Annual report of the Medical Director of Hillingdon County Hospital : 1947

Administrative County of Middlesex.

ANNUAL REPORT

OF THE

MEDICAL DIRECTOR

OF

HILLINGDON COUNTY HOSPITAL

FOR THE

YEAR 1947

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1949

ANNUAL REPORT OF THE MEDICAL DIRECTOR ON THE WORK OF HILLINGDON COUNTY HOSPITAL FOR THE YEAR 1947

STAFF.

Whole-time Medical Staff.

Medical Director :
W. Arklay Steel, M.D., Ch.B., F.R.C.P.

Deputy Medical Director and Surgeon :
G. W. Duncan, M.B., B.S., F.R.C.S.

Surgeons :
L. Fatti, M.B., B.S., F.R.C.S. H. G. Hanley, M.D., B.S., F.R.C.S. (H.M. Forces).
C. G. Scorer, M.B., F.R.C.S.

Chief Assistant in Surgery :
S. T. McCollum, M.B., F.R.C.S.

Physicians :
C. G. Barnes, M.D., B.S., F.R.C.P. E. B. Jackson, M.D., M.R.C.P. (H.M. Forces).

Physicians, Grade II :
C. R. Baxter, M.B., Ch.B., M.R.C.P. G. R. McNab, B.Sc., M.D., F.R.C.P.

Paediatrician :
H. Finlay, M.B., Ch.B., M.R.C.P., D.C.H.

Obstetric Surgeon :
Miss J. Morgan, M.D., B.S., M.R.C.O.G., D.A.

Chief Assistant in Obstetrics :
A. W. Chester, M.D., M.B., B.S.

Senior Anaesthetist :
H. J. V. Morton, M.A., M.D., D.A.

Anaesthetist :
R. I. W. Ballantine, M.R.C.S., L.R.C.P.

Director of the Department of Physical Medicine :
R. J. Talbot, L.R.C.P., F.R.C.S., D.Phys.Med.

Pathologist :
H. Rogers, M.D., M.B., Ch.B.

Chief Assistant, Department of Radiology :
S. Maddocks, M.R.C.S., L.R.C.P., D.R.M.E.

Casualty Officer :
L. B. Scott, M.B., F.R.C.S.E.

House Surgeon :
A. E. Kark, M.B., B.S.

Obstetric House Surgeon :
J. A. Mcl. Smith, M.B., Ch.B.

House Physician :
E. C. Hutchinson, M.B., Ch.B., M.R.C.S., L.R.C.P.

Supernumerary Appointments.

Surgical Registrar :
T. R. B. Courtney, M.B., F.R.C.S.

Supernumerary Paediatrician :
W. May, M.R.C.S., L.R.C.P., M.B., B.S.

Medical Registrar :
A. R. Harrison, M.B., B.S., M.R.C.P.

Supernumerary Anaesthetist :
T. N. P. Wilton, M.R.C.S., L.R.C.P.

Obstetric Registrar :
J. Price, M.R.C.S., L.R.C.P.

Supernumerary House Physician :
T. C. P. Williams, M.R.C.S., L.R.C.P.

Visiting Staff.

Radiologist :
G. Simon, M.D., B.Chir., D.M.R.E.

Dental Surgeon :
S. F. Simpson, L.D.S., R.C.S.

Venereologist :
A. J. Cokkinis, F.R.C.S.

Ophthalmologist :
I. Spiro, F.R.C.S.

Dermatologist :
F. J. V. Jenner, M.R.C.P.

Radiotherapist :
W. R. Ward, M.B., B.S., M.R.C.S., L.R.C.P.

Ear, Nose and Throat Surgeon :
E. O. Harris, M.B., B.S., F.R.C.S.

Psychiatrist :
B. Matheson, M.B., Ch.B., D.P.M.

Nursing Staff : 176 full-time, 27 part-time.

Matron :
Miss E. Hagland.

Administrative Staff	9	Staff Nurses (part-time)	16
Departmental Sisters	4	Pupil Midwives	12
Ward Sisters	32	Student Nurses	64
Staff Midwives...	1	Assistant Nurses	21
Staff Midwives (part-time)	4	Assistant Nurses (part-time)	7
Staff Nurses	20	Male Nurses	12

Other Staff.

Steward :
C. Abel.

Chief Almoner :
Miss D. Macdonald.

Deputy Chief Almoner :
Mrs. C. Wassey.

Pharmacist :
D F. B. Pritchard, B.Sc., M.P.S.

Radiographer :
C. Butler, M.S.R.

Chief Pathological Technician :
W. R. Hackett, F.I.M.L.T.

Chaplain :
The Rev. A. M. Bashford.

Staff Changes.

		Left.
Surgeon	L. Fatti, M.B., B.S., F.R.C.S.	31.11.47
Chief Assistant in Surgery	S. T. McCollum, M.B., F.R.C.S.	29.12.47
Physician, Grade II	G. R. McNab, B.Sc., M.D., F.R.C.P.	13.12.47
Casualty Officer	J. A. Little, M.R.C.S., L.R.C.P.	1.6.47
Anaesthetist	J. D. Laycock, M.R.C.S., L.R.C.P., M.B., B.S., D.A.	28.7.47
Assistant Medical Officer	J. Lawson, M.B., B.Ch.	13.3.47
House Physician	L. Bussell, B.A., B.S.C., B.M., B.Ch.	3.5.47
Supernumerary Obstetric Registrar...	J. Frankenberg, M.R.C.S., L.R.C.P.	30.4.47
Supernumerary House Physician ...	V. M. Borelli, M.B., B.S., M.R.C.S., L.R.C.P. ...	29.4.47

		Commenced.	*Left.*
A. Sankey, M.R.C.S., L.R.C.P.	House Officer, Obstetric	16.3.47	29.9.47
E. Sanders, M.R.C.S., L.R.C.P., M.B., B.S.	Assistant Medical Officer ...	5.5.47	3.11.47
A. Kark, B.Sc., M.B., B.Ch.	House Surgeon	21.7.47	21.12.47
P. Dennehy, M.B., Ch.B.	Assistant Medical Officer ...	6.1.47	20.7.47
A. Davies, M.R.C.S., L.R.C.P., M.B., B.S.	Supernumerary House Physician	31.4.47	29.6.47
T. Williams, M.R.C.S., L.R.C.P.	Supernumerary House Physician	30.6.47	29.12.47

Towards the latter part of this year Mr. Fatti resigned to take up a new appointment as Thoracic Surgeon in Johannesburg. Originally appointed to the Staff in 1933 as a general surgeon, Mr. Fatti, by his tireless efforts and infinite capacity for work, early established himself in the regard of his colleagues. This reputation was extended later throughout the county and other parts of the country when he took up thoracic surgery as a speciality and a special unit for that purpose was established at this hospital. His enthusiasm in clinical matters was a stimulus and inspiration to all, and it was largely due to his efforts that the Middlesex County Medical Society was first started, and throughout the difficult war years it was mainly his zeal and example which promoted the interest necessary for the success of the Society. In recognising his long and valued service to the hospital, tribute is paid by his colleagues to the high standard of his work and to his skill as an operator. The sincere good wishes of the members of the Staff accompany Mr. Fatti in his new career.

In January, Dr. Jackson was called up to the Forces and Dr. C. R. Baxter was appointed as Temporary Physician. In October, Mr. Hanley was called up and to fill the vacancy created, Mr. Scorer was appointed Temporary Surgeon.

In the transitional period between the waning of the authority of the Middlesex County Council and the assumption of control by the Regional Board, it is difficult to assess the requirements and the demands likely to be made on the hospital in the future. Before the war, adverse criticism was directed against municipal hospitals because of the apparently extreme under-staffing of medical personnel, and the belief that an inadequate medical service was the inevitable consequence. The Middlesex County Council did much to counteract this belief by establishing senior clinical appointments and was beginning to build up a very excellent service. Since the war, standards in staffing have altered, emphasis has been placed on specialisation and improved quality therefrom, specialities have been assumed and numerous additional appointments have been made throughout the country. From the overwork from understaffing the pendulum is swinging to the other extreme, when demoralisation will follow the under-work resulting from over-staffing. Too much emphasis has been placed on teaching, so that every appointee becomes an aspirant and self-appointed teachers abound without pupils. In a hospital such as this, so distantly situated from the centre of London, there are likely to be few opportunities for teaching undergraduates except as final year interns, but great scope exists for the development of the teaching of post-graduates, preferably as residents throughout the duration of special courses. The acute nursing staff shortage and the poor structural quality of many of the wards and departments prevent the full development and organisation of the hospital, and without additional theatre accommodation a complete service in all the specialities cannot be fulfilled, and further medical appointments will probably be delayed a few years.

Publications, 1947.

Mr. L. Fatti	"Perspex specimen boxes" *Lancet*, 1.2.47.
	"Right-sided cervical aortic arch"; also "Ectopic stomach"—accepted for the *British Journal of Surgery*, 1947.
	Co-author with W. Pagel, F. Simmonds and N. McDonald in revised edition of "Pulmonary Tuberculosis," 1947.
Dr. J. Morgan	"Ruptured rectus abdominis muscle in pregnancy," *Lancet*, 1947.
	"Hæmorrhagic disease of the newborn," *Journal of Obstetrics of the British Empire*, 1947.
Dr. C. G. Barnes... ...	"Hypoglycaemia after partial gastrectomy," *Lancet*, 1947.
Mr. H. G. Hanley and W. Arklay Steel.	"The solitary ectopic pelvic kidney," *British Journal of Surgery*, 1947.

Beds.

Slight revision of the complement of beds has been necessary this year, as the continuing poor recruitment of nurses has prevented the re-opening of the Annexe Wards and Theatre. The complement is detailed in this way:—

Male	Medical	70									
	Surgical	136									
	Chronic	76	...	...	...	...	282				
Female	Medical	73									
	Surgical	156									
	Chronic	111	...	...	...	...	340				
Maternity... ...	Beds	64									
	Cradles	71	...	...	...	...	135				
Children	Medical	46									
	Surgical	42	...	...	...	...	88				
						Total ...	...	845			

Great anxiety has been experienced in endeavouring to cope with the increasing demands for accommodation for chronic cases, especially for females, and the very unsatisfactory expedient of a waiting list for these cases has had to be adopted. So many factors have to be considered in assessing the urgency and priority of such admissions, that the waiting period for some has to be too prolonged and considerable hardship to patients and relatives is unavoidable. Domestic difficulties, especially attributable to housing shortage, prevent relatives from providing adequate accommodation and home nursing facilities.

Nurses' Training School.

Academic Results during the Year.

	Passed.	*Failed.*
State Examination—Preliminary	12	1 in part 1
State Examination—Final	21	—
County Nurses' Examinations (of this number 12 passed with credit)	19	2

The Sir Gilfred Craig Prize (also Silver Medal)—Nurse Muriel Roffey.

Nursing Staff.

In all but a few of the hospitals in the country there is a very serious shortage of nurses, causing grave concern to hospital administrators. This shortage first became evident in 1943, when criticism of hospital administration by all and sundry was rife, and as criticism became intensified recruitment of nurses correspondingly fell. Publicity adverse to nursing and exaggerating the " bad " features and conditions of hospital life was given undue prominence, and nursing was hailed as a profession to be shunned rather than advocated. Many and various schemes were propounded by different people unaware of hospital habits and practices. Charters of improved living conditions, and the Rushcliffe Scheme for nurses, included failings which are only now being admitted. Propaganda campaigns, appeals in the national press to girls to become nurses in order to stem the drift away from the profession, schemes altering nursing standards and curriculum, all these have had no effect other than the expenditure of vast sums of money. Those working in hospitals are most aware of the serious significance of the increasing shortage of nurses and know that the whole success of the New Health Scheme for Hospitals will be jeopardised unless a solution to the problem can be found.

Greater emphasis and importance should be given to the practice and less to the theory of nursing as the major part of a nurse's work should always be practical nursing. In hospitals nearly 50 per cent. below their normal complement of nurses, ward sisters with already heavy responsibilities have less time to provide practical demonstrations for the nurses, and the time may come when sisters with deficiencies in their own training will be unable to teach junior nurses the essentials of practical nursing. When resignations are not balanced by replacements great strains are put on the staff remaining, and with increased medical staffing adding to the numbers of ward rounds, clinical data to be charted every hour of every day in keeping with specialised procedure, and the carrying out of numerous confirmatory but often unessential investigations, as is the custom of the present day, the strain may be increased to the breaking point. Nurses undoubtedly form the key-stone to the whole Hospital Service and unless the depletion of staffs can be counteracted soon, hospitals will be unable to give a modicum, far less a high standard, of treatment. The reasons for the falling off in recruitment are numerous. Many are attributable to the trend of the times and part of the solution may rest with parents and teachers in imbuing the younger generation with the spirit of service and self-sacrifice which has always characterized the work of the whole profession of nursing in this country in the past.

The responsibility of the solution now rests with the Government and lesser authorities. They should take steps to concentrate the majority of nurses in the Hospital Service, as no where else are the services of trained nurses more required.

Structural Developments.

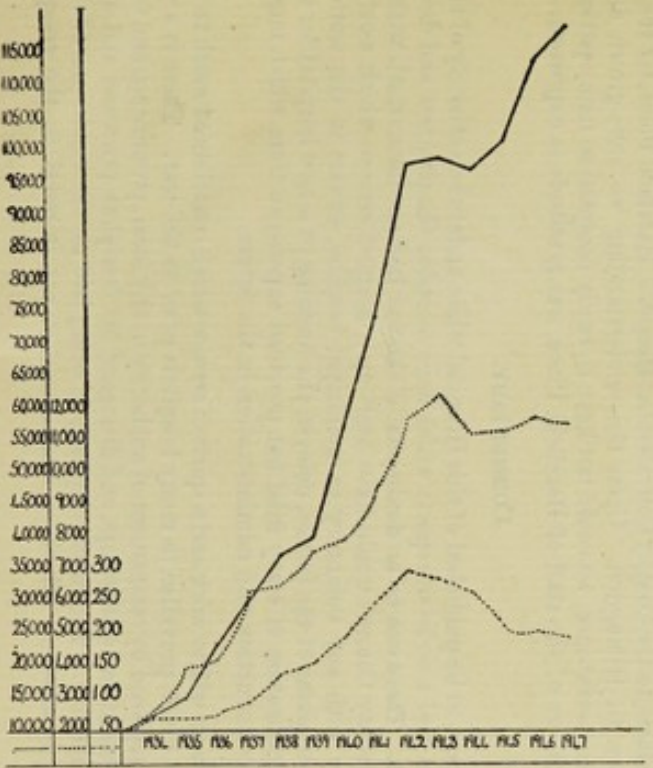
The main theme and thesis of numerous reports and several deputations to the Ministry in the past has been the need of this hospital since 1934 for permanent buildings. Agreement has been reached with the Ministry of Health that the claims made for priority to be given to this hospital for building are fully justified. Approval has been given for the buildings detailed under Section 1 of the building scheme to be commenced in 1948 and the other schemes to follow on as national conditions allow. The Regional Authorities have agreed that the main part of the hospital should be built on the Furze Site, the Ministries of Air and Civil Aviation have approved the scheme of building on this site to a height of 150 ft. The delay in the building of the main hospital is attributed to stronger claims than ours in the steel allocation, and while the priority for permanent buildings for this hospital still remains as urgent, our claims must be dependent on the easing of the steel restrictions in the future. The work of the additions to the Nurses' Home Dining Room, requested in 1945, proceeds so slowly, that completion of this building is not expected until well into 1948. Additions to the X-Ray Department to provide for more apparatus and to accommodate a clinical photographic department, will be commenced in 1948 and should provide extra facilities for the Department until permanent buildings are built. So that the work in hospital may be unaffected, slight structural additions and modifications will be required when the extension to the Nurses' Home commences next year.

Work of the Hospital.

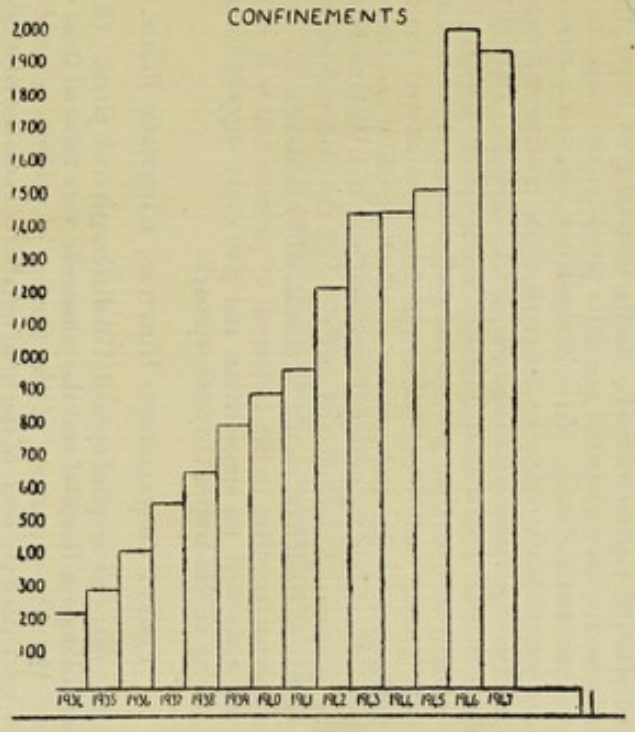
The work of the various departments is shown in detail in the statistical tables which form the main part of this report. In spite of the fact that three wards and the Annexe theatre remain closed, little fluctuation is noticeable in many of the statistics. In many departments substantial increases indicate the greater scope which would be possible were more abundant structural facilities available. Because of the shortage of nursing staff, excessive and often dangerous pressure has to be maintained in the wards in ensuring a quick turnover of cases so that acute cases may not be refused admission. This has had the effect of reducing the length of stay in hospital to 12·8 days, a limit too low for comfortable and safe administration. The work of the out-patient department has so increased that many of the clinics have had to be duplicated. All consulting rooms are fully occupied and doctors are having to conduct clinics in dressing rooms, off-shoots of the corridor and other odd corners of the department. This is extremely unsatisfactory and provides no privacy, so that to provide better accommodation it is proposed to transfer the work of the Ante-Natal Clinic to the old Convalescent Wards. It is greatly to be deplored that a return has to be made to buildings previously condemned in numerous past reports, yet they are the only buildings remaining wherein alternative accommodation for these clinics is possible. It can only be hoped that the occupation of these unsatisfactory quarters will be of short duration and the next move will be to a happier and healthier permanent environment at the earliest possible date.

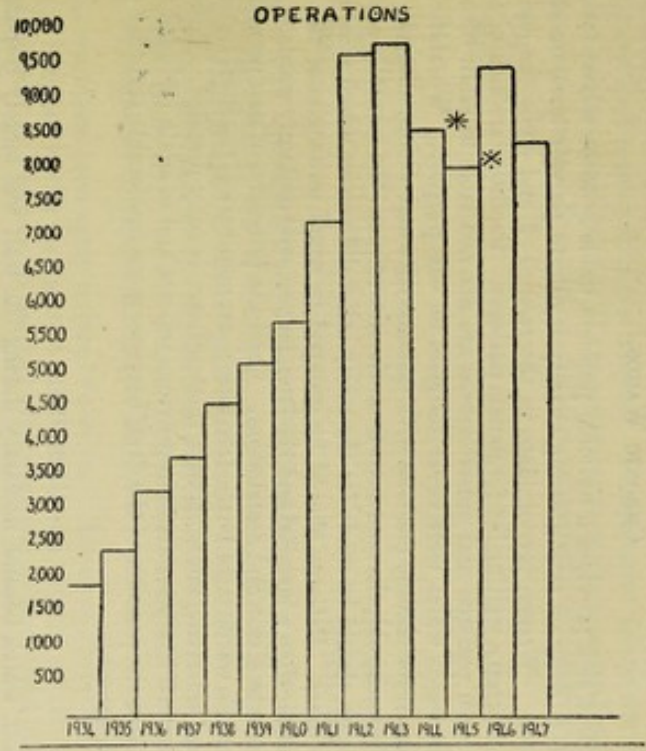
The number of cases treated to a conclusion in the hospital wards was 10,871 and in the chronic wards 897 (not included in statistical tables), making a total of 11,768 discharged throughout the year.

The following diagrams illustrate the very rapid increase of work performed in this hospital, and one of them reveals the rather disquieting feature of a reduction of nursing personnel coincident with major increases in the in-patient and out-patient turnover.



OUTPATIENTS —— 1941 - EVACUATION OF PATIENTS AND RESTRICTION OF ADMISSIONS
INPATIENTS ····· DUE TO FLYING BOMBS
NURSES ---- 1945 - THREE WARDS [111 BEDS] AND ONE THEATRE CLOSED
DUE TO SHORTAGE OF NURSING STAFF





* 1941 - EVACUATION OF PATIENTS DUE TO FLYING BOMBS
× 1945 - CLOSING OF THREE WARDS [111 BEDS] AND ONE THEATRE
DUE TO SHORTAGE OF NURSING STAFF

Chronic Wards.

The care of the chronic sick provides a national problem unlikely to be solved for many a long day. At this hospital it is daily an ever-growing anxiety trying to provide accommodation for the number seeking admission. Women predominate in the ratio 3 : 2 and since the end of the war it has become necessary to keep a waiting list for female patients. Facilities are lacking for increasing the accommodation for such patients and indeed nurses are not available to allow of acceptance of further responsibilities in wards which were never designed for this purpose. When the time comes, buildings should be designed for chronic patients with extreme care and vision, allowing for adequate segregation, the young from the old, the continent from the incontinent, the mentally alert from those less favoured, and provision should be made for the many other difficulties which arise in the day to day treatment of these cases. Patients should be grouped in small units giving the comfort and appearance of a home, rather than a hospital and the long, barren, cold and ugly wards of the past and present day allowed to pass to disuse and destruction. Until the provision of new permanent hospital buildings, the present chronic wards must be used, so long must members of the Staff suffer the rebukes and abuse of patients and relatives, knowing that this criticism is fully justified. Reference to this unfair imposition on the Staff has been made in previous reports and is again included to emphasise that with the passing years, the position of the Staff becomes more intolerable and that of the appropriate authority more inexcusable.

Catering.

The rationing of food, which became necessary during the war, was largely responsible for the marked change in the dietary in hospitals and for the many grievances voiced by patients of the deficiencies in the diet. Prior to this, diets in this hospital were very full and varied due to the smallness of the hospital and plentiful supplies of food. As the hospital grew larger, the essential services of which the Kitchen was one, were neglected and little provision was made for catering for the considerable increase of patients and staff. Three kitchens now cater for patients and staff and in the Nurses' Home, a very small kitchen supplies the needs of the medical and nursing staffs. Plans for extension of this kitchen were recently turned down by the Ministry. This followed a report given by a catering expert and little has been done to improve the conditions which are blatant to most people. Complaints are frequently received from patients and staff, relating to the food in its quantity, cooking or serving, and under present conditions little can be done to counteract the complaints. Requests have been made in the past for the establishment of a Catering officer and this appointment has been advocated by others. He should be given full responsibility, and, with modifications, a free hand in the buying, storing, preparation, cooking and serving of all the food in the hospital, and the proviso should be enforced that no fresh food should be purchased by contract.

Food is a very important item in the treatment of patients and it is sincerely hoped that the Regional Board will make such an appointment and give every support to any suggestions which would raise the catering of this hospital beyond reproach.

County Convalescent Hospital, Harefield Place.

In 1937, the year that this hospital opened, 770 discharges took place. Of this total 50 per cent. were referred from Hillingdon Hospital and the remainder were referred from other hospitals within the county. Since 1940 the proportion of the number of patients referred from Hillingdon has increased and now less than 3 per cent. of the total number of cases are admitted from hospitals other than Hillingdon.

The number of cases discharged during 1947 was 1,814. These figures are given to reflect a measure of our indebtedness to the County Convalescent Hospital, Harefield Place, for the co-operation and help always shown to Hillingdon. Upon this understanding we have grown accustomed to depend, for without their assistance, we could not have so easily accepted so many patients for treatment. To all the members of the staff of Harefield Place, our gratitude is expressed.

Commentary.

This is the last report to be published of this Hospital while under the authority of the Middlesex County Council—the last of a series of reports which have recorded the progress and development of the hospital since 1934. There can be no doubt that if the war had not intervened, within about ten years the Middlesex County Council would have built up a hospital service which would have compared very favourably with any voluntary or municipal hospital service in the world. The war shattered all dreams and plans of the future, delayed the building of a new hospital for far too many years, prevented re-organisation of every kind but provided experience from which much profit can be gained in hospital construction and administration in the future.

In the past there was a will to work and a spirit of service which contributed much to the excellent and happy atmosphere which prevailed in many hospitals prior to the war. There is a tendency for this spirit to-day to be replaced by resentment of authority in any form, prominence and favour sought by personal aggrandisement and a contempt and disregard for discipline practised and unfortunately encouraged by all and sundry. Too much emphasis is being laid on the conditions of service before willingness for service is shown. All these characteristics are inimical to the co-operation and

common purpose required and expected in hospitals. The remedy, when wanted, will require the full support of appropriate authorities. Since the war, with the exception of nurses, there has been a marked increase of staff employed in the hospital. Comparative figures for 1938 (5,488 in-patients), 1942 (10,639 in-patients), and 1947 (10,871 in-patients) show the total staff employed as 366, 374, 670 respectively for these years. For 1942 to 1947 the complement of nurses was as follows :—

1942	...	...	...	...	...	...	297
1943	...	...	...	...	...	...	282
1944	...	...	...	...	...	...	258·5
1945	...	...	...	...	...	...	211 full-time, 3 part-time
1946	...	...	...	...	...	...	194 full-time, 15 part-time
1947	...	...	...	...	...	...	176 full-time, 27 part-time.

Redundancies of staff are beginning to appear and the dependancy on at least one other to complete the work previously done by one, is becoming more evident. If efficiency is not increased and proof of lowered individual output is shown, justification for such numbers of staff will be untenable. Reluctance of staffs to engage in duties entailing work in the evening and during week-ends is being shown. In hospital, a 24 hours' service is essential for the care of the sick and it may be that alteration of rotas may be necessary to ensure the fairest distribution of work for all.

What has elsewhere been aptly referred to as the " Fetish of Perpetual Expansion " applied to departments in hospital is rife throughout the country and there is no doubt that a sane approach must soon be made to the subject to prevent extravagances of plans and staffs beyond the needs of immediate necessity.

This is an age of committees in which millions of man hours are lost to the country each year. These are likely to remain fashionable as tests of enthusiasm and lapse when personal initiative and acceptance of responsibilities regain their due recognition. In spite of many views to the contrary, it is upon the work and personality of the members of the Staff that the reputation and character of the hospital depends. With friendly and eager co-operation, avoidance of departmentalisation, a humble rather than an exalted estimate of personal limitations, a common purpose to promote the greatest benefit to patients, thus is engendered the spirit and happiness promoting a harmony without which good work is impossible.

ACKNOWLEDGMENT.

The adversities with which this hospital seems continually to be faced, have again been met with great tolerance and forbearance and it is with sincere gratitude that this tribute is paid to all members of the Staff for their loyalty and co-operation in the work of the hospital during the past year.

Statistical Tables and Analyses.

	Middlesex County Council Cases.	Ministry Cases.	Totals.	
Remaining in hospital, 1st January, 1947	538	13	551	
Admitted	9,576	67	9,643	
Born in hospital	1,943	—	1,943	
				12,137
Discharged	10,785	76	10,861	
Died (including chronic cases)	727	2	729	
Patients treated to a conclusion	11,512	78	—	11,590
Remaining in hospital on 31st December, 1947 ...	545	2	—	547

Classification of Patients Treated to a Conclusion.

Male infants under 3	1,375	
Boys, 3–16	812	
Men	2,447	
		4,634
Female infants under 3	1,206	
Girls, 3–16	583	
Women	5,089	
		6,878
Ministry cases		78
Total		11,590

Children under 16 constituted 34·3 per cent. of all patients treated.

The number of patients treated to a conclusion is the subject of the tables which follow.

I.—Table showing how the 11,590 Patients Treated to a Conclusion during the Year were Originally Admitted.

By Almoner	2,669
By relieving officer's order	4
By Medical Director—	
Births	1,943
Police (other than accidents)	22
Accidents	99
Maternity cases, emergency	279
Other cases	6,286
Transfer from Institution or Home, M.C.C.	33
Transfer from Hospital, M.C.C.	89
Transfer from Hospital or Institution—other authority ...	88
Ministry	78
Total	11,590

Of the above patients, 76·9 per cent. were admitted by the Medical Director.

II.—Table showing the Districts to which the 11,590 Patients Belonged.

Uxbridge	2,338
Yiewsley and West Drayton	1,288
Ruislip-Northwood	1,906
Southall	2,266
Hayes and Harlington	3,271
Other districts of Middlesex	359
Buckinghamshire	56
Other counties	28
Ministry	78
Total	11,590

Note.—The allotment of an accident case to any one of the preceding districts is governed by the following rules :—

(1) A person admitted, who is normally resident within the County, becomes a case for the district of residence, irrespective of the district in which the accident occurred.

(2) A person admitted, not being normally resident within the County, becomes a case for the district in which the accident actually occurred.

(3) A person admitted from and normally resident outside the County becomes a case for the Urban District of Uxbridge, in which the Hospital is situated.

III.—Table showing the Results of Treatment or the Termination, with Analyses of Deaths in Age and other Groups.*

	Acute Cases.		Chronic Cases.	
		Per cent.		Per cent.
Relieved	9,504	88·1	249	27·8
Unrelieved	900	8·3	310	34·5
Died	389	3·6	338	37·7

Analysis of Deaths in Age Groups.

Ages.	Male.		Female.		Total.	
	Acute.	Chronic.	Acute.	Chronic.	Acute.	Chronic.
Under 1	58	—	41	—	99	—
1–2	3	—	3	—	6	—
2–5	4	—	1	—	5	—
5–15	4	—	4	—	8	—
15–25	4	—	5	—	9	—
25–35	11	1	9	1	20	2
35–45	13	1	14	3	27	4
45–55	34	13	24	10	58	23
55–65	41	32	23	15	64	47
65–75	39	55	20	44	59	99
Over 75	13	93	21	70	34	163
Totals	224	195	165	143	389	338

* Excluding Ministry cases.

	Treated.	Percentage of Total.	Died.	Case Mortality per cent.
Medical cases	2,930	25·1	236	8·1
Surgical and obstetric cases	7,863	67·2	153	1·9
Chronic cases	897	7·7	338	37·7

	Acute Cases.	Case Mortality per cent.	Chronic Cases.	Case Mortality per cent.
Deaths within 24 hours of admission ...	129	33·2	33	9·8
Deaths 24 to 48 hours after admission ...	25	6·4	19	5·6
Deaths 48 to 72 hours after admission ...	19	4·9	18	5·3
All other deaths	216	55·5	268	79·3
Total deaths	389	100·0	338	100·0

For the causes of death, *see* Table VII.

IV.—Table showing the Behaviour of Patients and their Manner of Discharge.

Patients whose behaviour was normal	11,582
Patients whose behaviour was abnormal	8*
Total	11,590

*Troublesome	4
Mental	4
Suicidal	—
	8

Discharge.

In the normal manner or by death	11,491
At own request, with Medical Director's approval	24
At own request, against Medical Director's advice	74
Ejected for misconduct	1
Total	11,590

V.—Table showing whither the 11,590 Patients were Discharged.

To own, relative's or friend's home	4,208
To institution or children's home—M.C.C....	1
To out-patient department	4,752
To hospital or institution—other authority	100
To convalescent home	1,590
To acute infectious disease hospital	43
To mental hospital	1
To sanatorium	16
To another M.C.C. general hospital	74
Deaths	727
Ministry (including 2 deaths)	78
Total	11,590

VI.—Averages for the Year.

Beds—average daily complement	843·9
Beds—average daily number available	734·8
Beds—average daily number occupied (acute)	381·9
Beds—average daily number occupied (chronic)	184·7
Average daily percentage of available beds occupied	77·1
Patients per occupied bed—average number per annum (acute)	28·5
Patients per occupied bed—average number per annum (chronic)	4·9
Nursing staff—average daily number	199·57
Occupied beds per nurse—average number	2·86
Admissions—average daily number	31·7
Dangerously ill—average daily percentage (acute)	7·3
Dangerously ill—average daily percentage (chronic)	17·6
Stay—average length in days per patient (acute)	12·8
Stay—average length in days per patient (chronic)	75·2

Maximum number of beds occupied = 614 on 15th May.
Minimum number of beds occupied = 481 on 24th December.

VII.—Classification of the Diseases and Conditions for which the 11,512* Patients Discharged during 1947 were Primarily Treated.

* This figure does not include Ministry cases.

Disease or Condition.	Medical.			Surgical and Obstetric.			Chronic.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Healthy—										
No abnormality detected	72	—	—	—	—	—	12	—	—	84
Breast-fed infants with mother	81	1	—	—	—	—	—	—	—	82
Births	—	—	—	1,886	—	57	—	—	—	1,943
Diseases due to infection—										
Erysipelas	3	—	—	—	—	—	—	—	—	3
Gonorrhœa	—	—	—	—	—	—	—	1	—	1
Influenza	24	—	1	—	—	—	—	—	—	25
Measles—morbilli and rubella	1	9	—	—	—	—	—	—	—	10
Mumps, pertussis and varicella	1	4	—	—	—	—	—	—	—	5
Rheumatism, acute and sub-acute	32	—	—	—	—	—	—	—	—	32
Rheumatic chorea	9	—	—	—	—	—	—	—	—	9
Syphilis, primary and secondary	—	1	—	—	—	—	1	—	—	2
Tuberculosis, pulmonary	2	40	11	—	2	—	—	17	12	84
Tuberculosis, non-pulmonary	1	10	2	5	13	1	—	5	1	38
Miscellaneous, notifiable	22	15	—	—	—	—	2	—	—	39
Miscellaneous, non-notifiable	26	—	3	4	—	—	—	1	—	34
Infestations by metazoan parasites	1	2	—	—	—	—	1	—	—	4
Diseases of the nervous system—										
Vascular origin	1	21	9	—	—	—	—	15	24	70
Mental diseases	—	15	—	—	—	—	—	3	—	18
Miscellaneous	20	70	4	1	—	—	4	20	—	119
Diseases of the eye	7	1	—	44	4	—	3	3	—	62
Diseases of the ear	39	1	1	70	1	1	—	2	—	115
Diseases of the nose and sinuses	6	—	—	32	1	—	—	—	—	39
Diseases of the circulatory system—										
Rheumatic carditis	6	24	9	—	—	—	—	1	5	45
Myocardial degeneration, &c.	1	10	9	—	1	1	—	7	18	47
Arterio-sclerosis	2	44	27	1	2	3	—	48	116	243
Veins	15	9	2	55	2	—	1	3	1	88
Miscellaneous	20	43	15	2	—	2	2	12	6	102
Diseases of the blood and spleen	20	19	5	1	—	1	1	3	1	51
Diseases of the lymphatic system	35	6	—	35	1	—	—	—	—	77
Diseases of the endocrine glands	2	22	2	21	2	—	—	5	—	54
Diseases of the breast	2	—	—	22	—	—	—	—	—	24
Diseases of the respiratory system—										
Laryngitis	15	—	—	2	—	—	—	—	—	17
Bronchitis, acute	63	1	1	—	—	—	3	—	—	68
Bronchitis, chronic	2	12	5	—	1	—	2	26	5	53
Pneumonia, primary	109	3	6	1	1	—	3	—	5	128
Bronchopneumonia	135	7	19	—	—	—	8	1	30	200
Pleurisy	17	3	—	10	2	—	2	—	—	34
Miscellaneous	62	36	4	41	25	—	1	10	2	181
Diseases of the teeth and gums	1	—	—	24	—	—	—	—	—	25
Diseases of the digestive system—										
Tonsillitis	69	—	1	98	—	—	2	—	—	170
Enlarged tonsils and/or adenoids	—	—	—	382	—	—	—	—	—	382
Peptic ulcers	174	7	8	68	2	5	5	3	3	275
Dyspepsia of infants	37	—	1	—	—	—	—	—	—	38
Stomach and duodenum, other	88	1	8	—	—	—	11	—	—	108
Appendicitis	24	—	—	233	1	5	2	—	—	265
Viscероptosis, constipation and stasis	54	2	—	—	—	—	7	1	—	64

Disease or Condition.	Medical.			Surgical and Obstetric.			Chronic.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Diseases of the digestive system—*contd.*										
Hernia	2	2	1	190	8	3	10	3	1	220
Intestine, rectum, anus—other	71	10	8	50	5	3	9	3	4	163
Liver and gall bladder	30	5	3	24	2	1	—	2	1	68
Peritoneum	2	1	—	9	—	2	—	1	—	15
Miscellaneous	20	—	—	49	1	2	1	1	—	74
Diseases due to disorders of nutrition or of metabolism	23	78	12	—	1	—	—	5	2	121
Diseases of the generative system—										
Male organs	1	1	1	93	12	8	4	13	7	140
Female organs	16	2	—	113	1	—	1	—	—	133
Pregnancy, parturition and puerperium—										
Normal and abnormal conditions	—	—	—	2,672	3	3	8	—	—	2,686
Diseases of the organs of locomotion—										
Fibrositis group	28	1	—	1	1	—	3	—	—	34
Arthritis deformans	—	20	—	—	1	—	—	11	—	32
Osteomyelitis, acute and chronic	3	4	1	14	2	—	1	3	—	28
Miscellaneous	12	14	—	52	3	—	2	7	—	90
Diseases of the areolar tissue	17	1	—	35	—	—	2	1	—	56
Diseases of the skin	64	8	1	14	1	—	67	4	1	160
Diseases of the urinary organs—										
Nephritis	17	3	8	1	—	—	—	—	4	33
Pyelitis	44	1	—	3	1	—	1	—	—	50
Miscellaneous	18	3	3	73	15	4	2	4	6	128
Injuries—										
Superficial	13	—	—	51	—	—	5	—	—	69
Deep and foreign bodies	3	—	—	52	3	2	2	—	—	62
Shock or other injury	1	—	—	—	—	—	—	—	—	1
Cerebral concussion	—	—	—	116	1	—	1	—	—	118
Cerebral contusion	—	2	—	1	—	—	—	—	—	3
Burns and scalds	7	2	—	21	1	—	1	2	—	34
Wounds, clean and septic	—	—	—	32	1	—	5	—	—	38
Septic conditions of the hand	—	—	—	15	—	—	—	—	—	15
Fractures and dislocations	—	—	—	276	22	17	12	12	14	353
Miscellaneous	2	1	2	1	2	1	1	—	1	11
Tumours, benign—										
Generative system	—	1	—	47	5	—	1	—	—	54
Other organs and structures	—	4	—	37	3	—	—	—	—	44
Tumours, malignant—										
Digestive system	1	12	12	14	21	20	—	15	28	123
Generative system	—	9	3	9	12	2	—	13	13	61
Urinary organs	—	1	1	3	5	1	—	—	3	14
Other organs and structures	—	22	15	29	30	5	1	16	23	141
Tumours, intra-cranial	—	—	1	—	—	—	—	—	1	2
Cysts	2	—	—	48	—	—	—	—	—	50
Malformations, congenital	8	18	9	31	2	3	1	1	—	73
Poisonings	44	—	2	—	—	—	9	—	—	55
Special investigation/treatment	274	5	—	266	4	—	26	6	—	581
Totals	2,024	670	236	7,480	230	153	249	310	338	11690*

* This figure includes 178 transfers which have been entered under both Acute and Chronic headings.

Diseases and Conditions Treated to a Conclusion.

(Grouped in Order of Frequency.)

	Treated.	Died.
Pregnancy, parturition and puerperium	2,686	3
Births	1,943	57
Diseases of the digestive system	1,842	60
Injuries	704	37
Diseases of the respiratory system	681	77
Special investigation/treatment	581	—
Diseases of the circulatory system	525	214
Tumours—malignant (339), benign (98), cysts (50)	487	126
Diseases due to infection	286	31
Diseases of the generative system	273	16
Diseases of the urinary organs	211	25
Diseases of the nervous system	207	37
Diseases of the organs of locomotion	184	1
Healthy	166	—
Diseases of the skin	160	2
Diseases due to disorders of nutrition or of metabolism	121	14
Diseases of the ear	115	2
Diseases of the lymphatic system	77	—
Malformations, congenital	73	12
Diseases of the eye	62	—
Diseases of the areolar tissue	56	—
Poisonings	55	2
Diseases of the endocrine glands	54	2
Diseases of the blood and spleen	51	7
Diseases of the nose and sinuses	39	—
Diseases of the teeth and gums	25	—
Diseases of the breast	24	—
Tumours, intra-cranial	2	2
Totals	11,690	727

Analysis of Fractures and Dislocations Treated to a Conclusion during the Year, together with the Result of In-patient and Out-patient Treatment.

	Nature.			Totals.
	Simple.	Compound.	Deaths (included in total).	
Skull	18	4	1	22
Skull, with concussion	28	1	1	29
Skull, with cerebral contusion	5	3	6	8
Vertebræ	9	—	—	9
Ribs	9	—	—	9
Clavicle	6	—	—	6
Scapula	—	—	—	—
Humerus	24	—	—	24
Radius or ulna or both	28	—	—	28
Carpus, metacarpus or phalanges	9	24	—	33
Pelvis	3	—	—	3
Femur, neck	13	—	—	13
Femur, great trochanter	10	1	1	11
Femur, shaft	13	—	—	13
Femur, lower end	—	—	—	—
Patella	7	1	—	8
Tibia	15	—	—	15
Fibula	5	—	—	5
Tibia and fibula, simple	26	—	—	26
Tibia and fibula, compound	—	5	—	5
Tarsus, metatarsus or phalanges	3	2	—	5
*Multiple bony injuries, simple	20	—	6	20
†Multiple bony injuries, compound	—	7	2	7
Fracture-dislocations, various	5	—	—	5
Separated epiphyses	2	—	—	2
Dislocations, various	6	—	—	6
Pathological, malunited, &c.	3	—	—	3
Totals	267	48	17	315

* Multiple fractures of the vertebral column, hand and foot and cases of fractured ribs, tibia with fibula and radius with ulna are not included in the group unless associated with one or more fractures or dislocations elsewhere. Multiple fractures of the bones of the skull, face and nose are not classified as multiple.

† One or more injuries being compound, not necessarily all.

15·2 per cent. of the fractures and fracture-dislocation cases were of the compound variety.

Men	162 of whom 10 died.†
Women	73 of whom 6 died.†
Children under 16—male	57 of whom 1 died.†
Children under 16—female	23 of whom none died.

Special Methods applied to the above Cases.

Manipulation under general anæsthesia	11
Application of plaster of Paris	152
Manipulation under fluorescent screen	17
Transfixion pin or wire...	7
Open operation	10
Amputation for compound fracture	9
Smith Petersen pin	4
Open wiring	5
Zimmer	6
Gallows	6
Miscellaneous	45

The following compound fracture cases had amputation :—

One case of fractured humerus.

Eight cases of phalanges of hand.

†Cause of death :—

Cerebral contusion	8
Cerebral hæmorrhage	1
Subarachnoid hæmorrhage	1
Shock	3
Meningitis	1
Uræmia and arteriosclerosis	1
Hæmorrhage and ruptured lung	1
Hypostatic pneumonia	1
Total fracture deaths	17

The average length of stay of the 315 fracture and dislocation cases analysed above was 23·2 days.

The above figures relate to the fracture cases treated in hospital. The number is small considering the size of the hospital and the extent of the district.

At this hospital very adequate facilities and equipment exist for the treatment of fractures The essential conditions of an organised fracture service, as enumerated by the Committee on Fractures,* viz., segregation of cases, continuity of treatment, after-care and unity of control, are carried out in the practice of this hospital. All fracture cases are followed up at the Fracture Clinic until a satisfactory result is obtained.

772 fractures in addition were treated entirely as out-patients, making a total of 1,087 fractures under treatment during the year. The treatment of 124 of these cases was continued into the New Year.

* *Vide* Report of Committee on Fractures—Supplement to the *British Medical Journal*, 16th February, 1935.

The Work of the Special Departments.

1. Surgical	Major operations	2,374
	Minor operations	8,358
2. Anæsthetics	[For details see special table] ...	6,909
3. Radiological	Patients investigated	10,110
	Investigations	15,815
4. Physical Medicine ...	Patients	2,587
	Treatments	61,607
5. Maternity	Women examined at ante-natal clinic	2,866
	Attendances at ante-natal clinic ...	11,203
	Births	1,943
	*Obstetric operations	1,086
6. Pathological	Investigations	22,063
7. Ear, Nose and Throat ...	*Operations	732
8. Therapeutic, Diagnostic, Prophylactic	Special procedures	3,301
9. Casualty and Out-Patients	†Patients	23,416
	Attendances	119,413
	*Operations	5,436
10. Special Clinic	Patients	512
	Attendances	9,878
	Operations	63
11. Nurses' Sick Room ...	Nursing staff off duty through illness	166

Note.—Included in the above figures are those of the minor operations, anæsthetics, special treatments and investigations performed on, given to or made on, patients in the Casualty, various out-patient departments and Nurses' sick room.

1. Department of Surgery.

	Theatre.		Casualty and Out-Patients.		Wards.		Nurses.		Totals.
	Major.	Minor.	Major.	Minor.	Major.	Minor.	Major.	Minor.	
General—									
Skin and superficial structures ...	46	169	3	2,703	—	27	—	10	2,958
Arteries, veins and lymphatics ...	14	36	—	490	—	2	—	—	542
Nerves	1	21	—	—	—	—	—	—	22
Bones and joints	234	132	1	894	7	12	—	—	1,280
Muscles, tendons, bursæ and fasciæ	15	17	1	45	—	—	—	—	78
Amputations	10	14	1	6	—	—	—	—	31
Skull, brain and spine	2	9	—	—	—	2	—	—	13
Face	—	—	—	—	—	—	—	—	—
Eye	28	19	—	344	—	—	—	—	391
Mouth, pharynx and œsophagus	7	29	—	5	—	—	—	—	41
Thyroid, accessory glands and neck	23	12	—	2	—	—	—	—	37
Breast	21	21	—	15	—	—	—	—	57
Thorax and contents	64	241	—	58	21	110	—	—	494
Abdominal wall and cavity ...	270	1	—	—	1	—	—	—	272
Stomach and duodenum ...	94	35	—	—	—	16	—	—	145
Intestine, rectum and anus ...	289	123	—	210	—	23	—	—	645
Liver, gall bladder, pancreas and spleen	29	1	—	—	—	—	—	—	30
Kidney and urinary tract ...	113	353	—	312	—	12	—	—	790
Male generative organs	80	32	—	255	—	2	—	—	369
Female generative organs ...	517	83	—	5	—	1	3	—	609
Unclassified	5	81	—	19	—	4	—	1	110
Special—									
Obstetric	104	—	—	—	229	753	—	—	1,086
Ear, nose and throat	141	529	—	61	—	1	—	—	732
Grand totals	2,107	1,958	6	5,424	258	965	3	11	10,732

* These operations are included in the numbers of major and minor operations and are not additional.
† Ante-natal patients, attendances and operations included.

Operations—

Major	2,374
Minor	8,358

**Operative mortality rates*—

Per 100 major operations	2·78
Per 100 minor operations	·0006
Per 100 major and minor operations	·006

When the period of anæsthesia for an operation ordinarily classified as minor exceeds half-an-hour, that operation is deemed a major one.

Below are given, under anatomical headings, the names and numbers of the operations most frequently performed.

Skin and Superficial Structures (2,958)—

Toilet and suturing of wounds	1,825
Treatment of burns and scalds	15
Incision of abscess, cellulitis boil or carbuncle	145
Sinus, ulcer, scar, cyst, tumour	398
Removal of nail	94
Septic infections of hand	321
Skin graft and plastic repair	19
Foreign body in limb/trunk—removal	141

Arteries, Veins and Lymphatics (542)—

Injection of varicose veins	362
Ligature of varicose veins	45
For suppurative lymphadenitis	120

Nerves (22)—Miscellaneous ... ...

Bones and Joints (1,280)—

The majority of operations in this section were carried out for the treatment of fractures and dislocations; manipulations of bones and joints (97) and with the application of plaster of Paris (1,115) represent the most common operations performed. Transfixion pin or wire [including Zimmer apparatus (3)] (9); open operations for reduction and fixation of fragments (including Smith Petersen pin 6), (23); sequestrectomy (5); excision of bone (23).

Muscles, Tendons, Bursæ (68).

Amputations (31).—This total comprises operations on tibia and fibula (1), femur (3), arm (1), and fingers and toes (26).

Skull, Brain and Spine (13).

Eye (391)—Removal of foreign body, 295.

Abdominal Wall and Cavity (272)—

Herniotomy for inguinal herniæ (11 strangulated) (11 Gallie graft repair)	151
Herniotomy for femoral herniæ (13 strangulated)	23
Herniotomy for ventral, umbilical and incisional herniæ (2 strangulated)	18
Laparotomy—exploratory for adhesiolysis, peritonitis abscess, &c.	78

Mouth, Pharynx and Œsophagus (41).

Thyroid and Neck (37)—includes thyroidectomy (16), branchial cyst (5), operation on salivary glands (9). Adenoma thyroid (3).

Breast (57)—includes incision of mammary abscess (27), removal of breast (20), removal of tumour (9).

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* Every case on whom any operation, either radical or palliative, was performed is included in the total of operation deaths on which these mortality rates are based.

Stomach, Duodenum, Intestine, Rectum, Anus, Gall Bladder (820)—

For peptic ulcer (32 perforated)	39
Gastrectomy	42
Gastroscopy	51
Rammstedt	13
Enterostomy/colostomy, with/without resection	21
Enterectomy/colectomy	15
Anastomoses—various	5
Appendicectomy	178
Appendicectomy (Interval—previous Ochsner-Sherren treatment)	40
Appendicectomy with drainage	15
Appendix abscess—drainage only	10
For intussusception/internal hernia/volvulus	5
Excision of rectum	8
Proctoscopy/sigmoidoscopy (minor operation)	39
For hæmorrhoids (injections—192 (minor operation))	229
Ischio-rectal Anal abscess	34
Various Anal operations	27
Cholecystectomy	23
Cholecystogastrostomy	1
Splenectomy	3
Adrenal gland	2

Kidney, Ureter, Bladder and Urethra (790)—

Miscellaneous on kidney, bladder and ureter	22
Nephrectomy	20
Cystoscopy and ureteric catheterization	58
Cystoscopy (minor operation)	191
Ureterotomy-ureterolithotomy	5
Transplantation of ureter	1
For vesical calculus	1
Suprapubic cystostomy	15
Diathermy of vesical neoplasm	75
Cystectomy	1
Urethral operations	399

Male Generative Organs (368)—

Suprapubic prostatectomy	41
Diathermy of prostate	6
Circumcision (minor operation)	202
Varicocele, hydrocele, hæmatocele	68
On testis/vas/vesicles	29

Female Generative Organs (609)—

Ovary and/or tube Oophorectomy	46
Salpingectomy (sterilization 2)	8
Ectopic gestation	8
Hysteropexy (sterilization 4)	9
Hysterotomy (sterilization 4)	5
Myomectomy	6
For incomplete abortion	295
Curettage (diagnostic)	44
Hysterectomy (vaginal 2, Pan 8)	56
For prolapse	33
Therapeutic abortion (induction)	5

Thorax and Contents (494)—

Artificial pneumothorax	89
Pneumoperitoneum	57
Thoracoscopy and adhesiotomy	9
Lobectomy	22
Pneumonectomy (bronchiectasis 2, carcinoma 2)	4

Laparotomy was performed 748 times. This number does not include herniotomies for inguinal and femoral herniæ and open operations on the kidney and bladder. 228 laparotomies were for appendicitis. During the year 206 persons were discharged or died after operations for appendicitis.

ANALYSIS OF OPERATIONS FOR APPENDICITIS PERFORMED ON PATIENTS TREATED TO A CONCLUSION.

	Males.			Females.			Totals.		
	Relieved.	Died.	Total.	Relieved.	Died.	Total.	Relieved.	Died.	Total.
*Acute	61	—	61	47	—	47	108	—	108
Acute with local peritonitis ...	15	—	15	13	—	13	28	—	28
Acute with local abscess ...	—	—	—	—	—	—	—	—	—
Acute with general peritonitis ...	27	3	30	14	1	15	41	4	45
Chronic	—	—	—	—	—	—	—	—	—
†Interval	17	—	17	8	—	8	25	—	25
Totals	120	3	123	82	1	83	202	4	206

Operative mortality rate of 181 acute cases—2·2 per cent.

In 48 cases an appendix abscess was palpable on admission ; 48 of these received Ochsner-Sherren treatment. There was one death : a child, aged 8 years, ill 4 days prior to admission in moribund condition and unfit for operation, died from acute appendicitis and general peritonitis.

In 9 cases the abscess was drained. There were no deaths.

The average duration of stay of the unoperated cases was 14·6 days while for the operated cases it was 25 days. Twenty-five patients returned for interval appendicectomy. There were no deaths.

2. Anaesthetics.

Analysis of Anæsthetics administered during the Year.

	Theatre.	Maternity.	Wards.	Casualty and Out-patients.	Dental.	Total.
General Anæsthesia—						
Nitrous Oxide (supplemented by trilene 31, preceded by I.V.B. 494, preceded by I.V.B. and supplemented by trilene 184)	726	29	10	800	235	1,800
Ether (preceded by ethyl chloride 817, preceded by nitrous oxide 327, preceded by I.V.B. and nitrous oxide 271) ...	963	228	8	239	9	1,447
Cyclopropane (preceded by nitrous oxide 50, and supplemented by ether 35, preceded by I.V.B. 604, and supplemented by ether 269)	986	—	—	—	6	992
Vinesthene (preceded by I.V.B. 3) ...	20	—	—	—	2	22
Ethyl Chloride (alone)	13	—	1	34	1	49
Intravenous Barbiturates (preceded by surface application of local anæsthetic 147)	252	3	1	9	1	266
Local Anæsthesia—						
Spinal—High spinal 27, supplemented by I.V.B. and cyclopropane 20 ; low spinal 21, supplemented by I.V.B. 4 ...	47	1	—	—	—	48
Infiltration (supplemented by I.V.B. and nitrous oxide 13)	131	438	145	717	10	1,441
Brachial Plexus Block (supplemented by I.V.B. 3)	17	—	—	2	—	19
Caudal Block (supplemented by I.V.B. 3)	13	1	—	—	—	14
Intercostal Block (supplemented by I.V.B. and cyclopropane 3)	8	—	—	—	—	8
Nerve Blocks, various	10	—	—	—	—	10
Abdominal Field Block (supplemented by I.V.B. and cyclopropane 56, supplemented by I.V.B. and nitrous oxide 8)	67	—	—	—	—	67
Surface Application alone	361	—	17	289	—	667
Freezing, by ethyl chloride spray... ...	—	—	2	57	—	59
Totals	3,614	700	184	2,147	264	6,909

I.V.B. = Intravenous barbiturate.

3. Radiological Department.

In-patients investigated	2,186
Out-patients investigated	7,924
Total patients investigated	10,110

Analysis of Investigations made during the Year.

	Totals.
Skull for injury, disease or deformity	922
Chest and contents for disease	4,910
Alimentary tract	1,517
Biliary passages	269
Urinary system	1,122
Generative system	654
Bones and joints for injury	4,324
Bones and joints for disease or deformity	1,390
Miscellaneous	37
Dental	670
Totals	15,815

Special Methods of Investigation.

Barium meals	1,223
Barium enemata	173
Cholecystograms	114
Injections—Lipiodol/sodium bromide	162
Pyelograms—retrograde	54
Urograms—intravenous	458
Screening the removal of a foreign body	3
Manipulation and fixation of fracture under fluorescent screen	87
Total	2,274

Average investigations per patient	1·56
*Radiograms taken	36,588
*Average radiograms per investigation	2·31
*Average radiograms per patient	3·62
Dental radiograms taken	2,736
Maternity patients	87
Ante-natal clinic patients	527

Comparative Table.

	1946.	1947.
Radiological investigations	13,741	15,815

* Dental radiograms and dental patients included.

4. Physical Medicine Department.

	In-patients.	Out-patients.	Total.
Number of patients treated	290	2,297	2,587
Number of treatments given—			
Massage	1,023	11,687	12,710
Electrical	1,718	22,477	24,195
Ultra-violet ray	235	2,918	3,153
Diathermy	134	2,736	2,870
Medical and physical exercises	4,841	12,637	17,478
Wax	—	1,201	1,201
Totals	7,951	53,656	61,607

5. Maternity Department.

I. Ante-Natal Clinic.

Ante-natal sessions held	204
Expectant mothers examined	2,866
Total attendances	11,203
Average number seen per session	54·9
Average number of attendances per expectant mother	3·9
Women referred for pathological investigation	1,762
Women referred for radiological investigation	527

II. Statistical Tables and Analyses of Confinements.

Analysis of 1,949 *Deliveries which took place during the year.*

				Per cent.
Mother admitted ...	Via ante-natal clinic	1,658	85·1
	As an emergency case	291	14·9
	Total	1,949	100·0
Civil State	Married	1,894	97·2
	Unmarried	55	2·8
	Total	1,949	100·0
Parous State	Primipara	1,001	51·4
	Multipara	948	48·6
	Total	1,949	100·0
Presentation	Vertex—occipito anterior ...	1,704	
	Vertex—occipito posterior ...	86	
	Vertex—occipito lateral ...	74	
	Breech	98	
	Transverse	11	
	Face	7	
	Brow	4	
	Compound	5	
	Total...	1,989	

There were 36 sets of twins—

Both vertex occipito anterior	10 sets
Breech vertex	19 sets
Transverse vertex	2 sets
Transverse breech	1 set
Both breech	4 sets

There were 2 sets of triplets—

Vertex, vertex, transverse.
Vertex, vertex, breech.

Induction of Labour.

Indication.	Number of Cases that had Induction.		
	Of Premature Birth.	At or After Term.	Totals.
Maternal toxæmia or hypertension	56	169	225
Post maturity	1	84	85
Obstetric history	3	13	16
Fœtal death or abnormalities	5	6	11
Acute hydramnios or triplets	2	—	2
Pyelitis	1	2	3
Placenta prævia or ante-partum hæmorrhage ...	4	13	17
General constitutional diseases	1	14	15
Rhesus negative	6	3	9
Totals	79	304	383

N.B.—8 sets of twins and 2 sets of triplets were born following induction of labour.

Method of Delivery following Induction.

	Medical Induction only.	Surgical Induction only.	Medical and Surgical Induction.	Totals.
Natural forces	95	145	108	348
Forceps	7	12	12	31
Cæsarean section	5	7	2	14
Manual of vertex	—	1	—	1
Embryotomy	—	1	—	1
Totals	107	166	122	395

In 15 cases following induction the puerperium was morbid.
There were 373 live births and 22 stillbirths.

Method of Delivery of the 1,989 *Infants Born.*

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Fœtal.	Neo-natal.
Natural forces	1,343	—	19	30
Natural forces after induction	346	—	19	13
Natural forces after Willett's forceps ...	1	—	1	—
Natural forces after surgical induction and Willett's forceps	1	1	—	—
Natural forces after internal version ...	1	—	—	—
Natural forces after internal version after surgical induction	1	—	—	1
Forceps	136	—	4	4
Forceps after induction	31	—	—	1
Forceps after internal version	2	—	—	—
Cæsarean section	94	—	2	4
Cæsarean section after induction	14	—	1	1
Manual of breech	13	—	5	1
Manual of vertex	1	—	—	—
Manual of vertex after surgical induction ...	1	—	1	—
Manual of transverse	2	—	—	—
Embryotomy	1	—	1	—
Embryotomy after surgical induction ...	1	—	1	—
Totals	1,989	1	54	55

Midwives delivered	1,663 women.
Medical officers delivered	326 women.
Midwives sought medical assistance for ...	913 women.
Forceps rate	8·5 per 100 births.
Maternal morbidity rate after forceps ...	4·7 per cent.
Anæsthetics given for obstetric purposes ...	1,276
Average length of lying-in period in days ...	7·7

Pregnancy and Labour.

Conditions of both pregnancy and labour normal ...	1,170 = 60·1 per cent.
Conditions of either or both abnormal	741 = 38·0 per cent.
Multiple cyesis and labour, normal and abnormal ...	38 = 1·9 per cent.

Obstetric Operations.

Application of forceps	163
Cæsarean section	102
Cæsarean section and sterilisation	2
Adherent placenta	27
Manual delivery of complicated breech	4
Manual delivery of transverse	—
Surgical inductions	280
Embryotomy	3
Repair of perineum—tear grade 1	139
tear grade 2	148
tear grade 3	6
Versions	2
Placenta prævia (Willett's forceps)	1
Episiotomy	190
Miscellaneous	19
Total...	1,086

Indications for which Cæsarean sections were done :—

Indication.	Booked.	Emergency.	Totals.
Disproportion and trial labour	31	8	39
Contracted pelvis	19	3	22
Obstetric history	2	—	2
Breech or transverse presentation	5	2	7
Brow presentation	3	1	4
Pre-eclamptic toxæmia	1	1	2
Placenta prævia	6	8	14
Previous colpo-perineorrhaphy	4	—	4
Prolopsed cord	1	1	2
Ruptured uterus	1	—	1
Rigid cervix	3	1	4
Uterine inertia...	—	1	1
Essential hypertension	2	—	2
Hæmorrhagic disease of unborn	2	—	2
Smith Petersen pin in pelvis	1	—	1
Congenital vaginal stricture	1	—	1
Totals	82	26	108

27 classical and 81 lower segment operations ; no maternal, 5 neo-natal and 3 fœtal deaths.

Maternal Morbidity.

The figures given under this head relate to women admitted to the maternity department and to booked cases delivered before admission. Of this group, all who had pyrexia in the puerperium (Ministry of Health standard) and all who died after delivery or undelivered are included as morbid.

Cases of abortion and ectopic gestation are not admitted to the department. The maternal morbidity of cases of abortion is given under the head of abortion. No case of ectopic gestation was morbid.

	Booked.	Emergency.	Totals.
Pyrexial cases	40	13	53
Maternal deaths—pyrexial	—	—	—
Maternal deaths—apyrexial	1	—	1
Pyrexial cases and maternal deaths	41	13	54
Number of women delivered	1,658	291	1,949
Maternal morbidity-rate per 1,000 delivered ...	24·7	44·7	27·7

Pyrexia in the Puerperium.

The Ministry of Health standard of puerperal pyrexia is adopted. Unless there is definite evidence to the contrary, every case of pyrexia occurring in the puerperium is assumed to be due to uterine infection. In addition to the conditions generally accepted as sequelæ of uterine infection, the following, when they occur in the puerperium, are returned also under that head: thrombosis. thrombo-phlebitis, phlegmasia alba dolens, pulmonary embolus, pneumonia and broncho-pneumonia,

During the year, 53 cases of pyrexia in the puerperium occurred; 53 recovered and were discharged and none died.

Register No. ‡	Age.	Gravida.	Maturity (weeks).	Method of Delivery.	Complication of Labour and/or Maternal Complication.	* Pyrexia.		Cause of Pyrexia.	Cervical Swabbing.	Duration of Pyrexia.†	Births.
						Date of Onset.	Day of Puerperium.			Days	
B 47/65	27	1	40	Natural forces after medical induction	Nil	27.12.46	3rd	Cause not determined ...	Nil	8	Live.
B 47/67	22	1	40	Natural forces	Nil	30.12.46	4th	Local pelvic infection ...	,, ...	3	,,
B 47/207	20	1	40	Natural forces after medical induction	Nil	6.1.47	5th	Mastitis	No significance	3	,,
B 47/343	35	1	40	Cæsarean section	Toxæmia and disproportion	4.1.47	Before delivery	Cause not determined ...	,, ...	8	,,
E 47/353	24	1	40	Natural forces	Ante-partum hæmorrhage, adherent placenta and post-partum hæmorrhage	11.1.47	3rd	Local pelvic infection ...	,, ...	4	,,
B 47/550	22	1	40	,, ...	Nil	18.1.47	1st	Pyelitis	Staphylococci albus and coli-forms	3	,,
B 47/583	31	2	40	Forceps	Post-occipito posterior and uterine inertia	20.1.47	7th	Bronchitis	Nil	4	,,
B 47/719	29	1	40	Cæsarean section	Placenta prævia	23.12.46	1st	Cause not determined ...	No significance...	7	,,
B 47/731	35	1	40	,, ...	Complicated breech. Elderly primigravida with short cord, preventing ante-natal version	2.1.47	Before delivery	Bronchitis and pulmonary embolism	Hæmolytic streptococci ...	23	,,
B 47/751	21	1	34	Natural forces after surgical induction	Toxæmia and twins ...	21.1.47	15th	Pyelitis	No significance...	10	,,
E 47/963	31	2	38	Cæsarean section	Central placenta prævia ...	10.2.47	10th	Local pelvic infection ...	Staphylococci albus	5	,,
B 47/964	23	1	36	Natural forces	Nil	8.2.47	4th	Coryza	,, ...	3	,,
B 47/1117	30	1	40	,, ...	,, ...	21.2.47	3rd	Local pelvic infection ...	Staphylococci albus and coli-forms	4	,,
E 47/1262	19	1	40	Forceps	Eclampsia	22.2.47	Before delivery	Urinary infection ...	Nil	6	,,
B 47/1295	31	3	40	Natural forces after medical induction and surgical induction	Toxæmia	4.3.47	1st	Local pelvic sepsis ...	No significance...	3	,,
B 47/1412	26	1	40	Cæsarean section	Disproportion and extended breech	4.3.47	2nd	Gastro-enteritis	,, ...	3	,,
B 47/1424	24	1	40	Cæsarean section	Disproportion	1.3.47	1st	Local pelvic infection ...	No significance...	10	,,
E 47/1780	29	1	40	,, ...	Primary uterine inertia ...	24.3.47	1st	,, ...	,, ...	6	,,
E 47/2142	34	1	40	Forceps	Lymphadenoma	31.3.47	3rd	Hodgkin's disease ...	Nil	Until discharge	,,
B 47/2589	23	2	40	Natural forces	Nil	12.5.47	3rd	Local pelvic infection ...	Hæmolytic streptococci ...	3	,,
E 47/2723	31	2	35	Cæsarean section after surgical induction	Toxæmia	12.5.47	1st	Post operative collapse of lung	Nil	7	,,
B 47/2764	34	1	40	Cæsarean section	Persistent transverse lie and fibroids	11.5.47	4th	Paralytic ileus and local pelvic infection	No significance...	12	,,

E 47/2927	21	2	40	,, ...	Ante-partum hæmorrhage ... transverse presentation and placenta prævia	25.5.47	1st	Partial collapse of lung ...	,, ...	8 ,,
B 47/2953	23	1	40	Natural forces	Ante-partum hæmorrhage ...	31.5.47	3rd	Mastitis	,, ...	2 ,,
B 47/3002	32	1	40	,, ...	Nil	30.5.47	1st	Urinary infection ...	Nil	4 ,,
B 47/3037	42	3	40	Cæsarean section	Contracted pelvis	29.5.47	1st	Cause not determined ...	No significance...	3 ,,
B 47/3293	29	1	40	Natural forces after surgical induction	Toxæmia	11.6.47	1st	Local pelvic infection ...	Hæmolytic streptococci ...	7 ,,
B 47/3498	23	1	40	Natural forces	Nil	26.6.47	2nd	,, ...	Staphylococci albus	3 ,,
B 47/3757	19	1	40	,, ...	,, ...	5.7.47	2nd	Mastitis	Hæmolytic streptococci ...	4 ,,
B 47/3837	18	1	40	,, ...	Toxæmia	11.7.47	7th	Urinary infection ...	No significance...	4 ,,
B 47/3854	24	1	40	,, ...	Nil	12.7.47	5th	,, ...	,, ...	4 ,,
E 47/4080	32	1	40	Cæsarean section	Placenta prævia	22.7.47	1st	Cause not determined ...	,, ...	9 ,,
B 47/4147	27	2	40	,, ...	Brow presentation	28.7.47	5th	Pelvic infection	Staphylococci albus	2 ,,
B 47/4192	18	1	40	Natural forces	Nil	30.7.47	8th	Mastitis	Nil	36 hrs. ,,
B 47/4296	33	1	40	Natural forces after surgical induction	Toxæmia	7.8.47	9th	Urinary infection ...	No significance...	4 ,,
B 47/4312	41	1	40	Forceps after surgical induction	Deep transverse arrest, disproportion and toxæmia	4.8.47	1st	Local pelvic infection ...	,, ...	3 ,,
B 47/4405	29	1	40	Forceps	Deep transverse arrest and prolapsed cord	26.7.47	1st	Lobar pneumonia... ...	,, ...	11 ,,
B 47/4447	24	1	40	Natural forces	Nil	17.8.47	5th	Local pelvic infection ...	Staphylococci albus	3 ,,
B 47/4499	25	1	40	Forceps	Rigid perineum and deep transverse arrest	16.8.47	1st	Urinary infection ...	No significance...	6 ,,
E 47/4505	37	2	40	Natural forces after surgical induction	Toxæmia	19.8.47	11th	Thrombophlebitis ...	Nil	1 ,,
E 47/4844	37	2	40	Cæsarean section	Rigid cervix	6.9.47	9th	Wound sepsis	No significance...	4 ,,
B 47/4999	27	1	40	Cæsarean section after surgical induction	Mitral stenosis, toxæmia and prolapsed cord	9.9.47	1st	,, ...	,, ...	6 ,,
B 47/5170	38	1	40	Forceps	Toxæmia and rigid perineum	17.9.47	4th	Local pelvic infection ...	Hæmolytic streptococci ...	6 ,,
E 47/5343	34	7	40	Natural forces after surgical induction and medical induction	Nil	2.10.47	4th	Pharyngitis	No significance...	7 ,,
E 47/5357	26	2	40	Natural forces after surgical induction	Ante-partum hæmorrhage and cervical erosion	10.10.47	2nd	Urinary infection ...	,, ...	2 ,,
B 47/5704	28	3	40	Cæsarean section	Cord round neck	7.10.47	1st	Local pelvic sepsis ...	Hæmolytic streptococci ...	2 ,,
B 47/5748	37	2	40	Cæsarean section after surgical induction	Toxæmia and disproportion	13.10.47	Before delivery	Cause not determined ...	Nil	8 ,,
B 47/5809	32	1	40	Natural forces after medical induction	Nil	25.10.47	8th	Mastitis	No significance	4 ,,
B 47/6339	37	1	40	Cæsarean section	Disproportion	21.11.47	9th	Thrombophlebitis ...	,, ...	6 ,,
B 47/6480	22	1	40	Forceps	Rigid perineum	6.12.47	5th	Urinary infection ...	,, ...	4 ,,
E 47/6742	33	1	40	Cæsarean section	Placenta prævia	5.12.47	1st	Post operative bronchitis	Nil	4 ,,
B 47/6825	35	3	40	Natural forces after surgical induction and medical induction	Toxæmia	13.12.47	16th	Thrombophlebitis ...	,, ...	2 ,,
B 47/6829	23	1	40	Cæsarean section	Disproportion	13.12.47	1st	Local pelvic infection ...	Hæmolytic streptococci ...	3 ,,

* Date and day of the second recording of a temperature of 99° F. or over. In every case the date given here is earlier than that on which the pyrexia became notifiable.
† Temperature 100° after delivery. ‡ E. before a register number indicates an emergency case.

Summary of the 53 Pyrexial Cases.

Uterine infection	17
Mastitis	5
Urinary infection	10
Pulmonary complications	7
Other causes	8
Cause not determined	6
Total...	53

Of the 53 women who had pyrexia in the puerperium, 38 were primiparæ.

Maternal Deaths.

Register No.†	Age.	Gravida.	Maturity (weeks)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	*Class I.	*Class II.	*Group 1.	*Group 2.	Births.
493B	29	3	40	Toxæmia and lateral placenta prævia	Natural forces after surgical induction after Willett's forceps ...	Yes	—	—	Yes	Live

Maternal Mortality Rates.

Per 1,000 booked cases delivered	·6
Per 1,000 emergency cases delivered	—
Per 1,000 cases delivered	·5

* *Vide* Final Report of Departmental Committee on Maternal Mortality and Morbidity, 1932. Class I.—Deaths directly due to child-bearing (abortions and ectopics are not included here); Class II.—Death due to an independent disease. Group I.—Cases showing a primary avoidable factor; Group 2.—Cases showing no primary avoidable factor.

† B. after a register number indicates a booked case.

Indications for Forceps Deliveries.

Indication.	Booked.	Emergency.	Total.
Disproportion and deep transverse arrest	39	14	53
Disproportion and persistent occipito posterior ...	13	12	25
Pelvic contraction	24	7	31
Rigid cervix or perineum	15	1	16
Uterine inertia	8	7	15
Prolapsed cord	2	3	5
Eclampsia	—	1	1
Compound presentation	2	1	3
Fœtal or maternal distress	10	3	13
Ante-partum hæmorrhage	—	1	1
Twins	1	2	3
Previous cerebral hæmorrhage	1	—	1
Rheumatic carditis	1	—	1
Hydrops fœtalis	1	—	1
Totals	117	52	169

III.—Maternity Department, Infants' Report.

Births.

		Per cent.
Full-time	1,738	87·4
Premature	197	9·9
Stillborn	54	2·7
Total births	1,989	100·0

Average weight at birth of infants—booked cases ...	7 lbs. 5 ozs.
Average weight at birth of infants—emergency cases ...	7 lbs. 3 ozs.
Infants not entirely breast-fed	171

Stillbirths.

Details of 54 Stillbirths.

Maternal Complication.	Method of Delivery.	Infant.*	Cause of Death.
Emergency—			
Failed forceps	Embryotomy	F.T.M. ...	Stress of labour.
Ante-partum hæmorrhage ...	Cæsarean section	P. ...	Separation of placenta.
Failed forceps	Forceps	F.T. ...	Stress of labour.
Accidental hæmorrhage ...	Natural forces	P. ...	Accidental hæmorrhage.
Toxæmia and breech	Natural forces after surgical induction and medical induction	P.M. ...	Cause not determined.
Nil	Natural forces	F.T.M. ...	,, ,,
Toxæmia	Manual	F.T.M. ...	Maternal toxæmia.
Breech	,, ...	F.T. ...	Stress of labour.
Toxæmia	Natural forces after surgical induction and medical induction	P.V.M. ...	Maternal toxæmia.
Nil	Forceps	F.T. ...	Prolapsed cord.
Nil	Natural forces	P.V.M. ...	Multiple congenital abnormalities.
Toxæmia, accidental hæmorrhage and ante-partum hæmorrhage	,, ...	P. ...	Separation of placenta.
Breech	,, ...	P.V.M. ...	Mother Rhesus negative.
Nil	,, ...	P.M. ...	,, ,,
Toxæmia and retained placenta	Natural forces after surgical induction	P.V.M. ...	Prematurity and maternal toxæmia.
Nil	Cæsarean section	F.T. ...	Prolapsed cord.
Ante-partum hæmorrhage and concealed accidental hæmorrhage	Natural forces after surgical induction	F.T. ...	Separation of placenta.
Accidental hæmorrhage, placenta prævia, and post-partum hæmorrhage	,, ,,	F.T.M. ...	,, ,,
Accidental hæmorrhage ...	Natural forces	F.T. ...	,, ,,
Breech	,, ...	P.V. ...	Prematurity.
Rhesus negative...	,, ...	F.T. ...	Cause not determined.
Eclampsia and toxæmia ...	,, ...	P. ...	Maternal toxæmia.
Booked—			
Toxæamia	Natural forces after surgical induction	P.V.M. ...	Maternal toxæmia.
Breech	Natural forces	F.T.M. ...	Mother Rhesus negative.
Ante-partum hæmorrhage ...	,, ...	P. ...	Separation of placenta.
Toxæmia and breech	Natural forces after surgical induction	P. ...	Maternal toxæmia.
Breech	Natural forces after surgical induction and medical induction	P.V.M. ...	Cause not determined.
Face presentation	,, ,,	F.T.M. ...	Anencephalus.
Breech	,, ,,	F.T. ...	Hydrocephalus.
Nil	Natural forces	F.T. ...	Cerebral hæmorrhage and tentorial tear.
Lateral placenta prævia and ante-partum hæmorrhage	Natural forces after surgical induction	F.T. ...	,, ,, ,,
Nil	,, ,,	P. ...	Anencephalus.
Toxæmia	,, ,,	P.M. ...	Maternal toxæmia.
Toxæmia, breech, and ruptured uterus	Cæsarean section after medical induction	F.T. ...	Ruptured uterus and separation of placenta.
Triplets	Embryotomy after surgical induction	P. ...	Multiple congenital deformities.
Nil	Forceps	F.T.M. ...	Hydrops fœtalis.
Toxæmia	Natural forces	F.T. ...	Short cord tightly round neck.
Nil	Natural forces after medical induction	P.M. ...	Hydrocephalus.
Breech, pre-eclamptic toxæmia, and pulmonary embolism	Manual	P.V. ...	Prolapsed cord.
Face presentation	Natural forces	P. ...	Anencephalus.
Toxæmia	Natural forces after medical induction and surgical induction	F.T.M. ...	Hydrocephalus.
Nil	Natural forces	F.T.M. ...	Cause not determined.
Essential hypertension, adherent placenta, and post-partum hæmorrhage	Natural forces after surgical induction and medical induction	P. ...	Anencephalus.
Acute hydramnios	Natural forces after Willett's forceps	P. ...	Intracranial hæmorrhage.
Intra uterine death	Natural forces after surgical induction and medical induction	P.V.M. ...	Operation for ovarian cyst during pregnancy.

Stillbirths—continued.

Maternal Complications.	Method of Delivery.	Infant.*	Cause of Death.
Booked—continued.			
Hydramnios, ante-partum hæmorrhage and post-partum hæmorrhage	Manual after surgical induction	P. ...	Anencephalus and spina bifida.
Nil	Natural forces after surgical induction and medical induction	F.T.M. ...	Hydrocephalus.
Breech	Manual	F.T. ...	Prolapsed cord and stress of labour.
Toxæmia	Natural forces	P. ...	Maternal toxæmia.
Ante-partum hæmorrhage and post-partum hæmorrhage	Forceps	F.T. ...	Spina bifida and hydrocephalus.
Nil	Natural forces after surgical induction	F.T. ...	Anencephalus.
Nil	Natural forces	F.T. ...	Cause not determined.
Breech	Manual	F.T. ...	Stress of labour.
Face presentation	Natural forces	P.V. ...	Multiple congenital abnormalities.

* F.T. = Full-time. F.T.M. = Full-time, macerated. P = Premature. P.M. = Premature, macerated.
P.V. = Pre-viable. P.V.M. = Pre-viable, macerated.

Summary of Causes of Stillbirth.

Cause of Stillbirth.	Booked.	Emergency.	Total.
Maternal complications	5	6	11
Complication of labour	9	4	13
Placental conditions	1	7	8
Fœtal conditions	14	2	16
Unknown	3	3	6
Totals	32	22	54

Neo-natal Deaths.

DETAILS OF THE 55 NEO-NATAL DEATHS (DEATHS WITHIN 4 WEEKS OF BIRTH).

Cause of Death.	Maternal Complication.	Method of Delivery.	Weight at Birth.	Age.
			lbs. ozs.	
Emergency—				
Intracranial hæmorrhage, asphyxia, prematurity and tentorial tear	Nil	Natural forces ...	5 4	10 hours.
Hæmorrhagic disease of newborn	Breech	Manual	8 0	3 days.
Asphyxia, cerebral hæmorrhage, and prematurity	Nil	Natural forces ...	4 4	3 ,,
Atelectasis and prematurity	Placenta prævia and breech	Cæsarean section ...	3 7	1 day.
Prematurity and congenital atelectasis ...	Toxæmia and breech	Natural forces ...	2 1	1 ,,
Prematurity and broncho-pneumonia ...	Nil	,, ...	3 0	2 days.
Hydrocephalus and spina bifida	Nil	,, ...	7 10	9 ,,
Subtentorial hæmorrhage and atelectasis	Nil	Forceps	7 15	1 day.
Cerebral hæmorrhage and tentorial tear ...	Broncho-pneumonia	Natural forces ...	7 8	1 ,,
Cerebral hæmorrhage, atelectasis, and prematurity	Lobar pneumonia ...	,, ...	3 3	1 ,,
Pulmonary congestion and hæmorrhage into both adrenals due to prematurity	Breech	,, ...	4 0	1 ,,
Cerebral hæmorrhage and prematurity ...	Nil	,, ...	4 6	6½ hours.
Intracranial hæmorrhage and prematurity	Ante-partum hæmorrhage	,, ...	1 8	7½ ,,
Prematurity and atelectasis	Nil	,, ...	2 1	9 ,,
Prematurity	Breech	,, ...	2 0	1 day.
Intracranial hæmorrhage and broncho-pneumonia	Twins and toxæmia	Forceps	5 1	4 days.
Intracranial hæmorrhage	Nil	Natural forces ...	6 11	1 day.
Atelectasis	Ante-partum hæmorrhage	Natural forces after surgical induction	6 1	2 days.
Prematurity	Breech	Natural forces ...	2 9	1 day.
Booked—				
Broncho-pneumonia, cleft palate, and bifid tongue	Nil	Natural forces after medical induction	4 8	25 days.
Bronchiolitis and prematurity	Toxæmia	Natural forces after surgical induction and medical induction	4 10	11 ,,
Broncho-pneumonia	Toxæmia and adherent placenta	Natural forces after surgical induction	6 8	13 ,,
Tentorial tear, cerebral hæmorrhage and prematurity	Nil	Forceps	3 15	13 hours
Sclerema neonatorum and broncho-pneumonia	Nil	Natural forces ...	4 6	7 days.
Cerebral hæmorrhage tentorial tear, and prematurity	Toxæmia	Natural forces after surgical induction	4 6	3 ,,
Intracranial hæmorrhage, tentorial tear, and asphyxia	,, ...	Forceps after surgical induction and medical induction	5 11	3 ,,
Cerebral hæmorrhage and tentorial tear ...	Nil	Natural forces ...	5 11	1 day.
Asphyxia, cerebral hæmorrhage, and laceration of Falx Cerebri	Breech	,, ...	4 13	3 days.
Multiple congenital deformities	Breech and essential hypertension	,, ...	5 6	1 day.
Prematurity	Toxæmia	Natural forces after medical induction and surgical induction	3 3	1 ,,
Prematurity and maternal toxæmia ...	,, ...	Natural forces after medical induction and surgical induction	2 8	5 days.
Prematurity and broncho-pneumonia ...	Twins	Natural forces ...	3 10	14 days.
Atelectasis and prematurity	Placenta prævia ante-partum hæmorrhage	Cæsarean section ...	4 4	1 day.
Prematurity	Triplets	Natural forces after surgical induction	2 8	2 days.
,, ...	,, ...	Natural forces after internal version after surgical induction	2 8	1 day.
Prematurity and hæmorrhagic disease of newborn	Toxæmia	Natural forces after surgical induction	3 2	3 days.
Broncho-pneumonia, probably staphylococcal and toxæmia	Ante-partum hæmorrhage and post-partum hæmorrhage	Natural forces ...	4 10	20 ,,

Cause of Death.	Maternal Complication.	Method of Delivery.	Weight at Birth.	Age.
			lb. ozs.	
Booked—continued.				
Congenital atresia of œsophagus, tentorial tear, and cerebral hæmorrhage	Nil	Natural forces ...	7 1	2 days
Hæmorrhagic disease of newborn, and prematurity	Nil	,, ...	2 14	2 ,,
Prematurity, atelectasis and asphyxia-neonatorum	Essential hypertension	Cæsarean section after surgical induction	5 8	1 day.
Prematurity	Ante-partum hæmorrhage	Natural forces ...	2 6	1 ,,
Congenital hernia of brain	Chronic nephritis ...	Natural forces after medical induction	5 7	6 days.
Marasmus and prematurity	Nil	Natural forces ...	3 10	9 ,,
Prematurity and cerebral hæmorrhage ...	Face presentation ...	,, ...	3 8	1 day.
Hæmorrhagic disease of newborn	Nil	,, ...	7 4	12 hours.
Internal hydrocephalus and prematurity	Hydramnios and ante-partum hæmorrhage	Natural forces after surgical induction	4 0	35 mins.
Broncho-pneumonia and œdema of glottis	Nil	Natural forces ...	6 4	2 days.
Erythroblastosis	Rhesus negative ...	,, ...	5 15	7 hours.
Atelectasis and prematurity	Essential hypertension	Cæsarean section ...	3 1	8 ,,
Broncho-pneumonia and cerebral hæmorrhage	Nil	Forceps	6 14	5 days.
Broncho-pneumonia, cerebral hæmorrhage and prematurity	Hypertension ...	Natural forces after surgical induction	4 12	5 ,,
Prematurity	Mitral stenosis ...	Natural forces ...	1 14	1 hr. 40 m.
Atelectasis	Toxæmia	Natural forces after medical induction and surgical induction	5 11	2 days.
Broncho-pneumonia and prematurity ...	Breech	Natural forces ...	4 3	6 ,,
Meningitis and broncho-pneumonia ...	Toxæmia	Cæsarean section ...	2 14	9 ,,

SUMMARY OF CAUSES OF NEO-NATAL DEATHS.

——	Booked.	Emergency.	Total.
Prematurity	9	6	15
Prematurity and bronchopneumonia	7	1	8
Prematurity and cerebral hæmorrhage	2	6	8
Congenital malformations	5	2	7
Bronchopneumonia	5	—	5
Cerebral hæmorrhage	4	3	7
Hæmorrhagic disease of newborn	3	1	4
Erythroblastosis	1	—	1
Totals	36	19	55

Infantile Mortality Rates.

		Per cent.
Of 1,989 infants born,	54 were stillborn and 57 died	= 5·6
Of 1,935 infants born alive,	55 died within 4 weeks of birth	= 2·8
Of 197 premature infants born alive,	40 died within 4 weeks of birth	= 20·3

IV.—ANALYSIS OF CASES OF NORMAL AND ABNORMAL PREGNANCY, PARTURITION AND PUERPERIUM TREATED TO A CONCLUSION IN MATERNITY AND OTHER WARDS DURING THE YEAR.

	Booked.	Emergency.	Totals.
Pregnancy, normal	66	48	114
Pregnancy and spurious labour pains	15	9	24
Toxæmia of pregnancy	23	31	54
Ectopic gestation	—	8	8
Pregnancy and ante-partum hæmorrhage	5	10	15
Pregnancy and concomitant disease	27	45	72
Abortion, threatened	2	39	41
Abortion, incomplete and complete	11	288	299
Abortion, with post-abortum infection sequelæ	—	2	2
Labour normal	1,058	112	1,170
Labour normal and toxæmia of pregnancy	211	46	257
Labour normal and concomitant disease	52	6	58
Labour normal and constitutional disease	42	8	50
Labour abnormal	190	94	284
Labour abnormal and toxæmia of pregnancy	43	11	54
Labour abnormal and concomitant disease	17	4	21
Labour abnormal and constitutional disease	15	2	17
Labour multiple, normal and abnormal	30	8	38
Puerperium, normal	21	32	53
Affections consequent on parturition	2	26	28
Therapeutic abortion	6	13	19
Hydatidiform mole	—	1	1
Carneous mole	—	—	—
Totals	1,836	843	2,679

Among the 2,679 cases analysed above, there occurred 1 death. Details of this are given under the head of maternal deaths.

Abortion.

(Therapeutic inductions and cases of threatened abortion are not included.)

Cases treated to a conclusion	299
Pyrexial cases	6
Deaths (ectopic gestation 1) (carcinoma of pancreas 1)	2
Pyrexial cases and deaths	8
Maternal morbidity rate per 1,000 women who aborted	20·07

6. Pathological Department.

Analysis of Examinations made during the Year.

Bacteriology.										Biochemistry.																				
										Blood.									Cerebrospinal Fluid.					Urine.			Fæces.			
Blood Culture.	Cerebrospinal Fluid.	Urine.	Fæces.	Exudates.	Pus.	Sputum.	Swabbings.	Films for Gonococci.	Other Bacteriology.	Sugar.	Sugar Tolerance Curve.	Urea.	Calcium.	Phosphorus.	Phosphatase.	Cholesterol.	Proteins.	Others.	Protein.	Globulin.	Chloride.	Sugar.	Lange.	Sugar Estimation.	Urea Estimation.	Other.	Occult Blood.	Fat Analysis.	Fractional Test Meal.	Stomach contents.	Basal Metabolic Rate.
55	65	184	352	170	156	627	842	15	173	227	49	582	12	14	163	23	180	75	211	213	112	11	25	251	180	1562	240	28	222	232

The supply of sterile apparatus and solutions for continuous intravenous saline and glucose therapy has been maintained, approximately 2495 litres of sterile saline distilled water and glucose being supplied to the wards and theatre by the Department.

Other Clinical Pathology.																			Morbid Anatomy		
Hæmatology.								Serology.			General and Microscopic Examinations.								Post-mortem Examinations.	Surgical.	Post-mortem.
Full Count.	Red Cells and Hæmoglobin.	White Cell Count—Differential.	Reticulocyte Count.	Platelet Count.	Sedimentation Rate.	Coagulation Time.	Bleeding Time.	Red Cell Fragility.	Blood Grouping.	Blood Compatibility.	Widal Reaction.	T.B. Skin Reaction.	Kahn Test.	Urine.	Fæces.	Cerebrospinal Fluid.	Exudates and other Fluids.	Parasitic Infection.	Other Examinations.		Sections examined.	Sections examined.
539	1989	1068	113	25	1360	54	47	21	487	602	23	407	1947	2538	18	224	124	97	43	333	618	382

Examinations made at the West Middlesex County Hospital.

Wassermann Reaction	...	...	1,084
Kahn Reaction ...	...	...	1,008
Complement fixation	...	...	499
Animal inoculation	...	...	2
Total	...	...	2,593

Pregnancy tests at the Pregnancy Diagnosis Laboratory, Usher Institute, Edinburgh, 55.

Summary of Examinations made during the Year.

—	At Hillingdon County Hospital.		At West Middlesex County Hospital.	Totals.
	Pathological Department.	Special Clinic.		
Bacteriological	2,639	1,242	—	3,881
Biochemical	4,612	—	—	4,612
Other clinical pathology	11,736	501	2,593	14,830
Morbid anatomy	1,333	—	—	1,333
Total	20,320	1,743	2,593	24,656

Post-mortem examinations :—

On the bodies of 729 persons who died in Hillingdon County Hospital, 325 examinations were made. The remaining 8 examinations were made on persons brought in dead and on stillborn infants.

Hospital autopsy rate—44·5 per cent.

Actual specimens sent (and cases for post-mortem) :—

Hillingdon County Hospital	22,063
West Middlesex County Hospital	2,593

NOTE.—A serial group investigation, such as a fractional test meal, blood sugar curve, urea concentration test and Widal reaction for the whole enteric group, with b. abortus, is entered as one investigation. A routine investigation of cerebro-spinal fluid is entered under three headings, viz., bacteriological, biochemical and microscopic.

7. Ear, Nose and Throat Department.

Analysis of Operations Performed during the Year.

Aural furuncle, foreign body in ear	18
Paracentesis tympani	3
Mastoidectomy (Schwartze 21 ; radical 5)	26
Submucous resection of septum	13
Nose and sinuses, various	93
Antral puncture and washout	58
*Removal of tonsils and adenoids	395
Removal of tonsils by dissection	87
Ligation of tonsillar fossa	2
Foreign body in pharynx, removal	10
Bronchoscopy	3
Direct laryngoscopy	13
Tracheotomy	8
Miscellaneous	3
Total...	732

There was one death. One child, aged seven weeks, died of bronchopneumonia following operation for mastoiditis.

* This total includes 10 major operations. In children, tonsils are removed by dissection and, for purposes of classification, the removal of tonsils in children under or over the age of 12 years is deemed a minor or major operation, respectively.

8. Therapeutic, Diagnostic and Prophylactic Procedures.*

Analysis of Special Procedures.

	Theatre.	Wards.	Out-patient Department.	Total.
Injection of serum or vaccine	—	144	1,002	1,146
Injection of saline, subcutaneous or intraperitoneal	—	162	—	162
Multiple punctures of œdematous legs	—	14	—	14
Blood transfusion (auto- or hetero-)	99	261	—	360
Intravenous injection of saline or drug	10	186	403	599
Venesection	—	23	2	25
Lumbar puncture	—	245	—	245
Inhalation therapy	—	—	—	—
Paracentesis (thoracis) of pleural cavity	14	131	—	145
Paracentesis (abdominis) of abdominal cavity	—	90	—	90
Gastric lavage	—	224	—	224
Jennerian vaccination	—	—	1	1
CO_2 snow	—	—	280	280
Cisternal puncture	—	—	—	—
Splenic puncture	—	—	—	—
Sternal puncture	—	10	—	10
Totals	123	1,490	1,688	3,301

9. Casualty and Out-Patient Department.

†Casualties—medical and surgical	16,953
In-patients made out-patients	2,042
Ante-natal and post-natal cases	3,909
Special Clinic	512
Total casualties and out-patients treated	23,416
Patients on books at the beginning of the year	5,129
New casualties and out-patients	18,287
Total	23,416*

* Including 270 Ministry patients.

Clinic.	Patients.	Attendances.
Post-natal	1,043	1,277
Ante-natal	2,866	11,203
‡Massage	2,297	32,318
Orthopædic	830	6,440
Medical	3,026	9,597
Ear, Nose and Throat	1,717	3,738
Surgical (i)	1,173	3,924
Surgical (ii)	1,867	7,905
Dental	514	1,285
Skin	536	2,228
Eye	457	1,916
Psychiatric	3	59
Radio-therapy	26	301
Casualty	8,846	27,424
Special Clinic	512	9,878
Totals	23,416	119,493

Including 1,028 attendances made by Ministry patients.

Total number of attendances made	119,493§
Average number of attendances per patient	5·6

* None of these has been included in the foregoing list of operations.

† Includes patients referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment.

‡ Not included in the total number of patients owing to the fact that they have been referred from other clinics.

§ Only one attendance is included for 2,747 patients who attended more than one clinic during their visit to hospital.

Operations—

Suturing of wound/toilet/resuturing	1,727
Burns and scalds—toilet	10
Incision of abscess/boil/carbuncle	110
For sinus/ulcer/cyst/tumour, &c.	329
Removal of nail	89
For septic infection of hand	312
Removal of foreign body in eye	292
Removal of foreign body in limb	133
Varicose veins—suture	35
Injection of varicose veins, &c.	362
For suppurative lymphadenitis	93
Miscellaneous on joints	6
Manipulation of fracture or dislocation	47
Manipulation/application of plaster of Paris	841
Miscellaneous on tendons/bursæ	46
Amputation of finger, thumb and toe	7
Miscellaneous on eye	52
Ear, nose and throat, various	61
On mouth, pharynx and œsophagus	5
On thorax and contents	58
For mammary abscess	14
For injection of haemorrhoids	192
Genito-urinary, various	567
Ischio rectal, anal abscess, &c.	18
Miscellaneous	30
Total	5,436
Anæsthetics—general	1,082
Anæsthetics—local	1,065
Total	2,147
Admitted to hospital from out-patient department	4,645
Admitted to hospital from ante-natal clinic	1,658

10. Special Clinic.*

Total number of new cases	512
Total number of attendances made	9,878
Total number of therapeutic procedures	466
Vaccines—	
Intravenous injections	435
Intramuscular injections	2,892
Minor operations	63
Pathological examinations carried out in the clinic	1,743

11. Nurses' Sick Room.

	Full-Time.	Part-Time.
Complement of nurses at 31st December	176·00	27·00
Average daily complement of nurses	184·18	26·78
Average daily complement of nurses available for duty	162·64	13·30
Nurses off sick during the year	110·00	33·00
Nursing days lost	2,465·00	432·00
Average number of nursing days lost per annum—		
Per sick nurse	22·41	13·10
Per nurse of the average daily complement	13·38	16·13

* Included in Out-patient Department totals.

Disabilities.	No.	Major Operations.	Minor Operations.
Diseases of the Alimentary tract	62	—	—
Non-notifiable infectious diseases	48	—	—
Injuries	20	—	—
Ear, nose and throat conditions	21	—	—
Notifiable infectious diseases...	4	—	—
Influenza	26	—	—
Diseases of the skin	13	—	10
Respiratory diseases	7	—	—
Diseases of the organs of locomotion	14	—	—
Diseases of the nervous system	2	—	—
Diseases of metabolism	—	—	—
Diseases of endocrines...	3	3	—
Diseases of the lymphatic system	—	—	—
Diseases of the eye	—	—	—
Diseases of the blood	—	—	—
Diseases of the urinary system	1	—	—
Rheumatism	2	—	—
Miscellaneous	26	—	1
Totals	249	3	11

33 members of the staff were off duty twice.
14 members of the staff were off duty three times.
10 members of the staff were off duty four times.
1 member of the staff was off duty five times.
1 member of the staff was off duty six times.
1 member of the staff was off duty seven times.

Comparative Tables.

	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Beds—complement at 31st December	141	141	141	141	251·3	367	562	867	913	913	920	903	845	845
Beds—average daily complement ...	141	141	141	141	251·3	321·7	584·7	798·5	879·2	913	914·9	906·6	893·1	843·9
Beds—average daily number available	133·1	141	140·5	140·9	248·2	321·6	550·6	748·6	856·8	924·9	927·6	850·4	784	734·8
Beds—average daily number occupied	130·9	135·3	158·3	177·5	226·7	270·1	350·0	*430·8	*457·0	*488·8	*442·9	*433·9	*391·9	*381·9
Average daily percentage of available beds occupied	98·3	96	112·7	125·9	91·3	83·7	64·5	75·0	77·2	77·07	65·51	71·7	77·2	77·1
Patients per occupied bed—average number per annum	20·5	22·7	24·8	24·7	24·2	23·3	20·4	*20·4	*21·6	*23·76	*23·22	*23·54	*28·1	*28·5
Nursing staff—average daily complement	70	69·4	75·6	96·3	135·96	156·89	201	253·6	297·08	286·47	267·70	222·81	209·15	197·57
Occupied beds—average number per nurse	1·9	2	2·1	1·8	1·65	1·7	1·77	2·2	2·2	2·5	2·2	2·7	2·8	2·86
Admissions—average daily number ...	7·4	8·5	10·6	12	15·3	17·2	20·1	26·4	31·5	33·76	29·78	30·29	32·03	31·7
Admissions—percentage by Medical Director	59·7	51·8	77·3	81·5	72·8	73·8	72·8	77·0	72·77	67·5	73·5	74·3	73·9	76·9
Length of stay—average in days per patient	17·8	16·1	13·8	14·8	15·1	15·6	18·0	*19·8	*16·9	*15·36	*15·77	*15·5	*13·6	*12·8
Medical cases	767	806	872	1,000	1,499	1,606	1,761	*2,218	*2,393	*2,541	*2.027	*1,953	*2,013	*2,930
Surgical cases	1,920	2,262	2,991	3,391	3,989	4,653	4,773	*5,738	*7,473	*8,281	*7,154	*7,415	*8,102	*7,863
Ministry cases						46	700	814	773	793	1,103	848	430	78
Total cases treated to a conclusion ...	2,687	3,068	3,863	4,391	5,488	6,305	7,934	*8,770	*10,639	*11,615	*10,284	*10,216	*10,545	*10,871
Patients relieved (per cent.)	88·9	90	90·7	89	91·5	91·9	89·4	*89·6	*88·6	*88·0	*88·1	*88·3	*89·8	*88·1
Patients unrelieved (per cent.) ...	3·9	3·2	4·2	4·3	2·4	1·7	4·0	*3·7	*6·9	*7·5	*7·5	*7·7	*7·1	*8·3
Patients died (per cent.)	7·2	6·8	5·1	6·7	6·1	6·4	6·6	*6·7	*4·5	*4·5	*4·4	*4·0	*3·1	*3·6
Operations—major	652	834	1,049	1,207	1,496	1,615	1,775	1,963	2,313	2,438	2,178	2,067	2,185	2,374
Operations—major and minor ...	1,912	2,423	3,299	3,791	4,576	5,170	5,768	7,235	9,678	9,840	8,556	8,954	9,580	10,732
Anaesthetics—general	1,205	1,551	1,881	2,156	2,683	2,905	3,261	4,396	6,385	6,418	4,995	4,921	4,723	4,576
Therapeutic procedures		1,275	1,474	1,647	1,975	2,621	2,721	3,441	4,001	2,636	2,991	3,522	3,892	3,301
Radiological investigations	1,774	2,347	3,479	4,307	5,837	7,050	7,521	8,321	9,522	9,645	10,616	11,592	13,741	15,815
Physical Medicine Department treatments	7,928	9,276	13,686	18,161	22,031	35,164	43,147	68,498	65,174	60,148	47,154	54,419	56,934	61,607
Ante-natal clinic—women examined	275	440	573	813	1,123	1,405	1,514	1,718	2,016	1,867	1,786	2,214	2,919	2,866
Ante-natal clinic—attendances ...	1,397	1,609	2,926	3,468	3,998	5,482	5,751	6,228	7,558	8,911	9,039	8,812	12,075	11,203
Confinements	234	304	421	567	662	808	903	977	1,252	1,453	1,457	1,526	2,016	1,949
Maternal mortality rate per 1,000 delivered	8·6	13·2	7·12	3·5	9·06	7·42	5·5	7·2	3·2	4·12	2·06	—	1·48	0·5
Maternal morbidity rate per 1,000 delivered	47·4	75·5	59·4	38·8	51·2	39·6	26·6	33·8	53·5	40·6	35·0	35·5	27·3	27·7
Births	234	315	426	574	633	794	885	946	1,228	1,437	1,432	1,506	1,990	1,943
Stillbirth rate	9	6·7	5·6	5·4	6·7	7·25	5·6	4·9	3·76	3·4	3·5	2·6	2·8	2·7
Infantile mortality rate per 100 total births	11·6	9·23	6·7	8·7	13·73	11·02	13·7	9·1	8·2	7·7	7·45	5·62	4·76	5·6
Infantile mortality rate per 100 born alive	4·7	2·72	1·2	3·5	7·4	6·42	8·0	4·3	4·47	3·7	3·97	2·98	2·5	2·8
Pathological investigations	2,183	2,767	2,958	4,914	6,517	11,000	10,450	12,550	16,198	20,678	21,066	20,746	22,907	22,063
Casualties and out-patients	2,431	3,078	4,967	5,742	7,949	10,114	11,305	14,287	18,588	19,640	19,045	20,112	22,184	23,416
Casualty and out-patient attendances	12,753	15,023	23,976	30,893	37,680	48,327	57,037	74,413	98,030	99,012	97,338	101,858	114,025	119,493

* Acute cases only.

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W. ARKLAY STEEL,
Medical Director.

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