on Indian surveys, two were discovered by the survey unit in the Central Tuberculosis Clinic basement, one by the unit in the National Employment Service, one on industrial surveys, one in a nursing home, and one was found in 1965 and the diagnosis not finalized until 1966. This really means that we did not find one case of new active disease in approximately 50,000 examined by mass community surveys, held primarily in southwestern Manitoba. There were a number identified, however,

with old inactive disease that need following. I have gone into this in some detail because we must assess very critically our survey program.

We have been reducing community surveys gradually for a number of years and have been choosing areas more selectively that is, where there has been more tuberculosis. But the fact remains that in the southern and cultivated rural areas the cost is far exceeding the benefit. I think drastic action is indicated and in the future surveys should not be continued on a mass basis but limited to high risk segments of our population. In the statistical section you will note that no new cases were reported from about two-thirds of the municipalities in the province. Areas of the province that contain predominantly Metis population should continue to receive special attention. Tuberculosis contacts (mainly family) are the most important high risk group and through clinics and health units they are x-rayed and followed. People known to have previous tuberculosis are a high risk group and an effort is made to follow them closely. Other groups examined routinely are people in nursing homes, old folks' homes, the Salvation Army Hostel, the National Employment Service, and prison inmates. High school students, teachers, barbers, and food handlers are being examined, mainly as sound public health practice.

On a trial basis we incorporated a blood-testing survey for diabetes in south-western Manitoba. We found no new tuberculosis but in the 18,534 blood-tested a preliminary report indicated that 1.9% had previously unknown diabetes.

Tuberculin Surveys

Age Groups	Negative	Positive*	Total	Percentage of Positives
Under 5	3,153	10	3,163	.31
5 - 9	7,172	47	7,219	.65
10 - 13	6,639	116	6,755	1.71
14	1,944	64	2,008	3.19
15 - 19	16,589	1,386	17,975	7.71
20 - 24	6,497	1,474	7,971	18.50
25 - 29	2,488	716	3,204	22.35
30 - 39	4,317	1,475	5,792	25.45
40 - 49	3,893	2,432	6,325	38.61
50 - 59	2,750	2,454	5,204	47.15
60 - 69	1,402	1,672	3,074	54.31
70 and over	799	353	1,152	30.24
	57,643	12,199	69,842	17.47

* Includes present and previous positive reactors.

I will not comment on the rate of infection for various age groups as that is evident in the above table, except to point out the low rate for the children up to nine and to 14. This will be reflected by fewer new cases in the future, if they are kept from being infected. The older age groups are also showing a lower infection rate than five years ago. Fifty years ago, nearly everyone became infected but they are now passing out of the picture and the rising generation has much less opportunity of being infected with the tubercle bacillus.

The emphasis in the future should be mainly on clinic services (not mass mobile surveys). Apart from early diagnosis and controlling the spread of infection, actually half to three quarters of treatment is carried out away from hospital, which necessitates closer supervision and follow-up by clinic and public health type of services. With the diminishing cost for hospitalization it would be reasonable to divert money thus saved to treatment services outside the hospital.

Consultant Chest Clinics

These clinics have an accompanying doctor and examine only referred cases or those who have had previous disease or are tuberculosis contacts. They have reduced steadily since 1960 and only amounted to 407 examinations in 1966.

Number examined	407
New diagnoses	-
Known tuberculous patients reviewed	141
Contacts	235

Stationary Clinics

Central Tuberculosis Clinic

Number of examinations	5,058
New diagnoses	153
Disease active in	141
Known tuberculosis patients reviewed	2,144
TB Contacts reviewed	2,359
Number of referred films	924

By far the greatest and most important clinic service is being provided by the Central Tuberculosis Clinic. I have already expressed my firm belief in the need for increasing such services, especially with chemotherapy and in the follow-up of inactive cases. Although the Central Tuberculosis Clinic is credited

with 153 new diagnoses, it must be realized that the private physician referred most of them and thus initiated action that lead to the final diagnosis.

Manitoba Sanatorium

Number of examinations	1,257
New diagnoses	3
Disease active In	1
Known tuberculosis patients reviewed	322
TB contacts reviewed	178

Assiniboine Hospital

Number of examinations	886
New diagnoses	-
Disease active in	-
Known tuberculosis patients reviewed	162
TB contacts reviewed	209

Dr. A.H. Povah is the Board's tuberculosis consultant in Brandon where he conducts a weekly chest clinic. He also supervises 50-75 patients, nearly all with inactive tuberculosis, in the Hospital for Mental Diseases.

Northern Tuberculosis Unit

Number of examinations at Unit	463
Number of new diagnoses	9
Disease active in	6
Known tuberculosis patients reviewed	78
TB contacts reviewed	315

Number of referred films	4,872
(Eskimos - 2,376)	
(Indians - 1,686)	
(Whites - 810)	

New diagnoses	21
Disease active in	14
Known tuberculosis patients reviewed	427

Number of Clinic and Survey films	1,912
New diagnoses	2
Disease active in	1
Known tuberculosis patients reviewed	59

A consultation out-patient clinic and chest film reading service is provided by the Northern Tuberculosis Unit at The Pas with Dr. S.L. Carey in charge. Over 7,000 chest films or people were examined, which is a very useful service in a large area where the tuberculosis rate is about 10 times higher than in the rest of the province.

Chest Films from General Hospitals

Number of Hospitals	60
Total number of x-ray films	12,199
Reported as new active tuberculosis	3
Reported as suspect tuberculosis	50

The chest x-ray program of the Sanatorium Board in general hospitals was discontinued on December 31st, 1964. We strongly recommended that such a service be continued and I am pleased to report that the individual hospitals and the Hospital Commission have accepted this responsibility. We offered to continue reading the films for hospitals without the service of a radiologist, and you will note that 60 hospitals sent over 12,000 films for reading to the Central Tuberculosis Clinic.

City of Winnipeg

During 1966 there were eight deaths from tuberculosis in the city of Winnipeg, as well as 67 new active cases and 10 reactivated cases. The City Health Department, under the direction of Dr. R.G.Cadham, makes an important contribution in the tuberculosis control program, particularly in the investigation of new cases and the follow-up of almost 1,000 former patients.

	<u>1956</u>	<u>1966</u>
CASES UNDER SUPERVISION	4,610	7,535
TOTAL EXAMINATIONS	325,724	142,482
NEW ACTIVE CASES	376	214
DEATHS	67	28

B.C.G. VACCINATIONS

Tuberculosis Contacts	41
Student Nurses (General Hospital)	414
Student Nurses (Mental Hospital)	44
Student Nurses (Practical)	284
Nurses' Assistants	52
Sanatorium and Hospital Staff	37
Medical Students	55
Dental Hygienists	20
Dental Students	65
Laboratory Students	90
University Students - Faculty of Nursing	49
School of Rehabilitation	114
Swan Valley B.C.G. Project	347
Miscellaneous	18
	1,630
By Medical Services, Department of National Health and Welfare	5,039
Total	6,669

We plan to continue the high school B.C. G. Project in the Dauphin Health Unit for a total of five years and then try to assess the program. By vaccinating every two years we get all students from Grades XI to XII, - hence, by missing 1966 our total vaccinations for the year were down,

TREATMENT

Treatment Days for Tuberculosis

<u>Year</u>	<u>Province of Manitoba</u>	<u>Gov't of Canada & Other Provinces</u>	<u>Total</u>	<u>TB Beds Occupied December 31/66</u>
1955	165,696	202,422	368,118	1,014
1960	99,074	99,704	198,838	457
1965	40,032	47,630	87,662	207
1966	32,832	36,926	69,758	201

There has been a steady decrease in hospital treatment days for tuberculosis since 1952. Compared to 1965 they decreased slightly but not as much as anticipated.

Since the advent of drug therapy for tuberculosis there have been remarkable changes, not only in the decrease in deaths and the early control of infectiousness, but also in hospitalization. Ten years ago there were 1,000 beds occupied. On December 31st, 1966, there were 201 patients in Manitoba Sanatorium and the Central Tuberculosis Clinic. During this 10-year period new cases have decreased only 25 per cent but beds occupied decreased 80 per cent. The main reason for the lower occupancy is shorter hospitalization, rather than fewer cases. During 1966, 687 patients were receiving drugs at home and on December 31st, 1966, the number on out-patient chemotherapy was 432. A great deal of the day-to-day responsibility has been shifted to the patient, to the public health nursing service and, the family physician, to the clinic services, and to the Sanatorium Board in organizing and maintaining methods of supervision.

During 1966, a definite headway was made in this respect by centralizing all information about out-patient chemotherapy in the Central Tuberculosis Registry, and also by a closer follow-up through the health units and the area directors of Medical Services, Department of National Health and Welfare. Obviously, this is much more difficult for the Eskimos and Indians scattered in Northern Manitoba, but this program has been well advanced with the assistance and co-operation of the Indian Medical Services.

Average Length of Treatment Stay for Patients Discharged in 1966

	<u>Whites</u>	<u>Indians</u>	<u>Eskimos</u>
For reviews	7.5 days (28)	10.8 days (16)	10.5 days (2)
Non-TB patients	53.1 days (88)	55.2 days (57)	42.0 days (13)
Tuberculous patients	137.4 days (220)	274.5 days (114)	374.2 days (26)

(Bracketed figures are the number of patients)

The interesting feature about the table is that the whites (including Metis) received an average of four and a half months treatment in Sanatorium or the Central Tuberculosis Clinic, the Indians nine months, and the Eskimos 12-1/2 months. The whites were discharged sooner because their chemotherapy could be better supervised.

Chemoprophylaxis may be more widely applied as a preventive measure in the future. In 1966, 66 infected people, mostly without evidence of disease, were given courses of chemotherapy. These were mainly young children who had been exposed to infection.

REGISTRY TUBERCULOSIS REGISTRY

The total number of patients in the Registry file is 7,535. This is gradually being added to by the inclusion in the current files of persons who were previously removed because disease had healed. With the increasing number of reactivations among older age groups, these people are being returned to the active files for follow-up. The Registry has all pertinent information about new cases, contacts, deaths, admissions and discharges, surveys and clinics, tuberculin test records and B.C.G. vaccinations. As recommended last year, all records pertaining to Indian and Eskimo tuberculosis is being centred in the Registry. The records and the follow-up of all out-patients on chemotherapy for Whites, Indians and Eskimos is a more recent responsibility of the Central Registry. It is apparent that the Registry has a key role in the tuberculosis control program.

CONCLUSION

In Manitoba and elsewhere on this continent most tuberculosis specialists have reached or are approaching retirement. Although the problem of tuberculosis is far from solved, there is neither the scope nor stimulation in tuberculosis itself to attract young doctors. Physicians interested and trained in many fields, including immunology, epidemiology and public health, and also in non-tuberculous respiratory diseases, should provide incentives for competent replacements in an expanded program. The Sanatorium Board of Manitoba is on the verge of a forward medical re-organizational step, a need anticipated for some time and in accordance with Dr. G.J. Wherrett's report and recommendations of a few years ago. Tuberculosis and non-tuberculous respiratory disease will be combined. Medical teaching in these fields will be developed on a comprehensive and organized basis by formal affiliation with the Department of Medicine of the University of Manitoba.

Your new Medical Director, Dr. Reuben M. Cherniack, is a widely recognized authority on chest diseases, Associate Dean of the Faculty of Medicine, and a professor in the Department of Medicine, University of Manitoba. After 42 years with the Sanatorium Board and your Medical Director for most of that time, I, of course, am very interested in the Board's program and progress in the future. Not only will the present program continue but there will be an expansion to include non-tuberculous respiratory diseases and organized undergraduate medical teaching.

E. L. Ross, M.D.,
Consultant,
Tuberculosis Services.



In 1966 a total of 57,481 Manitobans received free chest x-rays in community and industrial tuberculosis surveys



A total of 69,529 people lined up for free tuberculin skin tests.

In co-operation with the University of Manitoba, the Board administered blood tests for diabetes to more than 18,000 people in Manitoba.



TUBERCULOSIS CONTROL PROGRAM

CENTRAL REGION, MEDICAL SERVICES

Continued vigilance in the Indian and Eskimo population with respect to tuberculosis must continue to remain at a high level for the following reasons:

- 1) There were 144 new and reactivated cases in the Indian and Eskimo population, an incidence rate of 305 per 100,000 population - a slight increase over the previous year.
- 2) The incidence rate of new and reactivated cases for the Eskimo population was 1,411 per 100,000 and for Central Region Indians it was 249 per 100,000 population. This reflects a considerable increase in tuberculosis among the Eskimo population and a slight decrease in the Indian population.
- 3) Tuberculosis among the Indian and Eskimo population continues to be a disease most highly prevalent in the very young and the young adult population. Sixty-three per cent of all active and reactivated cases occurred in this younger age-group.

The community chest x-ray survey accounted for the discovery of sixty-three per cent of the active and reactivated cases and is still one of our most useful tools in tuberculosis case-finding. The ratio of active cases found to the number of x-rays taken was 1.460. The percentage of the population x-rayed during the year varied from 48 per cent to 100 per cent for an average of 68 per cent of the total population. The lowest percentage of chest survey films were taken in the southern part of Manitoba, where the Indian people are more nomadic. In 1966 The Pas area and Southern Manitoba area were surveyed by the Sanatorium Board of Manitoba; the other zones and areas were surveyed by Medical Services Branch.

The Indian and Eskimo tuberculous patients in Manitoba and Keewatin area were admitted to the Central Tuberculosis Clinic in Winnipeg and the Manitoba Sanatorium at Ninette. In the Sioux Lookout zone, tuberculous Indian patients were treated at the Fort William Sanatorium. At December 31st, 1966, 128 Indian and Eskimo patients were under treatment; 69 were male and 59 were female. Of these 30 were Eskimo patients and 98 were Indian.

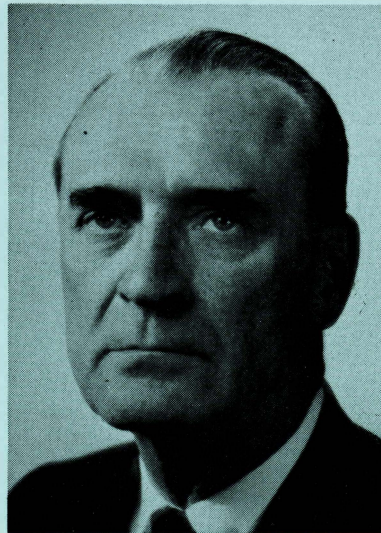
With respect to tuberculosis mortality, three Indian people from Norway House zone and four Indian people from Southern Manitoba area died in 1966. Six of the deaths were in the 50 to 70 age group.

In accordance with Medical Services Branch policy, the tuberculin testing and B.C.G. vaccination program was continued and a total of 5,353 Indians and 485 Eskimos were given B.C.G. in the Central Region.

I wish to take this opportunity to personally thank the Sanatorium Board of Manitoba for their continued and excellent co-operation in our common effort to control tuberculosis among the Indian and Eskimo people.

O. J. Rath, M.D., M.P.H.,
Regional Director,
Medical Services,
Dept. of National Health
and Welfare.

CENTRAL TUBERCULOSIS CLINIC



Dr. D. L. Scott

The Central Tuberculosis Clinic started as a diagnostic clinic with very few treatment beds, but it soon expanded and we now have 65 patient beds. There were 11,279 visits to the clinic last year, 5,058 of these being for examination. This means an average of 43.3 visits for each working day and 19.4 visits for examination. A total of 139 new cases of tuberculosis were discovered by examination and 17 by other means. Of these new cases, 13 were under five years, 23 were in the 20 to 24 age group, 54 were over 50 years of age and 17 of these were over 70 years. Older people create special problems because of family emotions and ties.

Over half, or 94, of the new cases occurred actively in the lungs and 31.9 per cent of these were far advanced, 29.79 per cent were moderately advanced, and 38.30 per cent were minimal.

There were 433 admissions to the ward and in 241 of these there was respiratory involvement by tuberculosis. A total of 125 were found either to be non-tuberculous or to have no disease. There were 434 discharges and 245 of these were cases of respiratory tuberculosis, 107 of them bacillary and 131 non-bacillary. There were six deaths due to tuberculosis and four non-tuberculous deaths. In addition 28 tuberculosis patients were discharged who were non-pulmonary. The average length of treatment was 48.50 days, compared to 57.03 in 1965, a commendable trend. Of the 434 discharges, nine were against medical advice, 122 were discharged on advice, 128 were discharged to continue chemotherapy as out-patients, and 122 patients were transferred to other institutions for further investigation or treatment.

Chemotherapy has become a very important part of the treatment of patients, both in hospital and at home. One of our biggest problems in the past few years has been the care of patients on an out-patient basis, because so much depends on them faithfully adhering to their treatment as prescribed. We have put a lot of thought into this and now feel that home treatment although still far from perfect has improved. The table below shows the drugs that are being used and the number of patients treated as in-patients and out-patients:

In-Patient Chemotherapy

- 276 patients received streptomycin
- 322 patients received INH
- 205 patients received PAS
- 21 patients received Seromycin with INH
- 5 patients received Isoxyl
- 5 patients received D'Cycloserine
- 15 patients received Viomycin
- 6 patients received Pyrazinamide
- 1 patient received Ethionamide.

Out-Patient Chemotherapy

6,221 streptomycin treatments were given to 154 patients, and there were 59 patients on this treatment on December 31st, 1966.

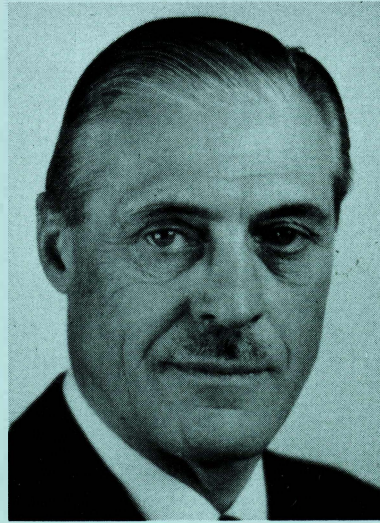
518 patients were on other anti-tuberculosis drugs at home during 1966, and there were 299 patients still on treatment on December 31st, 1966.

LABORATORY

A tremendous amount of tedious and time-consuming work is processed in the laboratory: 26,332 tests in 1966 for the Central Tuberculosis Clinic only. Tuberculin tests increased, as did vaccinations with B.C.G. In the x-ray department, a total of 5,147 radiographic examinations were made, involving 4,159 individuals.

D.L. Scott, M.D.,
Chief of Medical Services.

MANITOBA SANATORIUM



Dr. A.L. Paine

In 1966, its 57th year of service, Manitoba Sanatorium entered the first full year of operation as the only remaining treatment centre for tuberculosis in the province aside from the Central Tuberculosis Clinic. Patient composition was similar to 1965 but with a slight rise in patients of native extraction which on December 31st reached 89 per cent. As compared to 1965 total treatment days dropped from 65,876 to 50,095 and average daily occupancy from 181 to 137. The average days stay of those discharged was reduced from 364 to 236. Two factors were responsible for this considerable decline. The first was the chance discharge in 1965 of an unusually large number of long term patients with over 1,000 days stay which unduly increased treatment days for that year. The second was a planned factor which should continue to operate: namely, shorter stay of the average native extraction patient, accomplished in part by the increased use of out-patient chemotherapy. Most noteworthy features in the year's activity were the further extension of the out-patient chemotherapy program in natives (which commenced in 1964) and the enlargement of rehabilitation projects already under way.

ADMISSIONS

There were 131 significant admissions to our sanatorium in 1966. Of these, 101 or 77 per cent had new disease and 30 or 23 per cent were old patients with reactivation.

A break-down of the 101 new cases as to location and extent of disease shows the following figures: Respiratory tuberculosis was the main diagnosis in 94, while other areas alone were involved in seven. Of the 94 respiratory, 69 were of adult type, 20 primary and five pleural effusion. In the adult type 46 or 66 per cent had extensive disease and of

these four were miliary. The remaining 23 or 34 per cent were minimal. In the seven patients with other organs alone involved, the sites were kidney 2, brain 1, spine 1, peritoneum 1, cervical glands 1, soft tissue 1. Of the 94 with respiratory tuberculosis already tabulated above, 11 also had other areas involved as follows: kidney 3; pleura 4, cervical glands 2, uterus 1, erythema nodosum 1. Of all new cases, regardless of disease location, 60 were bacillary and 41 non-bacillary.

Patients with new disease were also analyzed as to race, sex and age, and as the group totalled 101 persons the sub-group results may be thought of in terms of approximate percentage as well as actual numbers. All but 15 were of native extraction, there being 43 Treaty Indians, 19 Metis and 23 Eskimo. Thirty-three patients were aged 15 or under, 61 between 16 and 59 and seven were 60 or over. As to sex 50 were males and 51 females.

Several points worthy of note emerge from the above analysis of new cases. Perhaps most important is that two-thirds of such admissions with adult tuberculosis had advanced bacillary disease. In urban white communities where minimal tuberculosis is often treated entirely at home, one would naturally expect most patients admitted to have advanced bacillary disease. But in our Institution, where 85 per cent of all new cases admitted are of native extraction and when the practice with native patients is to admit all new cases to hospital regardless of extent of disease, one would certainly hope to find a higher incidence of minimal disease in our native new disease admissions. This points up the fact that in natives, even more than in Whites, new disease is usually found in the advanced bacillary stage despite present efforts at prevention. In the writer's opinion this is due to the explosive, rapidly progressive course tuberculosis still takes in natives rather than to lack of case finding facilities. Another point of interest is the high incidence of children still coming in for treatment. This amounted to approximately one-third of new cases last year, of which none were tuberculin convertors and many had extensive lung and glandular involvement including three with miliary tuberculosis.

As already mentioned patients admitted with reactivation of disease numbered 30 or 23 per cent of all significant admissions. Of these 23 had positive sputum. In 22 there had been previous chemotherapy with drug courses ranging from one month to 3-1/2 years and averaging 17 months. There were three patients with previous lung resection and one with paraffin pack. Time elapsing between previous treatment and reactivation ranged from one to forty-eight years, with an average of 11 years. Seven reactivated patients had suffered previous reactivation. Three patients were white, and 27 were native extraction.

DISCHARGES

Of 10 patients leaving against advice none were considered bacillary.

Three were re-admitted, five continued chemotherapy at home, one was to be enrolled at the Pembina House Rehabilitation Unit and one has been recently examined and, though not on drugs, remains well. There were eight deaths, three from tuberculosis and five from other causes. Autopsies were performed on six.

A program of discharge to out-patient chemotherapy in native patients was commenced in 1964 and considerably enlarged in 1965. Of the total 233 discharges, 121 were discharged to carry on treatment as out-patients and 114 were Indians or Metis.

TREATMENT

With two-thirds of all admissions for treatment having advanced bacillary disease, there is still constant need for a good deal of medical and nursing management. But with modern chemotherapy the rule is that even seriously ill patients improve within a few months to the point where they are no longer infective and can be physically quite active. At this stage sanatoria serving predominately white urban population send most of their patients home on drugs. In our institution where almost 90 per cent of patients are of native extraction, early discharge has been seldom possible. The chief obstacles-poor conditions and habits of living and irresponsible attitude towards drug taking- are gradually being reduced but this is a slow process.

Keeping patients in sanatorium for long periods of time when they feel well physically poses great problems in supervision. Tuberculosis even in natives no longer attacks a cross section of the general population, but tends to pick out the social misfits, the emotionally unstable and the mentally retarded or unbalanced. Thus a good many of our patients are behaviour problems whether in or out of sanatorium but the enforced stay in hospital tends to accentuate their trouble. Many should have psychiatric evaluation and/or counselling and psychosis requiring treatment is not uncommon. We send a good many to the out-patient department of the Brandon Mental Hospital but one of our greatest needs is far more help than this service can provide.

In-patient chemotherapy has changed very little. Most patients are placed on all three first line drugs, streptomycin, INH and PAS on admission. In practice many remain on this routine until discharge when streptomycin is dropped and they carry on with INH and PAS if further drug treatment is indicated. In most cases a total of two years of chemotherapy is advised. When resistance or allergy develops second line drugs are substituted in order to keep the patient on at least two drugs. At year's end 7 per cent of patients were resistant to one or more drugs and approximately 15 per cent had some drug allergy. Primary resistance was found in only 1 per cent of all first treatment patients and secondary resistance in 10 per cent of those with reactivation.

A limited amount of chest surgery is still being done. Twenty-one major chest procedures were performed during the year, of which four were on whites and the remainder on natives. Indications were classed as mandatory in 10 and of these four are of special interest and involved the obliteration of long-standing Schede thoracoplasty chest wall defects with varying degrees of bronchopleural fistula and sinus formation secondary to empyema. The writer has devised an operation combining further resection if necessary and a plastic reconstruction of the chest wall with dacron mesh which has resulted in cure of all four of these hitherto intractable cases. A medical report is planned on this small but unusual series. Other mandatory indications were drug resistance and persisting positive sputum 3, decortication for intractable pleural effusion 1, excision chest wall sinus 1. Elective surgery was done mainly on native patients with localized lesions where trouble was foreseen in keeping up drug treatment either in or out of sanatorium. Incidence of various standard procedures involved in the above work was as follows: Thoracoplasty 2, variations of thoracotomy 4, wedge resection 4, segmental resection 2, lobectomy 9. There were no operative deaths and no serious post-operative complications including wound infections. Tracheostomy was done on two poor risk patients. Minor procedures included resection of sub-inguinal glands 1, bronchoscopy 22, bronchograms 9, aspirations 14, blood transfusions 246 units, I.V. infusions 256 units.

X-RAY AND LABORATORY

Both departments continue to do excellent work in support of both diagnosis and treatment control. The X-ray department made 2,926 radiographic examinations, did 36 electrocardiographic tracings and took 69 clinical photographs of which 22 were color slides of surgical specimens.

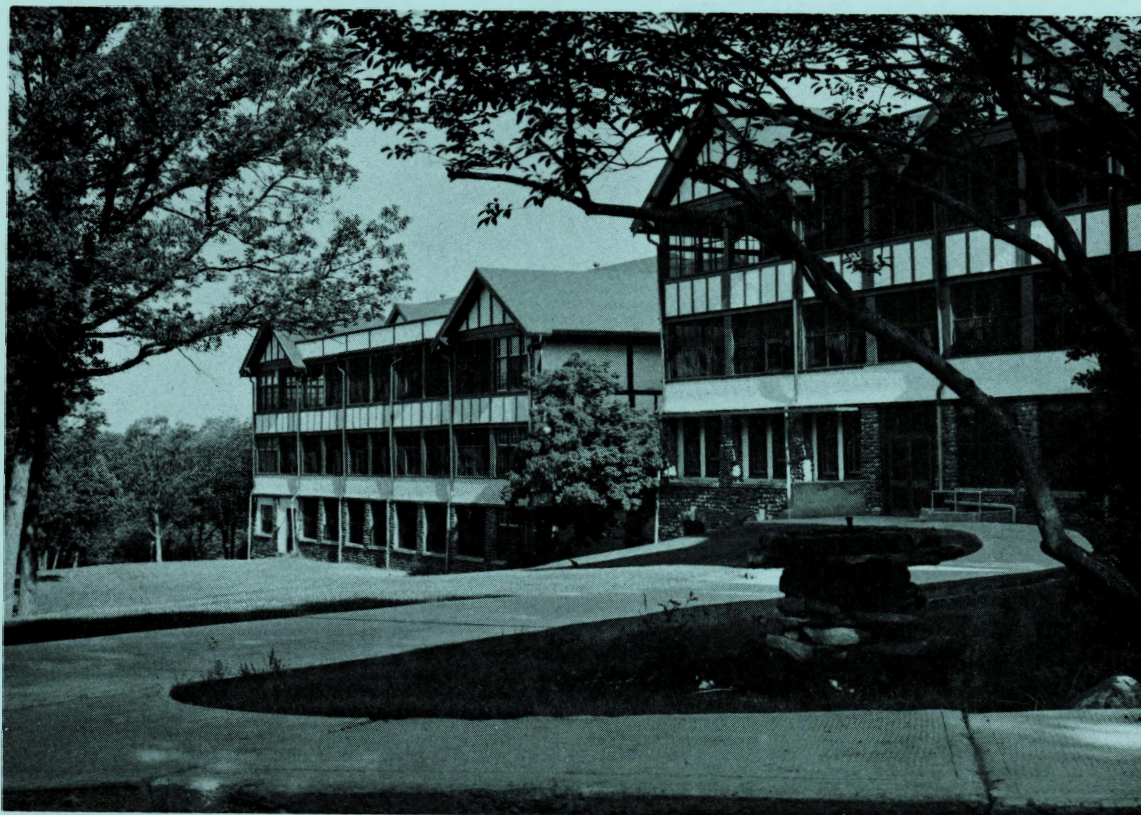
The laboratory did 15,969 tests for a total of 37,669 units of work. Aside from routine work 93 cultures of tubercle bacilli were grown last year and 30 bottles of blood cross-matched to augment routine supplies from the Red Cross.

MEDICAL PAPERS AND STUDIES

- 1) "Tuberculosis - The Ill Wind that Blows Good to Indians and Metis in Manitoba" by A.L. Paine, B.A., M.D., - Presented at the Canadian Tuberculosis Association meeting June, 1966.
- 2) "A Study of Patients of Native Extraction Discharged From Manitoba Sanatorium on Out-Patient Chemotherapy from January 1st, 1966 to September 30th, 1966 - Written November 14, 1966 - A.L. Paine.

- 3) "Manual on Supervision of Out-Patient Tuberculosis
Chemotherapy in Patients of Native Extraction" - Prepared
November 21, 1966 - A.L. Paine.

A.L. Paine, M.D.,
Medical Superintendent.



Infirmary, Manitoba Sanatorium.

TUBERCULOSIS RECORDS

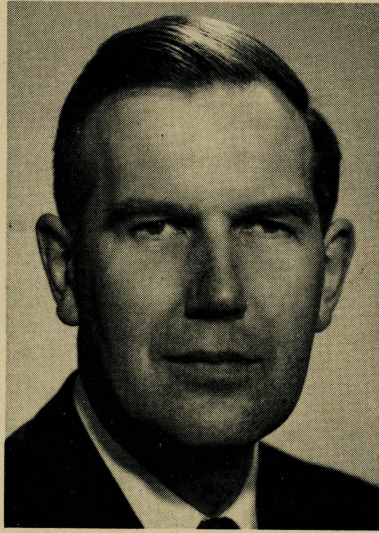
CENTRAL TUBERCULOSIS REGISTRY

	<u>Whites</u>		<u>Treaty Indians</u>		<u>Eskimos</u>	
	<u>1965</u>	<u>1966</u>	<u>1965</u>	<u>1966</u>	<u>1965</u>	<u>1966</u>
Patients on file, Dec. 31	5,215	5,172	1,845	1,894	442	469
Primary Type	157	178	72	87	56	58
Re-infection Type	5,058	4,994	1,773	1,817	386	411
New Cases Diagnosed	201	194	74	72		
Primary Type	22	13	16	11		
Re-infection Type	179	181	58	61		
New Active Cases	158	160	56	54		
Primary Type	22	13	16	11		
Minimal	43	28	6	12		
Moderately Advanced	29	30	10	9		
Far Advanced	22	37	11	9		
Pulmonary Tuberculosis						
Extent not stated	2	5	---	1		
Tuberculous Pleurisy	10	16	5	4		
Non-pulmonary Tuberculosis	30	31	8	8		
New Diagnoses Admitted to Sanatoria	117	124	51	52		

STATIONARY AND TRAVELLING CLINICS AND SURVEYS

	<u>Whites</u>	<u>Indians</u>	<u>Eskimos</u>
Total X-rayed at Clinics, Surveys	45,551	18,287	1,800
Stationary Clinics	7,201	,463	
Consultant (Travelling) Clinics	407		
Surveys	37,943	17,824	1,800
Total Tuberculin Tested	69,529		
New Diagnoses of Tuberculosis	181	24	
Stationary Clinics	157	1	
Surveys	24	23	
Old Tuberculosis Patients Reviewed	3,054	899	
Contacts Examined	2,981	315	

MANITOBA REHABILITATION HOSPITAL



Dr. L. H. Truelove

The year 1966 showed continued growth in all departments of the hospital. The function and policies of the hospital as a comprehensive rehabilitation unit for both in-patients and out-patients remained unchanged. Services are designed primarily for the treatment of adults suffering from locomotor disability and are restricted to those patients who can benefit from a functional point of view in a relatively short space of time, the average length of stay for in-patients being 48 days. Maximum use is made of treatment in groups in the therapeutic departments. Within these limits, the patients who are admitted are those who can benefit from the facilities available, and as a result a wide variety of disorders of the locomotor system is treated. There is representation on the active medical staff of all the sub-specialties in physical medicine and rehabilitation, rheumatology, the neurological sciences and orthopaedic surgery. The Executive Committee of the medical staff is elected annually from amongst the active members of the medical staff and I should like to express my appreciation for the guidance given by this Executive Committee which has met regularly under the chairmanship of the President, Dr. P.N. Porritt. The junior medical staff, with an establishment of six residents, has maintained a high standard under the direction of the Chief Resident, Dr. E. Bosley. In addition to work involved in the care of patients, an active residency training program has been continued. The training program was inspected and approved on behalf of the Royal College of Physicians and Surgeons of Canada in October.

A total of 1,071 patients were admitted as in-patients during the year; a slight increase over the total for 1965. This increase was possible owing to the activities of the Admissions and Discharges Committee

which attempts a careful assessment of patients requiring admissions to ensure that the best use is made of the facilities of the hospital.

A total of 1,918 new patients were seen in the Out-patient Department during the year as compared with 1,686 in 1965.

The number of beds available remained unchanged and the average daily in-patient bed occupancy was 89 per cent for the year.

OUT-PATIENT DEPARTMENT

A total of 1,918 new patients were examined in the department and 4,850 review examinations were conducted by members of the medical staff. All patients are seen according to an appointment system.

IN-PATIENT DEPARTMENT

During the year, 1,071 were admitted. The numerical distribution of patients by diagnosis under the most common categories was as follows:-

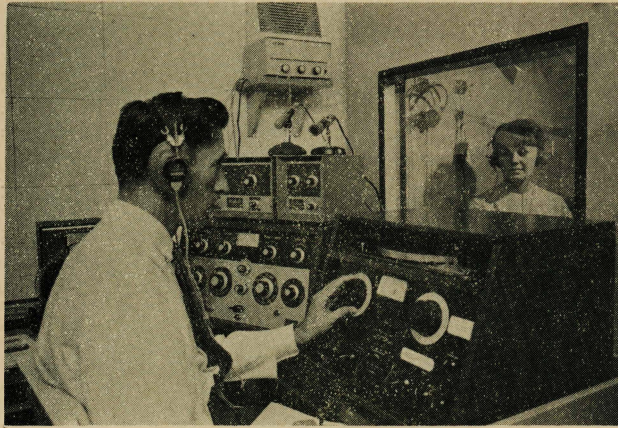
Arthritis	361
Orthopaedic	226
Hemiplegia	142
Amputees	116
Neuromuscular Disorders	96
Paraplegia	89

The distribution of patients in the above diagnostic categories remained unchanged. Specific programs of treatment have been organized in the following services: Arthritis, Hemiplegia, Paraplegia, and Prosthetics. All these services have been organized for some years now and are functioning at a high level of efficiency under their various directors.

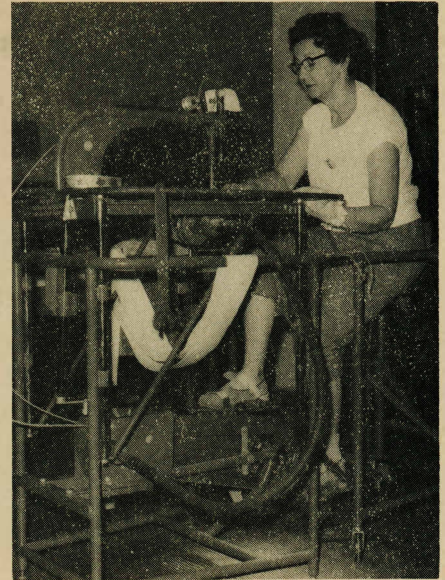
CONSULTANT SERVICES AND TEACHING COMMITMENTS

Regular clinics are held by various members of the medical staff in the Assiniboine Hospital in Brandon, the Canadian Arthritis and Rheumatism Society rural clinics, and the Manitoba School at Portage la Prairie. Additional out-patient clinics are held by members of the medical staff in the Winnipeg General Hospital, St. Boniface General Hospital and the Children's Hospital of Winnipeg.

Dr. I.H.K. Stevens retired from full time membership of the active medical staff in August and was replaced by Dr. M. Newman, who assumed the direction of the Hemiplegic Program. The consultant services of the hospital



Hearing assessment and rehabilitation



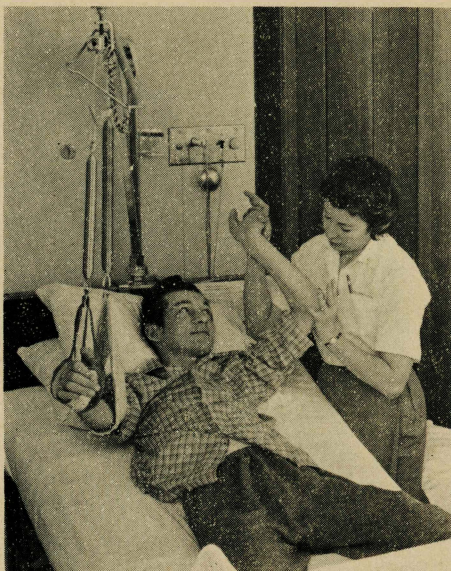
Exercising on the Oliver



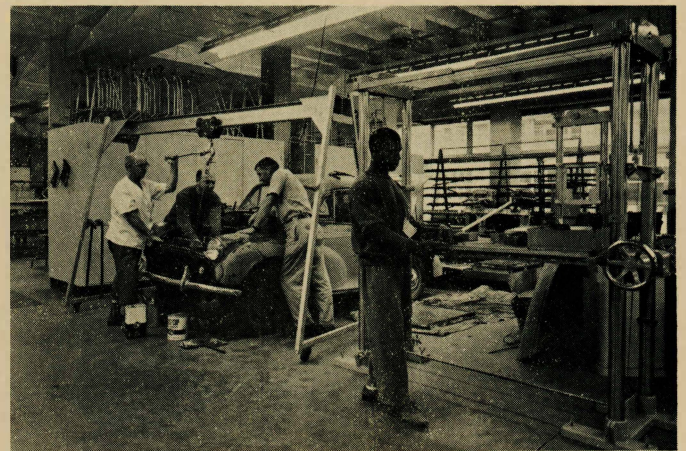
Laryngectomees learn to speak



Social Service counselling



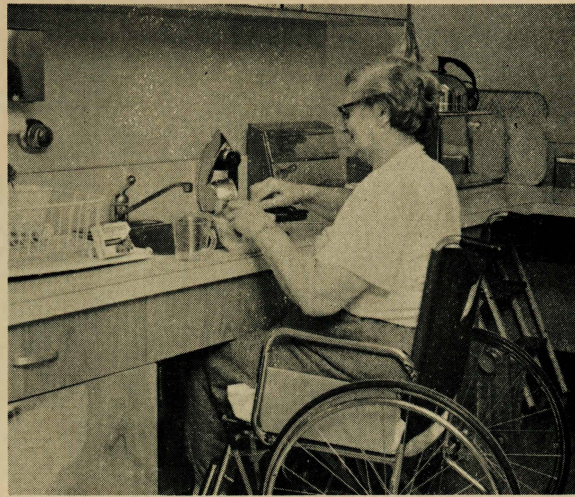
Paraplegic begins treatment



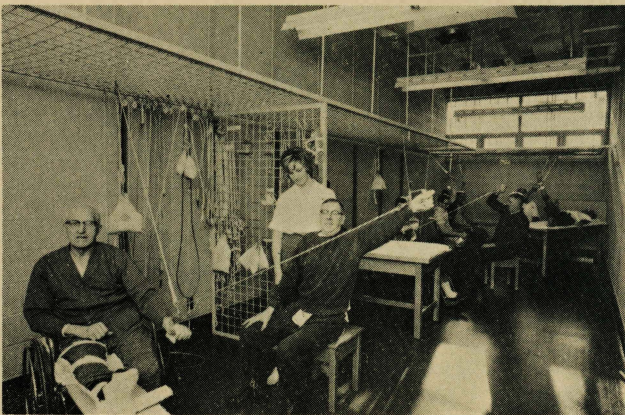
Occupational Therapy Metal Shop



Treatment in the pool



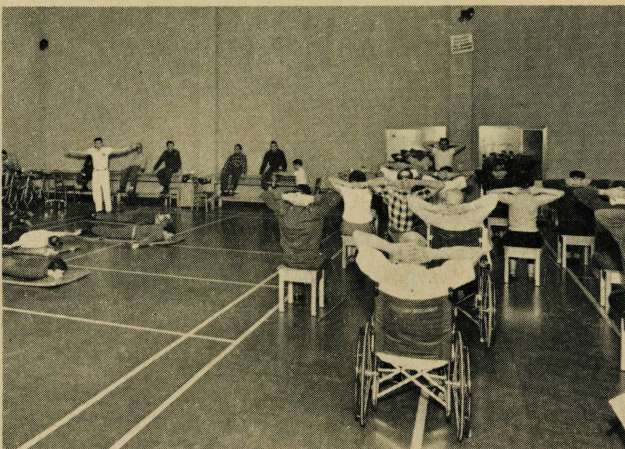
Learning to cope in a kitchen



Group resistance exercises



Weaving as an exercise



Orthopedic patients do arm exercises



Recreation

have been greatly enhanced by the appointment of Dr. J. Dougan, who has undertaken regular psychiatric services in the hospital. Special acknowledgement should be made of the dental consultant services which have been regularly undertaken by Dr. H. W. Hart.

The teaching commitments of the active medical staff are heavy. These include participation in the courses for rehabilitation nurses conducted in the hospital, regular lectures and seminar sessions with the resident staff, and participation in the teaching programs in the Medical College, the School of Medical Rehabilitation, the Department of Physical Education and the School of Social Work of the University of Manitoba. A three-week University Extension Course under the auspices of the Society for Crippled Children and Adults of Manitoba was held in the hospital in June and the Fifth Manitoba Symposium on Orthopaedic Disabilities and Rehabilitation was held in October. A post-graduate course in Rheumatic Diseases was held in March.

SOCIAL SERVICE DEPARTMENT

During the past year, the Social Service Department has given more service to patients, not only because of the increase in numbers of patients, but also because of the increasing use being made of this department. The number of in-patients has increased from 1,016 in 1965 to 1,071 in 1966. The number of out-patients has increased from 1,686 to 1,918. Correspondingly, the number of patients served by the Social Service Department has increased from 3,281 in 1965 to 3,372 in 1966, and the number of treatments given has increased from 8,559 to 9,727. At the same time, the Social Service Department has remained the same in number, consisting of four social workers and a secretary.

The "treatments" or services given by the department have tended to be concentrated on financial problems, prosthetic appliances and other devices, transportation, placement, and employment. All of these are pressing problems which are recognizable by all, and are essential in planning satisfactorily for the patient's discharge from hospital. Other problems not so easily recognized, but requiring more time and skill, are those involving counselling with the patient in his attitude about himself and his illness, his relationship with his family and friends, and their attitudes and understanding of him and his illness.

In September, 1966, the Manitoba School of Social Work participated in a study of the social conditions of all hemiplegic patients who had been discharged from the Manitoba Rehabilitation Hospital since 1963, to their homes in Winnipeg. This report pointed out that, although employment and a variety of interests and hobbies were important, the major social factors in affecting recovery and adjustment to a handicap were the support and understanding of the family and friends. It would therefore seem that with the

employment of a welfare worker who could handle the pressing problems of finances, prosthetic devices, transportation, etc., the present social work staff would be freer to do counselling with patients and their families, and to do follow-up of patients in their homes. This structure of the department should make it possible for social problems relating to environment, family relationship and attitudes, to be discussed with the worker, and in many cases further hospitalization would thus be prevented.

PHYSIOTHERAPY DEPARTMENT

During 1966, we were able to raise the complement of physiotherapists to 16. The work of the department increased in proportion and a total of 5,495 patients were treated throughout the year, accruing 890,939 units of patient treatment time. The problem facing the department now is one of space shortage.

In addition to patient treatment care, 29 second year and 29 third year students from the School of Medical Rehabilitation were in our department for six week periods as a part of their clinical training experience. Also, 15 first year students attended for three week periods.

Three of the third year students will be joining the department this summer after they graduate in May, thus bringing the total of Manitoba graduates on staff to nine. During the summer, interns will be working in the department from McGill, Vancouver, Laval, Saskatchewan, Alberta and Toronto.

From time to time, waiting lists for various parts of the program have had to be established, owing only to the space shortage. Particularly this is noticeable in regard to the hydrotherapy pool and individual exercise treatments, relating to the orthopaedic service. The waiting list is of a short duration and very fluctuating, but is evidence of the growth of the work seen over the last year.

OCCUPATIONAL THERAPY DEPARTMENT

The Occupational Therapy Department has continued to expand giving between 3,500 and 4,000 in-patient treatments per month and between 2,500 and 3,000 out-patient treatments per month.

Additional specific programs have been set up to meet the increasing demand for individual treatment of patients in various categories of disability, where group therapy has not achieved satisfactory results.

As in other departments, space has become limited, especially in the Home Unit. It becomes increasingly apparent that some of the patients, prior

to discharge, should have a small self-contained unit in which to live independently to see if they are capable of self-management.

The department continues to accept for interning graduate students from McGill University and the University of Toronto, also under-graduate students from the University of Manitoba and the School of Occupational Therapy at Kingston, Ontario. We also have second and third year students from the School of Medical Rehabilitation throughout the year for clinical training.

Occupational Therapists are required to make assessments for special orthotic devices and appliances and to confirm their fit and function. The workshops are also helping to supply a demand for custom made appliances needed throughout the province for private homes and hospitals.

DEPARTMENT OF COMMUNICATIVE DISORDERS

In 1966, the staff turnover in the Department of Communicative Disorders made it difficult to give as many treatments as in 1965. Out-patient treatments decreased in comparison with 1965, mainly as a result of the discontinuation of evening group therapy after May. In-patient total treatment time was decreased as there were few in-patients who needed group therapy for aphasics, and in general the number of in-patients who require speech therapy fluctuates.

In order to give satisfactory service to both in and out-patients, it is obvious that the Department of Communicative Disorders requires well trained, qualified and experienced clinicians. That they are not completely successful in this matter is partly caused by the lack of a training school in the prairie provinces. The medical staff of the hospital is giving constructive support toward the establishment of a school of speech pathology in Manitoba.

The total number of patients and treatments for 1966 were as follows:

<u>Total Patients</u>		<u>Total Treatments</u>	
In-patient	65	In-patient	697
Out-patient	168	Out-patient	2457
Total	233	Total	3154

ELECTROMYOGRAPHY DEPARTMENT

A total of 468 patients were examined during the year. This Department undertakes all investigations in Electromyography and Nerve Conduction Velocity estimations for the Province of Manitoba.

ACADEMIC ACTIVITIES

Papers and presentations by members of the medical staff.

Dr. F.D. Baragar

"Ankylosing Spondylitis"

Department of Extension, Course on Rheumatic Diseases,
March, 1966.

"An Outline of Rheumatic Diseases and Drugs Used in Their
Management" Post-graduate Refresher Course in Pharm-
acology for Pharmacists, October, 1966.

"Report for 1966 on the Meeting of the American Rheumatism
Association", Bulletin of Rheumatic Diseases, 1966.

Dr. B.J.S. Grogono

"Problems in the Rehabilitation of the Tetraplegic Patient"
Manitoba Medical Review, Volume 46, No. 3, 1966.

"Complications of Upper Limb Injuries",
Manitoba Medical Review, Vol. 46, No. 5, 1966.

"Two Wheel Trauma - Review of Motor Cycle Accidents",
Manitoba Medical Review, 1966, with Dr. P. Pieron.

Dr. R.R.P. Hayter

"Place of Physiotherapy and Occupational Therapy in Medicine
To-day", Proceedings, Department University Extension and
Adult Education, University of Manitoba, October, 1966.

Dr. M.J.D. Newman

"Allergies of the Nervous System",
College of General Practice, May, 1966.

Dr. L.H. Truelove

"The Articular Manifestations of Erythema Nodosum",
Modern Trends in Rheumatology, Butterworth, 1966.

"The Modification of Spasticity by Techniques of Cooling",
Fourteenth Annual Meeting, Canadian Association Physical
Medicine and Rehabilitation, August, 1966.

"Non-Articular Rheumatism",
Department of Extension, Post-graduate Course on Rheumatic
Diseases, March, 1966.

"Principles of Medical Rehabilitation",
Department of Extension, Course on Rehabilitation, June, 1966.

"Medical Rehabilitation",
Canadian Hospitals Association, 1966.

RESEARCH ACTIVITIES

The Manitoba Rehabilitation Hospital Research Fund was established to stimulate research in the field of medical rehabilitation within the hospital and supported two projects during 1966.

- 1) Dr. M. Newman and Mrs. M. Pflueger: "An Investigation into Perceptual Problems as Experienced by Patients Suffering from Hemiplegia".

A series of tests have been designed to assess the quality and degree of perceptual defects in these patients. The tests are applied at various stages during rehabilitation and correlated with the patient's progress. Controls are effected by the testing of patients with hemiplegia but without demonstrable perceptual defect.

- 2) Dr. L.H. Truelove:

An apparatus has been designed to assess the resistance to passive movement in patients showing spasticity related to various abnormalities of the central nervous system. The investigation is to assess the effects of various forms of cooling on this phenomenon and to attempt to elucidate the mode of action of the various types of cooling which are used in physical therapy.

CONCLUSION

The continued increase in the work of the hospital is reflected in the increasing number of out-patients referred for treatment in 1966. The rate of increase, 14 per cent, was somewhat lower than in the previous two years and is primarily due to increasing difficulties regarding space for treatment, not only in the number of beds available, but particularly in the therapeutic departments. There is an urgent need for consideration of the provision of additional space not only for the natural expansion of existing services but also for the establishment of new programs, such as an out-patient program for the rehabilitation of individuals who have suffered a coronary thrombosis and the establishment of a program for rehabilitation of those suffering from chronic respiratory disease.

L. H. Truelove, M.A., B.M.,
B.Ch., M.R.C.A., D. Phys.
Med.,
Chief of Medical Services.



SPECIAL REHABILITATION SERVICES

In 1966, Special Rehabilitation Services for the socially and vocationally handicapped experienced changes in policy, expansion of facilities and consolidation of services. With the changes, the philosophy of rehabilitation was maintained and efforts made to place greater emphasis on the individually centred approach.

On September 1, 1966, all rehabilitants eligible for training in government sponsored schools were transferred to the Federal-Provincial Training Agreement Program "5". Correspondingly, the responsibility of payment of subsistence allowances and tuition was removed from the rehabilitation counsellor and given to the training centre. As a result, the counsellors were able to spend more time in finding better housing for rehabilitants, budgeting of money and guidance. Individuals attending private trade centres remained on Program "6".

The Vocational Opportunity Services of the Department of Welfare, the Provincial Probation Service, Department of Indian Affairs & Northern Development, Department of Health, Rehabilitation Services, Children's Aid Society and other agencies referred candidates to the Program.

Social, academic and work training only was provided at the Rehabilitation Unit, Brandon, and Pembina House, Ninette, to those persons referred by Vocational Opportunity Services and Provincial Probation Service. The counsellors and probation officers of these agencies are responsible for follow-up in training and on the job.

ACCEPTED CASES:

A.	Carried forward from 1965	344
B.	Accepted in 1966	<u>458</u>

Total cases, 1966. . . 802

A.	Closed - Lost contact, lacked interest or otherwise unsuitable	112
B.	Closed - Referred to Vocational Opportunity Services for follow-up	50
	Returned to former employment after discharge from Sanatorium	19
	Closed - Referred to schools and other agencies	252
C.	Closed - Rehabilitated	<u>72</u>
	Total	495

Total cases 1966	802
Less closed cases	<u>495</u>

Carried over to 1967 307

Indian - 403 Non-Indian - 368 Eskimo - 31

TRAINING

	<u>1966</u>	<u>1965</u>
Attended Pembina House.	132	19
Still attending as of December 31, 1966 .	37	19
Attended Rehabilitation Unit *	42	64
*Closed Aug. 31, 1966, therefore none were in attendance as of December 31, 1966		
Attended Basic Training for Skill Development	60	39
Still attending as of December 31, 1966 .	19	14
Graduated	21	12
Attended Vocational Training	70	38
Still attending as of December 31, 1966 .	32	10
Graduated	26	25
Attended Training-on-the-Job	8	3
Still attending as of December 31, 1966 .	2	-
Graduated	4	1
Attended Regular School	17	17
Still attending as of December 31, 1966 . . .	6	-
Completed or referred to other agencies for follow-up	10	-
Attended Industrial Workshop	9	-
Still attending as of December 31, 1966 . .	1	-
Completed	8	-
Employment Placements 1966	137	98

SOCIAL ORIENTATION, ACADEMIC
UPGRADING and WORK CONDITIONING UNITS

Rehabilitation Unit, Brandon

The Rehabilitation Unit operated from April 1st, 1957, and was closed on August 31st, 1966, in order to consolidate and utilize the facilities established by the Pembina House project at Ninette. Through the Rehabilitation Unit, 409 persons had the opportunity to receive academic and social instruction, along with actually living with and becoming aware of the pressures that are common in industry and cities.

Pembina House, Ninette

Pembina House opened on November 1st, 1965 with 19 male rehabilitants in attendance on January 1st, 1966. Renovation of the men's residence (No. 2 Pavilion) was completed on March 15th, 1966, providing accommodation for 26 students. On April 18th, 1966, the first woman was admitted, using King Edward Cottage as the Women's Residence. Alteration to the building was completed on May 31st, 1966 providing bed space for 16 women.

A work orientation program was established on July 1st, providing actual work for rehabilitants in the various service departments of Manitoba Sanatorium - e.g. switchboard operator, electrical, painting and carpentry.

The program begins six weeks after the student is admitted, with the individual working half-days in each department. Each department supervisor reports the performance of the individual to the counsellors on staff. The balance of the day is spent in the classroom and /or remedial therapy for performance and work habits. Sixty-eight persons were assessed in regular working situations.

On October 1, all resident rehabilitants were transferred to Program "5" and given the responsibility of paying their own maintenance and tuition. A special trust account was opened whereby the student deposits a specific amount of money to be used for clothing. This system serves as a tool to help the individual appreciate the importance of budgeting money.

It is evident that students want the type of training offered at Pembina House. Once they are aware of the benefits to be derived from counselling, only minimum direction is required to carry out the rehabilitation process. In order to explain this in detail, the following case is presented:

Background

"A" is a Metis, male, single, 21 years of age. He came from a marginal income home in northern Manitoba. A received a Grade 1X education and joined the Navy. After two years he was discharged because of a chronic alcohol problem. The Department of Welfare tried without success to place A in employment. Every time A drank he was in trouble with the law.

Plan

A was admitted to the Rehabilitation Unit in Brandon in August, 1965. The counsellors felt that A had a good chance of succeeding if we were to help him understand the seriousness of his problem. The staff relied on the assistance of Alcoholics Anonymous and gradually A began to change. The change was first noticed in the classroom and later in the dormitory. Rather than wait to receive instruction, A began to seek knowledge on his own and gave guidance to the new students.

In October, 1965, A enrolled in Grade X and by mid-term was one of the best students in the school. We noticed that the frequency of drinking had reduced and when placed in summer employment, after graduating from Grade XI, he did not miss one day of work.

In September, 1966, A was enrolled in Grade XII. He plans to go on to university. This year there has been no difficulty with alcohol.

	<u>Brandon</u>	<u>Pembina House</u>
Attended	42	132
Graduated to Basic Training for Skill Development	17	22
Graduated to vocational training . . .	-	19
Placed directly on the job and training on the job	8	21
Transferred to hospital for further treatment	-	1
Referred to regular schools	-	4
Transferred to Industrial Workshop for assessment	2	4
Individuals who left because they felt they could not benefit from the program (several have requested an opportunity to return)	13	20
Still attending	-	37
Treaty - 131 Non-Indian - 39 Eskimo - 4 Male-117 Female-57		

IN-SANATORIUM PROGRAM

Manitoba Sanatorium - The social service program co-ordinates the available community resources and maintains a liaison between the medical team, teaching staff and the patients. A rehabilitation plan is formulated if the individual appears to have the ability to take ongoing training or employment. The worker also obtains details on the patient's home conditions and makes plans for his eventual discharge.

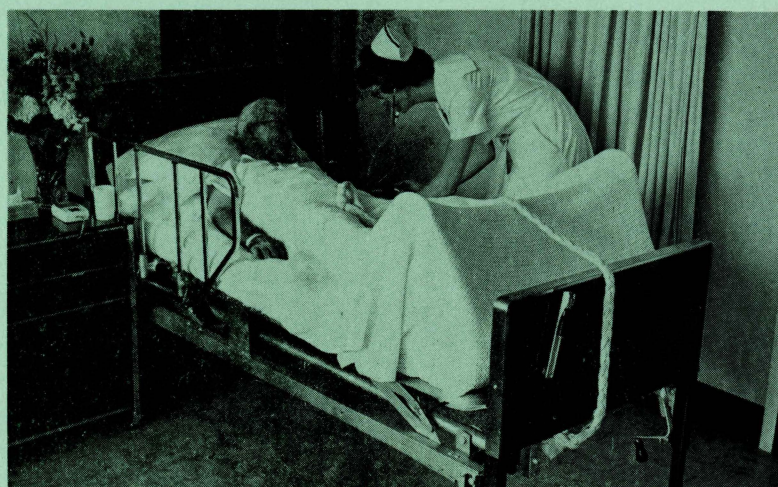
The in-sanatorium school program enrolled 172 students, 15 of whom were staff members. A total of 238 units were completed. Fifty-eight students were between the ages of 6 and 16. Of these 28 were discharged and returned to either public or residential schools. Six students were enrolled in vocational courses such as Typewriting, Business Mathematics, Business English and Bookkeeping.

Central Tuberculosis Clinic - The teacher-counsellor has the same responsibility as the co-ordinator of social service at Manitoba Sanatorium, and also supervises the Clinic's school. Thirty students received academic instruction and twenty received vocational instruction.

R.G. Butterfield,
Supervisor,
Special Rehabilitation
Services.



The schoolroom at Pembina House



NURSING DEPARTMENTS

The past year has been one of quiet achievements with our nursing personnel continuing to render excellent service in all three hospitals.

Manitoba Sanatorium; Miss Derinda Ellis continues to direct our nursing services at Manitoba Sanatorium and never fails to co-operate under all circumstances. Last March, when the threat of a major flood hung over Winnipeg and evacuation of some city hospitals appeared a distinct possibility, Manitoba Sanatorium was asked to be prepared to receive additional patients should the need arise. The staff at Manitoba Sanatorium calmly prepared for this eventuality and there was no doubt whatsoever that the hospital could have assumed any responsibilities required of it had an emergency situation developed.

It is a pleasure to report that some structural changes which helped to increase nursing efficiency were effected in Number One Pavilion and the West Infirmary during the year, and in addition to this, some new furniture and equipment were purchased for the patients' rooms.

Central Tuberculosis Clinic: The Clinic was very much busier than had been anticipated and a marked feature this year has been the high proportion of children admitted. The pattern of admission, as in 1965, has been one of isolated admissions from widely diverse areas of the province and it appears this situation is not likely to change very much in any foreseeable future.

Manitoba Rehabilitation Hospital: There is a great demand for patient accommodation in the Manitoba Rehabilitation Hospital, which is always busy and presents us with medical conditions of enormous complexity, which demand a high degree of nursing skills. The quality of nursing care is maintained at a very high standard and much credit is due to our senior staff who are responsible for setting the pattern. Particular mention of our head nurses and assistant head nurses is appropriate for some of these have been with us since the hospital opened and our program of patient care has benefited greatly from this continuity of direction.

NURSING EDUCATION

Manitoba Rehabilitation Hospital

Post-Graduate Courses in Rehabilitation Nursing: Two courses were held in 1966 and, once again, Registered Nurses from other hospitals and other provinces participated in the program. Mrs. Doris Setter continues to plan and develop the post-graduate program most ably.

In-Service Program for Licensed Practical Nurses: Two courses in Rehabilitation Nursing were held for Licensed Practical Nurses on our Manitoba Rehabilitation Hospital staff.

Nurses Assistants and Nursing Orderlies' Training Program: Nurses' Assistants and Nursing Orderlies completed our in-service training program. The successful nursing orderlies became members of the Manitoba Association of Certified Orderlies.

Nursing Students (Degree Course) from the University of Manitoba gained field experience during the year at the Manitoba Rehabilitation Hospital.

Manitoba Sanatorium

The nursing education program at Manitoba Sanatorium continued to be directed by Mr. William Broadhead. These included in-service programs for our own staff as well as affiliation programs for nursing students from the Brandon General Hospital and Brandon Mental Hospital.

STAFF ACTIVITIES

Several members of our staff pursued further knowledge and experience to broaden their nursing background.

Mrs. Edith Stevenson was successful in obtaining a Diploma in Education and Supervision in Schools of Nursing from the University of Manitoba. Miss Katy Simmons and Miss Doreen Lewis of our Manitoba Sanatorium staff embarked on the Nursing Unit Administration Course offered by the Canadian Hospital Association. Miss Diane Krawchuk of our Manitoba Rehabilitation Hospital staff proceeded to the University of Manitoba for further nursing training.

Miss E.G. Coull, B.Sc.N., Director of Nursing, Manitoba Rehabilitation Hospital and Miss D. Ellis, Director of Nursing, Manitoba Sanatorium, were official delegates at the Manitoba Hospital and Nursing Conference.

NURSING CONSULTANT

Activities of the Nursing Consultant included visits to Manitoba Sanatorium, participation in teaching programs at the Manitoba Rehabilitation Hospital, and attendance at the Canadian Tuberculosis Association Annual Meeting held in Saskatoon. A private pursuit was assembling some personal papers for inclusion in the Oxford University Colonial Records Project, which will be the official history of the British Colonial Administration and which will form part of the Bodleian Library.

Miss E.L.M. Thorpe, M.B.E.,
S.R.N., R.M.N., R.M.P.A., C.M.B. (1)
Nursing Consultant.

FOOD SERVICES

On December 31, 1965, the administration of our Assiniboine Hospital was transferred to the Brandon General Hospital. The overall figures for food service operations in 1966 are therefore diminished in proportion.

In overall operation, 636,957 meals were provided in Sanatorium Board hospitals at a labour cost of \$166,786.54 or 26.49 cents per meal. This figure, as compared with the 1965 figure of 930,611 meals at a labour cost of 21.03 cents per meal reflects both the deletion of the Assiniboine Hospital's operation efficiency and the rising cost of labour on the unit basis at Manitoba Sanatorium.

The total supply cost for the year was \$18,537.86 and, on the unit basis, 2.91 cents per meal. Total food cost was \$ 171,446.78.

Patient meals served amounted to 363,923 meals, as compared to 622,487 meals in 1965.

CAFETERIA

Sanatorium Board cafeterias served 273,924 non-patient meals in 1966, as compared to 308,124 in 1965. The average percent food cost stood at 66 per cent, a rise of six percent over 1965. The average check rose from 32.43 cents in 1965 to 33.04 cents in 1966.

MEALS-ON-WHEELS

"Meals-on-Wheels", which was instituted in Winnipeg in 1965, is a program designed by the Home Welfare Association to ensure the adequate nutrition of selected groups of elderly or disabled persons. The meals (mostly noon-hour dinners, but including some suppers) are prepared five days a week in the kitchen of the Manitoba Rehabilitation Hospital and are distributed to the recipients' homes by volunteers..

Winnipeg distributes more Meals-on-Wheels than any other centre in Canada. In 1966, a total of 11,769 meals were prepared, compared with 3,043 meals in 1965. Individual preferences and special diets are catered to.

Miss N. Tupper Chapman,
B.Sc., M.Sc., R.P.Dt., F.C.F.A.,
Director of Dietary Services.

PHARMACY SERVICES

The year 1966 was challenging and active for the Department. The department has achieved some of its major objectives and will continue to expand and provide necessary professional services within its area of responsibility for better patient care.

PHARMACY AND THERAPEUTIC COMMITTEE

On February 23rd, the Sanatorium Board formed a Pharmacy and Therapeutic Committee comprising representatives from medicine, nursing, pharmacy and administration, with Dr. R.H. McFarlane as chairman, Mr. T. Sims as secretary. The Committee has been an effective means of disseminating information about the use of drugs in the hospital.

HOSPITAL PHARMACY INSTITUTE

On April 23rd, the Manitoba Rehabilitation Hospital was the scene of a Hospital Pharmacy Institute. The program was well attended and was highlighted by the clinical demonstration of a health team approach towards a hospitalized patient. At this time, I would like to express my gratitude to Mr. T.A.J. Cunnings for making our Hospital Pharmacy Institute possible.

HOSPITAL PHARMACY AS A DRUG INFORMATION CENTRE

The Department of Pharmacy in co-operation with Administration has established the pharmacy as a drug information centre. Pharmacy is providing within its area of responsibility required drug information to health team members. The pharmacy has also provided and participated in 15 educational film showings for the professional staff. This is an important area of pharmacy service.

PHARMACY AND MEDICAL RESEARCH

A clinical evaluation of Kanamycin (Kantrex-Bristol) for the treatment of tuberculosis was conducted in the Central Tuberculosis Clinic. In the future, it appears that more drugs will be clinically evaluated in our hospitals.

PROFESSIONAL ACTIVITIES

The Sanatorium Board Pharmacy was represented at two pharmaceutical conventions:

Manitoba Pharmaceutical Convention at Winnipeg and the Canadian Pharmaceutical Association and the Canadian Society of Hospital Pharmacists at St. Johns, New Brunswick.

The significant topics discussed at the National Convention were:

The Pharmacists's Role in Investigational Drugs and the
Pharmacists's Role in Adverse Drug Reactions.

The Director was appointed co-chairman of the local paraplegic sports committee associated with the Canadian Paraplegic Association - Central Western Branch. The object of the committee is to establish a local athletic training program in preparation for the Pan-Am Paraplegic Games to be held in Winnipeg, August 8th to 12th, 1967. A program of Sports and Recreation for the disabled is an important factor for complete rehabilitation.

PHARMACY INSPECTION

The Department of Pharmacy was inspected by the Manitoba Hospital Commission and the Canadian Council on Hospital Accreditation. The Pharmacy Department is meeting all recognized standards of the authorities.

COMPARATIVE PHARMACY STATISTICS

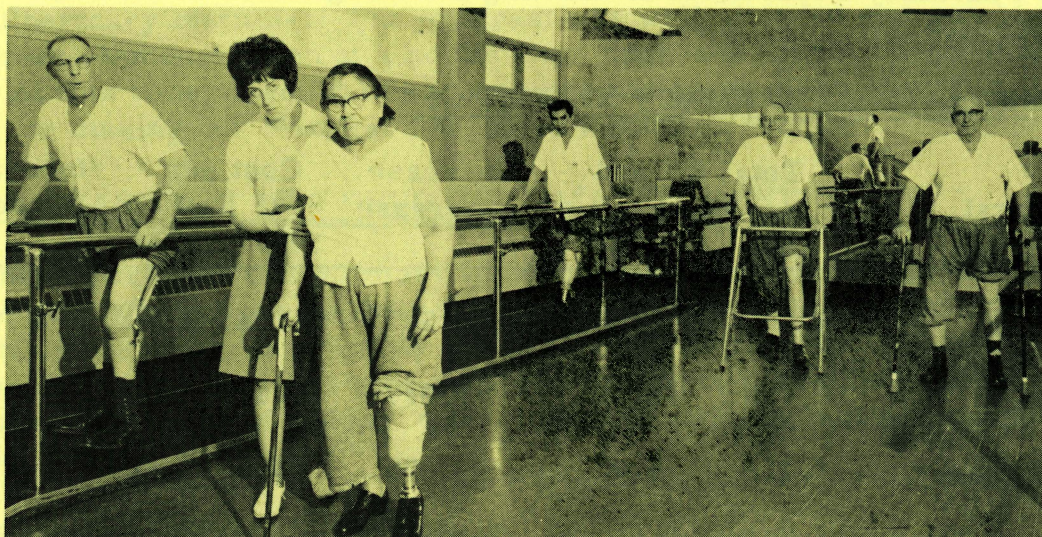
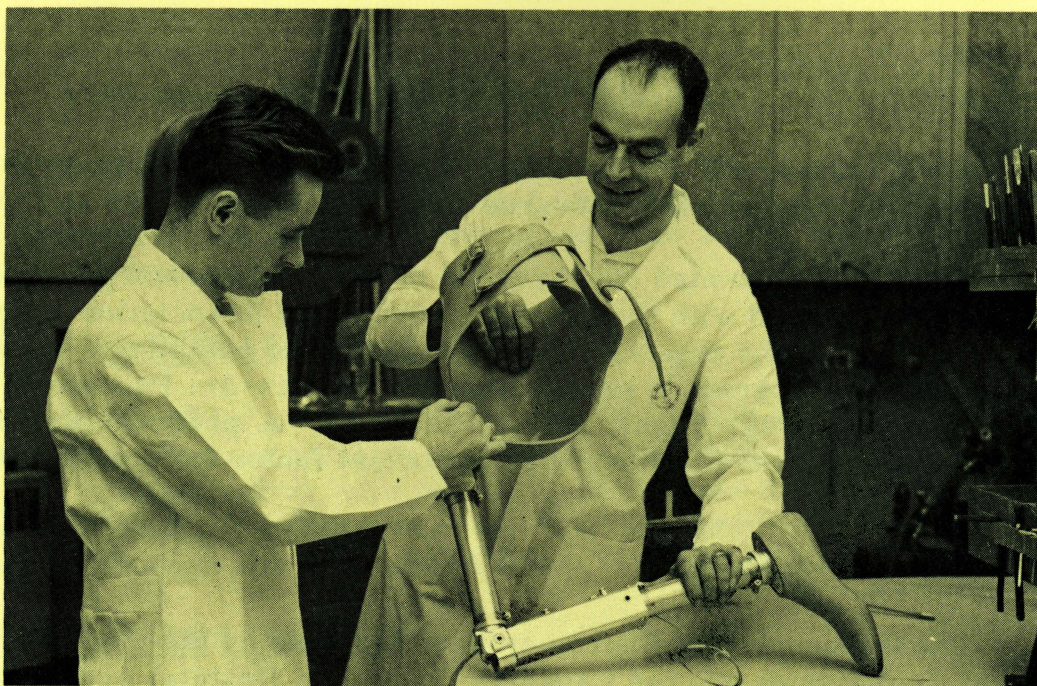
Hospital	Total Rx and Req.		*Increase Decrease	Cost per Pt. Day		*Increase Decrease
	1965	1966		1965	1966	
C. T. C.	2,801	3,308	* 507	\$.204	\$.208	*\$.004
M. R. H.	17,795	19,791	*1,996	.519	.526	.007
Man. San.	8,412	8,937	* 525	.205	.230	.025

The above statistics do not include Federal Health Grant anti-tuberculosis drugs. There has been a continuing increase of prescriptions and requisitions filled for all three hospitals.

DRUG STORAGE

The present drug storage facilities on the hospital wards are proving inadequate. The pharmacy department will study the problem in co-operation with Nursing Department to determine the most practical and effective solution.

Ted Sims, B.Sc., Pharm.
Director of Pharmacy Services.



THE PROSTHETICS AND ORTHOTICS RESEARCH AND DEVELOPMENT UNIT was established in 1963 to research and develop artificial limbs and braces and to serve as a training unit for other medical centres. The unit's accomplishments include the development of prefabricated adjustable plastic sockets and "instant" pylon prostheses which have a central structure made up of compatible parts that fit together like tinker toys. The new Winnipeg legs do away with the need for temporary prostheses. Fitting is made at the time of surgery, and when changes become necessary during the patient's treatment program, the position of the leg segments can be easily adjusted, or entire parts replaced. When the patient leaves hospital, he wears the same leg, neatly encased in a pleasing cosmetic cover, developed by the unit.

RIDDELL, STEAD, GRAHAM & HUTCHISON
CHARTERED ACCOUNTANTS

804-220 PORTAGE AVENUE
WINNIPEG 1, MANITOBA

AUDITORS' REPORT

To The Chairman and Members
Sanatorium Board of Manitoba

We have examined the combined balance sheet of the Sanatorium Board of Manitoba as at December 31, 1966. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances except that we were unable to confirm the Manitoba Hospital Commission operating deficits receivable of \$65,931 and surplus payable of \$9,748 and the Province of Manitoba owner's share grant receivable of \$37,700 as such amounts are subject to final settlement.

Except for such adjustments, if any, which may arise from the settlement of the accounts with the Manitoba Hospital Commission and the Province of Manitoba, mentioned above, and from the ultimate disposal of the buildings as set out in Note 3 to the financial statements, in our opinion the aforementioned statements present fairly the financial position of the Board as at December 31, 1966, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ridell Stead Graham & Hutchison

April 25, 1967

COMBINED BALANCE SHEET AS AT DECEMBER 31, 1966

ASSETS

CURRENT ASSETS

Cash		\$ 129,257
Trust funds held for safekeeping		4,248
Accounts receivable		
Manitoba Hospital Commission		
Patients	\$ 13,086	
Deficits from operations	65,931	
	\$ 79,017	
Province of Manitoba	184,252	
Other commissions and agencies	157,950	
Other	54,529	475,748
Investments, as par value (Market value		
\$490,729)		515,750
Inventories at cost		105,588
Prepaid expense		9,316

1,239,907

DUE FROM SCHOOL OF MEDICAL REHABILITATION 12,581

PROPERTY, PLANT AND EQUIPMENT

at cost 6,571,749

Deduct - Government construction
grants 1,886,196

4,685,553

Less - Accumulated depreciation and
amortized capital grants 1,739,996 2,945,557

UNAMORTIZED BOND DISCOUNT 32,227

\$4,230,272

SANATORIUM BOARD OF MANITOBA

LIABILITIES AND BALANCE OF FUND

CURRENT LIABILITIES

Accounts payable	\$	160,363
Safekeeping trust funds		4,248
Manitoba Hospital Commission - surplus from operations		9,748
Unredeemed coupons and accrued interest		17,593
Current debentures payable		<u>85,000</u>

276,952

DEBENTURES PAYABLE \$2,410,000

Less - current maturities included above	<u>85,000</u>	2,325,000
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UNAMORTIZED CAPITAL GRANTS 64,408

RESERVES

Rate stabilization reserve	75,000	
Laundry, building and equipment replacement	13,267	
Group insurance	24,372	
Other	<u>7,129</u>	119,768

BALANCE OF FUND

Special funds		
Endowment Fund #1	311,721	
Assiniboine Hospital	278,644	
Other	<u>11,418</u>	
	601,783	
Surplus from operations	622,495	
Construction grants and donations	<u>219,866</u>	1,444,144

\$4,230,272

THE SANATORIUM BOARD OF MANITOBA is a voluntary agency which conducts the province-wide tuberculosis control program, including prevention, treatment and rehabilitation. It also operates the Manitoba Rehabilitation Hospital for persons disabled by other illnesses.

Although the government now supplies a large part of the income for hospitals, it is still necessary to depend on private donors to finance tuberculosis prevention, certain medical and research equipment, and many special services for patients.

We are grateful to the many people who make special gifts or bequests to assist the work of the Sanatorium Board of Manitoba, and we invite the continued remembrance and support of those interested in our hospital and health services.

*THE FOLLOWING FRIENDS of the institutions operated
by the Sanatorium Board of Manitoba have made bequests
or gifts of five hundred dollars or more.*

Sir James Aikins, K.C., LL.D.
Mr. W. F. Alloway
Mr. J. H. Ashdown
Mr. Allan S. Bond
Mr. William Bower
Mr. H. H. Bradburn
Mr. J. R. Brodie
Hon. Colin H. Campbell, K.C.
Mr. John Chadbourn
Miss Anna Maude Chapman
Mr. Robert A. Christian
Mr. John R. Clements
Mr. L. R. Clements
Mr. Richard W. Craig
Mr. T. R. Deacon
Mr. Charles E. Drewry
Mr. E. L. Drewry
Mr. F. W. Drewry
Mr. C. H. Enderton
Mrs. C. R. Erickson
Mrs. Jettie C. Finley
Mr. Mark Fortune
Messrs. G. F. and J. Galt
Dr. Wilfred Good
Mr. George Gunn
Mr. Leslie Hamilton
Mr. H. W. Hammond
Mr. E. F. Hutchings
Mr. H. W. Kennedy
Mr. C. M. Koestler
Mr. H. Leadlay

Mrs. Agnes F. Lothian
Miss Louisa J. MacBean
Mrs. Harriet Maud MacQueen
Mr. Edward Mayo
Mr. Everett McCauley
Mr. W. J. K. McCracken
Mr. D. A. McDonald
Dr. W. S. McInnes
Mr. William McKenzie
Mr. Martin McKitterick
Mr. A. R. McNichol
Mr. David L. Mellish
Sir Augustus Nanton
Mr. F. Nation
Mr. W. McG. Rait
Mrs. Noel Rawson
Mr. Roy G. Roberts
Mrs. Jessie I. Scott
Mr. H. E. Sellers, C.B.E.
Mr. G. Shields
Mrs. Margaret Shea
Hon. Clifford Sifton, K.C.
Mrs. Lillian R. Simpson
Dr. D. A. Stewart
Mr. F. W. Thompson
Mr. G. Velie
Mr. W. Warnock
Mr. A. R. Welch
Miss Hazel F. Winkler
Mrs. Valentine Winkler
Mrs. R. Wood

Alpha Delta Pi, Winnipeg
Alumnae Association
Associated Canadian Travellers
(Winnipeg and Brandon Clubs)
Canada Packers Ltd.
Carling Breweries (Manitoba) Ltd.
Charles E. Frosst and Company
G. A. Baert Construction Co. Ltd.
Great West Coal Co. Ltd.
Great-West Life Assurance Co. Ltd.
Labatt's Manitoba Brewery Ltd.
Lions Club of St. John's
Manitoba Brewers' and Hotelmen's
Welfare Fund

Moore's Taxi Ltd.
Rat Portage Lumber Co. Ltd.
Reed, Shaw and McNaught
Riverside Lions Club
The T. Eaton Co. Ltd.
Zol-Mark Industries
Ladies Auxiliary, Associated Canadian Travellers (Winnipeg and Brandon Clubs)
Women's Auxiliary, Canadian Arthritis and Rheumatism Society, (Manitoba Division)
Volunteer Services,
Manitoba Rehabilitation Hospital