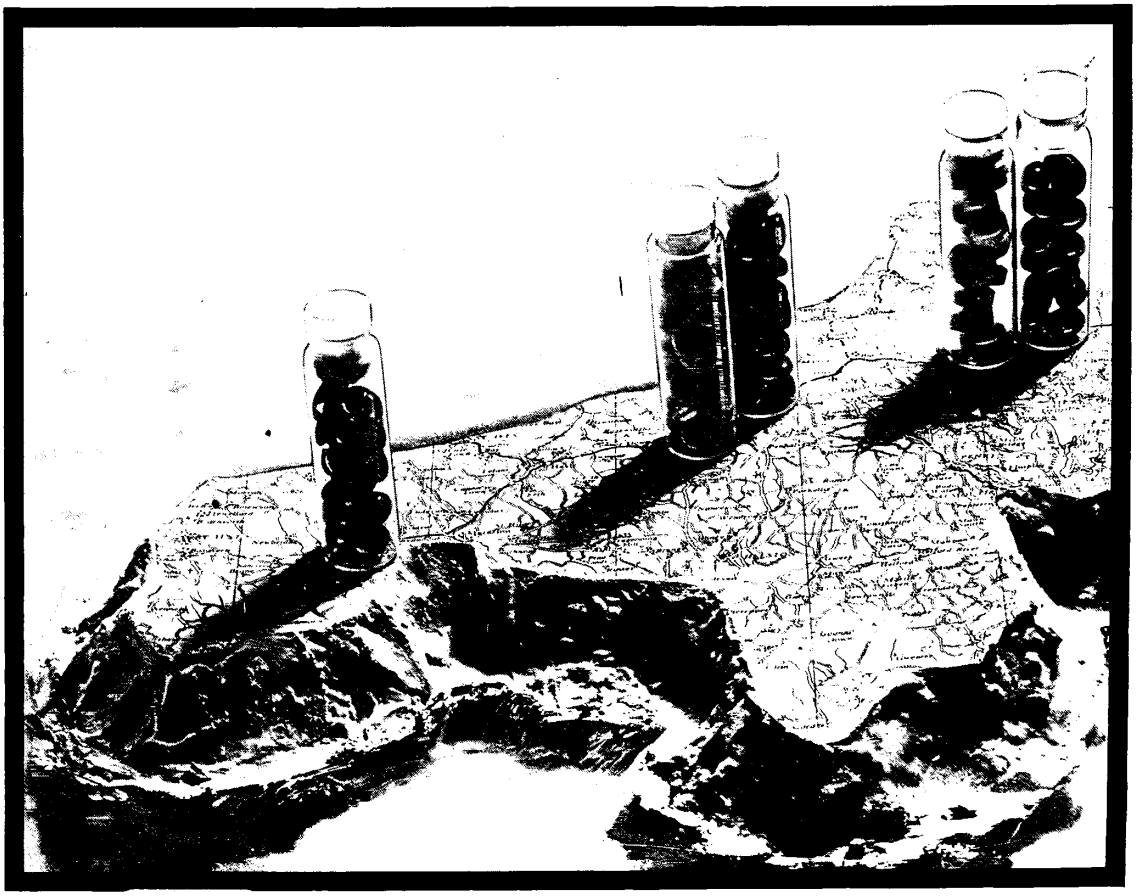
Drugs in Small Hospitals

A King's Fund Report



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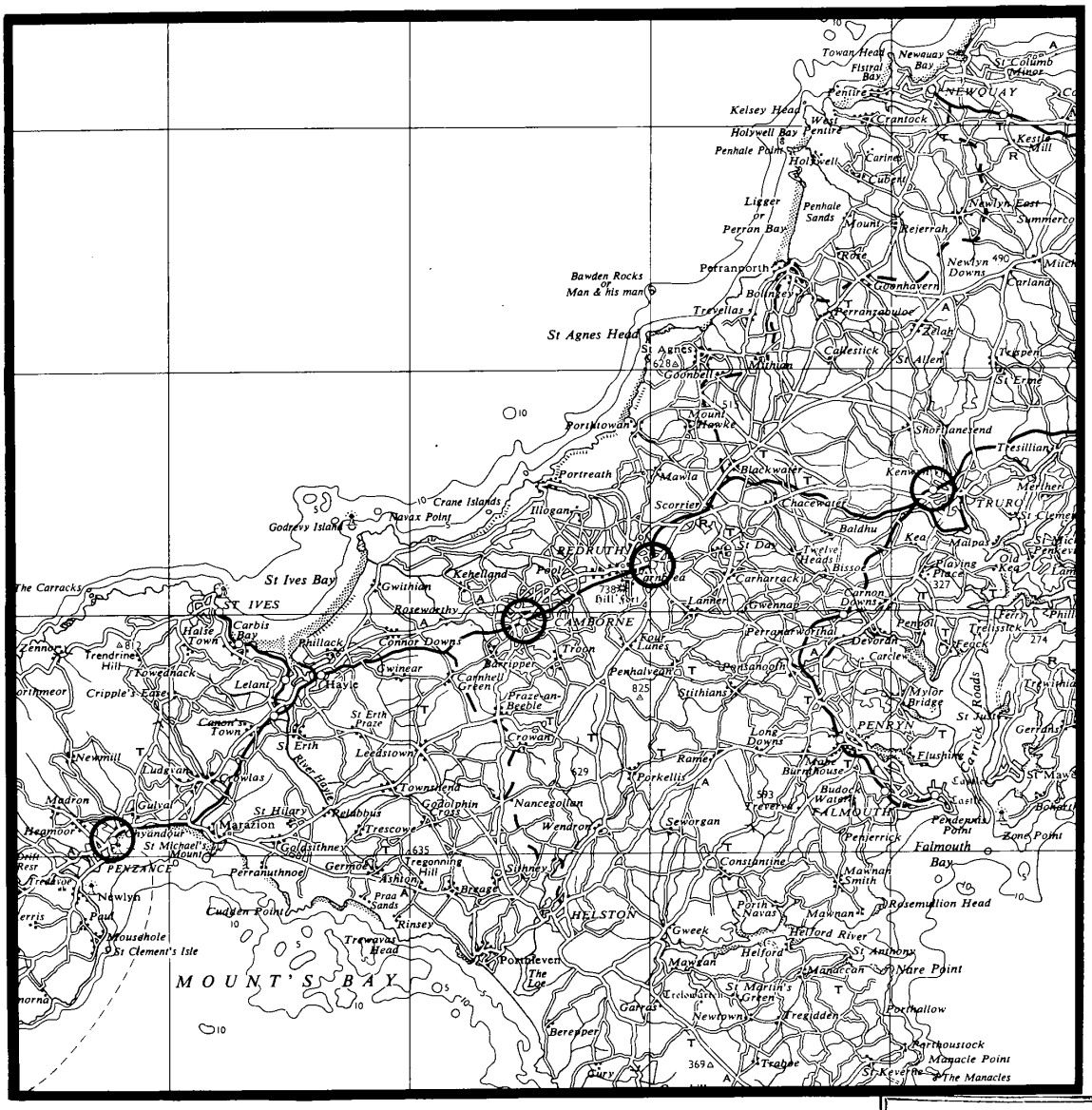

Map of West Cornwall, scale: 1/250,000. The rings indicate the towns in which are located the hospitals with pharmacies that took part in the enquiry. (Map reproduced from the Ordnance Survey Map with the sanction of the Controller of Her Majesty's Stationery Office. Crown copyright reserved).

DRUGS IN SMALL HOSPITALS

Report on a survey on the prescribing, distribution and administration of drugs in small hospitals

by

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PREFACE

This report is being published by King Edward's Hospital Fund in agreement with the West Cornwall Hospital Management Committee.

The King's Fund is very grateful to the West Cornwall HMC for the ready manner in which they agreed to cooperate with the Hospital Centre in this investigation, and to all the members of the staff of the hospitals in the West Cornwall area who gave such great help to Miss Stone in the conduct of the survey.

It is hoped that this report will be of practical help to all hospital authorities concerned with the problems of the prescribing, distribution and administration of drugs in small hospitals.

Lord Cottesloe
Chairman
Hospital Development Committee
King Edward's Hospital Fund

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SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following is a summary of the main findings and recommendations arising from the survey, with a note of the relevant paragraphs in the report.

Summary of findings

1. Arrangements for the prescribing, distribution and administration of drugs in the 22 hospitals in West Cornwall were studied, and a number of problems emerged. (Paragraphs 2.1 to 2.4)

2. Difficulties are occasionally created for the nursing staff by the prescriptions not being written on the prescription sheet, but elsewhere in the case notes. (Paragraph 3.1)

3. Chiefly because of transport difficulties, the supply arrangements for some of the hospitals are not always adequate for their needs, and may lead to inconvenience and increased expenditure. (Paragraphs 3.4 to 3.6)

4. A feeling of insecurity caused by the inadequacies of the supply arrangements leads to overcrowding of storage space, and sometimes to hoarding with consequent deterioration of stocks. (Paragraphs 3.7 to 3.10)

5. Arrangements for the supply of drugs to be taken home by the patient when discharged are not always satisfactory. (Paragraph 3.11)

6. The use of three different designs of prescription sheets within the group has led to difficulties, particularly when patients are transferred from one hospital to another. Poor prescription sheet design produces prescribing difficulties and problems of interpretation for the nursing staff. (Paragraphs 3.12 to 3.13)

7. Many prescriptions are never seen by a pharmacist, and the responsibility for their interpretation rests entirely with the nursing staff. In other cases, the absence of the prescription sheet in the pharmacy at medicine round times makes difficulties for the ward staff. (Paragraphs 3.6, 3.14 and 3.15)

8. Various methods of recording the administration of doses of medicines have been devised locally. The implications of these methods have not always been fully considered, and they may be time-consuming and dangerous. (Paragraph 3.16)

9. In some instances, no reference is made to the original prescription when medicines are administered. (Paragraph 3.17)

10. Some ward units comprise large numbers of patients in many rooms; this makes the medicine round a lengthy and complicated affair. (Paragraph 3.18)

11. Arrangements for the entering of patients' names and other particulars on prescription sheets are not always adequate. (Paragraph 3.20)

12. Insufficient opportunity exists for the hospital pharmacist to discuss problems with the staff at the outlying hospitals, or to impart information on the uses and dosage of drugs or their storage requirements. (Paragraphs 3.21 to 3.24)

13. Transfer of patients from one hospital to another within the group causes medical records problems and in some cases prescribing problems. Lack of communication between the various hospitals also creates difficulties on occasions. (Paragraphs 3.25 to 3.29)

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Summary of recommendations

1. All prescribing should be well documented; this would be achieved by improved design and use of prescription sheet, and by revising medical records procedures. (Paragraphs 4.1 to 4.9)

2. A supply system which would enable more frequent deliveries to be made to some of the hospitals with acute beds should be instituted. (Paragraph 4.10)

3. The transport timetable should be flexible enough to allow for occasional unscheduled deliveries of items between the routine deliveries. (Paragraph 4.11)

4. The range of drugs stocked at the outlying hospitals should be sufficient to avoid many requests being made for drugs between the routine deliveries. (Paragraph 4.12)

5. A pharmacist should visit the outlying hospitals at frequent regular intervals, to check prescription sheets and to advise on the ordering and storage of drugs. (Paragraph 4.14)

6. Supply of pharmaceuticals should be made direct to the ward sister; no intermediate reserve stock should be held by matrons. (Paragraph 4.15)

7. Arrangements should be made for patients to receive properly prescribed and dispensed medicines when they are discharged from hospital. (Paragraph 4.16)

8. Arrangements for the storage, prescribing and administration of drugs should be clearly stated in a procedure manual and all persons having responsibility for carrying out these procedures should be kept continuously informed of any amendments or addition to them. (Paragraphs 4.17 to 4.20)

9. A simple uniform and efficient method should be adopted at all hospitals for recording the administration of each dose of a drug at the time at which it is given. (Paragraph 4.19)

10. Reference literature should be provided at the places where drugs are used; information on the action and uses of drugs and storage requirements should be readily accessible and in an easily understood form. (Paragraphs 4.22 to 4.25)

ORIGIN AND PURPOSE OF THE ENQUIRY

1.1 This report describes an investigation into the problems of prescribing, distributing and administering drugs in small hospitals.

1.2 Until about ten years ago, it was the usual practice for ward sisters to prepare a "medicine list" detailing the medicines and doses to be administered to each patient in a ward. This list was made, and subsequently amended, by copying the details from the prescription written in the patients' case notes by the doctor at each visit. In 1958 the Central Health Service Council published a report entitled "The Control of Dangerous Drugs and Poisons in Hospitals" (the Aitken report)[1] which, among other things, focussed attention on the procedures for the administration of medicines in hospitals. One of the recommendations of the report was that the use of the medicine list should be abandoned, as it was a method liable to prove dangerously inaccurate because of copying errors and failure to bring the list up to date. It was also recommended that the original prescription written by the doctor should be used to provide the information needed whenever a dose of a preparation was administered to a patient. Following the Aitken Report the medicine list began to disappear from hospitals, and a new set of problems started to emerge. The situation was aggravated by the "therapeutic explosion" - the introduction of ever-increasing numbers of potent new drugs - which, already under way at that time, has been gaining momentum ever since. This has resulted in a great increase in the complexity of prescribing.

1.3 In 1965 several groups of workers started to study the problems in detail, and work was published (ref. Appendix V) showing that many errors crept in during the course of the chain of events starting with the writing of the prescription by the doctor and ending with the administration of the dose to the patient. It was found that the error rate was proportional to the number of items prescribed for any particular patient, becoming highest when there were six or more items concurrently prescribed.[2]

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Studies were made to see at which points in the existing system the errors were likely to be introduced. Some were found to be caused by illegible and ambiguous prescriptions, others by uncertainty in relating the names used on the prescriptions to those used on the bottle labels, and yet others were because of lack of availability of preparations when required due to inadequacies in the supply systems used.

1.4 To overcome these problems, improved systems have been designed and put into use at several places. In general, these systems incorporate the following features:-

a) An improved type of prescription sheet which is designed and used in such away that ambiguities of nomenclature, dosage and route are eliminated.

b) A method of recording the administration of each dose as it is given to prevent the inadvertent omission and duplication of doses.

c) An improved supply system to ensure that the dose prescribed is available at the time it is wanted.

d) A "ward pharmacist" who visits the wards at certain times each day to see the prescription sheets, which therefore never leave the ward and so are always available when required for medicine rounds.

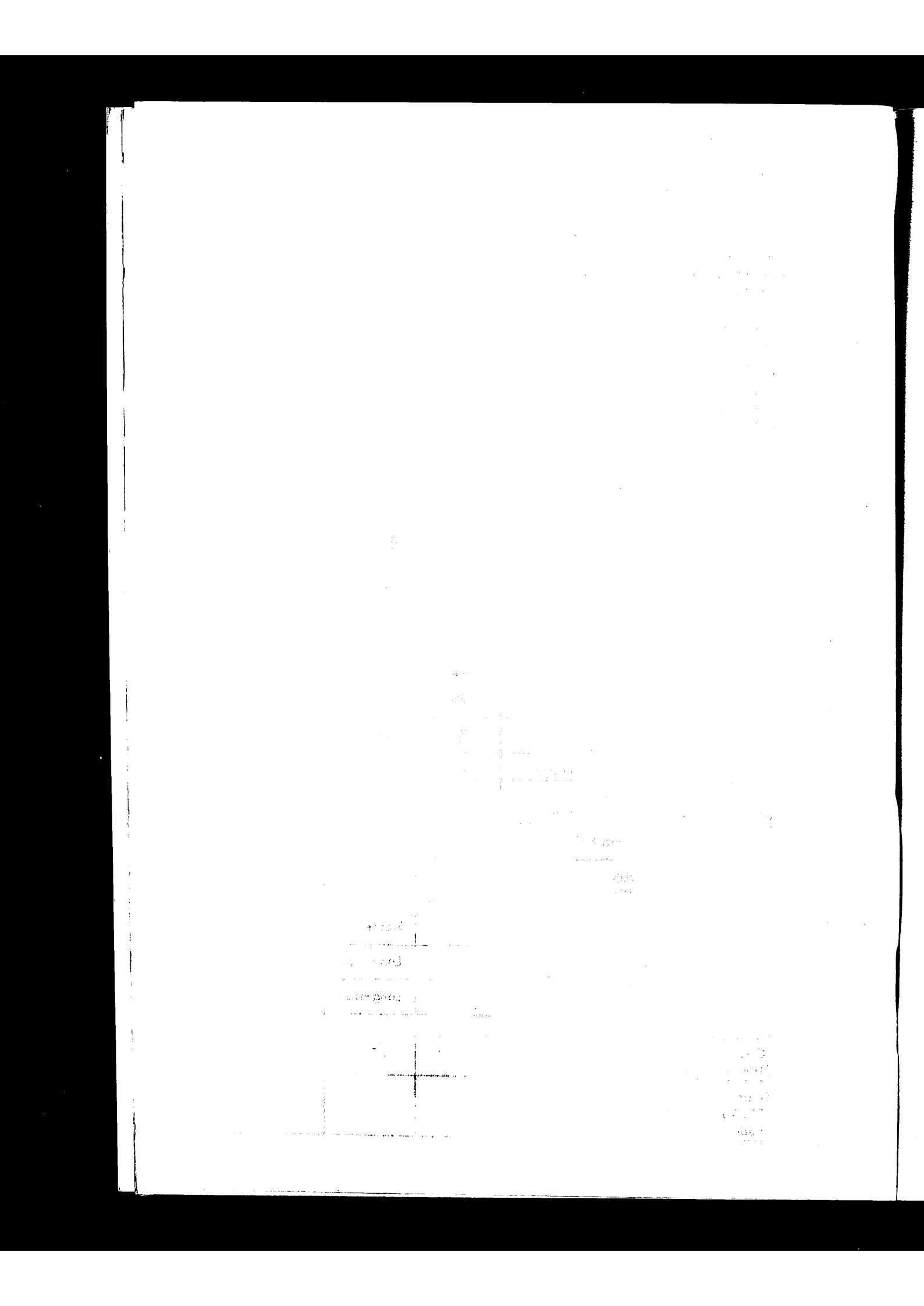
1.5 In February 1967, a conference was held at the King's Fund Hospital Centre, under the chairmanship of Professor Andrew Wilson, Professor of Pharmacology at the University of Liverpool, and attended by members of the medical, nursing and pharmaceutical professions. Papers were presented giving details of the work which had taken place in this field, and discussions about the problems took place.[3] A need was expressed for a study to be made of the difficulties arising in smaller hospitals, particularly those without a pharmacist, as hitherto virtually all the work had been done in large general hospitals. Subsequently, the Development Committee of the King's Fund decided to sponsor such an enquiry, in conjunction with the Guild of Public Pharmacists, and the West Cornwall Clinical Area was suggested as a suitable

group to be studied for this purpose. This group was thought to be ideal for this because it has a high proportion of small hospitals with no pharmacist, it has supply problems caused by the long distances between the hospitals, and also, at one of the larger hospitals, a ward pharmacist scheme is in operation. The post of investigator was advertised, and in September, 1967, a hospital pharmacist, Miss P Stone, was appointed to carry out the survey and prepare this report, under the guidance of a small steering committee of representatives from the Guild of Public Pharmacists, the King's Fund Hospital Centre and the West Cornwall Hospital Management Committee.

1.6 The group consists of 22 hospitals, extending from the Isles of Scilly to Bodmin. The total number of beds in the group at the time when the survey was made was 1,403 as shown in Table A. There are seventeen hospitals without a pharmacy. Of these, six are small general hospitals with an average of sixteen beds each, catering for a wide range of cases, including in some cases surgery, and also outpatients and casualty. Two hospitals are general practitioner midwifery units, and five hospitals are composed entirely of long-stay (mainly geriatric) beds; only one of the seventeen has a resident medical staff. Some of the outlying hospitals are at a considerable distance from their supplying pharmacy: a few more than 20 miles, and quite a number between 10 and 20 miles. During the holiday season the traffic in the area is heavy, and delays are likely to occur.

Table A - The hospitals included in the survey

Hospitals with a pharmacy	Outlying hospitals supplied	Number of beds	Type of beds	Distance from pharmacy (miles)
Camborne - Redruth (98 acute beds)	Barncoose	137	Geriatric (Acute treatment)	$\frac{3}{4}$
Royal Cornwall (Treliske) (180 acute beds)	St Austell & District	27	Acute	13
	St Austell Maternity	24	-	15
	Budock	123	Long-stay	11
	St Clements	53	Mainly acute	3
	East Cornwall	26	Acute	$26\frac{1}{2}$
	Falmouth & District	53	Acute	$12\frac{1}{2}$
	Fowey & District	14	Acute	22
	Newquay & District	20	Acute	17
	Perranporth	31	Long-stay	9
	Sedgemoor Priory	65	Long-stay	14
West Cornwall (92 acute beds)	Bolitho Maternity Home	17	-	1
	Edward Hain	14	Acute	10
	Helston & District	12	Acute	$13\frac{1}{2}$
	St Mary's (Isles of Scilly)	11	Acute	38
	Meneage	71	Long-stay	$13\frac{1}{4}$
	Poltair	37	Long-stay	$1\frac{1}{2}$
Royal Cornwall (City) (184 acute beds)	-	-	-	-
Tehidy (114 TB & Chest beds)	-	-	-	-



METHOD USED TO CONDUCT THE ENQUIRY

2.1 In the company of the chief pharmacists, and on occasions members of the administrative staff, a tour was made of all the hospitals in the group. During this, the investigator was introduced to group officials, the administrative staff of each hospital and many of the nursing staff. Interviews were also arranged with the teaching staff at the nurses' training schools. The background and purpose of the enquiry were explained, and the staff at each hospital were asked to attempt to formulate any problems that they might have, in readiness for a more detailed discussion at a later date. Visits were made also to the five pharmacies in the group, and at the three serving the outlying hospitals, the supply arrangements were studied and the problems discussed.

2.2 During the first stage described above, a questionnaire was prepared; this was used later as a basis for discussions and as a means of recording the information obtained, and was filled in by the investigator after each hospital had been revisited, during the second stage of the enquiry. The questionnaire contained sections dealing with the following subjects:-

Distribution and supply methods
Storage and security
Prescribing and administration of medicines
Movements of student and pupil nurses
within the group

2.3 All those hospitals not having a pharmacy on the premises were revisited and discussions held with the senior nursing staff and the ward staff. The wards were visited to see the storage arrangements, and the various documents in use concerned with medicines were studied; in some hospitals, medicine rounds were observed while in progress. Medical staff were met where possible and their views solicited on the supply system and whether they thought it had any limitations, on the provision of information by pharmacies and also on the design of the prescription sheets in use.

This second stage of the work provided some very interesting and varied experiences for the investigator, involving as it did the visiting of seventeen hospitals well separated by the autumnal Cornish countryside, and including a helicopter excursion in gale-force winds to the most far-flung of the group's hospitals - that on the Isles of Scilly. At the same time, it served to emphasise the problems arising in a widely scattered group such as this.

2.4 The information derived from the discussions was classified, and the problems formulated. Further studies were made on several topics which appeared to require more detailed consideration before any proposals for a solution could be made These were:-

Range of items in use at some of the hospitals
Transport arrangements
Prescription sheet design
The type of information which should be
included in written notes describing procedures
to be circulated to prescribers and nurses

Note. Throughout this report, no special significance has been attached to the terms "drug" or "medicine". These words have been used interchangeably, and are not intended to indicate any particular class of preparation.

THE PROBLEMS ENCOUNTERED

Prescribing

3.1 It was observed that prescriptions are sometimes written in the patients' case notes in places other than on the prescription sheet. This leads to difficulties for the nursing staff, who, having to use the original prescription for the administration of medicines, may find themselves rather in the position of a mobile librarian.

3.2 Much of the information about the patient's condition is exchanged between the nurses and the doctors by telephone, particularly in the hospitals with no resident medical staff; this means that vigilance is required to ensure that all telephoned prescriptions are subsequently confirmed in writing.

3.3 The medical staff attending any particular hospital are sometimes limited in number, and, as a result, their preferences for drug therapy in a given situation become very well known to the nursing staff. One feels that this may well lead to preparations being administered and not being later confirmed in writing, should the previously-mentioned vigilance not be maintained, or the necessity for it appreciated.

Distribution, supply and storage

3.4 For the seventeen hospitals without a pharmacy, pharmaceutical supplies are provided from three hospitals, as shown in Table A. The number of deliveries varies considerably from hospital to hospital; some receive deliveries every day, while others receive them only once a week. Geographical considerations seem to play as important a part in the organisation of the time-table as the varying needs of the hospitals. For the hospitals that do not have a daily delivery, it is a common procedure for the order to be collected when the completed previous order is delivered, so that two sets of order books and locked delivery containers are in use for routine items. In some hospitals, no copy is kept of the order, so that the staff may have to make out the new order without having

a record of the previous order available to study. If for some reason an item cannot be supplied, a note to this effect is usually made on the order by the pharmacy staff. However, unless a special telephone call is made, it may be two days or more before this note is received by the staff at the outlying hospital, and they realise that some alternative will have to be found.

3.5 In some hospitals, the relative infrequency of deliveries seems to lead to a fairly high number of transactions with local retail pharmacies, to provide for unexpected contingencies. This, of course, is not necessarily a great inconvenience, but does represent a breakdown in the service that the hospital pharmacy sets out to provide. At other times, the hospital pharmacy has to organise emergency transport - sometimes a time-consuming business in a group where the transport service is so fully utilised. Improvised transport methods are pressed into service and include the local 'bus service, taxis, homeward-bound pharmacists, and, in the case of one hospital, the local helicopter and steamship services.

3.6 In those hospitals where the pharmacy box is absent for more than a day, it is impracticable to send prescription sheets to the pharmacy, as they would then be missing when required for medicine rounds or for further prescribing. Consequently, they are never seen by a pharmacist, so that the responsibility for interpreting the prescriptions rests entirely with the ward staff. In other hospitals, only prescriptions which appear to be for new or unusual items are sent to the pharmacy.

3.7 The matrons of certain of the smaller hospitals keep a reserve stock of pharmaceuticals from which they issue supplies to the wards; and it is the matrons rather than the ward sisters who make out the orders which are sent to the pharmacy. This system has several disadvantages:-

a) The tendency is for an inflated level of stocks to be held relative to the number of beds. Of course, one should not make a direct comparison with the same number of beds in a ward in a large general hospital, as the range of diagnoses of

the patients is very extensive, and contingencies such as casualties and unexpected admissions have to be catered for.

b) Deterioration of stocks is liable to occur, due to the inflated stock level.

c) A good deal of redistribution into containers other than those originally supplied by the pharmacy takes place.

d) Complicated methods of maintaining Dangerous Drugs and Scheduled Poisons records may result. It should also be remembered that a matron's authority to order Dangerous Drugs is limited by law, and curiously enough, it differs from that of a ward sister, who may order stocks from the hospital pharmacist on her ward's behalf. In hospitals where there is no pharmacist the signature of the medical officer is required when the matron requisitions Dangerous Drugs.

e) Ward staff may be inconvenienced by this system; it encourages hoarding at the ward level because naturally they do not wish to trouble the matron to repair to her cupboard at frequent intervals when she is busy with other matters.

3.8 In the hospitals where a system of alternating boxes is employed, it is obviously not possible to have in use two sets of Dangerous Drug order books. This means that quite a delay may result before the book returns and a second order may be made out. One pharmacy in the group overcomes this by using Registered Post to send the completed orders to the hospitals, instead of waiting for the next regular transport.

3.9 Stocks of drugs which are no longer in use should be returned to the pharmacy to prevent waste and the accumulation of unwanted drugs which may at a subsequent date be administered to patients in error. At some of the hospitals, it was felt that the system in operation for this was not very effective, as far as one could judge by the presence of old stocks on the shelves.

3.10 At some hospitals, the storage space for drugs was inconveniently situated and in some cases inadequate for wards' needs. A squirrel-like tendency to hoard on the part of some of the sisters led to overcrowding; it appeared that the degree of

hoarding was directly proportional to the distance from the supplying pharmacy - no doubt the provision of a system of supply in which the ward had more confidence would largely overcome this problem.

3.11 In some cases, no arrangements exist for the supply of preparations from the hospital pharmacy for patients to take home on discharge. Mostly, this problem is dealt with by giving the patient a prescription to take to a retail chemist, or by writing to his general practitioner (who often has been in charge of the case while the patient was in hospital as well). However, in this rural area, there remains a residue of patients who are unable to reach a retail pharmacy because of disability or distance, and whose treatment should not be interrupted. These patients are usually assisted in their predicament by the provision of an interim supply from the ward stocks. This interim supply may be made in an unsuitable container, inadequately labelled, and in some cases involves a breach of the Pharmacy and Poisons Acts.

Administration of medicines and record keeping

3.12 There are two main designs of prescription sheet in use in this group. One of these is a modern design being used in conjunction with a ward pharmacist scheme at one of the hospitals. This sheet enables the prescriber to specify the exact times of medicine administration. The other is a traditional "Treatment Sheet" simply having columns headed "Activity and Investigations" and "Diet and Treatment". As the patients are transferred from one hospital to another within this group to an astonishing degree, it means that very often both types of sheet are in use on one ward at the same time. It was observed that sometimes prescribers do not make the best possible use of the modern sheet, doubtless because they have not been subjected to the indoctrination process awaiting new entrants to the hospital at which it is in general use. Confusion is also liable to occur about the times at which medicines should be administered, as the times specified on the modern sheet may not be usual times for administration according to standard recommended procedures.

Study of the prescriptions on one ward showed that eight medicine rounds would be needed that day to carry out the prescribers' instructions. It also seems that there is a real danger of the last dose at night or the first dose in the morning being either omitted or duplicated, these being the times when change-over of night staff could affect administration.

3.13 At two hospitals a third type of prescription sheet was in use. This design was thought to be highly unsatisfactory, since the main part of the lay-out was occupied by a blood pressure and albumin record, which is what the heading of the form proclaimed it to be, while a space for prescriptions and diet had been included on the back, evidently as an afterthought.

3.14 At the hospitals where the prescriptions were sometimes sent to the pharmacy, they were likely to be missing when needed for medicine rounds.

3.15 The absence of the patient's prescription sheet while it was at the pharmacy for an item to be dispensed, led some hospitals to start a second sheet to be used meanwhile. Confusion seems likely to develop subsequently when the two sheets are used together.

3.16 All hospitals of course have regulations regarding the recording of the administration of Dangerous Drugs and other substances liable to abuse, but opinions vary as to the desirability of recording the administration of each dose of every medication at the time it is given. However, there can be no doubt that many nursing staff would welcome a simple method of recording administration - the existence of many locally—introduced systems of recording implies that a need for this is felt. Unfortunately, in some cases the methods in use were of limited value because of one or all of the following reasons:

a) The record was not made at the actual time of administration, but later - for example, when the nursing report was written.

b) Not all the items were recorded; those items which were to be recorded were not well defined.

c) Variations in the policy regarding administration records occured from ward to ward in the same hospital; this seemed liable to create difficulties as nurses were moved around the hospital.

d) Some of the methods in use involved much writing or copying.

e) The records thus produced were liable to be used for subsequent administration rather than the original prescription - in some cases they were even likely to be genuinely mistaken for the original. This situation is fraught with hazard, since a series of copying errors could soon magnify an innocent error in dose to dangerous proportions.

3.17 In a number of hospitals, the original prescription was not used for medicine administration, but a medicine list of some kind was in use.

3.18 When considering the problems that arise in connection with the administration of medicines, it is important to remember that some units have difficulties to contend with that do not arise in conventional wards in a general hospital, for example:-

a) Large numbers of patients may be treated as a single ward unit under one sister. At one long-stay geriatric hospital 65 patients had to be visited on one medicine round.

b) Patients may be divided among many different rooms on several floors.

c) In a unit for subnormal patients, for instance, patients may be only be relatively static and all gathered together into one place at mealtimes. Patient identification may also present difficulties in such a unit, where the majority may not even know who they are themselves, and are not likely to take kindly to wearing some means of identification.

d) Treatment may not need to be changed for long periods in long-stay units.

3.19 Some staff complained that selection of preparations required for medicine rounds was made more difficult by the uniform style of labels and the hand-written labels employed by the pharmacies. It would be easy to dismiss this point as trivial, until one realises that it results in the undesirable practice of harbouring of distinctive containers that have become familiar old friends, and the transfer of materials thereto.

3.20 Arrangements for the entering of the patients' names and other details on the prescription sheets did not always seem to be adequate. The modern sheet previously described has a space for the application of an Elliott Addressall label bearing the patient's details, but such labels are not always readily available for the staff of the outlying hospitals to use. Further, these labels provide a wealth of information about the patient, but some of it, such as his occupation and religion, did not seem likely to contribute much to his drug therapy.

Provision of information

3.21 There is a lack of readily available information on drugs, including well-established ones. This role was filled by the manufacturers' packing slips in the days when supplies of proprietaries were purchased direct by the hospitals from retail pharmacies or wholesalers. Medical staff agreed that it was not always on new drugs that information was needed, and did not feel that an information bulletin would solve the problem. The doctors tend to turn to the local retail pharmacists for advice, simply because they are not acquainted with their hospital pharmacists.

3.22 A pharmacist's advice on storage requirements would be helpful in some cases; a label indicating that refrigeration is needed may easily be overlooked. Similarly, it is felt that all pharmaceutical stores should be under professional surveillance, as less qualified staff, however conscientious, should not be expected to master the intricacies of stock rotation and batch numbers without assistance.

3.23 The pharmacists who complete the outlying hospitals' orders have very little personal contact with their staff, except by telephone. The nurses said that they missed this personal contact, which they thought would help resolve some of their problems, which began by being trivial but became magnified by distance and unavoidable delays.

3.24 It is often possible for a pharmacist to suggest to a prescriber an acceptable alternative preparation which may be more economical. Under the present system, no opportunity exists for this to occur.

Problems caused by the transfer of patients from one hospital to another

In order to utilise to the fullest extent the acute beds in the group, and the resources of its modern district hospital, patients are transferred as soon as possible from acute beds to preconvalescent or long-stay beds in hospitals nearer their own homes.

Casualty admissions are handled by several hospitals at present, but not the new district hospital, so that it is quite possible for a patient to pass through the doors of three or four hospitals in the course of one reasonably straightforward illness. This situation produces some problems of its own, as may be well imagined.

3.25 Case notes, which do not always travel with the patient, may be delayed for 2-3 days in transit. During this time, the patient's treatment has to be continued by using either a doctor's or a ward sister's discharge letter.

3.26 Tablets may be sent with the patient to assist the staff at the next hospital. Unfortunately, this attempt to be helpful sometimes results in confusion, as the labelling may not be the same as that to which they are accustomed, if the bottle originated in a different pharmacy from usual. In any case, the supply may duplicate stocks already held.

3.27 As it is the custom to continue using the same prescription sheet with its entries, it is sometimes very difficult to tell when the transfer has taken place and which treatments are still in force. Of course, the ward staff are familiar with their own doctors' handwriting, but this might prove to be an unreliable guide for a new staff member.

3.28 Difficulties may be created in the outlying hospitals by the introduction of a novel scheme at one hospital which has not been fully explained to the staff of the others. At the hospital where the ward pharmacist scheme is in operation, it is customary to draw a horizontal line across the prescription sheet to indicate that the prescriptions above the line have been seen by the pharmacist. Apparently, at one outlying hospital, some sisters thought that the prescriptions above the line had been cancelled.

3.29 Up to the present, there has been no system of centralised medical records in this group. Although a few of the hospitals are linked and have a joint Medical Records Department, most of them maintain their own independent files of patients' case notes. The result is that a patient may have several sets of notes in existence each corresponding with an illness treated at a different hospital. More than one set may be in active use at one time, should he be attending, for example, a diabetic clinic at one hospital and a surgical clinic at another - a not at all uncommon happening.

This must certainly lead to potentially useful and possibly life-saving information about previous drug therapy or perhaps allergies being withheld from subsequent prescribers. The magnitude of this problem may be judged from the fact that when the case notes from two of the hospitals were pooled in an attempt to improve the situation, an estimated 60% of the patients at one hospital had notes at the other hospital as well.

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SUGGESTED SOLUTIONS AND RECOMMENDATIONS

Introduction

The following recommended solutions to the problems which have come to light are put forward in the hope that they may stimulate discussion and further suggestions. It has not been possible in the three months of this study to make more than preliminary investigations into the possibilities of putting them into practice in this group. Most of the proposals are by no means novel; it is felt, however, that a useful purpose may be served by setting them in the context of a definite geographical location.

Prescribing

4.1 Prescription sheet design. Quite a number of the prescribing difficulties stem from prescription sheet design and also the fact that when the prescription sheet is kept in the case notes it may not come readily to hand. It does not seem likely that a prescription sheet could be devised that was equally suitable for acute hospitals and long-stay units, and it is therefore suggested that two new sheets should be designed and tried out. Prescription sheets in use should not be kept in the case notes, but in a convenient place to promote their use.

4.2 Other orders. To avoid confusion, it is generally agreed that orders for other types of treatment should not be made on the prescription sheet, with the possible exception of diet.

4.3 All prescribing to be on the prescription sheet. The co-operation of all prescribers in ensuring that all prescriptions are written on the prescription sheet must be obtained. The medicine list will never make its final exit until this happens.

4.4 Confirmation of all telephoned prescriptions. Obtaining written confirmation should not be allowed to become a burden for the nursing staff, who must also appreciate how essential it is to obtain such confirmation, both for the patients' sake and their own.

RECOMMENDATIONS

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[illegible] in the hope that they may stimulate discussion [illegible]

[illegible] possible in the three months of this study [illegible]

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4.5 Centralisation of Medical Records. If case notes are to serve the purpose for which they are intended, it is essential that only one set should be in existence for each patient.

These case notes must contain the details of all his illnesses, whether occurring simultaneously or not. At least there should be some simple means of discovering that there are other case notes, so that they may be consulted if desired.

4.6 Completion of the patients' details on the prescription sheet. Good arrangements must be made to ensure that all the patients' personal details which are relevant to the prescribing of drugs appear on the prescription sheet. These are generally considered to be:-

Full name (there may be more than one in the ward with the same surname)
Hospital registration number
Age
Name of the doctor responsible for the prescribing
Name of ward/hospital

It was noted that a very small proportion of the prescription sheets seen in the course of the enquiry were completed to this extent.

4.7 Prevention of duplication. It is obviously hazardous to have two prescription sheets in use at the same time for one patient, and this must be prevented from happening. When a sheet becomes full and some of the entries have been cancelled, a new sheet should be started, all the current drugs being administered entered on it and then the old one cancelled completely and filed.

4.8 Review of prescription sheets. Prescription sheets should be regularly reviewed by the prescriber to ensure that discontinued prescriptions are clearly cancelled and that prescriptions still in force are re-written where necessary.

4.5 Centralization of Medical Records. If case notes are

be held they are intended, it is essential that only one file

for each patient.

These case notes must contain the details of all

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Full name (there may be more

Hospital registration number

Age

Name of the doctor responsible

Name of ward (hospital

It was noted that a very small

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and then the old one cancelled completely and filed.

4.8 Review of prescription sheets. Prescription sheets

reviewed by the prescriber to ensure that discontinued prescriptions

that prescriptions still in force

4.9 Filing of used prescription sheets. Prescription sheets form an important part of the record of the patient's treatment. As such, it is important that reliable arrangements be made for their filing with the patient's notes when no longer in daily use. Where no medication has been given, either the blank prescription sheet should be filed with the patient's notes, or an appropriate entry made - the fact that no drugs were given during a certain period may well be an important piece of information at a later date.

Distribution and supply

4.10 A more flexible supply system which would enable more deliveries to be made to some of the hospitals dealing with acute cases would eliminate many difficulties. At present, some acute hospitals receive only one delivery a week, although in one case a long-stay geriatric hospital gets a daily service. It appears that three times weekly deliveries would be adequate in most cases. A once or twice weekly delivery seems to work quite well in long-stay hospitals where new prescriptions are written mainly when a new patient is admitted, and very infrequently at other times.

4.11 Unscheduled deliveries. In one part of this group, the pharmacy shares the transport used by the Central Sterile Supply Department. Because the vans run on set routes and the time table of visits does not permit any deviation, it appears to be virtually impossible to make any variation from the recognised route in order to meet some unforeseen demand. In some cases the economies produced by this arrangement are illusory, as it has resulted in an urgently required drug having to be left at the nearest hospital to the one requiring it, and a taxi being sent to fetch it, a return journey of about 19 miles. Thus it appears that it would be better if the pharmacy were able to reroute its van, on occasions, according to circumstances, instead of invariably having to tailor the circumstances to suit the van.

4.12 Range of items stocked. All the doctors interviewed said that at times they prescribed items already stocked to save obtaining an item specially; none appeared to object to this strongly. It seems from this that if a comprehensive range of stocks could be provided and maintained at the outlying hospitals, quite a number of emergency transactions could be eliminated. A fairly long-term study of prescribing habits would

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have to be made for this to work satisfactorily. Preliminary studies showed that one general hospital of 14 beds used a range of about 160 items in a year. It was also obvious that no shorter period would give reliable information on this subject. A retrospective survey of requisitions showed no increase in the number of"new" items - ones not previously seen to have been ordered - until 10 months had been covered. The hospitals in this area experience an abnormally large seasonal variation in the number of patients treated, due to the influx of holiday visitors. In a region where the population remained fairly constant throughout the year, a study of items prescribed over a shorter period might give satisfactory results.

4.13 Design of a system of pre-packing.

a) The setting-up of a system of pre-packed ward stocks requires a good deal of planning if it is to function well. It seems that it would be useful to make a study of the rate of consumption of the various items before deciding on the pack sizes; one should be prepared to find that one size may not be suitable for all users, as in a group such as this their needs may vary tremendously. For example, one ward at one hospital was found to be using a certain antibiotic at the rate of about 450 capsules per week, while an outlying hospital supplied by the same pharmacy was using 20 per week.

To have only one pack size of these capsules is going to either make a vast amount of work for the pharmacy, or result in stock lying motionless on the shelves for long periods. Even small hospitals sometimes have a high consumption of some items, and to have to store a row of small bottles all containing the same drug makes the temptation to pool them and save space almost irresistible at times.

b) In this group a system of accounting for certain Scheduled Poisons is used which is analogous to that used for Dangerous Drugs. If the units issued from the pharmacy were sealed - for example with viscose seals - much unnecessary counting of unused bottles would be saved. It would also help to prevent more than one bottle being in use at a time.

4.14 The pharmacist and the prescription sheet. It is obviously highly desirable that the two should be brought together. It has been established that the original prescription should stay on the ward and be used as a record of the drugs to be administered. Consequently, various methods have been suggested or tried which would enable the pharmacist to receive information about a new prescription more reliably than by a telephone message from a sometimes bewildered nurse. In some hospitals, (not in this group) a copy of the prescription is made and is signed by the prescriber, and is then sent to the pharmacy instead of the prescription sheet. This is not satisfactory because the pharmacist sees only the orders for drugs which are not already in stock, and because prescribers are known to sign blank forms in advance. Should any alteration to the prescription be required, the change may not be recorded on the original prescription sheet. This is also the objection to the use of carbon copies for this purpose. Such systems do not permit a new prescription to be seen in the context of the other drugs which have already been prescribed, and in this way therapeutic incompatibilities may pass un-noticed.

The simplest solution would appear to be for a pharmacist to visit the hospitals at regular frequent intervals and to examine all the prescription sheets. Arrangements for supply could be made, and any queries dealt with. Such frequent contact would also reassure the nursing staff of the pharmacist's benevolent disposition, and his advice would be sought on day-to-day problems such as those of storage and stock levels.

4.15 Matrons' stocks. It is felt that it would be preferable in all cases for the pharmacy to supply direct to the wards and to eliminate the matrons' reserve stocks. Begun when autonomy for small hospitals was the rule, this system has surely been perpetuated because it serves as a buffer between the exigencies of ward ordering and the somewhat unsatisfactory supply system. If a good supply system were instituted, and could be seen to be effective, most matrons would probably be gratified to find that the time now spent on this could be used for other duties.

[redacted]

4.16 Patients' treatment on discharge. It is difficult to obtain precise information about how often it occurs that a patient is discharged under circumstances which make it essential for him to take drugs with him. Often out-patient attendances are made at a different hospital from the one at which in-patient treatment took place, so the case notes are transferred to that hospital, which in itself produces problems for a would-be investigator. It was noted that every person who described giving an interim supply from ward stocks emphasised that they always put the name of the tablets on the container (usually an envelope). It should be more widely understood that this alone is not sufficient to regularise such a transaction.

Administration of Medicines

4.17 No medicine lists. The use of all forms of medicine list should be discontinued. Emphasis should be placed on the importance of referring to the original prescription for every administration. It was noted that in the Kardex sheet for nursing notes in use in some places, there is a section for recording brief notes about current treatments. No doses are supposed to be entered here, in order to prevent its use for medicine administration, simply the dates of beginning and ending treatment. It was felt that it might prove tempting at times to add more detail and use this for administration purposes.

4.18 Times of medicine administration. Medicine administration could be made simpler for the nurses if standard times could be agreed throughout the group and stated on the prescription sheet. Then, on any medicine round the nurse has merely to run her eye down the relevant column to see whether a dose is due at that time. Provision must be made, of course, for the prescriber to state an unusual time if he thinks it desirable.

4.19 Records of administration. It is hoped that it will be possible to design a simple method of recording administration at the time each dose is given. Much nursing time at present spent on making notes about the progress of courses of treatment would thus be saved, and all problems regarding the omission or duplication of doses resolved.

4.20 Procedural notes. It can be seen that quite a number of problems were created by lack of communication between various sections of the group about current procedures. It is suggested that a standard procedure regarding all the details concerned with the prescribing and administration of medicines should be agreed and published as a booklet to be distributed to all concerned. It seems better that this should be distinct from the series of procedure sheets prepared for the guidance of student nurses on a variety of ward procedures; this group has more than one nurse training school, and so individual variations in these are possible.

4.21 The tools for the job. A professional opinion should be sought by buying departments on the suitability of all goods purchased which impinge on activities such as medicine administration. The pharmacists working in the group were as astonished as the investigator to discover that a medicine measure was in use which implied that three fluid drachms equal half a fluid ounce.

4.22 Provision of information. A pharmacist visiting the outlying hospitals frequently would contribute a great deal towards meeting what is required here. The need for information to be readily available between visits of the pharmacist can be met to some extent by providing the sources indicated below. In many cases information could be obtained by telephone, but ward staff are more likely to make use of this medium when they know personally the pharmacist concerned. Some basic reference books should be provided and renewed when appropriate at each place where drugs are used, instead of relying on chance or the goodwill of the doctors. Suitable books might be:-

British National Formulary[4]
Proplist[5]
Index of New Products[6]

4.23 Specialised reference books. At places where casualties are likely to be received, some more specialised reference works would be useful. These might include some publications on tablet and poisonous plant identification and one of the reference books on the treatment of poisoning.

4.24 Product information. It would be useful if some form of package insert be provided with hospital packs, giving brief details of dosage, side effects and contra-indications. At least an indication of the usual dose range could be included on the label.

4.25 Storage requirements. Packs should have an indication of storage requirements, when these are specialised, in easily understood terms (i.e. 'Store in refrigerator', not 'Store at 4° C') All packs should have an expiry date where applicable.

ACKNOWLEDGEMENT

I would like to thank the West Cornwall Hospital Management for the excellent arrangements made for me to carry out the investigation, which greatly simplified the task of making the survey. I also thank the staff at all the hospitals, whose interest and invaluable assistance at all times made visiting them a pleasure. Thanks are also due to the Forest Group Hospital Management Committee who allowed me leave to undertake this study.

Patricia Stone

APPENDIX I

THE VISITING PHARMACIST - NOTES ON THE INTRODUCTION AND OPERATION OF SUCH A SCHEME.

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1. Putting the scheme into operation

An initial introductory period should be spent working at the base hospital, meanwhile paying a limited number of visits to the outlying hospitals, with the following ends in view:-

a) The pharmacist to become familiar with the outlying hospitals, their work and general administrative set-up in the area.

b) A good working knowledge of the items and available packs stocked by the pharmacy should be achieved: this should include a knowledge of the pharmacy's ordering system so that the length of time needed to get a new item can be estimated reasonably accurately.

c) A preliminary impression should be formed of the items and quantities ordered by each hospital. During this period it would be helpful if this pharmacist could deal with all the queries arising from the outlying hospitals as far as possible.

d) A timetable of visits could be designed and tried out as the last step before setting the scheme into operation. This timetable should then be published so that it will be possible for people to get in touch with the pharmacist when he is on his travels if necessary.

2. The pharmacist's visit

a) The prescription sheet. The first duty should be to inspect all the prescription sheets. The treatments prescribed since the last visit should be identified. The dosage etc. - the details checked by every pharmacist whenever he dispenses a prescription - will be inspected, and any queries of this nature dealt with. In addition, should the

INTRODUCTION AND OVERVIEW

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[illegible] requires a prescription -
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nomenclature used for drug name or dosage vary from that used on the pharmacy's labels, the prescription sheet should be annotated, for the benefit of the nursing staff.

b) Supply. Items which are not held as ward stocks must now be obtained. One way of achieving this would be for the pharmacist to telephone his base giving details of the items.

A note should be made including the full name of the patient, his unit number and location, the drug and dose and the quantity to be supplied. Preferably a special form should be used for this purpose, to be filled in by both the visiting pharmacist and the pharmacist at the base hospital. As soon as possible afterwards the two pharmacists should compare their written notes to see that they correspond in every respect.

c) Ward stocks. The pharmacist should constantly seek to set up as comprehensive a range of ward stocks as possible, as suggested in paragraph 4.12. A knowledge of the type of cases treated at each place, and discussion with the staff should assist this process. The more successful this is, the less need will there be for intermediate supplies to be made. At the same time, statistics about the rate of use should be collected to be used later to decide the sizes of pre-packed units.

d) Stock levels. An eye should be kept on stock levels and routine ordering, and advice proffered where indicated. Discontinued courses of treatment supplied for individual patients should be taken back to the pharmacy.

e) Information. It is hoped that the pharmacist's advice will be widely sought on problems, and it should be freely available. He should also make sure that all the reference books are present and kept up to date where applicable. Should these include a card index such as the "Index of New Products", filing the new cards might well become his task.

APPENDIX II
NOTES ON THE SUPPLY SYSTEM

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1. Introduction. In the investigator's opinion, much that might be gained by having a pharmacist visit the outlying hospitals will be lost if this is not backed up by an improved supply system. The benefits to be gained by the pharmacist's inspection of the prescription sheets and storage facilities will not necessarily be so obvious as would those of a more adaptable supply system, and may therefore not be welcomed by the recipients.

2. Frequency of deliveries. For routine deliveries of stock items, a minimum of three times a week seems to be satisfactory for hospitals with acute beds, and once a week fairly satisfactory for those with entirely long-stay beds. It has been suggested that better store-keeping at the outlying hospitals would make frequent deliveries unnecessary - this may be true up to a point, but one should ask oneself how many pharmacies manage on one weekly delivery from their suppliers, with no extra orders at other times.

3. Timetable of pharmacist's visits. It is felt that ideally, the visits of the pharmacist should be made at the same intervals as the deliveries of stock orders. The best arrangements would be for the pharmacist's visit to shortly precede the next stock delivery so that he could telephone the pharmacy with details of any items required on fresh prescriptions, and these could be sent with the other items ordered routinely. Although such an arrangement would probably be feasible in most groups, in West Cornwall such distances separate the hospitals that it is impossible to design a timetable to do this using only one pharmacist operating from each base, as the group pharmaceutical services are organised at present. This is due to the fact that the 17 outlying hospitals are not distributed equally between the supplying pharmacies because of various local considerations.

i.e. Camborne - Redruth Hospital supplies one hospital (acute)

Royal Cornwall Hospital (Treliske) supplies ten hospitals (seven acute, three long-stay)

The most difficult section of the group for which to design a timetable is that served by the Royal Cornwall Hospital (Treliske), where there are ten outlying hospitals to be supplied. As a compromise, it is proposed that a supply system might be set up giving the suggested number of deliveries, and a timetable worked out for the pharmacist giving the nearest possible to the desired number of visits. (Organising such a timetable for the van driver, of course, does not present such difficulties; he would not have to spend so long at each hospital as the pharmacist).

An example of a possible weekly timetable for part of the group is shown in Table B.

	Hospitals to be visited	Total distance travelled	Type of beds and number		
			Acute	Long-stay	Maternity
Monday	Falmouth, St Clements	30 miles	106		
Tuesday	St Austell Acute, St Austell Maternity, Fowey	44 miles	41		24
Wednesday	Perranporth, Newquay Bodmin	63½ miles	46	31	
Thursday	Falmouth, Budock St Clements	32 miles	106	123	
Friday	St Austell Acute St Austell Maternity Sedgmoor Priory, Fowey	41 miles	41	65	24

It can be seen that this is far from ideal: Falmouth and District Hospital, with 53 acute beds, would receive only two visits a week. St Austell Acute and Fowey and District would also receive only two visits a week, and Newquay and the East Cornwall Hospital (Bodmin), one visit only. A far more promising timetable can be worked out if Falmouth and Budock Hospitals are omitted from this general arrangement. These two hospitals are to the south of Truro, whereas the remaining eight are all to the north and east. It might be worth considering whether these hospitals should be supplied from Camborne-Redruth

	32 miles
	41 miles

Hospital, as they are separated geographically from the other hospitals supplied by Treliske.

Redruth and Truro are about the same distance from Falmouth. It is suggested, therefore, that Falmouth and Budock Hospitals should be visited by a different pharmacist, possibly one working at the base hospital for the rest of the week. Table C shows a timetable based on this arrangement. It should be noted that it still does not appear to be possible to visit Newquay and District and the East Cornwall Hospitals (both of which have acute beds) more than twice a week. Otherwise, this timetable would provide the number of visits which seem likely to prove satisfactory.

Table C

	Hospitals to be visited	Total distance travelled	Type of beds and number		
			Acute	Long-stay	Maternity
Monday	St Austell Acute St Austell Maternity, Fowey	44 miles	41		24
Tuesday	St Clements, Newquay, East Cornwall	62½ miles	99		
Wednesday	St Austell Acute, Sedgemoor Priory, Fowey	46 miles	41	65	
Thursday	Perranporth, Newquay, East Cornwall	63½ miles	46	31	
Friday	St Clements, St Austell Acute St Austell Maternity, Fowey	46 miles	94		24

[illegible], as they are separated geographically from the [illegible] Station.

2. Falmouth and Truro are about the same [illegible]. Therefore, the Falmouth and Truro [illegible] financial, possibly one working at Truro [illegible] C shows a timetable based on this assumption [illegible] not appear to be possible to visit Falmouth and Truro [illegible] (both of which have about [illegible] would provide the number of visits [illegible]

Table C

	Hospitals in [illegible]
Monday	St Austell [illegible] St Austell [illegible]
Tuesday	St Clement, [illegible] East Cornwall
Wednesday	St Austell, [illegible] Paynter, Covey
Thursday	Penzance, [illegible] East Cornwall
Friday	St Clement, [illegible] St Austell [illegible]

APPENDIX III
NOTES ON PRESCRIPTION SHEET DESIGN

1. Introduction. The designing of a prescription sheet is no simple matter in these days when the one sheet has to perform so many functions for members of three different professions. Agreement must be reached between the users on several points of policy before a design can be finalised. These points are:

2. The patient's personal details. There is a trend these days towards using the system where a plate is prepared bearing all the patient's personal details and using this to duplicate adhesive labels which are then used whenever it is necessary to identify a prescription sheet, Pathological Laboratory request form or any other document. The Elliott Addressall system in use in part of this group is an example of this type of system. Before such a method is lightly accepted for the identification of prescription sheets, one should consider whether it is, in fact, suitable for this purpose. Such labels contain about eleven separate pieces of information about the patient; only four of these are relevant to prescribing. Two details which are needed, namely the whereabouts of the patient (hospital/ward) and the name of the doctor responsible for the prescribing, are not provided. In any case, a prescription sheet intended to be used in conjunction with such labels should not be designed for group use if they are not rapidly and easily available to all the hospitals.

3. Out-patient prescribing. Some hospitals use one prescription sheet for both in-patient and out-patient prescribing. The type of sheet which incorporates a record of administration is not suitable for out-patient prescribing, and if this feature is desired, two separate prescription sheets will be required.

4. Medicine rounds. A much more satisfactory and generally useful design can be made if the prescribers are agreeable to the times of the medicine rounds being stated on the prescription sheet. Failure to do this has on occasion caused confusion, as stated earlier.

It would be much simpler for the nurses if the number of rounds during the day could be fairly limited, although of course, provision must be made for medication at unusual times if so required.

5. Administration records. It must be decided whether it is wished to make a record of each dose at the time at which it is given. If this highly desirable policy is adopted, the method of carrying it out will also have to be decided. There are two main systems already in use, and it is difficult at present to suggest an equally efficient method that could be contrived that did not approximate to one or other of these.

a) The Aberdeen system. This method involves two sheets; the prescription sheet and the rec ording sheet. The prescriptions are identified by a code letter which is entered in a box on the recording sheet every time a dose is given.

b) The London Hospital system. In this system the administration record is alongside the prescription and so entries are made directly on the prescription sheet. No transcription is involved, but the method is a little prodigal of space. At the London Hospital there are only four main medicine rounds during the day, and this considerably simplifies the design of the prescription sheet.

6. Annotation of prescriptions by pharmacists. The policy of annotation of the prescriptions with Approved names and metric doses must be acceptable to the prescribers before it is put into force.

7. Location of prescription sheet. The location of the prescription sheet when it is in use on the ward must be agreed. This is relevant to the design of the sheet, as if, for example, it is to be contained in a Kardex file, it will have to be designed to fit. If the traditional board on the bed rail is to be retained, the prescription sheet should be printed on card instead of paper so that it will stand up to the wear entailed. However, it seems that keeping all the sheets together at one central point is a better arrangement - it would save nursing time, promote the sheets' use and also make the visiting pharmacist's task much simpler.

APPENDIX IV
INFORMATION BOOKLETS DESCRIBING PRESCRIBING AND ADMINISTRATION METHODS: SOME NOTES ON THE MATERIAL TO BE INCLUDED

Part 1

Introduction. It is important that all persons engaged in the prescribing, distribution and administration of drugs should be kept continuously informed of the procedures in use in the hospitals in which they work. This is particularly important when a somewhat novel system is proposed, such as a prescription sheet incorporating an administration record. The simplest and most effective way of doing this is to prepare written instructions in the form of a booklet for circulation to all concerned. The following notes offer some suggestions about the type of information which should be included in such a booklet, intended for both doctors and nurses.

1. Purpose of the prescription sheet. It must be explained that the prescription sheet is to be consulted each time a preparation is administered, and that a record of each dose given will be made at the time when it is administered. The prescription sheet will have been specially designed to make this possible.

2. Use of the prescription sheet. This section should include a facsimile of the prescription sheet or sheets in use. The inclusion of some specimen prescriptions, illustrating the use of the sheet for various types of prescription would be helpful. These might be regular prescriptions, for drugs given once only (including premedication), for "when required" and for drugs to be taken home, for example. There should also be brief notes as outlined below.

a) All the required details must be completed every time a preparation is prescribed, i.e. date, name of drug, dose, route and times of administration.

b) The name of the drug used should be the Approved Name whenever possible. This will be the name given prominence on the container supplied by the pharmacy.

c) The route must be clearly stated so as to leave the nurse in no doubt about the prescriber's wishes.

d) Times of administration must be stated precisely. The use of abbreviations and Latin must be avoided, as these are liable to be misinterpreted. Likewise if a preparation is to be given only when required, the symptom for which it is to be given should be stated as well as the minimum interval between doses.

e) The symbols used by the pharmacists are to mark or annotate the prescription sheet in any way should be explained.

3. The administration of medicines.

a) Here should be given the policy on which nurses may administer medicines. Normally, of course, this will be done by the sister or staff nurse. In addition, in the case of Dangerous Drugs, a witness will be required. There are other drugs, especially those which affect the central nervous system, which should be subject to special control and administered only in the presence of a witness. This should be clearly explained.

b) The method of using the recording system should be described in detail. Here again the use of a specimen sheet with sample entries would prove useful. The notes on the recording system should also include instructions on what to do should a dose not be given for any reason.

Part 2

In addition to the information contained in the booklet described in Part 1, the nursing staff will also require information about the ordering, handling and storage of drugs on the wards. It would be better if these topics could be dealt with separately, since they concern mainly the nursing staff rather than the doctors. In many hospitals, a series of 'Procedure Sheets', in which a variety of ward procedures are documented, is circulated to all the wards. These sheets are kept on the ward for reference. One or more sheets dealing with the following points in connection with medicines might well form part of such a series.

a) Ordering the drugs from the pharmacy - when and how to order, the need for properly authenticated written orders, when deliveries may be expected and any other relevant information.

b) Storage and security - which cupboards are to be used for the storage of various classes of drugs and other preparations, such as reagents; where the keys to each cupboard are to be kept, and whose responsibility it is to balance the stocks of Dangerous Drugs and those subject to special control.

c) The conduct of the medicine round - the equipment needed; patient identification and the methods of administration of various types of preparation.

Note

To avoid possible confusion, the same terms should always be used to describe the prescription sheet when preparing information booklets or procedure sheets. A study of such literature from several different hospitals showed that the expressions treatment sheet/card, prescription sheet/card, case paper, bed card and drug sheet were all used to describe the prescription sheet. Sometimes several different names appeared in the procedure sheets of one hospital. It has been suggested that the term 'prescription sheet' is the best one, and so should be used at all times.

APPENDIX V

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