

# **The Remote and Rural Midwifery Service**

## **CONTENTS**

<b>Introduction</b>	<b>3</b>
<b>Current Service</b>	<b>3</b>
<b>The Model of Care</b>	<b>4</b>
<b>The Workforce</b>	<b>5</b>
<b>Education and Clinical Competences</b>	<b>6</b>
<b>Commitments</b>	<b>12</b>

## Introduction

It is essential that remote and rural areas build sustainable maternity services so that women are encouraged to give birth locally to engender vibrancy within communities. The purpose of this paper is to identify the implications of the establishment of Community Maternity Units (CMUs) in remote areas upon the roles and competences of midwives working in those areas. Outcomes of the paper will draw from the work previous undertaken by The Expert Group on Acute Maternity Services (EGAMS)<sup>1</sup> and the Workforce Planning Review of Obstetric, Maternity and Gynaecology Services<sup>2</sup>.

There are a number of drivers which will impact upon the contribution of doctors to maternity services in the future including the effect of the Modernising Medical Careers, the New Deal, working time legislation and the recent GMS and Consultant Contracts<sup>3</sup>. Other drivers include the effect of demographic changes in the obstetric population of Scotland. In five health board areas the populations are predicted to rise (Lothian, Forth Valley, Borders, Fife and Shetland) but to fall in the rest of the country by up to 10%, in particular the Western Isles where a fall of 17% is predicted<sup>4</sup>.

## Current Service

The work of the Remote and Rural Project established that there are different models of maternity care within each of the Rural General Hospitals (RGH) and Community Hospitals, along with a community midwifery service. The EGAMS Report,<sup>5</sup> defined the Rural General Hospitals (RGHs) as Level 1C facilities<sup>6</sup>, except Caithness and Western Isles, which is defined as a Level IIa facilities<sup>7</sup>. The Community Maternity Units in the remote and rural areas of Scotland (as defined by the Clinical Peripherality Index<sup>8</sup> and map illustrated in Appendix 1) are detailed in Appendix 2. Analysis of the most recent validated data for year ended 2005, it can be seen that the number

---

<sup>1</sup> (2002) Ibid

<sup>2</sup> (2001) *A Framework for Maternity Services in Scotland* 2001 February, SEHD

<sup>3</sup> (2004) *Workforce Planning Review for Obstetrics, Maternity and Gynaecology* RCOG 2004

<sup>4</sup> (2007) *Population Dynamics*, June 2007 Scottish Public Health Observatory [www.scotpho.org/web/site/home/population](http://www.scotpho.org/web/site/home/population)

<sup>5</sup> (2002) *The Expert Group on Acute Maternity Services in Scotland Report*, 2002 Scottish Executive Health Department

<sup>6</sup> Community Midwife Unit attached to non-maternity Hospital

<sup>7</sup> Consultant Delivered service <500 births

<sup>8</sup> (2004) *Clinical Peripherality Index* Swan and Godden, Centre For Rural Health

of births in each centre is low, ranging from less than 1 birth every 2 months on Arran to 17 per month in Caithness.<sup>9</sup>

Emergency caesarean sections are regularly performed in 4 RGHs; in two hospitals (Caithness and Western Isles) these are carried out by locally based consultant obstetricians while in the other two, the caesarean sections are performed by consultant surgeons. Appendix 2 shows the number of elective and emergency caesarean sections undertaken in two time periods 2003/4 and 2004/5<sup>10</sup>. Over the period, the proportion of births by caesarean section has increased, from 17.5% in 2003/4 to 19.6% in 2004/5 however the proportion of these undertaken electively has increased from 40% to 45%, but the number of caesarean sections performed in the RGHs is small.

## The Model of Care

Sustainable maternity services must be integrated within the community and aim to maximise the opportunities for local delivery. The aim of a remote and rural midwifery service should be to maximise the opportunities for local delivery, and promote normality through working in partnership with women to reach clinical decisions based on a robust risk management approach.

The principles contained within the national programme of work “Keeping Childbirth Natural and Dynamic (KCND)” should be followed. These principles, although focusing on midwifery care, reinforce the importance of working within a multidisciplinary network of care. Key aims are to: introduce a multidisciplinary pregnancy year pathway for women; and support the implementation of a midwife managed care programme to accompany this.

The Expert Group on Acute Maternity Services (EGAMS) Report,<sup>11</sup> also recognised the patient's choice to deliver close to home and identified levels of maternity care including remote and rural settings ranging from Level 1a (home delivery) to Level 1C facilities (Community Midwifery Unit attached to a non-maternity hospital)<sup>12</sup>.

---

<sup>9</sup> [www.isdscotland.org/isd/files/mat\\_bb](http://www.isdscotland.org/isd/files/mat_bb)

<sup>10</sup> ISD data for Births is presented differently from other data relating to acute care. The only meaningful way to present the Caesarean section rate is as presented.

<sup>11</sup> (2002) *The Expert Group on Acute Maternity Services in Scotland Report*, 2002 Scottish Executive Health Department

<sup>12</sup> Community Midwife Unit attached to non-maternity Hospital

The remote and rural project is committed to the provision of local community midwife units (CMUs) for women with low obstetric risk, recognising patient's choice of delivery close to home. Regional managed clinical networks (MCNs) should be developed to streamline care during pregnancy and during labour".

Where there is a Community Midwifery Unit (CMU) it should be part of an explicit and linked referral network, with access at a distance to obstetricians and paediatricians in larger centres through e-health links to support clinical decision-making. Where the CMU is situated within a Rural General Hospital (RGH) there will be local support from anaesthetists and in island settings an emergency caesarean section service will be provided by the general surgeons as a minimum. Integral to the service is teamwork, multi-professional and interdisciplinary working, communication and education. A vital support and emergency backup for midwives and GPs in remote areas will be the Scottish Ambulance Service and the Neonatal Transfer Service.

The entry criteria to Levels Ia-d intrapartum care are identical and are as follows:

- Low risk, healthy women;
- Singleton pregnancy;
- Cephalic presentation;
- Spontaneous labour between 37 weeks gestation and 40/52 + 10 days
- Primigravidae or multigravidae <5

The exit examples for Levels Ia-d are purposely not all inclusive and these should be considered and specifically agreed locally within the overall network of maternity provision. Any woman with maternal medical and surgical history, poor past obstetric and neonatal history, and/or present pregnancy morbidity should be referred for incremental care.

## **The Workforce**

The midwife will be the lead professional in maternity care. The workforce in remote and rural areas will largely consist of qualified midwives, some student midwives, maternity care assistants and where relevant allied health care professionals (AHPs) such as physiotherapists. In certain areas there may be GP involvement and support. Where there is a CMU, staff should be integral

to the community teams, rotating into and out of the unit following the woman's pathway of care.

Remoteness presents particular challenges for the provision of maternity care in Scotland and innovative ways to accommodate and support pregnant, labouring and postnatal women in remote parts of Scotland must be considered. These might include developing skills and competencies not necessarily historically associated with that specific profession. There will be local variations in the make up of maternity teams and therefore some GPs will remain directly or indirectly involved in the delivery of maternity care to low risk women, especially women who have existing co-morbidities or intercurrent illness. Depending on the level of care provided within local primary care settings, the GP will require to have minimum set of maternity skills to manage such situations and this will therefore require to be reflected in their training.

## **Education and Clinical Competences**

In 2002 the EGAMS report detailed a list of core skills and competencies identified as essential for professionals to have in order "to provide effective and safe care for low-risk women and to manage obstetric emergencies within remote and non-specialist units". These skills are further detailed below. The range of core skills required mainly by midwives but relevant to all staff in order to keep birth normal are as follows<sup>13</sup>:

- Confident to provide intrapartum care in a low technology setting;
- Comfortable to use embodied knowledge and skills to assess a woman and her baby as opposed to using technology;
- Able to let labour 'be' and not interfere unnecessarily;
- Confident to avert or manage problems that might arise;
- Willing to employ other options to manage pain without access to epidurals;
- Responsible for outcomes without access to on site specialist assistance;
- Confident to trust the process of labour and be flexible with respect to time.

All competencies correlate to established good practice; implicit in this is maintaining patient safety and clinical governance. It is important that all professionals working in these

---

<sup>13</sup> (2002) *The Nursing Supportive Care in Labour Trial*, 2002 October, Hodnett et al, Paper presented at Normal Labour and Birth Research conference

environments have the confidence, clinical governance, skills and professional judgement to provide a consistently high standard of care for the woman and her baby. Another issue is that once such competencies are achieved it is vital that the level of skill and expertise is maintained.

### **Counselling and communication skills**

The professional must have the skill to communicate clearly with women, their partners and maternity care team members particularly when problems become evident. These skills are also central to obtaining good maternal history and providing informed choice about care options.

### **Clinical judgement and decision making skills**

All maternity care professionals must have the clinical judgement and decision-making skills required to work in their particular working environment. In many instances midwives may be aware of the appropriate line of diagnosis and care, but will refer to another midwife or doctor for assurance that the decision is right. The appropriate referral mechanism should be utilised. This option may not be directly available to a midwife working in a CMU, however even though the unit may be geographically distant to the consultant unit, this assurance can be obtained through e-health links.

### **Maternal history taking**

CEMD<sup>14</sup> highlighted the importance of good history taking at booking. It stressed the importance of a risk and needs assessment at booking which should be reviewed regularly. Crucial to ensuring a quality service for each woman and her family is the management of risk and identification and prevention of complications.

### **Risk assessment and management skills**

Risk assessment should be based on exclusion, rather than inclusion, criteria and careful attention must be paid to the changing nature of risk during the pregnancy care episode, managing uncertainty and adopting strategies to minimise risk. Assessing and managing risk within maternity services is a complex and dynamic process and implicit in this is the acknowledgement that there is no such thing as 'zero' risk. Management of care must balance the risks between the available levels of maternity care and informed patient choice and local access. The decisions women make about their care should be based on the best available

---

<sup>14</sup> (2001) *Confidential Enquiry into Maternal Deaths*, 2001 CEMD Report

evidence given at appropriate times during the care episode. Women have the opportunity to make truly informed choices about their care, whilst simultaneously having the professional advice and support of professionals to help inform the decision. In these instances, it is vital that there is a clear understanding by both parties of the nature of clinical and non-clinical risk.

Home Birth, stand-alone CMUs and CMUs attached to non-obstetric RGHs should have the **same exclusion criteria**, risk management strategy and emergency support mechanisms. It is recognised that using professionals with little experience of maternity services might in fact increase the risk to the mother and her baby, as interventions may be inappropriate or untimely. If women are led to believe that some form of medical emergency support is available on site, this might lead to an increase in expectations and associated dissatisfaction if expectations are not met. Women who do not fit the criteria for delivery in a CMU may opt to deliver in a CMU alongside a non-maternity RGH in the mistaken belief that there is more support to deal with emergency situations.

Non-clinical risk issues must be considered and include:

- Geography and weather conditions;
- Nature and condition of emergency equipment;
- Use of emergency equipment ;
- Nature of emergency back-up and support;
- Expected gap between current and necessary transfer arrangements.

Within the Framework for Maternity Service, basic entry criteria were identified for Level I low risk care and more complex Level III care. To identify the range of maternal and fetal morbidities, which are appropriately managed in Levels I and III care maternity units, exclusion criteria have also been developed for all levels of maternity care. It is proposed that based on the CMU audit and other professional discussions, these criteria need to be reviewed. This report recommends that the Ministerial Action Group on Maternity Services (MAMS) lead this review.

### **Recognition of the ill mother and baby**

Substandard care is sometimes difficult to evaluate but CEMD assessors for 1997-1999 Enquiry classified 60.4% of direct deaths and 22% of indirect deaths as having some form of substandard care. CEMD<sup>15</sup> identified that for the first time the number of indirect deaths from medical conditions exacerbated by pregnancy was greater than from conditions which directly arise from

---

<sup>15</sup> Ibid

pregnancy. Nearly half of the deaths in the indirect category were from diseases of the central nervous system, including cerebral haemorrhage and epilepsy. The remainder died of mainly infectious diseases, asthma, diabetes and blood disorders. The report highlighted the importance of identification and support of women with higher risk pregnancies who appear unsuitable for midwife-led care and made the explicit statement that midwives should be prepared to decline to take responsibility for high risk cases where involvement of an obstetrician is essential. Integral to the provision of a quality maternity service is the ability to identify and care for ill women and babies. All practicing midwives must have the necessary skills to recognise and initiate appropriate care for ill women and their babies.

### **Venepuncture and intravenous cannulation and the subsequent management of IV fluid replacement**

Not all midwives have this skill although most units run courses and there are anatomically correct models which can be used for practise purposes. However, it is recommended that in a CMU, there should be one practitioner available who has these skills. Both subgroups stressed that as well as being able to cannulate the professional must have the skills to manage IV fluid replacement. There are opportunities for professionals to refresh these skills in areas such as day surgery.

### **Adult resuscitation**

CEMD<sup>16</sup> stressed the importance of managing emergencies such as severe haemorrhage. This is a core skill of every midwife and health care professional but in order to maintain competency midwives must attend an annual update course. This course must include early identification of and care of the ill woman, including the recognition of sepsis.

### **Management of obstetric emergencies**

Obstetric emergencies including severe haemorrhage, cord prolapse, shoulder dystocia, breech delivery and postpartum haemorrhage are addressed in the Advanced Life Support in Obstetrics (ALSO) course. The Scottish Multi-professional Maternity Group (SMMG) was established to help develop multi-professional training programmes in obstetric and neonatal emergency skills including a course in normality and an examination of the newborn course.

---

<sup>16</sup> Ibid

## **Neonatal resuscitation**

All staff must have the skills and competencies to assess, resuscitate and stabilise the neonate prior to on-going management. The appropriate skills would include ventilatory support by *bag and mask* as opposed to tracheal neonatal intubation. Particular emphasis should be paid to the recognition of the ill neonate. Professionals working in remote areas must have undertaken the Neonatal Advanced Life Support (NALS) course.

## **Examination of the baby**

Currently this examination is completed by a paediatrician, advanced neonatal nurse practitioners and, in some cases, a GP. In order to provide a seamless service, especially in remote areas and with early postnatal discharge, midwives and GPs must be able to complete the gross initial inspection and detailed examination of the baby. The midwife must be able to understand the relevance of the examination, to examine assess and identify normality and abnormality, and be able to refer appropriately. A recommendation from QIS in a recent report on CMUs recommended that examination of the newborn should be included in the skill set of midwives working in CMUs and that they should be supported by regional networks where advice is required.

## **Pain management**

Units in remote areas will not offer epidural analgesia so midwives and GPs must have sound understanding of pain assessment and management. Included in this is a knowledge of the variety of pain management techniques (pharmacological and otherwise) which are appropriate and effective for intrapartum care (e.g. use of hydrotherapy).

## **Assessment, suturing and management of perineal injury**

This should include management of perineal pain, adequate assessment of perineal trauma, skilled technique to repair the perineum and to refer appropriately.

## **Prescription of Drugs**

This is an area of concern as current systems (PGDs and Nurse/Midwife prescribing codes) do not cover drugs that midwives might require to prescribe in a CMU. Work in this area is ongoing. The midwife working in a CMU must have the skills and ability to prescribe and dispense appropriate

drugs, especially analgesia in labour, drugs used in resuscitation and those involved in normal childbirth such as Konakian and Anti D. There is currently work underway commissioned by NES and QIS to devise a training programme for midwives prescribing.

### **Additional competencies which will be required for remote units**

Skills which are of particular importance for midwives working in remote and rural practice are those of risk assessment, decision-making, accountability and delegation. In addition in remote and rural practice, the following areas of competencies should be achieved by at least one team member:

***Ultrasonic scanning*** — currently some midwives and GPs provide an ultrasound scanning service. Basic scanning skills are required with the possible development of some level of fetal anomaly scanning with adequate expert support.

***Ventouse lift-out delivery*** - a common complication and cause for referral in low risk women is delay in the second stage of labour, it was agreed that Ventouse delivery should be considered as a team midwifery competency.

### **Maintaining Clinical Skills and Competencies**

Having achieved the requisite competencies appropriate to work in these specific levels of care, it is essential that maternity care professionals maintain and wherever possible develop these skills. For professionals working in small or remote clinical areas it may be more difficult to maintain competence in elements of maternity care. These individuals should utilise computer based simulation programmes as 'drill' scenarios to help maintain competence and skills and will need to spend allocated blocks of time in larger maternity units within their network. Video conferencing was identified as a way in which maternity care professionals can get support and maintain skills without actually being on-site.

## Commitments

Community Health Partnerships should identify the skill mix of their local maternity teams.

The six identified Rural General Hospitals (RGHs) should move to the provision of Community Midwifery Units (CMUs).

The CMUs must be part of a formal network with a maternity hospital or tertiary centre, to support the remote CMU.

The network must develop guidelines for transfers of patients with the CMUs

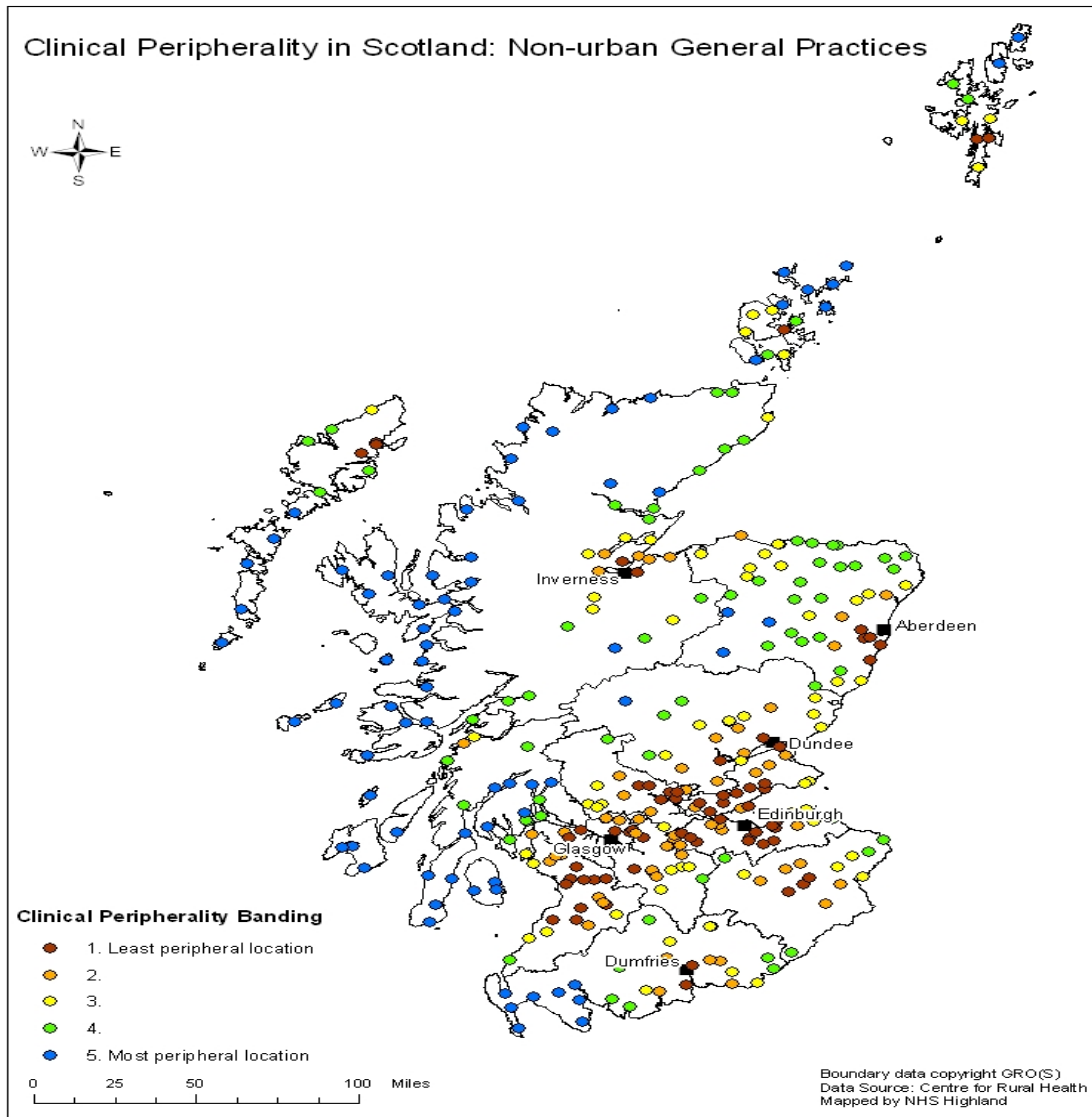
The midwife must be the lead professional in the care of low risk pregnant, labouring and post-natal women.

Midwives in remote areas and CMUs must have the skill set listed in the core competences, plus those required for working in remote areas as a minimum. These competences must include risk assessment and management.

## Forward Issues

Rural Boards should commission their Supervisors of Midwives to audit the skills set of their midwives against the core competences listed.

The exclusion criteria and entry levels for intrapartum care in a Level 1c unit should be reviewed and this work should be led by the MAMS Group.



<b>Current Activity</b>
-------------------------

## Births

NHS Board	Table 1	Total Births			
		Year End Mar 1995	Year End Mar 2000	Year End Mar 2004	Year End Mar 2005
Highland	Caithness	285	228	224	205
	Belford, Fort William	42	28	47	35
	Oban Maternity/Lorne and Islands, Oban	55	49	52	32
	Dunoon	46	31	30	33
	Mid Argyll, Lochgilphead	14	22	15	20
	Mackinnon, Skye	-	-	7	17
	Portree, Skye	12	8	-	-
	Vistoria, Rothsay	28	12	12	16
	Campbeltown	26	6	5	8
Western Isles	Western Isles Hospital	229	215	208	178
Orkney	Balfour	147	101	98	127
Shetland	NHS Shetland Gilbert Bain	215	193	157	154
Dumfries and Galloway	Stranraer Dalrymple/Garrick	73	73	74	73
Ayrshire and Arran	War Memorial	13	9	6	7
	<b>All RGH/CMU</b>	<b>1099</b>	<b>975</b>	<b>935</b>	<b>905</b>
	<b>Scotland</b>	<b>60261</b>	<b>53872</b>	<b>50764</b>	<b>52721</b>

Data Source: SMR02 Information and Statistics Division NHS Scotland

## Caesarean Sections

Table 12	Total Births	2003-2004				Total Births	2004-2005			
	2003-2004	Emergency		Elective		2004-2005	Emergency		Elective	
		No.	% of total	No.	% of total		No.	% of total	No.	% of total
Lorn & Isles/Oban MH	52	0	0	0	0	32	0	0	0	0
Caithness	224	33	14.7	22	9.8	205	43	21.0	20	10.2
Belford	47	0	0	0	0	35	0	0	0	0
Balfour	98	10	10.2	15	15.3	127	8	6.3	19	15.0
Western Isles	208	20	9.6	19	9.1	178	14	7.9	25	14.0
Gilbert Bain	157	19	12.1	0	0	154	13	8.4	2	1.3
All RGH	786	82		56		731	78		66	
Scotland	52335	8060	15.4	4710	9.0	52721	8119	15.4	5008	9.5

Data Source: SMR02 Information and Statistics Division NHS Scotland