

## *General-practitioner maternity units*

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**SUMMARY.** A study of information available for monitoring care was made during 1974 in 46 general-practitioner maternity units in the South-west of England. The information available did not form an adequate basis for monitoring at area level. Although many deliveries take place in general-practitioner maternity units in the South-west, perinatal mortality rates are low. Transfer of babies to a consultant unit, after the delivery is, however, commoner than elsewhere in England and Wales.

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### Introduction

Much has been written on the ideal place for normal confinement. There has been comment on the competing advantages of the specialised unit, the general-practitioner maternity unit, the home, and the short stay unit.

For at least two decades the trend has been towards hospital delivery in the United Kingdom. The Peel Report (Department of Health and Social Security, 1970) recommended that in the long term small isolated general-practitioner obstetric units should be replaced by larger combined consultant/general-practitioner units on the site of district general hospitals. This was argued to be in the interest of improving perinatal mortality rates which have become one of the main measurements of quality control for obstetric services.

None the less, the Chief Medical Officer (Department of Health and Social Security, 1974) reported that the perinatal mortality rate for England and Wales ranked eighteenth compared with 31 other countries quoted. Countries with lower perinatal mortality rates included Sweden, with near universal delivery in hospital, and also Denmark and Holland where delivery at home is common.

In this study I tried to obtain information in order to monitor care in isolated general-practitioner maternity units. The performance of maternity units is dependent on the selection of cases and also on the inputs of skill and services available in the units. The perinatal mortality is a measure of the outcome and is affected by all these factors. This may, however, be too crude a measure, particularly for assessing the work of small units delivering as few as 100 patients per year.

In theory the best measure of outcome for an obstetric service would be the proportion of conceptions identified at a particular stage of pregnancy which reach a set level of performance at a defined period post partum. This study examined only what information could be currently obtained on the working of 46 isolated general-practitioner maternity units operated by the South-western Regional Hospital Board immediately before re-organisation of the National Health Service in 1974. This was part of a larger study of general-practitioner maternity units undertaken during the second year of the M.Sc.(Social Medicine) course at the London School of Hygiene and Tropical Medicine.

The South-west is, after East Anglia, the least populated region in England (Dent, 1971). It is characterised by having a quarter of its population in towns of less than 20,000 inhabitants. As more than 40 per cent of hospital deliveries take place in the general-practitioner units it has a pattern of organised maternity work markedly different from most parts of Britain, but nevertheless has a perinatal mortality of 20 per thousand live and still births. This equals the regions with lowest perinatal mortality rates in the United Kingdom (Department of Health and Social Security, 1971).

In view of this combination of large numbers of deliveries in general-practitioner units and one of the lowest perinatal mortality rates in England it seemed appropriate to examine the information available for monitoring obstetric units in the South-west.

### Method

The following types of information about general-practitioner obstetric units in the South-west were examined:

(1) *Summary Hospital Form 3* of the hospital inpatient enquiry, and national and regional summaries from the Statistics and Research Division of the Department of Health and Social Security.

(2) *Hospital inpatient enquiry* tapes, to ascertain the proportion of babies transferred from delivery to special care units in various regions of England and Wales.

(3) *Information obtained at a personal visit* to each unit, checking facts available for the last 50 cases in the delivery register, facilities available and details such as distance from a consultant unit.

Study of these types revealed the limitations of information from sources outside the hospital used at present, and showed possible means of obtaining information more useful not only at regional level, but also to clinicians in the units.

### Results

#### (1) *SH3 Statistics*

These were often the main methods used for monitoring obstetric work at quarterly maternity liaison meetings held in each area. The statistics showed that general-practitioner beds were mostly less intensively used than consultant beds, but perinatal mortality rates that were reported to the Committees were related to very small numbers and hence of little use in monitoring quality of care.

#### (2) *DHSS summaries*

It was clear that more maternity work is done in general practice in the South-west than elsewhere in England. This may reflect the generally smaller lists of that part of the country with its characteristically dispersed towns. The provision of consultants in obstetrics and gynaecology per 100,000 of the population was lower than the average for England and Wales.

#### (3) *Delivery registers*

From an examination of delivery registers and other sources it was clear that the input of cases varied both in numbers and type.

As few as 18 deliveries per year or as many as 800 per year were reported from different units. All accepted primigravidae for delivery but 64.1 per cent did not deliver any over 30 years of age. The time for transfer to consultant care varied from as little as two minutes to over an hour, but this varied with distance and variations in season and time of day.

Clearly some units in the South-west function as specialised institutions with regular planned operative work and active use of induction methods. Most units, however, limited themselves to essentially normal midwifery without the use of operative interference.

#### (4) *Check-list examination*

The check-list examination of facilities provided, showed greater homogeneity though it did identify some particular examples of poor provision for infant resuscitation in units considerable distances from consultant support.

#### (5) *Hospital Inpatient Enquiry*

The HIPE study of transfer rates of babies to consultant care showed the South-west to have the highest rate of transfer for general-practitioner cases of any region in England and Wales despite a low perinatal mortality rate (table 1).

TABLE 1  
TRANSFER OF NEONATES TO SPECIAL CARE FACILITIES AFTER DELIVERY IN GENERAL-PRACTITIONER  
MATERNITY UNITS WITH PERINATAL MORTALITY, BY HOSPITAL REGION

Hospital region	Deliveries in general-practitioner units (as % of total deliveries in parentheses)		Transfer of patients to special care (rate per 100 deliveries in parentheses)		Perinatal mortality rate
	Number	%	Number	%	
South-western	1495	(40.8)	111	(7.4)	20
Wessex	505	(39.2)	15	(3.0)	21
Birmingham	1882	(36.5)	44	(2.3)	20
Sheffield	1475	(31.7)	70	(4.7)	22
Leeds	1362	(30.0)	81	(5.9)	22
Wales	874	(27.4)	47	(5.4)	24
East Anglia	375	(24.1)	18	(4.8)	20
Manchester	1469	(22.5)	64	(4.4)	25
South-east Met.	751	(22.3)	34	(4.5)	20
Newcastle	683	(16.9)	37	(5.4)	23
South-west Met.	412	(14.3)	17	(4.1)	20
Liverpool	426	(12.6)	28	(6.6)	26
North-east Met.	511	(12.1)	19	(3.7)	22
Oxford	323	(11.0)	18	(5.6)	20
North-west Met.	264	(6.7)	10	(3.8)	20

### Discussion

The marked use of general-practitioner maternity units in the South-west of England was not accompanied by high perinatal rates. Transfer of the baby after delivery in a general-practitioner unit was, however, more common.

As we cannot yet evaluate obstetric services using morbidity in infancy, I suggest the transfer rates for babies can be an outcome measure, particularly in isolated obstetric units.

The performance of obstetric units cannot be judged at area level by the information now available. Information at present available from maternity registers, with check lists of facilities available in each unit, would be useful in creating resource rating and performance charts similar to those that have already been used for accident and emergency units (Accident Services Review, 1970).

During this study, efforts were also made to examine other values that might be associated with a decentralised maternity service. These included economy in travelling and convenience to patients and their relatives as well as the value of having birth taking place within the local community.

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