INVESTIGATION OF THE MEDICAL AND SOCIAL NEEDS OF PATIENTS IN MENTAL HOSPITALS

II. TYPE OF ACCOMMODATION AND STAFF REQUIRED

BY

F. N. GARRATT, C. R. LOWE, AND THOMAS McKEOWN

From the Department of Social Medicine, University of Birmingham

A previous communication (Garratt, Lowe, and McKeown, 1957) described an investigation of the medical and social needs of the 3,555 Birmingham residents in Birmingham mental hospitals in January, 1957. Reasons were given for believing that these patients were representative of the mental hospital population of England and Wales, and the patients were classified according to the type of facilities required for their care. It was considered that 13 per cent. needed the full resources of a hospital, 75 per cent. needed limited hospital facilities, and the remaining 12 per cent. required none of the services traditionally associated with hospitals. The purpose of the present report is to examine in greater detail the patients assigned to each class, and to suggest the type of accommodation and staff required.

The methods used to obtain the data were described fully in the first communication. Briefly, with the help of the psychiatrist responsible for his care, the needs of each patient were examined and used to assess the nature of the services which would be most suitable.

I. PATIENTS NEEDING FULL HOSPITAL FACILITIES

It was estimated that 459 (13 per cent.) of the 3,555 Birmingham patients in mental hospitals needed to be cared for in an institution which could provide the full range of services associated with a modern hospital: x-rays, laboratories, surgery, skilled nursing, etc. There is of course, some room for differences of opinion about the type of service which necessitates full hospital care. In the case of patients at home, for example, decision turns upon the availability of out-patient departments, day-hospitals, laboratories, etc. The problem is different when patients are already in hospital, since it is then somewhat unrealistic—particularly in the absence of knowledge of their home circumstances—to inquire whether they need have been admitted. All that was attempted was to assess whether their care

required access to full hospital facilities. Undoubtedly there were a few patients who, if their homes had been suitable, could have been treated as out-patients.

(a) TYPE OF PATIENT

Table I gives the distribution of the 459 patients according to the nature of their mental illness, based on the 1948 International Statistical Classification. The distribution is very similar to that of all 3,555 patients in the mental hospitals (Garratt and others, 1957: Table V); the most notable differences are the lower incidence of senile psychosis (4.4 per cent. compared with 13.4 per cent.) and the higher incidence of psychoneurosis (7.4 per cent. compared

TABLE I
DIAGNOSIS OF PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Diagnosis*	Males	Females	All Patients	
			Number	Per cent.
Schizophrenia (300) ..	128	71	199	43.4
Manic Depressive Reaction (301)	30	32	62	13.5
Involuntional Melancholia (302)	15	29	44	9.6
Paranoid State (303) ..	18	15	33	7.2
Senile Psychosis (304) ..	6	14	20	4.4
Other Psychoses (305-09)	11	18	29	6.3
Psychoneuroses (310-18) ..	10	24	34	7.4
Disorders of Character and Behaviour (320-24; 326)	12	—	12	2.6
Mental Defect (325) ..	2	5	7	1.5
Syphilis (025)	—	2	2	0.4
Epilepsy (353)	6	8	14	3.1
Other Disorders	1	2	3	0.7
Total	239	220	459	100

* Numbers in brackets are list numbers used in 1948 International Statistical Classification.

with 1.9 per cent.). There is also a considerable difference between the sex ratios, the percentage of males being 52.1 and 38.2 among the 459 and 3,555 patients respectively. The excess of males among patients considered to require full hospital care is due chiefly to the sex ratio of schizophrenics (128 males, 71 females) and of patients with disorders of character and behaviour (12 males, 0 females). A preponderance of males has also been noted among recent hospital admissions for England and Wales as a whole (Registrar-General, 1955), but the reason for it is obscure. Broadly, however, the patients who were thought to require full hospital care were not restricted to a small group of diseases, but were widely selected from those represented in the mental hospitals.

It is well known that there are in mental hospitals some patients who, in addition to their mental illness, have a physical illness which, at least for a time, determines the character of the care they require. We have therefore divided the 459 patients needing full hospital care (Table II) according to whether their need was determined by their mental condition (82.8 per cent.) or by a superimposed physical illness (17.2 per cent.). All of the physically ill patients either were also mentally ill, or had had a mental illness at the time of their admission to hospital—otherwise of course they would not have been in a mental hospital. But at the time of the inquiry their needs were largely determined by their physical condition, and were therefore sharply identified from those of the main body of patients considered to require full hospital care.

TABLE II
TYPE OF ILLNESS FOR WHICH PATIENTS REQUIRED FULL HOSPITAL FACILITIES

Full Hospital Facilities Required for:	Males		Females		All Patients	
	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	205	85.8	175	79.5	380	82.8
Physical Illness ..	34	14.2	45	20.5	79	17.2
Total	239	100	220	100	459	100

The types of mental illness for which the 380 patients were thought to require full hospital care were approximately as suggested by Table I; indeed, because these patients comprise more than four-fifths of the total in the Table, they largely determine the nature of the distribution. It follows that, as noted in respect of all patients in Table I, they are widely selected from the 3,555 patients in Birmingham mental hospitals, differing chiefly in the lower

incidence of senile psychosis, and the higher incidence of psychoneurosis. They are also identified from the total population of the mental hospitals by a higher proportion of voluntary admissions (46.8 per cent. compared with 31.2 per cent.) and of recent admissions (the percentages of patients in hospital for less than a year were 68.2 and 20.0 respectively). Of the 79 patients undergoing investigation and treatment for physical illness, 26 had infectious diseases, 31 other medical conditions, and 22 a variety of disorders needing surgical attention (Table III).

TABLE III
TYPE OF PHYSICAL ILLNESS FOR WHICH PATIENTS REQUIRED FULL HOSPITAL FACILITIES

Type of Illness		Number of Patients
Infectious Conditions	Pulmonary Tuberculosis ..	23
	Other	3
Other Medical Conditions	Cardio-vascular Disease ..	7
	Dermatological Conditions ..	8
	Acute Bronchitis	4
	Other	12
Surgical Conditions	Traumatic and Orthopaedic ..	11
	Malignant Disease	8
	Other	3
Total		79

(b) PATIENTS' NEEDS

Medical Treatment.—Table IV (opposite) shows the medical treatment required by those needing full hospital care because of mental illness. (It should perhaps be noted once again that in this discussion the medical treatment required was the treatment actually received, because psychiatrists were able to provide what they considered necessary). There were considerable differences of opinion about the treatment of choice. For example, in one hospital 14.6 per cent. were having E.C.T. and 60.4 per cent. intensive administration of tranquillizers. In another hospital, 63.8 per cent. were having E.C.T. and none was receiving intensive tranquillizers. Our concern here is not, however, with the type of treatment, but with the proportion of patients requiring treatment which would make it desirable to have access to full hospital services. This proportion was 12, 11, 8, and 11 per cent. in the four hospitals. It is perhaps surprising that there were only trivial differences, since there was considerable variation in the composition of the hospital populations.

The medical treatment of the patients who required hospital care primarily because of physical illness (Table III) was quite different. Their illnesses were those usually treated in general hospitals,

TABLE IV
TREATMENT NEEDED BY PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES FOR MENTAL ILLNESS

Treatment Needed ..	Investigation and Assessment		Electro-convulsive Therapy		Insulin Therapy		Intensive Tranquillizers		Other		Total	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Hospital A	34	23·6	21	14·6	1	0·7	87	60·4	1	0·7	144	100
Hospital B	39	37·5	44	42·3	2	1·9	19	18·3	—	—	104	100
Hospital C	33	44·6	28	37·8	7	9·5	1	1·4	5	6·8	74	100
Hospital D	19	32·8	37	63·8	2	3·4	—	—	—	—	58	100
All Hospitals	125*	32·9	130	34·2	12	3·2	107	28·2	6†	1·6	380	100

* 32 of the 125 patients under investigation and assessment were receiving sedatives, vitamins, amphetamine, etc.

† Four patients were receiving psychotherapy and two penicillin for general paralysis of the insane.

where all the necessary facilities exist, and they were in mental hospitals only because they were then, or at admission, also mentally ill. Nevertheless it was their physical condition which, for a time at least, determined the accommodation and staff which they needed. In most cases the onset of the physical illness had occurred while the patient was in a mental hospital, but some patients had been transferred from a general hospital and a considerable number (23) had been admitted directly from home (Table V).

TABLE V
LOCATION OF PATIENTS, WHO REQUIRED FULL HOSPITAL FACILITIES FOR PHYSICAL ILLNESS, AT THE ONSET OF THAT ILLNESS

Location	Home		Mental Hospital	Total
	Direct Admission	Transfer from General Hospital		
Number ..	23	3*	53	79
Per cent. ..	29·1	3·8	67·1	100

* One patient was suicidal, and two had been extremely confused and restless.

Nursing Care.—Table VI gives the results of assessment of nursing care. All of the patients

treated for mental illness needed skilled nursing, and 90 per cent. needed it regularly (at least once a day) or constantly. The small proportion of patients who needed only occasional skilled nursing were in the late stages of their treatment, and had had more frequent attention a short time earlier. Since all of these patients were undergoing investigation or treatment for a mental illness, the service they required was that of a skilled mental nurse. Relatively few of them (13·2 per cent.) required simple basic nursing, and in this respect their needs were sharply distinguished from those of the patients treated for physical illness. This difference is of course determined by the fact that almost all of them were fully ambulant (91·3 per cent.: Table VII) and continent (95·3 per cent.: Table VIII). They did not therefore require the frequent personal attention needed by bedfast patients.

The demands for nursing care of patients with physical illnesses (Table VI) were quite different. Again, all of them required skilled nursing and, except for the few in the late stages of treatment, they required it so frequently that it could scarcely have been provided outside hospital. But the type of skilled nursing was different, being essentially of the kind needed by patients in general hospitals. It is in

TABLE VI
NURSING CARE NEEDED BY PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Full Hospital Facilities Required for:	Nursing Care Needed	Constant		Regular*		Occasional		None		All Patients	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	Skilled	13	3·4	340	89·5	27	7·1	—	—	380	100
	Basic	9	2·4	37	9·7	4	1·1	330	86·8	380	100
Physical Illness ..	Skilled	6	7·6	59	74·7	14	17·7	—	—	79	100
	Basic	26	32·9	36	45·6	5	6·3	12	15·2	79	100

* At least once a day.

TABLE VII
MOBILITY OF PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Full Hospital Facilities Required for:	Bedfast		Sitting Out of Bed		Ambulant				All Patients	
					Partly		Fully			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	10	2·6	12	3·2	11	2·9	347	91·3	380	100
Physical Illness ..	51	64·6	10	12·7	6	7·6	12	15·2	79	100

respect of basic nursing, however, that the demands of the two groups of patients differ most sharply. Because a high proportion of the physically ill patients were confined to bed (Table VII) and because many more of them were incontinent (Table VIII), their need for simple personal nursing was far greater.

TABLE VIII
CONTINENCE OF PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Full Hospital Facilities Required for:	Incontinent				Continent		All Patients	
	Wholly		Partly					
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness	11	2.9	7	1.8	362	95.3	380	100
Physical Illness	18	22.8	2	2.5	59	74.7	79	100

More than three-quarters of them required regular or constant service of this kind (Table VI), and relatively few (15.2 per cent.) were independent of it.

Supervision.—Another feature which has a considerable bearing upon the type of accommodation and staff is the degree of supervision required because of mental illness. Patients were subdivided according to whether they needed close supervision (personal supervision of severely disturbed patients), limited supervision (supervision of patients who, although they did not require close supervision, could not be allowed full freedom within the hospital community), open supervision (confinement to hospital but with complete freedom of movement within it), or no supervision. The proportions of

patients in each class are given in Table IX. It is scarcely surprising that all the patients undergoing active investigation and treatment for mental illness were thought to require some supervision; nevertheless two-thirds of them were restricted only insofar as they were not allowed alone outside the hospital grounds. In some respects supervision was less significant in the case of patients treated for physical illness because many were confined to bed or were only partly ambulant, and the possibility of unrestricted movement scarcely arose. Nevertheless, 11.3 per cent. of the patients required close supervision and a further 78.5 per cent. required limited supervision on the wards. It seems clear that although the medical and nursing care was determined by their physical condition, because of their associated mental illness most of these patients would not be suitable to be admitted to the same wards as patients in general hospitals with similar physical illnesses, but without the added complication of mental illness. And, although the skilled nursing was mainly directed to the care of physical illness, it could best be provided by nurses with experience of mental as well as of physical illness. It should also be noted that, after completion of treatment of their physical illness, relatively few (7) of these 79 patients were likely to be able to return home. It was thought that most of them (66) would require to live in an institution which could provide simple care of mental illness (of the type referred to under "limited hospital facilities") while the remainder (6) would need a further period of access to full hospital facilities for the treatment of their mental illness.

TABLE IX
SUPERVISION NEEDED BY PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Full Hospital Facilities Required for:	Supervision								All Patients	
	Close		Limited		Open		None			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	9	2.4	117	30.8	254	66.9	—	—	380	100
Physical Illness ..	9	11.3	62	78.5	—	—	8	10.1	79	100

(c) ACCOMMODATION REQUIRED

It seems to us that the two considerations which have most bearing on the type of accommodation and staff which should be provided for mentally-ill patients who need the full range of hospital facilities are their mobility, and the degree of supervision required. Unlike patients in general hospitals, most of them are ambulant and do not need traditional ward accommodation. The degree of supervision has a considerable bearing upon the type of nursing. For it might be possible to use nurses trained or in training for the general register for care of patients who require little or no supervision, but it would probably not be consistent with present nursing policy to use them in units containing seriously disturbed patients.

In Table X the 459 hospital patients have been classified according to their mobility and need for supervision. In this Table we have also preserved the distinction between patients treated for mental illness and those treated for physical illness. But, although this distinction has a considerable bearing on care, it is not a precise guide to the most suitable type of accommodation and staff. This is because the physically-ill were by no means all bedfast patients who needed no supervision, and the mentally-ill were not all ambulant patients who needed supervision. But by combining certain of the cells in Table X we have obtained four groups of patients identified broadly according to supervision and mobility.

(A) Bedfast, or recently bedfast, patients, all of whom required some degree of supervision.

(B) Bedfast, or recently bedfast, patients who required no supervision.

(C) Ambulant patients restricted—because of their mental state—within the hospital community.

(D) Ambulant patients unrestricted within the hospital community, but not allowed outside the hospital grounds.

It is suggested that the four groups of patients identified in this way should be accommodated in four different types of unit (Table XI). They should be in either traditional ward or hostel type of accommodation, and, according to the supervision required, in a closed or an open block. It should perhaps be said that the term "open block" has a different significance in the two cases. The eight patients (Group B) suitable for a traditional and open ward required no mental supervision whatsoever; their needs were identical with those of patients in general hospitals, and there could have been no reasonable objection either to admitting them to general wards, or to using student nurses in training for the general register for their care. The 241 patients suggested for hostel-type accommodation in an open block (Group D) all required some supervision because of their mental state, although they could move freely within the hospital community. These differences are of course evident from the more detailed classification given in Table X.

TABLE XI
TYPE OF ACCOMMODATION NEEDED BY PATIENTS WHO
REQUIRED FULL HOSPITAL FACILITIES

Accommodation	Traditional Ward	Hostel-Type	Total
Closed Block	(A) 93	(C) 117	210
Open Block	(B) 8	(D) 241	249
Total	101	358	459

Ward Accommodation with Supervision (Group A).—In Group A there are 93 patients (20 per cent.

TABLE X
CLASSIFICATION OF PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES

Patients		Bedfast or Sitting Out of Bed		Partly or Fully Ambulant		All Patients
Illness		Mental only	Physical	Physical	Mental only	
Supervision ..	Close	(A) 1	8	1	(C) 8	18
	Limited	8	47	15	109	179
	Open	13	—	—	(D) 241	254
	None	—	(B) 6	2	—	8
Total		22	61	18	358	459

of 459), who were considered to need traditional ward accommodation with supervision. 71 of them were being treated for physical illnesses of the kinds indicated in Table III. The other 22 patients were under investigation or treatment for a mental illness and were confined to bed because of the nature of their treatment, because they were retarded or restless, or because they were weak as a result of advanced age or poor nutrition. There can be no doubt about the desirability of the traditional type of accommodation (*i.e.* a high ratio of bed-space to day-room and other facilities): 77 patients were bedfast or were only occasionally permitted to sit out of bed, and the sixteen who were partly ambulant were either under investigation or were in an early stage of convalescence after an acute physical illness. All the patients needed some supervision because of their mental state, and all but thirteen required limited or close supervision.

The patients in Group A also had in common their needs for medical and nursing care. They all required frequent medical attention and skilled nursing, and 76 needed basic nursing as well (20 were incontinent). But because the patients required mental supervision, the wards would have to be staffed mainly, and perhaps entirely, by nurses with experience of mental as well as physical illness.

Even if it is agreed that the 93 patients in Group A needed traditional ward accommodation with supervision, it may be asked whether it would be desirable to have in the same unit patients being treated for physical and for mental illnesses. The answer to this question must turn largely upon the numbers for whom it is possible to plan (the 93 were drawn from a population of over a million) and upon whether the accommodation is to be designed specifically for the purpose, or adapted from existing facilities. Evidently if new accommodation is designed for a relatively large number of patients with most of their needs in common, it is possible to have regard for lesser differences in requirements which could scarcely be considered in a smaller or in an existing unit. But it seems to us that the overriding considerations are that all these patients needed traditional ward units (this is not of course to pass judgement on the optimum size or type of ward), and all needed skilled nursing, which, because of their mental state, would have to be undertaken mainly or entirely by mental nurses. The fact that some patients needed the services of a general physician, others of a surgeon, and still others of a psychiatrist, seems less significant from the point of view of their location, so long as all the patients are in a hospital which can provide the requisite services. For they all required the general supervision of

psychiatric staff, and the numbers attended by any other specialist were probably not large enough to make it practicable to create a separate unit. Nevertheless some subdivision might be desirable within the wards: for example the segregation of patients with tuberculosis who need barrier nursing, and of those whose mental condition makes it necessary for them to be closely supervised. These reservations do not affect our main conclusion, that from the point of view of their accommodation and staff requirements these 93 patients formed a unit, and had more in common with one another than with any other patients in the mental hospitals.

Ward Accommodation without Supervision (Group B).—It was suggested that eight patients (of 459) needed traditional ward accommodation without supervision. They were being treated for physical illnesses, of which three involved the central nervous system (epilepsy, syphilis, paraplegia) and one each of the following: pulmonary tuberculosis, antepartum haemorrhage, thyroid adenoma, diarrhoea of unknown origin, and fracture of femur. It was concluded that they needed traditional ward accommodation, because six patients were either bedfast, or only occasionally permitted to sit out of bed, and the two who were ambulant were under investigation for epilepsy and general paralysis of the insane. It is evident that their requirements were medical treatment and nursing care: all needed skilled nursing and five needed basic nursing as well. In view of the fact that they had no mental symptoms severe enough to require supervision, there could be no possible objection to employment of nurses with a general training. The most satisfactory way in which to provide for them would be to admit them to the appropriate wards of general hospitals.

Closed Hostel-Type Accommodation (Group C).—There were 358 ambulant patients who needed full hospital services because they were under investigation or active treatment of a mental illness. Because they are ambulant such patients do not require traditional ward accommodation, but could be cared for in facilities of the hostel type with a high ratio of day-room and other amenities to bed-space. In Table XI they have been subdivided according to the degree of supervision: 117 would have to be restricted to their own block, whereas the remainder (241) could move freely within the hospital community. It may be questioned whether in practice it would be possible to separate patients in these two groups, all of whom require some supervision. But it would probably be easier to staff the units if patients needing a considerable amount of personal supervision were separated from those who needed

little or no supervision so long as they remained within the hospital grounds.

Of the 117 patients suggested for closed hostel-type accommodation, eight needed close supervision because they were restless, confused, or aggressive, and the remainder could not be allowed unaccompanied outside their unit. Because of the nature of their medical treatment they all required skilled mental nursing. Although they were ambulant, 20 per cent. needed basic nursing, such as feeding, washing, and dressing, and in the case of incontinent patients attention to bladder and bowel.

These patients are also distinguished from those best accommodated in traditional wards (Groups A and B) by their need for some sort of occupation. The question of productive work does not of course arise in respect of patients undergoing investigation or treatment, but it was estimated that about 70 per cent. could benefit from occupational therapy. A considerable proportion (about a third) of those who might have benefited were not receiving this service, which was more deficient than any other considered in the inquiry.

Open Hostel-Type Accommodation (Group D).—Although they were also undergoing intensive investigation and treatment because of their mental illness, the remaining 241 patients were able to move without supervision within the hospital. Again because of their treatment they all needed skilled nursing, but only twelve needed basic nursing (Table XII). The majority of them (88 per cent.) required occupational therapy, which in most cases was being provided. The difference from the previous group is due to the fact that these patients were able to leave the ward and go to the occupational therapy centre.

As compared with Group C patients, those suggested for an open block were much less disturbed and had more insight into the nature of their illness. It seems very undesirable that they should share accommodation with patients who are grossly disturbed. They had much in common with those

now treated in some hospitals as out-patients, and with the non-statutory patients accepted as in-patients by early treatment centres.

(d) SUMMARY

459 patients (13 per cent. of the total mental hospital population of 3,555) were undergoing investigation or treatment of a mental or physical illness which made it necessary for them to have access to the full resources of a hospital. Those being treated for a mental illness (83 per cent.) were almost all continent and fully ambulant; they all needed skilled nursing, and 13 per cent. needed basic nursing (washing, dressing, feeding, lifting, attention to bladder and bowels, etc.) as well. Patients treated for a physical illness (17 per cent.) were affected by a variety of medical and surgical conditions (pulmonary tuberculosis, cardiovascular disease, traumatic and orthopaedic conditions, etc.). Most of them were confined to bed and many were incontinent. They all required skilled nursing and 85 per cent. required basic nursing. All the patients treated for a mental illness needed some supervision, but two-thirds were restricted only insofar as they were not allowed outside the hospital grounds. Nine-tenths of those with a physical illness required supervision.

It is suggested that the two considerations which have most bearing on the type of accommodation and staff required for patients needing full hospital facilities are their mobility and the supervision they require. Accordingly the data were used to divide the patients into four groups:

(A) 93 patients (20 per cent. of 459) were bedfast or only partly ambulant, and required traditional ward accommodation with supervision because of their mental state. They all needed to be under the general supervision of psychiatrists, but 71 also needed the services of general medical and surgical staff because they were physically ill. In view of their mental condition they had to be attended by nurses with experience of mental as well as physical illness.

TABLE XII
BASIC NURSING NEEDED BY PATIENTS WHO REQUIRED FULL HOSPITAL FACILITIES AND HOSTEL-TYPE ACCOMMODATION

Accommodation	Basic Nursing								All Patients	
	Constant		Regular		Occasional		None			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Closed Block (Group C)	4	3.4	19	16.2	1	0.8	93	79.5	117	100
Open Block (Group D)	1	0.4	8	3.3	3	1.2	229	95.0	241	100

(B) Eight patients were bedfast or only partly ambulant, and required traditional ward accommodation without supervision. These patients were under treatment for physical illnesses without mental complications, and could have been cared for by the medical and nursing staff of a general hospital.

(C) 117 ambulant patients needed hostel-type accommodation (a high ratio of day-room and other amenities to bed-space) with restriction to their own block because of their mental state. They were under active investigation or treatment of mental illness (without physical complications), and needed to be under the care of psychiatrists assisted by nurses with experience of mental illness. Most of them needed occupational therapy.

(D) 241 ambulant patients needed hostel-type accommodation, but did not require supervision so long as they remained within the hospital. In other respects their needs were the same as those of patients in Group C.

II. PATIENTS NEEDING LIMITED HOSPITAL FACILITIES

Much the largest of the three classes into which Birmingham residents in mental hospitals were divided consisted of 2,655 patients (75 per cent. of the total) thought to need limited hospital facilities. Limited hospital facilities include such simple services as basic nursing, supervision of mentally-ill patients, and occupational training, but not the more comprehensive services—investigation, intensive medical treatment, skilled nursing—which can be provided only where the full range of hospital services is available. Most of the patients needing limited facilities were either confined to bed by chronic physical illness, or were ambulant but in need of supervision because of their mental state. In respect of requirements they were therefore distinguishable both from the patients referred to in the previous section who needed full hospital services, and from those—discussed in the following section—who were considered suitable for hostel accommodation without mental supervision.

(a) TYPE OF PATIENT

Table XIII gives the distribution of the 2,655 patients according to the diagnosis of their mental illness. The distribution is very similar to that of the whole mental hospital population (Garratt and others, 1957: Table V)—almost inevitably, since they comprise about three-quarters of it. The only obvious difference is the greater excess of females. This is due largely to the sex ratio of patients with manic depressive reaction, paranoid state, senile

TABLE XIII
DIAGNOSIS OF PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Diagnosis*	Males	Females	All Patients	
			Number	Per cent.
Schizophrenia (300) ..	508	640	1,148	43.2
Manic Depressive Reaction (301)	55	122	177	6.7
Involuntional Melancholia (302)	7	78	85	3.2
Paranoid State (303) ..	67	197	264	9.9
Senile Psychosis (304) ..	69	353	422	15.9
Other Psychoses (305-309)	66	103	169	6.4
Psychoneuroses (310-18) ..	9	13	22	0.8
Disorders of Character and Behaviour (320-24; 326)	9	14	23	0.9
Mental Defect (325) ..	57	94	151	5.7
Syphilis (025)	26	18	44	1.7
Epilepsy (353)	36	52	88	3.3
Other Disorders	35	27	62	2.3
Total	944	1,711	2,655	100

* Numbers in brackets are list numbers used in 1948 International Statistical Classification.

psychosis, and involuntional melancholia, among whom the relative numbers of females to males were 2 to 1, 3 to 1, 5 to 1, and 10 to 1 respectively. A similar excess of females was recorded in a previous investigation of chronic patients in a Birmingham mental hospital (Cross and others, 1957). It is evidently much too great to be attributable wholly to differences between the numbers of males and females in the related age groups of the general population.

It seems unnecessary to examine in detail the age distribution and duration of stay which, for the reason previously given, inevitably resembled those of the whole hospital population. But, since most patients needing limited facilities were chronic patients, they included a greater proportion of older patients and of patients who had been in hospital for long periods.

For the purpose of assessing their requirements, patients in this class were divided according to whether their needs were due primarily to a mental or a physical illness (Table XIV). Although it is not a precise guide, the distinction is a useful one. Most of the mentally ill were ambulant and needed supervision and occupational training, but little nursing. Most of the physically ill were bedfast and needed basic nursing; occupational training was of course relatively less important.

TABLE XIV

TYPE OF ILLNESS FOR WHICH PATIENTS REQUIRED LIMITED HOSPITAL FACILITIES

Patients Needing Limited Hospital Facilities for:	Males		Females		All Patients	
	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	846	89.6	1,463	85.5	2,309	87.0
Physical Illness ..	98	10.4	248	14.5	346	13.0
All Patients	944	100	1,711	100	2,655	100

The distribution according to diagnosis of the 2,309 patients whose need of hospital facilities was attributed mainly to mental illness does not differ in any important respect from that of all patients in this class (Table XIII). On the other hand, the 346 patients whose needs were attributable mainly to physical illness were fairly sharply distinguished in respect of the nature of their mental illness. The proportion of schizophrenics (8.4 per cent.) was much lower and that of senile (48.8 per cent.) and other psychotics (12.4 per cent.) much higher. The physical illnesses upon which their need for mental hospital care largely rested are given in Table XV. More than half of the patients had no more specific diagnosis than infirmity due to old age and most of the others were affected by degenerative conditions. These observations merely reflect the fact that the physically ill consisted mainly of senile patients, most of whom also had mental symptoms.

TABLE XV

TYPE OF PHYSICAL ILLNESS FOR WHICH PATIENTS REQUIRED LIMITED HOSPITAL FACILITIES

Type of Illness	Males	Females	All Patients	
			Number	Per cent.
Infirmity of Old Age ..	42	148	190	54.9
Organic Disease of Central Nervous System ..	22	31	53	15.3
Diseases of Heart and Circulation .. .	13	7	20	5.8
Arthritis (all forms) ..	3	15	18	5.2
Cerebro-Vascular Disease	5	12	17	4.9
Chronic Bronchitis ..	5	5	10	2.9
Pulmonary Tuberculosis ..	—	10	10	2.9
Malignant Disease ..	2	7	9	2.6
All Other Conditions ..	6	13	19	5.5
Total	98	248	346	100

(b) PATIENTS' NEEDS

Medical Treatment.—The reader is reminded that patients who needed the sort of medical attention which could be given only where the full range of hospital facilities was available have, by definition, been excluded from this class. Treatment of those without associated physical illness consisted of administration of tranquillizers (43 per cent.) or other sedatives (1 per cent.); more than half were receiving no specific treatment. (Once again it should be said that, as the psychiatrists were in a position to give the treatment which they considered necessary, the treatment required is the same as that actually received.) However, it is generally agreed that drug therapy is a less important part of the medical care of this class of patient than occupational training, which is discussed below. The patients with a physical illness (Table XV) needed only the occasional medical supervision required by the chronic sick whose illnesses are no longer under active investigation or treatment. Of course they have acute exacerbations from time to time when they require frequent medical attention (and skilled nursing). But, for the purposes of the present analysis, a patient in this stage of illness (for example with pneumonia or heart failure) would be included among those considered to need full hospital facilities. It is natural to ask why these physically ill patients were in mental hospitals: 57.8 per cent. of them were physically ill when they were admitted and were accepted in a mental hospital because of associated mental symptoms; and 42.2 per cent. had developed their chronic physical illness since their admission (Table XVI).

TABLE XVI

LOCATION OF PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES FOR PHYSICAL ILLNESS AT THE ONSET OF THAT ILLNESS

Location	Home		Mental Hospital	Other*	Total
	Direct Admission	Transfer from General or Chronic Sick Hospital			
Number	181	12	146	7	346
Per cent.	52.3	3.5	42.2	2.0	100

* Municipal or voluntary home for elderly or blind.

Nursing Care.—It has been said previously that nursing care was one of the most significant considerations in assigning patients to the three major classes. Patients needing full hospital facilities all required skilled nursing; patients needing limited hospital facilities required no skilled nursing but

TABLE XVII

BASIC NURSING NEEDED BY PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Limited Hospital Facilities Required for:	Constant		Regular		Occasional		None		All Patients	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	51	2.2	392	17.0	35	1.5	1,831	79.3	2,309	100
Physical Illness ..	150	43.4	182	52.6	14	4.1	—	—	346	100

many of them required basic nursing; patients needing no hospital facilities and considered suitable for hostel accommodation required no nursing. Evidently the nursing care would provide a precise index, were it not for inclusion in the second class (limited hospital facilities) of some patients who did not need basic nursing, but required supervision because of their mental state.

The nursing requirements of patients in this class are shown in Table XVII. All of those with a physical illness needed the simple personal services—washing, dressing, feeding, etc.—required by the chronic sick. More than half of them were incontinent (Table XVIII), and about two-thirds were

bedfast (Table XIX). Of the mentally-ill patients on the other hand, only about one-fifth needed basic nursing (Table XVII), and this is understandable, since most of them were continent (Table XVIII) and fully ambulant (Table XIX). This is of course the source of the only inconsistency in the use of nursing as an index in classifying patients. It was considered right to include among those suitable for limited hospital facilities mentally ill patients who made few demands on the nursing services in any respect other than their need for supervision and training. Unless they were assigned to a separate class, it seemed preferable to group these patients with those with a physical illness who needed basic nursing, rather than with the patients considered suitable for hostel facilities who were wholly independent of the nursing services.

TABLE XVIII

CONTINENCE OF PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Limited Hospital Facilities Required for:	Incontinent				Continent		All Patients	
	Wholly		Partly					
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness	209	9·1	63	2·7	2,037	88·2	2,309	100
Physical Illness	190	54·9	7	2·0	149	43·1	346	100

Supervision.—In Table XX patients are distributed according to the amount of supervision they required. All those with a mental illness needed some supervision, although more than half of them were permitted to move freely within the hospital grounds and less than 1 per cent. needed close personal supervision. Most of the physically ill patients also had to be supervised, but 59 of them

TABLE XIX

MOBILITY OF PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Limited Hospital Facilities Required for:	Bedfast		Sitting Out of Bed		Ambulant				All Patients	
					Partly		Fully			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	9	0.4	8	0.3	117	5.1	2,175	94.2	2,309	100
Physical Illness ..	219	63.3	102	29.5	24	6.9	1*	0.3	346	100

* Congenital syphilis with epilepsy, too many fits for hostel.

TABLE XX

SUPERVISION NEEDED BY PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Limited Hospital Facilities Required for:	Supervision								All Patients	
	Close		Limited		Open		None			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	15	0·6	1,058	45·8	1,236	53·5	—	—	2,309	100
Physical Illness ..	11	3·2	276	79·8	—	—	59	17·1	346	100

needed no supervision of any kind. Since these patients were confined to bed the question of leaving the hospital and its grounds unaccompanied did not arise.

Occupation.—Although patients in this class needed little specific medical therapy, many of them required training, of which a suitable occupation is the most tangible feature. When they are found suitable work, patients with chronic mental illness often improve, sometimes to such an extent that they become fit to return home and take up normal employment.

Most of the 346 patients with physical illness were bedfast and consequently their occupational needs were limited. 52 (15 per cent.) of them required occupational therapy in the wards (only twenty were receiving it); but the remaining 294 were so grossly disabled that any form of occupation was precluded (Table XXI).

Almost all the 2,309 patients who required limited hospital facilities because of mental illness were ambulant (Table XIX), and their occupation was therefore a matter of considerable importance. About one-quarter were capable of productive work and nearly one-third required occupational therapy (Table XXI). The remainder were thought to be unsuitable for occupational training, being too inaccessible, retarded, or degraded. Some of these patients were encouraged to perform simple

stereotyped tasks in the ward, but the majority were completely unoccupied and appeared to be incapable of doing anything.

(c) ACCOMMODATION REQUIRED

It has already been suggested that the two considerations which have most bearing on the type of accommodation and staff required for the care of the mentally ill are the amount of supervision they require and their mobility; the 2,655 patients needing limited hospital facilities have been classified accordingly (Table XXII). We have also distinguished patients according to whether their needs were attributable mainly to mental or to physical illness. Again, and for reasons considered previously, the criteria of mobility and supervision are not a precise guide to the facilities and staff required. The physically ill were not all bedfast patients who were unsupervised, and the mentally ill were not all ambulant patients who were supervised. But by grouping the cells of Table XXII we have obtained four groups of patients identified according to these two features of care (Table XXIII, overleaf).

Group A. Bedfast or only partly ambulant patients, all of whom required supervision.

Group B. Bedfast or only partly ambulant patients who required no supervision.

Group C. Ambulant patients restricted within the hospital community.

TABLE XXI
OCCUPATION NEEDED BY PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Limited Hospital Facilities Required for:	None		Light Work on Ward		Occupational Therapy		Productive Work		Total	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Mental Illness ..	677	29.3	337	14.6	698	30.2	597	25.9	2,309	100
Physical Illness ..	294	85.0	—	—	52	15.0	—	—	346	100

TABLE XXII
CLASSIFICATION OF PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES

Patients						Bedfast or Sitting Out of Bed		Partly or Fully Ambulant		All Patients
Illness						Mental Only	Physical	Physical	Mental Only	
Supervision ..	Close	(A) 1	9	2	(C) 14	26				
	Limited	7	264	12	1,051	1,334				
	Open	9	—	—	(D) 1,227	1,236				
	None	—	(B) 48	11	—	59				
Total						17	321	25	2,292	2,655

Group D. Ambulant patients unrestricted within the hospital community but not allowed outside the hospital grounds.

Although this classification is the same as that employed in the previous section, the patients considered there were of course distinguished sharply by their need for frequent medical and skilled nursing care.

It is suggested that these four groups of patients could have been cared for most conveniently in different units, which are discussed separately below. For the purpose of this classification six patients who were only temporarily bedfast (three with coryza, two with septic feet, and one with a fractured arm) were transferred from Group A to Group C (one patient) and Group D (five patients). This explains the small difference between numbers in Tables XXII and XXIII.

TABLE XXIII
TYPE OF ACCOMMODATION NEEDED BY PATIENTS WHO
REQUIRED LIMITED HOSPITAL FACILITIES

Accommodation	Traditional Ward	Hostel-Type	Total
Closed Block	(A) 298*	(C) 1,066*	1,364
Open Block	(B) 59	(D) 1,232*	1,291
Total	357	2,298	2,655

* Small differences between numbers in Table XXII and XXIII are accounted for in the text.

Ward Accommodation with Supervision (Group A).—It was thought that 298 patients (11 per cent. of 2,655) should be cared for in traditional wards which provided some personal supervision. 287 were physically ill, and their need for traditional accommodation (a high ratio of bed space to day-room and other facilities) is evident from the fact that almost all of them were confined to bed. For the fourteen physically ill patients who were partly ambulant (Table XXII), it would probably be desirable to provide a small day room, but their movements were so restricted that it would still be preferable to care for them in a traditional ward. The remaining eleven in Group A (after transfer of six to Groups C and D) were catatonic or confused patients confined to bed because of their mental state.

The staff required in such a unit is readily stated. The patients all needed simple personal services, but, by present standards at least, they required little medical attention or skilled nursing over long periods. They therefore did not need immediate access to the full resources of a hospital, but required

only general medical supervision of the kind commonly provided by a general practitioner for patients in their own homes. The imperative demand was for basic nursing, which, if adequately supervised, did not need to be given by skilled staff. But as the patients all had abnormal mental symptoms, they would probably be considered unsuitable for care by nurses in training for the general register. Because they were restricted to bed, and many of them were unlikely ever to be ambulant again, occupational facilities were far less important than in the case of the ambulant patients in Groups C and D.

We shall not attempt to consider in great detail the needs of patients or the design of the unit. But again it is worth noting that there were twelve patients who required close supervision because they were severely disturbed (mainly noisy and confused senile psychotics, and four aggressive schizophrenics) and nine who had chronic pulmonary tuberculosis. This suggests that, if a unit were designed for the purpose and on a sufficient scale, it would be desirable to effect some segregation within it. But administratively the differences seem to us less significant than the features which all the patients in Group A had in common: their need for traditional ward-type accommodation with supervision because of their mental state.

Ward Accommodation without Supervision (Group B).—59 patients (2 per cent. of 2,655) needed traditional ward accommodation in which it was unnecessary to provide supervision. They were physically ill patients with mental symptoms of so trivial a kind that they had no bearing on their care; 27 had organic diseases of the central nervous system, fifteen had other organic diseases, and the remaining seventeen had no more specific diagnosis than infirmity associated with old age. They needed traditional accommodation because 48 were bedfast or occasionally sat out of bed, and the other eleven were only partly ambulant.

Like those in the previous group these patients required only general medical supervision and basic nursing. They differed sharply, however, in having no mental symptoms which needed supervision, and, if they had not been restrained by infirmity or physical illness, there could have been no objection to their leaving hospital unaccompanied. In terms of needs they were evidently identical with patients cared for in hospitals for the chronic sick, and that is of course where those responsible for administration of mental hospitals would prefer to see them. Again, because of their very limited movement, the question of occupation was of secondary importance.

Closed Hostel-type Accommodation (Group C).— 2,298 (86 per cent. of the 2,655 patients needing limited hospital facilities) were fully ambulant, and were therefore considered suitable for hostel-type accommodation. These patients comprise the hard core of the mental hospital population. They were affected by mental illness without an associated physical illness. About half of them were schizophrenics, unlike the patients with an associated physical illness (Groups A and B) of whom half were senile psychotics. All of them required some supervision because of their mental state, but they were divided into two groups according to whether they were or were not confined to the wards (Groups C and D respectively). Once again it might be asked whether in practice provision of separate accommodation would be feasible, and it would perhaps be less essential than the parallel separation in the case of patients needing full hospital facilities (which would more sharply divide those with insight from disturbed patients). Nevertheless it seems to us that from the point of view of the patients it would be desirable, and administratively it would be at least convenient, to separate those who could be permitted to leave their residential blocks unaccompanied, from those who could not.

There were 1,066 patients who needed a degree of personal supervision which made it undesirable for them to leave the wards unaccompanied; fourteen of them required close supervision. They needed little medical attention, but 30 per cent. of them required

basic nursing (Table XXIV). One of their most important demands was suitable employment; 14·4 per cent. were capable of productive work, that is of work which made a contribution to the hospital community, and only 38·2 per cent. were thought unsuitable for any type of occupation (Table XXV). As a further indication of the condition of patients it may be noted that about 70 per cent. were considered unsuitable for parole. In practice, 90 per cent. never left the hospital.

Open Hostel-type Accommodation (Group D).— The last group consists of the 1,232 ambulant patients who were allowed to move freely within the hospital community, but were considered unsuitable to leave the grounds alone. Their medical and nursing needs were approximately the same as those of the previous group: occasional medical supervision with basic nursing in about 10 per cent. of cases (Table XXIV). Only one-third of them were judged unsuitable to be released on accompanied parole, and in practice about one-quarter were receiving it.

Perhaps the most interesting feature of the care of this group of patients is their employment (Table XXV). Only about one-fifth were incapable of any occupation, and about one-third could undertake productive work. Patients of this type do in fact make a considerable contribution to the work of mental hospitals, and if they were not available it would be necessary to bring in workers to replace them.

TABLE XXIV
BASIC NURSING NEEDED BY PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES AND HOSTEL-TYPE ACCOMMODATION

Accommodation	Basic Nursing								All Patients	
	Constant		Regular		Occasional		None			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Closed Block (Group C)	34	3·2	279	26·2	7	0·7	746	70·0	1,066	100
Open Block (Group D)	14	1·1	105	8·5	28	2·3	1,085	88·1	1,232	100

TABLE XXV
OCCUPATION NEEDED BY PATIENTS WHO REQUIRED LIMITED HOSPITAL FACILITIES AND HOSTEL-TYPE ACCOMMODATION

Accommodation	Occupation Needed								All Patients	
	None		Light Work on Ward		Occupational Therapy		Productive Work			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Closed Block (Group C)	407	38·2	157	14·7	348	32·6	154	14·4	1,066	100
Open Block (Group D)	259	21·0	180	14·6	350	28·4	443	36·0	1,232	100

Table XXVI shows the kind of work actually done by those patients in Groups C and D who were engaged on productive work.

TABLE XXVI
PRODUCTIVE WORK DONE BY PATIENTS WHO REQUIRED
LIMITED HOSPITAL FACILITIES AND HOSTEL-TYPE
ACCOMMODATION

Occupation	Males	Females	All Patients	
			Number	Per cent.
Ward Cleaner	98	157	255	45.2
Kitchen or Canteen Assistant	31	56	87	15.4
Garden or Farm Labourer	70	—	70	12.4
Sewing Room Assistant ..	—	62	62	11.0
Laundry Worker	—	35	35	6.2
Other	46	9	55	9.8
Total	245	319	564	100

(d) SUMMARY

2,655 patients (75 per cent. of the total mental hospital population of 3,555) required no skilled nursing and only occasional medical attention, but needed basic nursing or supervision or both (referred to as limited hospital services). 87 per cent. had a mental illness without physical complications: most of them were ambulant and needed supervision and occupational training but little nursing. About one-quarter of them were capable of productive work. 13 per cent. were physically ill (more than half were elderly senile patients): most of them were bedfast and needed both basic nursing and supervision. Patients were again divided into four groups according to their mobility and supervision:

(A) 298 patients were bedfast or only partly ambulant, and required traditional ward accommodation with supervision. They needed only occasional medical attention, of the kind commonly given by general practitioners to patients in their own homes. Their essential requirement was basic nursing, provided in view of their mental state, by nurses with experience of mental illness.

(B) 59 patients were bedfast or only partly ambulant, and required traditional ward accommodation without supervision. Like the previous group they needed basic nursing but only occasional medical attention. Because they did not require supervision they could be cared for by nurses without experience of mental illness. In terms of the nature of their illness and their needs these patients are identical with those cared for in hospitals for the chronic sick.

(C) 1,066 ambulant patients needed hostel-type accommodation with restriction to their own block because of their mental state. They needed occasional medical attention with (in 30 per cent. of cases) basic nursing by nurses with experience of mental illness. Perhaps their most important requirement was training and employment. About 15 per cent. were capable of productive work.

(D) 1,232 ambulant patients needed hostel-type accommodation without supervision so long as they remained within the hospital. In other respects their needs were the same as those of patients in Group C, although the proportion capable of productive work (about one-third) was higher.

III. PATIENTS NOT REQUIRING HOSPITAL FACILITIES

After exclusion of the previous two classes, we are left with 441 patients (12 per cent. of 3,555 Birmingham patients in mental hospitals) who in the opinion of the psychiatrists required none of the facilities usually associated with a hospital. They did not need investigation, specific medical treatment, or skilled nursing (services demanding full hospital facilities), and they had neither physical disability serious enough to require basic nursing nor mental abnormality for which supervision was necessary (services demanding limited hospital facilities). Their circumstances were analogous to those of the patients in hospitals for the chronic sick who do not need specific medical or nursing care but remain in hospital chiefly for social reasons. It might be thought that all such patients in the mental hospitals could have been discharged if they had had a suitable home. This was not the case. Although none of them required traditional hospital services, more than half were considered to be unable to live wholly independent lives. They needed no personal supervision but they did need to live in an organized community which could provide assistance with such matters as training and employment. In the discussion which follows, the 441 patients are divided into two groups according to whether or not, in the opinion of the psychiatrist, they could have been discharged if a suitable home had been available.

(a) TYPE OF PATIENT

Table XXVII (opposite) shows the distribution of the 441 patients by the diagnosis of their mental illness. As compared with the whole mental hospital population (Garratt and others, 1957: Table V), there were fewer schizophrenics and senile psychotics, and more manic depressives, mental defectives, epileptics, and individuals with disorders of

TABLE XXVII
DIAGNOSIS OF PATIENTS WHO DID NOT REQUIRE
HOSPITAL FACILITIES

Diagnosis*	Males	Females	All Patients	
			Number	Per cent.
Schizophrenia (300) ..	49	54	103	23·4
Manic Depressive Reaction (301)	18	46	64	14·5
Involuntional Melancholia (302)	2	21	23	5·2
Paranoid State (303) ..	17	26	43	9·8
Senile Psychosis (304) ..	7	27	34	7·7
Other Psychoses (305-09)	11	10	21	4·8
Psychoneuroses (310-18) ..	5	8	13	2·9
Disorders of Character and Behaviour (320-24; 326)	18	21	39	8·8
Mental Defect (325) ..	17	27	44	10·0
Syphilis (025)	1	4	5	1·1
Epilepsy (353)	16	16	32	7·3
Other Disorders	15	5	20	4·5
Total	176	265	441	100

* Numbers in brackets are list numbers used in 1948 International Statistical Classification.

character and behaviour. Once again, there was an excess of females, which was particularly marked for certain kinds of illness (involuntional melancholia, manic depressive reaction, and senile psychosis). The 441 patients were a little older (two-fifths were over 65) than the total hospital population, and had been in a mental hospital for about the same length of time (nearly two-thirds for more than 5 years). A third of the patients were still technically certified, although not in need of supervision. In part this anomaly is accounted for by the fact that after 7 years' residence certification orders are reviewed only at 5-yearly intervals, unless the question of discharge from hospital arises. We may summarize these observations by stating that, in respect of the diagnosis of their mental illness, their age, and the duration of stay in hospital, the patients considered not to need hospital facilities were fairly representative of the whole mental hospital population. For obvious reasons they differed in their status under the Lunacy and Mental Treatment Acts, the surprising feature being that a considerable proportion of them were still certified.

We have no information about the circumstances in which these patients who no longer needed hospital care were admitted to hospital. Some no doubt were more seriously ill than at the time of our

assessment, but their illnesses had remitted or responded to treatment; others may have been admitted chiefly for social reasons. It was considered impossible to assess the relative importance of these two influences at the time of our survey, which in most cases was many years after the original admission.

Inquiry why the patients had not been discharged elicited the distinction already referred to between those who needed to live in an organized community (54·9 per cent.) and those who could have been released to a suitable home (Table XXVIII). Of the 179 patients who could have been discharged, 74 had no home, and 105 could not return to their homes because relatives or friends were unable or unwilling to receive them. Twenty patients were waiting to be discharged at the time of investigation.

TABLE XXVIII
REASON WHY PATIENTS WHO DID NOT REQUIRE
HOSPITAL FACILITIES HAD NOT BEEN DISCHARGED

Reason		Males	Females	All Patients	
				Number	Per cent.
Needed Life in Organized Community		119	123	242	54·9
Home Unsuitable	Relatives or Friends Incapable	13	47	60	13·6
	Relatives or Friends Unwilling	12	33	45	10·2
	No Home	25	49	74	16·8
Awaiting Discharge ..		7	13	20	4·5
Total		176	265	441	100

Since the disposal of the patients who did not require hospital accommodation is a matter of considerable practical importance, it was thought necessary to inquire whether they had any physical or mental symptoms which might prejudice the possible arrangements for their care. Although they were all ambulant, continent, and able to feed, wash, and dress themselves, about one-quarter had physical disabilities (Table XXIX, overleaf), and needed a little assistance from time to time. (For example, 29 of the 31 epileptics, although well controlled, had occasional fits, and the mobility of 27 other patients was limited to some extent by disorders such as Parkinsonism, club-foot, and old hemiplegia). And although none of the patients had a mental abnormality serious enough to require supervision, about half of them still had abnormal

TABLE XXIX
PHYSICAL DISABILITY IN PATIENTS WHO DID NOT
REQUIRE HOSPITAL FACILITIES

Physical Disability	Accommodation Needed				All Patients	
	Hostel in Organized Community		Home Only			
	No.	Per cent.	No.	Per cent.	No.	Per cent.
Epileptic Fits ..	14	5.8	15	7.5	29	6.6
Disorders affecting Locomotion	10	4.1	17	8.5	27	6.1
Deaf-mutism ..	9	3.7	4	2.0	13	2.9
Partial-sight ..	5	2.1	7	3.5	12	2.7
Other.. ..	30	12.4	13	6.5	43	9.7
None	174	71.9	143	71.8	317	71.9
Total	242	100	199	100	441	100

mental symptoms (Table XXX) and some occasionally needed assistance or guidance.

TABLE XXX
ABNORMAL MENTAL SYMPTOMS OR BEHAVIOUR IN
PATIENTS WHO DID NOT REQUIRE HOSPITAL FACILITIES

Abnormal Mental Symptoms or Behaviour	Accommodation Needed				All Patients	
	Hostel in Organized Community		Home Only			
	No.	Per cent.	No.	Per cent.	No.	Per cent.
Simple, Immature ..	40	16.5	21	10.6	61	13.8
Residual Delusions ..	31	12.8	24	12.1	55	12.5
Retarded, Apathetic	21	8.7	8	4.0	29	6.6
Mild Depression ..	15	6.2	9	4.5	24	5.4
Other.. ..	39	16.1	16	8.0	55	12.5
None	96	39.7	121	60.8	217	49.2
Total	242	100	199	100	441	100

(b) PATIENTS' NEEDS

Medical Treatment and Nursing Care.—It has already been said that none of these patients was considered to require investigation, or the kind of medical treatment which would have made it necessary to be in hospital. About a third were receiving tranquillizers or other drug therapy (sodium amytal, amphetamine, etc.), but this treatment is commonly given to patients in their own homes and had no bearing on the question of disposal. The reader is also reminded that no patient was considered to be independent of hospital facilities (*i.e.* was included among the 441 under

consideration) if he needed any form of nursing care or personal supervision.

Occupation.—Perhaps the most important facet of the care of this group of patients is their occupation. Their needs are assessed in Table XXXI. 267 (about three-fifths) were capable of productive work, usually under sheltered conditions, and a further 33 could have been employed after a period of rehabilitation. It is perhaps surprising that the proportion who could do productive work was higher among patients who needed to live in a sheltered environment, than among those who could have been discharged to a suitable home. This anomaly is explained by the fact that the latter group contained a considerably greater proportion of elderly patients near or beyond retirement age. About 10 per cent. needed neither productive work nor occupational therapy, but this was due to age rather than mental abnormality.

TABLE XXXI
OCCUPATION NEEDED BY PATIENTS WHO DID NOT
REQUIRE HOSPITAL FACILITIES

Occupation Needed	Accommodation Needed				All Patients	
	Hostel in Organized Community		Home Only			
	No.	Per cent.	No.	Per cent.	No.	Per cent.
None	17	7.1	27	13.5	44	9.9
Occupational Therapy	33	13.6	64	32.2	97	22.0
Occupational Rehabilitation	24	9.9	9	4.5	33	7.5
Sheltered Productive Work	155	64.0	86	43.2	241	54.6
Open Productive Work	13	5.4	13	6.5	26	5.9
Total	242	100	199	100	441	100

The work which patients were actually doing is shown in Table XXXII (opposite). Most of those capable of productive work (243 of 267) were employed on it, but a considerable number who were not receiving occupational rehabilitation (28) could have benefited from it. About one-quarter of the patients had no occupation other than occasional light work on the ward.

Parole and Visiting.—The extent to which patients were leaving hospital on parole is assessed in Table XXXIII. Nearly half were not receiving parole: because the possibility appeared not to have been considered (79 patients); because the patients were uninterested (65); because they were judged unsuitable to leave hospital alone (43) and had no relative

TABLE XXXII

PRESENT OCCUPATION OF PATIENTS WHO DID NOT REQUIRE HOSPITAL FACILITIES

Present Occupation	Accommodation Needed				All Patients	
	Hostel in Organized Community		Home Only			
	No.	Per cent.	No.	Per cent.	No.	Per cent.
None	46	19.0	71	35.7	117	26.5
Occupational Therapy	30	12.4	46	23.1	76	17.2
Occupational Rehabilitation	3	1.2	2	1.0	5	1.1
Sheltered Productive Work	161	66.5	78	39.2	239	54.2
Open Productive Work	2	0.8	2	1.0	4	0.9
Total	242	100	199	100	441	100

or friend to accompany them. This last reason may be thought to be inconsistent with the basis of the original classification, according to which no one was included among the 441 in this class if he required any personal supervision. Of the 43 patients 24 were at advanced ages, nine were deaf mutes, and seven were simple minded. From the point of view of the original classification, some of these were borderline cases. But while they would have required some degree of personal care outside hospital, it seemed inaccurate to say that they needed to be confined to the hospital grounds because of their mental state.

About one-third of the 441 patients were never visited, and one-quarter were visited only occasionally. The proportions were approximately the same for the two sub-classes into which the group was divided.

Sleeping Arrangements.—Since these patients were among the least disturbed in the mental hospitals, and many of them could have lived in the general community, it was thought of interest to examine the sleeping accommodation provided in the hospitals

TABLE XXXIV

SLEEPING ACCOMMODATION PROVIDED FOR PATIENTS WHO DID NOT REQUIRE HOSPITAL FACILITIES

Sleeping Accommodation		Accommodation Needed				All Patients	
		Hostel in Organized Community		Home Only			
		No.	Per cent.	No.	Per cent.	No.	Per cent.
Single Room ..		15	6.2	2	1.0	17	3.9
Dormitory	With Patients of Same Type	42	17.4	40	20.1	82	18.6
	With Patients of Different Types	185	76.4	157	78.9	342	77.5
Total		242	100	199	100	441	100

(Table XXXIV). Seventeen were in single rooms and 82 shared dormitory accommodation exclusively with patients of their own class. The great majority (342), however, shared dormitories with patients from the other classes, some of whom were severely disturbed.

(c) ACCOMMODATION REQUIRED

It is suggested that the 441 patients under consideration could have been cared for more economically and more effectively if separated from those in each of the two previous classes. Separate accommodation would have been more economical because they did not require the expensive services of a hospital. It would have been more effective because more attention could have been given to their real needs, such as occupation and recreation, and they would be segregated from patients with more severe forms of physical and mental illness.

In the case of the 242 patients who needed to live in an organized community, it seems evident that institutional accommodation was required. In view

TABLE XXXIII

PAROLE RECEIVED BY PATIENTS WHO DID NOT REQUIRE HOSPITAL FACILITIES

Accommodation Needed	Parole Received		Parole Not Received—Reason:						Total	
			Patient not Interested		Patient Unsuitable to Go Alone		No Obvious Reason			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Hostel in Organized Community ..	147	60.7	40	16.5	17	7.0	38	15.7	242	100
Home Only ..	107	53.8	25	12.6	26	13.1	41	20.6	199	100
All Patients ..	254	57.6	65	14.7	43	9.8	79	17.9	441	100

of the needs we have described a high ratio of day-room and other facilities to bed space was required. The services needed were those usually provided in residential homes, essentially the domestic services, and in addition adequate facilities for recreation, occupational therapy, and training. Those capable of productive work, and they were the majority, could probably have been employed most conveniently in the hostel or in its grounds.

In the case of the 199 patients who needed only a home it is not so obvious that institutional accommodation was necessary. This is the type of patient for whom a policy of boarding out might be applicable, and for some of them it would no doubt be the best solution, perhaps particularly in the case of elderly patients who are no longer able to work. Those who can do productive work are, however, extremely useful in the present mental hospitals, and if they were boarded out alternative labour would have to be found. If satisfactory institutional accommodation were provided there would probably be no objection to retaining many of them. Their requirements were more or less identical with those of the other 242 patients in this class; and there is no reason why they should be separated from them.

The institutional arrangements which could be made would inevitably depend on the number of patients to be catered for at a single centre, and on whether new facilities were designed for the purpose. But it is worth recalling that although the patients were identified according to their needs, they were by no means a homogeneous group. Among them there were several sub-groups, and to the extent that segregation was possible it might be desirable to separate them. For example, there were 31 epileptics, 61 who were "simple" and inactive, thirteen deaf mutes, and a considerable number of elderly patients, of whom 77 were over 75 years of age.

(d) SUMMARY

441 patients (12 per cent. of the total mental hospital population of 3,555) required none of the facilities usually associated with a hospital (*viz.*, medical attention, nursing, or supervision). Their main need was suitable employment, more than three-fifths being capable of productive work. Patients were divided into two groups according to whether they could have been discharged to a suitable home (199) or not (242). Those who could not be discharged were considered to need the support of an organized community. Those who could have been discharged either had no home, or could not return home because relatives or friends were unwilling or unable to receive them. It is suggested

that patients of this type might be boarded out, but as they are very useful in hospital it may be desirable to retain them with suitable safeguards for their welfare. Accommodation for all of the patients not requiring hospital facilities should be of hostel type, and separate from that of the previous two classes.

DISCUSSION

In the past, hospitals have not been designed with any close regard for the needs of the patients who occupy them. For example, an examination of all patients in a large hospital for the chronic sick (Lowe and McKeown, 1949) suggested that they could be divided fairly sharply into three classes: those who needed full hospital facilities (such as frequent medical attention and skilled nursing); those who needed only limited hospital facilities (essentially basic nursing—washing, dressing, feeding, attention to bladder and bowels, etc.); and those who needed no hospital facilities but were retained for social reasons. The same mixing of patients with entirely different needs was also observed in sanatoria (Lowe and Geddes, 1952), and it seemed probable that it would be found in mental hospitals and, to a lesser extent, in general hospitals. In the investigation described in this and a previous report (Garratt and others, 1957), we have therefore attempted to examine the medical, nursing, and social needs of all Birmingham patients in mental hospitals, with a view to using this information to assess the type, size, staff, and possibly the site of the mental hospitals which should be provided in future. Here we are concerned with only the first three of these four features.

In the first report it was shown that mental hospital patients could be divided readily into the same three broad classes, according to the type of facilities required for their care. We have now attempted a more detailed assessment of the arrangements needed for the patients in each class. For those requiring full or limited hospital facilities, it is suggested that the two most significant considerations are their mobility and the amount of supervision they require. Patients who are bedfast or only partly ambulant are considered to need traditional ward accommodation, but those who are fully ambulant should be in hostel-type accommodation with a much higher ratio of day-room and other facilities to bed space. The significance of supervision is of course that it largely determines the type of nurse who can be employed. Patients who must be personally supervised because of their mental state require the attention of nurses with experience

of mental illness, whereas there could be no reasonable objection to the use of nurses trained or in training for the general register in the case of patients who do not need supervision. The distinction is perhaps somewhat theoretical in present circumstances, since the mental hospitals are usually isolated and all their nurses are recruited on the understanding that they will attend the mentally ill. But it might be of first rate importance if the mental hospitals were brought into closer association with the general hospitals to the extent of sharing a common nursing staff.

The issues are different in respect of patients in the third class, who required none of the services traditionally associated with a hospital. All of them were ambulant and needed hostel-type accommodation, separate from seriously disturbed patients, with adequate arrangements for training and employment. From the point of view of their care perhaps the most important question is whether they should be boarded out (or more accurately, the extent to which they should be boarded out) or retained in hospital, where they make a valuable contribution to essential work.

It is evident, of course, that the results of this analysis reflect the care formerly given to the mentally ill, and can be expected to change both as arrangements at home and in hospital improve, and as new methods of treatment become available. This merely reminds us that no appraisal can be final. Nevertheless, a hospital system based on an assessment of contemporary requirements is less likely to become redundant, and will be more readily adapted to changing needs than one which reflects earlier needs, or, as is usually the case, has been improvised with no planning at all.

SUMMARY

A previous communication described an investigation in which the 3,555 Birmingham residents in mental hospitals in the period January 1 to March 31, 1957, were assigned to one of three classes according as they required for their care full, limited, or no hospital facilities. In the present report the data are used to assess the nature of the accommodation and

staff which would be most appropriate for the patients in each class. It is suggested that the two considerations which have most bearing upon the arrangements are patients' mobility and the amount of supervision they require. These criteria have been used to divide the Birmingham mental hospital population into the nine groups tabulated below, which are drawn from a total population of approximately 1,100,000:

Hospital Facilities Required		Type of Accommodation	
		Traditional Ward	Hostel
Full	Closed Block	93	117
	Open Block	8	241*
Limited	Closed Block	298	1,066
	Open Block	59	1,232*
None	Open Block	—	441

* Although they required no supervision within the hospital, these patients were not considered suitable to leave the grounds unaccompanied.

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