MAINTENANCE OF SERVICE PATIENTS IN THE MONTREAL NEUROLOGICAL INSTITUTE.

In the letter from Deputy Minister Alexander Ross to Dr. James of December 5th, some observations can be made according to the numbers of his paragraphs.

2. (a). It should be pointed out at once that it is quite impossible to compare costs in one of the routine hospitals of the Department of Veterans Affairs with the costs in an active treatment hospital such as the Montreal Neurological Institute. The \$3.00 and \$3.50 per day which was discussed in Dr. Penfield's letter of February 24th, 1944, included board, lodging and routine care from nurses and junior physicians and house staff. It does not include extras nor the consultants' medical fees for responsibility for the case, and it does not include the surgeon's fee where operation is necessary.

Previous to the establishment of the per diem charge, D.P.& N.H. patients (including services) were charged \$3.00 for ward accommodation and \$6.00 for room accommodation. This covered, as mentioned above, bed, board, and routine medical and nursing care. The following extras were added depending on the type of case: x-rays, pneumoencephalography, operating room charges, anaesthesia, myelogram, special laboratory procedures, etc.

In other words, service patients were handled like civilian patients with lowest basic rate and extras. Civilian ward patients, if from Montreal, were then being charged the basic rate of \$3.00; if from the Province of Quebec or elsewhere, \$3.50. Patients from compensation commissions were being charged \$3.50 basic rate with extras. These civilian patients could be carried at this low rate only because the City of Montreal and the Province of Quebec contributed an annual total of \$35,000.00 to cover hospitalization deficits. Thus, service patients were not covering their own costs but were sharing in the benefit from the City and Province donation.

Surgeons and physicians made no professional fee charge to civilian patients on the ward from the Province of Quebec and City of Montreal, but they made a small charge for patients from elsewhere and charged fees to compensation patients according to established rates, which were a little more generous than the rates for service patients on the ward.

Thus, service patients on the public ward were handled in a manner similar to compensation patients, but were given a cheaper rate. Officers were handled like private patients, whom they displaced from private accommodation, except that the professional fees charged to them were less for professional care and much less for operation, in accordance with the D.P.&.N.H. scale of accepted fee charges.

Essential hospital care same for all-.

450 = Charity Rate. City 1.50 Prov 1.50 Hosp. 1.50

The above arrangement was changed on May 1st, 1943, to a per diem charge of \$5.00 for other ranks and \$10.00 for officers. This was arrived at by computing the charges that had been made to D.P.&.N.H. patients over a 3 month period. It was found that the basic rate of \$3.00 plus extras came to \$5.00 on an average, while the basic rate of \$6.00 plus extras for officers came to \$10.00, on an average.

On February 15th, 1944, the rate was increased to \$5.50 and \$11.00, inasmuch as the Institute had been losing money on the first rate due to rising costs. Meanwhile the basic rate even to Montreal ward patients had been raised to \$3.25, to patients from the Province of Quebec outside Montreal, \$3.75, and to others, \$4.00, and the charge for private rooms had been raised. So that the service patients were estimated to be paying under the new per diem charge \$3.50 and \$7.00 per day plus extras. The per diem charge for service patients covered all care except for the professional fees of the man in charge of the case, or the consultant called in, or the fee of the operating surgeon. Service patients when continued to be charged professional fees by the doctors at the same rate as in the past.

The method of handling civilian patients described above provides a standard of service which is the same for all classes, public and private. But the private patient (who has a room and selects his surgeon) at least pays his way, while the public patient does not. He produces the annual hospitalization deficit.

All scientific and teaching work is supported by McGill University on an entirely separate budget derived from the income of a capital donation made by the Rockefeller Foundation.

- 2. (b) and (c). In regard to these paragraphs it should be pointed out, of course, that the Neurological Institute was built and equipped completely by outside funds, and that there has never been any charge made against the patient for depreciation or to retire the original cost. No charge is made against hospital income for building maintenance except for painting, cleaning, and minor repairs on the ward floors themselves. Thus no charge is made against the hospital account for the maintenance of the building as a whole, including, light, heat, gas and power, elevators, janitor service, laboratory maintenance, or research department. It is also to be pointed out that the attending staff receives no income from the hospital charges to patients.
- 2. (d). In regard to medical supplies, this unit is so small and will be so closely associated with the rest of the Neurological Institute in all of its activities, that it would be unwise to have a separate source of medical supplies for the Annex. We therefore recommend that all medical supplies should be provided in the same way for civilian and service patients and that we should make no direct demand upon the Department of National Defence for supplies of that type.

In regard to the statement that there are four army medical officers on loan to the Neurological Institute, it should be pointed out that there are at present no army medical officers whatever here, unless reference is made to the following:

Captain Herbert Jasper is seconded for research on (i) injuries to the nerves and (ii) head injuries, from Col. Hurst Brown's department. Dr. Jasper is working partly under a research grant from the National Research Council. There is also seconded to him for this experimental work Lieut. R.H. Johnston. These amp, 8 7 men are not responsible for routine clinical work. It is true that Captain Jasper directs the Department of Electroencephalography, but this should be offset by the fact that he has full use of our laboratories and equipment for the pursuit of his army research, together with secretarial and technical assistance, which are paid for out of university funds.

> However, there are in the Institute at the present time two men who have been seconded to us by the Royal Canadian Navy and who have helped greatly to facilitate the handling of service patients and to speed up the turnover. I refer to (i) Lt. Commander J. Preston Robb, who is acting in an administrative capacity and as assistant neurologist, and (ii) Surg.Lt.Cmdr. Clifford Campbell, who is carrying out routine anaesthesia, thus making it possible to operate upon twice as many patients as we had been able to previously. On the house staff at the present time there are two men from the Air Force and one from the Navy, all three of whom are being trained in neurology. These men, however, do not replace any of the normally functioning staff.

Decident and On the other hand, I may point out that I have me a request that Lieut. Guy Morton, at present receiving his routine training at Camp Borden, should be secondary to serve as innice. On the other hand, I may point out that I have made routine training at Camp Borden, should be seconded back to us to serve as junior attending surgeon, and that we need very badly at least one junior army medical officer to act as house officer.

> Of all the service men mentioned in the preceding paragraphs, the only one who would normally be paid anything from hospital income is the anaesthetist. Dr. Petersen, who, before his recent death, occupied the position of Registrar now being held by Surg. Lieut. Commander Robb, received no funds derived from patients' hospitalization. Rather than trying to charge off any of the money which the Navy pays to Surg. Lt. Cmdr. Robb, it would be better to recommend that he be discharged from service. after which he would receive a stipend from University funds which he could supplement from private practice. In regard to Lieut. Morton, if he were discharged from service, he would also, of course, receive no funds from hospitalization sources. He would receive a small stipend from a University source and would balance that with practice. As long as Robb and Morton remain in service they will, of course, make no professional fee charge for service patients that may be under their care. This is a saving to the Services.

It seems to be an impossible task to break down the costs under the heading of (a) administration, (b) maintenance of patients, (c) maintenance and repairs of building and equipment, (d) operation of plant, including light, heat, power, water, etc.. (e) special expenses characteristic of our problems.

It is essential for us to be able to transfer service patients into the Institute building and keep them there or to have them in the Annex. The reason for this is that under some circumstances they will receive better service over in the M.N.I. in view of the fact that all of the special equipment in the Institute is used by men from the Annex.

we can only estimate the costs according to our past experience. In February 1944, it was computed, as pointed out above, that \$5.50 for other ranks and \$11.00 for officers would cover the expense of caring for service patients. This did not include much of the building maintenance, elevator maintenance, heat, light, gas, power and steam; all of these things were paid out of funds contributed by Province and City for the hospitalization deficit. Furthermore, it only paid for a portion of the administration, that is, it did not include the salary paid to the Director, the Registrar, and the Executive Assistant. It is obvious, therefore, that if the Department of Defence paid for these things, an added charge would have to be made. Because of the desirability of easy transfer back and forth, however, a flat rate should be arrived at, if possible, applicable in or out of the Annex.

But the cost of heat, light, gas, power and steam to the Annex is a clear extra and must somehow be paid for by the patients who occupy the Annex. Dr. Kershman, the Executive Assistant, and Mr. MacFarlane, the University engineer, estimate that the cost of this service to the Annex alone would come to \$4,350.00 annually, or if spread over income from 27 beds would create an added per diem charge of 53 cents.

Analysis of the cost of hospitalization for 1944 as against 1943 indicates a distinct rise in costs. This amounts to 17% at the M.N.I., which would increase the per diem rates from \$5.50 and \$11.00 to \$6.46 and \$12.92. If the \$0.53 is added to this, officers in the Annex would pay \$13.45 and men \$6.99, while those in the M.N.I. would pay \$12.92 or \$6.42. This would seem unsatisfactory.

From a practical point of view, there would seem to be only two possible proposals for meeting the hospitalization costs of service patients:

l.) The light-heat-power-gas could be paid directly by the Department of Defence and we would then make a basic rate (described above) for other ranks of \$3.50 and \$7.00 for officers. Added to that basic rate we would have to charge all of these individuals for their extras just as we do in the case of public or private patients at present. These extras would include those items which were mentioned in the first paragraph of this letter (& a).

Professional fees would have to be handled as an addition. Under this arrangement, when the capacity of the Annex was exceeded for either officers or men they could come into the Institute and pay the rate charged there.

patients on a similar basis to that in force for patients of the Department of Veterans Affairs and service patients at the present time, namely, a per diem charge for other ranks and officers which will cover everything but the professional fee. In this case it will be necessary to compute what these patients are actually costing us at the present time. It seems best to work out a figure which ensures the University against loss but which charges service patients the same as D.V.A. patients no matter what building either may occupy. (See A in Table I).

If it is desired that an average be struck so that the charges for officers and other ranks is the same, we will have to estimate what the proportion of officers to men has been in the past and will have to refigure it each year to make sure that we are not going into the red on this basis. My opinion is that there will be an increasing percentage of officers above the present ratio of 1 to 6 because of the increasing personal demand for treatment in the M.N.I. (See B in Table I).

Annex to M.N.I.

Annex - Square feet - Upper floor - 7,900

Lower floor - 6,600

14,500 sq.ft.

27 beds with 85% occupancy - 8,277 patient days per year.

(a) Costs to be computed on a per diem basis (see Table I).

Hospitalization costs of 8,277 patient days - (see Table I)

Annual cost of light, heat, power & gas \$4,350.

(b) Costs undertaken by the University

Insurance on Annex at 3 cents per sq.ft. \$ 435.

First floor (6,600 sq.ft) renewals and repairs at 8th cents 561.

Share of telephone, elevator, M.N.I. administration - not figured out

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TABLE I.

A. Hospitalization costs estimated on a per diem basis as public and private in Annex.

Dancont non diam channe	Other ranks	Officers	
Present per diem charge Basic room rate: \$3.50; \$7.00) Extras 2.00; 4.00)	\$5.50	\$11.00	
Rise of costs in past year, 17%	.96	1.92	
Light, heat, power and gas (\$4,350) on a patient-day basis	.53	.53	
Per diem charge - men - officers	\$ 6.99	\$ 13.45	
Costs undertaken by University, see previous page.			

B. Hospitalization costs estimated on a per diem basis with uniform

rate on extras for officers and men	Men	Officer	<u>s</u>	
Basic room rate	\$3.50	\$7.00		
Plus 17% increase as above	.61	1.22		
Plus light, heat, power, gas	.53	.53		
			\$4.64	\$8.75
Uniform rate of extras* (old basis)	2.30	2.30		
Plus 17% increase	.40	.40		
			2.70	2.70
Per diem charge - men - officers Costs undertaken by University, see previous page.			\$7.34	\$11.45

^{*} Figured at an estimate of 1 officer to 6 other ranks.

The following question is brought up by Mr. Ross here:

If the extras raised the basic ward charge of \$3.50 up to \$5.50,

which meant \$2.00 for extras, why should the extras for officers

be estimated at \$4.00 so as to raise the basic room rate from

\$7.00 to \$11.00? This is due to the fact that in order to try

to pay for the whole of the hospitalization, it has been the custom

in hospitals of this type to make a charge for private patients

that is at least double that paid by public patients. If the \$4.00

figure is to be lowered, then it will be necessary to raise the

\$2.00 figure. If the present ratio of 1 officer to 6 men continues,

the flat rate for extras would be \$2.30 for everyone, as in B, TableI.

Apparently the Deputy Minister would seek to pay off the cost of the building in some way. He perhaps does not realize that the Neurological Institute is not a profit making institution, and in our figures no attempt has ever been made to write off the cost of the building. In regard to any reduction in costs because of medical officers supplied, this has been dealt with in the paragraphs that follow 2e above. Only in the case of the Naval anaesthetist could a financial adjustment be considered. To accomplish this, the charges made to patients for his services in the form of anaesthesia fee could be set aside and paid back to the Department from which he is on loan after subtraction of a fair amount to cover his keep, materials and overhead.

We need men from the Services in interneship (unpaid) level because they have taken men out of civil life 9 months after graduation. More senior medical officers seconded to us must be charged against the professional fee costs, not against the hospitalization costs.

Professional Fees

No reference is made to this cost in Mr. Ross' letter.

Before discussing this, reference should be made to the relationship of the Montreal Neurological Institute to the Montreal Military Hospital (Queen Mary Road) and to St.Annes Military Hospital, also the informal relationship to Service hospitals at a distance. The relationship will probably be established or continued as follows:

Routine care and the less elaborate operations will be carried out at the Montreal Military and St.Annes Hospitals. But for certain types of major operations on brain, spinal cord and nerves, the elaborate equipment of the M.N.I., which is not provided in other hospitals, is necessary. For such complicated or desperate operations, or for complicated study, patients will be transferred to the M.N.I. and returned as quickly as possible to the hospital of reference for convalescence. To a lesser extent this applies to hospitals in the Maritime Provinces and elsewhere.

When service patients are referred to the M.N.I. for special treatment or special study, it would be to their advantage to have the services of those best qualified to care for them. This is the way civilian cases are handled. For example, brain abscesses usually go to Dr. Cone, blood vessel abnormalities to Dr. Elvidge, obscure neurological diseases to Dr. Russel or Dr. McNaughton, and epilepsy caused by brain wounds to Dr. Penfield.

At the present time civilian patients, veterans and service patients are all handled in this way, and professional fees are paid to the surgeon or physician who cares for them. Patients treated for the Compensation Commission of the Province of Quebec, and the Compensation Board of the Province of New Brunswick, are handled on a similar basis.

In conclusion, we would recommend:

That all service patients admitted to the Institute should be subject to the Director, who will allot them to the supervision of civilian members of his staff or to medical officers seconded to his staff:

That hospitalization should be paid for on one per diem basis for officers and another for other ranks (see A and B above); these figures to be corrected to the actual cost at recurring intervals;

That professional fees should be paid to the physician or surgeon-in-charge according to the scale of fees in force for the Department of Veterans Affairs, excepting where medical officers capable of doing the work are available for supervision.

Addendum

It was pointed out in Dr. Penfield's letter to Col. J.C. MacKenzie of September 28th, 1944, that, in addition to the payment of professional fees according to D.V.A. scale there were two other possibilities:

1.) Army Salaries. Call up surgeons and physicians and put them on an army salary; or

2.) Per diem payment for professional care.

In order to determine a basis from which to compute what this might come to, it was estimated by the Executive Assistant of the Neurological Institute, Squadron Leader Kershman (quoted in Dr. Penfield's letter), that if the fees paid for professional care of service patients in the M.N.I. from June 1st, 1942 to May 31st, 1944, had been paid on a per diem basis to surgeons and physicians, the cost would have been \$4.50 per day for neurosurgical patients and \$2.14 per day for neurological patients.

It was further estimated that, if 27 beds* should have an occupancy of 85%, there would be 8,277 patient days per year. If the proportion of officers to other ranks continues to be 1 to 6 (as in the past) and if the present average stay of 20 days for neurosurgery and 15 days for neurology be maintained, the 27 beds would care for 350 neurosurgical and 79 neurological patients, or a total of 429 admissions for the year. If the daily hospitalization be paid for at \$11.00 and \$5.50, as in the past, and the daily professional charge at \$4.50 and \$2.14, as computed above, the average cost to the services per patient would be \$201.00 for time in the M.N.I., while convalescence usually took place in a hospital where the basic cost was much less.

If it is realized that now there is a long waiting list of service patients who cannot be admitted to the M.N.I. because of lack of space, and that these patients are seeking cure from highly pensionable disabilities, the cost of \$201.00 per patient does not seem exorbitant, and the addition of 429 admissions made possible by the Annex seems highly desirable.

^{*} It seems probable that a variable additional number of service patients may still have to be cared for in the M.N.I. proper.