

NHS Grampian

Local Report ~ *January 2007*

Maternity Services

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The maternity services standards apply to specific areas of the service. The clinical standards cover the period of time between confirmation of pregnancy, through until the baby is 6–8 weeks old. The project group developed five standards, covering: core principles; pre-conception and very early pregnancy; pregnancy; childbirth; and postnatal and parenthood. This report presents the findings from the peer review of performance against the standards.

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1 Setting the scene

NHS Quality Improvement Scotland (NHS QIS) was set up by the Scottish Parliament in 2003 to take the lead in improving the quality of care and treatment delivered by NHSScotland. We do this by setting standards and monitoring performance, and by providing NHSScotland with advice, guidance and support on effective clinical practice and service improvements.

About this report

The ‘Clinical standards for maternity services’ were published in March 2005. These standards are being used to assess the quality of services provided by NHSScotland nationwide.

This report presents the findings from the peer review of **NHS Grampian**. This review visit took place on **27 April 2006**, and details of the visit, including membership of the review team, can be found in Appendix 2.

1.1 How the standards were developed

In June 2002, a maternity services project group was established and chaired by Dr Jane Magill, Director, Robert Clark Centre for Technological Education, University of Glasgow. Membership of the maternity services project group includes both healthcare professionals and members of the public (see Appendix 3).

Members of the maternity services project group are involved in the quality assurance process of:

- developing standards
- reviewing performance against the standards throughout Scotland, using self-assessment and external peer review, and
- reporting the findings from the review.

When developing the maternity services standards, a Scotland-wide consultation process was undertaken. The views of health service staff, women (pre and postnatally), and the public were sought, and all the relevant evidence available at the time was taken into account. Draft standards were also piloted in NHS Highland, NHS Lanarkshire and NHS Lothian in June 2004.

1.2 How the review process works

The review process has two key parts: local self-assessment followed by external peer review. First, each NHS board assesses its own performance against the standards. An external peer review team then further assesses performance, both by considering the self-assessment data and visiting the NHS board to validate this information and discuss related issues. The review process is described in more detail below (see also the flow chart on page 9).

Self-assessment by NHS boards

On receiving the standards, each NHS board assesses its own performance using a framework produced by NHS QIS. This framework includes guidance about the type of evidence (eg guidelines and audit reports) required to allow a proper assessment of performance against the standards to be made.

The NHS board submits the data it has collected for this self-assessment exercise to NHS QIS before the on-site visit, and it is this information that constitutes the main source of written evidence considered by the external peer review team.

External peer review

An external peer review team then visits and speaks with local stakeholders (eg staff, patients and carers) about the services provided. Review teams are multidisciplinary, and include both healthcare professionals and members of the public. All reviewers are trained. Each review team is led by an experienced reviewer, who is responsible for guiding the team in its work and ensuring that team members are in agreement about the assessment reached.

The composition of each team varies, and members have no connection with the NHS board they are reviewing. Both of these factors facilitate the sharing of good practice across NHSScotland, and ensure that each review team assesses performance against the standards rather than make comparisons between one NHS board and another.

At the start of the on-site visit, the review team meets key personnel responsible for the service under review. Reviewers then speak with local stakeholders about the services provided. After these meetings, the team assesses performance against the standards, based on the information gathered during both the self-assessment exercise and the on-site visit. The visit concludes with the team providing feedback on its findings to the NHS board. This includes specific examples of local initiatives drawn to the attention of the review team (recognising that other such examples may exist), together with an indication of any particular challenges.

Assessment categories

Each review team assesses performance using the categories ‘met’, ‘not met’ and ‘not met (insufficient evidence)’, as detailed below.

- **‘Met’** applies where the evidence demonstrates the standard and/or criterion is being attained.
- **‘Not met’** applies where the evidence demonstrates the standard and/or criterion is not being attained.
- **‘Not met (insufficient evidence)’** applies where no evidence is available for the review team, or where the evidence available is insufficient to allow an assessment to be made.

A final category **‘not applicable’** is used where a standard and/or criterion does not apply to the NHS board under review.

1.3 Reports

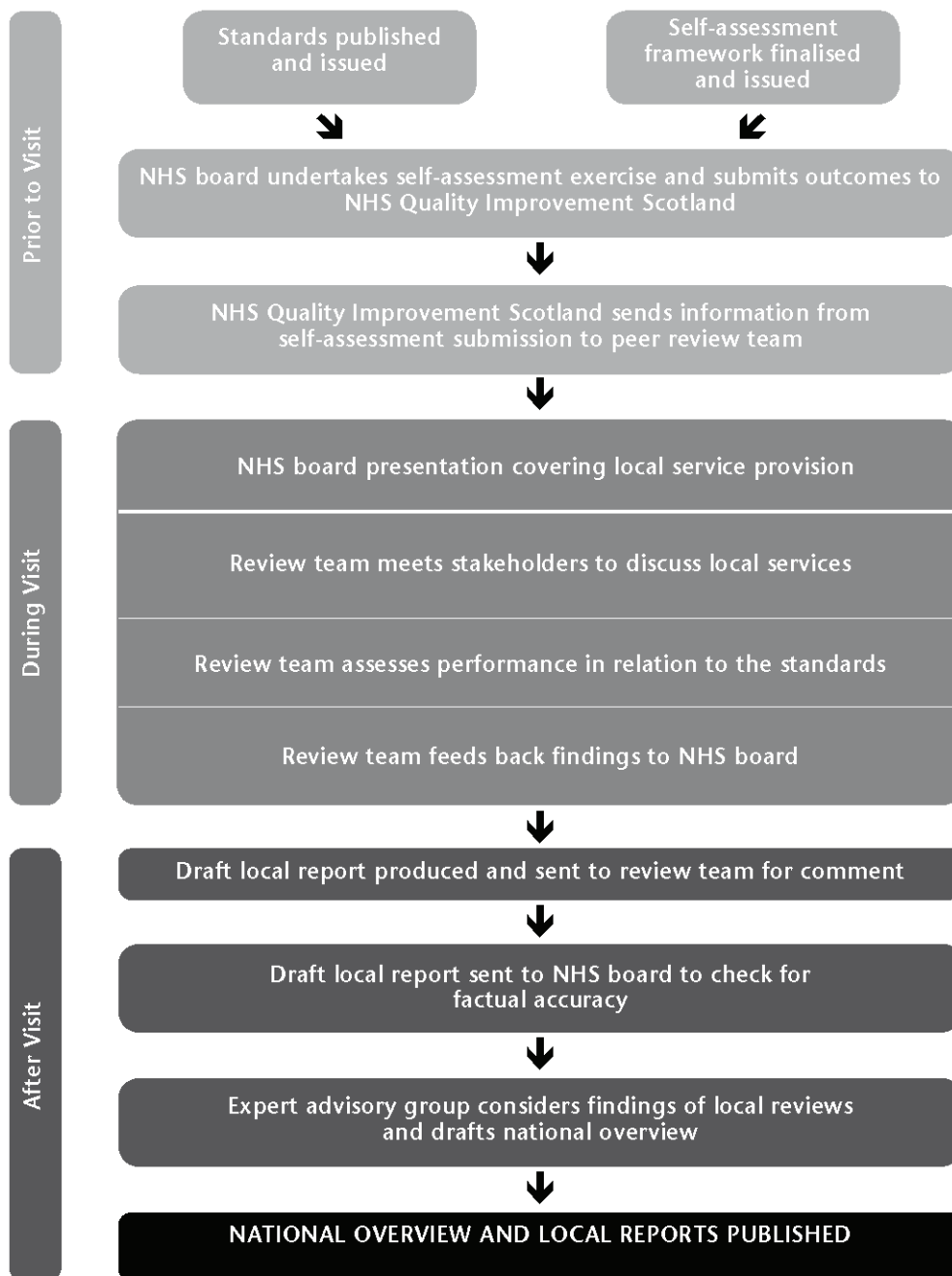
After each review visit, NHS QIS staff, with clinical input as appropriate, draft a local report detailing the findings of the review team. This draft report is sent to the review team for comment, and then to the NHS board to check for factual accuracy. The local report is published only after all the visits for that topic have been undertaken nationwide.

Once a national review cycle is completed, the expert advisory group convenes to examine review findings and make recommendations. The group then oversees the production of a national overview of service provision across Scotland in relation to the standards. This document includes both a summary of the findings (highlighting examples of local initiatives and challenges for the service) and recommendations for improvement.

Part of the remit of NHS QIS is to report whether the services provided by NHSScotland, both nationally and locally, meet the agreed standards. This does not include reviewing the work of individual healthcare professionals. In achieving this aim, variations in practice (and potential quality) within a service will be encountered and subsequently reported.

Please note – all reports published are available in print format and on the NHS QIS website.

The review process



2 Summary of findings

2.1 Overview of local service provision

Grampian is situated in north-east Scotland and has a population of around 524,020. About 40% of the local population live in Aberdeen, which is the largest urban area in the region, although a significant proportion live in rural areas.

Local NHS system and services

Grampian NHS Board is responsible for improving the health of the local population and for the delivery of the healthcare required. It provides strategic leadership and has responsibility for the efficient, effective and accountable performance of the NHS in Grampian.

At the time of the review visit, NHS Grampian provided acute services through a single operating division. There are three community health partnerships (CHPs) providing primary care. Each CHP covers a local authority and geographical area and is a way of organising non-acute care where an NHS board maximises its ability to support integration across health services and between these and other agencies such as social services.

The NHS board is also accountable for both continuously improving the quality of health services, and safeguarding high standards of care, by creating an environment in which excellence in clinical care will flourish (framework of clinical governance).

Further information about the local NHS system can be accessed via the website of NHS Grampian (www.nhsgrampian.org).

Service organisation

Information obtained from a scoping study exercise undertaken in 2005 indicated that there are 15 NHS boards within Scotland that provide maternity services.

In NHS Grampian, all maternity services are provided across primary and secondary care settings throughout the NHS board area, with specialist/tertiary services being provided within Aberdeen Maternity Hospital. Tertiary services are also provided for NHS Highland, NHS Shetland and NHS Orkney, as well as neonatal services for the north of Scotland, NHS Tayside and NHS Western Isles as required.

There are two consultant-led units (Aberdeen Maternity Hospital and Dr Gray's Hospital, Elgin) and four midwife-led maternity units (Aboyne Community Hospital; Chalmers Hospital, Banff; Fraserburgh Hospital and Peterhead Community Hospital) which are supported by a community midwifery service. Consultant outreach clinics are held in Fraserburgh, Peterhead, Stonehaven and NHS Orkney, with telephone consultation provided to NHS Shetland. Outreach medical clinics are held in Buckie, Keith, Huntly and Banff. A quarterly outreach obstetric clinic is held in Orkney with telephone consultant support provided to Shetland from Aberdeen Maternity Hospital.

The number of births has increased slightly over the last 5 years as illustrated in the following table.

NHS Grampian	Number of births				
	2001	2002	2003	2004	2005
Aberdeen Maternity Hospital	4,150	4,168	4,091	4,169	4,184
Dr Gray's Hospital	870	881	828	863	955
Aboyne Community Hospital	42	32	34	59	60
Chalmers Hospital	43	55	43	53	59
Fraserburgh Hospital	69	70	68	66	58
Peterhead Community Hospital	101	101	109	103	114
Insch Maternity Unit	17	Unit closed	-	-	-
Huntly Maternity Unit	17	35	30	Unit closed	-
Home births	13	20	17	29	36
Other (eg born before arrival)	Not available	Not available	Not available	Not available	Not available
Total births	5,322	5,362	5,220	5,342	5,466

2.2 Summary of findings against the standards

A summary of the findings from the review, including examples of local initiatives drawn to the attention of the review team, is presented in this section. A detailed description of performance against the standards/criteria is included in Section 3.

Core Principles

There are named individuals who have clear lines of responsibility for maternity services at NHS Grampian Board level. There is also a separate NHS Grampian maternity services clinical management board (MSCMB), with representation from a range of health professionals and members of the public, that is developing a maternity services strategy. The review team encouraged the Board to continue to sustain public involvement in the development of the maternity services strategy.

Critical incidents that occur within NHS Grampian are reported, investigated and analysed, and learning outcomes from this process are effectively distributed throughout the region. Risk management software has recently been introduced in Dr Gray's Hospital to support collation and review of all incidents received and this system is to be implemented Board-wide. Positive changes to clinical practice were evident as a result of service-user feedback.

The review team encouraged the Board to agree local guidelines with the Scottish Ambulance Service.

There are formal arrangements in place for all women and their babies in NHS Grampian to access a network of specialist services and clear risk assessment criteria are defined in the antenatal care in Grampian guidelines. These guidelines ensure that all women with risk factors are offered assessment by a consultant obstetrician and their care-needs can be re-assessed throughout their pregnancy. Audit of risk factors and other important aspects of maternity care take place at a local level and NHS Grampian also participates in national multi-centred audits.

Resuscitation training for all healthcare professionals involved in delivering maternity care is provided, although training records demonstrating competence were not available to the review team at the time of the visit.

An NHS Grampian-wide policy for the identification of women who are at risk of domestic abuse is being developed and it was reported that this would build on the close communication links already established between NHS Grampian maternity services and Grampian police.

High dependency care facilities for adults are available within the labour suite of Aberdeen Maternity Hospital and within a medical ward at Dr Gray's Hospital. Transfer protocols for women requiring intensive care are available in all NHS Grampian maternity units and referral protocols are in place to ensure that women identified with a high obstetric risk are delivered in an appropriate unit.

Neonatal intensive care facilities are available in Aberdeen Maternity Hospital and there are special care baby units (SCBU) present in both Aberdeen Maternity Hospital and Dr Gray's Hospital.

All women within NHS Grampian have a named midwife made known to them and are provided with information to enable them to make an informed choice about their place of birth for their baby. Their decision-making is guided by skilled healthcare professionals who ensure the women give fully documented informed consent for all interventions and investigations. Women are also given the opportunity to reflect on their birth experience.

NHS Grampian encourages a woman's partner and family to be involved in her pregnancy and childbirth with clearly expressed flexible visiting times.

Structured and accurate record-keeping throughout the antenatal, childbirth and postnatal periods is ensured by the use of a unified handheld maternity record throughout NHS Grampian. The unified record assists with timely reporting of births in line with current national standards.

Pre-conception and Very Early Pregnancy

Specific social, physical and emotional needs that may affect a woman during pre-conception are recognised by maternity services personnel and such women are directed to appropriate pre-conception clinics. Women with diabetes receive care which meets SIGN Guideline 55: Management of Diabetes.

There are formal arrangements in place throughout NHS Grampian to refer women to an early pregnancy assessment service (EPAS) which provides prompt diagnosis and care in a dedicated area, either in Aberdeen Maternity Hospital or Dr Gray's Hospital. The provision of ultrasound scanning on a 24-hour basis was specifically commended by the review team. The early pregnancy service is enhanced by the use of telemedicine and the review team encouraged the Board to consider opportunities to maximise the usefulness of this technology.

Pregnancy

Midwives and health visitors provide a comprehensive programme of education for childbirth to women and their partners and families throughout NHS Grampian. The programme, which includes a postnatal reunion, is tailored to meet local needs, however, the review team encouraged the Board to consider the advantages and economies of providing a single education programme led by a named individual.

Example of a local initiative...

Aberdeen Maternity Hospital provides a multidisciplinary, multi-agency antenatal education programme specifically designed for women with problematic drug use during pregnancy. The programme is based on early nurturing intervention principles developed by the charity Peers Early Education Partnership (PEEP) which aims to support the women and families of Aberdeen City in a non-judgemental way. The programme encourages women to start thinking about the positive changes that can be achieved through understanding good parenting skills, and the importance of securing emotional attachment between mother, father and baby to improve a vulnerable child's life through altering lifestyle. The education is co-ordinated and offered on an inpatient and outpatient basis.

Routine maternity care is provided in NHS Grampian according to the antenatal care in Grampian guidelines which allow for comprehensive screening and diagnostic services and provide a detailed fetal anomaly screen to all women at around 20-weeks gestation. Women at risk of rhesus disease are offered Anti-D prophylaxis at 28 and 34 weeks gestation.

Women within NHS Grampian receive an obstetric risk assessment which determines their antenatal care plan. This plan is reviewed regularly and takes into account the woman's preference for place of birth for her baby. The routine pattern of care for a woman in NHS Grampian allows for up to 12 visits which exceeds that recommended in 'A Framework for Maternity Services in Scotland'.

Childbirth

NHS Grampian plans midwifery services to ensure that all women receive one-to-one midwifery care at their chosen place of birth of their baby and there are always two midwives in attendance for planned home births. Multidisciplinary protocols are in place for the care of women throughout labour which are consistent with their risk assessment and their chosen place of birth. These protocols cover the management of all key labour practices.

Women are informed about, and offered, a range of pain control techniques during childbirth which includes: transcutaneous electrical nerve stimulation (TENS); oral and intramuscular analgesia; the use of water; and epidural analgesia. The latter is only available in Aberdeen Maternity Hospital and women who choose this method of pain control may be booked to deliver there or in Raigmore Hospital, Inverness, whichever is more convenient for them. Pain assessment tools have yet to be implemented in NHS Grampian maternity services.

Specialist obstetric anaesthesia services are available to all women in NHS Grampian during weekday daytime hours and a plan to provide this specialist service out-of-hours is under consideration.

There is an audit process in place to monitor anaesthetic and theatre services response to obstetric emergencies, 'decision to delivery' times and perceived urgency.

Postnatal and Parenthood

NHS Grampian has procedures in place to ensure that all women are assessed by a midwife immediately after giving birth and again prior to transfer to the community. The assessment is documented in the delivery section of the handheld maternity record. Contraception is discussed with women at the time of their discharge from hospital and a range of standard leaflets detailing choices of methods available are accessible. Protocols are in place to ensure ongoing assessment for the recognition of complications and such observations are recorded in the handheld maternity record.

Maternity services within NHS Grampian were reported as working towards the UNICEF/WHO Baby Friendly practice standards and there is commitment to attaining Baby Friendly Status. Achievement of this status was recognised by the review team as a challenge for the NHS Board.

Women are informed of the benefits of breastfeeding and are supported in the community with a comprehensive education programme and local peer support groups. An infant feeding advisor is in post in Aberdeen Maternity Hospital and the review team encouraged the Board to consider making this a Board-wide post to co-ordinate the education programme throughout NHS Grampian.

Example of a local initiative...

Within Aberdeen Maternity Hospital there is a breastfeeding centre that provides mothers with practical advice and information about breastfeeding. The centre is staffed by infant feeding support midwives and is accessible on weekday mornings (subject to staff availability) to all women living in the NHS Grampian area. Women can self-refer or be referred by a healthcare professional for ongoing encouragement, reassurance and support with breastfeeding problems experienced following discharge from hospital. Advice is also available on maintenance of milk expression if a baby is in the neonatal unit, baby weight-gain and breast infections.

The centre provides information, and is a learning resource, for all healthcare professionals with an interest in breastfeeding.

Babies are clinically examined immediately following birth by an attending midwife and 'skin to skin' contact between mothers and their newborn babies is encouraged immediately following delivery for 30 minutes up to one hour. Midwives have been specifically trained in the examination of the newborn and this expertise was particularly commended by the review team.

There are guidelines in place for transfer of information on women and their newborn babies from secondary to primary care. It was reported that there are good working relationships between midwives and health visitors. Protocols are in place for the care of women and their babies in transfer and post transfer to the community.

3 Detailed findings against the standards

Standard 1(a): Standard 1 ~ Core Principles

Standard Statement

Accountability: There are clear lines of responsibility for the planning and delivery of maternity services, with evidence of public involvement.

NHS Grampian

Essential Criteria

1a.1: There is a named individual at NHS Board director level with responsibility for maternity services.

STATUS: Met

The interim director of nursing is the named individual with responsibility for the planning and delivery of maternity services at NHS Grampian Board level.

1a.2: There is a named clinician at both Primary and Acute NHS Operating Division level with responsibility for maternity services.

STATUS: Met

Within NHS Grampian, there is a named GP responsible for the service at primary care operating division level and a designated clinician has responsibility at acute care level. Staff reported that, in addition, the maternity services within the acute operating division in Moray were managed separately by a lead clinician. The review team encouraged the Board to ensure that these named individuals receive dedicated time to support delivery and integration of the maternity services across the whole of the NHS Board area.

1a.3: There is a current, dated, documented NHS Board strategy, developed by stakeholders, which sets out how maternity services are planned, developed and implemented, in line with Scottish Executive Health Department (SEHD) policies for women-centred care.

STATUS: Not met

At the time of the review visit, there was a draft strategy for the provision of maternity services across NHS Grampian which was developed by the NHS Grampian maternity services clinical management board (MSCMB). Representation on the MSCMB includes health professionals, managers and consumers from all of the community health partnerships (CHPs) throughout Aberdeenshire, Aberdeen

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City & Moray and the acute services. The lines of communication between the MSCMB and the NHS Grampian Board were not clearly defined.

The draft maternity services strategy document was noted to be based on the principles contained in 'A Framework for Maternity Services in Scotland' and the subsequent report of the Expert Group in Acute Maternity Services in Scotland (EGAMS) and includes recommendations and feedback received from the Aberdeenshire CHP following a period of public consultation from July–December 2005. The review team commended NHS Grampian's involvement of the public to date on the delivery of maternity services in Aberdeenshire.

Staff reported that the NHS Grampian MSCMB aims to meet in May 2006 to finalise the draft which will then go through a period of further public consultation before sign-off. The review team recognised the work undertaken by the Board to date in drafting and consulting on the strategy document. It encouraged the Board to consider prioritising the setting of a timetable for the completion of the maternity services strategy that takes into account the proposals around the changes in the service.

1a.4: There is evidence of a range of public involvement activities in the planning of all maternity services.

STATUS: Not met

The review team found evidence of public involvement in two of the three CHP areas within NHS Grampian.

The Board presented good examples of a wide range of public involvement activities undertaken in Aberdeenshire in 2005 during the public consultation on the change and innovation plan which included older people's services, diagnostic/treatment services and maternity services. Activities included public meetings; externally facilitated focus groups; a citizen's panel questionnaire; and local authority guided events to identify interested parties using regional and local press advertising.

There is an active maternity services liaison committee (MSLC) in Moray which is chaired by a member of the public. The MSCMB fulfils the role of the MSLC for Aberdeen City, although staff reported that sustaining public representation on the Board was an ongoing challenge.

The review team was further informed that NHS Grampian's public involvement team and public forum, who are supported by NHS Grampian corporate services, have successfully recruited members of the public onto various groups, but noted that recruiting adequate numbers to represent the local demographics of Aberdeen City was difficult. The review team supported the Board in its efforts to sustain public involvement across the whole of NHS Grampian.

Standard 1(b): Standard 1 ~ Core Principles

Standard Statement

Risk Management: All healthcare professionals are aware of the importance of risk assessment and management of pregnant women, and take action to minimise avoidable adverse clinical incidents, including during transfer and access to services.

NHS Grampian

Essential Criteria

1b.1: Assessment: There is a system to ensure that all critical incidents are reported, investigated and analysed, resulting in changes in practice, where necessary.

STATUS: Met

There are multidisciplinary clinical risk management committees based in Aberdeen Maternity Hospital and Dr Gray's Hospital, Elgin, that meet monthly and review all the IR1 incidents reported in the previous month. The meetings are open to all maternity services staff with a core membership attending. An anaesthetist attends the Dr Gray's Hospital committee if their expertise is relevant. All healthcare professionals are aware of the importance of risk assessment, and learning from incidents is provided via ongoing training and discussions.

In Aberdeen Maternity Hospital, there is a midwife with 3 days dedicated time per week to collate and review all reported incidents. There is a nominated supervisor of midwives who cascades information relating to trends of incidents identified throughout the region. The risk management committees are responsible for changing practice if required and agree on learning opportunities for dissemination across the NHS Board area via the NHS Grampian risk management group, and there was evidence of modified protocols as a result of learning from incidents. The clinical director of NHS Grampian receives copies of the minutes of these risk management committees.

In the community hospitals, incidents are reviewed as and when they occur and are usually managed locally through one-to-one discussions although there is a system in place for reporting serious incidents to the NHS Grampian risk management group.

In Moray and within the anaesthesia service in Aberdeen Maternity Hospital, all IR1 forms are electronically recorded onto the Datix healthcare risk management system and it was noted that the Board plans to implement the use of Datix across NHS Grampian by the end of August 2006. The review team supported the Board with its decision for full implementation of the system across the region.

1b.2: Assessment: A compliments, comments and complaints procedure is in place to enable women to express views about their pregnancy and childbirth experience.

STATUS: Met

NHS Grampian uses a 'feedback card' to allow women and visitors to register a compliment, comment, suggestion or complaint about their experience of pregnancy and childbirth, and the maternity service provided. The cards are available in wards and departments throughout the hospital, and the feedback and complaints procedure is detailed in the maternity services guide books for both Aberdeen Maternity Hospital and Dr Gray's Hospital. Comments can also be made via the NHS Grampian website.

Complaints are monitored by a local team, themes identified and a quarterly report is presented to the Board. The review team was advised of several positive changes to clinical practice/processes and maternity services facilities as a result of public feedback received, eg the introduction of tabletop fridges for storage of expressed milk within individual rooms and foot-operated bins to reduce infection in the neonatal unit. The review team commended the Board on sharing compliments and complaints received about the service with staff.

At the time of the review visit, it was reported that the numbers of comments regarding clinical and non-clinical practice received are not formally collated or audited, however, staff reported that the introduction of the Datix system Board-wide will assist with the analysis of this information in the future.

1b.3: Assessment: There are local guidelines agreed between the NHS Operating Division and the Scottish Ambulance Service, for the safe transfer of women during pregnancy, childbirth and with her newborn baby in the postnatal period.

STATUS: Not met

At the time of the review visit, there were no local guidelines specific to maternity services agreed between NHS Grampian and the Scottish Ambulance Service. A representative of the Scottish Ambulance Service reported that national agreed guidelines are used for transporting women in pregnancy, during childbirth and in the postnatal period with their newborn babies and, to date, no special maternity needs or risk had been identified for the NHS Grampian area. The review team was further informed that it is usual practice for a member of the ambulance service to meet with maternity staff to discuss transfer arrangements for mothers and their newborn infants prior to their discharge from hospital.

Board staff reported that the current system for transporting women and babies works well and it was noted that there are good working relations between the Scottish Ambulance Service and maternity service staff. The general manager of the Scottish Ambulance Service was also noted to be an active member of the MSCMB.

NHS Grampian uses a specific request form for transporting neonatal babies which identifies the need for an escort or special equipment to accompany the baby. There is a dedicated ambulance available on a daily basis for the return of women and their babies from Aberdeen Maternity Hospital to the community. However, it was reported that the majority of women use their own transport.

1b.4: Referral: Formal arrangements exist for women and their babies to access a network of specialist services.

STATUS: Met

The review team was informed that there are formal arrangements for women and their babies to access a network of specialist services: allied health professions (AHPs); anaesthesia and intensive care; imaging; laboratory medicine; medicine; neonatology; obstetrics; perinatal pathology; surgery; and psychiatry.

Staff reported that specialist referrals are mostly directly arranged through verbal contact, although forms are available to request referral and can be used as required. Consultant to consultant referral was noted to be most commonly practiced throughout NHS Grampian. Community midwives working within GP practices can directly refer women to the frequently held AHPs and anaesthesia clinics.

Staff reported that the introduction of the handheld maternity record will support the sharing of information relating to specialist referrals and treatment provided and allow for audit of the number of women referred for specialist consultation.

1b.5: Referral: All women with risk factors for their pregnancy are offered assessment by a consultant obstetrician.

STATUS: Met

The review team commended the detailed antenatal care in Grampian guidelines in use across the region which describe the risk assessment, clinical management and referral pathways for pregnant women. The guidelines are used initially by staff at the woman's first antenatal booking appointment to ensure that all pregnant women with identified risk factors are managed by a consultant obstetrician and follow an appropriate pathway of care. Throughout NHS Grampian, the midwife is responsible for managing all women with low obstetric risk, with each woman having a nominated consultant obstetrician to whom she would be referred if her risk increased, although the named midwife will continue to be involved with the woman's care throughout her pregnancy.

At Dr Gray's Hospital, women with a complex medical condition may be booked for delivery at Aberdeen Maternity Hospital, however, this practice is not formalised into a written protocol. Women identified with specific obstetric complications would

have their individual case discussed at consultant level prior to any transfer being arranged for specialist management.

1 b.6: Training and Audit: There is an audit system in place to monitor important aspects of maternity care.

STATUS: Met

Within NHS Grampian, there is an audit system in place to monitor aspects of maternity care provided by the obstetrics, gynaecology and neonatology departments of the Aberdeen Maternity Hospital. This system is co-ordinated by a clinical effectiveness committee that agrees on topics to be audited, reviews audit results and determines actions that need to be taken to improve maternity care.

Staff advised that a report of audit findings is published approximately every 18 months and circulated to all staff throughout the region in written and CD form. It was also noted that each senior house officer working in the maternity department is given an audit project and is responsible for presenting the findings at a 6-monthly audit presentation session which is attended by staff from all disciplines. Midwives throughout the region also take an active role in audit and can nominate topics for audit consideration.

Within Moray, there is a clinical governance group with consultant representation from obstetrics and gynaecology. This group agrees local audit topics.

NHS Grampian also contributes to a number of national multi-centred audits.

The review team acknowledged the positive audit activity undertaken by the Board, however, noted that there is currently no formal mechanism for deciding audit topics or prioritising when re-audit should be carried out and encouraged the Board to consider implementing a systematic, co-ordinated process for audit across NHS Grampian.

1 b.7: Training and Audit: All healthcare professionals directly involved in childbirth are competent in basic adult obstetric, neonatal resuscitation and immediate care.

STATUS: Not met (insufficient evidence)

There is a programme in place to ensure that all healthcare professionals are provided with neonatal resuscitation training and the course information is revalidated every 2 years. A 1-day neonatal resuscitation training course is provided monthly and there was evidence of good attendance. Basic adult resuscitation training is also provided by anaesthesia staff once a month; however, there was no information available to the review team on staff attendance at obstetric resuscitation training courses.

The Scottish Ambulance Service does not routinely provide joint resuscitation training for NHS Grampian staff, although it was reported that it does provide training for staff on the use of any new resuscitation equipment in the ambulances.

During staff induction, attendance at training courses is recorded, however, at the time of the review visit, there was no formal mechanism for identifying individuals requiring re-training on resuscitation skills. Records of attendance at training sessions are currently maintained and it was reported that the records of attendance are being revised to ensure that attendance rates can be monitored more easily and to identify staff who require further training to update/maintain their resuscitation skills. It was noted that attendance at training courses was the responsibility of the individuals themselves and monitored as part of their personal development plan.

The review team commended the neonatal resuscitation training programme and encouraged the Board to integrate and monitor the training across the region and to ensure that it is clearly documented that all healthcare professionals directly involved in childbirth are competent in resuscitation and immediate care.

1b.8: Clinical Complications: A clinical risk assessment process for individual women, including a communications strategy, is in place, which addresses escalating risk.

STATUS: Met

The risk assessment criteria used by staff at the time of a woman's first antenatal booking appointment are defined in the detailed antenatal care in Grampian guidelines which also include referral protocols for changing risk criteria during pregnancy.

1b.9: Clinical Complications: A policy is in place for the identification of women who are at risk of domestic abuse, and staff are trained in assessment, communication skills and support of such women.

STATUS: Not met

Board staff reported that all midwives within NHS Grampian have received basic awareness training in the recognition of domestic abuse to ensure they have the skills and knowledge required to respond appropriately when supporting this group of vulnerable women. Further 'routine enquiry' training is planned to take place in 2006 prior to the launch of an NHS Grampian policy for the identification of women who are at risk of domestic abuse. Staff reported that this proposed policy includes a routine enquiry form for staff to use when discussing a woman's pregnancy at the time of her antenatal booking visit.

A midwife from Dr Gray's Hospital is a member of the Moray domestic abuse forum and there is NHS Grampian representation on the Aberdeen domestic abuse partnership which focuses on domestic abuse issues within Aberdeen City.

There are close links and good working relations between NHS Grampian maternity services and Grampian police. Staff reported that local police domestic abuse liaison officers contact the appropriate professionals in maternity services to alert them of any domestic abuse incidents reported involving pregnant women. Community midwives then assist the police with obtaining the woman's consent for support and protection if requested. This two-way liaison was commended by the review team as a positive strength of the service and it encouraged the Board to progress the implementation of its domestic abuse policy.

1b.10: Clinical Complications: High dependency facilities and clinical expertise are available within the obstetric unit for all women in level II and level III consultant-led units.

STATUS: Not met

Within the labour suite in Aberdeen Maternity Hospital, there is a one-bedded high dependency room with additional high dependency care and equipment available in the recovery area if necessary. There is 24-hour obstetric consultant and anaesthesia cover and midwives are trained in the midwifery care of critically ill patients; a module commissioned by Aberdeen Maternity Hospital and conducted by Robert Gordon's University, Aberdeen. Midwives maintain their high dependency skills with regular placements in the intensive care unit (ICU).

In Dr Gray's Hospital, high dependency care is available in a medical area but not within the obstetric unit. The consultant physician responsible for the ward shares the woman's care with the high dependency nurses and the midwifery team. Women requiring artificial ventilation are routinely transferred to Aberdeen Royal Infirmary following consultant referral.

1b.11: Clinical Complications: There is a defined rapid access route for women to adult intensive care and expertise in all level II and level III consultant-led units.

STATUS: Met

The review team was satisfied that there are clearly defined procedures for consultant referral of women from Aberdeen Maternity Hospital and Dr Gray's Hospital to the adult intensive care facilities in Aberdeen Royal Infirmary and Raigmore Hospital, Inverness.

1b.12: Clinical Complications: Adult intensive care facilities and specialist medical back-up are available on-site in all level IIc and level III consultant-led units.

STATUS: Met

Adult intensive care facilities and specialist medical back-up are accessible on-site at the Foresterhill campus of Aberdeen Royal Infirmary. The journey from Aberdeen Maternity Hospital is a short ambulance transfer across the hospital grounds to the ICU located in Aberdeen Royal Infirmary.

Dr Gray's Hospital is a level IIb unit. This criterion is, therefore, not applicable to this maternity unit.

1b.13: Clinical Complications: Where full adult intensive care facilities are not currently available on-site in level IIc and level III consultant-led units, a strategy is in place outlining the process and timescale to achieve this.

STATUS: Not applicable

Aberdeen Maternity Hospital is a level III consultant-led service which provides full adult intensive care facilities on-site.

1b.14: Clinical Complications: Units that do not have adult intensive care facilities, advanced imaging and cardiology on-site, must have protocols in place for the care of women with significant medical or obstetric illness to ensure that they are delivered in a unit that can provide these resources on-site.

STATUS: Met

Adult intensive care facilities are available at Aberdeen Maternity Hospital and advanced imaging and cardiology services are available in Dr Gray's Hospital and Aberdeen Maternity Hospital. Women with significant medical or obstetric illness are risk assessed according to the antenatal care in Grampian guidelines which determine that women are delivered in an appropriate unit that can provide the required resources. Referral protocols are in place for managing the development of significant illness during pregnancy.

1b.15: Clinical Complications: Neonatal intensive care unit (NICU) facilities are available on-site in level IIc and level III consultant-led units. Where NICU facilities are not available on-site, a strategy is in place outlining the process and timescale to achieve this.

STATUS: Met

The neonatal care facilities within NHS Grampian's level III consultant-led unit, Aberdeen Maternity Hospital, include 10 intensive care cots; seven high dependency cots and two isolation cots which can be used for any baby. There are also three family rooms where parents can stay while their baby is in the neonatal intensive care unit (NICU).

A full range of medical and pre- and post-operative neonatal care is provided in Aberdeen Maternity Hospital. Babies requiring extra corporeal membrane oxygenation or cardiac surgery are referred to The Royal Hospital for Sick Children, Glasgow.

1b.16: Clinical Complications: Special care baby unit (SCBU) facilities are available on-site in all level II and level III consultant-led units and there is a defined rapid access route to NICU in all level II and level III consultant-led units.

STATUS: Met

In Aberdeen Maternity Hospital, there are 19 special care cots. Dr Gray's Hospital has a four-cot special care baby unit (SCBU) which can provide stabilisation of babies before being transferred to the NICU in Aberdeen Maternity Hospital. Transfer is arranged at consultant level according to the National Neonatal Transport Service protocol.

1b.17: Clinical Complications: Where there is provision of NICU and SCBU facilities, these conform to agreed national guidelines.

STATUS: Not met

The Board reported that it has undertaken a self-assessment exercise against the British Association of Perinatal Medicine standards for hospitals providing neonatal intensive and high dependency care (second edition, 2001). The audit highlighted that medical/nursing staffing levels, equipment and facilities, and the support for parents were identified as not meeting the required levels.

The SCBU within Dr Gray's Hospital was reported to be meeting all recommended standards including the audit requirements in line with national guidance.

Standard 1(c): Standard 1 ~ Core Principles

Standard Statement

Information, Communication and Support: All women are fully informed of the different options available to enable them to take an informed and active role in planning their care, and in the decision-making involved in providing this care. Healthcare professionals are skilled in supporting women in the decision-making process.

NHS Grampian

Essential Criteria

1c.1: There is a named healthcare professional identified for each woman, who leads and plans her contact with maternity services.

STATUS: Met

All women within NHS Grampian have the name of their nominated community midwife identified to them on the front page of their handheld maternity record. The lead healthcare professional identified for each woman (consultant/GP/midwife) will have been determined by the risk assessment at the initial antenatal booking appointment. Ongoing risk assessment and the midwife will maintain the care plan for the woman throughout the duration of her pregnancy.

1c.2: Women are provided with information in order to make an informed decision about the chosen place of birth for their baby.

STATUS: Met

All women within NHS Grampian are offered a choice regarding place of birth for their baby which is first discussed with their midwife at their antenatal booking visit, although women are aware they can change their minds at any time throughout their pregnancy. Women can choose between having a home birth; delivery in a community maternity unit in either, Aboyne, Banff, Fraserburgh or Peterhead; in the midwife-led delivery unit in Aberdeen Maternity Hospital; the obstetric unit of Aberdeen Maternity Hospital or in Dr Gray's Hospital where women can opt to have care led by either midwives or obstetric consultants. The woman's choice will be directed by the midwife based on the woman's risk assessment. Women who choose to have epidural analgesia can only deliver in Aberdeen Maternity Hospital or in Raigmore Hospital if nearer for them.

Women initially receive verbal information about choices for place of birth and this is reinforced with the provision of written information which is available in a variety of local and national leaflets. The information can also be provided in audio tape form if necessary. Staff reported that translation services are accessible via a telephone link and extra time would be taken to explain birth choices available to those women with special needs.

At the time of the review visit, no data were available on the incidence of denial of a woman's choice of place of birth.

1c.3: There is evidence that professionals obtain informed consent for interventions and investigations, and this is documented.

STATUS: Met

The NHS Grampian informed consent policy is in use throughout the service with written consent obtained for major interventions and investigations. Verbal consent is obtained for ultrasound scanning, vaginal examination and interventions during labour.

The completion of consent forms in midwifery records is audited by supervisors of midwives using an annual audit tool for midwifery records and record-keeping. In Aboyne Community Hospital, a monthly peer review of midwifery records is performed which includes monitoring of consent for screening and interventions.

1c.4: All women are given the opportunity to reflect on their birth experience.

STATUS: Met

Across NHS Grampian, women are encouraged to reflect on their labour/delivery experience through discussions with a member of the maternity staff involved in their care and this may occur in hospital, or more usually in the woman's home as part of the 8-week postpartum review which is led by their health visitor. The health visitor can then contact any healthcare professionals involved and arrange further discussion with access to the woman's notes.

The review team encouraged the Board to consider formally documenting these discussions and auditing women's experiences of childbirth.

1c.5: Training on how to communicate information in an effective and sensitive manner, is provided to all healthcare professionals.

STATUS: Met

Communication training is a major component of all training courses available to medical and midwifery staff across NHS Grampian. Examples of courses include assisted birth practitioner, child protection and domestic abuse, and therapeutic communication in pregnancy loss settings. Specialist courses are available for those involved with the recurrent miscarriage clinic.

Individual communication training needs are identified through personal development plans and the annual supervision of midwives review.

1c.6: There is a policy for supporting and informing parents bereaved during pregnancy, or soon after giving birth.

STATUS: Met

Within NHS Grampian, there is a working guide for NHS staff 'Getting it Right at the End, Caring for the Dying and Bereaved' which includes sections on 'When a Baby Dies' and 'When a Child Dies'. There are several local and national leaflets providing bereavement support information for women and their families.

1c.7: Information giving (verbal, written and other media) is monitored and evaluated.

STATUS: Not met (insufficient evidence)

There is a process for assessing written patient information prior to its release within NHS Grampian, however, the review team did not see any evidence of the quality of the information giving being monitored or evaluated. It was reported that audits evaluating information provision concerning pregnancy loss are conducted in the Rubislaw Ward in Aberdeen Maternity Hospital.

Standard 1(d): Standard 1 ~ Core Principles

Standard Statement

Partner and Family Involvement: All maternity services and healthcare professionals recognise the important role of the partner/family, and ensure that they are encouraged and supported to be involved in pregnancy and childbirth.

NHS Grampian

Essential Criterion

1d.1: There is evidence that partner/family/friend involvement occurs, (including information provision for partners and families and open/flexible visiting times for partners and children).

STATUS: Met

Within NHS Grampian there are clearly defined written protocols for flexible visiting times which encourage involvement of the woman's partner and children. Partners are invited to attend all antenatal care clinics with their partner and special partners evenings are arranged on request for parent education sessions. Partners are welcomed to be actively involved in all aspects of pregnancy care to provide emotional, psychological and physical support especially during labour.

The visiting policies in use are reflected in the hospital information booklets which were commended by the review team for their openness and clarity.

Standard 1(e): Standard 1 ~ Core Principles

Standard Statement

Record-keeping: A structured and accurate record of all events during the antenatal, childbirth and postnatal periods is maintained for every woman and child (known as a 'unified record').

NHS Grampian

Essential Criteria

1e.1: All women have a unified handheld record.

STATUS: Met

Women throughout NHS Grampian carry their own unified handheld maternity record with the exception of those women who have stated that they would prefer to not carry their record in which case the records are maintained within the maternity department.

1e.2: The SMR02, Scottish birth record and birth notification General Register Office for Scotland (GROS), is completed for all women and newborn babies in line with current standards.

STATUS: Met

There is a process in place to ensure that the Scottish Morbidity Record 2 (SMR02), Scottish birth record (SBR) and birth notification are completed in line with current standards. In Aberdeen Maternity Hospital and Dr Gray's Hospital, an electronic patient administration system is used by the medical records department staff to produce reports to monitor completion and accuracy of coding of all birth records. Aberdeen Maternity Hospital administration covers Aberdeen City and Aberdeenshire and Dr Gray's Hospital covers Moray. Reports are produced monthly for the SMR02 and SBR, and daily for birth notifications.

In the community hospitals, the midwife responsible for the woman's delivery completes the SMR02 and birth notification.

Desirable Criterion

1e.3: The national unified handheld record and national electronic record are completed for all women and newborn babies.

STATUS: Not applicable

The review visit to NHS Grampian took place shortly after the official launch of the national unified handheld maternity record. As the review team considered the time between the launch of the national record and this review visit to be insufficient to measure progress in this area, it concluded this criterion was not applicable at this stage of the review process.

Standard 2(a): Standard 2 ~ Pre-conception and Very Early Pregnancy

Standard Statement

Pre-conception Services: All women with a poor obstetric/medical history, a previous poor fetal/maternal outcome, or where there is a family history of significant illness, have access to specific pre-conception services.

NHS Grampian

Essential Criterion

2a.1: There is a specific pre-conception service for women with diabetes which is based on the SIGN guideline for diabetes.

STATUS: Met

The review team found the pre-conception diabetic services provided for women planning a pregnancy within NHS Grampian were comprehensive and commendable and are based on SIGN Guideline 55: Management of Diabetes. Women in Aberdeen with known insulin-dependent diabetes, Type 2 diabetes or previous gestational diabetes are given an opportunity to attend the combined pre-pregnancy/antenatal clinic where specialist obstetric and midwifery staff work together with diabetologists and dietitians. At the diabetic clinic within Woolmanhill Hospital, Aberdeen, there is an adolescent clinic where conception and pregnancy are discussed. Across Aberdeen City and throughout Aberdeenshire, 'road-shows' on all aspects of diabetes are presented. A managed clinical network supports the provision of diabetic care and staff reported that the majority of care is managed at GP practice level with a high uptake of pre-conception care which leads to early attendance of diabetic women at booking visits with their midwife.

In Moray, pre-pregnancy counselling is offered to women with diabetes and those with polycystic ovarian syndrome at the medical/obstetric clinic which specialises in diabetes management and is delivered in conjunction with the general outpatient diabetic service.

Desirable Criterion

2a.2: There are specific pre-conception services for women with a personal or family history of significant illness (eg epilepsy, neural tube defect, chromosomal abnormality).

STATUS: Met

In Aberdeen and Aberdeenshire, women with a personal or family history of significant illness are referred by their GP for pre-conception counselling to specific relevant clinics, eg haematology, epilepsy and endocrinology. Haematology and epilepsy clinics are provided monthly with weekly clinics available to women

identified with a high obstetric risk pregnancy. Women requiring pre-conception care may also be referred from an antenatal clinic to an interdisciplinary clinic, eg for the management of renal disorders. Staff reported that results from tests conducted at antenatal clinics are shared with the woman's GP and used for appropriate pre-conception referral.

In Moray, specific pre-conception services are not formalised, but in practice women with a history of significant illness such as cardiovascular disease can be referred to obstetric/medical clinics and tertiary centres as required.

Standard 2(b): Standard 2 ~ Pre-conception and Very Early Pregnancy

Standard Statement

Early Pregnancy Complications: All women who experience complications in early pregnancy have access to an early pregnancy assessment service.

NHS Grampian

Essential Criteria

2b.1: There are formal arrangements in place for referral to the early pregnancy assessment service, which allows any healthcare professional to access the service directly.

STATUS: Met

The staff in the Rubislaw Ward in Aberdeen Maternity Hospital provide a 24-hour service for women who experience early pregnancy problems. Women can self-refer or are referred by medical, midwifery or NHS 24 staff.

In Dr Gray's Hospital, there is an early pregnancy assessment clinic which can be accessed Monday–Friday during normal working hours with out-of-hours telephone calls transferred to Ward 3 to ensure advice is available 24 hours a day.

2b.2: There are formal arrangements in place for referral to the early pregnancy assessment service, which allows women with previous early pregnancy problems to self-refer.

STATUS: Met

Within NHS Grampian, pregnant women who have experienced a previous pregnancy loss are given a direct contact number to self-refer to the early pregnancy assessment service (EPAS) if required. The EPAS operates during weekdays with telephone support available to cover the service out-of-hours. Women who have not yet had a pregnancy confirmed but wish to contact the EPAS for advice can easily do so. Staff reported that women with learning disabilities are also well supported and receive one-to-one care.

2b.3: Women who experience early pregnancy complications are cared for in a dedicated area distinct from the general gynaecology or antenatal ward.

STATUS: Met

In Aberdeen Maternity Hospital, women who experience early pregnancy complications are cared for in the Rubislaw Ward which is in an area distant from the antenatal and postnatal wards. In Dr Gray's Hospital, these women are cared for in a dedicated room which is adjacent to the labour ward and is furnished in a non-clinical way with doors closed to maintain privacy. Partners are also welcome to stay overnight if required and staff work flexible hours to accommodate continuity of care for the women as much as possible. Staff reported that women are very positive about the support they received following early pregnancy loss as evidenced by their thank-you cards and letters.

The review team commended the EPAS and care given to women who experience early pregnancy loss.

2b.4: Women who miscarry have access to a choice of management options (surgical/medical/expectant).

STATUS: Met

Women who experience a miscarriage receive an information leaflet that describes the management options available to them which are then discussed with their midwife. Surgical, medical and expectant options are available with dedicated surgical times allocated in the obstetric theatre.

2b.5: There is prompt access (within 24 hours) to ultrasound facilities with trained staff in secondary and tertiary services.

STATUS: Met

The review team commended the provision of obstetric ultrasound scanning services on a 24-hour basis. This is provided by a group of trained obstetric ultrasonographers in Aberdeen Maternity Hospital and by a team of midwife ultrasonographers, radiographers and consultant obstetricians/gynaecologists in Dr Gray's Hospital.

Desirable Criterion

2b.6: Telemedicine is used to promote regional networking, and to expedite the reporting of results.

STATUS: Met

There are well established telemedicine links between Aberdeen Maternity Hospital and Dr Gray's Hospital which allow for easy discussion and review of ultrasound scanning images between healthcare professionals. The telemedicine cardiac image quality reportedly available from Dr Gray's Hospital is sub-optimal and can often require referral of women to Aberdeen Maternity Hospital for a further scan.

Staff reported that neonatal cardiac images can be transmitted from Aberdeen Maternity Hospital to The Queen Mother's Hospital, Glasgow. Telemedicine can also be used to link with the Scottish Neonatal Consultants Group and formal monthly teaching sessions are provided using the telemedicine links from the ultrasound department of Aberdeen Maternity Hospital.

Staff reported that the telemedicine links have been established for some time and while back-up points are available in areas throughout the hospitals, the maternity services telemedicine links are due for renewal in order to maximise the usefulness of the technology. The review team encouraged the Board to consider the benefits of investment in upgrading the hardware for this technology.

Standard 3(a): Standard 3 ~ Pregnancy

Standard Statement

Education Programme: All maternity services provide comprehensive programmes of education for childbirth and parenthood to women and their partners and families.

NHS Grampian

Essential Criteria

3a.1: There is a written syllabus of education that targets specific groups, and is in a user-friendly format. The syllabus outlines the aims, themes and outcomes of the education programme.

STATUS: Met

Across NHS Grampian, education for childbirth is delivered by midwives and health visitors according to local guidelines which specify the aims, themes and outcomes of a programme designed to meet local needs. Needs are identified through information collated from education class evaluation forms and education programmes are adapted in response to feedback received.

Interpreters can be arranged to attend educational classes if required and a translation service is available via the national telephone language line. Parent education sessions are also tailored to suit specific groups of women, eg teenagers and substance misusers. One-to-one education is provided for individuals with special needs, or for those women who live in remote and rural areas of NHS Grampian. Within Aberdeen Maternity Hospital, the education classes designed for substance misusers are based on the Peers Early Education Partnership (PEEP). This initiative was commended by the review team.

3a.2: There is a lead named co-ordinator, with recognised training and development to undertake the role, who takes responsibility for the programme on a service-wide basis.

STATUS: Not met

At the time of the review visit, NHS Grampian did not have a lead named co-ordinator with recognised training and development who would take responsibility for the education programme on a service-wide basis. However, staff reported that midwifery team leaders have overall responsibility for organising and delivering the local parent education programmes within the community setting and it was noted that these midwives have received relevant training, eg NHS-ConNeCT and Prospect workshops on leading parent education sessions. Local evaluation forms on the education provided are completed by users of the service and the feedback received is used to adapt courses locally.

Within Aberdeen Maternity Hospital, there is a head of the parenthood department, however, this post does not have an NHS Grampian-wide remit. The review team encouraged the Board to consider the advantages of a standardised education programme and the sharing of education evaluations across the region.

Desirable Criteria

3a.3: The Ready, Steady, Baby book is provided to all women on confirmation of pregnancy.

STATUS: Met

The Ready, Steady, Baby book is part of the information pack that women receive from the midwife at the time of their first antenatal booking appointment. Copies of the book are also available within health centres, family planning clinics and some GP practices across NHS Grampian. Board staff reported that it is planned to ensure that all GPs can provide pregnant women with a copy of this book on confirmation of pregnancy.

3a.4: Parent education programmes include a postnatal reunion.

STATUS: Met

Staff reported that an invite to attend a postnatal reunion is given to all women who attend parent education classes. Attendance at these reunions is monitored locally and it was reported to be variable throughout the region.

Standard 3(b): Standard 3 ~ Pregnancy

Standard Statement

Screening Services: All women have access to screening services and antenatal diagnostic testing.

NHS Grampian

Essential Criteria

3b.1: All women who are identified in the screening programme as at risk of rhesus disease are managed and treated according to an agreed protocol.

STATUS: Met

NHS Grampian adheres to the agreed national programme for antenatal screening and diagnostic testing and women who are identified as being rhesus negative are offered routine antenatal Anti-D prophylaxis at 28 and 34 weeks gestation. If a baby's blood group is identified as being rhesus positive, further Anti-D injections are offered. If severe rhesus disease is diagnosed in early pregnancy and an intrauterine transfusion is indicated then such women would be managed by specialist care in NHS Greater Glasgow & Clyde. Women are provided with an NHS Grampian written information leaflet on antenatal Anti-D prophylaxis which the review team noted could be updated by replacing it with the most recent national leaflet on Anti-D immunoglobulin during pregnancy.

The overall provision of rhesus screening throughout NHS Grampian was commended by the review team.

3b.2: The antenatal care and investigation of women conforms to the guidance set out in Table 14, page 40 of A Framework for Maternity Services in Scotland.

STATUS: Not met (insufficient evidence)

The antenatal care in Grampian guidelines describe the routine antenatal care which is available to women throughout NHS Grampian and allows for up to 12 antenatal visits. Staff reported that these guidelines are interpreted and used flexibly according to an individual woman's risk assessment. However, at the time of the visit, it was not clear to the review team that the guidance set out in 'A Framework for Maternity Services in Scotland' was being applied across the whole of NHS Grampian as there was not staff representation from all areas at the review visit to confirm current practice. It was, however, determined that all women are offered a detailed fetal anomaly screening visit at week 20 of their pregnancy and this was commended by the review team.

Standard 3(c): Standard 3 ~ Pregnancy

Standard Statement

Antenatal Care: All maternity services provide antenatal care delivered by a network of professionals, such that each woman is managed by a midwife, GP or obstetrician according to her level of risk, and as locally as possible.

NHS Grampian

Essential Criteria

3c.1: Each maternity service has an explicit plan for antenatal care for all women, taking account of risk, which acknowledges that women can move in either direction between different levels of care and lead professionals.

STATUS: Met

The antenatal care in Grampian guidelines are followed across the NHS Board region and are based on a woman's risk assessment which is recorded in the handheld maternity record. The individual level of obstetric risk is monitored throughout the pregnancy and the care plan outlined in the record is amended accordingly. These guidelines include referral protocols for problems arising in pregnancy and allow for movement between different levels of care and lead professionals.

3c.2: Women are offered the opportunity to be involved in the development of their birth plan, including the chosen place of birth of their baby.

STATUS: Met

Individual birth plans are discussed during antenatal visits and specific forms are completed to record the woman's preferences in her handheld maternity record. Women are offered a choice of place for the birth of their baby dependent on their level of obstetric risk and are fully informed of the reasons why the choice to have a home delivery may have to be reviewed.

3c.3: The routine pattern of antenatal care for pregnant women is no more than nine visits for a primigravida and eight visits for a multigravida.

STATUS: Not met (insufficient evidence)

The antenatal care in Grampian guidelines describe the routine antenatal care which is available to women throughout NHS Grampian and allow for up to 12 visits. Staff reported that these guidelines are interpreted and used flexibly according to a woman's individual obstetric risk assessment. However, staff from all areas across NHS Grampian were not represented at the review visit to allow the review team to reach a decision regarding compliance with this criterion.

Standard 4(a): Standard 4 ~ Childbirth

Standard Statement

Care Planning and Birth: All women receive an agreed plan of care throughout labour in line with current professional standards consistent with their risk assessment and their chosen place for childbirth.

NHS Grampian

Essential Criteria

4a.1: Each woman receives one-to-one midwifery care during established labour and childbirth by a trained midwife, or trainee midwife under supervision.

STATUS: Met

One-to-one midwifery care is achieved by community midwives working in partnership with hospital-based midwives. This practice was commended by the review team.

It was also reported that one-to-one care is always available to all women in Dr Gray's Hospital. Senior and junior student midwives are appropriately supervised by a qualified midwife.

4a.2: For planned home births there is a minimum of two trained professionals present, one of whom is a midwife.

STATUS: Met

An on-call rota system ensures that there are always two trained midwives available for planned home births. As the number of home births in some of the rural areas is low, community midwives maintain their skills for home birth deliveries by attending intrapartum sessions which are conducted in midwife-led maternity units.

Maintaining home birth delivery skills was recognised as a challenge by the review team.

4a.3: There are agreed multidisciplinary, evidence-based policies for the management of all key labour practices, when care deviates from the norm.

STATUS: Met

NHS Grampian has agreed multidisciplinary protocols in place for the management of all key labour practices. These include: induction of labour; breech presentation; perineal repair; caesarean section; prophylactic antibiotics for caesarean section; placenta praevia; prostaglandins and oxytocin use; management of thromboembolism and thromboprophylaxis; water birth; epidural analgesia; fetal monitoring;

management of multiple pregnancy; diabetes; pre-eclampsia and eclampsia; declination of blood products; haemorrhage; prolapsed cord; rupture of the uterus; shoulder dystocia; neonatal resuscitation; adult resuscitation; retained placenta; and intrauterine death. These protocols are available within Aberdeen Maternity Hospital and Dr Gray's Hospital as a pocket-sized booklet (labour ward management guidelines) issued to all professional maternity services hospital staff and in A4 format on the labour wards. Similar protocols are also available in Peterhead, Fraserburgh, Banff and Aboyne community units.

The review team was informed that it is intended to publish the protocols on the NHS Grampian intranet site and the review team encouraged the Board to use this opportunity to standardise the protocols across the region and to include protocol review dates to ensure all staff follow the most up-to-date version.

Standard 4(b): Standard 4 ~ Childbirth

Standard Statement

Pain Management: All women, regardless of their specific location, are informed about, and offered the range of pain management techniques during childbirth, and are supported in their choice of pain control.

NHS Grampian

Essential Criteria

4b.1: All women receive information about, and have access to, a range of pain management techniques which include: transcutaneous electrical nerve stimulation (TENS); oral and intramuscular analgesia; inhalational analgesia; and the use of water for pain relief. Epidural analgesia is available in consultant-led units.

STATUS: Not met

Information leaflets on pain management techniques are provided for women at their antenatal booking visit and the techniques are discussed during parent education sessions and on admission in labour.

Oral, intramuscular and inhalation (Entonox) analgesia and transcutaneous electrical nerve stimulation (TENS) are provided within all NHS Grampian maternity sites and available at home births. Aberdeen Maternity Hospital has a fixed birthing pool for use as a method of pain relief and birthing pools can be hired in other units or for private use in a woman's own home.

Epidural analgesia is only available in Aberdeen Maternity Hospital and women who choose this method of pain relief would routinely be booked for delivery there. Alternatively, depending on geographic location, they can be booked to deliver at Raigmore Hospital (NHS Highland).

4b.2: All women, who have epidural analgesia or an operative delivery, have their pain assessed using a pain assessment tool.

STATUS: Not met

A chart is available for recording the pain score of women who have an operative delivery in Aberdeen Maternity Hospital or Dr Gray's Hospital, although staff reported that the chart is not routinely completed. It was verbally reported that, in Aberdeen Maternity Hospital, women who receive epidural analgesia for pain relief, but do not undergo surgery, do not have their pain assessed using a pain assessment tool.

Desirable Criterion

4b.3: Epidural analgesia is available at all times in consultant-led units.

STATUS: Not met

Epidural analgesia is available in Aberdeen Maternity Hospital with two specialist anaesthetists currently providing this service from 9am–6pm in the labour ward. Out-of-hours cover is provided by a member of the on-call anaesthetic team. There is no epidural service offered at Dr Gray's Hospital.

Standard 4(c): Standard 4 ~ Childbirth

Standard Statement

Anaesthesia: During childbirth all women have access to anaesthesia that conforms to current professional standards.

NHS Grampian

Essential Criteria

4c.1: There is a lead consultant obstetric anaesthetist with responsibility for the organisation and management of the specialist anaesthetics service within consultant-led units.

STATUS: Not met

There is a named consultant anaesthetist responsible for the management of specialist anaesthetics services in each consultant-led unit within NHS Grampian. One is a consultant obstetric anaesthetist and the other is a generalist consultant anaesthetist.

4c.2: Arrangements are in place in consultant-led units, to ensure that a specialist anaesthetic service is available at all times during childbirth.

STATUS: Not met

A specialist anaesthetic service is available from 9am–6pm on Monday–Friday with out-of-hours cover provided by a dedicated anaesthetist on the labour ward within Aberdeen Maternity Hospital. General anaesthetist cover is available on an on-call rota basis. Anaesthetists update their obstetric skills on an individual basis.

In Dr Gray's Hospital, anaesthesia cover is provided by a team of anaesthetists using an on-call rota system. This system provides anaesthetist cover to all hospital services as required and therefore is not dedicated to the obstetric service.

The Board recognises the challenge to provide a dedicated anaesthetic service out-of-hours for the obstetric service and reported that funding was under consideration as a means of providing this cover.

4c.3: All specialist anaesthetic services comply with NHS QIS anaesthesia standards and Royal College of Anaesthetists (RCA) guidelines.

STATUS: Met

The review team acknowledged the Board's commitment to comply with the NHS QIS anaesthesia standards and the guidelines issued by the Royal College of Anaesthetists (RCA). The Board has an action plan to follow-up on the NHS QIS

anaesthesia review visit in February 2005. The review team confirmed from observation of this plan that the Board is meeting this criterion.

4c.4: There is a system in place to ensure that anaesthetic and theatre services respond rapidly to obstetric emergencies and expedite delivery in the event of maternal or fetal compromise.

STATUS: Met

At both NHS Grampian consultant-led units, there are dedicated theatre facilities, staff and procedures in place to respond rapidly to obstetric emergencies. Staff reported to the review team that occasionally these facilities may be at full capacity and elective caesarean surgery is delayed to accommodate emergency cases. However, it was noted that this situation is currently being addressed and a proposal has been put forward to the Board for consideration.

The review team commended the practice of regularly testing the emergency response procedure by running mock exercises and also noted that the exercises could usefully be extended to include other personnel not necessarily directly involved in maternity services but who might also be involved in supporting an obstetric emergency.

4c.5: There is a system in place to ensure that 'decision to delivery' intervals and perceived urgency are monitored.

STATUS: Met

Within both consultant-led maternity units, audits are conducted to monitor the time from decision to the actual delivery time by emergency caesarean. Category of perceived urgency is recorded and monitored.

Desirable Criterion

4c.6: The time from informing the anaesthetist to the start of an emergency operative delivery should not normally exceed 30 minutes except if there is a risk to maternal health.

STATUS: Not met (insufficient evidence)

At the time of the review visit, there were no audit data available to confirm that the time from informing the anaesthetist to the start of an emergency operative delivery was no more than 30 minutes at both consultant-led units in NHS Grampian. Staff did report that in the majority of emergency cases this is being achieved as measured by the time from the decision to deliver to the actual time of delivery (rather than start of delivery).

Standard 5(a): Standard 5 ~ Postnatal and Parenthood

Standard Statement

Care of Women: All women receive appropriate care and assessment from giving birth to the 6-week postnatal check.

NHS Grampian

Essential Criteria

5a.1: All women are assessed immediately after giving birth by a suitably qualified member of the birth team.

STATUS: Met

The review team was informed that all women within NHS Grampian are assessed immediately after giving birth by the midwife in attendance. Women who have had operative deliveries are also assessed by a consultant. Staff reported that this assessment is recorded in the delivery section of the handheld maternity record and audits conducted at Aberdeen Maternity Hospital and Dr Gray's Hospital as part of the preparation for the NHS QIS review demonstrated compliance with this criterion.

5a.2: All women are assessed prior to transfer to community care and/or within 24 hours of giving birth, by a midwife.

STATUS: Met

The Board reported that all women are assessed within 24 hours of giving birth and prior to transfer to community care. Assessments are performed by an experienced midwife and a written record of the findings is entered in the handheld maternity record. Audit data were made available to the review team.

5a.3: There is ongoing assessment for the recognition of complications, eg infection, haemorrhage, thromboembolism and anaesthetic problems.

STATUS: Met

Staff reported that there are consistent guidelines in place across NHS Grampian for recognition of complications in women who have given birth. Postnatal nursing care plans and charts are used by nurses and midwives to record ongoing assessments.

5a.4: Women receive information on contraception within 2 weeks of childbirth.

STATUS: Met

Contraception is discussed between women and their midwife as part of the discharge from hospital procedure and this is recorded on a checklist or community postnatal record which is attached to the handheld maternity record. A copy of the hospital discharge summary is also provided to the woman's health visitor, GP and community midwife. At the time of discharge, women receive standard leaflets providing information on contraception choices available and are given the option to discuss contraception with specialist family planning clinic nurses or GPs.

Standard 5(b): Standard 5 ~ Postnatal and Parenthood

Standard Statement

Infant Feeding: Maternity services promote, support and sustain breastfeeding. Women are informed of its benefits, while being supported in their chosen mode of feeding.

NHS Grampian

Essential Criteria

5b.1: There is evidence that the maternity service adheres to the principles of, or is working towards, the UNICEF/WHO Baby Friendly status.

STATUS: Met

The Board reported that a UNICEF/WHO Baby Friendly Initiative professional is visiting Aberdeen Maternity Hospital and Dr Gray's Hospital in July 2006 to assist NHS Grampian with developing an action plan for implementing the Baby Friendly best practice standards and to support preparation for UNICEF/WHO accreditation. The existing breastfeeding strategy and action plan dated 2002 are being updated by the infant feeding advisor and staff reported this was nearing completion.

The community maternity units within NHS Grampian are also working towards Baby Friendly status and the Board reported that all areas within NHS Grampian follow the Baby Friendly best practice standards and the review team encouraged the Board to continue to work towards attainment of Baby Friendly status.

5b.2: Women are provided with readily accessible information and support in their chosen method of feeding, including access to peer support groups.

STATUS: Met

Women are provided with a range of written and verbal information on choices of feeding methods available for their baby as well as copies of the NHS Grampian breastfeeding policy and a directory of breastfeeding-friendly premises in the region.

Women are supported in their chosen method of feeding via support groups which are set up in the community and consultant-led maternity units. Each consultant-led unit had a lactation consultant in post at the time of the review visit. A separate young parents' project is also available to provide feeding support for women in Elgin. Women choosing to bottle feed their babies are advised how to prepare formula feeds and sterilise equipment.

All women in NHS Grampian can access the Aberdeen Maternity Hospital breastfeeding centre which is open on weekdays from 9am–1pm and is staffed by specialist infant feeding support midwives. The centre, which was commended by the review team, provides women with support, practical advice and information, and is

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used by health professionals as a problem-solving resource point. Weekly feeding support groups are also held in some community areas such as Banff, Old Meldrum, Fyvie, Aboyne, Elgin and Stonehaven.

Desirable Criteria

5b.3: Each NHS Board area has an infant feeding advisor to provide education and training to healthcare professionals who support women in their chosen method of feeding.

STATUS: Not met (insufficient evidence)

An infant feeding advisor for NHS Grampian is in post and has implemented a self-directed learning programme which is based on the UNICEF/WHO breastfeeding management course material. At the time of the review visit, the infant feeding advisor was not available to clarify whether the Board has an area operational plan for the education and training of all healthcare professionals who support women in their chosen method of feeding.

5b.4: Admission rates for babies due to inadequate nutrition are monitored.

STATUS: Not met (insufficient evidence)

Admission rates for babies over 37 weeks gestation are collected in both Aberdeen Maternity Hospital and Dr Gray's Hospital however, a diagnosis of inadequate nutrition can not specifically be monitored from the data collected.

Standard 5(c): Standard 5 ~ Postnatal and Parenthood

Standard Statement

Care of Babies: All babies receive appropriate care and assessment from birth until 6 weeks post birth.

NHS Grampian

Essential Criteria

5c.1: Steps are taken to minimise the number of infants who require re-warming or avoidable admission to SCBU.

STATUS: Met

The Board reported that in order to minimise the number of infants who require re-warming, babies are dried and then 'skin to skin' contact with the mother is encouraged immediately following delivery for a minimum of 30 minutes and up to one hour. If the baby temperature falls below normal limits, further 'skin to skin' contact takes place and additional clothing and hats are provided to prevent further heat loss.

Posters encouraging 'skin to skin' contact are displayed throughout the hospital units.

5c.2: All babies are clinically examined immediately following birth by a suitably qualified member of the birth team.

STATUS: Met

All babies in NHS Grampian are clinically examined by the attending midwife immediately following birth. If babies are born prematurely this examination is conducted by medical staff.

5c.3: All babies are clinically examined prior to discharge from hospital and/or within 72 hours of birth, by a suitably qualified healthcare professional.

STATUS: Met

Prior to discharge from hospital, all babies are clinically examined by a healthcare professional trained in examination of the newborn. If a mother and baby have been discharged early, this examination would be conducted by a community paediatrician. Several midwives have been specifically trained in the examination of the newborn and this expertise was particularly commended by the review team. Babies delivered in community maternity units are examined by the GP prior to discharge.

5c.4: There is ongoing assessment, including recognition of group B streptococcal infection and jaundice.

STATUS: Met

The review team was advised that intrapartum and postnatal guidelines were available on the wards to ensure that baby symptoms of group B streptococcal infection and jaundice would be recognised and managed. Bilirubinmeters are used in conjunction with visual examination for daily evaluation of signs of jaundice.

Standard 5(d): Standard 5 ~ Postnatal and Parenthood

Standard Statement

Transfer Standard: The transfer of women and their newborn babies into the community is planned to facilitate continuing effective care.

NHS Grampian

Essential Criteria

5d.1: A system is established to ensure that information on women and their babies in the postnatal period is collated and transferred between secondary and primary care in a reliable, timely and secure manner.

STATUS: Met

The Board reported that there is a documented protocol to ensure that written information on women and their babies in the postnatal period is collated and transferred between secondary and primary care. In some areas, the discharge information is electronically generated on admission whilst in other areas it is generated manually. It was reported that midwives always telephone the liaison health visitor or relevant community midwife in advance of a woman's discharge from hospital care as well as sending the appropriate discharge information. It was reported that as health visitors and community midwives are co-located, this communication works well. The speed of communication with the health visitors was particularly commended by the review team and the attention given to high risk cases on discharge was noted.

5d.2: Guidelines for transfer and post transfer care are in place.

STATUS: Met

Guidelines are in place for the transfer and post transfer care of women and their newborn babies within NHS Grampian. Protocols are also available for readmission and the transfer of newborn babies to special care or ICUs outside NHS Grampian.

Appendix 1 – Glossary of abbreviations

Abbreviation

AHP	allied health profession
CHP	community health partnership
EGAMS	Expert Group in Acute Maternity Services in Scotland
EPAS	early pregnancy assessment service
GP	general practitioner
GROS	General Register Office for Scotland
ICU	intensive care unit
IR1	incident reporting form
MSCMB	maternity services clinical management board
MSLC	maternity services liaison committee
NHS QIS	NHS Quality Improvement Scotland
NICU	neonatal intensive care unit
PEEP	Peers Early Education Partnership
RCA	Royal College of Anaesthetists
SBR	Scottish birth record
SCBU	special care baby unit
SEHD	Scottish Executive Health Department
SMR02	Scottish Morbidity Record 2
TENS	transcutaneous electrical nerve stimulation
UNICEF/WHO	United Nations Children’s Fund/World Health Organisation

Appendix 2 – Details of review visit

The review visit to NHS Grampian was conducted on 27 April 2006.

Review team members

Dr Linda de Caestecker (Team Leader)

Acting Director of Public Health, NHS Greater Glasgow & Clyde

Mrs Patricia Bryson

Public Partner, Greater Glasgow & Clyde

Dr Fiona Cameron

Consultant Anaesthetist, NHS Tayside

Mrs Aileen Duncan

Clinical Services Manager, NHS Greater Glasgow & Clyde

Ms Isobel S Gardiner

Clinical Manager for Community Midwifery Services, NHS Lothian

Mrs Joanna McGregor

Public Partner, Highland

Mr Makarand K Oak

Consultant Obstetrician and Gynaecologist, NHS Lanarkshire

NHS Quality Improvement Scotland Staff

Mrs Morag Kasmi

Senior Project Officer

Dr Avril MacLennan

Project Officer

During the visit, members of the review team met with local health service personnel including anaesthetists, health visitors, midwives, neonatologists, obstetricians, paediatricians, paramedics, AHPs and GPs.

Appendix 3 – Maternity services project group members

Chair

Dr Jane Magill

Director, Robert Clark Centre for Technological Education, University of Glasgow

Project group members

Ms Gill Allan

Sister Midwife, NHS Tayside

Mrs Frances Arnott

Health Visitor, NHS Forth Valley

Ms Irene Barkby

LSA Midwifery Officer/Divisional Nurse Director – Acute, NHS Lanarkshire

Dr Ian Bashford

Senior Medical Officer, Scottish Executive Health Department

Dr Jennifer Bennison

Deputy Chair (Policy), Royal College of General Practitioners (Scotland)

Professor Andrew Calder

Consultant Obstetrician, NHS Lothian

Ms Cynthia Clarkson

Lay Representative, National Childbirth Trust

Dr Corinne Love

Consultant Obstetrician, NHS Lothian

Dr John McClure

Consultant Anaesthetist, Royal College of Anaesthetists, NHS Lothian

Ms Dahrlene McMahon

Paramedic, Scottish Ambulance Service

Mrs Mathilde Peace

Lay Representative, Lothian Health Council

Dr Gillian Penney

Clinical Senior Lecturer & Programme Director, Scottish Programme for Clinical Effectiveness in Reproductive Health, NHS Grampian

Ms Nancy Robson

Public Partner, Grampian

Ms Joanne Thorpe

Midwifery Team Leader, NHS Argyll & Clyde

Dr Tom L Turner

Consultant Paediatrician, NHS Greater Glasgow

Support from NHS QIS was provided by **Ms Jan Warner** (Director of Performance Assessment and Practice Development), **Mr Steven Wilson** (Team Manager), **Mrs Morag Kasmi** (Senior Project Officer), **Ms Sharon Keane** (Project Officer), **Dr Avril MacLennan** (Project Officer) and **Mrs Lorraine Inglis** (Project Administrator).

Appendix 4 – Timetable of review visits

Organisation reviewed	Visit date(s)
NHS Argyll & Clyde	20 June 2006
NHS Ayrshire & Arran	7 June 2006
NHS Borders	19 April 2006
NHS Dumfries & Galloway	29 March 2006
NHS Fife	10 May 2006
NHS Forth Valley	17 January 2006
NHS Grampian	27 April 2006
NHS Greater Glasgow	25 May 2006
NHS Highland	16 March 2006
NHS Lanarkshire	2 February 2006
NHS Lothian	1 March 2006
NHS Tayside	16 February 2006
NHS Orkney	22 November 2005
NHS Shetland	8 November 2005
NHS Western Isles	6 December 2005

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NHS Quality Improvement Scotland

Edinburgh Office
Elliott House
8-10 Hillside Crescent
Edinburgh EH7 5EA

Phone: 0131 623 4300
Textphone: 0131 623 4383

Glasgow Office
Delta House
50 West Nile Street
Glasgow G1 2NP

Phone: 0141 225 6999
Textphone: 0141 241 6316

Email: comments@nhshealthquality.org
Website: www.nhshealthquality.org

