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SANATORIUM BOARD OF MANITOBA

• Tuberculosis Control

• Extended Treatment and Rehabilitation Hospitals

A Health Education Service of the

CHRISTMAS SEAL FUND

MANITOBA LUNG ASSOCIATION SANATORIUM BOARD OF MANITOBA

629 McDERMOT AVENUE WINNIPEG, MANITOBA R3A 1P6

A Voluntary, Non-Profit Corporation

OPERATING

X-Ray and Tuberculin Surveys

Travelling Tuberculosis Clinics

Central Tuberculosis Clinic — Winnipeg

Manitoba Sanatorium — Ninette

Assiniboine Hospital — Brandon

Manitoba Rehabilitation Hospital — Winnipeg

Prosthetics and Orthotics Research and Development Unit — Winnipeg

CO-OPERATING WITH

Other Health and Welfare Agencies in the Province

REPORT FOR THE YEAR 1964
Winnipeg, Manitoba

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Printed in Canada



Statement by THE HON. JUDY LA MARSH

Once again, after another year of success in the field of tuberculosis control, it is my privilege to express the gratification of the Government of Canada and my Department to the Sanatorium Board of Manitoba for their tireless efforts in the control and treatment of tuberculosis in both

Manitoba and the Central Arctic. Although the closing of Clearwater Lake Hospital was a sad occasion in many respects, it was nevertheless an achievement and a milestone of progress in the battle against tuberculosis among the Indian and Eskimo population. I would like to congratulate the Board and its dedicated personnel for a job well done.

Although tuberculosis is in a large measure controlled, all workers in this field must continue to apply all their resources and all their dedication to sound public health principles before the eventual goal of complete eradication can be achieved.

May you continue to be in the forefront in your field and may complete success be your eventual award.

JUDY LA MARSH, Minister of National Health and Welfare.



Statement by THE HON. C. H. WITNEY

The Sanatorium Board of Manitoba can look back with justifiable pride on another successful year of operation in both the treatment and rehabilitation field.

The continued decline in the incidence of tuberculosis in Manitoba over the past 20 years reflects the degree to which the Board's operations, both in treatment and preventive measures, have

implemented new technological developments and adjusted to ever changing conditions. The year under review has seen the closing of still another institution for the care of tuberculosis, namely the Clearwater Lake Hospital -- further evidence of the effectiveness of the over-all program of tuberculosis control. It is evident, however, that there will be a need for many years ahead to continue the preventive measures so efficiently organized by the Board, and this work deserves the full support of the public.

This annual report also indicates further development in the field of Rehabilitation, which the Sanatorium Board first so successfully pioneered for tuberculosis patients, and which has more recently been extended to the much wider scope of the Manitoba Rehabilitation Hospital. This co-operative enterprise has been of benefit to all our citizens.

The Board continues to receive well merited support from its loyal and efficient staff, as well as the general public. I welcome this opportunity of expressing the appreciation of the Government for its splendid achievements and to wish it continued success.

C. H. WITNEY, Minister of Health, Province of Manitoba.

SANATORIUM BOARD OF MANITOBA

EXECUTIVE

Chairman	MR.	J.W. SPEIRS
Vice-Chairman and Chairman, Manitoba Sanatorium		
and Preventive Services Committee	MR.	FRANK BOOTHROYD
Chairman, Assiniboine Hospital Committee	MR.	JOHN B. CRAIG
Chairman, Manitoba Rehabilitation Hospital		
Committee	MR.	S. PRICE RATTRAY
Executive Members	MR.	R.H.G. BONNYCASTLE
	MR.	R. L. BAILEY
HONODA BY I THE MEMBERS		
HONORARY LIFE MEMBERS		

MR. A. E. LONGSTAFFE MR. C. E. DREWRY DR. ROSS MITCHELL

STATUTORY MEMBERS

Representing the Provincial Department MR. JOHN GARDNER of Health MR. GEORGE ILIFFE DR. J. A. MACDONELL DR. E. SNELL

ELECTED MEMBERS

MR.	R.	Κ.	ARMSTRONG	MR.	W.	В.	CHAPMAN	MR.	S.	Α.	MAGNACCA
MR.	R.	L.	BAILEY	MR.	GE(ORGI	E COLLINS	MR.	H.	L.	McKAY
MR.	J.	F.	BALDNER	MR.	J.	В.	CRAIG	MR.	F.	0.	MEIGHEN
DR.	L.	G.	BELL	MR.	ED	. DO	WC	MR.	Ε.	В.	PITBLADO, Q.C.
MR.	R.	Η.	G. BONNYCASTLE	MR.	D.	M.	DUNLOP	MR.	S.	PR	ICE RATTRAY
MR.	FRA	NK	BOOTHROYD	MR.	G.	W.	FYFE	MR.	R.	J.	ROBINSON
MR.	W.	R.	BOWRA	DR.	J.	E.	HUDSON	MR.	J.	W.	SPEIRS
								MR.	Η.	Τ.	SPOHN

MEDICAL ADVISORY COMMITTEE

DR. F. HARTLEY SMITH, Chairman

DR.	H.S.	EVANS	DR.	D.L.KIPPEN	DR.	C.B.	SCHOEMPERLEN
DR.	J.E.	HUDSON	DR.	R.O.McDIARMID	DR.	F.R.	TUCKER

EXECUTIVE	DIRECTOR	AND
SECRETARY	-TREASURE	ER

AUDITORS

MR. T.A.J. CUNNINGS RIDDELL, STEAD, GRAHAM AND HUTCHISON

MEDICAL STAFF

SANATORIUM BOARD OF MANITOBA

Consultant, Tuberculosis Services: DR. EDWARD LACHLAN ROSS

CENTRAL TUBERCULOSIS CLINIC

Resident Medical Staff

DR. D. L. SCOTT DR. PAUL MARI DR. E.S. HERSHFIELD (Chief of Medical Services)

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.
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

DR. A. L. PAINE (Medical Superintendent & Surgeon)
DR. LESLIE SALAY
DR. R.A. REILLY
DR. A.P. CHORNOMORETZ

Consultants

Anaesthesiology: WASYL ZAJCEW, M.D., Dip. Anaes.
S. O'BRIEN-MORAN, M.B., B. Ch., G.M.C., D.A., R.C.P. & S.(Eng.)
H.P. CAMRASS, M.B., CH. B. G.M.C.

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.S.,

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.

ASSINIBOINE HOSPITAL

Resident Medical Staff

DR. R. C. LAMBERT (Senior Physician)

DR, B, K, JOE

Active Medical Staff

Dr. M. E. Bristow	Dr.	H. B. Hunter	Dr.	R. Pol	0
Dr. H. P. Camrass	Dr.	D. J. Ireland	Dr.	A. H.	Povah
Dr. R. P. Cromarty	Dr.	N. Y. Joubert	Dr.	F. J.	Purdie
Dr. A. Ditor	Dr.	M. Kozakiewicz	Dr.	L. C.	Rose
Dr. A. J. Elliott	Dr.	J. M. Matheson	Dr.	J. E.	Rowlands
Dr. H. S. Evans	Dr.	R. O. McDiarmid	Dr.	J. H.	Scott
Dr. J. A. Findlay	Dr.	R. McQueen	Dr.	H. S.	Sharpe
Dr. F. Fjeldsted	Dr.	T. J. Mills	Dr.	V. J.	H. Sharpe
Dr. R. K. Hay	Dr.	I. Morrison	Dr.	W. Sha	hariw
Dr. James Hendry	Dr.	R.F.M. Myers	Dr.	E. J.	Skafel
Dr. W. P. Hirsch	Dr.	S. O'Brien-Moran	Dr.	R.H.D.	Sykes

Courtesy Medical Staff

Dr.	Α.	M.	Grant	Dr.	Doreen	Joubert	Dr.	G.	Τ.	McNeil1
Dr.	J.	Ε.	Hudson				Dr.	В.	D.	Sutter

Consultants

Anaesthesiology:	S. 0	BRIEN-MORAN,	M.B., B.	Ch., G.M.C.,	D.A.,	R.C.P.&S.(Eng.)
	H.P.	CAMRASS, M.B	., Ch.B.,	G.M.C.		
	RF	POLO M D				

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

Neurosurgery: R.K. HAY, M.B., G.M.C., F.R.C.S. (Eng.), Cert. Neurosurg.

Orthopaedics: T.J. MILLS, M.B., B. Ch., G.M.C., B.A.O., F.R.C.S. (Irel. & Can.), M.Ch. Orth.

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

A.P. LAPKO, M.D., D.A.B.P.

Pediatrics: R.F.M. MYERS, M.D., Cert. Paed. Psychiatry: M.E. BRISTOW, M.D., Cert. Psy.

Radiology: R.H.D. SYKES, M.D., M.R.C.S. (Eng.), L.R.C.P. (Lond.), G.M.C., R.C.P. & S. (Eng. & Can.), Cert. Diag. Rad.

Urology: R.P. CROMARTY, M.B., F.R.C.S. (Can.), Cert. Gen. Surg.

Active Dental Staff

DR.	W.	R.	HARWOOD	DR.	D.	Κ.	HURST	DR.	J.T.	MILLS
DR.	Α.	R.	HURST	DR.	J.I).L.	KENNEDY	DR.	J.E.	PURDIE

MANITOBA REHABILITATION HOSPITAL

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

- Chief of Medical Services: L. H. TRUELOVE, M.A., B.M., B.Ch., M.R.C.P.(Lond.), D.Phys.Med., Cert. Phys. Med.
- Chief of Anaesthetic Services: D.M. HUGGINS, M.D., Cert. Anaes., D.A.B.R., F.A.C.A.
- Chief of Laboratory Services: L. P. LANSDOWN, M.D., D.P.H., Cert. Bact. Chief of Medical Electronics Services: M.G. SAUNDERS, M.Sc., M.B., Ch.B., V.U. (Manc.)
- Director of Physical Medicine: R.R.P. HAYTER, M.B., B.S., Cert. Phys. Med., D.Phys.Med., R.C.P.(Eng.)
- Medical Director, Prosthetics and 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.

Consultants

- Cardiology: LEON MICHAELS, M.B., B.S., Ph.D., F.R.C.P. (Can.), M.R.C.P. (Lond.)
- Chest Dieseases: R. M. CHERNIACK, M.D., F.R.C.P. (Can.), Cert. Int. Med.
- 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.)
- 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.)
- Opthalmology: 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.
- Otorhinolaryngology: W. ALEXANDER, M.D., D.A.B.O., Cert. Ophth.Otol.
- Pathology: J.G. FOX, M.D., Cert. Path.

NON-MEDICAL SENIOR STAFF

SANATORIUM BOARD OF MANITOBA

Executive Director	T.A.J.CUNNINGS
Executive Assistant	EDWARD DUBINSKY
Comptroller	R. F. MARKS
Purchasing Agent	K. J. ROWSWELL
Nursing Consultant	MISS E.L.M. THORPE, M.B.E.
Director of Dietary Services	MISS NAN. T. CHAPMAN
Assistant Director of Dietary Services	MISS JEAN ALEXANDER
Director of Pharmacy Services	THEODORE SIMS
Supervisor, Special Rehabilitation Services	EDWARD LOCKE
Supervisor, Christmas Seal Sale	MISS MARY GRAY
Surveys Officer	J. J. ZAYSHLEY
Chief Radiographer	W. J. ANDERSON

CENTRAL TUBERCULOSIS CLINIC

Hospital Manager	A. H. ATKINS
Director of Nursing	MISS E.G. COULL
Radiographer	E. W. ACKROYD
Senior Laboratory Technician	MARVIN THORGEIRSON

MANITOBA SANATORIUM

Hospital Manager	NICHOLAS KILBURG
Director of Nursing	
Food Supervisor	MRS; LOIS RICHARDSON
Chief Engineer	GORDON STINSON
Radiographer	WILLIAM C. AMOS

ASSINIBOINE HOSPITAL

Hospital Manager	C.C. CHRISTIANSON
Director of Nursing	MRS. I.A. CRUIKSHANK
Dietitian	MISS ANNE HRENCHUK
Senior Physiotherapist	GEORGE LENNOX
Welfare Co-ordinator	MRS. J. P. JACKSON
Radiographer	F. H. GIBSON
Senior Laboratory Technician	MISS L.E. DELAMATER
Chief Engineer	R.R. CLARK

Non-Medical Senior Staff continued

Sanatorium Board of Manitoba

MANITOBA REHABILITATION HOSPITAL

Hospital Manager A	H. ATKINS
Director of Nursing M	MISS E. G. COULL
Supervisor, Out-Patient Department	MRS. D. L. WHIMSTER
Supervisor, Social Services M	MISS MARY HAMILTON
Chief Physiotherapist M	MISS J. K. EDWARDS
Chief Occupational Therapist M	MRS. JOY HUSTON
Senior Speech Therapist M	MISS MARIE DAMEN
Medical Record Librarian M	MISS ETHEL BROWN
Director, Volunteer Services	MPS W. E. BARNARD
Senior Laboratory Technician M	MARVIN THORGEIRSON
Radiographer E	E. W. ACKROYD
Plant Superintendent W	N. O. D. EVANS

CENTRAL TUBERCULOSIS RECISTRY

Supervisor		MISS	JANET	SMITH
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PROSTHETICS AND ORTHOTICS RESEARCH AND DEVELOPMENT UNIT

Technical Director JAMES FOORT

Section 1

GENERAL REPORTS

James W. Speirs has served on the Sanatorium Board since 1943, and became Chairman of the Board in 1958. A prominent Winnipeg businessman, he is President and General Manager of Modern Dairies Ltd.



T. A. J. Cunnings joined the Sanatorium Board executive staff in 1942. As Director of the Rehabilitation Division, he established the first successful rehabilitation programme for TB patients in Canada. In 1945 he was appointed Secretary-Treasurer of the Board, and in 1947 he assumed his present position as Executive Director and Secretary-Treasurer.



REPORT OF THE CHAIRMAN

LADIES AND GENTLEMEN: I have much pleasure in welcoming you to the 54th Annual Meeting of the Sanatorium Board of Manitoba. The reports which will be presented to you today indicate continued progress in our efforts to control and eventually eradicate tuberculosis in this province; and they describe the developments in our extended treatment and rehabilitation hospitals, and in our other related services.

THE BOARD:

Since our last Annual Meeting the Board has been strengthened by the addition of the following: Mr. Ed. Dow of Boissevain, Mr. D. M. Dunlop of Winnipeg, and Mr. R. K. Armstrong and Mr. S. A. Magnacca of Brandon. We welcome these men to membership on the Board and we are grateful for their advice and support.

During 1964 there was 48 meetings of the Board and its administrative committees. The Board has always had the most generous contribution of time from its members for the direction of its many affairs and I would like again to pay tribute to each member who so faithfully attends meetings and participates in the establishment of policies.

I am sorry to report that Mr. T. A. Moore, who has been a valued member of the Board since 1960, has tendered his resignation, due to the fact that he is leaving Brandon to take up residence in Vancouver. Mr. Moore has been an active supporter of the Board as a member and officer of the Associated Canadian Travellers, Brandon Club, and recently has been the Dominion President of that organization which has, as we all know, been such a loyal and true friend of the Sanatorium Board of Manitoba. We are sorry indeed to have him leave, but we wish him every success in his new endeavours in British Columbia.

I should like to express appreciation to Dr. Hartley Smith, Chairman of the Medical Advisory Committee, and the members of that committee; Dr. F. R. Tucker, Dr. C. B. Schoemperlen and Dr. D. L. Kippen of Winnipeg, Dr. H. S. Evans and Dr. R. O. McDiarmid of Brandon and Dr. J. E. Hudson of Hamiota. Their advice has been sought on many matters during the year and it has been most helpful to the Board.

SERVICES

The past year has, in many respects, been one in which difficult policy and administrative problems developed.

Our continued progress in the control of tuberculosis made it apparent during the summer of 1964 that Clearwater Lake Hospital would not be needed much longer for the treatment of tuberculosis patients. The matter of alternate use of the hospital was discussed with the Manitoba Hospital Commission and the Minister of Health, and the officers of the

Department of National Health and Welfare at Ottawa. Since the Manitoba Hospital Commission decided there was no alternative use for the hospital, arrangements were made to close it. The remaining patients were moved from the hospital in February, 1965, and the contract under which it was operated for the Department of National Health and Welfare will officially terminate today with the approval of Government authorities. A generous arrangement was made by our Board with respect to termination pay for the staff. I am pleased to report to you that some of these Clearwater Lake Hospital employees were transferred to our other hospitals. Most of the equipment has now been distributed to other federal hospitals.

Clearwater Lake Hospital has been operated by the Board since August 1st, 1945. In the intervening years several thousand Indian and Eskimo patients have been treated there. I would like to pay tribute to the many faithful members of the staff who have served so well at this hospital, on many occasions under conditions of some difficulty due to staff shortages and other problems related to the location of the hospital.

The standard of treatment at Manitoba Sanatorium and the Central Tuberculosis Clinic continues at a high level. However, our staff estimate that provincial treatment days will reduce by more than 20,000 in 1965 as compared to 1964; and that Federal Government treatment days will be down about 31,000 days. Since payments are received on a per diem basis, it will be apparent that while this is very encouraging insofar as the Board's ultimate objective of bringing tuberculosis under control is concerned, it raises difficult financial and administrative problems.

With respect to Assiniboine Hospital, Brandon, the Board submitted a brief on May 1st, 1964, to the Manitoba Hospital Commission with respect to the re-construction of Assiniboine Hospital. A good deal of concern and uneasiness was caused among the hospital staff by persistent indications that the Manitoba Hospital Commission was considering that the hospital would not be continued in operation. On March 12th, 1965, the Chairman of the Commission, in letters to the Sanatorium Board and others, announced that the Commission had decided that Assiniboine Hospital should be terminated and that the old Brandon General Hospital should be renovated for extended treatment care.

Assiniboine Hospital's patients come from all parts of Western Manitoba, about 50 percent from the city of Brandon and 50 percent from other parts of the province. This hospital has a record of efficient operation and at the same time has acquired a very high reputation among the people of Western Manitoba for the standard of its services. It has a thoroughly modern Physiotherapy and Occupational Therapy Unit designed to be incorporated in a new hospital, the cost of which (over and above statutory government grants) was all contributed by the people of Western Manitoba. The decision of the Manitoba Hospital Commission appears to have been made without full consideration of the interest and the wishes of the people of the western part of the province and it has not yet been accepted. The Assiniboine Hospital Committee of the Board is therefore continuing negotiations with the Minister, the Premier, and the Manitoba Hospital Commission.

CONTRIBUTORS

We are most grateful to those people who have provided bequests or gifts in 1964 to support the work of the Board. This voluntary support is essential to provide for aspects of our service that are not available through Government Grants or Manitoba Hospital Commission payments. I should like particularly to mention the need for research in the field of long-term illness. The Prosthetic and Orthotic Research and Development Unit, located at the Manitoba Rehabilitation Hospital and financed through a Federal Health Grant, is making a contribution in the development of improved design. The unit has already assisted many patients. Indeed, the work of this unit has had national and even international recognition. Along the same line, the Board in 1964 established a Manitoba Rehabilitation Hospital Research Fund and it is hoped that there will be support for the fund from interested members of the public.

Christmas Seal Campaign: Our tuberculosis preventive services are basically financed by the Christmas Seal Sale. During the calendar year 1964, income from this source totalled \$170,191.00, which is somewhat reduced from the previous year. The Christmas Seal Fund is made up primarily of many thousands of contributions in the two to three dollar range from citizens throughout the province. It is essential that this voluntary fund be well maintained so that our tuberculosis preventive services can continue the progress that they have made in recent years. Indeed, we know from experience that if our tuberculosis preventive services are allowed to suffer, we will be faced with the probability of a reversal of our accomplishments and an increase in tuberculosis. We are therefore especially grateful to the thousands of people who support our Christmas Seal Tuberculosis Preventive Fund. At the same time, we are most grateful to the hundreds of people throughout the Province who lend us voluntary support in so many ways, and in particular, in assisting in our tuberculosis x-ray and tuberculin surveys, and doing volunteer work in our hospitals.

Associated Canadian Travellers: The magnificant support of the Associated Canadian Travellers has been continued in 1964 with contributions from the Winnipeg Club of \$8,377.00 and the Brandon Club of \$18,400.00. The work of the Associated Canadian Travellers undoubtedly represents one of the finest voluntary community services in the province.

APPRECIATION

We are grateful for the continuing co-operation and confidence of both the provincial and federal governments, and the cordial relationships between government officials and members of our staff that are so essential to carrying out a program.

The Sanatorium Board of Manitoba is fortunate in having a loyal, devoted and competent staff who have a special dedication to their work, and to each of them I express sincere thanks for their attention to the needs of the patients and the general advancement of our work.

J. W. SPEIRS, Chairman of the Board.

REPORT OF THE EXECUTIVE DIRECTOR

The Board in 1964 continued to carry out its major objectives:

- 1. Continuation of our vigorous anti-tuberculosis campaign in a realistic and effective manner, to advance our efforts in prevention, treatment and rehabilitation.
- 2. Maintenance and development of a high standard of extended treatment and rehabilitation care in the Board's hospitals which have this function.
- Operation of our Special Rehabilitation Services for Indians, our Health Education Services and related endeavours.

The following table summarizes the Board's services to the people of Manitoba in 1963 and 1964:

Services to Individuals

	1963	1964
Admissions for Treatment Out-Patient Visits	3,077 41,961	2,807 44,550
TB Preventive Service and Rehabilitation	217,502	230,841
	262,540	278,198
Treatment Days for In-patients	271,331	262,054

ASSETS AND LIABILITIES

Assets held by the Board as at December 31st, 1964, including special funds, but not including buildings and equipment at Clearwater Lake Hospital owned by the Government of Canada, totalled 6,253,966.00, after deducting accumulated depreciation of 1,524,048.00. This is a decrease of 380,916.00.

Analysis of Decrease in Net Assets

Depreciation - 1964	\$ 160,325.00
Accounts Receivable	170,149.00
Inventories	43,538.00
Other	6,904.00
	\$ 380,916.00

Liabilities of \$2,811,966.00 decreased \$308,243.00 from the preceding year.

ANALYSIS OF DECREASES IN LIABILITIES

Bank Loans	\$ 105,206.00
Accounts Payable	98,559.00
Debentures Redeemed	85,000.00
Decrease in accrued	
interest and un-	
redeemed coupons	19,478.00
	\$ 308,243.00

HOSPITAL OPERATIONS

At the year end we had 832 beds for treatment in our five hospitals.

Assiniboine Hospital: The operation of Assiniboine Hospital was affected during 1964 by the distinct impression that the Manitoba Hospital Commission had decided that its operation should be terminated as a regional centre for extended treatment and rehabilitation in Western Manitoba. Despite the unsettling effect, the staff continued to give a high standard of service and the average occupancy in 1964 was 87 percent, and the average length of stay was 72 days. Patients from Brandon made up 52 percent of the total and patients from other parts of Western Manitoba accounted for 48 percent.

Central Tuberculosis Clinic; with 64 beds, had an occupancy of 85 percent and an average length of stay of 66 days.

Clearwater Lake Hospital: Operation of the hospital was complicated during the latter part of the year by its impending closure. There was high occupancy during the early part of the year but this dropped off rapidly towards the year end. Average occupancy for the year was 87 percent.

 $\frac{\text{Manitoba Rehabilitation Hospital:}}{\text{to grow and develop in a very satisfactory manner.}} \text{ Average occupancy in 1964 was 89 percent and the average length of stay was 48 days.}$

Manitoba Sanatorium: This institution operated at 84 percent occupancy in 1964, with average length of stay 332 days. The fire commissioner made extensive recommendations with respect to bringing the electric wiring up to standard. A start was made on this work in 1964 and is being continued in 1965. The laundry roof was completely renovated.

INVENTORIES

As at December 31st, 1964, supplies on hand including food stocks, drugs, engineering supplies, fuel and miscellaneous items, totalled \$162,970.00 a decrease of \$24,000.00 as compared to the previous year. This decrease includes an allowance for loss on liquidation of stocks at Clearwater Lake Hospital in the amount of \$10,000.00.

TUBERCULOSIS PREVENTIVE AND REHABILITATION SERVICES

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

Preventive Services	1963	1964
X-Ray Field Services	\$ 14,859	\$ 16,630
Indian Clinics	6,522	3,996
Travelling Clinics	8,130	9,375
Survey Services	38,144	39,990
National Employment Service	3,420	3,647
Dauphin Survey & B.C.G. Project	2,675	643
Hospital Admission X-Rays	71,426	66,274
Tuberculin Surveys	24,529	24,437
Health Education	9,445	8,833
B.C.G. Vaccinations	2,491	2,866
	\$181,641	\$176,691

Expenditures on tuberculosis rehabilitation services in 1964 amounted to \$102,363.00, an increase of \$6,326.00 over 1963.

Expenditures on the special rehabilitation services for Indian and Metis, which is included in the above figures, amount to \$72,376.00, and increase of \$7,374.00 over 1963.

FOOD SERVICES

In 1964 we served 1,145,911 meals. Miss N. T. Chapman, Director of Dietary Services, and her staff are to be highly commended for the efficiency and quality of their work, and the standard of the dietary department.

NATIONAL HEALTH GRANTS

The appropriation available under the Tuberculosis Control Grant from the Government of Canada for the fiscal year of 1964-65 was \$170,521.00. This grant has been decreasing annually and at one time was substantially more than \$200,000.00. The following is a comparative statement of claims on the respective projects for the fiscal years ended March 31st, 1964 and 1965 respectively.

	1964	1965
Streptomycin and Other Antibiotics X-Raying of Admissions to General Hospitals Assistance to Sanatorium Board of Manitoba	\$ 28,248 59,86 7	\$ 35,000 56,398
Assistance to Sanatorium Board of Manitoba Assistance to Manitoba Sanatorium Extension of B.C.G. Vaccination Program Tuberculin Surveys	17,629 45,497 4,796 22,313	17,606 36,727 2,865 21,925
none a series to done as liquin seed to kit	\$178,350	\$170,521

Financing of the Hospital Admission X-Ray Program under Federal Health Grant was terminated as at December 31st, 1964. The Manitoba Hospital Commission has now approved the inclusion of a routine chest film in hospital operating costs.

INSURANCE

Fire insurance, including supplementary perils, was carried on the Board's property in the amount of \$5,667,000.00. Public liability, professional liability, boiler and steam vessel, motor vehicle, fidelity, and robbery cover is carried in appropriate amounts.

PERSONNEL

As at December 31st, 1964, the staff of the Sanatorium Board of Manitoba numbered 868. At the year end there were 347 employees enrolled in the Pension Plan, an increase of 103 during the year. Claims under the Group Insurance Plan covering weekly indemnity, surgical and related benefits were increased \$6,440.00 over the previous year, disbursements being as follows:

Central Tuberculosis Clinic and	
Manitoba Rehabilitation Hospital	\$ 7,131.00
Assiniboine Hospital	7,905.00
Manitoba Sanatorium	7,633.00
Clearwater Lake Hospital	1,797.00
Preventive and Other Services	3,230.00
Total	\$27,696.00

In 1964 beneficiaries under staff life insurance policies were paid \$20,000.00.

As at January 1st, 1965, the surgical cover under our Group Insurance Plan was discontinued and staff were enrolled under the Manitoba Medical Services Plan.

APPRECIATION

Any large organization can only function through the integrity, quality and devotion to duty of all members of the staff. The Sanatorium Board of Manitoba has been very fortunate in this respect. The attention of our staff to the needs of the patients and to the advancement of the Board's work has frequently been the subject of commendation by those who have benefited from their services. I should like to record my gratitude for the splendid support and co-operation of professional and non-professional staff in all departments.

May I take this opportunity to record my gratitude for the direction and counsel of members of the Board and members of the Medical Advisory Committee. The Sanatorium Board of Manitoba has a high reputation

for the responsibility and interest of its Board Members and all of us who are members of the staff have a keen appreciation of the thoughtfulness and consideration with which the Board carries out its many responsibilities.

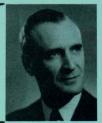
T. A. J. CUNNINGS, Executive Director.

TUBERCULOSIS CONTROL



Dr. Edward L. Ross has been associated with the Sanatorium Board of Manitoba since its pioneering years. He joined the medical staff at Manitoba Sanatorium in 1925 and in 1937 became Medical Superintendent of that institution, a position he held until the fall of 1946 when he came to Winnipeg as Medical Director of the Sanatorium Board.

Chief of Medical Services Dr. D. L. Scott has supervised the work of the Central Tuberculosis Clinic since it was first opened in Winnipeg in 1930. He first became a member of the Sanatorium Board staff in 1928 when he joined the medical staff at Manitoba Sanatorium.



Dr. A. L. Paine, a thoracic surgeon, started his medical career at Manitoba Sanatorium, in 1933, as a Medical Assistant. In 1936 he joined the Sanatorium Board's Travelling Cinics, and in 1947 he was appointed Medical Superintendent of Manitoba Sanatorium, which is now the centre for tuberculosis treatment in the province.





Dr. Stuart L. Carey, Chief of Medical Services, came to Clearwater Lake Hospital at The Pas in July, 1952. A graduate of the University of London, England, he has been associated with the Sanatorium Board since 1946 and for several years had charge of the Board's Travelling Clinic programme in Winnipeg.



Dr. Otto J. Rath was named Regional Superintendent for the Central Region, Indian and Northern Health Services, in November, 1961. He joined Indian and Northern Health Services in 1950 and five years later became Regional Superintendent of the Saskatchewan Region. Prior to his present appointment he was Associate Regional Superintendent of the Foothills Region in Alberta.



Edward Locke has directed the Sanatorium Board's special program for disabled Indians and Eskimos since its inception in 1956. Having attended school and worked in both rural and urban areas of the province, he has long been interested in the Indians and the problems of their acculturation.

TUBERCULOSIS CONTROL IN MANITOBA

I am pleased to report that during the year 1964 there was improvement in the tuberculosis picture, mainly shown by a reduction in new cases. The downward trend was interrupted in 1962 and 1963 by an increase accounted for by local epidemics, which served as a striking reminder that this infectious disease has the potential for sudden increase and that an intensive and continual search for new cases and sources of infection is necessary. In 1964 new active cases were down 19.2 percent - that is, from 286 to 231. There was also a considerable reduction in those requiring hospital treatment, which will be discussed later.

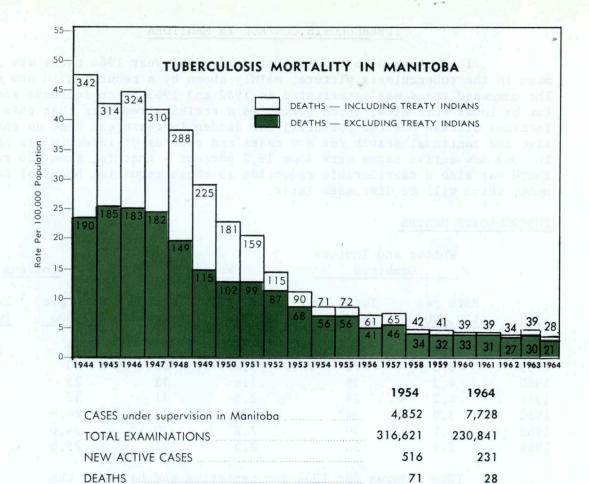
TUBERCULOSIS DEATHS

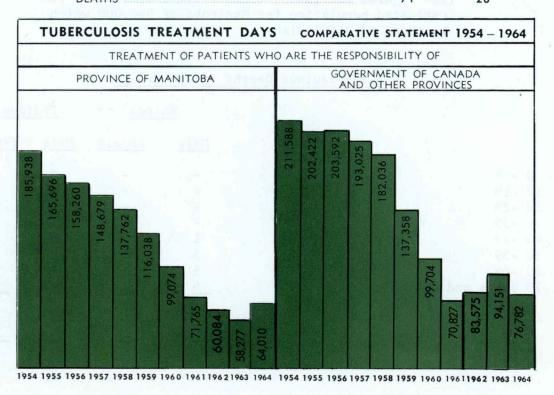
Whites and Indians Combined		Whit	es	Indians		
Year	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths
1950	22.8	181	12.8	102	438	79
1955	8.5	72	6.8	56	80	16
1960	4.3	39	3.8	33	25	6
1961	4.2	39	3.5	31	32	8
1962	3.6	34	2.8	27	26.9	7
1963	4.1	39	3.2	30	34.6	9
1964	2.9	2,8	2.3	21	25.5	7

(The figures for 1964 are tentative and based on the estimated population for Manitoba of 960,000 which includes 27,765 Indians.)

Tuberculous Deaths by Age Groups

		Wh	ites	Indi	lans
		<u>Male</u>	Female	<u>Male</u>	<u>Female</u>
0 - 9		· <u>-</u>	_	1	78 _
10 -19		-			1
20 -29		-	-		-
30 - 39		_	1484	1	-
40 -49		1	2	-	2
50 - 59		5	1	-	kin 🚽
60 -69		5	_	-	1
70 years and	d over	_6	_1	<u> </u>	_1
		17	4	2	5
		_		-	_





	Whites	<u>Indians</u>
Died in Sanatorium	9	2
Died in General Hospitals	_ 11	4
Died at Home	TATULE STATE 1	_1
	21	7

Apart from the lowest death rate from tuberculosis ever reported for Manitoba, a few interesting features can be drawn to attention. There were only three deaths under the age of 39, and 70 percent were over 50. It will be noted that over half the deaths occurred in general hospitals. Most of these were admitted to general hospitals for the treatment of some other condition related to tuberculosis which they had had in the past, and therefore the death was attributed to tuberculosis.

NEW ACTIVE CASES

Year	Whites Active TB	Indians Active TB	<u>Total</u>
1950	3 64	239	603
1955	231	101	332
1960	218	66	284
1961	179	56	235
1962	197	86	283
1963	218	68	286
1964	166	65	231

The new case rate and the rate of positive tuberculin tests are the closest index we have in measuring the degree of control of tuberculosis. The rate for Manitoba of new active cases in 1964 was 23.8 per 100,000 population, which is relatively low, the average for Canada being 30.2 per 100,000. Considering the Indian population alone, the rate was 250 per 100,000. Great progress has been made in lessening infection among the Indians, but it is evident that tuberculosis is still a major health problem among them and improved or more intensive methods of control are needed. There was little or no improvement among the Indians during 1964, both as to new cases and deaths but among the white population new cases decreased by 19.2 percent.

Out of the 144 municipalities and unorganized areas no new cases were found or reported in 97. Twenty-nine had only one each. The most cases from any one area was 11 and that was from Thicket Portage. The case-finding program for 1965 is based principally upon the distribution and number of new cases reported during the previous three years, especially 1964.

		Whites			Indians	
	<u>Male</u>	<u>Female</u>	<u>Total</u>	Male	<u>Female</u>	Total
0 - 9	9	11	20	8	11	19
10 - 19	20	15	35	6	7	13
20 - 29	14	14	28	3	5	8
30 - 39	15	8	23	3	3	6
40 - 49	11	4	15	6	1	7
50 - 59	12	4	16	1	2	3
60 - 69	12	1	13	4	-	4
70 and over	12	3	15	3	2	5
Age not stated	1		1			_=
	106	60	166	_34	31	65

We are impressed always by the number of elderly people on treatment but it is obvious from the above table that young people and children are vulnerable. This does not apply to the children generally but mainly to those who had family or other known contact with tuberculosis. Most had primary disease (a more benign type) and responded well to treatment. They were mainly Indians and Metis and were thus, in this respect, mostly from high incidence areas of the province.

As to type and extent of disease of the new cases, 50 percent of the pulmonary cases had primary disease (childhood), minimal (adult type), or pleurisy. Most were not spreaders of infection. Of greater significance is that 38 percent had moderately advanced or far advanced disease and these were mostly infectious. Non-pulmonary disease accounted for 12 percent of the new cases.

Apart from the new cases, of almost significance as far as the spread of infection is concerned, are the relapses (re-activations) among known old cases. There are approximately 12,000 inactive cases in the province and from among them 51 re-activated during 1964. This compares to 64 the previous year. Most relapses occurred in the first five years after treatment but the breakdowns really do not vary much over a 20-year post-treatment period. The breakdown rate for old cases is over 400 per 100,000 population, compared with 23.8 from the general population. Those in this high risk group are advised to have an annual chest x-ray. In 1964, 5,885 previously known cases were reviewed by us.

In case-searching, special priority is given to groups in which the breakdown rate is highest, such as contacts and those with previous inactive lesions showing by x-ray (whether previously treated or not). Other high risk groups are, of course, Indians, Eskimos and Metis. Those entering jails are routinely x-rayed. The incidence is low among high school and university students but their tuberculin positive rate (infection rate) more than doubles from the ages of 14 to 19, so they are surveyed yearly in Winnipeg. The school teachers in Winnipeg are x-rayed every two years and we plan to extend this program. Those in nursing homes and old folks' homes are x-rayed, and also the Salvation Army Hostel. Those applying to the National Employment Service are routinely chest filmed as well as over 11,000 in industry.

New Active Cases - Diagnoses Initiated by:

		Whites	Indians	<u>Total</u>		
Private Physicians		58	21	79	_	34.2%
General Hospital -		17	8	25)		
	Outpatient Department	7	-	7)	-	33.3%
	Other	35	10	45)		
Surveys		28	20	48	-	20.8%
Chest Clinics		12	6	18	-	7.8%
Other		9	br	9	-	3.9%
Total	example to be produced	166	65	231		

PREVENTION

Tuberculosis prevention consists mainly of the early identification of sources of infection so that spread of infection can be prevented. The selection of areas surveyed is based upon the rate of tuberculosis infection and the incidence of new cases, and these are often the more remote and less populated parts of the province.

Examinations by Clinics, Hospitals and Surveys

Year	Stationary Clinics	Travelling Clinics	Hospital Admission X-Rays	Surveys*	<u>Total</u>
1960	8,003	1,977	69,686	145,681	225,347
1961	8,368	1,969	67,316	171,037	248,690
1962	7,348	1,257	63,515	144,583	216,703
1963	7,525	1,141	67,403	141,433	217,502
1964	7,167	1,629	62,065	159,980	230,841

^{*}Including Indian Surveys

		Whites			Indians	
	Male	Female	Total	<u>Male</u>	Female	<u>Total</u>
0 - 9	9	11	20	8	11	19
10 - 19	20	15	35	6	7	13
20 - 29	14	14	28	3	5	8
30 - 39	15	8	23	3	3	6
40 - 49	11	4	15	6	1	7
50 - 59	12	4	16	1	2	3
60 - 69	12	1	13	4	-	4
70 and over	12	3	15	3	2	5
Age not stated	1		1	000		
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Chest Clinics	12	6	18 -	7.8%
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1964	7,167	1,629	62,065	159,980	230,841

^{*}Including Indian Surveys

Tuberculin and X-ray Surveys

Tota1			159,980
_			
	Tuberculin Test Only	88,733	
	Tuberculin and X-ray	15,303	
	X-ray Only	55,944	

tuberculin test, was 24.7 percent in because those surveyed were from known in 1964, to get a truer picture, those were included in the total positives. creased. Most of those in the higher so the most important tuberculin figure	1964. The rate is high higher incidence area known to be previousl The rate for children age groups were infect	er in 1964 s. Also y positive was not in- ed years ago
New Cases (active)		
White	28 (one	in 1,944 x-rayed
"ave " and the same are supplied to		r tuberculin
Indian		ening) in 788 x-rayed)
Known tuberculous x-rayed	1,234	
Included in the above survey Indians and Eskimos. These people are Consultant Chest Clinics (Travelling)		
oonsurtant onest offnies (fraveffing)		
Number held	44	
Number examined	1,629	
New diagnoses Known tuberculous patients	reviewed 279	
Contacts	650	A Section 1
These clinics have an accomplered cases or those who have had precontacts. Stationary Clinics (Outpatient clinics	evious disease or are t	uberculosis
	ly the Central Tubercul	
Examinations	1,17	7,167
New diagnoses of tuberculos:	is(mostly C.T.C.)	140
Disease active in		124
Known tuberculous patients		3,932
Tuberculous contacts review	Pd De	3 052

B.C.G. Vaccinations

Tuberculosis Contacts	55
Newborn	121
Licensed Practical Nurses	2
Student Nurses (General Hospital)	389
Student Nurses (Mental Hospital)	33
Student Nurses (Practical Nurses)	126
Nurses ^t Assistants	51
Sanatorium and Hospital Staff	52
Mental Hospital Patients	4
Medical Students	1
Dental Students	13
Laboratory Students	75
X-ray Students & Technicians	32
University Students - Faculty of Nursing	15
Dauphin B.C.G. Project	340
	1,309
By Indian and Northern Health Services	4,293
Total	5,602

The BCG project in the Dauphin Health Unit area which began in 1963 was continued in 1964. This consists of vaccinating the high school students. There is a considerable rise in the infection rate from 15 to 25 years of age and in the Dauphin area the new case rate was above the average rate. In some instances, where it may not be entirely possible to prevent infection, they are vaccinated, as in the groups listed above. For these people BCG.will provide a considerable degree of protection from disease, even if they are exposed to infection. The most important group are the Indians. The BCG program of the Indian and Northern Health Services is heartily endorsed by the Sanatorium Board.

General Hospital Admission X-rays

Hospitals	grae jaleitaure (j. j. 1959) tu Populari komunga (j. 1959)	80	
	ssions X-rayed Patients X-rayed ital Staff X-rayed		42,367 9,244 10,454
Total	ital Stall A-layeu	nite o	62,065

This total represents 28.6% of the admissions to the 80 hospitals.

X-ray Findings

It is understood that these x-ray films are for screening only and abnormalities found are assessed by further investigation.

- 1. Of the 62,065 x-rayed, (which includes admissions, outpatients and staff for the 80 hospitals) 34 people had apparently active tuberculosis. This is one in 1,825 x-rayed, and, if just the 42,367 admissions are considered, 20, or one in 2,118, were tentatively thus classified.
- 2. Eight were discovered among out-patients and six among staff.
- 3. 440 of the total, or <u>one in 141</u>, had evidence of tuberculosis that was considered inactive.
- 4. Besides all the above, 3,887 were found to have some other thoracic abnormality, mostly non-tuberculous chest or cardiac conditions.

Due to a major reduction in the National Health Grant it became necessary for the Board to discontinue financing routine admission chest films in general hospitals as at December 31, 1964. It is obvious from the foregoing figures that from the tuberculosis point of view, and probably in the interest of detecting non-tuberculous conditions, routine chest films of patients admitted to general hospitals are desirable. Of the new cases of tuberculosis reported during the year, 77 were from general hospitals and in 25 the source of diagnosis was attributed to the admission film. Also half of the tuberculosis deaths in 1964 occurred in general hospitals. The coverage by the admission film program has been gradually decreasing over a number of years, being only 28.6 percent of the total admissions in 1964, more and more patients having chest films as part of the medical routine requested by the attending physician, especially since financing of general hospitals became a responsibility of the Manitoba Hospital Commission. The hospitals are interested in having chest films on patients admitted and it seems likely that this important service will be continued. Many of the rural hospitals, especially those without the service of a radiologist, are continuing to send admission films to the Central Tuberculosis Clinic for reading.

City of Winnipeg

The Division of Tuberculosis Control of the Winnipeg Health Department continues to contribute greatly to tuberculosis control in Winnipeg, mainly by the Public Health Nursing supervision of patients at home and their contacts, and seeing that advice about treatment and reexamination is carried out. Appended is a report from the Winnipeg Health Department, which sets out pertinent facts concerning tuberculosis in Winnipeg.

This spring the Board in co-operation with the City Health Department is carrying out an intensive survey in a higher incidence area of tuberculosis in the City of Winnipeg, namely, the area bounded by the Red River and Sherbrook Street and by the C.P.R. tracks and Notre Dame Avenue. The schools and industries are being tuberculin tested and x-rayed first, followed by a house-to-house canvass, and the mobile unit covering the area street by street.

TREATMENT

	Province of	Gov't of Canada &	inogen h,		#TB Beds
Year	Manitoba	Other Provinces	Total	% Decrease	Occupied
1952	204,003	215,257	419,260		1,106
1953	201,869	208,092	409,961	2.2	1,116
1954	185,938	211,588	397,526	3.0	1,064
1955	165,696	202,422	368,118	7.4	1,014
1956	158,260	203,592	361,852	1.7	999
1957	148,679	193,025	341,704	5.5	940
1958	137,762	182,036	319,798	6.4	799
1959	116,038	143,352	259,390	18.8	625
1960	99,074	99,704	198,838	23.3	457
1961	71,765	70,827	142,592	28.2	388
1962	60,084	83,575	143,659	.7(increase) 400
1963	58,277	94,151	152,428	6.1(increase) 433
1964	64,010	76,782	140,792	7.6(increase) 278

Tuberculosis

	Bed Ca	apacity	Bed O	ccupancy
8 761 Sperikani 27000 21	Dec. 31/63	Dec. 31/64	Dec. 31/63	Dec. 31/64
Manitoba Sanatorium Central Tuberculosis Clini Clearwater Lake Hospital	268 c 64 120	268 64 120	224 64 <u>145</u>	173 52 53
	452	452	433	278
On treatment in Mental Hos	pitals		la la 8 blooms	11211
			441	_283

Decrease in beds occupied compared to December 31, 1963 - 35.8%

From these tables it will be noted that a decrease in patient days (and beds occupied) began in 1953 and was most marked in 1959, 1960 and 1961. Then for two years there was a slight increase (due to local epidemics). In 1964, patient days decreased again, the beds occupied at the end of the year

being only 278, which represents a decrease of 35.8 percent compared to a year ago. It became possible and necessary to consolidate treatment facilities in the Manitoba Sanatorium, Ninette, and the Central Tuberculosis Clinic in Winnipeg.

Treatment with chemotherapy and surgery remained much the same. We are very much aware of earlier discharge from hospital to continue drug treatment at home and at work, but as Dr. Paine has pointed out, we are limited in the extent to which this can be carried out because 75 to 80 percent of those on treatment are Indian, Metis or Eskimo. With less favourable home conditions, remoteness, and lack of supervision to assure continuation of their drugs, we often have to keep these patients from 12 to 24 months. The average length of treatment was 239.4 days - 199 days for the whites, 242 for Indians, and 386.9 for Eskimos.

We did have the opportunity for a trial project at Thicket Portage on the Hudson Bay Line. This is a small community of about 300 people, nearly all Metis, where an epidemic occurred over a year ago, resulting in 28 admissions. Early in November, 18 were discharged home on drug treatment, which is being supervised by a missionary's wife, the Northern Health Service of the Department of Health and by Dr. S. L. Carey. A public health nurse visits the families once a month and they are x-rayed every three months. This project seems to be working out well and was possible because it involved a limited area. However, as evidence that patients are not kept in hospital for their full drug treatment, 628 received drugs at the Central Tuberculosis Clinic as out-patients. There were 188 patients discharged to continue chemotherapy outside hospital and among these were no Eskimos, only the occasional Indian and few Metis.

Treatment by drugs is being instituted earlier, especially in children who have a positive tuberculin test or when exposure to infection is gross and before there is x-ray manifestation of disease. There were 38 such cases treated in 1964, mostly at home. It is generally recognized that the degree of positivity of the tuberculin test is of clinical significance. Last year, 1,891 with severe reactions were closely followed by chest x-rays - in three months and then at 6 to 12 month intervals for a few years.

CENTRAL TUBERCULOSIS REGISTRY

It is not possible to conduct a good tuberculosis control program without a good tuberculosis registry. Manitoba's is one of the best in Canada and has served as a pattern for many of the other provinces. It contains records of all the tuberculous in the province, past and present, and their families. It is also responsible for the follow-up of medical advice through the health departments and the health units. The Registry's records and their varied and pertinent analyses are invaluable in the direction of the programme.

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

WINNIPEG CITY HEALTH DEPARTMENT TUBERCULOSIS CONTROL

During 1964 there were 10 deaths from tuberculosis in this city, in comparison to 12 last year. As a disease approaches the endpoint of eradication, more skill, effort and resources are needed to trace the last remaining cases and treat them. The society which bears this cost may become somewhat disinterested in a disappearing disease and resent what may superficially appear to be a disproportionately large and costly effort to eradicate an uncommon disease. The Sanatorium Board of Manitoba and the City Health Department have spared no effort during 1964 to remind our citizens that tuberculosis is not yet extinct and that only through constant fighting can we prevent its threatened re-expansion.

The following table illustrates the total deaths from tuberculosis and the rates per 100,000 population in several selected years since 1910 and is presented for comparative purposes.

Year	Number	Rate per 100,000
		THE BOW ROSED FOR
1910	164	123.6
1940	52	23.0
1950	21	8.3
1960	16	6.3
1961	10	3.8
1962	7	2.7
1963	12	4.7
1964	10	3.9

NEW ACTIVE CASES OF TUBERCULOSIS

In tuberculosis the number of deaths usually parallels and consists of a constant proportion of the total number of newly discovered cases. In 1964, 67 such cases were discovered and reported, which is seven cases less than the previous year. Note, however, that in order to discover these 67 cases a much greater search was made including a much greater total number of diagnostic procedures.

	New Cases	Rate per	100,000 F	Population	Found of	on Surveys
1050	70				1 - 441	agent of
1959	79		26.5		2	+
1960	45		17.4		4	4
1961	68		26.5			3
1962	65		25.3		4	4
1963	74		28.8			5
1964	67		26.2		4	4

Usually in tuberculosis on this continent and in recent years most of the new cases were discovered in the older age groups. This year some deviation from this trend was noted, many of the new cases being in younger groups as well.

The number of reactivations this year was even lower than last year's figure. This may be the reflection of a closer follow-up of known cases carried out jointly by the Sanatorium Board of Manitoba and our department. Our public health nurses bear the brunt of ensuring regular attendance of old tuberculosis cases to the hospital for follow-up and, in many instances, this is a very hard task as people who feel well at the moment, accept with great reluctance the necessity to go for another examination.

Pulmonary tuberculosis in recent years diminished to a greater extent than the extrapulmonary types and the total number of these latter cases (23 new cases) tends to approach that of the pulmonary disease (44 new cases) which at one time was largely predominating, being the main contagious form of tuberculosis disease.

How New Active Cases and Reactivations Were Discovered

		New	Reactivations
General Hospital		28	VCV1
Private Physicians		21	2
Community Surveys		4	toel -
Chest Clinics		10	2
Vital Statistics		4	
	Total	67	_10

Note that the two most rewarding methods of case finding is the diagnostic work performed by the practicing physicians and hospitals. Routine chest x-rays of patients presenting a variety of complaints is being done with increasing frequency today with an occasional, unexpected discovery of pulmonary tuberculosis, cancer, heart disease or other diseases. Doctors are increasingly realizing the important value of the chest film as a diagnostic tool.

The total number of tests done during the 1964 surveys was 25,594 in comparison to 16,000 last year, which illustrates how much more was done this year to find approximately the same number of cases (4).

	Tests	Tests Read	Positive	Negative
Schools	11,362	10,741	514	10,227
- Percentage	X.0%	94.5	4.8	95.2
Colleges	1,832			1,432
- Percentage Industrial	12,400	11,863	5,091	78.2 6,772
- Percentage	12,400	95.7	42.9	57.1
TOTAL	25,594	22,604	5,605	18,431
- Percentage		88.3	24.8	81.5

Among students examined in the schools, 4.8 percent of tuberculin tests were positive; 42.9 percent were positive among industrial workers.

Positive reactors were subsequently submitted to an x-ray examination. One active case was found in a school and two in industry.

X-Ray Surveys in Winnipeg 1964

	Number New Active Case
Industrial	11,640 2
Schools and Colleges	2,910 1
National Employment Service	5,174
Central Tuberculosis Clinic, Survey Un	nit <u>2,170</u> <u>1</u>
	21,894
<u>1</u>	<u>1963</u> <u>1964</u>
Admissions to Sanatoria	61 74
Re-admissions to Sanatoria	5 1
Discharges from Sanatoria	46 74

Average number of cases under supervision by the City Health Department - 930.

Note again that the total number of x-rays done by the Sanatorium Board has increased to 21,894 (from 14,904 in 1963). The discharges from Sanatoria equalled the number of admissions, indicating a further shortening of the period of hospitalization for that disease. There was only one readmission in 1964 in comparison to 5 in 1963 and 18 in 1962. This again reflects on the more adequate supervision of old cases.

SUMMARY

At the turn of the century tuberculosis was the most frequent cause of death in the civilized part of the world. With the development of epidemiological and overall public health measures, the first and greatest improvement in the control of this disease occurred in the first few decades. With the advent of chemotherapy during the last twenty years a further limitation of the disease was achieved and the eventual disappearance of tuberculosis as a major cause of death and disability appeared possible. In the last few years, however, this has not occurred and a toll is still being paid yearly for this disease.

Poor locality and depressed socio-economic conditions influence adversely the prevalence of the disease and this has been repeatedly demonstrated to be a major factor in this city year after year.

CENTRAL TUBERCULOSIS CLINIC

In its 34 years of operation the Central Tuberculosis Clinic has played an important part in the Sanatorium Board's efforts to eradicate tuberculosis from the province. In the beginning, its role was mainly to diagnose and to make proper disposal of patients referred to us. The death rate for tuberculosis in Manitoba in 1931 was 61.3 per 100,000, and the majority of new cases discovered were in an advanced stage. In the interval, with the many advances in treatment and prevention, the death rate has been reduced to 2.9 per 100,000. We are still finding new cases of tuberculosis but not as many in the advanced stage of disease. Surgical treatment, treatment with drugs, and earlier diagnosis has reduced the period of treatment in sanatorium, making it possible for many patients to be discharged home on chemotherapy. Here at the Central Clinic outpatients attending for streptomycin treatments during the year numbered 145, and on December 31 there were 79 still attending. Besides this, there were 483 patients who received other anti-tuberculosis drugs during the year, and 308 were still on our lists as at December 31st, making a total of 628 outpatients who received some form of drug therapy during 1964.

A total of 10,077 visits were made to the Central Clinic during the year. Of this number, 1,315 were new examinations, 3,261 were follow-up reviews, and 5,501 were visits for streptomycin treatments. The Central Clinic has 65 beds for treatment and observation, including three for the care of infants. There were 315 patients admitted to these beds and 327 discharges. Of the admissions, 166 were on treatment for respiratory tuberculosis and 33 had tuberculosis of non-respiratory origin. Thirty-six former patients were admitted for review. Of the 327 discharges, 112 were allowed home to continue on outpatient chemotherapy treatment; 76 were transferred to sanatorium for surgical or more prolonged treatment; there were 10 deaths, six from tuberculosis and four from non-tuberculous disease; and two left against medical advice. The average length of treatment was 66.9 days.

At the Central Clinic last year 138 new discoveries of tuber-culosis were made, and it is of interest to note that we were again rewarded in our search for early cases, 42 of the new discoveries being classified as minimal. The incidence of disease in older people still remains high; over the age of 40 there were 52 cases of all forms of tuberculosis. It is obvious that our preventive services should concentrate on the older age groups.

LABORATORY AND X-RAY DEPARTMENT

Laboratory investigation is very important for diagnosis and follow-up care. The unit here is small but does operate very efficiently. For our purpose alone, 15,576 examinations of various kinds were carried out. Vaccination with B.C.G. to increase resistance to disease was continued and there were 814 vaccinations performed by our laboratory staff. We have had good success with this program over the years, with over 95 percent conversions.

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

MANITOBA SANATORIUM

In the year 1964, which was the 55th of operation of Manitoba Sanatorium, two features are perhaps most worthy of note. One was the decline in patient population after a temporary rise initiated in 1961 by treatment centralization and sustained throughout 1962 and 1963 by an increase in new cases. The second event was a move to change patient management, especially of those of native extraction. Steps were taken to begin a new program aimed at earlier and, when possible, more productive rehabilitation.

Treatment days at the sanatorium totalled 79,505, a decline of 7,453 from the previous year. The average patient population dropped from 238 to 218. The patient population on December 31, 1964, was 173. Fifty-six percent were Treaty Indians or Eskimos, 23 percent were Metis and 21 percent were white. Males continued to outnumber females two to one. Thirty percent of the patients were under the age of 16, many being smaller children; 51 percent were between the ages of 16 and 59 and 19 percent were 60 years of age or over.

ADMISSIONS AND DISCHARGES

Admissions totalled 222 and were classified as follows: First admissions, 43; re-admissions, 35; transfer, 136; review, 8. Of the 162 with respiratory tuberculosis, 131 had re-infection disease which was minimal in 40, moderately advanced in 55 and far advanced in 36. Twenty-three had primary disease and eight had pleurisy with effusion. In the 16 patients with non-respiratory tuberculosis the sites involved were meninges 1, peritoneum 1, hip joint 1, cervical glands 3, genito-urinary 10. Four admissions, all children, had recently occurring positive tuberculin reactions only. There were 40 non-tuberculous admissions of which one was new born and the rest came for diagnosis or review. Twenty-four patients, or 13.6 percent of all admissions, had reactivated disease; 18 were previously treated with chemotherapy and, in addition, three had had lung resection.

Of the 272 discharges, 229 were from tuberculosis, 41 were in for diagnosis, investigation or review and two were new born. Of the 10 deaths, five were from tuberculosis and five from other causes. There was one disciplinary discharge in a non-bacillary patient and 16 patients left against medical advice. Of this latter group, six are again admitted, eight are at home but non-bacillary and one is bacillary and untraced.

OUT-PATIENTS

Total attendance in this department was 1,199. A total of 370 old patients came back for review; 376 were contacts. The remaining 453 came for diagnosis and yielded three new discoveries of tuberculosis and 14 non-tuberculous chest conditions.

TREATMENT

The average length of time in hospital was 301 days, compared to 332 in 1963. The long hospital stay reflects the type of patient under treatment rather than any emphasis on prolonged inactivity. At present,

79 percent of our patients are of native extraction. We still believe that adequate treatment of all patients with definite tuberculosis demands one and a half to two years of well supervised chemotherapy. For patients returning to good living conditions, much of this treatment can be carried on safely at home. But for most patients of native extraction good living standards are not easily met outside the sanatorium.

The sanatorium still must provide rest, including strict bed care, in the early toxic stages of disease. Confinement during the infective period, the alleviation of symptoms and providing surgery when needed are also essential. Otherwise, the sanatorium's main role today is to indoctrinate the patient in the rules for healthful living, to adjust chemotherapy with respect to sensitivity and tolerance, to school the patient well in taking drugs over long periods of time and to direct and regulate his activity.

With respect to chemotherapy, the relative use of the various drugs is based on some practical considerations as well as therapeutic effectiveness. Streptomycin is used whenever possible because, being injectible, it has the advantage over oral drugs of certainty of administration. Also, for many patients who live in outlying areas it is available only while they are in hospital. PAS is a useful drug for home treatment, but often it requires lengthy adjustment in hospital because of gastro-intestinal intolerance. For these reasons we make wide use of thes two drugs as well as the most potent and easily tolerated drug, INH. Whenever possible, patients are started on all three first-line drugs; when, because of resistance or intolerance, this cannot be done, second-line drugs are substituted. Of the 173 patients at the year's end, the number on the various drugs was as follows: INH - 146, PAS - 109, Streptomycin - 89, Cycloserine - 33, Isoxyl - 19, Pyrazinomide - 7, Trecator - 2, Viomycin - 2. As regards drug combinations two patients were on four drugs, 99 on three drugs, 49 on two drugs, eight on one drug and 15 on no drugs. The incidence of drug tolerance was as follows: Streptomycin - 26, PAS - 28, INH - 3, Trecator - 4, Viomycin - 3, Isoxyl - 1. Drug resistance developed in the following: Streptomycin - 13, PAS - 7, INH - 3, Viomycin - 1; clinically resistant to all drugs - 6.

Surgery, though less frequently used, is still an important part of treatment. It is mainly in native patients that we do elective surgery to prevent relapse and expedite discharge. Among all patients undergoing chest surgery the indication was classed as elective in 78 percent and mandatory in 22 percent. Mandatory indications included persisting cavity with positive sputum, intractable haemorrhage, destroyed lung and empyema.

During the year 60 major chest procedures were performed as follows: Pneumonectomy - 3, lobectomy - 13, segmental resection - 10, wedge resection - 15, thoracotomy - 3, thoracoplasty - 10 stages, plombage - 2, Schede thoracoplasty - 3, chest wall sinus repair - 1. There were no operative or post-operative deaths. Tracheostomy was done at operation in two poor risk patients. Three drug resistant patients developed tuberculous empyema following resection and are now responding to Schede thoracoplasty.

Orthopedic surgery was further reduced. Dr. W. B. MacKinnon performed one spinal fusion and one sinus excision about the hip joint. Dr. R. O. McDiarmid did tonsillectomy in four children.

X-RAY AND LABORATORY DEPARTMENTS

The X-ray Department did 3,537 radiographic examinations compared to 3,811 last year. The department also did 105 electrocardiographs, took 50 clinical photographs and made 48 colored slides of surgical specimens.

In the laboratory the volume of work remained about the same. A total of 19,704 tests were performed, representing 44,265 units of work. locate Control of the Control of the

PUBLICATIONS

Five to Seventeen Year End Results in 402 Patients with Pulmonary Resection:

Dr. A. L. Paine and Dr. Z. Matwichuk, published in the American Review of Respiratory Diseases, November 1964.

A. L. PAINE, M.D. Medical Superintendent as the pass to read that beginning the thinking on it pends that is

CLEARWATER LAKE HOSPITAL

Early Thursday morning, February 4, 1965, the last load of patients left Clearwater Lake Hospital en route to Ninette, thus closing an institution that had been in operation since 1945, combatting tuber-culosis throughout Northern Manitoba. During that same hour a thin, ill Indian male walked into the out-patient department for examination and was discovered to be suffering from far advanced pulmonary tuberculosis. The battle was in a state of armed neutrality with no complete victory.

During the past two years epidemics of major proportion have occurred on three occasions in the north: one at Cranberry Portage, one at Thicket Portage and the worst at Eskimo Point in the Northwest Territories. Clearwater Lake Hospital was the hub in the wheel of Northern Preventive Services, and by its location and experience dealt with these problems expediently. However, due to the declining incidence and patient population, an unsound economic situation was created, which led to the ultimate decision to cease operation.

Although Extended Treatment facilities for non-tuberculous, chronic diseases, became available during 1958, this service did not develop as extensively as was hoped, due partly to staffing problems and to remoteness.

In the 20 years of operation, over 7,000 patients were processed in the admitting office of the hospital and almost 5,000 received the advantage of active therapy. In the tuberculosis preventive field, several hundred thousand x-ray films were interpreted and a finger was kept on the pulse of tuberculosis control.

In 1956 the patients and the staff were honored by a visit from the former Governor-General Vincent Massey and at different times the hospital acted as host to various governmental dignitaries, including the Hon. Paul Martin in his capacity as the federal Minister of Health. On three separate occasions the hospital was awarded an accreditation certificate from the Canadian Council on Hospital Accreditation. Immediately following the closing of the hospital, the 125 members of the staff were assisted by the Sanatorium Board to find employment elsewhere. The professional staff members were placed in other institutions and the majority of employees encountered no real difficulty in obtaining satisfactory positions elsewhere. The stability of the institution was illustrated by the number of long term employees on staff, for at least 14 of them had served for periods of five years or more and two had been at the hospital for 19 years.

A telegram received from the Department of Northern Affairs expressed the appreciation felt for the care of Eskimo patients. "On behalf of this department and the numerous Eskimos who have been hospitalized under your care, I extend to you and all your staff many thanks for your kindness, co-operation and assistance you have extended to us for many years. Thanks for a job well done."

It was indeed a "job well done", but the appearance of that sick man in the out-patient department on the day of closure was a stark reminder that the problem of tuberculosis was not solved and that vigilance would have to continue to avoid future outbreaks.

The statistics for the year 1964 reveal that an active program was carried on. Of the 179 admissions to the tuberculosis section, 109 or 60.9 percent were first admissions and 66 or 60.5 percent of these were new active cases of tuberculosis. Twenty-one percent of the new admissions were bacillary and have no doubt left their trail of infection.

There were 271 discharges and 61 of these were transfers to other institutions. Two patients died.

The average length of treatment had diminished to 211.3 days and the total patient days numbered 53,687.

The Extended Treatment Program became devoted mainly to caring for long-term, elderly patients who required limited active treatment and, for the most part, had limited rehabilitation prospects. Only 96 extended treatment patients were admitted during the year.

In closing, a word of caution is necessary. In Northern Manitoba tuberculosis still smoulders slowly like muskeg fires. If outbreaks are not tracked down and stamped out one by one, a major problem could arise. Constant, continued surveillance of known cases and the search for new cases are necessary.

S. L. CAREY, M.D. Chief of Medical Services.

TUBERCULOSIS CONTROL AMONG INDIANS AND ESKIMOS

The tuberculosis control and treatment program was conducted along similar lines to previous years. This is still considered an important program in that we cannot yet state that tuberculosis is controlled. However, we can state that there has been steady improvement in the total picture over recent years, with the exception of 1963 when the Eskimo Point epidemic occurred.

Case finding activities included community chest x-ray surveys, school surveys, hospital admission chest x-rays, investigation of patients with a high index of suspicion, physician referrals, nurse referrals and tuberculin testing. The chest x-ray survey is still one of our best methods for the detection of active cases in a scattered population, particularly in the remote areas such as the Central Northern and The Pas Zones. In the overall picture the ratio of active cases detected to the number x-rayed was 1:621. Of the total number of active cases (128) detected, 42 or 33 percent were discovered by the x-ray surveys. The cases detected by survey in turn led to the discovery of other active cases by investigating contacts.

The routine x-raying of patients admitted to hospitals is another valuable method for detection of cases. This program is a routine in departmental hospitals as well as in many others. The number of people x-rayed is not obtainable but would cover at least 80 percent of all admissions. Chest film interpretations are done in Manitoba and the Central Northern Zone by the medical staff of the Sanatorium Board of Manitoba and by Fort William Sanatorium for the Sioux Lookout Zone.

The overall percentage of people x-rayed was 60 percent. This is a fair percentage since it does not include very young children, hospital admissions and many of the nomadic Indians in southern areas. The percentage is based on total populations and not on available population.

The incidence rate of new and reactivated cases per 100,000 population in 1964 was 294, compared to 597 in 1963. The trend over the years is a gradual but steadily decreasing incidence - from 729 in 1958 to 294 in 1964.

The incidence rates of new and reactivated cases by area are Central Northern Zone (Eskimo 601), The Pas Zone (500), Southern Manitoba Zone (262), Sioux Lookout Zone (258) and Norway House Zone (189). The two most isolated areas still have the highest incidence and the Eskimos, as in years past, still have the highest incidence of tuberculosis.

At the end of the year all detected active cases had been admitted to hospital. A total of 171 active tuberculous cases were in hospital on December 31, 1964, and of these 42 were Eskimo and 129 were Indians.

The morbidity rate per 100,000 population of all known active cases in the Central Region at the end of the year was as follows:

	Indian	Eskimo	Total
No. of Tuberculosis Cases	129	42	171
Rate/100,000	309	2296	392

The majority of the cases under treatment were in the one to 44 age group, weighted more heavily in the one to 19 age group. Of the 98 new active cases detected there were 25 primary, 13 minimal, 26 moderately advanced, 12 far advanced, two miliary and 20 other types. All were predominantly in the 0 to 44 age group. The percentage of reactivated cases discovered in the region was 23 percent of the total number of active cases discovered.

The tuberculosis mortality rate of Indians and Eskimos in the region in 1964 was 27.5 per 100,000 population, the Eskimo rate (54.7) being a little more than twice the Indian rate (23.4). The overall mortality rate from tuberculosis is still about ten times the non-native rate (2.3). The 12 deaths occurred in the 10 to 70 years and over age group.

Tuberculosis patients were admitted from the field to Clearwater Lake Hospital, Manitoba Sanatorium, Central Tuberculosis Clinic and Fort William Sanatorium. The total number of patient days for treatment of active tuberculous cases in Central Region was 87,617 days.

This year the tuberculin testing and B.C.G. program was intensified, utilizing the Heaf tuberculin test and the percutaneous method of B.C.G. administration. A total of 6,267 Indians and Eskimos were vaccinated. The number of tuberculin conversions following B.C.G. administration is not known, but we feel that much better results could be obtained by intradermal B.C.G. administration. A special controlled study was undertaken by this office and Southern Manitoba Zone which will be completed in February, 1965.

As usual we have had an excellent close liaison and complete cooperation from the Sanatorium Board of Manitoba without whose able assistance in case finding, patient review, follow-up service and treatment services, we could not have functioned in this field of tuberculosis control. The Fort William Sanatorium also assisted greatly in the Sioux Lookout Zone in the field of film interpretation, consultations and treatment services.

As is evidenced from the statistical data, the tuberculosis control program in this Region is improving but control is still eluding our group. The various concerted efforts of all involved in this field of endeavour must continue if we are ever to achieve our aims.

O. J. RATH, M.D., M.P.H.
Regional Superintendent
Medical Services
Department of National Health
and Welfare

SPECIAL REHABILITATION DIVISION

The year 1964 was a year of stock taking, of constructive thought and planning, and although no spectacular changes took place during the year, it is anticipated that many future developments will be recorded as having had their beginning in 1964.

IN-SANATORIUM PROGRAM

Although vocational rehabilitation has long been a part of the in-sanatorium program it has not kept pace with the progress made in medical treatment. It is believed that many patients could be discharged much earlier but for the fact that they are either too irresponsible to continue the necessary drug therapy at home, or home conditions make it impossible for them to do so. To return these people to the depressed home conditions which contributed so largely to their developing tuberculosis in the first instance would likely result in relapse, in which case all the effort and expense of treatment will have been for naught. The solution lies in helping these people, while still in sanatorium, to develop an awareness of and a desire for improved living standards. accomplish this the individual must begin as early as possible to think of himself as a rehabilitant. Although drug therapy and medical followup will be required beyond this point, it is proposed that the emphasis be on post-hospital planning with the majority of time being devoted to social and vocational orientation, academic upgrading and work conditioning. This suggests a major change in patient management, and in bringing it about it is essential that care be taken not to undermine the treatment program. Patients and staff alike must have opportunity to adjust to this new concept. In 1964 the first experimental steps were taken toward this goal. At the Manitoba Sanatorium, Ninette, a Co-ordinator of Rehabilitation and Social Services was appointed; an Advisory Committee comprised of the Medical Superintendent, the Supervisor of Rehabilitation Services, the Business Manager and the Coordinator of Rehabilitation and Social Services was set up to coordinate medical and vocational services and, in general, to be responsible for program development within the institution. A new system of case conferencing was inaugurated with a view to the development of a post-hospital plan for every patient regardless of vocational potential. A start was also made toward the development of a workshop and additional classroom facilities. Pre-vocational (academic) training has always been an important part of the in-hospital program and will play an even more vital role in future.

While these changes were contemplated, the in-hospital school program continued to function as in the past. At Manitoba Sanatorium, Miss G. Manchester and the teaching staff, in addition to providing increased classroom instruction, continued active bedside teaching. At the Central Tuberculosis Clinic Mr. M. Pearce provided instruction not only to the tuberculosis patients in the clinic but also to those students referred by the Social Service Department of the Manitoba Rehabilitation Hospital. At Clearwater Lake Mr. C. Spafford was again in charge of the school program. Thanks to the efforts of these teachers, 334 students from Grade 1 to 12 were able to further their schooling. Of those registered at the end of the year, 40 percent were (Treaty) Indian; 27 percent were Eskimo and 53 percent were of other racial origins. Many of these people had never attended school prior to entering sanatorium and in some instances spoke little or no English. In the Handicrafts Division, 230 persons were registered during the year.

A growing interest in the individual centred approach to the social aspects of rehabilitation, as developed by the Indian Rehabilitation Program, was indicated by an increasing number of inquiries from other agencies during the year. However, due to limitations of staff and facilities, the number of persons to whom services were provided in 1964 remained approximately the same as in 1963. Of those accepted under the Indian Rehabilitation Programme, which is responsible for the provision of services to all disabled Indians of Treaty status, regardless of the nature of their handicap, 35 percent had disabilities resulting from tuberculosis, 25 percent from various orthopedic conditions and 19 percent from other physical causes; for example, arthritis, loss of hearing, chronic heart failure. The remaining 21 percent, although having no physical disabilities, were handicapped as a result of social factors. When applied to this group, the rehabilitation approach becomes a preventive as well as a restorative measure. Of the 17 persons requiring psycho-therapy during the year, only four had previous histories of mental illness and only two required treatment in hospital. In 12 cases the diagnosis was similar. The condition was described by one psychiatrist as being the result of "anxieties in immature personalities". The symptoms did not become evident until after the individual commenced training and as a result we were often not contacted by the referring agency until after the individual had failed to follow through with a training program. The danger of pressures created by too rapid upgrading without adequate social preparation must be recognized. It is far less expensive, both in terms of human values and in dollars and cents, to take preventive measures than to provide treatment in mental institutions.

ASSESSMENT AND SOCIAL ORIENTATION UNIT, BRANDON

The Unit continued to function as usual despite the growing demands on staff time. The purpose of the Unit is to provide an atmosphere in which the rehabilitant may take stock of himself, where he may learn about available opportunities, acquire an understanding of the demands which will be made on him and gain appreciation of his own strengths and weaknesses. While trying various tasks and being exposed to various situations, the individual is supported in his efforts to overcome the fears of failure, the lack of confidence and the lack of direction and purpose which more often than not are the real disabling factors. The success of the Unit program, which was designed and staffed to handle a maximum of 16 rehabilitants at a time, is dependent on the ability of staff to establish a close working relationship with each rehabilitant. This is, however, only the beginning. Those leaving the Unit to enter training or to take employment for the first time require continuing counselling and guidance. Initially, most rehabilitants were transferred to Winnipeg, but with the development of Brandon as a training centre an increasing number are now remaining in Brandon. At one point during the year a total of 42 rehabilitants were in training in Brandon. These were not simply physically handicapped but otherwise well adjusted persons requiring re-training to fit them for re-employment. In all cases the physical disability, regardless of degree, was overshadowed by a complexity of social handicaps. They ranged in age from 16 to 40, five were married men with families. Many had never visited an urban centrelet alone lived in one. Most had physical impairments which necessitated ongoing supervision of medication. As mentioned previously, 17 were emotionally disturbed to the point of requiring psychotherapy. The key to the rehabilitation of this special group attending the Unit at Brandon is not the facility but rather the staff. It is a matter of people working with people.

TUBERCULOSIS REHABILITATION PROGRAM

Rehabilitation in general received a setback in 1964 when Miss Margaret Busch, who has done such fine work with non-Indian tuberculosis patients, was herself re-admitted to sanatorium. All staff have pitched in but it has been no simple matter to fill the gap left by such an able and dedicated person as Miss Busch.

With regard to the following statistics, the same criteria have been applied to the white (non-Indian) tuberculosis group as to the Indian groups. Persons were registered as "accepted" only after all remedial" medical treatment had been completed, or was unlikely to interfere with the vocational rehabilitation plan. Prior to being accepted all persons who appeared to have some vocational potential were listed either as "awaiting study" or "under study". In hospital, the married woman, the older patient, the child who is likely to return to school, and others, who it is believed will pick up the threads of their lives where they left off when admitted to hospital, must be considered and in many cases counselled. But as these people were not until late in 1964 considered to be a responsibility of the Vocational Rehabilitation Division, the numbers dealt with were not recorded. With the emphasis now being placed on earlier discharge it is more than ever important that steps be taken to ensure that home conditions are satisfactory; that supervision of medication and adequate follow-up are available; that the child does return to school and, in general, that every precaution is taken to minimize possible re-admission. Since January 1, 1965, 66 such cases have been recorded.

CASELOAD - 1964:

	INDIAN REHABILITATION	TUBERCULOSIS REHABILITATION		
A:	Carried over from 1963	133	62	195
B:	Referrals	187	64	251
*C:	Non-registered	38 358	$\frac{3}{129}$	$\frac{41}{487}$

*Non-registered means any case which, having been closed, later requires counselling or assistance not necessitating any direct expenditures.

ACCEPTED CASES:

	Carried over from 1963 Accepted in 1964	62 66	62	
Д.	necepted in 1904	128	65	193
	Indian - 100	Metis - 25	Eskimo - 3	Whites - 65

DISPOSITION OF ACCEPTED CASES	INDIAN REHABILITATION	TUBERCULOSIS REHABILITATION
A: Closed - Lost contact, lacking in-	W. S. RUTTBLIGHTON	E REGISTORING OF
terest or otherwise no longer con-	*	
sidered suitable	30	4
B: Closed - Returned to regular school		
program or utilizing other resources	6	1 1
(transferred to other agencies)		
C: Closed - Rehabilitated, no longer re-		
quiring services	17	18
D: Carried over to 1965	75	42
TRAINING		
Attended Rehabilitation Unit	51	0
Attended Regular Schools	darrie bida if he	2
Attended Provincial Pre-vocational Schools	33	7
Attended Vocational Schools	16	27
Received Training on the Job	6	0
Completed Pre-vocational Training	14	0
Still in Training	17	6
Completed Vocational Training	5	7
Still in Training	6	16
Completed Training on the Job	3	0
EMPLOYMENT		
Placements - 1964	56	10

In 1964 interest in training continued to mount, and with the development of new facilities and new courses the number eligible for training increased. It is now realistic for the rehabilitant who, on entering the Unit, may have had as little as four or five years of schooling to think in terms of trades training, providing he is of average intelligence and willing to apply himself. At the Unit he can achieve an equivalent of Grade 7 in Maths, English and Literature in a matter of three to four months. He may then progress to the Provincial Basic Training for Skill Development (prevocational training) Course. This course now requires approximately six months to complete but it still means that the student who may have started as low as a Grade 4 level can, in a matter of ten months, upgrade himself to the point where he is able to qualify for any one of the many trades training courses now available. It also means that the average time between acceptance and closure has been extended. We may now anticipate anyone qualifying for training will. on the average, require 10 months of upgrading, 10 months of vocational training, plus a further 12 months of follow-up after placement. In some instances, particularly where the rehabilitant has had no previous work experience, he may be encouraged to work for a time between pre-vocational and vocational training.

In 1964, 12 students from the Indian group returned to training and nine were waiting to enter training at the end of the year. Many of the non-Indian group come from socially and economically depressed homes and in comparing these people with those of Indian origin one is impressed with the similarity of their attitudes and problems. Opportunities for self-improvement, upgrading and re-establishment have never been greater. Naturally there are still gaps in services but more often the reason for persons failing to take advantage of opportunities is that they are either unaware that these opportunities exist, or are unable to appreciate the benefits to be derived from them.

EDWARD LOCKE, Supervisor

EXTENDED TREATMENT AND REHABILITATION HOSPITALS



Dr. Ralph C. Lambert was appointed senior physician at Assiniboine Hospital, Brandon, in April, 1964. Born in St. Kitts in the Leeward Islands, he studied medicine at Birmingham University, England, graduating in 1962. He did post-graduate work in medicine at Hammersmith Hospital, and in addition to his M.B. and Ch.B. degrees, is a member of the Royal College of Physicians, London.



Dr. Leslie H. Truelove was appointed Chief of Medical Services of the Manitoba Rehabilitation Hospital in February, 1960. A graduate of Oxford University, he received his Diploma in Physical Medicine from the Royal College of Surgeons and the Royal College of Physicians in London in 1959. Before coming to Canada he was a clinical research fellow in the Rheumatic Unit of Northern General Hospital in Edinburgh.

MANITOBA REHABILITATION HOSPITAL

The year 1964 was a busy one. There was an overall steady increase in the work of the hospital as represented by the number of patients receiving treatment in both out-patient and in-patient departments. In addition, all departments continued to improve their standards of work as routines became more clearly established.

The hospital has functioned well as a general rehabilitation centre catering for all types of physical disability with special facilities for the treatment of arthritis, hemiplegia, paraplegia and amputations. A total of 160 beds were maintained throughout the year, and although there was some seasonal variation, patients were distributed amongst the three wards in accordance with the following diagnoses: R-6, Arthritis; R-5, Hemiplegia (neurological and miscellaneous); R-4, Orthopaedic (post-traumatic and post-operative) and Paraplegia.

The general principle of treating patients in groups wherever possible has been followed, but nearly all patients have required one or more periods of individual treatment during their day's program, whether in the Physiotherapy, Occupational Therapy or Speech Therapy Departments.

During the year 1,080 patients were admitted as in-patients and 1,242 patients were registered as new out-patients. These figures represent a considerable increase over the corresponding figures for 1963.

The average daily in-patient occupancy was 143 or 89.4 percent of established beds. It is a pleasure to record the debt of gratitude owed by the hospital to our Chief Resident, Dr. E. Bosley, and the other members of the resident staff who have maintained a consistently high standard of professional work.

OUT-PATIENT DEPARTMENT

A total of 2,680 medical reviews were conducted by members of the medical staff. The great majority of patients have been individuals with major disabilities requiring a co-ordinated approach to their rehabilitation.

With the ever increasing load of work, the nursing staff of the department under the direction of Mrs. Doris Whimster has shown great skill in maintaining a comprehensive appointment system for all patients.

IN-PATIENT SERVICES

The average length of stay for the whole hospital was 48 days, varying from an average stay of 86 days for cases with quadriplegia to 30 days for patients with post-traumatic orthopaedic conditions.

The numerical distribution of patients by diagnosis under the most common categories was as follows:

Rheumatoid Arthritis	251	Osteoarthritis	64
Hemiplegia	182	Multiple Sclerosis	34
Paraplegia and		Amputees	63
Quadriplegia	95		

Orthopaedic Cases:

Fractures	119
Post-operative	-65
Other	51

A large number of patients were transferred from general hospitals, comprising 41 percent of all patients admitted. Eighty-eight percent of patients who were transferred from hospitals came from the Winnipeg area.

Development of the organized program for the treatment of patients with rheumatoid arthritis has continued under the particular direction of Dr. F. D. Baragar. An analysis of the results in this group of patients compares favourably with other centres.

On the neurological ward, the program for the treatment of patients with hemiplegia has developed under the direction of Dr. I.H.K. Stevens. A feature of this program, which has received particular attention, has been the area of training in the activities of daily living and the attempt to adapt a patient to the home conditions.

The physical treatment of patients with orthopaedic conditions and prostheses has made lively progress under the direction of Dr. R.R.P. Hayter.

Dr, B.J.S. Grogono was appointed Medical Director of the Paraplegic Unit at the beginning of December. This unit, which contains 16 beds, works in close association with the Canadian Paraplegic Association and provides comprehensive treatment for patients with this condition.

CONSULTATION SERVICES AND TEACHING COMMITMENTS

Members of the consulting staff have continued to take part in regular consulting clinics at the Assiniboine Hospital in Brandon, the Dauphin General Hospital, The Canadian Arthritis and Rheumatism Society rural clinics, and the Manitoba School, Portage la Prairie. In addition, clinics are held by various members of the staff in the Winnipeg General Hospital, St. Boniface Hospital, and the Children's Hospital of Winnipeg.

A full teaching program for members of the resident medical staff was continued throughout the year with regular ward rounds, weekly seminars, and monthly therapeutic conferences. In the later months of the year, weekly tutorials were also held.

Members of the medical staff took part in the course in Rehabilitation Nursing as well as various teaching commitments in the School of Medical Rehabilitation and in the Faculty of Medicine of the University of Manitoba. A three-week University Extension Course in Rehabilitation was held in June. The Annual Meetings of the Canadian Physiotherapy Association and the Canadian Association of Occupational Therapy were held in part in the hospital. Study courses in conjunction with the meeting of the Physiotherapy Association and of the Association of Occupational Therapists were held in the hospital.

Clinical sessions of the Fourth Manitoba Symposium on Rehabilitation and Orthopaedic Disabilities were held in the hospital auditorium in December.

SOCIAL SERVICE

The work of this department has continued to expand under the guidance of Miss Mary Hamilton. A full-time social worker is attached to each of the three rehabilitation wards and one to the out-patient department.

All in-patients are seen on admission and problems assessed, maximum efforts being made for co-operation with outside agencies.

Amongst the many agencies with whom the hospital has been particularly associated during the year, the Canadian Arthritis and Rheumatism Society, the Victorian Order of Nurses, Care Services, and the Society for Crippled Children and Adults of Manitoba have been particularly prominent in the amount they have contributed towards the rehabilitation and care of patients who have been in the hospital.

PHYSIOTHERAPY DEPARTMENT

In spite of a heavy load of patients, this department under the direction of Miss Joan Edwards, had done an outstanding job both in the treatment of individual patients and in the development of organized services.

A total of 2,074 patients were treated during the year, this being an increase of 25 percent over 1963. There was a small seasonal decline in new patients attending the department in July, but apart from this, approximately 185 new patients were admitted to the department for treatment in each month during the year.

OCCUPATIONAL THERAPY DEPARTMENT

During the year, 1,526 new patients were treated, this being an increase of 32 percent over the previous year.

Approximately 135 new patients were taken on for treatment in the department each month during the year. The department has developed in scope under the able direction of Mrs. Joy Huston and has been commented on by distinguished visitors as one of the finest in existence.

SPEECH THERAPY DEPARTMENT

Miss Marie Damen and her staff have continued to demonstrate the place of speech therapy in adults and the valuable contributions that can be made in the rehabilitation of certain conditions.

During the year 218 new patients were seen, this representing the maximum amount of work that can be done with the present staff. It is hoped that the work of this department will be able to expand considerably as more staff becomes available.

ELECTROMYOGRAPHY SERVICE

An average of 38 patients were examined each month throughout the year, representing an increase of approximately 20 percent over the

work for the previous year. This is a comprehensive diagnostic service in Electromyography which serves the whole province of Manitoba.

PAPERS AND PRESENTATIONS

Dr. F. D. Baragar: "Recent Advances in Rheumatology"; Manitoba Medical Review, Vol. 44, No. 1, January 1964

Dr. R.R.P. Hayter: "Management of Athletic Injuries"; Canadian Physiotherapy Association, Winnipeg Branch

"Physiotherapy Techniques" and "Instant Prosthesis for Leg Amputation"; Brandon District Medical Society

Dr. I.H.K. Stevens:

"Management of Cerebral Vascular Disease with Hemiplegia"; Manitoba Medical Review, Vol. 45, No. 1,
January 1965

Dr. L. H. Truelove: "The Place of Physical Treatment in a Long-Term Care Institution"; Mental Retardation, Vol. 14, No. 1,
April 1964

"Motor Nerve Conduction Velocity in Acute Idiopathic Polyneuritis"; Canadian Neurological Society Annual Meeting

"The Treatment of Rheumatoid Arthritis in a Rehabilitation Hospital: Results of a Staged Program"; Fourth International Congress on Physical Medicine and Rehabilitation

"Parkinson's Disease, Pre and Post-operative Assessment"; Canadian Association of Occupational Therapists Annual Meeting

CONCLUSION

The startling increase in the demand on the services of the hospital during 1964 amounted in most departments to between a 20 and 25 percent increase over corresponding figures for 1963. The satisfactory state of affairs foreshadows an increased staff in all departments and an expectation that further facilities will become necessary.

In addition to the facilities for treatment which have been outlined, the Board has offered encouragement in the research field by the establishment of a Manitoba Rehabilitation Hospital Research Fund in the latter months of the year, and it is hoped that this fund will grow rapidly with the object of supporting much needed research in many areas of rehabilitation.

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

MANITOBA REHABILITATION HOSPITAL

(From the Report of the Hospital Manager)

For this hospital, 1964 was a year of continued consolidation, encouraging progress and the opportunity for a reassessment of objectives, principles and policies.

At the close of 1963, it was reported that, along with advances in that year towards the establishment of an extensive, co-ordinated rehabilitation program, there was a recognized responsibility to achieve improvement in certain key areas. One such area was the speedier turn-over of beds and the maintenance of maximum occupancy for the benefit of the people of Manitoba and the medical community of the province. It is pleasant to report a marked improvement in this field during 1964, as it is to acknowledge a growth in liaison and understanding with the allied community agencies, and the advance towards a welding of those associations into an expanding community rehabilitation service in the broadest sense of the term.

From a most stimulating 12 months, certain events stand out:

- 1. The completion of the first formal post-graduate course in rehabilitation nursing offered in Canada. Beginning with the general principles of nursing and the philosophy of rehabilitation itself, the course covers all aspects of the medical, physical, social and psychological rehabilitation of the sick and disabled, and comprises some 60 hours of formal classroom instruction as well as clinical experience on the wards.
- 2. The election of Dr. Dwight Parkinson as President of the organized Medical Staff of the Manitoba Rehabilitation Hospital at the annual meeting of the Medical Staff in April.
- 3. The appointment in August, and the formal installation in the hospital auditorium in October, of two full-time hospital chaplains to serve patients in the Manitoba Medical Centre.
- 4. The hospital actively participated in the annual congresses of the Canadian Physiotherapy Association and the Canadian Occupational Therapy Association, both held in Winnipeg in the summer of 1964.
- 5. The fifth annual Manitoba Symposium on Rehabilitation and Orthopaedic Disabilities attracted to the hospital in November some 150 physicians and surgeons from all parts of Canada. Eminent guest speakers were present from a number of countries.
- 6. Also in November, research engineers and medical directors from the Prosthetic and Orthotic Research and Development Units in central and eastern Canada assembled to review their respective activities and exchange technical data.
- 7. The close of the year was marked by an outstanding program of Christmas activities, notably a remarkable patients' party and concert on December 16. December 23 saw the now traditional Nine Lessons and Festival of Carols presented to a participating audience of patients, visitors and staff.

TREATMENT SERVICES

By the end of 1964 some 280 doctors had applied for and been granted courtesy medical staff privileges and were able to act as attending physicians upon their patients in the hospital. Of these, some 200 doctors admitted patients. Another 300 doctors in the province referred cases to the hospital under the care of the hospital medical staff.

VOLUNTEER SERVICES

The Volunteer Services Department continued to develop in a most gratifying manner. Mention should be made of the outstanding contribution made by this group to the welfare of the patients and the work of the staff. During the year this department presented cheques to furnish two complete four-bed wards in the hospital, and they donated 9,390 hours of free time in many areas within the hospital.

CONCLUSION

In conclusion it is submitted that the general atmosphere of the hospital in 1964 was one of satisfying achievement, and the expressed appreciation of the great majority of patients and physicians was gratifying. Regular patient entertainments were held, including many films shows, some stage and variety productions, band concerts and choral presentations. Staff functions continued to be popular and a significant factor in promoting good inter-departmental relations. Sections of the Recreation Club continued to be active in bowling, gymnastics, table tennis, basketball, badminton, volleyball, ceramics and art. Without question, the good atmosphere within the hospital was due to the many staff members who so freely gave of their time and effort to plan and advance the patient and staff activities. Great credit is due to them.

A. H. ATKINS Hospital Manager

ASSINIBOINE HOSPITAL

Assiniboine Hospital, providing extended treatment services to the people of Western Manitoba, has continued to operate with a high patient occupancy for the year 1964. Patient days for the year were 63,042 as compared to 63,177 for the previous year. The percentage of occupancy was 87 percent for the current year, the variation for the past three years being only one percent.

During the year 865 patients were admitted to the 198-bed hospital, as compared to 1,008 for the previous year. Patients admitted from the rural area of Manitoba made up 47.8 percent of this total, the balance, 52.1 percent coming from the Brandon area. An analysis of admissions into age groups reveals that 53.6 percent were seventy years of age or over.

	MALE	FEMALE	TOTAL
Under age 40	28	48	76
40 to 49 years	24	24	48
50 to 59 years	42	31	73
60 to 69 years	85	76	161
70 to 79 years	134	118	252
80 to 89 years	95	117	212
90 and over	22	21	43

Discharges for the year number 853, and of these 176 or 20.6 percent were deaths. The number of autopsies performed were 78, the autopsy percentage being 44.3 percent. The average length of stay of discharged patients was 72.3 days as compared to 59.9 days for the previous year. This increase in the length of stay reflects a change in policy restricting the admission of patients for the performance of emergency or elective surgery.

MEDICAL STAFF

During the year the following changes took place on our resident medical staff: Dr. A. H. Povah relinquished his position as Chief of Medical Services as of March 31st, in order to devote himself full time to private practice. He had filled this position since 1960, when the institution became an extended treatment hospital, and previously had served as Medical Superintendent, since 1951, while the institution was known as the Brandon Sanatorium. Dr. William Shahariw, also left our resident medical staff to go into private practice at the end of May. Both physicians have rendered many years of devoted service to the institution, in their respective capacities. Dr. R. C. Lambert, a specialist in internal medicine, assumed the position of Senior Physician in April of 1964 and Dr. Byung Kil Joe joined the resident medical staff in September. The resident medical staff were responsible for the care of 38.3 percent of patients admitted to the hospital; the balance, 61.7 percent being cared for by physicians from the Brandon area.

PHARMACY

There was a substantial increase in the volume of prescriptions for the year, accompanied by an equally substantial increase in the total cost of drugs used. The cost of drugs per patient day rose from .72¢ for 1963 to .85¢ for 1964, an increase of approximately 18 percent.

PHYSIOTHERAPY, OCCUPATIONAL THERAPY AND SPEECH THERAPY

The physiotherapy department gave 12, 387 treatments to 451 inpatients and 3,103 treatments to 272 out-patients. This work load has been in excess of what three physiotherapists can be reasonably expected to handle and treat properly. The addition of at least one physiotherapist must be one of our prime goals for the coming year, in order that this department may be able to provide a satisfactory service. A total of 264 patients received 17,059 intermittent positive pressure breathing treatments, a reduction of 20 percent from those provided the previous year.

The occupational therapy department provided 5,230 treatments for 295 patients through the year. The staff, consisting of one qualified therapist and two trained assistants, found it difficult to cope with this volume of work and it is quite apparent that a second qualified therapist is urgently required.

A speech therapist, from the Brandon Hospital for Mental Diseases, visits the hospital for a three hour session once a week. Since October a retired school teacher provides a three hour daily remedial program for the patients, with the direction provided by the speech therapist.

LABORATORY AND X-RAY DEPARTMENTS

The laboratory performed 24,523 procedures, representing 55,526 units of work. A trained laboratory assistant was replaced by a qualified laboratory technologist, increasing our staff complement of technicians to three. The increased volume of technical work necessitated this upgrading of staff.

X-ray examinations for the year totalled 3,927 as compared to 4,548 for 1963.

SOCIAL SERVICE DEPARTMENT

Activity of the welfare co-ordinator included the preparation of social histories for 294 patients and other services for another 117 patients. Frequently, a great deal of detailed work is necessary in preparing for the discharge of patients to their home or to alternate care institutions. Of the cases handled 138 were able to return to their own home while 107 patients were discharged to senior citizen homes, nursing homes and similar accommodation. This office, in addition, handles a multitude of family and financial problems on behalf of the patients. The services of the department are an important adjunct to the treatment service offered by the hospital and is a vital line of communication between it and the community.

OUT-PATIENT SERVICES

There were 7,820 out-patient visits during the year and of these 4,306 were for physiotherapy and occupational therapy, 1,192 were tuberculosis investigations and 625 were for other diagnostic and treatment service. The tuberculosis investigations include the x-raying of all the Brandon school teachers, referrals from the Department of National Health and Welfare, inmates from the Brandon Gaol, members of the R.C.M.P. and cases referred by the Department of Health.

GENERAL

The various service departments of the hospital, including food services, housekeeping, maintenance, and administrative staff, have operated efficiently during the year. Many maintenance problems are being encountered due to the fact that the hospital plant is becoming more inadequate with each passing year. A "Fire Emergency Program" was heavily stressed during the fall of the year, and the responsibility for the success of this program was largely due to the efforts of the Chief Engineer and the nursing staff. Staff relations have remained harmonious and the staff continued to render loyal service throughout the year.

We wish to express our sincere thanks to the Associated Canadian Travellers, Brandon Club, the Women's Auxilliary of the Associated Canadian Travellers and radio station C.K.X. for their continued support. We also thank the members of the Sanatorium Board, the Assiniboine Hospital Committee and the Administrative Staff of the Sanatorium Board for their endeavours on our behalf. Finally we wish to express our appreciation to the Assiniboine Hospital Medical Staff, the various federal and provincial health agencies and the numerous voluntary organizations with whom we have contacts throughout the year.

C. CHRISTIANSON Hospital Manager

Section 4

NURSING AND FOOD SERVICES

Miss Ethel L. M. Thorpe, M.B.E., R.N., R.M.N., R.M.P.A., C.M.B. (1), became Nursing Consultant for the Sanatorium Board of Manitoba in March, 1963. Prior to her appointment she served for 13 years as matron of Bellevue Hospital in Jamaica, and during World War II she was a Lt-Colonel and Principal Matron in Queen Alexandra's Royal Army Nursing Corps (T.A.N.S.). She was born in Norwich, England, and is a graduate of the Royal Free Hospital, London, and (in psychiatric nursing) from Hellesdon Hospital, Norwich.



Miss Nan Tupper Chapman, Director of Dietary Services, joined the Sanatorium Board staff in 1948. She holds a B.Sc. degree, summa cum laude, in Nutrition and Dietetics from the University of Illinois and an M.Sc. in Foods and Nutrition from the University of Alabama. Prior to her appointment with the Board she taught at the University of Saskatchewan.



NURSING DEPARTMENTS

QUANTITY OF NURSING STAFF

There was an upward adjustment in trained nurse quotas in all our hospitals during 1964, and the recruitment was better than during 1963. Several overseas graduates eased the position at Manitoba Sanatorium and Clearwater Lake Hospital, The Pas. The staffing position at the Central Tuberculosis Clinic remained stable. At Assiniboine Hospital it continued to be necessary to employ a percentage of part-time staff, especially during the summer months when the shortage of trained nurses throughout Manitoba was at a peak. There was no difficulty in filling staff quotas at the Manitoba Rehabilitation Hospital in Winnipeg but the turnover of trained nurses was greater than we would have wished. Several resignations occurred for family reasons, and several young graduates came and went, intrigued by a new specialty and anxious to have some experience of it.

QUALITY OF NURSING CARE

The Sanatorium Board of Manitoba has continued the policy of encouraging post-graduate education and experience for senior nursing personnel.

Miss. E. G. Coull, B.Sc.N., Director of Nursing, Manitoba Rehabilitation Hospital, returned to the University of Ottawa for further advanced studies during the summer. Miss M. R. Pemberton-Smith (now Mrs. J. M. Trainor), Nursing Instructor, Manitoba Rehabilitation Hospital, attended a three week course at the Kenny Rehabilitation Institute in Minneapolis, and a seminar in the rehabilitation nursing of geriatric patients held at the University of Manitoba. Miss Vera Peacock, Day Supervisor, Manitoba Rehabilitation Hospital, also attended the seminar in the rehabilitation nursing of geriatric patients held at the University of Manitoba. Mrs. Vera Myers, Head Nurse, Assiniboine Hospital, completed a one year Diploma Course in Teaching and Supervision in Hospitals and Schools of Nursing, at the University of Manitoba.

Nursing Representation

Miss E. G. Coull, Director of Nursing, Manitoba Rehabilitation Hospital, Mrs. I. A. Cruikshank, Director of Nursing, Assiniboine Hospital, Miss D. Ellis, Director of Nursing, Manitoba Sanatorium, and Miss V. Appleby, Director of Nursing, Clearwater Lake Hospital, were all official delegates at the Manitoba Associated Hospitals and Nursing Conference.

Mrs. I. A. Cruikshank, Director of Nursing, Assiniboine Hospital, attended the Hospital Disaster Institute at Hamiota.

Post-graduate Courses in Rehabilitation Nursing were held at the Manitoba Rehabilitation Hospital on three occasions during 1964. A total of 44 of our registered nurses have now completed these courses, which have done so much to stimulate interest in the problems presented and have helped us to achieve a high standard of patient care. Nursing standards at the Manitoba Rehabilitation Hospital are very high indeed and staff attitudes are excellent. The quality of patient care in this hospital is constantly commented upon and highly commended by patients, patients' relatives and friends, and by visitors to the hospital.

OTHER EDUCATIONAL PROGRAMS

Nurses' Assistants Training Program - In-service training for Nurses' Assistants and Nursing Orderlies was continued in all five of our hospitals during 1964.

Affiliation Programs - for Nursing Students from the Brandon General Hospital and the Hospital for Mental Diseases, Brandon, were continued at Manitoba Sanatorium throughout the year. A total of 90 student nurses reported for experience in tuberculosis nursing at Ninette.

Sanatorium Board of Manitoba Bursaries - One registered nurse and two licensed practical nurses successfully completed the training for which they were awarded Sanatorium Board bursaries, and subsequently joined our nursing staff.

"The Role of the Nurse in Rehabilitation" - We were very proud of the article written by Mrs. P. Holting which was published in the August issue of the News Bulletin of the Sanatorium Board of Manitoba and reprinted in full in the Fall-Winter copy of Rehabilitation in Canada. Mrs. Holting and her nursing advisers did a very find job and presented a comprehensive picture of the part played by nursing in this particular specialty which involves so many professional disciplines.

<u>Student Public Health Nurses</u> from the University of Manitoba have gained field experience in rehabilitation through association with the Manitoba Rehabilitation Hospital.

NURSING CONSULTANT

Among the activities of the Nursing Consultant were: Thirty official visits to the rural hospitals operated by the Sanatorium Board of Manitoba; attended the seminar on the rehabilitation nursing of geriatric patients at the University of Manitoba; attended the Canadian Tuberculosis Association Annual Conference in St. John, New Brunswick, as a Provincial Representative for Manitoba, and delivered a paper on Tuberculosis Control in Manitoba to the Nurses Section of this Conference; visited Brandon General Hospital and the Hospital for Mental Disease, Brandon, accompanied by Miss D. Ellis, Director of Nursing, Manitoba Sanatorium, for the purpose of reviewing affiliation agreements; attended Manitoba Associated Hospitals and Nursing Conference; addressed the Canadian Association of Occupational Therapists on "Problems in the Nursing Management of Hemiplegia."

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

The overall operation of food services during 1964 again saw meal production above the million mark, although 40,624 fewer meals were served during 1964 than during 1963. Just over 50 percent of the reduction represents a decreased number of patient meals.

In all, a total of 1,145,911 meals were served during 1964 at a labor cost of 21.03 cents per meal. This represents an increase in labor cost per meal of 1.65 cents, due mainly to statutory increases.

Total supply costs were \$24,795.29 or \$252.80 less than the figure for 1963, but on a unit basis, by reason of the decrease in the number of meals served, the supply cost per meal remained at 2.11 cents.

A total of 782,810 patient meals were provided in 1964 - 21,762 fewer than the number provided in 1963.

FOOD COSTS

A total of \$280,404.58 was spent on food, a decrease of \$2,720.27 accounted for by the 40,624 decrease in meals served. The average raw food cost per patient meal was 27.15 cents.

CAFETERIAS

The Sanatorium Board's cafeterias served 363,131 non-patient meals during 1964, a decrease of 19,832 meals as compared with the 1963 total. The average check increased by 6.17 cents from 25.51 cents per meal to 31.68 cents.

AVERAGE PER MEAL-DAY USAGE AND COSTS

The following is a 1963-1964 comparison of our average provisions of nutritionally important items:

Meat Poultry Fish	1963 .42 lb. .08 lb. .03 lb.	1964 .45 lb. .11 lb. .03 lb.
Total Flesh Foods	.53 lb. (6.8 oz.)	.59 lb. (9.4 oz.)
Eggs - each Milk	1.2 1.4 1b.	1.1 1.6 lb.

As in previous years, the Manitoba Rehabilitation Hospital baked all its own bread and rolls. In cost analysis, the ingredients for baking are included in the staples cost, whereas the institutions which do not bake their own bread have separate "Staples" and "Bakery" costs. Putting the two together, we have the following picture:

Staples Plus Bakery Costs Per Person Per Meal Day

Manitoba Sanatorium Assiniboine Hospital Clearwater Lake Hospital	Staples Cost	Bakery Costs	Baker's Plus Staples Cost
Manitoba Sanatorium	10.42¢	5.00¢	15.42¢
Assiniboine Hospital	8.88¢	3.17¢	12.07¢
Clearwater Lake Hospital	7.97¢	4.68¢	12.25¢
Manitoba Rehabilitation Hospital	5.97¢		5.97¢

It is seen that the Manitoba Rehabilitation Hospital's combined staples and bakery cost was much less than half that of any other institution.

ACTIVITIES

Five members of the Manitoba Rehabilitation Hospital food service staff took part in a Food Cost Control Course given jointly by the Canadian Restaurant Association and the Canadian Hotel Association. Four passed the course, one with honors.

Miss Jean Alexander, Assistant Director of Dietary Services, was elected as Manitoba's delegate to the annual convention of the Canadian Dietetic Association.

The Director of Dietary Services was made a Fellow of the Universal Cookery and Food Association. Fellowships in this association are awarded only on the basis of special contributions to the food service field and cannot be acquired in any other way.

Miss Alexander conducted a special series of classes at the Manitoba Rehabilitation Hospital, including films and demonstrations for diabetic patients.

An article entitled "Hospital Bakeries", written by the Director of Dietary Services, was accepted for publication by the British Food and Cookery Review.

MISS NAN TUPPER CHAPMAN, B.Sc., M.Sc., R.P.Dt., F.C.F.A. Director of Dietary Services

RECORDS

The Sanatorium Board of Manitoba extends sincere thanks to the thousands of people who have supported our tuberculosis and other health programs. We are especially indebted to the volunteer workers who have helped with our tuberculin and x-ray surveys, our Christmas Seal Campaign, and our rehabilitation and library services. We are grateful to the many persons in the province who have contributed toward the building and equipping of our new health facilities. We particularly appreciate the magnificent support of the Associated Canadian Travellers, Winnipeg and Brandon Clubs, who from 1945 until December 31, 1964 have contributed \$456,812.24 to our work.

TUBERCULOSIS RECORDS

CENTRAL TUBERCULOSIS REGISTRY

				The state of the s			
		Wha	ites	Treaty	Indians	Esk	imos
190		1964	1965	1964	1965	1964	1965
PATIENTS ON	FILE, Dec. 31	5,140	5,227	1,179	1,864	608	637
Primary Ty	pe	107	98	64	72	57	61
	on Type		5,129	1,115	1,792	551	576
NEW CASES D	IAGNOSED IN MANTTOBA.	256	200	78	75		
Primary Ty	pe	29	27	20	16		
	on Type	227	173	58	59		
OF THESE, N	EW ACTIVE CASES	218	166	68	65		
	pe	29	28	20	16		
		56	40	17	10		
	Advanced	42	38	5	22		
	ed	27	22	11	5		
	Tuberculosis						
Extent	not stated	4	-	_	-		
Tuberculou	s Pleurisy	12	20	5	3		
Non-pulmon	ary Tuberculosis	48	18	10	9		
NEW DIAGNOS	ES ADMITTED TO						
		176	132	60	59		

STATIONARY AND TRAVELLING CLINICS AND SURVEYS

	Whites	Indians	Eskimos
TOTAL X-RAYED at clinics, surveys Stationary Clinics Consultant (Travelling) Clinics Surveys	63,034 7,017 1,568 54,449	15,982 150 61 15,771	1,027
TOTAL NUMBER TUBERCULIN TESTED	104,036		
NEW DIAGNOSES OF TUBERCULOSIS Stationary Clinics Consultant (Travelling) Clinics Surveys	152 121 - 31	43 19 - 24	
OLD TUBERCULOSIS PATIENTS REVIEWED Stationary Clinics Consultant (Travelling) Clinics Surveys	4,563 3,878 273 412	882 54 6 822	
CONTACTS EXAMINED AT CLINICS	3,664 3,020 644	47 32 15	

INSTITUTIONAL STATISTICS

	Whi	tes	Treaty	Indians	Eskin	nos
	1963	1964	1963	1964	1963	1964
DIMERUM THE CONTROLL			***			
PATIENTS IN SANATORIA	100	120	110	111	10/	10
as at Dec. 31	199	129	118	111	124	43
PATIENTS ADMITTED TO SANATORIA						
Jan. 1 to Dec. 31	492	442	249	232	218	44
Of these, the number found				5 1 382 15	-10	
to be tuberculous	294	342	116	168	145	24
FIRST ADMISSIONS	174	156	71	60	94	4
Primary Type	23	15	16	10	57	1
Re-infection Type	1.0	100	tentals by			
Minimal	43	48	22	12	8	2
Moderately Advanced	42	43	7	20	8	1
Far Advanced	25	17	11	5	11	_
Tuberculous Pleurisy	12	22	7	9	7	-
Non-pulmonary Tuberculosis	29	11	8	9	3	_
RE-ADMISSIONS	88	51	32	36	37	7
Primary Type	1	1	1	1	4	í
Re-infection Type						
Minimal	21	11	12	11	18	3
Moderately Advanced	26	14	10	14	11	3
Far Advanced	24	15	6	6	3	-
Tuberculous Pleurisy	4	1	7	1	1	-
Non-pulmonary Tuberculosis	12	9	3	3	11 -	-
PATIENTS ADMITTED FOR REVIEW	32	38	13	20	14	2
THIRD ADMITTED TOX REVIEW	32	30	13	20	14	
TUBERCULOUS PATIENTS TRANSFERRED.	93	97	75	52	23	11
					4 3 3 3 1 3	
PATIENTS DISCHARGED FROM	0.7.7		105			
SANATORIA - Jan. 1 to Dec.31	377	400	185	193	152	113
TUBERCULOUS PATIENTS DISCHARGED	264	291	122	132	102	96
After review	32	38	13	20	14	2
With inactive tuberculosis	86	86	93	85	83	88
With active, improved			Samuel Samuel	47 191 94		
tuberculosis	107	151	10	24	2	4
With active, unimproved						
tuberculosis	16	3	1	-	-	-
With quiescent tuberculosis	6	2	2	-	1	
With tuberculosis of unde-						
termined activity	3	3	2	1	10, 17	1
Discharged dead	14	8	1	2	2	1
NUMBER DISCHARGED AGAINST						
MEDICAL ADVICE	12	13	2	1		1
IMPIONE NOVIOU	14	13	TEST TO PER	1. 1. 1. 1.		T
						_

PATIENTS ADMITTED AND DISCHARGED TO SANATORIUM

		Manitoba Sanatorium	Central Tuberculos Clinic	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT
ADMISSIO	ONS			
First Re-add Trans To con For d	admissions missions fers ntinue treatment iagnosis, review	 43 35 136 - 8 1	192 57 29 1 36	109
	Total	 222	315	179
Female Bacill Non-Ba Bacill	lary acillary lary status etermined is on Admission	 146 76 87 69 22	206 109 106 91 2	
Minimal Moderate Far adva Miliary Primary Pleurisy Tracheo Other re	ely advanced	 40 55 36 - 22 8 1 - 16 44	51 52 30 1 6 26 - 33 80	

PATIENTS ADMITTED AND DISCHARGED continued

	180 oaskid	Manitoba Sanatorium	Central Tuberculosis Clinic	Clearwater Lake Hospital
DISCHARGES				
	1 advice		90	
	edical advice ary		2	
Transfers		33	76	61
Deaths To contin	ue anti-microbial	10	10	2
	treatment		113	
Reviews .		8	36	
	Total	272	327	271
Respirato	ry Cases			
Inactive		92	29	
Active im	proved	95	84	
Active un	improved	-	47	
			1	
	ned		4	
Died		5	6	
	Total	193	171	
Bacillary		16	74	
Non-bacil	lary	171	90	
	status undetermined		1	
Non-respi	ratory TB	30	41	
Average D	ays Treatment	301.1	66.9	211.3
Out-patie	nt examinations	1,199	10,077	

ASSINIBOINE HOSPITAL

Patients in Hospital - January 1, 1964	153
Patients in Hospital - December 31, 1964	165
Total Number of Admissions	865
Total Number of Discharges, including deaths	853
Total Patient Days	63,042
Percentage of Occupancy	87%
Average Days Stay for Discharged Patients	72.28 days
Number of Deaths	176
Percentage of Discharges Who Died	20.63%
Hospital Autopsies	78
Percentage of Deaths Autopsied	44.3%
Patients Admitted from Rural Manitoba Patients Admitted from City of Brandon Area	414 or 47.8% 451 or 52.1%
Responsibility of Patient Care Resident Medical Staff Private Physicians	331 or 38.3% 534 or 61.7%
Out-Patient Visits Tuberculosis Examinations Dept. of Nat'l. Health & Welfare and D.V.A. Staff Examinations Physiotherapy and Occupational Therapy	7,820 1,025 167 271 4,306
General	2,051
Total Operations (Major) Total Operations (Minor)	46 444
Physiotherapy Treatments (In-patients and Out-patients) Occupational Therapy Treatments (In-patients and Out-	15,490
patients) Intermittent Positive Pressure Breathing Treatments	5,230
(In-patients and Out-patients)	17,059
Radiology - Number of examinations	3,927
Laboratory - Number of Standard Units	55,526

MANITOBA REHABILITATION HOSPITAL

IN-PATIENTS	1963	1964	
In Hospital January 1	90	114	
Admissions, Jan. 1 to Dec. 31	990	1,080	
Total In-patients Under Care	1,080	1,194	
Discharges, Jan. 1 to Dec. 31	960	1,080	
Deaths	6	2	
Average Length of Stay	48	days 48	days
Patient Days	27,216	The second second	
A Della Tarantina Caracteria	100		(00 /9)
Average Daily In-patient Occupancy		(or 143	(or 89.4%)
	84.	. 4%)	
OVER DAME DAME	, 19		
OUT-PATIENTS			
weeking the terminal hogotaxis	mark aus	s seed, white of	
New Registrations, Jan. 1 to Dec. 31	., 994		
Medical Reviews	2,002		
Consultations by Staff Doctors	795	1,087	
Average Daily No. of Out-patients	96	71	
TREATMENT DEPARTMENTS			
(New Patients - In-patients and Out-patients)			
'A Shar straight &			
Physiotherapy	1,676	2,074	
Occupational Therapy	1,159	,	
Speech Therapy	191		
Social Service	758	966	
	, 30	000	

ANALYSIS OF PATIENTS DISCHARGED

	Number of Average
	Patients Length of Stay
Medicine General	142 34 days
Cardio	2 22
Multiple Sclerosis	
Ankylosing Spondylitis	
Hemiplegia	
Paraplegia	
Quadriplegia	
Respiratory	
Rheumatoid Arthritis	
Osteoarthritis	64 38
Orthopedics	
Fractures	
Post-operative	
Amputees	
Malignancy	
Bone	



Manitoba Sanatorium, Ninette.



The Manitoba Rehabilitation Hospital, Winnipeg.



Central Tuberculosis Clinic, Winnipeg



Clearwater Lake Hospital, The Pas.



Assiniboine Hospital, Brandon

Physiotherapy and Occupational Therapy Unit, Assiniboine Hospital

