Bliss Baby Report 2008
Neonatal care in Scotland

Bliss
for babies born too soon, too small, too sick

Background

Scotland has a higher rate of premature birth than England or Wales, and this rate has been steadily increasing for at least the last 25 years. In 1980, 5.7 per cent of babies were born premature. In 2005, the figure was 7.9 per cent.[1]

Scottish neonatal care is characterised by large, highly specialised units concentrated in urban centres (predominantly Glasgow and Edinburgh). Unlike in England, there are no formal clinically managed neonatal networks. Due to large distances between sites, neonatal transport is of even greater importance in Scotland than elsewhere in the UK.

Neonatal transport

The transport service is arranged into three regional teams, with four host sites: Aberdeen and Dundee for the northern region, Edinburgh in the southeast and Glasgow for the western service. This transport system is the most developed in the UK, and it evolved as a result of a working group commissioned by the Scottish Government. The recommendations of the group were endorsed in full, and approximately £2 million funding per annum has been provided since 2003. In contrast to many transport services in England, the service is made up of dedicated transfer teams. These teams are not part of the staffing quota within units, as they are intended exclusively for accompanying babies during transfer. There are four dedicated neonatal ambulances, and air transfers are provided when necessary, using the Air Wing of the Scottish Ambulance Service (SAS).[2]

However, there are still challenges with Scotland's transport systems, which are under increasing pressure. In July 2008, Quality Improvement Scotland's (QIS) Perinatal Collaborative Transport Study (CoTS) reported on some of these difficulties.[3] CoTS looked at the 599 in-utero transfers that took place over a six-month period. It found that 86 of them (14 per cent) were between level 3 units. The main reason for these transfers was a lack of staffed Intensive Care cots. It also found that level 3 units were frequently unable to accept referrals from other units. The report recommends introducing a national system to coordinate transport.

Government action

The formation in the summer of 2006 of the Maternity Services Action Group (MSAG) has been an important development in Scottish neonatal care. This influential group advises ministers and aims to improve the nature and quality of maternity services from pre-pregnancy through to very early infancy.

Bliss sits on MSAG's neonatal subgroup, which has been working on a comprehensive report which will map out a future plan for neonatal services in Scotland. This report is expected to be published in autumn 2008. Its recommendations will need to be acted on by Government and Health Boards alike to bring about the necessary improvements in care.

Bliss survey of neonatal units in Scotland

In spring 2008, Bliss sent a Freedom of Information request to every neonatal unit in the UK. The data returned to us provides us with a comprehensive picture of the care provided for sick and premature babies. All 16 units in Scotland responded to our survey.[4]

Of the 53,000 babies born in Scotland each year,[5] approximately 8,000 are admitted to Scottish neonatal units.[6] This is roughly one in seven babies. Of these 8,000, approximately 1,500 need Intensive Care. This equates to one baby being admitted to neonatal care approximately every hour.

Staffing

In 2007, the number of specialist neonatal nurses increased by two per cent on the previous year. This means that the rate that neonatal posts were created in 2007 was more than double that in 2006. This may be evidence that Health Boards are starting to place more emphasis on recruiting and training neonatal nurses.

Ten of the 16 units in Scotland gave us information about the number of babies they admitted, the amount of care they needed and their nurse staffing in 2006 and 2007. Over the same period, the amount of care provided increased by one per cent. From this data we can estimate how much these units were able to meet the nursing needs of the babies admitted during this time. The table below sets out the results. All staffing figures relate to whole time equivalents.[7]

Ten out of 16 units provided information	Total number of nurses		Total number of consultants		Number of units meeting BAPM standards		Shortage of nurses in those units not meeting BAPM standards	
	2006	2007	2006	2007	2006	2007	2006	2007
	402	414	45	43	2	3	100	101

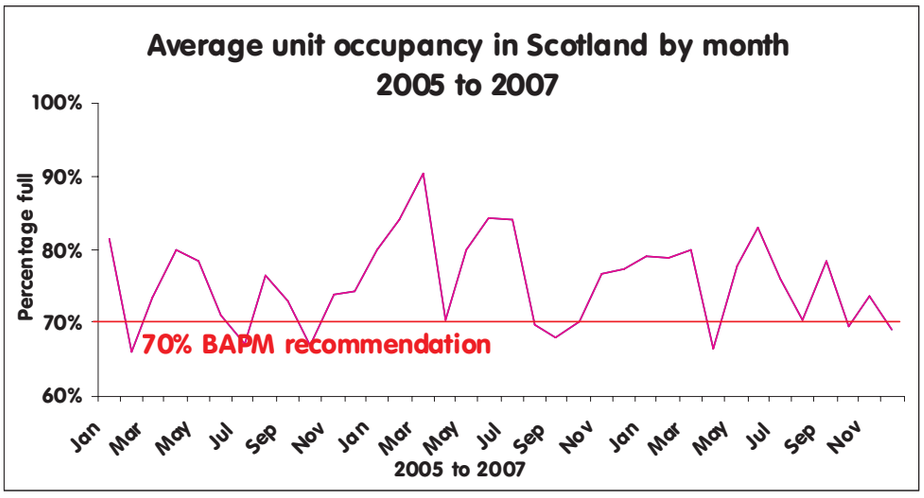
Out of the ten hospitals that provided information, three of them had enough nursing staff to provide the care that the babies they admitted in 2007 needed. To receive the minimum nursing standards that experts say they require, the babies admitted to the seven hospitals not meeting the BAPM standards needed an extra 101 nurses. While the number of nurses has increased, the amount of care that babies needed also increased, so the shortage has actually remained unchanged.

What's more, experts maintain that this is an underestimate of the number of nurses a unit actually needs.[8] This is because nurses need time away from their clinical duties to study new techniques and update their knowledge. It is also because certain nurses will have a specific responsibility such as helping mothers to breastfeed or looking after the training of other nurses. These nurses will be included in the unit's total number of nursing staff but they will not necessarily be available to care for babies. All of this means that the shortage is underestimated.

Medical staffing, in common with some other parts of the UK, is also increasingly a concern. In contrast to the nursing numbers, the number of consultants covering neonatal care across Scotland actually fell by two per cent between 2006 and 2007. With the imminent impact of the European Working Time Directive, limiting doctors to a 48-hour maximum working week, this is a significant cause for concern.

Occupancy

Despite large centralised units and an excellent transport system, many Scottish units (43 per cent) are operating above the recommended occupancy level of 70 per cent. Occupancy rates across Scotland have stayed relatively consistent over three years, fluctuating over recommended levels for most months. The national average was 71 per cent in 2005, 75 per cent in 2006 and 73 per cent in 2007 (see chart on page 3).



However, there is a worrying trend of units reaching or exceeding 100 per cent capacity. In 2005, one in five units went to 100 per cent capacity or more at some time. In 2006 and 2007, this happened to one in three units. Most worryingly, the units reaching 100 per cent capacity are the larger, most specialised, Intensive Care units.

The shortage of neonatal nurses combined with the high levels of activity means that many Scottish units are overstretched. If a unit becomes full, staff will always provide emergency care to any new baby that needs it. However, this means they may have to find an appropriately staffed cot in another unit to move the baby to. Between 1 April and 1 September 2007, 43 per cent of units in Scotland had to close to new admissions at some point. They did this for an average total of six days during these five months. This would mean that Scotland's baby units were closed for a total of over 200 days a year.

Transfers

Bliss funded Dr Lesley Jackson to conduct further research to accompany the CoT Study, looking at parents' experiences of in-utero transfers.[9] The financial and psychological impact of transfers on families is often overlooked. The issues highlighted in Dr Jackson's study are echoed in the parents' chapter of this report. While parents often say that the medical care for their babies is excellent, the crucial 'softer' side of care, such as the importance of clear communication and support for breastfeeding, can get neglected.

One in five mothers reported family difficulties as a result of the transfer, while over half of them felt "isolated" at their destination hospital. Over half of partners were unable to travel to the hospital the mother was transferred to. Almost a third of parents reported financial difficulties related to the transfer. These parents were also more likely to have problems with childcare, travel and accommodation and were more likely to have a longer stay in hospital. More than anything, the parents' own words tell the obvious emotional turmoil of their circumstances. One mother said:

> **'[Care was] excellent, we were constantly updated on our baby's care and kept fully informed, the only thing I found a little frustrating was the lack of support to help me breastfeed once my baby was off the tube feed. I felt the nurses were pushing me to give bottles to make their lives easier, I did persevere and with the help of the breastfeeding counsellor on the post natal ward successfully left hospital breastfeeding.'**

Bliss often hears from parents that while the care their baby receives is of an exceptionally high standard, medical and nursing staff rarely have time to answer their questions fully. This is a side-effect of the shortage of nurses; not only does it affect the care that babies receive, but also the communication that parents receive. This can further have an impact on how involved families feel in their child's care.

Conclusion

While there are encouraging signs that the shortage of neonatal nurses can be tackled, there is, however, a very long way to go. Health Boards need to commit to a long-term recruitment and training strategy that takes into account the rising birth rate and increasing demand for neonatal care.

This demand is evident with more units in 2006 and 2007 exceeding 100 per cent capacity, resulting in babies being transferred because of a lack of available cots. It is worrying that the units that most commonly exceed capacity are the larger, most specialised, Intensive Care units.

Although transport services for newborns in Scotland are among the best in the UK, pressure on the service is increasing, and the needs of a baby's family can be sorely neglected if long distance transfer is required.

Recommendations

- Neonatal care must be provided in complete compliance with BAPM 2001 standards. Babies are entitled to the same level of nursing care as adults and children in intensive care. Anything less than one to one nursing for babies in intensive care is unacceptable.
- Health Boards must commit to a long-term recruitment and training strategy for the whole neonatal workforce to achieve full BAPM compliance by 2015 at the latest. Changes in the birth rate, the demand for neonatal care and retirement of the existing workforce must be factored into this strategy.
- The Scottish Government should provide whatever resources are necessary to help Health Boards to achieve the recommendations of the Maternity Services Action Group review.
- Neonatal care must be seen as an integrated part of maternity services. Increasing the number of midwives, neonatal nurses and community neonatal nurses must be part of a long-term strategic plan to improve care for mothers and babies.
- Each unit should provide a support pack for families of babies who need to be transferred. The pack should include information about the unit and local area that they are going to and help them to access financial support to cope with the additional burden that they face.

References

1 ISD Scotland National Statistics (2006), *All births by term and birthweight*, available at http://www.isdscotland.org/isd/files/mat_bb_table7.xls

2 Hallsworth et al, *The Provision of Neonatal Services: Data for International Comparisons*, RAND Europe (2008).

3 NHS Quality Improvement Scotland *Perinatal Collaborative Transport Study (CoTS)*, Dr Charles Skeoch et al (2008).

4 Surgical neonatal units were not included in the survey. The Special Care Baby Unit at Dr Gray's Hospital was not included because the unit was closed to admissions from April to September due to high levels of staff maternity leave.

5 ISD Scotland (2006).

6 CMA Medical Data *Directory of Critical Care* (2008).

7 This is a unit of measure that is equal to one filled, full time salaried position.

8 *Neonatal Intensive Care Review – Strategy for Improvement*, Department of Health (2003).

9 Jackson L, Skeoch C, Wilson AM, *An Evaluation of the Financial and Emotional Impact of In-Utero Transfers upon Families* (as yet unpublished).

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