Inspecting Informing Improving

# Investigation of the maternity service provided by the Royal Wolverhampton Hospitals NHS Trust at New Cross Hospital

June 2004

# Contents

## Healthcare Commission

The Healthcare Commission exists to promote improvement in the quality of NHS and independent healthcare across England and Wales. It is a new organisation that started work on April 1st 2004. The full name of the Healthcare Commission is the Commission for Healthcare Audit and Inspection.

The Healthcare Commission was created under the Health and Social Care (Community Health and Standards) Act 2003. The organisation has a range of new functions and takes over some responsibilities from other organisations. It:

- replaces the work of the Commission for Health Improvement (CHI), which closed on March 31st 2004
- takes over the private and voluntary healthcare functions of the National Care Standards Commission, which also ceased to exist on March 31st 2004
- picks up the elements of the work of the Audit Commission which relates to efficiency, effectiveness and economy of healthcare

In taking over the functions of the Commission for Health Improvement, the Healthcare Commission now has responsibility for investigations initiated by CHI. This report relates to an investigation, most of which was carried out by CHI prior to April 1st 2004. In order to provide readers with some consistency, we use the term Healthcare Commission rather than CHI throughout, unless the context requires otherwise.

It is important to note that the Healthcare Commission has full responsibility for this report and the activities which flow from it such as ensuring that an action plan is published by the trust which the Commission will make available through its website.

# Report summary

On 23rd October 2003 the Commission for Health Improvement (CHI), announced its decision to investigate maternity services at New Cross Hospital, part of the Royal Wolverhampton Hospitals NHS Trust (the trust). This followed four serious incidents in the maternity services at the trust and concerns raised by the public about the quality of care provided by the maternity service. The Birmingham and The Black Country Strategic Health Authority, with the support of the trust and the Wolverhampton City Primary Care Trust, contacted CHI and requested an investigation.

In three of the four incidents sadly the infants died. It is clear that these four incidents were both stressful and traumatic for all the women and the families involved.

The Healthcare Commission did not investigate the four individual incidents, as this had already been done but the Commission examined all the relevant information from internal and external reports relating to these incidents. The purpose of the investigation was to analyse and examine the systems and processes that the trust has in place to ensure the quality and safety of maternity care. During the investigation the Healthcare Commission examined a number of areas including the experience of patients and spoke to a large number of women and staff. The Commission also examined the rates of deaths occurring after 24 weeks of pregnancy up to the first seven days of life (perinatal mortality), still births, caesarean sections, the management and leadership within the service, staffing, team work, clinical effectiveness, audit and how they manage risks. The role of external organisations in monitoring the quality of care was also considered.

Until 2003 the maternity services in the trust were largely an invisible service, which was not high on the senior management agenda and not enough attention was paid to the quality of service provided to women and their babies. The maternity service has functioned as well as it has under the circumstances due to the dedication and hard work of individual staff. The investigation found a number of key factors that led to the unsatisfactory quality of care provided to women using the trust's maternity services. The key conclusions are highlighted below.

## Key conclusions

The trust has a range of systems in place that on paper look robust and effective. However the investigation found that the processes the trust has in place have not ensured the effective implementation of these systems in the maternity services.

Poor quality historical data relating to maternity services at the trust hindered data analysis during the investigation. However, a rise in perinatal mortality at the trust in 2001 and 2002 was found not to be statistically significant. Similarly, a Healthcare Commission comparison of trust perinatal mortality rates with others trusts with similar ethnicity for 1998 to 2002 revealed rates at the trust not to be higher. The trust's caesarean section rate is higher than the national average, partly due to the high numbers of emergency caesareans.

Many women have satisfactory experiences of giving birth in the maternity unit of the trust, but this is often marred by events either not being carried out right or not happening when they should have done. This report highlights opportunities for the trust to make changes. The Healthcare Commission spoke to a number of women who feel they are not listened to enough and that the trust does not taking any action

as a result of listening to their views. The systems in place for involving women in their care and treatment are weak and the information provided is inadequate. There is no clear and consistent approach to producing information for patients.

The environment in which care is delivered has benefited from some financial investment, which has resulted in most areas being modernised. However there are still concerns about the actual building as it prevents woman centred care from being provided effectively.

Since the appointment of a complaints coordinator there have been improvements in the complaints system but there are still concerns about the overall inefficiency of the system. There are long delays in receiving a response and in some cases women do not receive a reply at all. Complaints and concerns received about the maternity service are mainly around the poor physical environment, communication difficulties, and care and treatment issues.

The investigation also found problems around the leadership and management of the maternity services, team work and staffing. The leadership at all levels in the maternity services, and in the women and children's division appears to have been weak and inconsistent for several years. The previous Head of Midwifery was unable to empower midwives to influence the development of midwifery led care and to ensure that birth was as normal a process as possible for women and their families. The relationship between the Head of Midwifery, Clinical Director and Divisional Manager did not allow for effective leadership and management. This led to problems with decision making which then effected the implementation of change taking place. There should have been increased support from key members of the executive team available to help the managers and leaders achieve essential change.

The trust board could be more effective with increased board development. Non-executive directors would benefit from a clearer understanding of their corporate responsibility to scrutinise the trust and enable them to challenge the management team.

There are long standing difficulties between consultants, and also between consultants and midwives. The new Clinical Director is having some success in engaging his consultant colleagues in changing practice but it is unclear if these changes will be sustained now the investigation has concluded.

Consultant and midwifery staffing levels are a cause for concern, both in the number of vacancies and in the staffing levels expected to deliver the services required. There is no system of rotation to enable junior midwives to develop a broad range of skills and gain confidence in dealing with complex issues. Staff and union representatives have in the past highlighted concerns about staffing and have not received satisfactory responses from the trust. Sickness absence was high in the maternity services and is now slightly above the trust average. The capacity of the human resources department to effectively support the maternity services is insufficient.

Training and education systems have the potential to deliver effective staff development programmes but there are inadequate administration systems to monitor attendance of staff at training events. This is of particular concern for mandatory training. Due to staffing problems, attendance at training events is limited. The supervision process for midwifery staff needs improvement with protected time for supervision.

There is a need to improve communication with staff in the women and children's division. Staff want to contribute to decisions about service developments and expect managers and leaders to be more visible in clinical areas.

Risk management systems at trust level seem robust and risk is regularly on the trust board agenda, however there is insufficient focus on clinical risk management. In the maternity services there is little evidence of systematic risk assessment being used and where risks are identified action to implement changes does not always follow. Information systems are not being used to their full potential to identify common themes and to link risk, litigation and complaints.

The reporting framework for clinical audit and effectiveness is inadequate in the women and children's division and the trust board does not receive information on a regular basis relating to clinical audit or clinical effectiveness. There is little patient input into clinical audit in the maternity services and no evidence of multidisciplinary audit.

The investigation also looked at the role of external organisations in monitoring the quality of care at the trust. It found that the Birmingham and The Black Country Strategic Health Authority initially had limited capacity to effectively monitor clinical governance, although this has now been changed. The local delivery plan and the service level agreement set up by the primary care trust does not provide a robust framework for monitoring the performance of the maternity service. The forthcoming publication of the National Service Framework for Children, which includes maternity services, provides an opportunity to review and clarify these issues.

There are examples of good practice in the maternity services, in particular on the neonatal unit. The neonatal unit admission policy promotes the involvement of and communication with parents and they have effective procedures in place to ensure confidentiality of information. They have also changed practice as a result of an audit into how babies are kept warm when they are transported. The maternity service has an informative monthly risk management newsletter aimed at increasing staff awareness of risk management and health and safety issues.

Providing there is continuous improvement of the maternity services and effective implementation of the recommendations in this report, there is no reason why the maternity services at New Cross Hospital should not be able to offer a quality service to the women in Wolverhampton. This improvement must be informed by the views of the women themselves. Communication and team work must be improved, and management and leadership of the service must be more effective. A workshop was held on June 15th 2004, with the Healthcare Commission, the trust and key stakeholders to identify and agree the trust's response to the recommendations in this report. As a result an action plan will be developed and progress against it will be monitored by the Birmingham and The Black Country Strategic Health Authority and the Healthcare Commission.

## Key recommendations

1. The trust must identify ways to increase the involvement of patients to influence the quality of care provided as well as service developments, especially in the maternity services. The following points should be integral:
    - regular surveys to attain the views of women and their families
    - the maternity services liaison committee must be more influential

- the patient advice and liaison service should be more accessible
- the patients forum should have a key role in monitoring progress
- improve the complaints process based on feedback from complainants

2. There must be effective support to enable the management and leadership of the maternity services to deliver change including:
    - increasing input from the human resource department
    - the Director of Nursing proactively supporting the Head of Midwifery
    - the Chief Executive ensuring effective implementation of remedial action which is monitored to assess sustainability of change
    - good communication between the trust executive and the directorate management teams
    - access to independent expert advice from external organisations
    - an organisational development programme to promote a culture of openness
    - robust performance monitoring systems
    - a programme of development for non-executive directors and robust induction arrangements

3. Action must be taken to promote effective team work in maternity services and improve communication. This should especially include:
    - full commitment to working with the Modernisation Agency clinical governance support team
    - improve communication between consultants, consultants and midwives, and the trust and the maternity services
    - regular open meetings led by the directorate management team to share information and seek feedback from staff on the progress of the action plan
    - work to promote mutual respect of colleagues
    - the Medical Director ensuring ongoing improvement in team work within the consultant group as well as supporting the clinical director in leading this work

4. Adherence to guidelines, protocols and procedures must be improved. The following action is required:
    - urgent action to promote full compliance with National Institute for Clinical Excellence (NICE) guidance and appraisals
    - the development of guidelines for the antenatal management of women experiencing complex problems and other high risk groups

5. Midwifery services require further development to ensure that:
    - the care of women identified as being low risk is midwifery led using clear pathways of care
    - following the review of the midwifery establishment, targeted recruitment should take place to fill vacant posts as a matter of urgency
    - maternity healthcare assistants development programmes should be implemented
    - supervision should be more robust, proactive and high profile
    - senior midwives must be engaged and supported with personal training plans in the process of delivering the action plan and developing the unit

6. The environment in which services are delivered and the equipment used in clinical areas should be of high quality. In particular:

- further modernisation of the environment should be completed
- catering provision to maternity be enhanced
- all equipment and systems to maintain equipment must be risk assessed
- the reliability of the blood gas analyser on the labour ward must be determined

7. The trust must improve the quality of its data collection and systems to translate this into meaningful information. For example it should:
    - make accurate returns to the Department of Health regarding maternity data
    - investigate the high proportion of emergency caesarean sections and aim to reduce, also to further examine perinatal mortality rates and act on findings
    - record systems in the ultrasound department should be computerised
    - meetings should be effectively minuted

8. The reporting of clinical incidents and subsequent learning must be enhanced by:
    - regular multidisciplinary discussion of incidents and near misses
    - wider participation of staff in risk management processes after serious incidents
    - discussions led by the consultant on call subsequent to an incident occurring

9. The trust must ensure that it has effective processes to ensure learning takes place and that changes in practice occur as a result of clinical audit. For example:
    - develop systems to enable the sharing of good practice
    - regular reporting of the impact of audit to the trust board
    - the divisional governance team should be responsible for planning and reviewing audits with support from an external agency
    - priorities for audit should influenced by national guidelines e.g. electronic fetal monitoring and topics of relevance to the maternity services action plan

# Chapter 1 - Introduction

## 1.1 Background

On October 23rd 2003, the Commission for Health Improvement (CHI) announced its decision to investigate maternity services at New Cross Hospital, part of the Royal Wolverhampton Hospitals NHS Trust (the trust). The Birmingham and The Black Country Strategic Health Authority (the strategic health authority) asked the Commission for Health Improvement to investigate because there had been four serious incidents between January 27th 2003 and March 21st 2003 in which three of the babies had died unexpectedly either during or shortly after delivery. There was also growing concern from the public about the safety and quality of care provided by the maternity services. The trust and Wolverhampton City Primary Care Trust supported the request for an investigation.

## 1.2 Terms of reference

The terms of reference state that the investigation look at:

- the systems and processes the trust has in place to ensure the quality and safety of the maternity care it provides
- the environment and culture in which the care is delivered
- issues related to management, staffing, team work, and leadership
- reasons behind variations in perinatal mortality rates
- the role of external organisations in monitoring the quality of care at the trust

The full terms of reference are set out in Appendix A.

The investigation was conducted under the powers set out in Section 20(1)(c) of the Health Act 1999, which empowered CHI to investigate and make reports on the management, provision and quality of healthcare. The purpose of investigating a trust or other NHS organisation is to help that organisation to improve the quality of the healthcare it provides, to indicate what needs to be done to build or restore public confidence in the services provided and to help the organisation and the wider NHS learn lessons about how best to ensure patient safety.

The Healthcare Commission will provide advice and assistance to all relevant organisations on the preparation of an agreed action plan for implementing this report's recommendations. The trust is responsible for implementing the action plan, and the Birmingham and The Black Country Strategic Health Authority and the Healthcare Commission will regularly monitor progress against the action plan.

## 1.3 The investigation process

The investigation consisted of four interrelated parts:

- review and analysis of documents supplied by the trust and other relevant organisations
- analysis of views of local stakeholders including women who have used the maternity services, their relatives, carers and friends
- interviews with past and present trust staff, and visits to and observations of trust facilities
- interviews with relevant external agencies and individuals

## 1.4 Acknowledgements

We wish to thank the following people for their help and cooperation with the production of this report:

- the women, their relatives and carers, who contributed either in person, over the phone or in writing, this was not easy for some individuals
- the agencies and organisations who gave their views and submitted relevant documents to the investigation including the West Midlands Perinatal Institute
- Professor Stephen Robson and Jane Herve for their expert advice
- staff interviewed by the investigation team and those who assisted during the course of the investigation. In particular, Mark Hackett, Chief Executive and Margaret Holt, Clinical Governance Manager at the Royal Wolverhampton Hospitals NHS Trust
- staff and patients who welcomed the investigation team onto the wards during the observations visits

# Chapter 2 - Background to the investigation

## 2.1 Royal Wolverhampton Hospitals NHS Trust

The Royal Wolverhampton Hospitals NHS Trust is a large hospital that provides acute hospital services and a range of sub regional specialist care, such as renal, cancer and coronary heart disease services to a diverse population across the Black Country, south Staffordshire and Shropshire. The trust has developed rapidly during the last five years, income has doubled and there has been £175 million of capital investment. Established on April 1st 1994, the trust operates on two sites, New Cross Hospital and the Wolverhampton and Midlands Counties Eye Infirmary. Over 95% of Wolverhampton residents receive their healthcare from this trust.

The trust employs over 4,000 people and this will increase with the opening of the new heart and lung centre. It has been awarded two stars in the NHS performance ratings. It has also been awarded a hospital wide Chartermark, which is an award scheme of the Government to recognise and encourage modernisation. The trust has stage two (practice) of Improving Working Lives, a standard which sets a model of good human resource (HR) practice against which NHS employers and their staff can measure the organisations performance.

The population the trust serves is ranked within the top 50 of the most deprived local authorities by both the Townsend and Jarman indexes and also the Indices of Deprivation 2000. Unemployment in certain parts of Wolverhampton is as high as 30%. There are higher proportions of the population in the Indian and Carribbean ethnic groups in Wolverhampton (22%) compared to other areas in England (average 9%). Approximately 30% of the population of childbearing age are from black and minority ethnic backgrounds compared with 11% nationally.

## 2.2 The national context for maternity services

In 1999 the Royal College of Midwives and Royal College of Obstetricians and Gynaecologists published *Towards safer childbirth*, which sets out specific national standards for maternity units. In March 2003 the Commission for Health Improvement (CHI) published a report of an investigation in maternity services at Ashford & St Peters Hospitals NHS Trust, and in 2003 maternity services have also been the subject of an inquiry by the House of Commons Health Select Committee. The House of Commons report on the provision of maternity services presents data on caesarean section rates, the staffing structure of maternity care teams, and the provision of training for health professionals who advise pregnant women and new mothers. The report expressed concerns about the rising rates of intervention during birth, including caesarean sections, and insufficient staffing levels in many maternity units.

The National Institute for Clinical Excellence (NICE) published guidelines on caesarean sections in 2004, antenatal care in 2003, and on electronic fetal monitoring and induction of labour in 2001. In addition they have published a technology appraisal recommending that routine immunisation processes are in place for pregnant women at risk of developing rhesus disease (a condition where the blood of a baby breaks down due to a reaction between the mother and babies blood). The Government responded in February 2004 to three Health Select Committee reports relating to maternity services. These looked at the provision of maternity services, inequalities in access to maternity services and choice in

maternity services. The Department of Health is due to publish a full National Service Framework for Children, Young People and Maternity Services in the summer of 2004. The framework will set out a ten year strategy for improving services, reducing inequalities and improving access to care. The maternity services part of the framework is expected to apply the NICE guidelines on antenatal, birth and postnatal services to the health and social care system to make maternity services more flexible, accessible and appropriate for women.

## 2.3 The local context for maternity services

The maternity unit at New Cross Hospital is a purpose built facility that opened in 1972 with the addition of a prenatal assessment unit in 1993 and provides traditional care as well as special care for babies and their mothers. The unit itself has 70 beds, 10 in the labour ward and 60 in two maternity wards, both containing antenatal and postnatal patients. The neonatal unit is situated next to the labour ward and has 24 cots, seven of which are available for intensive care. The labour ward has full time consultant cover Monday to Friday 9am to 5pm with on call arrangements outside these hours. Community midwifery is provided and some midwives also provide ultrasound scanning. An antenatal clinic is situated on the ground floor. The maternity unit has undergone three refurbishments in recent years but patients and staff continue to express concerns about the appropriateness of the environment. The trust recognised these problems and in 2000 included its replacement in the strategic outline business case for the site development.

The obstetric and gynaecology directorate provides services for women within Wolverhampton and the surrounding areas. Over the last five years there has been a decrease in the number of births and an increase in the number of high risk pregnancies and women being transferred to the unit before delivery. This change has been influenced by a changing local population and the work of the sub regional neonatal unit, with good outcomes for premature and multiple births. There were 3,785 births in 1998 decreasing slightly to 3,569 in 2003.

## 2.4 Financial position of the trust

The trust's annual report for 2002/2003 states that it spent £154 million delivering services. Its budget has risen from £98 million in 1999 to £176 million in 2003 and will increase again in 2004. The trust achieved the four financial targets that it was assessed against by the Department of Health, however it has shown a deteriorating financial position during the year 2003/2004.

## 2.5 Events leading to the decision to investigate

A series of serious incidents occurred in the maternity unit between January 27th 2003 and March 21st 2003. These incidents can be summarised as follows:

- a woman had an emergency caesarean section as a result of maternal and fetal distress following unsuccessful attempts to deliver her baby using forceps and ventouse suction. The mother and baby survived
- a woman had an unexpected breech presentation and prolonged second stage labour and the baby died shortly after birth
- a woman had a normal labour and delivery, but the baby was born in poor condition and died within minutes
- a woman had a poor fetal heart trace, prolonged second stage of labour and delayed emergency caesarean section. The baby was stillborn

Following internal investigations by the trust of these incidents, the Chief Executive requested an external consultant obstetrician to produce a report for each case. The report identified that in one case it was hard to see how the death could have been avoided. With regard to the other three cases, the consultant's report said that either a failure to recognise fetal compromise occurred or that there was delay in taking action. Between April and July 2003 the trust took action to address the concerns raised by this external report. The recommendations included greater consultant involvement on the labour ward, improved heart trace interpretation, the need for up-to-date labour ward guidelines and improved communication. Since these incidents there has been a lot of local media attention, which suggested that the public had a lack of confidence in the maternity services.

The Birmingham and The Black Country Strategic Health Authority and the PCT were not informed of the four incidents until two months after the last one had occurred. At that time they were also informed of concerns over the poor working relationships between some senior consultant staff in the maternity unit and between consultants and midwives. Of the consultants in post, four have undertaken the role of Clinical Director contributing to a lack of consistency and continuity. There has also not been a united multidisciplinary approach to developing the service. The current trust senior executives recognised this in 2002 and made unsuccessful efforts to address the problems. However these behavioural and organisational issues may have had an adverse effect on the effectiveness and quality of care to women and their babies.

The problems within the maternity services date back to at least 1996 when the risk management department of the Medical Defence Union reported similar problems. It noted a lack of consultant involvement in the management of labour, poor communication between professional groups and recommended early action on a range of issues to decrease the risk of an adverse event occurring. Action was taken following the Medical Defence Union report yet staff and patient reports suggest similar concerns existed at the time of this investigation and they question why more has not changed in the intervening years.

From 1998 to 2000 there was a complete change in the senior executive team in the trust including both executive and non-executive directors, which meant members of staff with knowledge of past events and the history of problems had left impacting on the organisational memory. The trust states that they became aware of concerns about poor working relationships between staff in the maternity services in 2002. The Chief Executive recommended an external review of the issues, which the consultants endorsed. The review was to look at professional standards, practices and processes related to the organisation of clinical care. The trust said it was not aware of any concerns about individual clinical performance or outcomes at that time. After some difficulty recruiting an external reviewer one was eventually appointed with a proposed start date of April 2003.

When informed of the untoward incidents at the end of May 2003, the Birmingham and The Black Country Strategic Health Authority, following discussions with the Department of Health's investigations and inquiries unit did not support the trust's proposed review going ahead because of clear public anxiety. The Birmingham and The Black Country Strategic Health Authority contacted the Commission for Health Improvement in July 2003 and formally requested an investigation. CHI made an initial evidence request and undertook a preliminary investigation before announcing the decision to investigate the maternity services on October 23rd 2003.

In the meantime the Birmingham and The Black Country Strategic Health Authority worked with the primary care trust and the trust to set up a strategic oversight group.

This group was to oversee the trust's implementation of a detailed action plan. The action plan covers antenatal care, team work, sustainability of improvements and agreed management action. This group continues to meet regularly to monitor progress of the action plan.

In 2001 the Commission for Health Improvement conducted a routine clinical governance review but did not examine the maternity services. The report of this review referred to maternity patient surveys, risk management in maternity services and junior doctor training. The investigation team found that although the maternity services had these mechanisms in place they did not have adequate systems to ensure that implementation was effective.

Since the four incidents in 2003 the following actions have been taken:

- the trust commissioned internal and external reviews of each clinical case
- the trust commissioned an external medical adviser who worked with staff to progress changes. A midwifery advisor was commissioned by the Birmingham and The Black Country Strategic Health Authority who has also worked with staff
- a new Clinical Director of the obstetrics and gynaecology directorate has been appointed, and the workload of the Women and Children's Divisional Manager reduced to enable her to focus on the directorate
- a strategic oversight group was established by the Birmingham and The Black Country Strategic Health Authority with the primary care trust to oversee the implementation of the action plan
- the Birmingham and The Black Country Strategic Health Authority commissioned a prospective and retrospective clinical review into adverse events in the maternity unit from the West Midlands Perinatal Institute
- a collaborative action planning day has been held to plan changes required based on the recommendation of this report

The Healthcare Commission investigation team supports the above actions and recognises that they are contributing to the improvement of the quality of care in the maternity service. However further progress is necessary and the following chapter identify areas where change is required and details recommendations to bring about the required changes.

# Chapter 3 – The patient experience

## 3.1 The patient experience and patient and public involvement

Healthcare is about patients, it is about involving them, seeking their views, acting on those views where possible, and about ensuring appropriate provision of information. The focus of this investigation is about the experience of patients when using the maternity services at New Cross Hospital. This chapter examines some of the trust wide processes for involving patients, how the trust learns from their experience, and how these systems work in maternity services.

The trust has a patient experience strategy that includes the expectations of patients, equality and diversity, hospital cleanliness, privacy and dignity, integrated care pathways, the patients' forum, and the patient advice and liaison service (PALS). The trust board uses various methods for monitoring the patient experience including:

- an annual patient satisfaction survey
- the evaluation of integrated care pathways
- patient feedback
- surveying 300 patients per month across the trust
- results of divisional/departmental patient satisfaction and focus groups
- audits of how it meets national standards of cleanliness
- the patients' forum annual report
- analyses of complaints information

The Nurse Director is the board lead for patient and public involvement and the Deputy Nurse Director is the lead for patient experience. The Head of Midwifery and Divisional Manager are the leads within maternity services.

The trust's first patient experience annual report 2002/2003 details how certain aspects of the experience of patients have been improved across New Cross Hospital and the Eye Infirmary. Improvements that particularly relate to the maternity services include:

- standardisation of documentation
- changing shift patterns to improve consistency of care
- a review of health records
- refurbishment of the neonatal unit to improve privacy and dignity
- refurbishment of two wards and the delivery suite
- purchase of extra scanning machines that eliminated waiting lists

In the maternity services there was little evidence of a progressive philosophy of care, and people felt care should be more focussed on the needs of women. UNICEF (the United Nations Children's Fund) awards baby friendly status to maternity units and community teams, that demonstrate outstandingly high levels of commitment to encouraging and supporting women to breastfeed their baby. The trust development plan states that it is working towards achieving baby friendly status, but there is little evidence of this.

## 3.2 Equality and diversity and spiritual care

Targets for equality and diversity are contained in the 2003/2004 healthcare plan for the women and children's division. The framework covers disability, race, spiritual and religious and cultural beliefs, gender, and age. There is a trust wide equality and

diversity steering group that is chaired by the Chief Executive of the trust, and an equality and diversity patient experience implementation group. The implementation group undertakes formal monitoring of the citizens' experience strategy and an annual progress report is presented to the public. The group also monitors compliance with the race relations scheme and reviews diversity information. Meetings are held every two months and minutes go to the trust equality and diversity steering group. The trust has access to the Wolverhampton interpreting service and has a contract with the Royal National Institute for Deaf People to provide sign language and interpreters for people who are deaf or deafened.

The department of spiritual and pastoral care consists of chaplains and spiritual representatives from a number of faiths, including the Church of England, Roman Catholic and non conformist churches, Islam, Hinduism and Sikhism. They offer a 24 hour, seven days a week on call service. Within the maternity services, the department of spiritual and pastoral care responds to specific requests for christenings, prayers, and offers bereavement support to families if required.

The maternity unit attempts to meet the wishes of Muslim women by using women doctors and women midwives to help during birth. The Sikh member of the spiritual and pastoral care department acts as a liaison person for Sikh women and provides additional support when possible. The Anglican response to bereavement has been modified and Anglican chaplains spend time with the bereaved family as well as with staff involved in their care. Women and staff who spoke to the Healthcare Commission would like to see improved bereavement support in the maternity services. The trust is reviewing the provision and supports the need for improvement.

The charity Looking After Parents and Siblings (LAPS), a member of the Black Country Bereavement Network, provides a support group at the trust for families following bereavement. The aim of the charity is the protection and preservation of good mental health and the relief of suffering and distress caused by the death of a baby through the provision of counselling, training and education. Bereaved parents are given information and a baby book that contains photographs, hand and footprints and a lock of hair (if possible) for the family to keep in memory of the loss of their baby.

## 3.3 How are people involved in care and treatment?

There are many examples of patient involvement across the trust and patient views are actively sought. The trust conducts spot surveys of 300 patients every month in different departments in the hospital. However, there is little evidence of patient involvement or of implementation of the strategy for patient and public involvement in the women and children's division, this seems particularly weak in the maternity services. Patient involvement is mainly through the maternity services liaison committee (detailed below). Implementation of the patient and public involvement strategy is the responsibility of divisional managers. There are now efforts being made in the maternity services to listen to the views of women but the proposed 10 week patient surveys do not appear to be happening regularly and patient views are not always acted upon systematically.

## 3.4 Patient advice and liaison service (PALS)

The patient advice and liaison service (PALS) provides support to patients, relatives and carers. Quarterly reports are completed which detail trends, feedback and recommendations and copies of the report are widely circulated within the trust but

there is little evidence that action is taken as a result of these reports. The PALS coordinator and PALS officers try to address concerns at the point of service and act as a signpost through the different services in the trust. They support patients in getting appointments with health professionals for further information and assist with information about the trust complaints procedures. Guidance about access to health records is available from PALS too. The PALS service is publicised throughout the trust and leaflets are available. Senior management are described as accessible and supportive of the PALS but the location of the PALS office is on the edge of the site that makes it difficult for members of the public to access. The trust recognises the need to establish the PALS service in a more accessible location for patients and this will be provided for as a part of the New Cross site redevelopment.

## 3.5 Patients' forum

A patients' forum was established in October 2000 and met once a month until July 2003. In the 2002 annual report some of the changes influenced by the forum are detailed. The forum was involved in reviewing services, patient information, security arrangements and the complaints process. It has also contributed to site development, the domestic violence group, improving sign posting throughout the trust and been involved with improvements to the travel plan. In June 2003 the minutes of the forum record complaints about conditions in the maternity services, especially with regard to cleanliness. Hotel services responded to concerns about cleanliness subsequent to them being raised by the forum.

The Commission for Patient and Public Involvement in Health (CPPIH) was established in January 2003. It is responsible for appointing members to patient and public involvement forums and for organising the necessary support for them. The main functions of forums are to monitor and review services from the patient perspective and to feed this perspective into the work of the trust. The first meeting of the patients forum at the trust was in December 2003, at that time it had seven members. The Wolverhampton Citizens Advice Bureau provides administrative and secretarial support to this forum, and the forum facilitator reports to the Chief Executive of the Bureau.

The patients' forum has representation on the health scrutiny panel of the Wolverhampton City Council. The purpose of the panel is to improve the health of local people and address health inequalities; as well as secure the continuous improvement of health services and services that impact upon health. While the forum gets established it has observer status on this panel. It is anticipated that this will be reviewed once the forum has had time to develop their work. The health scrutiny panel have discussed the maternity services at New Cross Hospital following a presentation given by the Chief Executive of the trust. The panel asked to be kept informed of progress. There were good links between the former patients forum and the Wolverhampton Community Health Council.

The Community Health Council received a number of verbal complaints about the maternity services. Topics raised included concerns about the high caesarean rate, supervision of junior midwives, and problems with independent reviews of complaints. Women and their partners also shared concerns with the Council about the unreliability of equipment. However these concerns did not lead to the Council doing a focussed visit that they had authority to carry out, the last focussed visit of the maternity services was in 1998.

## 3.6 Maternity services liaison committee

The health community has a maternity services liaison committee that is formally established by the primary care trust. It advises on the provision of maternity services, and supports the implementation of new ways of working in line with national policy development. It also comments on standards and resources of maternity care, reviews maternity services and indicates remedial action, and receives views of users. Membership includes a non-executive member of the trust, and representatives from the local community, including consumer organisations.

The objectives of the maternity services liaison committee include ensuring quality information to enable informed consent about treatment, examining services for bereaved parents, reviewing procedures in the light of the experience of women of their care, and to produce caesarean care pathways. The co chair of the committee is a member of the directorate risk management group, but no other examples of patient involvement in risk management were identified. The National Childbirth Trust has been active at New Cross Hospital for many years and a member of the National Childbirth Trust has chaired the committee since 1997. Members are also involved in joint working and review groups within the trust including the labour ward forum, the obstetric risk management committee and the breast feeding working groups. The National Childbirth Trust contribution to services is welcomed by the trust.

## 3.7 Environmental and service quality issues

In 2002 the trust secured £780,000 to modernise the maternity services. This financial input resulted in some much needed improvements to the patient environment including redecorating wards, improved toilet facilities and alterations to improve sizes of rooms on the neonatal unit. However there are still significant concerns about the age of the building, which does not lend itself to supporting and encouraging straightforward and natural childbirth. Despite efforts to modernise the building the environment for patients is still impoverished and the age and design of the building also makes it difficult for hotel services to maintain the necessary high standards of cleanliness. Since the refurbishment in 2002 the number of complaints about the environment have reduced but there are still reoccurring problems including the temperature being too high in the wards, especially during summer. A new building was scheduled for the service for 2005 but this has now been delayed until 2010 and further modernisation is needed to improve the existing facilities until the service is moved to the new building. The trust is aware of these concerns and is making the modernisation of facilities a key priority as part of the site redevelopment.

Women complained about lack of access to food outside of meal times, particularly during the night. One patient had given birth at midnight after a long period of labour and was told there was nothing to eat when she requested food. There are biscuits and toast on the wards that can be provided 24 hours a day but not all staff know about this, particularly night staff. The trust states that it is compliant with the better hospital foods initiative and provides a range of options to cater for the dietary needs of patients. The trust is planning to provide snack boxes out-of-hours on the delivery suite to add to the current range of options to meet their dietary needs. Work is also progressing on the introduction of a vegetarian menu.

Several women expressed concerns about the mix of patients on wards A5 and A6. For example, women who have yet to deliver but have been informed their baby has

died are not provided with separate facilities to women who have just given birth to healthy babies.

Some women and their partners feel that they are not listened to enough and that their wishes are not always taken into account. They do not get satisfactory explanations about what is happening. Staff do not always introduce themselves to women and are too busy to talk to them. A few women reported that staff attitude seemed uncaring and abrupt. There is inadequate handover of information when staff change shifts and women often have to tell staff the same information again. Staff talk about clinical issues where other people can hear, compromising confidentiality. There is also concern that staff do not always refer to patient records and record clinical information on scraps of paper. This is in contrast to good practice on the neonatal unit where other parents are asked to leave the room to ensure confidentiality during clinical meetings with families.

An audit in 2002 showed that only 6% of health records contained a birth plan, and only 50% of records had a management plan. Birth plans are not compulsory but such low compliance suggests that they are not being discussed with women to enable effective choice to take place.

## 3.8 The complaints process

The trust receives around 400 complaints a year, most commonly about staff attitudes and communication. There are on average 40 complaints a year in the maternity services where approximately 3,500 births occur annually. Although the volume of complaints is low, the issues raised are important to women in the services. The main issues women complain about are the attitude of staff, communication and clinical treatment. These include not being looked after properly, such as not being given enough choice and a lack of individualised care. A few women also complained of being left alone for long period of time. Complaints about postnatal care and the way babies are cared for are fewer, unlike the national picture in which most complaints relate to the postnatal ward (Audit Commission, *First Class Delivery,* 1997)

The trust's complaints policy is generally comprehensive, but does have a noticeable gap. It is assumed that each division monitors trends in complaints and takes action accordingly. Quarterly information given to the management and trust boards does not contain detailed information about trends in directorates or action taken to implement changes. However, following the appointment of the complaints management coordinator the trust board has started to receive detailed information about trends in complaints and the quality of reports has improved. There is no apparent linkage between complaints, claims litigation and clinical incidents although the trust's electronic information system has the potential to do this. The trust has recognised this and in February 2004 appointed an information technology facilitator to develop the system further.

During the risk pooling scheme assessment for trusts' in October 2002, the trust scored 61% for the reporting and management of complaints due to its incomplete complaints policy and lack of a trust wide process to risk assess complaints received. This figure rose to 93% in the October 2003 assessment as a result of improvements made to the process. There was criticism as to the handling of independent reviews of complaints and there have been eight of these during the last three years in maternity services. Of particular concern was the length of time that independent

reviews seem to take. However this is a national problem and will be rectified with the introduction of the new NHS complaints policy.

## 3.9 Information to and from patients

A range of patient information is available in different languages throughout the trust and maternity services. There are no quality standards applied to patient information such as ensuring they use patient friendly language, and version control is poor so women receive different information about the same process e.g. the booking in leaflet.

The 2003/2004 healthcare plan for the women and children's division has targets to improve the experience of patients. These include the development of a no wait culture, improvements to housekeeping services and improved provision of patient information. Surveys are one way of getting feedback on service developments. Several trust wide surveys have been conducted during the last three years. The Picker Institute Europe (a registered charity that specialises in measuring patient experiences) conducted outpatient, inpatient and emergency department surveys. Where maternity services were included in trust wide surveys the results provided limited information for feedback and development for the unit. However the results do highlight a general trust wide issue about patient communication and information.

Maternity specific patient experience data has been sought in various forms. In October 2003 a patient survey to which 37 women responded said the majority of care and treatment met the expectations of women. Suggested actions include conducting four or five surveys each year and reviewing:

- clinic profiles and waiting times for antenatal clinic
- patient information regarding induction of labour
- patient information about antenatal appointments
- training for staff

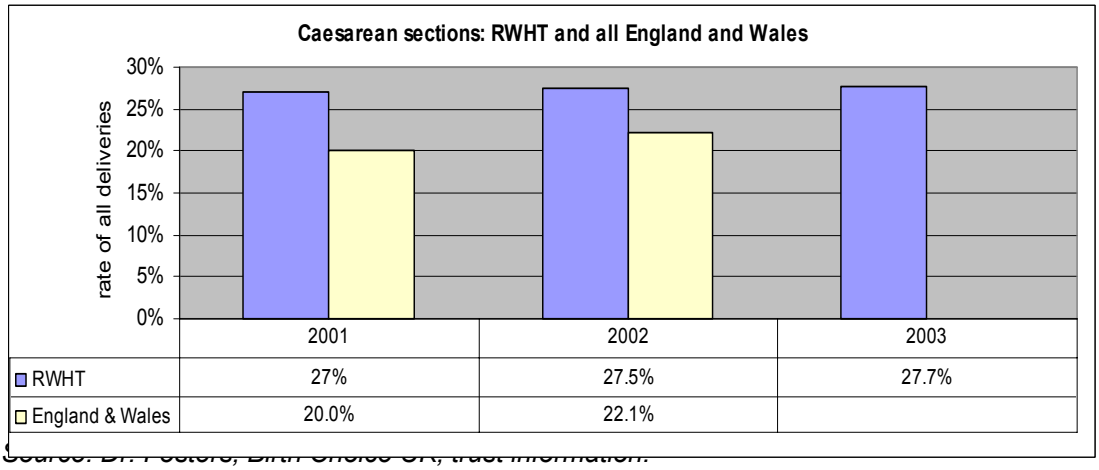
There is a lack of information about progress on these actions although review of antenatal care and care on the delivery suite are included in the strategic oversight group action plan.

Maternity services have no formal process for ensuring that results from patient surveys inform improvements. The maternity service liaison committee and the divisional management team must consider and act upon survey results. There is inadequate reporting of patient experience to the trust board and reports would benefit from more detail especially about action following surveys.

## 3.10 Outcomes: - caesarean sections

Figure 1 shows that the proportion of deliveries where a caesarean section was performed has increased at the trust between 2001 and 2003; it was also higher than the national rate for all of the three years examined.

**Figure 1:Caesarean section rates at Royal Wolverhampton Hospitals NHS Trust against all England and Wales rates**



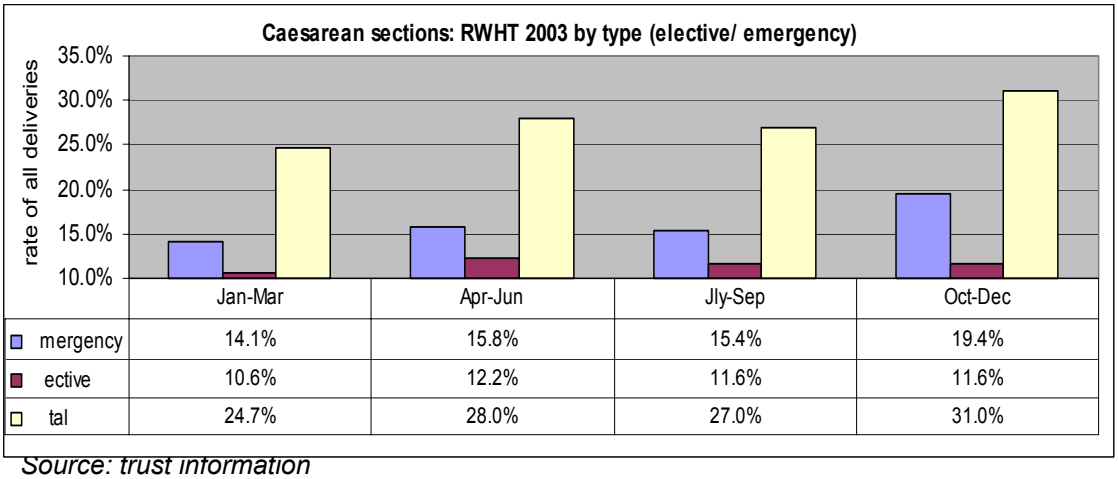

| | 2001 | 2002 | 2003 |
|---|---|---|---|
| RWHT | 27% | 27.5% | 27.7% |
| England & Wales | 20.0% | 22.1% | |

*Source: Dr Foster, Birth Choice UK, trust information.*

*Information for England and Wales for 2003 was not available at the time of publication of this report.*

The increase has continued during 2003, as shown in Figure 2 with the total rate exceeding 30% in the last quarter of 2003. The increase is due to a rise in the proportion of babies delivered by emergency caesarean section. The exact reasons for the high rate are not known, but the investigation found little progress in adopting a low risk approach to delivery and the predominance of a medical model of care, both of which are unsupportive to reducing caesarean section rates.

**Figure 2: Caesarean section rates at Royal Wolverhampton Hospitals NHS Trust by type**




| | Jan-Mar | Apr-Jun | Jly-Sep | Oct-Dec |
|---|---|---|---|---|
| mergency | 14.1% | 15.8% | 15.4% | 19.4% |
| ective | 10.6% | 12.2% | 11.6% | 11.6% |
| tal | 24.7% | 28.0% | 27.0% | 31.0% |

*Source: trust information*

## Outcomes: - perinatal mortality

Poor quality of nationally available Hospital Episode Statistics data relating to maternity services at the trust meant that it could not be used in this analysis. The trust is aware of this issue and has addressed it for future data recording.

Based on information supplied by the trust, the investigation team established that trends in stillbirths and early neonatal deaths fluctuated considerably between 1995 to 2002 (see Appendix C).

A rise in perinatal mortality at the trust in 2001 and 2002 was found not to be statistically significant. Using data from the Office for National Statistics for 1998 to 2002, the Healthcare Commission compared perinatal mortality at the trust with all other trusts in England and Wales and separately with those with similar ethnic populations to Wolverhampton. This revealed perinatal mortality to be significantly higher at the trust when compared to all trusts in England and Wales. However, when compared with nine comparable trusts in terms of population ethnicity, perinatal mortality was found to be only slightly higher at the trust and the difference was not statistically significant (see Appendix B).

Research has identified variations in the rate of infant mortality associated with ethnic background. Perinatal outcomes at the Royal Wolverhampton NHS Trust reflect the general pattern of higher death rates among some black and minority ethnic groups. There are a number of underlying, complex causes for such differences, for example, deprivation, low birth weight, maternal nutrition and access to high quality services. Addressing these is a challenge for the NHS and other agencies with a responsibility for public health.

Addressing inequality in infant mortality has been a key government target since 2001. Health inequalities were made a key priority for the NHS in the Priorities and Planning Framework for 2003-2006 and the government launched a programme for action, *Tackling Health Inequalities* in July 2003. The government has set a national target for 2010 to reduce the gap in infant mortality across social groups and raise life expectancy in the most disadvantaged areas. This includes improving access to maternity services, focusing on early antenatal bookings and take up rates for women from low income backgrounds and black and minority ethnic groups. NHS organisations are required to address these issues, with partner organisations such as local authorities. The Department of Health is preparing further guidance for strategic health authorities to assist them in their role of monitoring performance against the targets.

The West Midlands Perinatal Institute uses methodology from the confidential enquiry into stillbirths and deaths in infants (CESDI) in their case reviews. The panel consists of two midwives, two consultant obstetricians, a specialist registrar in obstetrics and gynaecology. For cases that involve neonatal management, a consultant neonatologist and an advanced nurse practitioner attend as well. The panel looks at anonymised incident report forms and grades the cases using the system described in table 1. The Birmingham and The Black Country Strategic Health Authority commissioned the West Midlands Perinatal Institute to carry out a review of selected cases that had an adverse outcome. Ten cases that occurred between June and October 2003 were prospectively selected and a further ten were selected retrospectively that had occurred between 2001 and 2003.

Table 1. Findings of the West Midlands Perinatal Institute review of selected births with an adverse outcome at the Royal Wolverhampton Hospitals NHS Trust

| **Grade** | | **Prospective review** | **Retrospective review** |
|---|---|---|---|
| 0 | No suboptimal care | 2 | 1 |
| 1 | suboptimal care, but different management would have made no difference to the outcome | 2 | 3 |
| 2 | suboptimal care- difference management *might* have made a difference to the | 4 | 2 |

| | | | |
|---|---|---|---|
| | outcome | | |
| 3 | suboptimal care- different management *would reasonably have been expected* to have made a difference to the outcome | 2 | 4 |

*Source: West Midlands Perinatal Institute Report, March 2004*

The West Midlands Perinatal Institute reviews classified 60% of deaths it considered as grade 2 or grade 3. The report notes that the level of care in the cases reviewed "does not appear to be any worse than that which is evident in other units whose cases had undergone confidential assessment by CESDI expert panels in recent years". In an attempt to put the findings for the trust into context, the West Midlands Perinatal Institute quotes findings from CESDI annual reports. Of the intrapartum related deaths considered in 1994/1995, 78% were classified as grade 2 or 3 (25% were grade 2 and 52% were grade 3). 45% of stillbirths attributed to events occurring before birth in 1996/1997 were classified as grade 2 or 3. Overall, 68% of cases in 1994/1995 were classified as grade 2 or 3 (26% were grade 2 and 42% were grade 3). Although not quoted by the Institute, this considers all cases and would appear to be comparable to the Institute's findings for the trust. It should be remembered however, that the Institute's interim report only looked at a small number of cases, and it is therefore difficult to draw overall conclusions.

## 3.11 Key findings

1. Perinatal mortality has increased at the trust over the period 1995 to 2002; examining ONS data for 1998 to 2002 revealed that the rate was significantly higher than the average rate at other trusts in England and Wales; however when comparing Wolverhampton to trusts with a similar ethnic mix only, the mortality rate at the trust is not significantly higher.

2. A review of a small number of perinatal mortality cases from the trust by the West Midlands Perinatal Institute of cases with an adverse outcome found that different management might or would have reasonably been expected to have made a difference to the outcome in 60% of cases; this finding is comparable to the Confidential Enquiry into Stillbirths and Deaths in Infants (CESDI) findings.

3. Caesarean section rates are higher at the trust than nationally due to high proportions of babies being delivered by emergency caesarean section.

4. Poor quality hospital episode statistics data relating to maternity services at the trust inhibited the use of this data for analysing patient experience.

5. There is little evidence of patient involvement in the maternity services, and more robust mechanisms to assess patient experience in the trust should be developed, particularly to gaining patient feedback within the divisions and ensuring actions are taken forward.

6. There is no clear and consistent approach to information for patients. Quality standards are not applied to the publication of patient information documents such as language reviews or version control.

7. There is a gap in what is otherwise a comprehensive complaints policy and procedure in that it is assumed by trust management that each division monitors trends and takes action accordingly. This does not happen in the maternity services. There was criticism as to the trust's handling of independent reviews

from several sources that included staff and patients. Of particular concern was the length of time that independent reviews seem to take.

## 3.12 Recommendations

1. The trust should ensure that they make accurate data returns to the department of health regarding maternity data sets contained within hospital episode statistics.

2. The trust should investigate why high proportions of babies are born by emergency caesarean section and identify ways in which it can be reduced. Also the trust should examine perinatal mortality rates and identify influencing factors.

3. The Healthcare Commission strongly endorses the government approach to tackling this health inequality and its underlying factors and expects to see NHS organisations addressing these issues with their partners. The Healthcare Commission will therefore require this trust to demonstrate the measures it is taking, with its partners, to tackle the problem locally.

4. The Healthcare Commission also suggests that the Department of Health address the following in the forthcoming National Service Framework for Children: reviewing equality of access to maternity services; the importance of encouraging early access to maternity services; and the availability of translation and advocacy services for women from ethnic minority groups.

5. The PCT should review and strengthen the terms of reference of the maternity services liaison committee .

6. Patient involvement in the maternity services must be broader than just the liaison committee. Efforts should be made to involve women in the audit process. Regular surveys should be conducted to get feedback from women and their families. Comments from community groups, including toddler groups and postnatal reunions should be sought and action must be taken in response to feedback.

7. The newly established patients forum should have a key role in monitoring progress in the maternity services. The Commission for Patient and Public Involvement in Health and the maternity services liaison committee should consider the development of a protocol about ways of working together on patient issues in maternity services.

8. Informed choice of as normal a birth as possible should be promoted by the pro-active use of individual birth plans.

9. The trust should establish a patient readership panel that reflects the diversity of the population to aid the development of and comment on patient information before it is agreed for publication.

10. Further modernisation of the physical environment of the maternity services, particularly to bathroom areas, should be completed. Hotel services provision should be enhanced to keep the environment as clean as possible.

11. The trust should critically examine its handling of complaints, seeking feedback from former complainants to enhance this process.

12. Systems to improve the confidentiality of patient information should be established, this should include both verbal and written communication.

# Chapter 4 – Management and leadership

## 4.1 Governance of the maternity services

Leadership at all levels in the obstetrics and gynaecology directorate has been weak and inconsistent. The people who were appointed were seen as visionary and with good ideas for the service, but they did not necessarily have the skills or sufficient dedicated time to influence service development or implement required changes. Leaders in the maternity service lacked support and this resulted in the service stagnating with changes that were initiated having limited impact. There has been at least four years of changing and fluctuating clinical leadership and management during which time there has been a failure to engage staff and women in the development of the service. Professional leadership for midwives has also been inadequate. The division had no clear vision for maternity services and it was under managed and under led. The working relationship between the head of midwifery, clinical director and divisional manager should have been working to ensure effective leadership but it clearly did not achieve this. What it did achieve was a paralysis of decision making which prevented changes to improve the quality of maternity care taking place effectively.

Divisional managers responsibilities include establishing an annual plan in their area of responsibility and ensuring that trust policies are translated into local policies; identifying staff to be responsible for governance and providing regular governance reports. Clinical directors' responsibilities include providing leadership for governance activities within the directorate; setting guidelines of competence for medical staff; monitoring and maintaining clinical records, development, dissemination and review of local clinical policies, procedures, and guidelines, local adaptation of trust wide clinical policies, and active management of clinical risk. Using this description as a benchmark, it is clear that these responsibilities were not fulfilled. A new clinical director was appointed in July 2003 and the divisional manager who has been in post since March 2002, who is now concentrating solely on maternity services.

Midwifery leadership at the trust must be strengthened to ensure that development of midwifery practice receives a much higher profile than it has done in the past. Under the proposed new structure the post has changed, with additional areas coming under the direct responsibility of the head of midwifery. The previous head of midwifery had competing demands on time available to effectively lead the midwifery services whilst on a leadership course and when doing trust wide work.

As mentioned earlier, people in positions of leadership are not supported sufficiently to achieve essential change. The current midwifery management team have had to work under significant pressure for the last year. As well as running the service they have had to work without a substantive head of midwifery in place, cover vacant posts and attempt to implement action to achieve change.

Poor performance is not being effectively managed and further education and training is required to tackle this. Staff and trade union representatives complained about the movement of people into different posts due to poor performance without first addressing the issue. Staff feel pressurised by some managers and report they were told "not to drop the unit in it" when interviewed during the investigation team visit to the hospital. Most staff were open and keen to share their experience of working in the service.

The directorate management team including the consultant group, and senior midwives, need to act as positive role models. They need to be highly visible and build a culture of progress and pride in what the directorate does and how they do it. Leadership skills need to be supported by development programmes for managers and clinical directors.

Whilst acknowledging that change is happening, there are doubts from many staff about whether things will continue to progress after the Healthcare Commission investigation. The input from two external clinical advisers since the untoward incidents early in 2003 has been beneficial. Whilst the advisers were initially regarded with suspicion, their contribution to service development has been considerable.

## 4.2 Governance of the trust

The trust does have a number of effective systems and processes in place. It has an extensive management agenda with focus on key performance targets, capital and service developments and growth. The challenge of managing the complexity and demands of this agenda has played a part in the loss of focus on some aspects of quality of care.

This report focuses on maternity services but they cannot be examined in isolation from the wider governance of the trust. The aim of the trust governance strategy is to ensure structures and processes are in place within the organisation that ensure all staff are aware of their role in relation to clinical and corporate governance. It also highlights how they can be actively involved in risk management. The investigation team found that the strategy and the committee structure focus on corporate governance and risk management, and that clinical governance would benefit from greater emphasis.

The governance directors' meeting should focus once every three months on a particular area of governance, but this has proved unworkable. An annual review programme has now been agreed and implemented and the maternity services report was considered in August 2003. The governance directors' meeting focus on certain areas of clinical governance such as risk management and strategic capacity. Patient experience is occasionally on the agenda of the meetings but involving patients and members of the public is rarely discussed.

Governance is well resourced, with governance directors supporting the medical director in his clinical governance role. Staff are not clear on the structures for governance and lines of accountability. There are a lot of meetings that do not have a clear purpose or that lack authority to make decisions and take action. This creates a lack of focus on clinical governance and does not enable effective challenge to existing procedures.

There is conflicting evidence about the leadership style of the executive team including the Chief Executive. Some of those interviewed described management styles as adversarial, intimidating and at times autocratic. Others said that executive members of staff are responsive and approachable, although perhaps some are more hands on than they should be. The Chief Executive has an open door management style, but divisional and directorate management staff find this undermining on occasions. However, in the recent nationwide NHS staff survey the trust scored above average for the quality of senior management leadership.

A culture of mistrust and fear still exists in maternity services despite the efforts of the executive team to change this. Relevant information should be shared as much as possible and efforts should be made to communicate with increased openness. There should also be increased engagement with the primary care trust and the Birmingham and The Black Country Strategic Health Authority with a broad range of members of the executive team attending external meetings, not just the Chief Executive.

An outline business case has been developed to provide a new women and children's hospital, a new ambulatory centre, new operating theatres, additional pathology and diagnostic facilities and other qualitative improvements. There has been significant progress on this in relation to agreeing assumptions across the local health community and it has taken into account the wider strategic review of Black Country services. The outline business case has not yet been approved; it will be revised and resubmitted to the Birmingham and The Black Country Strategic Health Authority with the expectation of agreement being reached later in 2004 prior to external procurement processes starting in 2005.

Further trust board development would enable it to be more effective. Non-executive directors do participate in an induction programme but would benefit from a clearer understanding of their corporate responsibility to scrutinise the trust that would enable them to better challenge the management team. The trust board monitors high level indicators on processes, outcomes, staff and patient experience and other objectives around its healthcare plan. The challenge with only receiving high level indicators is that there has to be confidence that systems and processes are in place to monitor more detailed indicators in divisions and directorates; this is not the case in the women and children's division. As there are no national performance indicators for maternity, staff feel it is a low priority for the trust. There are targets however for maternity services in the annual healthcare plan for 2003/2004. The trust board regularly receives and discusses performance information but performance monitoring both of the division and within maternity services could be stronger. It was expected that the trust board would receive a copy of the maternity services action plan in September 2003 but this did not happen and no reason for the delay has been given.

Performance reviews of divisions are held every six months and progress is assessed against objectives in their local healthcare plan. The Clinical Director, specialty manager and divisional manager usually attend these reviews although it is not clear if this is regularly the case in maternity services. Maternity clinicians services would like to be more involved in these reviews and it is essential that the new head of midwifery be empowered to contribute to the process. The Chief Executive provides monthly performance reports to the trust board and the management board.

The management board is a key operational committee with responsibility for the development and delivery of the annual healthcare plan, ensuring that divisional and directorate reports are considered alongside the corporate risk register and reviewing the risk register quarterly. It receives a monthly performance report and an annual healthcare plan report. In June 2003 the chief executive provided a summary of the problems in maternity services and action taken as a result. The Chief Executive presented a paper to the December board meeting listing learning points for the trust from recent experiences in the maternity services. The main topics covered included:

- systems are not enough, behaviours and people count
- all levels of staff within the organisation need to accept their governance accountability

- understanding the whole picture
- ensuring the basics are still delivered
- recognising and addressing the changes in the NHS, such as the need to both deliver and demonstrate safe and effective services
- addressing effective and ineffective performance

These were drawn from discussion with the trust board, governance and clinical directors, the Women and Children's Division Clinical Director, Acting Head of Midwifery and Divisional Manager. The learning could have been greater had wider consultation with staff and women in the maternity services taken place.

Changes to the structures supporting the Medical Director in his clinical governance role were introduced in April 2004. The six governance directors were reduced to four, each covering a wider area of responsibility. One of the directors will act as a deputy for the medical director in his absence. The Medical Director is the lead for medical and clinical services staff and must be seen to support the clinical directors. There have been three changes of Clinical Directors in maternity services and each has struggled to tackle the issue of the difficult relationships in the consultant team. The role of the Medical Director is seen as key to supporting the clinical directors achieve change and challenge the situation. Despite efforts being made, these were not as effective as they should have been due to the intractability of the problems. The recruitment and selection process for clinical directors should be a clear and transparent process, even though the posts have been advertised and appointments made following an interview process, staff feel appointments are made in rotation within the consultant team.

The Director of Nursing is the trust lead for nursing, midwifery and allied health professionals and was criticised by staff in the directorate for facilitating the move of the head of midwifery with no immediate replacement. However, the Community Midwifery Manager was seconded into the post to ensure continuity of midwifery management. The Director of Nursing should have been better informed about management and leadership of the maternity services and then could have been more proactive and supportive in addressing this situation.

## 4.3 Key findings

1. Leadership at all levels in the obstetrics and gynaecology directorate has been weak, inconsistent and can be described as poor. The relationship between the Head of Midwifery, Clinical Director and Divisional Manager should work to ensure effective leadership but it clearly did not achieve this. What it did achieve was a paralysis of decision making which limited the effectiveness of changes that took place. However, those in positions of leadership were not supported sufficiently to achieve essential change.

2. Midwifery leadership must be strengthened to ensure that development of midwifery practice receives a much higher profile than it has done in the past.

3. The culture of the maternity services is described as inward looking in that they are not represented at key meetings both within the trust and outside the hospital to interact with the wider health community.

4. The trust board is seen as one that could be improved, with the benefit of increased board development non-executive directors could contribute more effectively to ensuring quality is high on the agenda of executive directors.

5. The role of the Medical Director should be key to supporting the clinical directors achieve change and challenge consultants where necessary, despite efforts being made, this was not as effective as it could have been. Also, the director of nursing should have been better informed about management and leadership in the maternity services and could then have been more supportive.

## 4.4 Recommendations

1. To champion change an executive director should be clearly accountable for delivering the maternity services action plan and be given time and space to ensure renewed concentration on quality. The directorate management team must take greater responsibility for the implementation and monitoring of the action plan and involve staff, women who use the service, and outside agencies to ensure the objectives are met appropriately.

2. As a result of a finding that the trust has not been able to learn effectively and make sustained changes in practice, it is recommended that the Chief Executive ensures effective implementation of remedial action. Monitoring procedures must be put in place to make sure changes in practice are sustained.

3. Midwifery leadership at the trust must be strengthened to ensure that development of midwifery practice receives a much higher profile than it has done in the past. The post of Head of Midwifery will require considerable support to effect the necessary changes and will require access to key trust wide committees to ensure appropriate representation of midwifery issues. The Director of Nursing must be proactive in empowering the head of midwifery and in supporting and promoting change in maternity services.

4. There should be positive role model behaviour within the senior management team including the midwifery managers, senior midwives and especially the consultant group. The senior management team should be highly visible and build a culture of progress and pride in what the directorate does and how they do it. Closer working relationships must be established between the trust executive and the directorate management team in order to provide a robust and effective system of support for the new management team.

5. The range of internal and external support for the directorate should be reviewed and should include access to independent expert advice.

6. A programme of development for non-executive directors should be available as well as robust induction arrangements.

7. A service development programme should be implemented to promote a culture of openness, where staff feel free to express concerns, and where fear and mistrust are reduced.

# Chapter 5 - Staffing and staff development

There are many dedicated and hard working staff in the maternity services doing their best to work effectively in difficult circumstances. The service has been under exceptional levels of scrutiny and now needs to move forward. The pressure the adverse incidents and subsequent reviews have placed on staff has been significant.

## 5.1 Human resources

The trust board strategically leads on staffing, training and continuing professional development. The trust board receives monthly performance reports, which includes the budget for staff; expenditure on agency staff, sickness levels at trust and directorate level and turnover rates. There is concern about the capacity of the human resources (HR) department to effectively support the maternity services in addressing HR issues. In the 2003 NHS staff survey the trust scored significantly below the national average in the areas of appraisal, personal development plans, health and safety training and staff job satisfaction. However in the same survey the trust scored significantly above the national average on the quality of senior management leadership.

The trust cannot provide comprehensive sickness information, which indicates limited capacity of the HR department or poor recording processes. Sickness rates within the women and children's division averaged 4.8% from October 2002 to September 2003, which is just below average for the trust for the same period (4.9%). Before this sickness rates fluctuated between wards and teams, with higher levels being recorded on the labour ward and on ward A6 than those in the community and those on ward A5.

The trust has a joint negotiating committee that is starting to embrace working in partnership and staff involvement, a Royal College of Midwives representative is a member of this committee. The committee has a history of tension and conflict, with a poor working relationships between certain members. The trust is improving partnership working and is supported by the Department of Trade and Industry to achieve this.

The trust has detailed policies for disciplinary and grievance procedures. Staff and union representatives state that the policies are satisfactory but that their implementation is not consistent. From September 2003 information on disciplinary cases, grievances, bullying and harassment has been included in the quarterly board reports.

The trust has taken disciplinary and remedial action with a few individuals following the serious incidents in 2003. Four medical staff were counselled, one of whom was referred to the National Clinical Assessment Authority. Two midwives were suspended following senior midwifery advice and disciplinary and professional development action taken. The suspension of the midwives particularly affected the culture of the unit and demoralised many staff. Although this has now improved, staff report a culture of fear and mistrust that leads to lack of confidence in responding effectively to high risk births. Staff feel that the action taken against the midwives seemed disproportionate and their view is that the serious incidents were a reflection of the overall culture of the maternity services. The West Midlands Perinatal Institute confidential enquiry case review of November 2003, found no instances of gross incompetence or negligence although did make some recommendations to improve care.

During the investigation it became clear that the culture of the unit is changing and midwives report feeling confident to contribute their clinical views with most colleagues. It remains difficult however for junior midwives to challenge senior midwives.

## 5.2 Staffing levels

Midwifery and consultant staffing levels in the obstetrics and gynaecology directorate have been and continues to be a cause for concern. The 2002 West Midlands Local Supervisory Authority Report noted a 7% vacancy rate for midwives. The authority was concerned that the midwifery establishment had been reduced in that year and was at a level that could compromise the safety of mothers and babies. Steps were taken by the trust to address this, which included recruitment of newly qualified staff, national recruitment advertisements and developing a local approach to recruiting bank staff.

Birthrate Plus is a workforce planning system for maternity services supported by the Department of Health. Following a detailed analysis at New Cross Hospital a report was presented in December 2003 that identified there was a shortfall of 20 midwives (14%) for the service. In the UK as many as two thirds of maternity units in England have identified a shortfall of midwives, with approximately 50% of these having a deficit of 10 full time posts. What is less usual at Wolverhampton is that a significant proportion of women were graded either four or five during the analysis, indicating a higher dependency, with many births requiring significant medical intervention. It confirms there are a higher number of high risk pregnancies. This contributes to staff having less confidence in making decisions about care and treatment.

Staff report that the number of vacancies and rates of sickness absence is a source of frustration with senior midwives spending much of their time trying to ensure the next few shifts are appropriately staffed, especially on the labour ward. The issues of high workload and inadequate shift cover remain. It is difficult to get agency staff, and additional time has to be spent supervising them. At the September 2003 joint negotiating committee meeting it was noted that there were a number of midwives who were interested in increasing their hours but they had been told that this was not possible and agency staff were being used instead. The Divisional Manager looked into this and could find no evidence of any staff being refused the opportunity to increase their hours. There are concerns about the reliance on bank and agency staff in the maternity services but information to the trust board is not detailed enough to show what action is required. Student midwives were told they would not be allocated to posts despite there being vacancies. This was rectified but not quickly enough to prevent some of them obtaining jobs elsewhere, indicating a lack of forward planning.

Views on shift arrangements are inconsistent. Some midwives describe poor organisation of duty rosters, frequent shift changes, extra working hours being requested at the end of their shift and missing breaks due to staff shortages. This causes difficulties with childcare arrangements. Union representatives report that more needs to be done to implement family friendly working practices.

Staff rotation within maternity services has been discussed since 1998 but is still not happening. The West Midlands Local Supervisory Authority highlighted the lack of midwife rotation and said that this needs to be addressed urgently. Rotation should have been put in place by November 2003 but at the time of the investigation team visit in January 2004 there was no agreed date for implementation. In the absence of

rotation staff become deskilled and can lose confidence in dealing with complex cases. It is therefore essential that this be introduced as soon as possible, particularly for junior midwives.

Staff have raised concerns in writing and verbally about staffing levels and have also highlighted impending problems to the chief executive, the trust chair and local MPs, after which efforts were made to improve staffing levels. Staff complete incident forms when there are shortages because they consider it a risk to patient care although staff report they have been advised by their manager not to do this.

Consultant staffing levels have received attention because of vacancies and long-term sickness and there was a reliance on locums and bank staff. Two new consultant obstetricians have been appointed, one with a specific focus on risk. A new labour ward rota was introduced in April 2003 and revised in January 2004 to address concerns about consultant cover. The revised rota states that one consultant must provide 40 hours committed cover from Monday to Friday. It is too soon to determine whether the revised rota will actually make a difference in practice, although there are fewer delays in accessing consultant advice.

Antenatal clinics are sometimes cancelled at short notice and there is occasionally confusion over who is providing cover. Clinics run late because of limited availability of staff to do ultrasound scanning. Staffing of the single theatre seems to work well with staff being called from general theatre when required. Lack of medical cover for wards A5 and A6 has led to delayed discharges and limitations on the availability of beds.

## 5.3 Team work

The Healthcare Commission has serious concerns about team work in the maternity services. As far back as 1996 the Medical Defence Union identified a lack of communication between professional groups. The West Midlands Perinatal Institute review in November 2003 also found poor communication and that this appeared to be associated with several instances of substandard care. Dysfunctional relationships between the consultant team impacts on relationships with midwives and has limited effective multidisciplinary work. Consultants do not all get together regularly to make decisions. Working relationships have not been as close or effective as necessary to ensure a quality service. Where there is a difference of opinion this is not resolved and the subject is avoided. There has not been a united approach to developing the directorate and people are seen to be working as isolated practitioners rather than as a team. This leads to junior doctors not referring problems to the consultants and difficulties accessing consultants for advice. Conflict between consultants and midwives has at times resulted in public disagreements. The maternity services have not always been effectively represented at key meetings within the trust and this may have impacted on resources available for the service. There has been a failure to agree on ways of working, poor leadership of the clinical teams and ineffective role modelling for junior staff.

There is evidence that efforts to promote effective team work in the directorate have met with limited success. The Chief Executive met with the consultants in the maternity services in August 2002 and the medical director interviewed all the consultants. At that time no concerns were raised to them about problems in the directorate impacting on clinical care. However, the issue of different clinicians working in different ways did lead to communication breakdowns and to poor coordination of care. The new Clinical Director is having some success in engaging

his consultant colleagues and attendance at meetings has improved. However despite all consultants being instructed to prioritise a team building event, two consultants made other arrangements and were not available.

A multiprofessional labour ward forum began in July 2003 to encourage dialogue and joint problem solving, however attendance at this is varied. There is a midwives forum for discussion of professional issues, although some midwives were unaware it exists. This forum is prominently advertised and attendance has improved. Staff at all levels need to be involved in service development issues and contribute to the decision making process. Many staff have good ideas about how the service can be developed and support is needed to translate these into action. The trust has sought advice from the Modernisation Agency to work initially with the consultants and then with the wider multidisciplinary team to improve attitude, behaviours, and working relationships and promote team building. Relationships are improving slightly now that some consultants are spending more time in the maternity unit but this needs to continue. Mutual respect for the contribution that each profession makes to the service should be encouraged.

## 5.4 Training and education

The trust has structures and resources for education and training at strategic and operational level. The directorate of education is responsible for the education and training needs of postgraduate medicine, undergraduate medicine, nursing, and allied health professions. It also considers the needs of managers and other staff groups. Training needs analysis is not systematic although a model of analysis is being piloted which is linked to appraisal. There is a comprehensive three day induction for new staff but arrangements vary for locum and temporary staff. There are also local induction packs in all areas.

The maternity service leads for education are the head of midwifery and the clinical director. They are supported by the lead consultant for medical staff training. There is some confusion as to what constitutes mandatory training throughout the trust; there is a clear definition but no consensus of understanding. This, together with staff shortages, leads to a lack of protected time for mandatory training. A new trust wide database was introduced in April 2003 to improve the recording of attendance and non-attendance at statutory and mandatory training for staff in maternity services. This urgently needs to be fully developed to enable clinical team managers to receive the necessary reports. Most staff in the trust have an annual appraisal that includes identification of training needs. However, there has been little meaningful progress on appraisal in the women and children’s directorate in the last few years.

Access to resources for training and education is limited. Some midwives have difficulty accessing the intranet to receive electronic communication and intranet based training courses. All staff have access to the internet, intranet and email, trust records indicate that approximately 70% to 80% of clinical staff access computers within maternity services. There is a good range of journals related to obstetrics and gynaecology in the Medical Institute but the textbooks are dated. There is good access in the Institute to clinical resources on line and literature search facilities. The Wolverhampton University School of Health is to be moved off site during 2004, which may make access to nursing literature more difficult.

## 5.5 Supervision

Statutory supervision of midwifery staff needs improving, newly qualified midwives need more support, mentorship and supervision. Staff are offered a choice of supervisor, which results in uneven distribution. More midwives should be encouraged to train as supervisors. Staff find it difficult to get time off work for supervision with a few staff attending in their own time to ensure they fulfil statutory requirements. There is no consistency in how often staff meet with their supervisor, with some meeting monthly, and others only meeting annually.

The adequacy of junior doctors supervision is supported by the Senior House Office post evaluations in June and December 2002 and by the West Midlands Deanery review. There was limited supervision of junior medical staff, especially on the labour ward but this is much improved now with supervision being more proactive. The Royal College of Obstetricians and Gynaecologists recognition visit of March 2003 stated that the department should be congratulated on a very satisfactory report and there was general approval about the standard of teaching and training.

## 5.6 Staff involvement

There is a need to improve communication with staff and involve them more in the women and children's division. The 2002 trust staff survey found that staff wanted better communication between management, senior staff, and staff. It also found that management need to be more approachable and supportive, to consult on changes and involve staff. An audit early in 2003 found poor communication between management and staff, with little involvement of midwives in the development of the unit.

There is a newsletter called *Trust talk* and a weekly briefing system for staff was introduced in March 2004. Staff reported that they learn about things regarding the trust in the local newspaper rather than through structured information channels at work. Feedback to staff on clinical and service development issues is weak. Efforts are made to involve staff in the division but this is ineffective. Staff feel the trust does not listen to their views or ideas for innovation. For example, a range of uniforms were brought to the ward for staff to try on and choose from, but when the new uniforms arrived, they were not the ones that were chosen, and no explanation was given for this. Particular efforts need to be made to ensure night staff are involved and communicated with effectively.

In November 2003 many staff did not know of the existence of the action plan that the service was working to, this was circulated widely before the investigation team visit in January 2004. The trust plans to establish a staff engagement forum in the women and children's division with the head of communications, the improving working lives coordinator and support from the HR department. The aim of this group will be to meet regularly and ensure effective communication throughout the division.

## 5.7 Key findings

1. Professional staff are not working well in teams, clinically or managerially. There has not been a united approach to developing the directorate and people are seen to be working as isolated practitioners rather than as a team.

2. Midwifery and consultant staffing levels in the obstetrics and gynaecology directorate have been and continues to be a cause for concern. Vacancies, sickness absence rates and reliance on bank and agency staff are a source of frustration. Senior midwives spend much of their time trying to ensure the next

few shifts are appropriately staffed. There have been concerns about insufficient consultant presence on the labour ward in particular. There remain issues of high workload and inadequate shift cover. Concerns were expressed about the capacity of the HR department to effectively support the maternity services.

3. There is a need for more midwifery supervisors and protected time for staff to attend supervision meetings. Also, in the maternity services rotation of midwifery staff has been discussed since 1998 but it is still not happening.

4. There are underdeveloped IT administration systems for monitoring mandatory and non-mandatory training.

5. There is a need to improve communication with staff and involve them more in the women and children's division. Feedback after incidents or developments is a particular area of weakness.

## 5.8 Recommendations

1. The medical director should lead work with the Modernisation Agency clinical governance support team to promote effective team work, initially between the consultants themselves and then between consultants and midwives. Work should be implemented to promote mutual respect of colleagues and also to recognise the enthusiasm and motivation of junior doctors.

2. Vacant midwifery posts need to be filled as a matter of urgency. A detailed review of the midwifery establishment should be completed and followed by targeted recruitment up to agreed establishment levels. The trust should examine the variation in skill and workload of maternity healthcare assistants and look at how they can enable midwives to work more effectively.

3. Rotation of midwives between clinical areas needs to be fully implemented. The period of learning in a new clinical area should be determined for each individual depending on experience.

4. Senior midwives must be engaged and supported in the process of delivering the directorate action plan and developing the unit. A period of rotation to day duty should be considered for all permanent night G grade midwives to address this point and ensure their involvement in meetings and new initiatives. Training plans to meet the needs of the G grade midwives must be produced and implemented. The clinical and managerial competencies must be appraised regularly.

5. Attendance and educational value of all multidisciplinary teaching sessions, including cardiotocograph training, should be audited. For all staff involved in interpretation of cardiotocographs, competency should be reviewed and documented at least six monthly. Ongoing work on the programme of in house multidisciplinary training and education is required, particularly further development of the effective administration system to provide reports.

6. Supervision of midwives should be more robust, proactive and high profile and there should be a system for recording the frequency of supervision. The role of supervisors of midwives in investigating serious untoward incidents should be clarified and more information about their role be made available.

7. Written and verbal communication with staff should be improved through regular open meetings. Although led by the directorate management team, there should be trust executive involvement. As well as communicating changes, the meetings should include feedback on the progress of the action plan to enhance sustainability. Staff involvement in progressing the action plan is essential.

8. The capacity of the human resources department should be reviewed to assist the directorate in all aspects of HR.

# Chapter 6 - Risk management, clinical effectiveness and clinical audit

## 6.1 Risk management

The trust has a complex reporting framework for the management of risk. It has several committees at directorate, divisional and trust level. The systems themselves are satisfactory, but they are not effectively implemented in maternity services.

Each divisional team has to have a risk management structure in place. The clinical director, who is accountable to the trust management board and the trust board, chairs the women and children's divisional governance team. It links to the trust wide risk management system through the divisional manager and divisional coordinator. The October 2003 external review of risk management identified no non-executive director involvement at any of the trust wide risk management committees. This was in contravention of acknowledged best practice but has now been rectified. There are trust wide specialist risk management groups for issues such as infection control, blood transfusion and medicines management. The women and children's division has three specialty level clinical risk management groups of paediatrics, neonatal and obstetrics and gynaecology. There are also directorate, ward, professional and topic based meetings. Minutes are not always taken at meetings such as perinatal mortality meetings, which limits effective communication of learning. Also when minutes are taken, they do not always clearly identify action required and the person accountable.

Incident forms are completed for all reported incidents and near misses. There has been a positive increase in the number of incident forms completed, which is due, in part, to the Birmingham and The Black Country Strategic Health Authority requiring that every stillbirth or neonatal death over 24 weeks gestation be reported for investigation. The trust uses a root cause analysis model to identify causes of incidents. After an incident patient notes are temporarily removed from the clinical area for photocopying. While this is important to assist with the investigation it does limit learning from incidents as staff cannot access notes to read and study them. To address these concerns it has been agreed that only the critical part of the records is now to be photocopied and returned the same day.

The divisional risk meeting is well attended and a number of incidents are discussed at each meeting. There are difficulties sharing the learning that takes place in this forum. Actions are identified as a result of discussions but those responsible for implementing actions do not always deliver and the trust does not effectively monitor that actions are conducted in a timely manner.

The maternity services risk management newsletter is an example of good practice, it contains valuable information about lessons learnt from incidents and near misses. Not all staff in the directorate are aware of this and it should be disseminated more widely. There are examples of learning from incidents such as an improved response from pharmacy regarding the issuing of medication to babies to ensure doses are not missed is now in place.

There is limited evidence of systematic risk assessment in the directorate although a trigger list is used for reporting incidents and near misses. There are mechanisms by which routine antenatal risk assessment can be conducted, recorded and communicated, including a risk assessment form, but this is not well developed and

women return to the antenatal clinic unnecessarily. When items are identified on a risk register there is little evidence that they are responded to. The trust risk register (September 2002) identified five risks for the women and children's division, including poor staffing levels, lack of mandatory training, inadequate hygiene facilities in the labour ward, lack of medical cover and medication errors. The divisional risk register for November 2003 identifies the same risks, suggesting little action had been taken to address them, as well as:

- failure to establish robust governance arrangements within the division
- failure to ensure that evidence based practice occur
- failure to comply with professional clinical standards

In the antenatal clinic there are further examples of where risks have been identified yet action appears not to have been taken. Restricted growth is linked to high risk in labour for adverse outcome. Different growth charts are used by doctors and sonographers and it is thought that could adversely impact on the number of stillbirths. The out-of-hours ultrasound service is limited and there are concerns about maintenance of equipment. Service contracts have been removed by the trust on equipment in the ultrasound department because of cost pressures. The medical physics department which should carry out quality assurance checks each year may not be able to continue with this action due to lack of resources.

The clinics in the antenatal department are busy and sometimes run late with women complaining of having to wait up to two hours for a scan. Women with low risk pregnancies go to the clinic instead of being supported in the community by their GP and community midwife. The service does not fully meet the needs of women with low risk pregnancies.

The blood gas analyser on the labour ward does not always give accurate readings. The machine is calibrated and maintained but problems continue to occur. Clinical staff report having had no input into the type of machine purchased and report that this model is not fit for purpose. The trust state that the choice of machine was made by the clinical director at the time and senior staff on the delivery suite. Staff do not trust the results and this leads to further testing and delays in appropriate diagnosis and relevant action. Other equipment in the unit was noted to have items missing or reported by staff to be old and unreliable.

The medical equipment purchasing committee ensures the trust has a structured replacement process for clinical equipment but funding procedures lead to delays in implementing this programme. New monitors for the labour ward have been identified as a priority. Orders were placed and scheduled for delivery in April 2004.

The trust has met the standards for level one of the risk pooling schemes for trusts (RPST). The assessment report (November 2003) awards the trust an overall score of 89.5% and awards a score of 100% for corporate accountability arrangements for risk management and its risk management strategy. The trust has now achieved level one of the clinical negligence scheme for trusts (CNST).

Record keeping and storage of records in the directorate is generally good with the exception of ultrasound records. Unlike radiology, ultrasound records are not computerised but are kept on flimsy sheets in the basement. As 18,000 reports are prepared each year this is a risk management and record keeping issue.

## 6.2 Data systems

There are three electronic data systems that are accessed for information to assist with risk assessment and risk management. These are a patient information system, and specialist integrated risk management and education software packages.

The patient information system aims to reduce the time spent on administration of records but some midwives are not skilled in the use of computers and can spend an hour at the computer completing a form that previously would have taken 15 minutes. However the system does provide accurate and timely clinical information to inform care planning and audit of practice. The system automatically allocates the NHS number for babies and meets clinical standards for record keeping. Three system modules for maternity, neonatal and anaesthetics have been purchased, which run separately but are linked so that the same information is stored in all. The system also links with the trusts main patient management system. It produces monthly reports for discussion in the labour ward forum, information for the national Confidential Enquiry into Stillbirths and Deaths in Infancy (CESDI) and reports for the West Midland Perinatal Institute.

The risk management information system is used to record all incidents such as medication errors or needlestick injuries, as well as near misses and serious untoward incidents. Although complaints are logged on the system and some reports can be produced, it is not yet capable of producing reports for trend analysis. The Development Information Technology Manager appointed in February 2004, is leading work to address these issues.

The trust education information system records all educational and in service training courses undertaken by staff. When fully operational it will be able to record attendance, non-attendance, provide risk management training reports to all managers and enable all staff to access their own training record,

Data quality was weak but has improved recently. The trust achieved a hospital episode statistics quality score of 95.5% in 2002/2003. There are efforts to improve the quality of clinical coding. In November 2003 the trust achieved NHS Information Authority data accreditation standards.

The trust has completed a lot of work in the area of risk management including conducting a review of its compliance with the salient conclusions raised by the Commission for Health Improvement (CHI) investigation into maternity services at Ashford and St Peters NHS Trust. Risk dominates the governance agenda, with a disproportionate focus on non-clinical risk management. This should now be balanced with increased attention to clinical effectiveness and clinical audit.

## 6.3 Clinical effectiveness and clinical audit

The trust participates in core trust wide clinical audits as well as undertaking multiprofessional audit in selected areas. The board receives an annual clinical governance report, which highlights the outcome of audits and those audits that have the most impact on delivery of care.

The action plan following the clinical governance review in 2001 included the following clinical effectiveness targets:

- processes to be introduced to ensure that information on clinical effectiveness and outcomes of care are routinely considered
- an approach and processes to be developed to capture information on the patients experience, including through clinical effectiveness, in order to inform clinical governance
- develop ways of sharing good practice within the trust including training on care pathways
- build on good practice within integrated care pathways across the trust
- ensure compliance with the implementation of guidelines within the trust

Limited progress appears to have been made on these targets in the obstetrics and gynaecology directorate.

There is a clinical audit and effectiveness strategy that should enable the systematic collection of clinical audit recommendations and subsequent monitoring of their implementation. This does not happen in the maternity service and there is no audit information regularly reported to the trust board. There is a trust wide clinical audit committee that advises the trust board and the management board on clinical audit issues via the governance directors meeting. The committee reviews the programme of each division and supports clinical audit throughout the trust. There are divisional representatives on the trust's audit and effectiveness committee, education board, and research and development committee.

There is little or no patient input into the clinical audits in the obstetrics and gynaecology directorate. The clinical audit officer does much of the audit work and audit within the obstetric and gynaecology directorate audit is weak. The labour ward manager audits the notes of patients on a regular basis, but it is not clear how the results of this influences future practice. Six of the 22 clinical audits conducted in 2002/2003 were within maternity services. The methods for ensuring recommendations from audit result in changed practice are unclear. Failure to ensure effective implementation of recommendations is a recurrent theme found in this investigation.

The obstetric and gynaecology directorate has an audit committee, but it meets sporadically, has poor attendance and does not effectively monitor the progress or completion of audits. Audit topics are not selected in relation to clinical outcomes. The consultant lead for clinical audit and effectiveness in the directorate has now been changed to help address the weakness in the process. There is no evidence of multidisciplinary audit in the directorate.

Audit findings have improved practice on the neonatal unit where an audit of the temperature of babies led to a change in the way they are transported. Mechanisms for disseminating findings of clinical audit to staff within the women and children's division are not systematic. There is a trust-wide annual clinical audit report and in 2002 a clinical audit newsletter was developed but it was only published on one occasion. Audit is not clearly linked to risk management. The trust states that this will be addressed in the 2004/2005 strategy for clinical effectiveness.

There is no clinical effectiveness strategy in the division. Insufficient attention is given to clinical audit and effectiveness in the trust's healthcare plan. Divisional clinical effectiveness targets are not given target dates and actions, and there are no mechanisms for monitoring the targets.

A key issue related to clinical effectiveness is the implementation of National Institute for Clinical Excellence (NICE) guidelines and the monitoring of compliance. The trust has risk assessed the likelihood of not being able to implement NICE maternity guidance as high. There is a joint steering group led by the Wolverhampton City Primary Care Trust, comprising of staff from both organisations. Representatives of the obstetrics and gynaecology directorate made a presentation to this group in September 2003 showing that the trust is not compliant with the NICE guidance relating to maternity services. For example, midwives do not always follow guidelines about baby heart traces (CTGs). Also reduced staffing levels make it unrealistic to allocate one midwife to one woman, sometimes one midwife has to work with two women, especially at night. Guidelines on induction of labour of fetal monitoring are as required by NICE but implementation of the guidelines is not effectively monitored. The unit is working towards complying with recently published guidance from NICE on grading caesarean sections. Midwives are asked to comment on local clinical guidelines when drafted but do not receive feedback as to whether their comments are taken on board. It is also not clear when guidelines are agreed and implemented.

The directorate has made limited progress on the development of care pathways because of difficulty reaching agreement between the consultants. However, there is a care pathway for women undergoing elective caesarean sections. A care pathway is needed for changing a woman's pregnancy classification from low to high risk.

Examples of good practice include the admission procedure for the neonatal unit implemented in June 2003, and the proposed assessment and induction suite to improve the management of women admitted in early labour and induction cases. A significant number of women could benefit from attending for day assessment at the unit rather than being admitted as inpatients. This is seen as a positive development, but the unit was not open at the time of the investigation because of staffing limitations and care pathways not being agreed. It was initially scheduled to open in early December 2003 but eventually opened in March 2004. This delay added to the workload of the staff in antenatal clinic and the wards.

The trust is taking action on all the targets in the obstetric and gynaecology action plan dated October 2003. The Birmingham and The Black Country Strategic Health Authority and the primary care trust monitor the plan that includes the following areas in relating to clinical effectiveness:

- develop and agree a maternity service strategy
- review and develop evidence based clinical protocols and guidelines
- offer improved case management through evidence based practice
- provide a safer service through implementation of the safer childbirth standards
- review clinical outcomes to identify future areas of improvement linked to clinical audit findings
- offer improved access to evidence based information for all labour ward staff

Within the obstetric and gynaecology directorate there is no consensus as to what constitutes a clinical policy, practice or guideline. There is a trust policy that clearly identifies the difference, but staff knowledge is limited. Documents in the division are often undated, some unreferenced, and some do not have review dates. The trust system for updating policies could be more robust as some have passed their review date. Communication of and access to policies is not effective.

There is no clear system for creating or routinely reviewing clinical guidelines. The labour ward guide to practice (2003) incorporates Royal College of Obstetricians and Gynaecologists guidelines and all staff should adhere to this guide. There is not a

common policy of antenatal care followed by consultants, as they do not use the guidelines developed by the previous clinical director. Evidence based guidelines on antenatal fetal monitoring are required to enhance implementation of and compliance with NICE guidance.

## 6.4 Promotion of midwifery led care

Midwives provide most of a woman's care during pregnancy, labour and in the postnatal period. The care of low risk women should be midwifery led using clear pathways of care within as normal a setting as possible. NICE guidance should be followed to ensure no unnecessary fetal monitoring and midwives should be encouraged to keep care as normal as possible. The provision of continuous support during birth should be the standard. The unit has most of the midwifery posts filled but the establishment needs to be reviewed. Many people interviewed said that practice was not woman centred and that practices could be more up-to-date with national developments. Concern was expressed that when the ward is busy junior midwives are allocated to high risk cases without adequate supervision.

Despite various staff having completed leadership development programmes, staff empowerment is lacking. A recently revised directorate structure provides more management support and will assist senior midwives to concentrate more on their midwifery roles. There is support for this structure apart from the proposed changes to the role of the head of midwifery, which appears to limit opportunities to influence trust wide issues.

## 6.5 Key findings

1. Failure to ensure action takes place following learning is a recurrent theme found in this investigation. In general the trust has systems to identify what needs to be done but does not effectively monitor and ensure that action is carried out in a timely manner.

2. There is a clinical audit and effectiveness strategy that should enable the systematic collection of clinical audit recommendations but subsequent monitoring of their implementation this not in place. The reporting framework for clinical audit and clinical effectiveness appears isolated from the women and children's division and there is a failure of the trust board to identify and receive information on a regular basis about this. Also there is little or no patient input into the clinical audits in the obstetrics and gynaecology directorate and there is no evidence of multidisciplinary audit.

3. There is a lack of effective care pathways and care pathways that are developed are not routinely implemented, particularly at night. Within the maternity services there is no consensus as to what constitutes a clinical policy, practice or guideline. Documents are undated, some are unreferenced, and some have no review date.

4. Trust procedures for monitoring and reviewing policies should be more effective as there are out of date policies on the intranet.

5. Staff do not trust the results of the blood gas analyser on the labour ward and this leads to further testing and delays in appropriate diagnosis and relevant action.

6. Radiology records were digitalised seven years ago but ultrasound was not included resulting in thousands of paper records requiring storage.

7. Risk dominates the governance agenda with a disproportionate focus on non-clinical risk management that should now be balanced with increased attention to clinical effectiveness and clinical audit.

8. The absence of minutes of meetings limits learning from discussions to those who are present, where minutes of meetings are taken they do not always clearly identify action required and the person accountable.

## 6.6 Recommendations

1. Urgent action should be taken to promote compliance with NICE guidance and technology appraisals for maternity services. Local guidelines for the care of low risk women should follow NICE guidance.

2. Local guidelines (incorporating care pathways) for the antenatal management of complex cases, including women referred to the antenatal assessment suite, need to be developed and implemented. High risk groups that require guidelines are identified in the recently published NICE guidance. Guidelines should include the indications for consultant review.

3. Adherence to guidelines, the involvement of senior staff (G grade midwives and consultant obstetricians), and the documentation of management plans in complex cases should be audited. This should involve all red and amber incident cases and specific problems such as caesarean sections for non-reassuring fetal status, and inductions of labour.

4. Incident reporting should be reviewed within a multidisciplinary forum and the agreed list should be readily available in all clinical areas. The discussion of clinical incidents should be more open and informative.

**5.** A full risk assessment of all equipment in the unit is recommended together with the systems used to maintain them. The reliability of the blood gas analyser on the labour ward should be determined and if acceptable quality control standards cannot be met then the analyser should be replaced. There should also be better processes to update and replace equipment including servicing.

6. Clinical effectiveness and clinical audit should be reported to the trust board more frequently. The trust and the women and children's division must ensure that it has an effective process in place to check that recommendations from clinical audits are implemented effectively and in a timely manner. This should also include systems to share good practice. Patient involvement in audit and multidisciplinary audit requires further development.

7. The divisional governance team should take responsibility for planning and reviewing clinical audits. The maternity services should identify and work with an external agency to develop and progress their audit programme. Priorities for audit should be topics recommended in national guidelines and topics of relevance to the action plan being monitored by the strategic oversight group.

8. Midwives provide most of a woman's care during pregnancy, labour and in the postnatal period. The care of low risk women should be midwifery led using clear pathways of care.

9. Arrangements should be made to computerise the records system in the ultrasound department as soon as possible.

10. Meetings should be minuted with clear attributable action points and deadlines for delivery. Minutes should be widely circulated.

11. The trust process for policy management and dissemination should be reviewed and enhanced.

# Chapter 7 - Partnerships and external monitoring

Key partners of the trust in the delivery of healthcare include the Birmingham and The Black Country Strategic Health Authority, the Wolverhampton City Primary Care Trust (PCT). More specific to working in partnership with maternity services is the West Midlands Perinatal Institute.

## 7.1 The Birmingham and The Black Country Strategic Health Authority

The Birmingham and The Black Country Strategic Health Authority covers the six local authorities of Birmingham, Dudley, Sandwell, Solihull, Walsall and Wolverhampton. It manages 12 primary care trusts (PCTs) and 13 NHS trusts. A review was conducted in 2003 of clinical and non-clinical service configurations. The review spanned five areas, one of which was children's services including maternity services. The review looked at the long term way in which health services should be designed to best serve the needs its population.

The review has led to greater integration of planning and commissioning of children and maternity services across Walsall and Wolverhampton. The aim for maternity services was to improve primary and community based services through enhancing community based midwifery services in the antenatal and postnatal period. There were no specific recommendations from the review affecting maternity provision. The review noted that the predicted fall in birth rate for Walsall and Wolverhampton meant that a review of maternity provision would be required within five years time. The establishment of a Newborn Network across Shropshire, Staffordshire and the Black Country, following the recommendations of the national review of neonatal services, would be the mechanism for determining the level of neonatal services at acute trusts and for considering the implications for high risk obstetrics and fetal medicine services.

The capacity of the Birmingham and The Black Country Strategic Health Authority to monitor the clinical governance performance reports from trusts was initially limited. The medical director was the only person responsible for clinical governance, but additional staff have been recruited to strengthen this. A director of nursing has been appointed and a clinical governance committee has been established.

There has been tension in the working relationship between the Birmingham and The Black Country Strategic Health Authority and the trust since the incidents early in 2003 that may stem from a breakdown in communication. Work to resolve this is ongoing and it is hoped that the working relationship will continue to improve.

## 7.2 Wolverhampton City Primary Care Trust

The primary care trust (PCT) commissions and monitors services through a local delivery plan which forms an integral part of the performance management process employed by the PCT. Key indicators are reported to the PCT board on a monthly basis and others are monitored on a quarterly basis and reported to the strategic health authority. There is no separate section in the local delivery plan about maternity services although there are related areas that are monitored such as the workforce, breastfeeding, smoking in pregnancy and teenage pregnancy. The PCT has a service level agreement with the trust that does not cover maternity services in

sufficient detail. The local delivery plan and the service level agreement do not achieve a satisfactory framework for external performance monitoring of the quality of the trust's maternity services.

Funding allocation by the PCT to the trust was linked to national government targets. Staff at the trust are critical of this system as they felt that maternity services lost out as there are no national targets for maternity services. There is a perceived lack of clarity about the performance management roles of the PCT and the strategic health authority.

The PCT and the trust appear to have a collaborative working relationship although communication to the PCT could be improved. Quality standards are included in the 2003/2004 service level agreement and there is a clear expectation that the PCT should be notified of all serious untoward incidents. Since April 2004 the trust is using the strategic executive information system, which is a reporting framework for serious untoward incidents amongst other things.

The Wolverhampton maternity care strategy 1998-2003 was jointly developed by Wolverhampton Health Authority, the trust, the maternity services liaison committee and other stakeholders in 1999 with an updated action plan developed by the PCT in March 2003. This aims to provide a safe and woman centred service that enables parents to be satisfied with their experience of pregnancy and childbirth, which contributes to effective parenting and ensures minimal morbidity and mortality for all mothers and babies. Objectives in the strategy include:

- the provision of a safe environment and empathetic service based on sound evidence
- the organisation of care will be based on evidence of clinical effectiveness
- shared care protocols following seamless care pathways will be in place for the care of all women with a normal pregnancy
- the review of local guidelines in light of current evidence of clinical effectiveness
- the development of a robust system to ensure audit findings are implemented
- interventions that are evidence based

Little evidence was found to suggest that the strategy was promoted as effectively as it could have been, or any ongoing systematic monitoring of action implemented. There are many aspirations in the strategy that are still relevant today but have not been achieved and the health community would benefit from re-visiting this.

## 7.3 The strategic oversight group

In June 2003, the PCT and the Birmingham and The Black Country Strategic Health Authority asked the trust to prepare an action plan to ensure a safe maternity service. The immediate plan then evolved over the ensuing months to focus on four areas of work: antenatal care, teamwork, sustainability, and management action agreed with the strategic oversight group. There are 47 action points listed, including a review of the maternity services management structure. This action plan could be a real opportunity to enable positive change and all staff in maternity services need to be involved more in this work.

A strategic oversight group was established to receive reports on the implementation of the action plan, to critically evaluate progress against agreed outcomes and timescales, to amend and revise action and to ensure effective communication with the public, patients and staff. The first meeting of the group was on July 3rd 2003 and it continues to meet regularly. Its membership includes the Medical Director of the

Birmingham and The Black Country Strategic Health Authority, the Chief Executive and Director of Public Health of the PCT, a lay representative and three professional advisors. Initially the only lay representative was the chair of the trust, many questioned whether this was adequate lay representation. The co chairs of the maternity services liaison committee now attend and provide additional lay representation. The trust's Chief Executive updates the group on progress against the action plan. A trust operational oversight group and the obstetrics and gynaecology management team advise and manage this process.

At the oversight group meeting in December 2003 the West Midlands Perinatal Institute report was discussed. The trust Chief Executive said the report should be discussed at the obstetrics and gynaecology management team meeting and the labour ward forum, to decide on action to be taken. Many staff did not see the action plan until just before the investigation team visited the hospital in January 2004. There is no evidence to indicate when or if the trust board has seen the action plan.

## 7.4 The West Midlands Perinatal Institute

The West Midlands Perinatal Institute has undertaken an external review looking at the care and treatment of those using maternity services where there has been an adverse outcome for the mother and or baby. The remit for the investigation was to look at a review of 10 cases after June 2003 to assess practice in light of changes that had been instituted earlier in the year. Also the Birmingham and The Black Country Strategic Health Authority commissioned a retrospective review based on cases, which occurred during the last 24 months. The reports give a rounded picture of the lessons learnt from the panel reviews, with specific points about the organisation of care, communication with patients, communication between professionals, antepartum care and monitoring during labour. The institute report adds that more could have been learnt from past mishaps in a unit, which has been under intense spotlight and scrutiny. The Institute highlights the urgent need to address delays in recognising and acting on problems as they arise. Full details of these can be found on the West Midlands Perinatal Institute website at **www.perinate.org/pnm**

## 7.5 Key findings

1. The Birmingham and the Black Country Strategic Health Authority initially had limited capacity to monitor clinical governance. Additional staff have now been appointed to strengthen this area and a clinical governance committee has been established.

2. The local delivery plan and the service level agreement established by the PCT do not achieve a satisfactory framework for external performance monitoring of the service.

## 7.6 Recommendation

1. The PCT should take advantage of the forthcoming publication of the National Service Framework for Children to strengthen arrangements for performance management and monitoring of maternity services.

# Appendix A

## Terms of reference for the Commission for Health Improvement investigation in Maternity Services provided by the Royal Wolverhampton Hospitals NHS Trust.

The Commission for Health Improvement will carry out an investigation into maternity services at New Cross Hospital, part of the Royal Wolverhampton Hospitals NHS Trust.

The Commission for Health Improvement (CHI) ceased to exist on March 31st 2004. On April 1st 2004 the Healthcare Commission was formed which supersedes the Commission for Health Improvement. The Healthcare Commission will continue the work undertaken by CHI.

The investigation follows a number of intrapartum deaths in maternity services at the Royal Wolverhampton Hospitals NHS Trust and subsequent public concern about the quality of care provided in the unit. Concerns about the service were highlighted by Birmingham and The Black Country Strategic Health Authority, which contacted CHI to request an investigation with the support of the trust and the Wolverhampton City Primary Care Trust.

The Commission for Health Improvement will investigate maternity services provided by Royal Wolverhampton Hospitals NHS Trust, to establish whether the trust has maintained appropriate standards in the management, provision and quality of maternity care. The investigation will:

1. Examine the management, provision and quality of health care, incorporating clinical governance systems and processes in place in the Royal Wolverhampton Hospitals NHS Trust to ensure the safety, effectiveness, quality and appropriateness of maternity services. This examination will include, but will not necessarily be restricted to:
    a) The overall strategic capacity, culture and management effectiveness of the trust and maternity services including leadership and direction and progress on clinical governance since the CHI clinical governance review.
    b) Performance management and how information is used to enable this taking into account evidence from previously conducted reviews and enquiries.
    c) Risk management arrangements and learning including untoward incident reporting and complaints systems, record keeping, medication errors if appropriate and systems in place to obtain consent.
    d) Arrangements to ensure the provision of clinically effective services including the existence of and compliance with national and local guidelines, protocols and care pathways, and clinical audit systems to monitor these.
    e) Staffing and staff management including managing attendance, recruitment and retention, equal opportunities, use of bank, agency or locum staff, induction, supervision, training, continuing professional development and multidisciplinary working. Review how staff are involved and empowered to influence decision making.

f) The organisation of the service including the physical environment, philosophy of care, and arrangements for patient and public involvement

g) The views of those using maternity services, their relatives, friends, organisations representing maternity service users and any other individual or organisation who wishes to express their views to the Commission for Health Improvement about the quality of maternity services provided by Royal Wolverhampton Hospitals NHS Trust

2. Examine historical/cultural and organisational factors in the local health community and in the wider NHS that impact on the management, provision and quality of health care provided by the trust, including, but not necessarily restricted to:

a) Accountability arrangements in the local health community, to include the commissioning, external performance management and quality monitoring of the trust.

b) The nature of relationships between key stakeholders including the effectiveness of joint working where applicable.

c) The impact of national policy.

3. Consider any other matters arising during the investigation which CHI considers to be relevant in reaching its conclusions.

**Additional information**

The investigation will be conducted by CHI under powers set out in Section 20(1)(c) of the Health Act 1999. This empowers CHI to investigate, and make reports on, the management, provision and quality of health care. The purpose in investigating a trust or other NHS organisation is to help that organisation to improve the quality of the health care it provides, identify what needs to happen to build or restore public confidence in the services provided, and to help the organisation and the wider NHS to learn lessons about how best to ensure patient safety.

CHI will publish a report on the findings of the investigation and will make recommendations as appropriate to the trust and other relevant bodies.

Where recommendations are made, CHI will provide advice and assistance to all relevant organisations towards the preparation of an agreed action plan for implementation. Overseeing the implementation of an action plan prepared by the trust will be the responsibility of the Birmingham and The Black Country Strategic Health Authority.

CHI will ensure effective collaboration, as required, with other organisations.

04 November 2003

# Appendix B The Investigation team

The team working on this investigation was:

Rev Philip Carrington MBE (lay reviewer)
Trust Chaplain
South Tees Hospital NHS Trust

John Edwards
Consultant Obstetrician and Gynaecologist
Poole Hospital NHS Trust

Gillian Fletcher (lay reviewer)
President
National Childbirth Trust

Anthony Mander
Consultant in Obstetrics and Gynaecology

Lesley Mort
Director of Services and Clinical Governance
Rochdale Primary Care Trust

Debbie Murdock OBE
Investigations Manager
Lead Manager for the investigation
Healthcare Commission

Fiona Sommerville
Independent Midwifery Consultant

Richard Venning
Chief Executive
Kings Lynn and Wisbech NHS Trust

Dr Heather Wood
Investigations Manager
Support Manager for the investigation
Healthcare Commission

The team was supported by:
Marcia Fry, Head of Operational Development and Lead Senior Manager on the investigation for the Healthcare Commission

Dr Linda Patterson OBE, Medical Director and Lead Director on the investigation for the Commission for Health Improvement

Erin Amato, Assistant Enquiries Officer

Kristi Collins and Aileen Lovat, Investigation coordinators

David Harvey, Senior Analyst supported by analyst team members

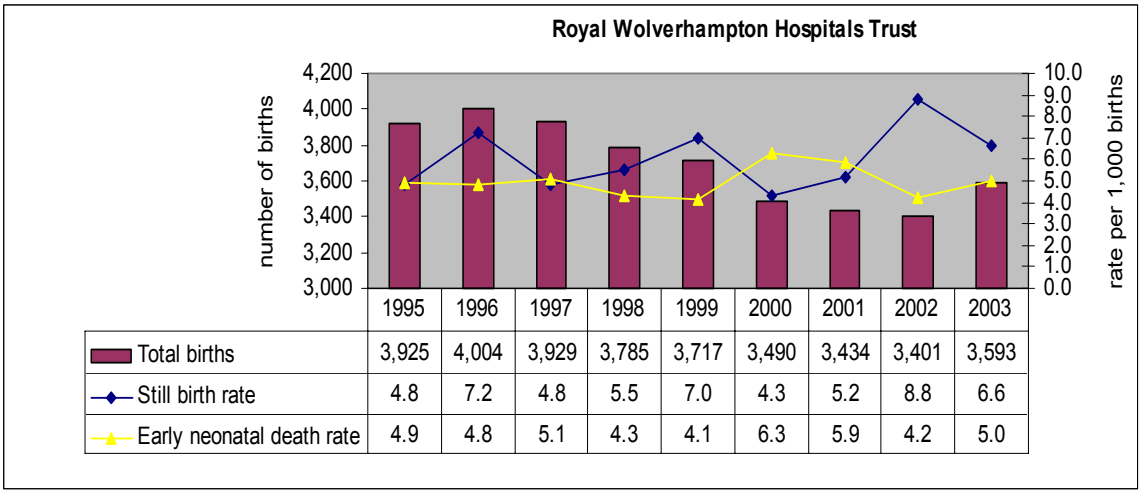
# Appendix C - Perinatal mortality

Concerns about maternity services within the trust were raised in May 2003 following a number of high profile serious untoward incidents. One concern raised was of a high perinatal mortality rate, which therefore required more detailed analysis. The analysis was carried out using data from the trust, the Office of National Statistics, West Midlands Perinatal Institute and information from Dr. Fosters and BirthChoiceUK web sites.

**Number of births, stillbirth rate and early neonatal death rate**

Figure 1 shows trends in the total number of births, stillbirths and early neonatal deaths at the trust from 1995 to 2003. The number of births declined during this period, while the decline at the trust is steeper than that seen in the national birth rate the reasons for it are not known. Trends in stillbirths and early neonatal deaths fluctuate considerably, which is suggestive of coding problems relating to a failure to differentiate events around birth in some cases. This problem has been observed elsewhere and is best overcome by combining stillbirths and early neonatal deaths into one perinatal death group.

Figure 1:




| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|---|---|
| Total births | 3,925 | 4,004 | 3,929 | 3,785 | 3,717 | 3,490 | 3,434 | 3,401 | 3,593 |
| Still birth rate | 4.8 | 7.2 | 4.8 | 5.5 | 7.0 | 4.3 | 5.2 | 8.8 | 6.6 |
| Early neonatal death rate | 4.9 | 4.8 | 5.1 | 4.3 | 4.1 | 6.3 | 5.9 | 4.2 | 5.0 |

***Source: New Cross Hospital, Rapid Report Forms, West Midlands Perinatal Institute Summary of West Midlands Region Vital Statistics 2000 to 2002 and trust information.***

The trust have supplied provisional 2003 data to enable their early neonatal death rate to be calculated but at the time of publication this data had not been verified.

**Still births: causes of death**

According to the West Midlands Perinatal Institute around 90% of stillbirths nationally are caused by events occurring before the birth, the remaining 10% can be attributed to events occurring during delivery/ birth; either still birth before delivery or during labour or during delivery could indicate sub standard care. Table 1 shows the percentage of stillbirths, within the trust, which were due to events either before or during labour. The analysis indicates a marked fluctuation over the time period shown of the proportion of stillbirths attributed to events occurring during birth with noticeably high proportions in 2001 and 2002.

Table 1:

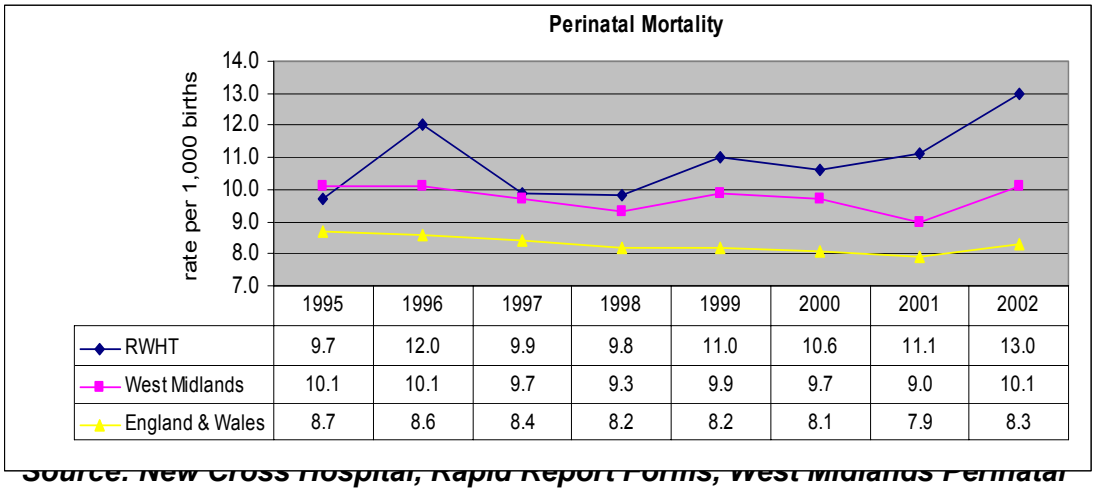
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1998-2002 |
|---|---|---|---|---|---|---|---|---|---|
| Congenital anomaly | 3 | 4 | 2 | 3 | 5 | 1 | 4 | 7 | 20 |
| Unexplained before birth | 14 | 19 | 15 | 13 | 19 | 13 | 10 | 14 | 69 |
| During delivery/ birth events | 1 | 4 | 0 | 1 | 0 | 1 | 3 | 5 | 10 |
| Other specific causes | 1 | 2 | 2 | 4 | 2 | 0 | 1 | 4 | 11 |
| Total | 19 | 29 | 19 | 21 | 26 | 15 | 18 | 30 | 110 |
| % Stillbirths attributed to events occurring before birth | 73.7 | 65.5 | 78.9 | 61.9 | 73.1 | 86.7 | 55.6 | 46.7 | 62.7 |
| %Stillbirths attributed to events during delivery/ birth | 5.3 | 13.8 | 0 | 4.8 | 0 | 7 | 16.7 | 16.7 | 9.1 |

***Source: New Cross Hospital, Rapid Report Forms & Healthcare Commission Analysis***

**Perinatal mortality**

Figure 2 shows trends in perinatal (stillbirth and early neonatal death) mortality at the trust, the West Midlands region and nationally between 1995 and 2002. During this period the national rate reduced slightly, but appeared to increase in 2002. A similar pattern was observed in the West Midlands region. Examining the years 2000 to 2002 individually showed that the perinatal mortality rate at Wolverhampton was not significantly different from the West Midlands regional rate, whereas pooling the data over the last three years does show a marginally significant excess in perinatal mortality (p=0.04). It is difficult to interpret this result in isolation and ideally there should be an examination of the distribution of mortality over all the trusts in the region[1].

Figure 2:




| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|
| RWHT | 9.7 | 12.0 | 9.9 | 9.8 | 11.0 | 10.6 | 11.1 | 13.0 |
| West Midlands | 10.1 | 10.1 | 9.7 | 9.3 | 9.9 | 9.7 | 9.0 | 10.1 |
| England & Wales | 8.7 | 8.6 | 8.4 | 8.2 | 8.2 | 8.1 | 7.9 | 8.3 |

***Source: New Cross Hospital, Rapid Report Forms, West Midlands Perinatal Institute Summary of West Midlands Region Vital Statistics 2000 to 2002***

**Analysis of Office for National Statistics data**

[1] Statistical result by Dr David Spiegelhalter, Medical Research Council, Bio-statistics unit, Cambridge

Data from the Office for National Statistics on the number of live births, stillbirths and early neonatal deaths occurring in trusts in England and Wales was reviewed for the years 1998 to 2002. The rate of adverse events at the Wolverhampton trust was compared with the overall rate for England and Wales, excluding Wolverhampton. The rates at Wolverhampton were then compared with a subset of trusts having similar black and minority ethnic populations to Wolverhampton. Each of the comparator trusts had level 2 or 3 neonatal intensive care facilities. In each case the data from comparators was aggregated into an overall adverse event rate, rates were not calculated separately for any other trust. Ethnicity is associated with infant mortality[2], comparisons were made between the trust and all other trusts in England and Wales and separately with those with similar ethnic populations to Wolverhampton. Ethnicity is associated with infant mortality because of a link with social deprivation and inter-marriage within some groups; the methodology for selecting such similar trusts is described below.

**Methodology**

Using 2001 census data at local authority level, the distribution of populations by ethnicity was examined. The local authority of Wolverhampton comprised of 77.8% whites, 2.7% mixed, 14.3% Asians, 4.6% blacks and 0.6% Chinese or other ethnic groups. Similar local authorities were found by selecting a group of 20 local authorities, which most closely matched the percentage of Asians, and then selecting another group of 20 local authorities that had a similar percentage of blacks. Seven local authorities that were in both groups were retained as comparators.

The number of live births, stillbirths and early neonatal deaths that occurred between 1998 and 2002 at the nine trusts that principally serve the seven local authorities identified as having similar populations to Wolverhampton city are shown below in table 2.

**Table 2** Number of live births, stillbirths and early neonatal deaths by trust during the period 1998 to 2002

[2] Raleigh V S, Balarajan R. The health of infants and children among ethnic minorities. In *The Health of our children.* Ed. Beverley Botting. OPCS Decennial Suppplement Series DS no.11 London: HMSO 1995

| Trust | Live births | | | | | Stillbirths | | | | | Early neonatal deaths | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 1998 | 1999 | 2000 | 2001 | 2002 | 1998 | 1999 | 2000 | 2001 | 2002 |
| T1 | 3,262 | 3,140 | 2,976 | 2,901 | 2,885 | 20 | 11 | 20 | 20 | 13 | 1 | 3 | 6 | 2 | 1 |
| T2 | 2,967 | 2,830 | 2,964 | 2,808 | 2,932 | 14 | 13 | 19 | 21 | 15 | 12 | 6 | 10 | 8 | 6 |
| T3 | 6,201 | 6,193 | 5,861 | 5,848 | 6,030 | 44 | 62 | 49 | 42 | 42 | 49 | 36 | 45 | 42 | 35 |
| T4* | 4,252 | 4,220 | 4,217 | 4,384 | 4,216 | 27 | 44 | 37 | 27 | 47 | 17 | 13 | 22 | 22 | 28 |
| T5 | 3,362 | 3,225 | 3,180 | 3,027 | 3,128 | 19 | 20 | 36 | 18 | 23 | 17 | 8 | 8 | 9 | 5 |
| T6* | 3,705 | 3,684 | 3,776 | 3,769 | 4,213 | 21 | 31 | 27 | 33 | 41 | 11 | 13 | 16 | 21 | 13 |
| T7 | 4,134 | 4,037 | 4,243 | 4,193 | 4,393 | 17 | 27 | 28 | 30 | 32 | 9 | 4 | 5 | 8 | 15 |
| T8 | 2,601 | 2,490 | 2,447 | 2,405 | 2,417 | 9 | 17 | 7 | 11 | 20 | 2 | 10 | 8 | 2 | 9 |
| T9 | 4,308 | 4,520 | 4,256 | 4,340 | 4,105 | 20 | 20 | 24 | 30 | 24 | 12 | 12 | 5 | 11 | 7 |
| New Cross Hospital | 3,723 | 3,669 | 3,447 | 3,375 | 3,330 | 21 | 26 | 14 | 18 | 31 | 19 | 16 | 24 | 21 | 14 |
| Total England and Wales | 621,495 | 607,959 | 591,051 | 581,808 | 582,569 | 3,360 | 3,248 | 3,158 | 3,115 | 3,326 | 1,811 | 1,791 | 1,706 | 1,557 | 1,578 |

****Some of the trusts were combined for the analysis since the birth data was split across general and maternity hospitals***
***Source: Office of National Statistics data***

The statistical technique of logistic regression was used to estimate the probability of a death in Wolverhampton compared to elsewhere. Logistic regression uses a measure of probability known as odds, but since deaths are rare this is very similar to the more common measure of probability known as risk. In this report we therefore refer to the risk of death at Wolverhampton compared to elsewhere, a value less than one meaning the risk is lower and a value above one meaning the risk is greater, e.g. a value of 1.05 is interpreted as a 5% increase in mortality.

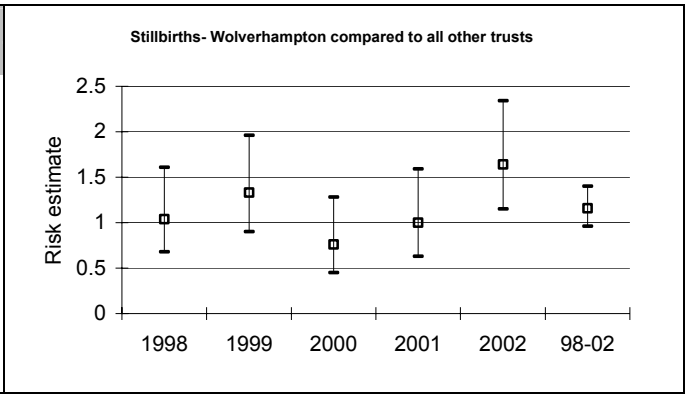
Stillbirths and early neonatal deaths were examined separately and also combined to form perinatal deaths.

Results, the trust compared with the rest of England and Wales

Table 3 shows that, for 1998 to 2002 overall, the risk of a stillbirth in the trust was not significantly different to the rest of England and Wales. In 2002 the risk was significantly higher at 1.64 (95% C.I. 1.15 to 2.34), but not in any other year.

**Table 3**. Risk of stillbirth with 95% confidence intervals in Wolverhampton compared with the rest of England and Wales

| Year | Risk estimate | Confidence interval | |
|---|---|---|---|
| | | Lower | Upper |
| 1998 | 1.04 | 0.68 | 1.61 |
| 1999 | 1.33 | 0.9 | 1.96 |
| 2000 | 0.76 | 0.45 | 1.28 |
| 2001 | 1 | 0.63 | 1.59 |
| 2002 | 1.64 | 1.15 | 2.34 |
| 98-02 | 1.16 | 0.96 | 1.4 |

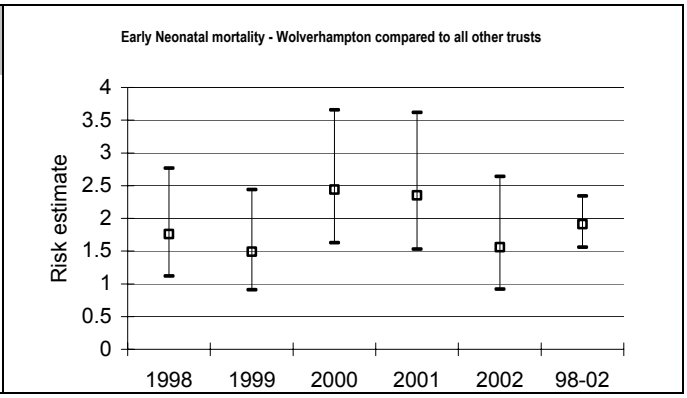



***Source: Office of National Statistics data***

Table 4 shows that the risk of an early neonatal death was higher in Wolverhampton compared with all other trusts, for the five-year period as a whole. The rate at Wolverhampton was almost double that elsewhere, estimated to be 91% higher with a risk ratio of 1.91 (95% C.I. 1.56 to 2.34). For individual years, the risks were significantly higher at the 95% level in 1998, 2000 and 2001.

**Table 4. Risk of early nenoatal death with 95% confidence intervals in Wolverhampton compared with the rest of England and Wales**

| Year | Risk estimate | Confidence interval | |
|---|---|---|---|
| | | Lower | Upper |
| 1998 | 1.76 | 1.12 | 2.77 |
| 1999 | 1.49 | 0.91 | 2.44 |
| 2000 | 2.44 | 1.63 | 3.66 |
| 2001 | 2.35 | 1.53 | 3.62 |
| 2002 | 1.56 | 0.92 | 2.64 |
| 98-02 | 1.91 | 1.56 | 2.34 |

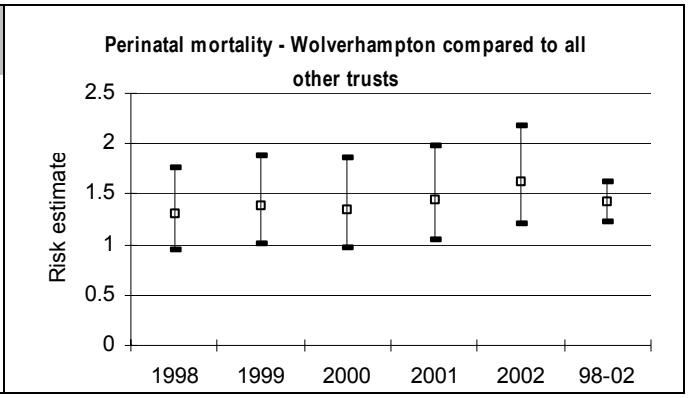



***Source: Office of National Statistics data***

Table 5 shows that the perinatal mortality rate at Wolverhampton was significantly higher than that at other trusts in England and Wales, for the five year period as a whole. The relative risk at Wolverhampton was estimated to be 1.42 (95% C.I. 1.23 to 1.63). For individual years, the risk was significantly higher at the 95% level in 1999, 2001 and 2002.

**Table 5. Risk of perinatal mortality with 95% confidence intervals in Wolverhampton compared with the rest of England and Wales**

| Year | Risk estimate | Confidence interval | |
|---|---|---|---|
| | | Lower | Upper |
| 1998 | 1.3 | 0.95 | 1.77 |
| 1999 | 1.39 | 1.02 | 1.89 |
| 2000 | 1.35 | 0.98 | 1.86 |
| 2001 | 1.45 | 1.05 | 1.99 |
| 2002 | 1.62 | 1.21 | 2.18 |
| 98-02 | 1.42 | 1.23 | 1.63 |



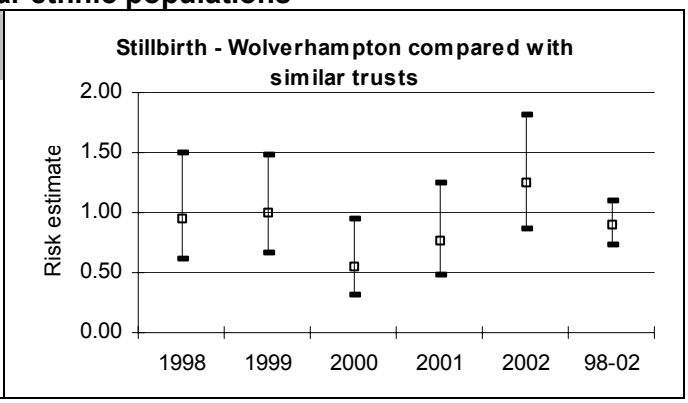

***Source: Office of National Statistics data***

Results - the trust compared with similar trusts

Table 6 shows that the risk of stillbirth was slightly lower at the trust than at the other trusts for the five year period as a whole, although the difference was not statistically significant. The rate was estimated to be 90% of that elsewhere, with a risk ratio of 0.90 (95% C.I. 0.74 to 1.1). In the year 2000 the risk was significantly lower, but not in any other year.

**Table 6. Risk of stillbirth with 95% confidence intervals in Wolverhampton compared with trusts with similar ethnic populations**

| Year | Risk Estimate | Confidence interval | |
|---|---|---|---|
| | | Lower | Upper |
| 1998 | 0.95 | 0.61 | 1.50 |
| 1999 | 1.00 | 0.66 | 1.49 |
| 2000 | 0.55 | 0.32 | 0.95 |
| 2001 | 0.77 | 0.48 | 1.25 |
| 2002 | 1.25 | 0.86 | 1.82 |
| 98-02 | 0.90 | 0.74 | 1.10 |



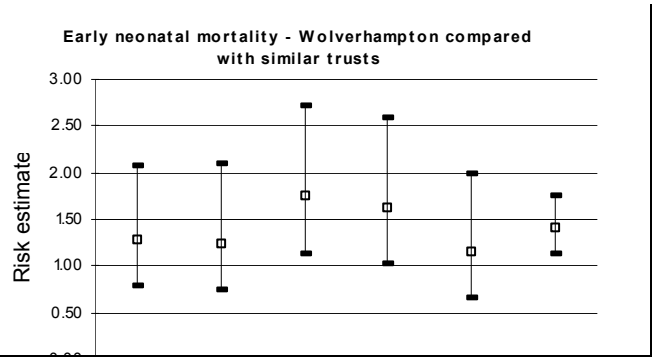

***Source: Office of National Statistics data***

Table 7 shows that the risk of early neonatal death in Wolverhampton was significantly higher than elsewhere for the period as a whole. The relative risk was estimated to be 1.42 (95% C.I. 1.14 to 1.76). For individual years, the risk was higher in each year but was only statistically significant in 2000 and 2001.

**Table 7. Risk of early neonatal death with 95% confidence intervals in Wolverhampton compared with trusts with similar ethnic populations**

| Year | Risk | Confidence interval | |
|---|---|---|---|

| | estimate | Lower | Upper |
|---|---|---|---|
| 1998 | 1.28 | 0.79 | 2.07 |
| 1999 | 1.25 | 0.74 | 2.11 |
| 2000 | 1.76 | 1.14 | 2.72 |
| 2001 | 1.63 | 1.03 | 2.59 |
| 2002 | 1.15 | 0.66 | 2.00 |
| 98-02 | 1.42 | 1.14 | 1.76 |

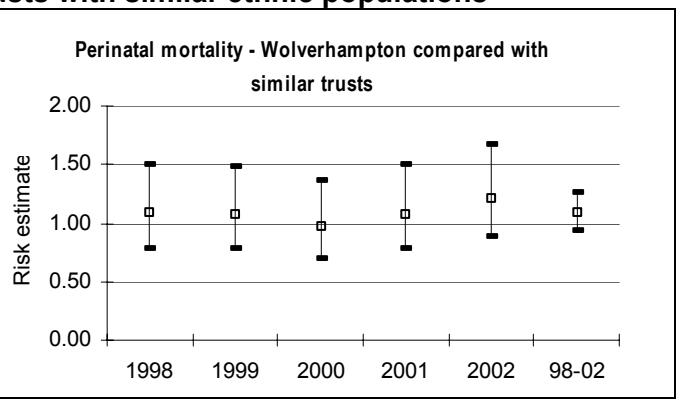



**Source: Office of National Statistics data**

Table 8 shows the overall risk of perinatal mortality at Wolverhampton to be slightly higher than elsewhere, but not significantly so at 1.09 (0.94 to 1.26). For individual years, the rate was higher in four years out of five but not significantly so in any one year.

**Table 8. Risk of perinatal mortality with 95% confidence intervals in Wolverhampton compared with trusts with similar ethnic populations**

| Year | Risk estimate | Confidence interval | |
|---|---|---|---|
| | | Lower | Upper |
| 1998 | 1.09 | 0.78 | 1.51 |
| 1999 | 1.08 | 0.78 | 1.49 |
| 2000 | 0.98 | 0.70 | 1.37 |
| 2001 | 1.08 | 0.78 | 1.51 |
| 2002 | 1.22 | 0.89 | 1.67 |
| 98-02 | 1.09 | 0.94 | 1.26 |




***Source: Office of National Statistics data***

**Conclusion**

Yearly fluctuations in stillbirths and early neonatal deaths largely compensate for one another; this could occur if events around birth are not correctly distinguished and coded all of the time. The separate analyses of stillbirths and neonatal deaths therefore need to be treated with extreme caution and reliance should only be placed on the results of perinatal mortality. Similarly, the comparison of the trust with all other trusts in England and Wales should be treated with caution. The effect of comparing the trust to trusts with a similar ethnic population rather than all other trusts in England and Wales was that the estimated relative risks were largely reduced. We would suggest that the most reliable results are those shown in table 8, comparing perinatal mortality at the trust with other trusts that have similar populations.

Overall, the risk of perinatal mortality was 9% higher in the trust compared to trusts with a similar ethnic population, however the difference in risk was not significant with an odds ratio of 1.09 (95% C.I. 0.94 to 1.26).

# Appendix D

## Analysis of views received from members of the public and local organisations about maternity services at the Royal Wolverhampton Hospitals NHS Trust

As a key part of the investigation, views were sought from a wide range of people who have used the maternity services at the trust, their relatives, friends, organisations representing maternity services and any other individual or organisation who wished to express their views. Over 250 questionnaires were supplied to the trust and voluntary organisations for them to distribute to service users of the maternity unit at New Cross Hospital. Documentation circulated with the survey asked for reports of positive experiences of the services as well as areas where care and treatment could have been better. The collection of views was not a scientific process and therefore cannot be regarded as being representative of the views of all service users. The summary presented is for information and includes both the 47 questionnaires and the three letters received.

**Total number of surveys provided = 250+**
**Total number of surveys received = 47**
**Total number of letters received = 3**
**Overall total received = 50**

| Positive themes | Frequency theme occurred | % of total responses |
|---|---|---|
| Good staff attitude | 21 | 42 |
| Satisfied with care received generally | 14 | 28 |
| Adequate information | 4 | 8 |
| Improvements with cleanliness since previous experience | 2 | 4 |
| Good care provided by neonatal | 2 | 4 |
| Satisfactory food | 1 | 2 |

The most commonly occurring positive theme was that of a perceived good staff attitude, however a very similar number of people felt that they had experienced bad attitudes from staff. Some people did comment that the experience was mixed.

| Negative themes | Frequency theme occurred | % of total responses |
|---|---|---|
| Bad staff attitude | 20 | 40 |
| Inadequate information given to patient | 11 | 22 |
| Dissatisfied with care received generally | 10 | 20 |
| Staffing establishment | 9 | 18 |
| Poor pain management | 7 | 14 |
| Concerns about cleanliness | 6 | 12 |
| Not listened to by staff | 6 | 12 |
| Failure to recognise/act upon | 5 | 10 |

| | | |
|---|---|---|
| warning signs | | |
| Staff unaware of patient details (e.g. previous appointments, scans, specific concerns raised) | 4 | 8 |
| Mistakes/perceived mistakes made | 3 | 6 |
| Unsatisfactory food (quality) | 3 | 6 |
| Left alone for long periods | 3 | 6 |
| Lack of continuity of staff caring for patient | 3 | 6 |
| Poor handover | 3 | 6 |
| Inadequate monitoring (scanning etc) | 3 | 6 |
| Need to redecorate | 2 | 4 |
| Parking problems | 2 | 4 |
| Lack of support for staff | 2 | 4 |
| Unsatisfactory food availability (patient delivered at night as was unable to get food) | 1 | 2 |
| Incorrect information recorded by staff | 1 | 2 |
| Examined by midwife not wearing gloves | 1 | 2 |

A number of the negative themes that have most commonly occurred do overlap with key themes that emerged during site visit, documentary analysis and/or stakeholder interviews. These include:

- perceived bad staff attitudes and an overall dissatisfaction with the general care received also emerged during the stakeholder interviews
- inadequate information. The issues raised included a lack of information being given during procedures, such as scans and delivery, as well as after birth for things like breastfeeding
- staffing establishment. Women commented that they had perceived low staffing levels, whilst other women had been informed of low staffing levels (in order to explain long waits etc)
- not listened to by staff
- staff unaware of patient details. Women commented that when they came in for appointments staff were not up to date with previous scans, concerned raised etc and so were having to keep explaining their situation. This may link with some of the other themes that have emerged such as poor handovers between staff and lack of continuity of staff caring for women

# Appendix E - Glossary

| Term | Explanation |
|---|---|
| Accountability | responsibility, in the sense of being called to account for something. |
| Action plan | an agreed plan of action and timetable that makes improvements to services, following a clinical governance review. |
| Acute<br>*care/ trust/hospital* | short term (as opposed to chronic, which means long term).<br><br>*Acute care* refers to medical and surgical treatment involving doctors and other medical staff in a hospital setting.<br><br>*Acute hospital* refers to a hospital that provides surgery, investigations, operations, serious and other treatments, usually in a hospital setting. |
| Adverse incident | something that has happened that is out of the ordinary and unintended which may be harmful to patients, visitors or staff. For example a patient falling on an icy path, or not receiving prescribed medicines. It may be clinical or non-clinical. |
| anaesthetics/anaesthetist | the study and practice of a branch of medicine that controls a patient's consciousness during an operation. It may also deal with intensive care and pain control. An anaesthetist is a doctor who specialises in giving anaesthetics to patients during surgery. |
| Antenatal | The period between conception and birth. |
| Antenatal fetal monitoring | monitoring the well-being of the baby during the pregnancy before the onset of labour. |
| antibiotic prescribing | prescription of antibiotics, drugs used to treat infections. |
| Appraisal | assessment, usually annually of a member of staffs performance & agreement of a development plan. |
| Audit | a review of procedures against agreed standards, to check their effectiveness and quality. |
| Audit Commission | a public body responsible for ensuring that public money is used economically, efficiently and effectively. The Audit Commission carries out national research on the public sector to monitor performance and ensure that local authorities and NHS organisations are providing |

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| | cost effective services. |
| Benchmarking | a process of comparison with similar groups to see how local practice matches that in similar situations elsewhere. |
| Birthrate Plus | recognised workforce planning system for maternity services supported by the Department of Health. |
| Blood transfusion practice | the process by which blood transfusion are administered. |
| Breech presentation | the position of a baby in the uterus such that it will be delivered buttocks first (instead of the normal head-first position). This type of delivery increases the risk of damage to the baby. |
| caesarean section (c section) | the procedure in which the baby is born through surgical incision in the abdomen and womb rather than being born vaginally. |
| cardiotocograph (CTG) | a means of recording a fetal heart beat, for example during labour. |
| care pathway | a description of the journey taken (or intended to be taken) through a clinical service. Some have defined it as a defined set of treatment and care steps designed to meet the particular need of each patient. |
| charter mark | an award by government as a mark of quality. |
| Clinical | any treatment provided by a healthcare professional. This will include doctors, nurses, AHPs etc. Non-clinical relates to general management, administration, catering, portering etc. |
| clinical audit | the evaluation and measurement by health professionals of how far they are meeting standards that have been set for their service. Standards may be derived from research evidence or local targets. Successful clinical audit usually involves changing practice to meet the standards. |
| clinical director | the clinician (often a doctor) who is accountable for clinical and sometimes managerial leadership of a directorate, which comprises several specialities. |
| clinical effectiveness | the way a healthcare organisation ensures that the approaches and treatments it uses are based on the best available evidence, for example from research, literature, or national or local guidelines. |
| clinical governance | refers to the quality of health care offered within an organisation.<br>The Department of Health document *A First Class* |

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| | *Service* defines clinical governance as “a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.”<br>It is about making sure the health services have systems in place to provide patients with high standards of care. |
| clinical governance review | a review of the policies, systems and processes used by an organisation to deliver high quality health care to patients. The review looks at the way these policies work in practice (a health check for a health organisation) |
| Clinical Governance Support Team (CGST) in England | The NHS Modernisation Agency’s clinical governance support team (CGST) runs a series of programmes to support the implementation of clinical governance within the NHS in England |
| clinical information | information about treatments given to a patient by a health professional. Could also mean information collected by the organisation about clinical practice (of individuals or teams). |
| Clinical Negligence Scheme for Trusts (CNST) | an ‘insurance’ scheme for assessing a trust’s arrangements to minimise clinical risk which can offset costs of insurance against claims of negligence. Successfully gaining CNST standards (to level one, two, three) reduces the premium that the trust must pay. |
| clinical practice | methods of delivering health care. |
| clinical risk | Something associated with healthcare which could cause harm. |
| clinical risk management | understanding the various levels of risk attached to each form of treatment and systematically taking steps to ensure that the risks are minimised. |
| clinician/clinical staff | a fully trained health professional – doctor, nurse, therapist, technician etc. |
| Commission for Health Improvement (CHI) | independent national body (covering England and Wales) to support and oversee the quality of clinical governance in NHS clinical services. |
| Community Health Council (CHC) | a statutory body sometimes referred to as the patients’ friend. CHCs represent the public interest in the NHS and have a statutory right to be consulted on health service changes in their area.<br><br>This body has been abolished and replaced in England but will continue to exist in Wales. |

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| Confidential Enquiry into Maternal Deaths in the United Kingdom (CEMD) | inquiry established to improve understanding of how the risks of maternal death might be reduced. |
| Confidential Enquiry into Stillbirths and Deaths in Infancy (CESDI) | inquiry established to improve understanding of how the risks of death in late fetal life and infancy might be reduced and to make recommendations for clinical practice. |
| consent | permission, from a patient to allow a health treatment or investigation to happen. A person cannot give consent for another adult but parental or other consent is needed for treatment of a child under 16. |
| consultant | a fully trained specialist in a branch of medicine who accepts total responsibility for specialist patient care. (For information on the training and staff grade posts of doctors, see **doctors**). |
| controlled drugs | drugs whose use is restricted (by an act of law). They can only be given in certain circumstances and by certain groups of health professionals. The care and custody of controlled drugs is also governed by law. |
| controls assurance | the ways that the board of an NHS organisation checks that its policies are being carried out. This includes internal and external audit for financial matters, employment polices and all areas in which the organisation interacts with the public. |
| CTG | see **cardiotocograph** |
| diabetes | any disorder of metabolism causing excessive thirst and the production of large volumes of urine. Used alone, the term most commonly refers to diabetes mellitus (a disorder of carbohydrate metabolism in which sugars in the body are not oxidized to produce energy due to lack of the pancreatic hormone insulin. The accumulation of sugar leads to its appearance in the blood then in the urine. |
| doctors | **Consultant**<br>a fully trained specialist in a branch of medicine who accepts total responsibility for specialist patient care.<br><br>**GP**<br>a family doctor, usually patients' first point of contact with the health service.<br><br>**Trust grade and staff grade doctors**<br>doctors who have completed their training but do not have the qualifications to enable them to progress to consultant level.<br>Doctors in training, also called junior doctors: |

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| | **SpR, specialist registrar**<br>specialist training post in a field of medicine, more senior than other training posts. Once SpRs have completed their programme, they can apply for consultant posts.<br><br>**SHO, senior house officer**<br>the position gained by doctors after their registration by the General Medical Council. SHO is the second tier of trainee doctor in a hospital.<br><br>**preregistration house officer**<br>the most junior grade of trainee doctor in a hospital. Such doctors have only provisional registration with the GMC and must successfully complete a year as such before becoming fully registered. |
| Early neonatal death | infant death within the first week of life |
| Elective | a planned hospital procedure as opposed to one carried out in an emergency. |
| Electronic fetal monitoring | a method of monitoring the heart beat of a baby using ultrasound which enables a correlation of the heart rate pattern with baby movements and/or contractions. |
| Electronic patient records (EPR) | details of patients and patient care stored electronically rather than on paper. An aim of the NHS is to work towards storing records electronically rather than on paper. |
| Epidural | on or over the dura mater (the outermost of the three membranes covering the brain and spinal cord). The epidural space is the space between the dura mater of the spinal cord and the vertebral canal. The spinal epidural space is used for anaesthetising spinal nerve roots, especially to provide pain relief during childbirth. |
| Evidence based clinical guidelines | guidelines (drawn up to assist clinician/patient decisions in specific clinical circumstances) that have been produced from a sound research base. |
| Evidence based practice | clinical staffs' use of recent research or best practice guidelines to guide their practice. These practices include searching or evidence to guide clinical decisions, critically appraising the evidence to make sure that is applies to the patient in question, applying it and auditing success. Evidence based practice also relates to the application of clinical guidelines. |
| Fetal compromise | jeopardy to the well-being of the baby in utero. |
| Fetal distress | a fetal heart rate pattern which is suggestive of fetal compromise. |

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| Forceps | a pincer-like instrument designed to grasp an object so that it can be held firm or pulled. The forceps used in childbirth are so designed as to fit firmly round the head of the baby without damaging it. |
| Forceps delivery | an assisted delivery of the baby by a doctor, where forceps are used to facilitate delivery of the baby's head. |
| Gynaecologist | doctor who specialises in conditions affecting the female reproductive system. |
| Gynaecology | a branch of healthcare which is concerned with conditions affecting the female reproductive system. |
| Health community or health economy | all organisations with an interest in health in one area including the community health councils, and voluntary and statutory organisations. |
| Higher surgical trainee | a junior doctor who has a National Training Number for surgical training i.e. they are specialist registrars (SpRs) engaged in structured training and examinations leading to the Certificate of Completion of Specialist Training (CCST) after about 6 years. Gaining the CCST allows them to apply for a consultant job. |
| Improving Working Lives | a Department of Health initiative launched in 1999. It includes standards for developing modern employment services, putting in place work/life balance schemes and involving and developing staff. |
| In utero | within the womb. |
| Incident reporting system | a system which requires staff to report all matters relating to patient care where there has been a problem. |
| Independent review | was stage two of the formal NHS complaints procedure, it consists of a panel with an independent chair, usually with three members, who look at the issues surrounding a complaint. |
| Individual performance review (IPR) | usually an annual process to look at staff performance against previously agreed objectives. |
| Infant mortality | death of a child during the first year of his/her life. |
| Infant mortality rate | the number of deaths of infants under one year of age per 1000 live births in a given year. |
| Information technology (IT) | includes use and supply of all computer systems. |
| Instrumental delivery | an assisted delivery of the baby aided by either forceps or ventouse. |
| Intervention | a treatment given to a patient by a health care professional. |

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| Intranet | an organisation's own internal internet which is usually private and restricted to staff use only. |
| Intrapartum | during labour. |
| Intrapartum mortality | death occurring during labour. |
| Intrapartum surveillance | observation of the condition of mother and baby during labour. |
| Investigation - by CHI | an in depth examination of an organisation where a serious problem has been identified. |
| Investors in People | a national quality standard which sets a level of good practice for improving the performance of an organisation through its people. |
| Lay member | a person from outside the NHS who brings an independent voice to the work of the Healthcare Commission. |
| Leading empowered organisations (LEO) programme | a three day training programme designed to equip health care professionals for leadership and to make changes in NHS organisations. |
| Local delivery plan | a Strategic Health Authority led capacity planning process took place between June-October 2002 to identify and quantify any gaps in provision in meeting the NHS plan.<br><br>Using their capacity plans as a baseline, Strategic Health Authorities were then asked to produce Local Delivery Plans by March 2003 showing how any capacity gaps would be overcome, and how the NHS Plan would be delivered in each local area from 2003/2006. |
| Locum | a temporary practitioner who stands in for the permanent one. |
| Maternal distress | distress of the mother, the term is most commonly used in labour. |
| Maternity unit | special unit for the care of women in childbirth. |
| Matron | used in the NHS Plan (2000) to describe a senior nurse with clear authority at ward level. They will control resources to enable delivery of the core elements of care, including resolving clinical issues, such as discharge delays, and environmental problems such as cleanliness. |
| Medical | the branches of medicine practised by physicians concerned with treatment using drugs and medicines as opposed to (surgical) operations. |

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| Medical director | the term usually used for a doctor at trust board level (a statutory post) responsible for all issues relating to doctors and medical and surgical issues throughout the trust. |
| Midwife | a professional trained in the care of women, babies and their families before, during and immediately after birth. Midwives are registered with the Nursing and Midwifery Council and are the experts in normal straightforward birth. |
| Midwifery Care Assistant (MCA) | an individual who has undergone basic training in the clinical setting to assist the midwife in his/her role. MCAs are not professionally qualified but may have undergone vocational training. |
| Mortality rate | the number of deaths in a given period and for a given size of population. |
| Multidisciplinary team | a group of people who are from different professional backgrounds concerned with the treatment and care of patients, who meet regularly to discuss patient treatment and care. |
| National Childbirth Trust (NCT) | a charity that offers support in pregnancy, childbirth and early parenthood and aims to give parents the chance to make informed choices. |
| National Institute for Clinical Excellence (NICE) | a part of the NHS set up to provide clinical staff and the public in England and Wales with guidance on the effectiveness of current treatments. |
| National Service Framework (NSF) | guidelines for the health service from the Department of Health on how to manage and treat specific conditions, or specific groups of patients, for example, Coronary Heart Disease NSF, Mental Health NSF. Their implementation across the NHS is monitored by CHI. |
| National targets | a nationally agreed target that all NHS organisations must achieve. It includes waiting times for appointments. |
| Neonatal | referring to the newborn period which, by convention, is the first four weeks after birth. |
| Neonatal Intensive Care Unit (NICU) | a unit providing care to acutely ill newborn infants. |
| Neonatal mortality rate | calculated from deaths occurring in the first four weeks of life (makes up infant mortality rate – the number of deaths of infants under one year of age per 1000 live births in a given year). |
| NHS performance rating | an annual summary of the performance of NHS organisations by the Government, also called star |

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| | ratings, Organisations are given a number of stars ranging from 0 (lowest) to 3 (excellent) to reflect their performance on a set of key indicators. This rating will affect an organisation's funding and its degree of autonomy.<br><br>Performance ratings for NHS trusts were published in September 2001. |
| NHS trust | a self governing body in the NHS, which provides health care services. They employ a full range of health care professionals, including doctors, nurses, dieticians, physiotherapists etc.<br>Acute trust – provides medical and surgical services usually in hospital. |
| Nursing director | the term usually used for a nurse at trust board level responsible for the professional lead on all issues relating to nurses and nursing throughout the trust. |
| Obstetric case mix | the mix of high and low risk obstetric patients in a pregnant population. |
| Obstetrician | a doctor who specialises in the delivery of obstetric care and the diagnosis and treatment of gynaecological disease. |
| Obstetrics | a branch of medicine dealing with the care of women during pregnancy, childbirth and the period of recovery from childbirth. |
| Outcome | all the possible results that may occur from a treatment, service or prevention programme. |
| Outcomes of patient care | the end result of a patient's treatment (can be interpreted widely or narrowly). |
| Overview and scrutiny committees | part of local authority arrangements to influence decisions to improve public services for local people. Overview and scrutiny committees may address issues around health inequalities to secure the continuous improvement of health services and services that impact upon health. |
| Patient administration system (PAS) | a networked information system used in NHS trusts to record information about inpatient and outpatient activity. |
| Patient advice and liaison service (PALS) | a new service proposed in the July 2000 NHS plan due to be in place by 2002, that will offer patients an avenue to seek advice or complain about their hospital care. |
| Patient environment action team (PEAT) | a team of inspectors who visit hospitals to check on cleanliness. |

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| Patient forums | groups that will be based in every trust and Primary Care Trust to monitor the range and effectiveness of services provided by the trust, inspect premises where services are delivered and seek the views of trust patients, particularly minorities and 'hard-to-reach' parts of the local community. |
| Patient involvement | the amount of participation that a patient (or patients) can have in their own care or treatment including making decisions. It is also used to describe how patients can have a say in the way that services are planned or provided. |
| Performance indicators | measures to indicate how well an organisation is performing. |
| Performance management | using a review process (usually results delivered against objectives set) to assess how well a person, team or service is working. |
| Performance monitoring | a permanent, ongoing system which records how a particular service or procedure is carried out and how well it meets targets or standards. |
| Perinatal | the period beginning shortly before and ending shortly after birth. |
| Perinatal mortality | deaths after 24 weeks of gestation, including stillbirths, and during the first week of life. |
| Postnatal | after delivery or childbirth. |
| Postneonatal mortality rate | deaths occurring between four weeks and one year of age. |
| Primary care trust (PCT) | organisations that bring together all primary care practices in an area. PCTs are diverse and complex. Unlike Primary Care Groups, which came before them, they are independent NHS bodies with greater responsibilities and powers. They were set up in response to the Department of Health's *Shifting the Balance of Power* and took over many health authority functions.<br>PCTs are responsible for<br>• improving the health of their population<br>• integrating and developing primary care services<br>• directly providing community health services<br>• commissioning secondary care services<br>PCTs are increasingly working with other PCTs, local government partners, the voluntary sector, within clinical networks and with 'shared service organisations' in order to fulfil their roles. |
| Prolonged second stage labour | a second stage of labour which is longer than it ought to |

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| | be. |
| Protocol | a policy or strategy which defines appropriate action. |
| Radiometer blood gas analyser | machine which determines the pH (acidity) and carbon dioxide levels within a blood sample. |
| Risk assessment | an examination of the risks associated with a particular service or procedure. |
| Royal College of Midwives (RCM) | the trade union and professional organisation run by midwives, it provides professional leadership, education, influence and representation for and on behalf of midwives. |
| Royal College of Obstetricians and Gynaecologists | professional body that conducts examinations, post graduate training and education in obstetrics and gynaecology. The Royal College of Obstetricians and Gynaecologists also promotes research and good practice in the profession. |
| Secondary care | specialist care, usually provided in hospital, after a referral from a GP or health professional. |
| Senior house officer (SHO) | the position gained by doctors after they are registered as a doctor by the GMC. SHO is the second tier of trainee doctor (after preregistration house officer) in a hospital. |
| Serious untoward incident (SUI) | an occurrence which led, or may have led to harm in one or several patients/staff or members of the public which is of sufficient severity to warrant special investigation. |
| Sonographer | a radiographer who has undertaken postgraduate training in ultrasound techniques. |
| Specialist registrar (SpR) | a training position for doctors which allows them to gain some specialist knowledge in the field of medicine in which they wish to become a consultant. It is more senior than a senior house officer (used to be called registrar or senior registrar). Once SpRs have gained a certificate of completion of specialist training (CCST), they are eligible to apply for consultant posts. |
| Staff grade support | support for staff grade doctors or support provided by them. |
| Stakeholders | a range of people and organisations that are affected by, or have an interest in, the services offered by an organisation. In the case of hospital trusts, it includes patients, carers, staff, unions, voluntary organisations, community health councils, social services, strategic health authorities, GPs, primary care trust in England, local health groups in Wales. |

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| Star rating | see **NHS performance rating** |
| Stillbirth | birth of a fetus that shows no evidence of life (heartbeat, respiration, or independent movement) at any time later than 24 weeks after conception. |
| Strategic health authority | organisations that replaced health authorities and some functions of Department of Health regional offices in April 2002. Unlike health authorities, they are not involved in commissioning services from the NHS. Instead they performance manage PCTs and NHS trusts and lead strategic developments in the NHS. Full details of the changes are in the Department of Health document, *Shifting the Balance of Power*, July 2001. |
| Strategy | a long term plan for success. |
| Terms of reference | the rules by which a committee or group does its work. |
| Trust board | a group of about 12 people who are responsible for major strategy and policy decisions in each NHS trust. Typically comprises a lay chairman, five lay members, the chief executive, executives and directors. |
| Ultrasonography (sonography) | the use of ultrasound, usually in excess of 1 MHz, to produce images of structures of the human body that may be observed on a TV screen and subsequently transferred to photographic film. |
| Ultrasound | high frequency sound waves used to create images of structures and organs within the body. |
| Ventouse delivery | an assisted delivery of the baby whereby a suction cap is applied to the head of a baby to help the delivery. |
| Woman centred care | a system of care or treatment is organised around the needs of the woman. |

# Appendix F

**Interviews conducted**

The investigation team conducted a total of 160 interviews. The following shows a breakdown of those interviewed:

**Trust and former trust staff**

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|---|---|
| Chief Executive and executive/deputy directors | 9 |
| Chair and non-executive directors | 5 |
| Non- senior and middle managers | 4 |
| Clinical middle managers | 5 |
| Ward managers and assistant ward managers | 6 |
| Consultant obstetricians and gynaecologists | 11 |
| Junior and other doctors | 9 |
| Supervisors of midwives | 7 |
| Qualified Midwives | 11 |
| Student midwives | 1 |
| Other nurses/assistants | 4 |
| Domestic staff | 3 |
| Staff side/trade unions | 3 |
| Admin/clerical/support | 17 |

**Other**

| | |
|---|---|
| Community Health Council | 1 |
| Primary care trusts | 2 |
| Strategic health authorities | 3 |
| West Midlands Perinatal Institute | 1 |
| Commission for Patient and Public Involvement in Health | 1 |

**Relatives the public and voluntary organisations**

| | |
|---|---|
| Service users | 42 |
| Relatives | 2 |
| Trust staff | 10 |
| Strategic health authorities | 1 |
| Primary care trusts | 1 |
| Other | 1 |

# Appendix G

**Documents received in the course of the investigation**

A summary of the documents received by CHI while conducting the investigation is given below. Over 1,500 documents were submitted as evidence, the majority were received from and related to:

Royal Wolverhampton Hospitals Trust
Birmingham and The Black Country Strategic Health Authority
Wolverhampton City Primary Care Trust
National sources
Other sources

**Royal Wolverhampton Hospitals NHS Trust**

Details/profile of the trust and its services – trust service annual reports, structure charts and management structure
Minutes and some supporting papers from trust committee and group meetings. These include trust and management board minutes and reports
Risk management policies, procedures and reports
Clinical audit, strategies, reports and newsletters, and results
Education and training, strategies, programmes and policies
Staffing, strategies and policies
Staff newsletters
Public user group meetings – public/user newsletters and public/user surveys/questionnaires
Public/user leaflets
Clinical, operational an service policies, procedures and guidelines
Staffing figures and monitoring records
Clinical activity data
Governance strategies and reports
Service level agreements
Divisional and directorate action plans
Details of incidents, claims, ombudsman and independent reviews
CNST, RPST and controls assurance reports
Documents related to the internal investigation of the trust and review

**Birmingham and The Black Country Strategic Health Authority**

Minutes and related information from trust committee and group meetings, including board, directorate and clinical audit groups
Details of incidents
Clinical service's outturn reports
Strategic Health Authority communications, strategy, updates and action plans
Strategic Health Authority staff briefing

**Wolverhampton City Primary Care Trust**

Minutes of the Primary Care Trust board and related information from various groups, including minutes from the health authority.
Local delivery plan
Maternity services strategy

**National sources**

Policy, General Medical Council and Royal Colleges

**Other sources**

A number of other documents were received from other organisations.

Maternity care strategy
Patient information and leaflets
Report of visits to clinical areas
Details on complaints and concerns of patients and staff
External report on an incident