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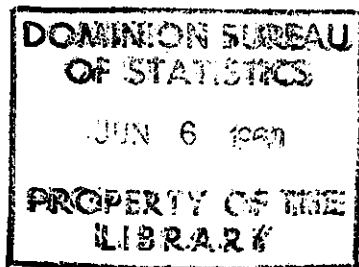
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# THE SMALL GENERAL HOSPITAL IN 1957

## A Statistical Summary



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## **SYMBOLS**

The interpretation of the symbols used in the tables throughout this publication is as follows:

... figures not appropriate or not applicable.

– nil or zero.

## INTRODUCTION

The purpose of this paper is to give information for 1957 regarding the utilization, facilities available, personnel, and finances of the average small general hospital in Canada. The basic material was obtained from the regular questionnaires which all hospitals are asked to complete annually for the Dominion Bureau of Statistics. The hospitals serving as the basis for this study were a sample of public general hospitals, including Red Cross Outpost Hospitals, with individual rated capacities of less than 25 beds, cribs, and bassinets. The tables indicate the number of returns used in calculating particular items.

For the majority of the non-financial items, the sample consisted of: a) almost complete representation in Nova Scotia, New Brunswick, Quebec, Ontario, Alberta, British Columbia and The Territories; b) approximately two out of three small general hospitals in Manitoba; c) approximately every second small general hospital in Saskatchewan; and d) no hospitals in the Province of Newfoundland.

In respect of the financial items, sampling was not involved. The data were tabulated from the reports of all the public general hospitals with 1-24 beds of rated capacity which contributed to "Hospital Statistics—Vol. II, Financial Information". Thus, with the exception of a few hospitals which did not complete reports, or which completed reports unsatisfactorily, the entire known universe of small public general hospitals was used in the tabulation of financial aggregates and the computation of the averages.

It has been customary for the Dominion Bureau of Statistics to publish hospital statistics in the form of provincial and national aggregates—in the first place, because aggregates are important per se and secondly, because the typical or average may be misleading when the limits within which normal variations can be expected are not stated. Nevertheless, the pattern defined by the average often proves an effective tool for the individuals or establishments included in the statistical composite.

## DEFINITIONS

The definitions used are as contained in the official manual of definitions and instructions in use in 1957. The principal definitions relevant to the present study are as follows:

**Public hospital**—one which is not operated for profit, accepts all patients regardless of their ability to pay, and is recognized as a public hospital by the province in which it is located.

**General hospital**—one which primarily provides facilities for the treatment of a wide range of conditions. Hospitals for women and children, and for children, which render general medical or surgical services, are classified as general hospitals.

**Rated bed capacity**—a theoretical number representing the number of beds that could be placed in a given hospital structure if a standard number of square feet were allowed for each bed. This number may be equal to, greater than, or less than the actual number of beds in regular use (referred to as "beds set up"), and this in turn may differ from the number of patients in the hospital.

**Patient-days**—the period of service rendered to an in-patient between the census-taking hours on two successive days. In computing patient-days, the day of admission is counted, but not the day of discharge or death.

**Separations**—patients who were discharged from or who died in hospital during the year.

## UTILIZATION

In 1957 the typical small general hospital had a theoretical capacity of 12 beds and cribs and 4 bassinets. Actually set up in the hospital at December 31, however, were 14 beds and cribs—over two-thirds of them in medical and surgical units—and 5 bassinets in obstetrical service. Receiving treatment and care at that date were 8 adults and children and 1 newborn infant. Thus, the occupancy rate at December 31 was 50.2 per cent for beds, cribs and bassinets.

Admitted to the typical small general hospital during 1957 were 428 adults and children, or 36

patients per bed and crib of theoretical capacity. There were 65 live births, or 16 per bassinets of theoretical capacity, and 1 stillbirth. Live births, in other words, accounted for 13 out of every 100 admissions. During the course of the year 10 adults and children and 1 newborn infant died in the hospital. The "gross death rate" was, therefore, 2 deaths of adults, children and infants out of every 100 separations. Adults and children separated during the year stayed in the hospital an average of 7 days. Newborn infants were kept 6 days. Out-patients treated by the hospital in 1957 numbered 436.

**TABLE 1. Provincial Distribution**

Province or territory	Number of hospitals		Rated bed capacity of sampled hospitals		
	In sample	Completing 1957 reports	Beds and cribs	Bassinets	Total
Newfoundland .....	—	15	—	—	—
Prince Edward Island .....	2	2	25	10	35
Nova Scotia .....	12	12	137	60	197
New Brunswick .....	9	9	94	40	134
Quebec .....	4	4	70	11	81
Ontario .....	20	21	216	100	316
Manitoba .....	22	33	217	109	326
Saskatchewan .....	48	93	611	181	792
Alberta .....	21	23	284	94	378
British Columbia .....	22	22	220	45	265
Yukon .....	1	1	16	3	19
Northwest Territories .....	1	1	20	2	22
<b>CANADA—TOTAL</b> .....	<b>162</b>	<b>236</b>	<b>1,910</b>	<b>655</b>	<b>2,565</b>
<i>Average</i> .....	...	...	<i>11.8</i>	<i>4.0</i>	<i>15.8</i>

**TABLE 2. Size Distribution**

Hospital size	Number of hospitals in sample	Beds, cribs, and bassinets	
		Rated number	Percentage of total
0- 4 beds, cribs, and bassinets .....	9	34	1.3
5- 9 " " " " .....	13	100	3.9
10-14 " " " " .....	37	454	17.7
15-19 " " " " .....	58	1,000	39.0
20-24 " " " " .....	45	977	38.1
<b>TOTAL</b> .....	<b>162</b>	<b>2,565</b>	<b>100.0</b>

**TABLE 3. Beds Set Up as at December 31, 1957, by Unit Types**

Type of unit	Number of hospitals in sample		Number of beds and cribs set up, December 31, 1957		Percentage of unit beds to total beds set up
	With unit	Without unit	Total	Average per hospital	
Medical and surgical .....	160	2	1,599	9.9	68.6
Obstetrical .....	105	57	373	2.3	16.0
Paediatric .....	106	56	304	1.9	13.0
Chronic .....	3	159	8	0.3	2.4
Convalescent .....	4	158	12		
Communicable disease .....	10	152	14		
Tuberculosis .....	1	161	20		
Orthopaedic .....	2	160	2		
<b>ALL UNITS</b> .....	...	...	<b>2,332</b>	<b>14.4</b>	<b>100.0</b>

**TABLE 4. Utilization of Facilities**

Item	Total	Number during year			
		Average per hospital	Average per hospital per day	Average per bed and crib (rated capacity)	Average per bassinets (rated capacity)
<b>Patient-days:</b>					
Adults and children .....	491,309	3,032.8	...	...	...
Newborn .....	63,148	389.8	...	...	...
<b>Admissions:</b>					
Adults and children .....	69,322	427.9	1.2	36.3	...
<b>Births .....</b>	10,473	64.6	1	...	16.0
<b>Deaths:</b>					
Adults and children .....	1,606	9.9	1	...	...
Newborn .....	196	1.2	1	...	...
<b>Stillbirths .....</b>	132	0.8	1	...	...
<b>Patients under care at year-end:</b>					
Adults and children .....	1,367.5	8.4	...	...	...
Newborn .....	173.0	1.1	...	...	...
<b>Separations:</b>					
Adults and children .....	95,918	592.1	1.6	50.2	...
Newborn .....	14,389	88.8	1	...	22.0
<b>Days' stay of separations:</b>					
Adults and children .....	680,768	4,202.3	...	...	...
Newborn .....	88,080	543.7	...	...	...
<b>Out-patients .....</b>	70,688	436.3	1.2	...	...

<sup>1</sup> Less than 0.5.

**PERSONNEL**

In 1957 the typical small general hospital employed 14 full- and part-time persons, or 9 for each 10 beds, cribs and bassinets of theoretical capacity. The hospital staff collectively worked 7.9 hours per patient-day. Workers in non-specified occupations accounted for 55.5 per cent of total staff,

while nurses and nursing assistants together constituted 39.0 per cent. The remaining 5.5 per cent were distributed among the other specified occupations. There were 2 full-time persons on the payroll at the end of 1957 for every 100 admissions of adults, children and newborn infants.

**TABLE 5. Distribution of Full-time Personnel, by Patient-days of Employing Hospital**

Patient-days of employing hospital	Number of hospitals in sample	Number of persons employed full-time	
		Total	Average
0- 99 .....	9	21	2.3
100- 499 .....	5	12	2.4
500- 999 .....	5	18	3.6
1,000-1,499 .....	7	48	6.9
1,500-1,999 .....	13	96	7.4
2,000-2,499 .....	13	114	8.8
2,500-2,999 .....	15	132	8.8
3,000-3,499 .....	19	177	9.3
3,500-3,999 .....	18	188	10.4
4,000-4,499 .....	12	162	13.5
4,500-4,999 .....	12	167	13.9
5,000-5,499 .....	13	169	13.0
5,500-5,999 .....	9	132	14.7
6,000-6,499 .....	3	46	15.3
6,500-6,999 .....	1	20	20.0
7,000-7,499 .....	2	50	25.0
7,500+ .....	6	111	18.5
<b>TOTAL .....</b>	<b>162</b>	<b>1,663</b>	<b>10.3</b>

**TABLE 6. Number of Persons Employed, and Hours Worked**

Occupation	Number employed in sample of hospitals		Number of full- and part-time employees in sample of hospitals			Number of full- and part-time hours worked		Total full- and part-time hours worked per patient-day <sup>1</sup>
	Full-time	Part-time	Total	Average per hospital	Percentage distribution	Total	Average per hospital	
Doctors .....	2	5	7	<sup>2</sup>	<sup>3</sup>	2,440	15.7	<sup>2</sup>
Nurses .....	513	110	623	3.8	28.3	1,269,632	8,191.2	2.4
Nursing assistants.....	198 <sup>4</sup>	38	236	1.5	10.7	473,561	3,055.2	0.9
Technicians .....	7	70	77	0.5	3.5	66,214	427.2	<sup>2</sup>
Dietitians .....	12	1	13	<sup>2</sup>	<sup>3</sup>	29,728	191.8	<sup>2</sup>
Orderlies .....	10	—	10	<sup>2</sup>	<sup>3</sup>	9,872	63.7	<sup>2</sup>
Medical record librarians .....	3	8	11	<sup>2</sup>	<sup>3</sup>	8,289	53.5	<sup>2</sup>
Not specified .....	918	304	1,222	7.5	55.5	2,254,745	14,546.7	4.3
<b>Total .....</b>	<b>1,663</b>	<b>536</b>	<b>2,199</b>	<b>13.6</b>	<b>100.0</b>	<b>4,114,481</b>	<b>26,545.0</b>	<b>7.9</b>
<i>Number of hospitals in sample ..</i>			<i>162</i>			<i>155</i>		

<sup>1</sup> Patient-days for adults, children, and newborn in the 155 hospitals in the sample which reported "hours worked" were 519,436.

<sup>2</sup> Less than 0.5.

<sup>3</sup> Less than one per cent.

<sup>4</sup> May include 3 nursing aides.

**SPECIAL SERVICES, CLINICS, AND EDUCATIONAL FACILITIES**

The typical small general hospital supplemented general patient care in 1957 with some services of a specialized nature—viz., anaesthesia, blood services, radiology, and oxygen therapy. It did not

have a laboratory. A well-baby clinic was operated within the hospital. Neither medical nor nursing facilities were available.

**TABLE 7. Special Services and Clinics**

Item	Number of hospitals reporting in sample		Percentage of hospitals with	Item	Number of hospitals reporting in sample		Percentage of hospitals with
	With	Without			With	Without	
<b>Special service</b>				<b>Special service — Concluded</b>			
Anaesthesia .....	157	5	96.9	Occupational therapy .....	—	162	—
Blood service (any formal arrangements).....	154	8	95.1	Pathology .....	—	162	—
Radiology .....	153	9	94.4	Advanced hydrotherapy .....	—	162	—
Oxygen therapy .....	144	18	88.9				
Laboratory .....	73	89	45.1	<b>Clinic</b>			
Infra-red therapy .....	64	98	39.5	Well baby .....	29	18	61.7
Electrocardiography .....	55	107	34.0	Prenatal .....	8	39	17.0
Basal metabolism tests .....	45	117	27.8	Tuberculosis .....	8	39	17.0
Ultra-violet therapy .....	26	136	16.0	Arthritis .....	7	40	14.9
Dentistry .....	14	148	8.6	Mental health .....	3	44	6.4
Inducto-thermo-therapy .....	11	151	6.8	Crippled children's .....	2	45	4.3
Massage and manipulation .....	6	156	3.7	Cancer .....	1	46	2.1
Electroencephalography .....	1	161	0.6				

**TABLE 8. Laboratory Personnel**

Category of personnel	Number of persons employed full- and part-time		
	Total	Average per hospital in sample <sup>1</sup>	Average per hospital reporting laboratory service
Technicians, certified .....	7	<sup>2</sup>	<sup>2</sup>
Technicians, "other" .....	30	<sup>2</sup>	<sup>2</sup>
Specialists in pathology and bacteriology, "other" ..	1	<sup>2</sup>	<sup>2</sup>
Other personnel .....	44	<sup>2</sup>	0.6
<b>TOTAL</b> .....	<b>82</b>	<b>0.5</b>	<b>1.2</b>

<sup>1</sup> Of the 73 hospitals with laboratory service, 68 reported. Thus, the sample total for this item was 157.

<sup>2</sup> Less than 0.5.

**TABLE 9. Units of Laboratory Service**

Type of service	Number of units		
	Total	Average per hospital in sample <sup>1</sup>	Average per hospital reporting laboratory service
Haematology .....	62,324	397.0	916.5
Biochemistry - Urines .....	80,963	515.7	1,190.6
Bloods .....	1,472	9.4	21.6
Other .....	6,030	38.4	88.7
Bacteriology .....	2,017	12.8	29.7
Public health bacteriology .....	509	3.2	7.5
Blood bank .....	4,701	29.9	69.1
Miscellaneous tests .....	9,474	60.3	139.3
<b>TOTAL</b> .....	<b>167,490</b>	<b>1,066.8</b>	<b>2,463.1</b>

<sup>1</sup> Of the 73 hospitals with laboratory service, 68 reported. Thus the sample total for this item was 157.

**TABLE 10. Radiology Personnel**

Category of personnel	Number of persons employed		
	Total	Average per hospital reporting in sample <sup>1</sup>	Average per hospital reporting radiology service
Specialists in diagnostic and therapeutic radiology, not certificated .....	1	<sup>2</sup>	<sup>2</sup>
Therapeutic radiologists, other .....	1	<sup>2</sup>	<sup>2</sup>
Diagnostic radiologists, other .....	3	<sup>2</sup>	<sup>2</sup>
Diagnostic radiologists, certificated .....	4	<sup>2</sup>	<sup>2</sup>
Technicians, "other" .....	33	<sup>2</sup>	<sup>2</sup>
Technicians, registered .....	7	<sup>2</sup>	<sup>2</sup>
"Other" personnel .....	56	<sup>2</sup>	<sup>2</sup>

<sup>1</sup> Of the 153 hospitals with radiology service, 140 reported this item. Thus the sample number was 149.

<sup>2</sup> Less than 0.5.

**TABLE 11. X-ray Machines**

Type	Number of machines		
	Total	Average per hospital reporting in sample <sup>1</sup>	Average per hospital reporting radiology service
Diagnostic-stationary .....	82	0.6	0.6
Diagnostic-mobile .....	84	0.6	0.6
Therapeutic-superficial .....	2	<sup>2</sup>	<sup>2</sup>
Therapeutic-deep .....	1	<sup>2</sup>	<sup>2</sup>

<sup>1</sup> Of the 153 hospitals with radiology service, 140 reported this item. Thus the sample number was 149.  
<sup>2</sup> Less than 0.5.

**TABLE 12. Radiology Facilities**

Item	Number of hospitals in sample <sup>1</sup>		Percentage of sample hospitals
	With	Without	With
			%
<b>Facilities:</b>			
Routine chest x-ray on admission .....	97	52	65.1
Radiography .....	131	18	87.9
Fluoroscopy .....	109	40	73.2
Superficial x-ray therapy .....	3	146	2.0
Deep x-ray therapy .....	1	148	0.7

<sup>1</sup> Of the 153 hospitals with radiology service, 140 reported this item. Thus the sample number was 149.

**TABLE 13. Educational Facilities**

Facility	Number of hospitals reporting in sample	
	With	Without
Formal training for nursing assistants .....	1	45
Other .....	-	46



**FINANCES**

During 1957 the typical small general hospital incurred net expenditures of \$40,000—i.e., \$2,625 per bed, crib and bassinet of theoretical capacity, or \$11.57 per adult, child, and newborn patient-day. The hospital's net payroll, which amounted to \$21,900—i.e., \$1,432 per bed, crib, and bassinet of theoretical capacity, or \$6.31 per adult, child, and newborn patient-day, accounted for 54.5 per cent of net expenditures.

Net earnings from in-patient services given by the hospital in 1957 amounted to \$31,600—i.e., \$2,061 per bed, crib, and bassinet of theoretical capacity, or \$9.08 per adult, child and newborn

patient-day. Net in-patient service earnings were equivalent to 78.6 per cent of net expenditures. Net earnings from out-patient services brought the hospital \$1,500; grants, \$2,500; and other sources of income, \$1,800. Total revenue in 1957 was \$2,800 less than total net expenditure.

On the hospital's book at December 31, 1957 were revenue fund assets of \$17,500 and plant fund assets of \$58,600. On the other side of the balance sheet there were revenue fund liabilities of \$6,100 and plant fund liabilities of \$21,100. The revenue fund assets of the hospital were equivalent to 52.8 per cent of total net operating earnings.

**TABLE 14. Financial Data**

Item	Number of hospitals reporting	Total	Average		
			Per hospital	Per adult, child, and newborn patient-day <sup>1</sup>	Per bed, crib, and bassinet (rated capacity) <sup>2</sup>
		\$'000's		\$	\$
Net operating earnings during year:					
In-patient services .....	209	6,597.9	31.6	9.08	2,060.56
Out-patient services .....	209	319.2	1.5	0.44	99.69
Grants .....	209	516.1	2.5	0.71	161.18
"Other" income during year .....	209	382.5	1.8	0.53	119.46
Net expenditure during year .....	209	8,404.1	40.2	11.57	2,624.64
Gross salaries and wages during year .....	209	4,990.5	23.9	6.87	1,558.56
Net salaries and wages during year .....	209	4,583.8	21.9	6.31	1,431.54
Revenue fund:					
Assets .....	193	3,378.4	17.5	...	...
Liabilities .....	193	1,173.3	6.1	...	...
Plant fund:					
Assets .....	174	10,192.6	58.6	...	...
Liabilities .....	174	3,662.7	21.1	...	...

<sup>1</sup> Patient-days for the 209 hospitals were 726,561.  
<sup>2</sup> Rated capacity for the 209 hospitals was 3,202.



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