## REPORT OF SUB-COMMITTEE TO ENQUIRE INTO MEDICAL EDUCATION AND INTERNSHIPS\*

Members of the Sub-Committee: Cape Province. Mr. M. Cole Rous† (Chairman and Convener), Mr. T. B. McMurray (Hon. Secretary), Dr. J. R. E. Lee, Mr. J. D. de B. Joubert (co-opted); Transvaal. Dr. J. H. Struthers, Dr. F. Ziady and Dr. M. C. Segal; Natal. Dr. A. B. Taylor; O.F.S. Dr. R. Theron and Dr. J. S.

This Report consists of two sections: (A) Medical Education

and (B) Internships.

The Cape Section of the Sub-Committee decided that it was necessary in the first instance to make a study of the thought and work that has already been put into this problem. To this end the following literature was acquired and carefully studied:

1. First World Conference on Medical Education. London. 1953. Report by the Editor of the Proceedings, Dr. Hugh Clegg.

804 pages.

2. General Practice and the Training of the General Practitioner. Report of a Committee of the Association (B.M.A.), 1950. 88

3. Psychiatry and Medical Education—Report of the 1951 Conference on Psychiatric Education, under the auspices of the American Psychiatric Association. 164 pages.

4. Psychiatry in a General Hospital. G. A. Elliott, M.D., F.R.C.P., Professor of Medicine, University of the Witwatersrand. S. Afr. Med. J., 3 July 1954 (28, 561).

5. Trends in Medical Education in South Africa. Idem. Ibid., 7

May 1955 (29, 432).

A Physician Views Psychotherapy, Idem. Ibid., 20 November 1954 (28, 981).

The Training of Students in General Practice. Idem. Ibid.,

5 February 1955 (29, 134).

It was further decided that Mr. T. B. McMurray would undertake the extensive and onerous work of collecting information about hospital posts in the Union of South Africa. In the light of this data the problem of arranging and determining internships can be studied.

## A. MEDICAL EDUCATION

## M. COLE ROUS, M.B., CH.B., F.R.C.S.†

Cape Town

The term Medical Education covers both undergraduate and postgraduate teaching of medicine. The Cape members of the Sub-Committee have found the problem so complex and difficult that only the undergraduate aspect of the question has been tackled in the first instance.

After months of study, many meetings and numerous discussions, we feel that we are only just beginning to come to terms with the broad outlines of this problem and now present an interim draft

report on Undergraduate Medical Education.

#### The Undergraduate Medical Curriculum

Informed opinion, from all parts of the civilized world, seems almost unanimous in condemning medical curricula as unsatis-

The members of your Sub-Committee would like it to be clearly understood that the material on which this report is based was gathered from a study of authoritative literature and not from the study of medical curricula of South Africa. Such criticisms as are made in this report may, or may not, apply to our medical schools but are not directly aimed at them because we have made no study of them. We are aware that at least some of the medical schools of South Africa are striving to change their curricula in directions adumbrated in this report.

Faults of the Medical Curriculum. The main faults of the medical

curriculum would appear to be:

(a) Overcrowding of the time-table, which has an inhibiting effect on the mind of the student and leaves no time for thought. (b) The training is in terms of fragments and facets of specializa-

tions by specialist teachers teaching in watertight compartments.

(c) The teaching is administered in terms of subjects which are separated from one another in compartments. Why he should

\* Presented to the Federal Council of the Medical Association

of South Africa and published by order of the Council.

† Now deceased.

learn them and how they can be of use to him later is left to such imagination as the student may possess. The interest and motivation to study would be created by the surgeon, physician and pathologist taking appropriate and applicable material into the departments of Anatomy and Physiology and teaching in cooperation and harmony with the anatomist and physiologist. But this is not in terms of the traditional curriculum. The subject is taught in pure culture and truncated by 'stop examinations'. The implica-tion is that having passed the 'stop examination', the student may drop the subject with a sigh of relief. The application of that subject in later years, necessary to the proper understanding of the contemporary subject, is very haphazard.

(d) Inadequate training in important aspects of general practice. (e) Inadequate and inappropriate training in psychiatry. terms of the traditional curriculum students are taught to name the major incurable psychoses in institutions far removed from the general hospital. They are not taught the important technique of psychiatric interview nor are they made to realize the essential

unity of mind and body.

(f) General type of teaching. The teaching in most medical schools has been done by specialists who become ever more The emphasis has been on knowledge, detail and specialized. memory rather than on general principles and a logical approach to problems.

g) Attitude towards students:

The Teaching Staff: Doubtless there have been many exceptions, but all too often the attitude towards the student is that he is there as a humble spectator privileged to see a great specialist in action, or to record verbatim his words of wisdom. Attentive admiration, silent and docile compliance, have in the past been the hallmarks of the model medical student.

The Nursing Staff: The attitude of the nursing staff towards medical students has been even more rugged and outspoken. Many of us have suffered under the dominant contempt of the matriarchal ward-sister whose starched scorn has made us feel

that we enter her domain on extreme sufferance.

Summary. The general result of the traditional medical curriculum has been the production of a badly over-stuffed animal in whom the teachers have little confidence and who has less in himself. There is a pious hope that these manifest defects will be corrected during the year of internship.

Answer to the Problem

Prof. Guy Elliott, who has applied his exceptional talents to this question, which he has studied intensely for many years in many countries, says, 'There is no answer to this problem.' By this we understand him to mean that the problem is not immediately susceptible of solution by thought; it is a problem that must be 'lived out', not 'thought out'. He is making remarkable contributions in reorganizing his curriculum in terms of the reality of the modern situation. His knowledge and experience are too great to permit of a theoretical solution from the armchair.

Your Committee is of the opinion that the curriculum which proves satisfactory for one medical school may not necessarily be the best for another in the same country. The needs of one country may differ widely from those of another. Furthermore the future curriculum of a progressive medical school will almost certainly be flexible and will change with the changing needs of the times. For these reasons it would seem a positive gain if some general guiding principles could be deduced which would win the assent of most of those who have this complex problem at heart. As a tentative start in this direction we propose the following suggestions:

1. Simplification of the curriculum by teaching and emphasizing the general principles of the sciences that compose Medicine and

ruthlessly pruning the 'factual' type of teaching.

2. Co-ordination and integration of the teaching of subjects (examples are given in Prof. Guy Elliott's papers). This requires a radical change in the teaching methods and may meet with resistance from some members of the teaching staff. It will require for its success a sincere and respectful cooperation between surgeons, physicians, pathologists, physiologists and so on.

This principle of coordination and integration is visualized as taking place (a) upwards, (b) downwards and (c) collaterally in

the medical curriculum:

(a) The teaching of a subject will continue after the 'stop examination' in that subject has been passed and certain aspects of physiology will be taught by the physiologist to the student of pathology, medicine and surgery, in cooperation with the teachers of these subjects.

(b) Certain aspects of advanced subjects will be introduced to students of the earlier disciplines to illuminate and create interest and motivation, without which 'learning is a weariness

unto the flesh'.

(c) Subjects in which the main teaching falls in the same months of the curriculum can often be integrated in order that each shall illuminate and enrich the other.

Training in certain aspects of general practice by and with general practitioners. This in itself constitutes a big problem, which is being vigorously tackled in different ways in different parts of the world.

4. Psychiatric training in the general hospital to illustrate the psychological disturbances that so frequently occur in patients suffering from organic illness and to emphasize the essential unity

of mind and body.

5. There should be constant and sincere attempts by all teachers to train students in observation and deductive reasoning; in recognizing and defining problems; and in the use of the library and in lucidity of communication. In short, it has become an urgent necessity to train minds rather than attempt to turn the students into repositories of knowledge.

6. Every medical student should be treated with the respect and consideration due from a senior member of an honourable profession to his younger colleague. Under no circumstances should words and attitudes of ridicule and scorn and contempt towards the medical student be regarded as justifiable. On the part of the nursing staff a similar change of attitude towards medical

students should be regarded as mandatory.

#### Resistance to Change

The members of your Committee were particularly impressed by the remark 'It is easier to change a graveyard than a medical curriculum.' There would appear to be a general feeling that there are heavy and powerful factors resisting change in a new direction.

A study of the literature would seem to indicate that the two most important factors that might impede progress are: (a) A shortage of money; (b) The attitudes and feelings of the teaching

staff.

(a) It is well known that lack of funds is a constant source of embarrassment to the medical schools and hospitals in this country. The old method of teaching is cheaper than the proposed changes. In the traditional pattern the accent is on lecturing, and lecturing has been defined as a process by which knowledge is transferred from the note-book of the lecturer to the note-book of the student without passing through the brains of either. In these terms a lecturer or a professor can easily deal with a class of 80 to 120 students, and this is a lot cheaper than study-groups of 4-6 students being trained in observation, inference and exposition. It is clear that the application of the new principles will require more teachers than the old and these cost money.

(b) The attitude and feelings of the teaching staff. The members of your Committee were unanimous in conceding the obstructive effects of a shortage of money and were equally unanimous in disbelieving that serious obstruction could, or would, come from the teaching staff. They found themselves unable to give credence to the statements (1) that the greater resistance would come from the professors and lecturers themselves: (2) that the force of tradition would outweigh the manifest necessity for modern methods; (3) that they were blind to the fact that the ever accelerating accumulation of modern knowledge and the developments of new specialities has created a situation in which the old method, however satisfactory, in the 'old days' is now hopelessly inadequate.

(c) That members of the teaching staff are likely to view the suggested changes with suspicion, resentment and hostility as an unwarranted encroachment likely to create discomfort and the

exposure of personality, inadequacies and defects.

(d) That they would prefer the old methods which permit of the defence mechanisms of isolation and varying degrees of aggression and hostility rather than venture into the new fields in which cooperation and learning are mandatory for the success of the new approach.

Resistance by the medical students is most unlikely because their minds are flexible and because these changes would bring new vitality and interest and comprehensibility into the medical course.

Resistance from the Medical Council will not occur once that body is assured that the proposed changes will produce a more efficient and better integrated doctor.

### The Concept of the 'Basic Doctor'

This idea has been put forward as a concept which would give meaning and integration to the proposed changes in the new medical curriculum. The suggestion is that the medical schools should not attempt to produce general practitioners but should aim at training a basic doctor, i.e. one who is well trained in the basic principles of the medical sciences, who has been taught the art of observation and reasoning, the use of logic and libraries, and the ability to recognize and define problems and to communicate semantically.

With this basic training at graduation, he would then turn to any branch of medicine, in which he would study and gain experience before being licensed to practise. If it is towards a speciality that he turns after graduation, the requirements are already laid down by the Medical Council. Suitable requirements could be formulated and re-formulated in the light of experience

for those wishing to qualify for general practice.

It is pointed out that this 'basic doctor' concept would remove the anomaly of medical schools training general practitioners who are not allowed to go from graduation to general practice.

Some of those who favour this idea have urged that its application would shorten the medical curriculum considerably: others that it would shorten it slightly and still others that it would

shorten it not at all.

After giving a lot of consideration to this matter, your Committee decided that, provided the general principles that have been formulated in this Report are applied to the teaching of medicine it does not matter whether the product is called a basic doctor or regarded as a general practitioner who is not yet allowed general practice.

#### CONCLUSION

In studying the subject of Medical Education, the members of your Committee have been deeply impressed by the magnitude, importance and difficulty of this most complex problem, which will require generations of experience for its practical solution.

Your Committee is happy to acknowledge valuable assistance which it has received from Dr. T. B. Davie, Principal of the University of Cape Town, Prof. van den Ende, Professor of Bacteriology of the University of Cape Town, and Prof. Guy Elliott, Professor of Medicine, Witwatersrand University.

## B. INTERNSHIPS

T. B. McMurray, M.B., M.Ch. Orth. (L'Pool), F.R.C.S. (Edin.)

#### Cape Town

Since the meeting of Federal Council held in March 1955, we have tried to get the fullest possible information regarding the facilities for postgraduate study and the position of interns in South Africa. To this end all the hospitals have been sent questionnaires which, with a few notable exceptions we have received duly filled in.\*

The hospitals have been classified into 3 main groups and some subsidiary groups:

Group I. These are teaching hospitals having a full specialist staff. They are closed hospitals.

Group II. These are hospitals having a full specialist staff together with some general practitioners but are not teaching hospitals.

Group III. These are hospitals staffed mainly by general practitioners but in a few of them there are specialists on the staff.

Information has been sought to find out how many interns are normally allotted to each hospital; secondly, how many full-time higher-grade appointments are allotted to each hospital; and, thirdly, how many part-time positions there are on the staff,

\* The outstanding information has since been received and is embodied in the Tables I-IV.

These part-time positions have been further divided into specialist and general practitioner and the various specialties are shown.

Unfortunately it has been impossible to complete this work in the 6 months largely because some hospitals are tardy in sending their replies, but before the Federal Council meeting to be held in April 1956 we hope to have a full analysis of hospital jobs in South Africa.\*

### The Position of Interns

The numbers of successful graduates in medicine for 1953 and 1954 are shown in Table I. It will be seen that there is an average of 300 per year at present. Once the Stellenbosch Medical School and the Durban Medical School start graduating doctors, then this figure will obviously have to be altered. Provisionally, I think that the alteration may mean an addition of about 100 per year, giving a total of 400 per year. The number of interns employed at the different classes of hospitals (375) is shown in Table II.

Tables III and IV show the number of interns and medical staff for whom places are allotted at hospitals belonging to Group I and Group II, and also the number of beds contained in these hospitals. The medical staff other than interns are divided into higher', (i.e. non-specialist medical staff and 'specialist', and also into full-time (f) and part-time or visiting (v). The distribution of staff in the different hospital departments is shown.

#### Group-I Hospitals (Table III)

In these the interns number 120, the 'higher' staff 197 (196 full-time) and the 'specialist' staff 349 (108 full-time and 241 visiting). The number of beds in these hospitals is 5,545.

### Group-II Hospitals (Table IV)

In these the interns number 182, the 'higher' staff 268 (206 full-time and 62 visiting) and the 'specialist' staff 449 (371 visiting and 78 full-time). The beddage is 8,984.

#### Group-III Hospitals (Table V)

These hospitals provide places for 69 interns. The number of 'higher' staff is 70, in addition to 470 general practitioners attending.

#### Special Hospitals

These include tuberculosis hospitals, convalescent homes, orthopaedic hospitals, maternity hospitals and industrial hospitals. The number of interns they require is less than 10.

## TABLE I. SUCCESSFUL GRADUATES IN MEDICINE

		Witwatersrand	Pretoria	Cape Town	Total
1953	 	123	64	115	302
1954	 	116	68	122	306

## TABLE II. NO. OF INTERNS AT HOSPITALS OF DIFFERENT CLASSES

TABLE III. STAFF IN GROUP-I HOSPITALS

							1.	ABLE III	i. SIAI	r in on	0.1-1	OSTITAL								
						Medicine	Surgery	Obsterries	Gynaecology*	Paediatrics	Orthopaedics	Urology	Ophthalmology	E.N.T.	Dermatology	Psychiatry Neurology	Anaesthesia	Radiology		
Groote Schuur															1					837
Interns						10	10	5		2	3	2	2	1	1				36	
Higher (V)																			35	
Higher (F)						9	10	6		1	3	6	2 9	2 3	6		7		94	
Specialist (V)		4.4				20	13	13		8	4	0	9	3	1	5	7 2	8	94 29	
Specialist (F)			6.6			8	3	1		3	1			1			-			
Johannesburg Genera	al						13								4				29	1,500
Interns		4.0	11			15	13													
Higher (V)	::	11	**	**		11		10	10	3	6	2 5	10	10			6	4	89 99 43	
Specialist (V)						20		10		10	5	5	10	10	7		8	15	99	
Specialist (F)					**	8		4		1	2					1	10	13	43	
King Edward VIII																			-	1,653
Interns						10	9	6			1								26	
Higher (V)	**			**							1		-				3		1	
Higher (F)					**	5 2 2	4	3			2		2	1			3		20 11 21	
Specialist (V)			4.5		.,	2	6	-			3		1		1	1	3	3	21	
Specialist (F)				**		2	6	3										-		
Pretoria																			-	1,555
Interns						9	4	3		3	5	2					3		29	
Higher (V)							-				-		-	2			7		52	
Higher (F)						14	9	5		5	6	2	2 2	2 2	1	i.	,		37	
Specialist (V)			4.			8	7	3		3	0	4	-	-			6	9	52 37 15	
Specialist (F)		12		1.5	33															
Totals																			120	5,545
Interns	2.2					44	36	14		5	9	4	2	1	2		3		120	
Higher (V)		4.1			.,				10	0	10	4	8	8	1		16	4	196	
Higher (F)			2.4		10		23	24	10	9	18 18	13	21	15	14	6	15	3	241	
Specialist (V)		+ +	4.4		++		26	28		4	3	13	1	2	2	3	21	35	108	
Specialist (F)		-10	++	100	10.0	18	9	8		*	3			- 3		16.9				
						151	94	74	10	39	49	21	32	26	19	9	55	42	666	

<sup>\*</sup>Where not otherwise stated gynaecological staff is grouped with the obstetrical staff.

In addition the Johannesburg General Hospital returned the following staff:

Higher (F). Thoracic Surgery 1, Casualties 31.

Specialist (V). Radiology 3, Physical Medicine 3, Plastic 1, Thoracic Surgery 2, Neuro-Surgery 1, Casualties 1, Peripheral Vascular 3.

Specialist (F). Physical Medicine 1, Plastic 1.

# TABLE IV, GROUP-II HOSPITALS

						Medicine	Surgery	Obstetrics	Gynaecology	Paediatrics	Orthopaedics	Urology	Ophthalmology	E.N.T.	Dermatology	Psychiatry Neurology	Anaesthesla	Radiology	Total	Beds
Addington Interns						5	4	3		2	2	1	1	1	1	1	1		22	720
Higher (V)		::				5	2	2			1		1	1			3		22 2 23 33	
Specialist (V)	**					6	6	2 2		2 3	3	2	2	3	1	1	3		33	
Specialist (F) Baragwanath														-				*		1,506
Interns Higher (V)		**	**			15	15												30	
Higher (F) Specialist (V)						11	13	11		11	3	2	3 2	1			4		66	
Specialist (F)				::	::	7	- 6	4		3	2	2	1	1	1		5	5	37	262
Boksburg-Benoni Interns						2	2	2		1	1	1	1	1			11/10		11	362
Higher (V) Higher (F)	**				-::	1	1	. 1		1.							2		3	
Specialist (V)					100	1	1	1		1	2	1	2	1	1	1	1	3	16	
Specialist (F) Cape Town Free Dis	pensar	у	**																	
Interns Higher (V)	**		::	**	**	1	1												2	
Higher (F) Specialist (V)	::					2	1		1		2		2	1	3		2	1	15	
Specialist (F)		::	::	::	::	-					-		-				-			176
Conradie Interns						1	1		1		- 1								4	170
Higher (V) Higher (F)	::		::														1	1	1	
Specialist (V) Specialist (F)			2.1	::	::	2	4		2		1	2	1	1	10		4	1	18	
Coronation				**			-													410
Interns Higher (V)	::	**	***	**		5	6												11	
Higher (F) Specialist (V)		**				6	7		3 2	9	1	1	1	1	1	1	3	-	29 11	
Specialist (F)				::	::	3	3		-	-		•	•				3	2	11	208
Discoverers Interns																	. )			200
Higher (V) Higher (F)	::	::				2	2	2			1						2		9	
Specialist (V)				::	::	1	1	1		1	1	1	1	1	1	1	1	1	13	
Specialist (F) Edendale		**	**		**			100		1								-	-	620
Interns Higher (V)			::		::	3	3	2			2	1	1	1					13	
Higher (F) Specialist (V)	**.					4	4	3		1	2	1	1	1	1		1		18 12	
Specialist (F)					2.	3	1	1		1								1	4	146
Edenvale Interns						6			1	1			1	1					10	146
Higher (V) Higher (F)						2	,			1							2		6	
Specialist (V)	.5						2 2	1	1	i			1	1	1	1	1	2	11 2	
Specialist (F) False Bay						2								-	29.					42
Interns Higher (V)		**	::	::-		1											1		1	
Higher (F) Specialist (V)						1	1		1		1	1		1			1		7	
Specialist (F)						1	1		1		1									474
Far East Rand Interns						2	2	1			1	1	1						8	474
Higher (V) Higher (F)						3	2 2	2			1								8	11
Specialist (V)						1	1	1			1	1	1	- 1	- 1	1	1	1	10	1 30
Specialist (F) Frere					**															509
Interns Higher (V)				::	::	5	6	2											11	
Higher (F)						1	1	1			1		1	3			1 2	3	11 5 15	
Specialist (V) Specialist (F)		::				3								-			-	1	1	207
Germiston Interns						1	1	1				1.	1		1				. 6	397
Higher (V) Higher (F)						1	1	1	1								1		5	
Specialist (V)	-::					1	i	1	1	1	3	- 1	1	1	. 1	1	1	1	15	
Specialist (F) Grey (Pietermaritzbur	rg)		**															1		357
Interns Higher (V)						1	. 1	- 1			1		1	1	- 5				6	
Higher (F)	::		::			1 2 3	2 3	1			1		1	1 -			2		13	2.1
Specialist (V) Higher (F)	::					3	3	- 1		1	1		1	1			2	13	1	212
Krugersdorp						1	1	1										1	. 3	312
Higher (V)			::														1	730	3 1 6	
Higher (F) Specialist (V)	::	::	::	::	::	1	1	1		1	1	1	1		1	1			11 2	
Specialist (F)																	1	. 1	2	

						Medicine	Surgery	Obstetrics	Gynaecology	Paediatrics	Orthopaedics	Urology	Ophthalmology	E.N.T.	Dermatology	Psychiatry Neurology	Anaesthesia	Radiology	Total	Beds	
Livingstone (Port E	uzabeth	1)	14			2	2	i		1	1								7	474	
Higher (V) Higher (F)	**	44				1	2			3	1								3 7		
Specialist (V) Specialist (F)				2.5		4	5	5		2	2	1	2	3	1	1	2		29		
National (Bloemfont	tein)	**		**	**													1	29 1	612	
Interns Higher (V)				**		2	2	1	1		2								8	012	
Higher (F) Specialist (V)	**		4.0			1	2	I			1						1		6		
Specialist (F)		4.	3.			3	3	3			2	1	2	2	1	2	1	2	19		
Paarl Prov. Interns						1	1											-		200-	
Higher (V) Higher (F)		- 55		2.0							1	1	1	1			6		6		
Specialist (V)		- 53	11	**	**		1				1							2			
Specialist (F) Port Elizabeth Prov.		**		2.4														-	4	000	
Interns						1	1	1			F	1	1						6	304	
Higher (F)		- 11	11	**	**		1	1			1								3		
Specialist (V) Specialist (F)	**	**	**		4.	2	4	3			2	1	2	3	1	1	2	1	22		
Queen Mary (Uitent	nage)		**	4.	3,6															134	
Higher (V)	**		**		**	3	3	4											10		
Higher (F) Specialist (V)	**			**																	
Specialist (F)			**	**	7.	1	1	1		1	1		1	1	1		1	1	10		
Rondebosch and Mo Interns	ownray					1	1												2	57	
Higher (V)	11																				
Specialist (V)		11	7.		**	2	4	2			2	2	1	1			3		17		
Specialist (F) Somerset	**		**	**															-	253-	
Interns Higher (V)		15				2	1	1		1	1			1					7	255	
Higher (F)			**			2	1	2 5			1	1					1		8		
Specialist (V) Specialist (F)		**		::		1	3	5			2	1	1	1	1	1	3	2	19		
Vereeniging Interns																		-	-	154	
Higher (V)	**	**	**	::	::												3		3		
Higher (F) Specialist (V)	**	::		••		2	1				1	1					~		4 7		
Specialist (F) Victoria	**													1	1	1		1	í		
Interns			**			1	1				1	1							- 4	125	
Higher (V)	***		**	**		1	1														
Specialist (V)				**		1	3	2			2	1	2	1	1		2		15		
Specialist (F) Voortrekker (Kroons	tad)		**	**	**															355	
Interns Higher (V)				+ •		2	2												4	337	
Higher (F)			**	**	**		1	1									1		2		
Specialist (V) Specialist (V)	::	11				1	2						1.				-	1	2 4 1		
Woodstock	- 11				11															77	
Interns Higher (V)					**	1	1												2		
Higher (F) Specialist (V)	**				++	2	2	3			2	1		-			1		.1		
Specialist (F)	-:-	1.	::			-	-	3			2	1	1	2	1			1	14		
Totals						59	53	18	3	6	15	8	9	7	2	1	1		182	8,984	
Higher (V)		4.6			**	16	14	9	4	4	2						17		62		
Higher (F) Specialist (V)	**	7.		::	::	41 43	43 54	26 34 5	8	23 15 3	15 37 2	5 20 2	31	33	19	14	22 31	17	206 371		
Specialist (F)			**	**		13	10	5		3	2	2	1	1	1		12	23	78		
						172	174	92	15	51	71	35	47	45	24	15	83	40	899	8,984	

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In addition the following staff was returned:

Addington.

Higher (F):
Specialist (F):
Thoracic Surgery 1.
Specialist (F):
Physical Medicine 1, Pathology 4.
Higher (F):
Specialist (F):
Physical Medicine 1, Plastic 1, Thoracic Surgery 1, Neurosurgery 2, Casualties 2,
Specialist (F):
Spe
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Where not otherwise stated gynaecological staff is grouped with the obstetrical staff.
 At the Conradie Home the chronic sick beds are excluded from the total stated. The staff enumerated are those that attend in the acute wards (but the interns attend also in the chronic wards. In addition to the staff enumerated 10 general practitioners attend at this hospital.

TABLE V. GROU	UP-III HOSE	PITALS			al	
				10	Interns Interns Visiting Medical Officers Beds Beds Beds	
22 - 27 2		alas.		Obstetrical Beds <sup>1</sup>	Interns Interns Visiting Officers Beds Beds Beds Beds	
Hospital	Interns Higher	Visiting Medical Officers	S	ster Is1	\$ 5 7 220 B OB	-
	Inte	Ne Off	Beds	Bed	Odendaalsrus — — 3 62	
Andrew McColm Preterio	- 1		101		Olifantshoek Nursing Home 1 12 Oudtshoorn (Royal S. Western) 2 - 8 89 12	,
Andrew McColm, Pretoria	2 _	6	212	13	Ouma Cillie Verpleeginrigting,	
Barkly West		2	28		Kakamas — 2	
Beaufort West	2 —	5	66	8	Paarl 6 <sup>6</sup> 1 20 200 <sup>5</sup> 16  Pallotti Nursing Home, George — — — 7 16	)
Bethal	1 -	6	103		Pietersburg 2 5 7 212 12	2
Bethlehem	1 2	6	139	12	Piet Retief — 4 132	
Beulah N. Home, Barkly East		2	12	2	Port Nolloth	
Bray, Kirstonia (District Vry- burg)		1	22		Port Nolloth — — 1 8 Port Shepstone — 3 3 143	
Britstown	_ =	2	16		Postmasburg — — 25	
Burghersdorp		6	16	4	Potchefstroom 1 — 4 142 16	5
Butterworth	- 1	6	115	7	Potgietersrus — 1 48 66 Paul Kruger Memorial, Rusten-	
Caledon	_ =	2 4	65	6		2
Calvinia		2 3	17		Prieska — 3 24	
Cathcart Cottage		8	32 18	5	Queenstown Frontier 3 — 9 186 17 Reivilo — 2 26	2
Ceres	= =	4	20	1	Reivilo — 2 26 27 Rita Coetzee Nursing Home,	-
Colesberg		3	24	4	Kirkwood — 4 6	
Cradock Queen's Central	1 -	5	50		Riversdale — 5 46	0
G. J. Crookes, Renishaw	_ 3	5	80 20	4	St. Konrad's, Taungs 1 1 1 150 10 Senekal 6 46	J
Douglas, Wilhelmina N. Home			9		Settlers, Grahamstown 2 1 89 — 1-	4
Duiwelskloof	1 1	2 2	68		Sir Henry Elliott, Umtata 5 2 7 253 1	8
Elsie Ballot, Amersfoort		2	7	3	Somerset East — 5 49 Spes Bona, Paulpietersburg — 2 10	
Ermelo	1 1	2 92	75		Spes Bona, Paulpietersburg — — 2 10 Standerton 2 1 5 109 10	0
Ficksburg		5	33		Stanger 4 - 115	
Fort Beaufort	= =	3	51	5	Stellenbosch 2 — 9 <sup>10</sup> 70 10 Stoffel Coetzee, Smithfield — 3 23	0
George Grey's, King William's Town	2 1	6	52 153		Stoffel Coetzee, Smithfield — — 3 23 Stutterheim — 5 30	
Greytown	- 2	2	64		Sutherland — 3 15	3
Harrismith	2 -	8	62		Swartland, Malmesbury 2 — 6 <sup>12</sup> 64	
Heidelberg	1 1	3 <sup>3</sup>	70 57		Tayler Bequest, Matatiele — 4 35 Tayler Bequest, Mount Fletcher — 1 1 17	
Heilbron Helpmekaar, Griquatown	= =	2	18			2
Hoopstad (Stephanus Erasmus)		4	31	5	- Pingram Ti	6
Hottentots Holland, Somerset			39		Van der Bijlpark — — 85 Ventersdorp — 4 36	8
West Humansdorp	1 =	6	50			25
Indwe (Private)		-	20		Victoria West 1 2 45	6
Jan en Nellie Keyter		4	33		Virginia — 6 62	
Jansenville (Ex SAWAs Health Memorial)		3	14		Vrede 5 30 Vryheid 1 2 119	
Keimoes, Carterton Verpleeg-	-	3	1.7			4
inrigting		1	10	3	Williston (A.C.V.V.) — 2 9	
Kenhardt, Charles N. Home		21	10	1 5	Witbank	7
Kimberley	6 2	3	349 56	,	Wolmaransstad 2 3 2 9815	9
Kokstad, East Griqualand					Worcester 2 1 16 64	
(Usher Memorial)	-	4	63		Zastron — 4 58	5
Komgha	1 1	2	9 22		Zeerust — 1 3 68 1	4
Ladysmith	4 4	1 7	407		Included in previous column.	
Langa, Cape Town	2 1	2 44	30		<ol><li>Including 1 orthopaedic surgeon and 1 radiologist.</li></ol>	
Leydsdorp		2	21	1	3. Including 1 anaesthetist.	
Lichtenburg Louis Trichardt	II	3	108 28		4. Plus 9 general practitioners.	
Lovedale (Victoria)	3 3	-	120		<ol><li>Including 30 paediatric beds.</li></ol>	
Lower Umfolozi, Empangeni	1 4		198	,	6. 3 at present.	
Lydenburg	1 1	3	116	6	7. All patients treated by their own practitioners.	
Marydale		1	12		8. Including 1 radiologist.	
Middelburg, Transvaal	2 1	3	168	14	9. Including 1 orthopaedic surgeon.	
Molteno		3	10	4	10. Including 1 orthopaedic surgeon and 1 ophthalmic surgeon	n.
Montagu		5	29		<ol> <li>Including 3-4 orthopaedic and 4 gynaecological beds.</li> <li>Including 1 specialist surgeon.</li> </ol>	
Newcastle (N R)	1 2	1	126		<ol> <li>Including 1 orthopaedic surgeon and 1 radiologist.</li> </ol>	
Niemeyer Memorial	- 1	-	60		<ol><li>Including 24 beds for tuberculosis.</li></ol>	
Nigel, Dunnottar	1 3	5	120		<ol><li>Including 4 for orthopaedic cases.</li></ol>	