The All Wales Clinical Pathway for Normal Labour: What are the Experiences of Midwives, Doctors, Managers and Mothers?

Final Project Report: A Policy Ethnography to Explore the Implementation of The All Wales Clinical Pathway for Normal Labour

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Appendices:
Appendix One: Summary of main studies reviewed
Appendix Two: Definitions of 'variance' in the literature
Appendix Three: Part 1 NLP
Appendix Four: Part 2 NLP
Appendix Five: Part 3 NLP
Appendix Six: NLP 'Women's leaflet'

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This research study was carried out between October 2004 and October 2006, with the overall purpose of providing a qualitative evaluation of the implementation of the All Wales Clinical Pathway for Normal Labour. The study was supported by The Health Foundation in the form of a Leading Practice Through Research Award.

What is the All Wales Clinical Pathway for Normal Labour?
The All Wales Clinical Pathway for Normal Labour (known locally as the Normal Labour Pathway, and referred to in this report as the NLP) consists of a three part document, which records midwifery care from the onset of labour until birth, in a format designed to minimise writing unless the situation deviates from the norm. The document also functions as a protocol for practice, based on research evidence where this was available and 'best practice' where this was not. The pathway is used solely by midwives.

The NLP is a key strategy in Welsh maternity policy, aimed at promoting normality in childbirth and minimising intervention for women with normal pregnancies. Following an initial pilot, the pathway was introduced throughout Wales between 2002-2004. It is now an accepted part of Welsh maternity policy and is used during the care of 'low risk' women in all maternity units within Wales.

Study aims:
The study had two key aims:
  i.   to investigate the use of the All Wales Clinical Pathway for Normal Labour by observing its use in context (that is, how it is used 'on the ground', in real life settings);
  ii. to evaluate the implementation of the All Wales Clinical Pathway for Normal Labour from the perspectives of key stakeholders i.e. midwives, mothers, doctors and midwifery managers.

Study design:
Approach: The study used a policy ethnography approach to investigate the 'real life' experiences of those most affected by the pathway i.e. midwives, mothers, midwifery managers and doctors. Policy ethnography is a social science research method which aims to explore how policy is put into action from the viewpoint of the key players, thus increasing our understanding of organisations in action. It is underpinned by a belief that, although policy may appear to be made 'at the top' by policy makers, in reality it is the local interpretation and adaptation of policy by grass roots workers that is of significance.

Data collection methods: Data were collected via semi-participant observation, focus groups and interviews in order to access a range of perspectives. Observation of midwives using the pathway provided insights

into the effects of the pathway on everyday practice. Focus group and interview schedules were then developed on the basis of this observational data. Data collection took place in 2 Welsh maternity units, for the purposes of comparison. The study was conducted over a two year period, with three phases of data collection:

i. *Phase One*: *Background information*
- Semi-structured interviews with key informants involved in the initial stages of devising, planning and implementing the pathway
- analysis of documents (minutes of meetings, publicity material and presentations)

ii. *Phase Two*: *Maternity Unit A:*
- Semi-participant observation of midwives caring for women using the NLP, followed by an interview with the midwife concerned
- Focus group discussions and semi-structured interviews with a range of hospital and community-based midwives
- Semi-structured interviews with mothers who had been cared for on the NLP, maternity unit doctors and midwifery managers

iii. *Phase Three*: *Maternity Unit B:* replication of Phase Two.

Research sites:
Maternity Unit A: a medium-sized unit in a semi-rural area, undertaking approximately 1400 births per year. Midwives worked predominantly in midwife-led integrated teams, which were community-based and provided midwife-led care to 48% of women.
Maternity Unit B: a large tertiary referral unit in an urban area, undertaking 3600 births per year. Midwives worked in either hospital or community settings.

Sample: Purposive sampling used. A total of 71 participants took part:
4 key informants; 41 midwives; 5 midwifery managers; 6 doctors; 15 mothers.

Ethical approval and access: Ethical approval and access to research sites was obtained from the Local Research Ethics Committees and the Research and Development Committees for each of the participating NHS Trusts. Access was also negotiated with the Heads of Midwifery and a senior obstetrician from each site.

Data analysis: Thematic analysis using N6 computer assisted qualitative data analysis package.

Findings:
General:
- The NLP is a complex multi-faceted intervention, not merely a change in documentation. It has had complex and unexpected outcomes on the experiences of midwives, mothers and doctors.
- The most significant impacts are on the working practices of midwives and midwife-doctor relationships.

- The impact of the pathway was affected by clinical context, professional group and length of midwifery experience.
- In the view of participants, the NLP has had little impact on clinical outcomes, particularly childbirth intervention rates. This perception is upheld by Welsh Assembly Government Maternity Statistics for the period http://www.wales.gov.uk/statistics
- The process of devising and implementing the NLP was experienced as exclusionary by doctors. Midwives appear to have experienced more consultation and preparation. Training and support varied between study sites. Ongoing training is needed for midwives and doctors.

Midwives:
- Midwives were divided in their views regarding the NLP as a record of care. More recently qualified midwives expressed positive views, considering that the 'tick box' approach allowed more time for client care. Experienced midwives expressed concerns about the lack of a 'story' in the records. The lack of detail was thought to have implications for litigation cases and for future reflection on the birth experience.
- Midwives generally felt supported by NLP, as it had increased their confidence in adopting a normality approach. More recently qualified midwives felt it enhanced clinical judgement, those with lengthier clinical experience thought that it constrained clinical judgement. This led to resistance and adaptation of the NLP by some of these midwives. Concerns were raised regarding the long term implications of clinical pathway use for the development of clinical judgement.
- Midwives thought that a major impact of the NLP protocol had been to give women more time in the first stage of labour. This was experienced positively by midwives (as it allowed more time for normal physiological processes) and negatively by doctors (who raised concerns about clinical safety).

Doctors:
- Doctors felt that NLP excluded them from contact with low risk clients, and therefore they had less knowledge of the individual woman's clinical situation. They considered this to be a change in role which had implications for clinical safety.
- There had been a shift in power, with midwives assuming more control within maternity care. This had led to increased tensions between midwives and doctors.

Mothers:
- Mothers had little knowledge of the NLP and did not know that this was a new policy based approach to maternity care.
- The NLP protocol aims to reduce hospital admissions in first stage of labour and mothers are encouraged to remain at home until labour is well-established. For some mothers this created anxiety. Concerns were expressed regarding a lack of support in early labour.

- Mothers' understandings of normal and abnormal childbirth differed from those of midwives, and this warrants further research investigation.
- Mothers identified their relationship with the midwife, in particular the quality of support and encouragement given, as key factors in their achievement of a normal birth.

Key implications for practice:
- The emphasis on documentation by exception should be reviewed. Practitioners should be able to add to documentation at their discretion.
- Women need to be informed of this new approach to their care and provided with opportunities to discuss this with midwives, in order to understand the rationale for this and its implications for their labour and birth experience.
- Support for women in early labour is essential. Telephone advice needs to be reassuring, supportive and encouraging, with the needs of individual women being addressed.
- Proactive efforts must be made to ensure any tensions between midwives and doctors are minimised. Opportunities for collaborative working should be actively sought, in order to enhance mutual understanding and tackle areas of conflict. Both groups need to work in partnership to address issues of importance within maternity care, with an emphasis on shared aims and objectives.
- Careful attention should be paid to the development of clinical judgement in student and newly qualified midwives, given the potential for the use of clinical pathways to impact on this. This has implications for pre-registration and post-registration midwifery education, as well as for preceptorship and support for newly qualified midwives.
- Ongoing training and support for all practitioners is needed.

Key implications for policy making:
- 'Soft technologies' such as clinical pathways need rigorous evaluation as for any other type of intervention. All new policies should have evaluation built in from the onset. This evaluation needs to be designed by those with appropriate skills.
- All possible stakeholders should be fully consulted at each stage of the policy making process, in order to minimise feelings of exclusion and alienation.
- Effective communication between health care professionals should not be taken as a given; rather time and resources must be set aside to ensure that this becomes a reality rather than an ideal.
- Audit tools need to be designed in the initial stages of projects, with careful attention paid to the types of information that will be useful to all stakeholders.
- Ongoing support is needed for projects, to ensure their effectiveness
- All of the above require funding and resources to be made available.

Key implications for research:

- Longitudinal studies are needed to investigate the long term impact of clinical pathways on the development of clinical judgement and expert practice.
- The NLP requires a long term study to monitor the effects of 'documentation by exception' (especially on litigation and complaints cases).
- Further research is needed to investigate the impact on clinical outcomes of using a half a centimetre per hour cervical dilatation rate as the norm.
- Further research is needed to explore women's understandings of normal birth, and to compare it with midwives' understandings
- The lack of evidence pertaining to clinical outcomes for mothers and babies is of concern. There may still be opportunities for quantifying some outcomes (for example, making use of historical data). This is recommended.
- Any other units considering implementing the NLP should ensure that rigorous systems of evaluations are in place.
- More qualitative research is needed to explore the complex effects of introducing 'soft technologies' into practice.

Chapter 1: Introduction

This research study was carried out between October 2004 and October 2006, with the overall purpose of providing a qualitative evaluation of the implementation of the All Wales Clinical Pathway for Normal Labour. The study was supported by The Health Foundation in the form of a Leading Practice Through Research Award.

The research team was based in the Institute for Health Research, Swansea University and headed by Professor Billie Hunter. A Project Advisory Group, consisting of clinical midwives, midwife educators, an obstetrician, a service user representative, policy maker and experienced researchers, met regularly to guide the conduct of the study and enhance the interpretation of findings.

The study had two key aims:
  iii. to investigate the use of the All Wales Clinical Pathway for Normal Labour by observing its use in context (that is, how it is used 'on the ground', in real life settings)
  iv.   to evaluate the implementation of the All Wales Clinical Pathway for Normal Labour from the perspectives of key stakeholders i.e. midwives, mothers, doctors and managers

1.1 Background to the study:
Over the past few years the United Kingdom (UK) has seen a decrease in the numbers of normal births and a rise in childbirth interventions (House of Commons 2003). As one of the countries within the United Kingdom, Wales demonstrates a similar pattern. Indeed, at the time the study commenced, Wales had the highest rate of Caesarean sections in the UK, at 24.4% of all births (National Assembly for Wales NAfW 2003). The most recent figures (for 2005) show a rate of 24.5%, higher than England (22.9%) but slightly lower than Scotland (24.9%) (http://www.birthchoiceuk.com/Professionals/index.html). As part of a midwifery response to this situation, the All Wales Clinical Pathway for Normal Labour was devised, in an attempt to improve childbirth outcomes (Welsh Assembly Government WAG 2002).

Since 1997, the Welsh Assembly Government has had responsibility for developing and implementing health policy, including maternity policy, relevant to the needs of the local population. Welsh maternity policy is informed by two reports: 'Delivering the Future in Wales: A Framework for Realising the Potential of Midwives in Wales' (WAG 2002), and the National Service Framework for Children, Young People and Maternity Services in Wales (WAG 2005a). Both of these documents identify the All Wales Clinical Pathway for Normal Labour as a key strategy for promoting normality in childbirth and minimising intervention for women with normal pregnancies.

Following an initial pilot, the All Wales Clinical Pathway for Normal Labour was introduced throughout Wales between 2002-2004. It is now an accepted part of Welsh maternity policy and is used during the care of 'low risk' women in all maternity units within Wales. The use of clinical pathways in 'managing'

a normal physiological event such as childbirth is unusual. At the time of data collection, this appeared to be the only UK example of a pathway being used to support normal labour.[1] Other UK maternity care pathways were identified in discussions with colleagues, but these were usually related to a specific issue e.g. care of women after caesarean section. Therefore the Normal Labour Pathway, as it is generally known, is a initiative which could be seen as pioneering and it has certainly generated a great deal of interest within the wider UK and internationally.

This widespread interest has been rewarding and affirming for policy makers within Welsh maternity services, and has certainly raised the profile of Welsh midwifery; however, this interest also means that it is imperative that as much information is available as possible about the pathway and how it is experienced by the various stakeholders. The innovative nature of the Normal Labour Pathway (NLP) and the lack of a previous similar tool, means that evaluation is essential, in order for both practitioners and policy makers to have research-based evidence relating to its use in practice.

However, no evaluation study was set up concurrently with the commencement of the Pathway, and the Pathway has now been fully implemented throughout Wales. This makes quantitative evaluation difficult, as there is no baseline data available and it is not possible to ascertain the impact of the pathway on maternity care outcomes. Audit data is being collected from all Welsh NHS Trusts, but as will be seen later, this is of limited value in relation to macro level evaluation.

Two other research projects investigating aspects of the NLP were identified:
  i)   A small scale project carried out by Lucey as part of a Health Professions Wales Research Training Fellowship. This study explored the experiences of women who accessed Part One of the NLP more than once. The findings have not yet been reported.
  ii)   ii) The 'OPAL' study ("Labouring to better effect: Studies of services for women in early labour – Options for assessment in early labour"), conducted by Spiby et al from the Mother and Infant Research Unit, University of York and funded by the NHS Service Delivery and Organisation (SDO) programme. OPAL is a set of mixed methods studies aimed at investigating service provision for women in early labour in England and Wales. Part One of the NLP was investigated by this team as it provided a specific example of a new innovation for women in early labour; hence one objective of the OPAL study was to 'explore the perceptions of Part 1 (the telephone component) of the Pathway amongst service users and provider' (Spiby et al 2006 p 5). The OPAL study reported in November 2006, and the findings are referred to in this Report as appropriate.

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[1] There are North American clinical pathways in existence which focus on the care of mothers and babies experiencing vaginal births, but these do not have the intention of actively supporting a normal approach to childbirth. An English integrated care pathway to support 'natural birth' has also recently been developed in Birmingham (Clarke et al 2007).

Informal discussions with midwifery and medical colleagues had indicated that the Pathway was impacting upon Welsh maternity care in what appeared to be complex and unexpected ways, and it was this that prompted the decision to undertake a formal study to explore these issues further. The uniqueness of the Pathway makes it an ideal topic for a research study and, as it is currently used in Wales alone[2], this lends itself to a case study approach focusing on its implementation within Welsh maternity services. A qualitative approach appeared most appropriate, as it would enable detailed insights to be gained into the process of devising, implementing and using the Pathway, as well as into some of the complex outcomes. The research design is discussed in more detail in Chapter Three.

1.2 What is the Normal Labour Pathway?
The NLP consists of a three part document, which records midwifery care from the onset of labour until birth, in a format designed to minimise writing unless the situation deviates from the norm. The document also functions as a protocol for practice, based on research evidence where this was available and 'best practice' where this was not. The pathway is used solely by midwives. (See Appendices for copies of each part of the NLP). In the two research sites, the NLP documents were usually retained by the midwives in the maternity unit, rather than being held by the woman. This appears to be common practice throughout Wales.

On the front page of each document, it is noted that the NLP has been developed 'by clinicians throughout Wales for 100% of women in normal labour'. It notes that the NLP is a 'guide' and that it 'encourages clinical judgement to be used and documented'. The aim of reducing unnecessary intervention in normal labour is noted, and also that 'all clinical interventions will follow discussion and verbal consent from the woman'. Boxes are provided for the caregiver to give name, initials, designation and the time that care commenced and ceased. It is also stated that 'documentation is by exception', and that if 'everything is normal' according to the guidance within the NLP, the partogam is 'acceptable documentation' of normality. Hierarchies for the grading of recommendations (A-C) and levels of evidence (I-IV) are provided; these are as used by the National Institute for Health and Clinical Excellence (NICE). On the back page of each document it notes that the NLP was 'developed with the financial assistance of the Office of the Chief Nursing Officer, Welsh Assembly Government. This is the only mention of the Welsh Assembly Government.

The NLP has a logo (a silhouette of Wales, with the words 'All Wales Clinical Pathway for Normal Labour') on the front page of each document, but no other evidence of 'ownership' or authorship. There is no Welsh Assembly Government logo or endorsement, apart from the acknowledgement of financial support.

The NLP is supported by a website, hosted by HOWIS http://www.wales.nhs.uk/sites3/home.cfm?orgid=327. This contains all the

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[2] Although through personal communication, I have been informed that implementation is being considered or in progress in several NHS Trusts in England, as well as in Scotland and the Isle of Man.

NLP documents, brief details of what the NLP is and how it was developed (including the names of all Standing Committee members and a bibliography for the NLP evidence base). The documents available on this website are dated 25/08/04.

1.2.1 Part 1: Telephone Advice:
Part One of the NLP is designed to provide a record and protocol relating to telephone advice given to women in labour. Boxes identify key information to be ascertained during the phone call (e.g. gestation, antenatal history, brief history of this labour), and whether this is a first or subsequent phone call. Variance codes are noted alongside this information. If variances are noted, there is a table provided on the back page for the midwife to write code and a brief description of the variation.

Information is provided differentiating between latent and active phases of labour, presumably as a guide for the midwife when making the phone assessment, although this is not made explicit. The name 'Bolane' is included in this information; although it is not clear whether this is a reference as no further details are provided. A list of points is provided relating to the most appropriate environment for the latent phase of labour; these are graded as per NICE recommendations. These all point to the benefits for women of remaining at home in early labour. There are suggestions for advice which may be given to women in the latent phase.

1.2.2 Part 2: Initial assessment:
This document is designed to support a detailed face-to-face initial assessment of the woman. Key antenatal maternal and fetal factors are identified, in the form of a check list for assessment. A table detailing all aspects of the clinical assessment is provided; this identifies the normal limits for each assessment (e.g. fetal heart rate, maternal pulse rate). The midwife notes the actual recording and whether this falls within normal limits. Variance codes are provided as in Part One.

A table is also provided for the documentation of two vaginal examinations. The document states that a vaginal examination should normally be used to confirm active labour 'within four hours of the onset of 1:1 midwifery care.' Active labour is defined as 'when the cervix is more than 3cms dilated and fully effaced in the presence of regular, painful contractions'. The graded recommendations for the most appropriate environment for women in the latent phase of labour (as provided in Part one) are detailed again.

1.2.3 Part 3: Active labour pathway:
This is the most substantial part of the NLP, consisting of 10 pages compared with four pages in each of the other parts. This part is designed to be used once it has been confirmed that a woman is in the active stage of labour. It includes a partogram.

Expected progress in labour is described in the form of an algorithm. This recommends that a vaginal examination is performed within four hours of 1:1 midwifery care commencing, followed by another vaginal examination four

hours later, if the woman is not showing signs of full dilatation. At this examination, the midwife is asked to note whether there has been progress in cervical dilatation of at least 2 cms. If not, a list of suggestions is provided to enhance labour progress. These include 'low tech' options such as mobilisation and change of maternal position, as well as more 'technical' responses such as artificial rupture of membranes (the latter is last on the menu of options, though it is not clear if these options are ranked in any way). It is then recommended that an additional vaginal examination be carried out within 2 hours, if there are no signs of full dilatation. If at this stage there has been progress of at least one centimetre, then care can continue on the NLP. If not, the woman should 'exit the pathway'.

It is important to note that the accepted time allowed by the NLP for cervical dilatation, and the accepted intervals between vaginal examinations, differs from common practice prior to introduction of the NLP. Previously, labour progress of one centimetre an hour was considered normal. Vaginal examinations were usually performed when the woman was first admitted to the labour ward, and 2-4 hourly after that. The importance of these changes is evident in the accounts of participants, and is discussed further in Chapter Five.

Part Three of the NLP also provides information about expected progress during second and third stages of labour (both active and physiological), and ranks recommendations in terms of the NICE A-C hierarchy of evidence. Boxes are provided for pre-birth discussions and for a summary of the 'delivery' including post birth observations of the mother and baby. A further page details any suturing information.

1.2.4 Leaflet for women:
There is also a related leaflet for women ("Your Pathway Through Labour"), which is generally given to women during pregnancy. This describes the labour process, and makes explicit the difference between the latent and active phases of labour. The leaflet describes how women may feel in the different stages of labour and what they can do to cope with the demands of labour. The underpinning aim is to encourage women to stay at home for as long as possible, at least until they are in established labour. This is justified by the policy aim of reducing the numbers of women admitted to hospital who are not in established labour. From a managerial perspective this should free up beds; from a clinical practice perspective, it should help to avoid unnecessary interventions such as induction and acceleration of labour, which may occur when women are a 'captive audience' awaiting the onset of labour in a maternity unit. There is also evidence that women cope with labour better in the familiar surroundings of their own homes (Janssen et al 2003). The views of women in relation to this leaflet, and more broadly to the policy of remaining at home during early labour are discussed in detail in Chapter Eight.

1.2.5 Comparison with other clinical pathways:
The NLP differs from other clinical pathways in a number of important ways. Firstly, unlike other pathways, it is used by only one group of professionals

(i.e. midwives). In contrast, as will be seen in the review of the literature in Chapter Two, most clinical pathways are designed for multi-professional use. For example, pathways for the care of a patient following a stroke may be accessed by nurses, doctors, physiotherapists, speech therapists, dieticians and occupational therapists. This multi-professional perspective is also commonly evident in the initial stages of devising most clinical pathways; in contrast, the steering group responsible for creating the NLP consisted mainly of midwives, with limited involvement from other health care professionals and service users. It is usually also the case that pathways are local initiatives, designed to address specific local concerns, rather than being implemented on a national basis as is the case with the NLP.

The NLP also differs from other pathways in its aim; as we will see, rather than attempting to standardise an intervention as is often the case, this pathway aims to facilitate an approach to care i.e. a normalising approach to childbirth. The focus is broad rather than specific i.e. addressing the large scale (and complex) problem of high childbirth intervention rates, rather than tackling a smaller problem e.g. efficient and effective care of patients post surgery.

1.3 Why was the NLP created?

The Normal Labour Pathway was devised as a strategic response to the rising levels of childbirth intervention (and consequent reduction in normal birth rates) within Wales (Ferguson 2003, Fox 2004). The drivers for this new policy came from within the Welsh Assembly Government (WAG). As will be discussed within Chapter Two, clinical pathways have become increasingly popular within contemporary health care, as a key means of attempting to ensure that care is evidence based and clinically effective. As such, clinical pathways are a primary tool within the UK NHS modernisation agenda.

A number of other clinical pathways have been developed within Wales. Examples of these are: the Welsh Collaborative Care Pathway, aimed at enhancing the quality of care during the last days of life (Jones and Johnstone 2004) and the All Wales Clinical Pathway for Routine Enquiry into Domestic Abuse, aimed at supporting midwives and health visitors during antenatal social history taking (Hardacre 2005). The commitment of the Welsh Assembly Government to this approach is clearly evident on its website www.wales.gov.uk/subihealth/.The NLP is thus part of a broader WAG initiative aimed at 'the widespread use of clinical pathways to improve clinical governance' (Fox 2004:216). This commitment included financial support, which enabled the midwifery officer at the WAG to fund the secondment of a midwife to undertake the role of Pathway Co-ordinator. This role (discussed further in Chapter 4) involved co-ordinating the development of the pathway, convening and chairing the pathway steering group and visiting maternity units to publicise the NLP.

According to both Ferguson (2003) and Fox (2004), both of whom played key roles in the creation and implementation of the NLP, the key reason for establishing the NLP was the need to respond to the high levels of caesarean section in Wales, as identified in the 2001 National Sentinel Caesarean

Section Audit Report (Thomas and Paranjothy 2001). The rising caesarean section rates identified in this report were a cause for concern amongst many maternity care providers, and the reasons for this steady rise were questioned. However, it is only Wales that has responded by creating a clinical pathway. The underpinning rationale appears to be that some midwives would 'benefit from guidance being available for midwifery care in normal labour' (Fox 2004: 216) and that this could best be provided as a structured framework in the form of a clinical pathway. Fox (2004:216) observes that prior to NLP introduction at least, normal birth rates varied between NHS Trusts in Wales, and she argues that this may in part be due to variations in practice between midwives and between maternity units. These practice variations 'may not reflect present evidence and best practice, but could be the result of routine and ritual' (Fox 2004: 216)[3]. A clinical pathway, in theory at least, could provide a means of standardising practice and reducing practitioner variation. How midwives have reacted to this objective is considered in detail in Chapter Six.

1.4 Conclusion:
From its conception, the NLP appears to have been designed as an innovatory tool with ambitious goals. It is unique when compared to other clinical pathways, as it is a uni-professional document which has been implemented nationally. The ambitious nature of its goals are evident in its attempt to address the large scale (and complex) problem of high childbirth intervention rates by creating an ideological shift within one group of professionals.

This research study used a policy ethnography approach to explore the journey of this unique and ambitious strategy as it moved from paper to practice. In the next chapter, the related literature is reviewed, in order to place the NLP in the wider context of clinical pathways in general. Chapter Three describes the research design and methods used. Chapters Four - Eight set out the key findings: in particular, the initial creation and implementation of the NLP; the use of the NLP as a record of care and protocol; the impact on midwives' ways of working; and the impact on doctors, mothers and maternity care in Wales. In the conclusion, the key issues arising from the study are highlighted and their implications for maternity policy, practice and research are considered.

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[3] It is interesting to note that NLP steering group discussions are cited as supporting evidence for this assertion, although this group did not start to meet until after the decision to establish a clinical pathway had been taken.

Chapter 2: Clinical pathways – literature review

A review of the literature was conducted to provide a backdrop to the study. The literature reviewed suggests that clinical pathways may have both intended and unintended consequences. Although they have the potential to inform the organisation of client care, they may also redefine professional identities and boundaries.4 As will be seen, this resonates with the findings of this study.

2.1 Methods:
Relevant articles were located by searching the Cumulative Index of Nursing and Allied Health Literature (CINAHL) and PubMed for the period 1995-2006. An initial search was undertaken using the term 'pathway', designed to capture articles employing different terminology. Reference lists from each article were examined to identify further papers of relevance. These included studies concerned with the development of clinical guidelines and protocols, and the construction of nursing, midwifery and medical notes. Given that clinical pathways are rare within maternity care, the search included clinical pathway use in a range of clinical settings. A total of 120 articles (and several book chapters and reports) were identified as being of relevance to the review. From these, 50 were selected for inclusion in the analysis on the basis that they offered original accounts of the development of pathways or their effectiveness, or because they provided useful theoretical concepts (see table, Appendix One).

Six main themes were identified in the literature, and these are discussed in turn, using a critical reviewing approach:

- the multiple aims associated with clinical pathways
- the process of initial development
- pathway implementation into practice
- the concept of variance
- impact of pathways
- clinical pathways and maternity care

Firstly, however, it is important to clearly define what is meant by a 'clinical pathway', as various terms appear to be in use and used interchangeably.

2.2 Defining Clinical Pathways:
The National Assembly for Wales (1999, p.10) defines a clinical pathway as

A documented sequence of clinical interventions, placed in an appropriate timeframe, written and agreed by a multidisciplinary team. They help a patient with a specific condition or diagnosis move progressively through a clinical experience to a desired outcome.

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[4] A version of this chapter has been published as: Hunter B, Segrott J (2007) Re-mapping client journeys and professional identities: a review of the literature on clinical pathways. International Journal of Nursing Studies doi:10.1016/j.ijnurstu.2007.04.001

Bryan et al (2002: 77-78) describe an integrated care pathway as "a map of the process involved in managing a common clinical condition or situation. It should detail what to do, when to do it, by whom the action should be undertaken and where the task should be performed." Thus clinical pathways map out both the sequence and timing of practitioners' care, and the 'journey' of the client.

Pathways are normally developed by multidisciplinary teams, and cover the overall package of care provided. They are also usually developed for a specific local setting, by the practitioners delivering the care (de Luc, 2000). Pathways differ from other types of clinical guideline, as they identify each specific step in the care process, rather than stating broad principles for practitioners to follow (Miller and Kearney, 2003). What makes pathways particularly important is that they have a dual function; that is, they are both guidelines - a framework for clinical decision-making (Miller and Kearney (2003), and a written record of the care given.

It is important to note that numerous and sometimes interchangeable terms are used to describe pathways, including 'integrated care pathway', 'care pathway', 'critical path' and 'critical pathway'. For the purposes of this report, the term 'clinical pathway' is used, while the diversity of terms and different kinds of pathways currently being used in healthcare practice are acknowledged.

2.3 History and development of clinical pathways:
Clinical pathways were first developed in the United States, where their primary function was to control healthcare costs as part of the 'managed care' paradigm (Cheah, 1998; Currie and Harvey, 2000; de Luc, 2000, Pinder, et al., 2005). Clinical pathways are used in the US to create standardised treatment packages, with uniform lengths of stay and predictable costs, whilst maintaining consistent standards of care (de Luc 2000; Atwal and Caldwell, 2002; Currie and Harvey, 2000).

In most other countries pathways have been developed mainly with the aim of improving the quality of care (Atwal and Caldwell 2002, Currie and Harvey 2000, Berg 1997, de Luc 2000), though the appeal of cost reduction benefits through increased efficiency of healthcare practices is often evident. Bragato and Jacobs (2003, p.165) suggest that in the UK, new models of integrated care have "combin[ed] a desire to improve quality of the service offered to the clients, without increasing costs." There is thus significant scope for pathways to be put to work to achieve a variety of different goals (and considerable room for tension between the goals of clinical and cost effectiveness).

In the UK in particular, pathways have been harnessed as a tool to achieve the aims of a broader quality improvement agenda within the National Health Service (NHS) – particularly clinical governance (Pinder, et al., 2005). Clinical governance is "a system 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" (Scally and Donaldson 1998, p.62). Clinical pathways are

expected to deliver these aims by increasing local adherence to national standards, and reducing unacceptable variations in practice (Atwal and Caldwell, 2002; Campbell, et al., 1998).

2.4 Multiple aims of clinical pathways:
The review of the literature suggests that organisations may have many intended aims when introducing clinical pathways. The key purpose of clinical pathway use in the UK is generally described as being to facilitate continuous improvement in the quality of care by basing care on evidence and best practice, and subsequently auditing variances from this standard.

Pathways differ in their focus, for example some focus of specific conditions, others on processes of care. Jones (2000, p.216) suggests that "Care pathways can be designed to reflect the care and treatment of a particular diagnosis". Alternatively, they "can [also] be designed to reflect a process of care from one agency or care boundary to another." The latter design of pathway is concerned with the efficiency, timing and sequencing of the care process, so as improving co-ordination and communication between healthcare practitioners.

The aim of greater co-ordination between practitioners is to make the care process more efficient. Whilst this typically is believed to bring benefits to clients, it also offers the potential for cost savings, through reduced delays, and lengths of stay, and removal of task duplication (Wigfield and Boon, 1996). But this leads de Luc (2000) and Berg (1997) to emphasise the need to identify the aims of clinical pathways at the outset. As de Luc (2000, p.493) suggests:

"If it is primarily to reduce costs whilst maintaining quality … [then] having no adverse effect on the quality of clinical care is a positive result. If, on the other hand, the tool is being used to improve the quality of clinical care … then having no effect on clinical care does not constitute a favourable outcome".

Pathways are seen as a particularly effective tool for implementing evidence-based practice (EBP), by translating the recommendations of research studies into an embodied action plan for practitioners (Cheah, 1998; Robotham and Cro, 2001). They detail which procedure to adopt and when, and the best person to undertake each task (Bragato and Jacobs, 2003; Bryan, et al., 2002; Walldal, et al., 2002). They are thus integral strategies in the current drive for evidence based health care.

It is also the case that clinical pathways increase the possibilities for surveillance of health care professionals. By mapping out a step-by-step, standardised care process, and monitoring deviation from this ideal, practitioners' actions become highly visible, and both they and their employers become more accountable (Atwal and Caldwell, 2002; Barnes, 2000). As the 'New NHS' attempts to increase its control over the process and outcomes of care (DOH 1997), pathways provide an effective means of achieving this (Jones, 2000).

2.5 The Process of Initial Development of Clinical Pathways:

2.5.1 Selecting an appropriate 'condition':
The starting point for developing pathways is normally to determine which condition requires a pathway, or is suitable for one. Authors disagree, however, about which conditions are best suited to pathways. Walsh (1997, p.39) suggests that they are most appropriate for "common conditions with … predictable outcomes", and Campbell, et al. (1998) indicate that many pathways are in surgical areas with relatively stable, set routines.

The suitability of pathways for complex, unpredictable conditions is less certain (Currie and Harvey, 2000; Dy, et al., 2005). This consideration is clearly of relevance to the use of clinical pathways in maternity care, as childbirth is commonly acknowledged as an event which is unpredictable.

Some authors seem unclear as to whether complexity and wide variations in clinical practice make pathways unsuitable, or whether it is precisely such situations which require a pathway. For instance, Campbell, et al. (1998) describe some of the key selection criteria for pathway development as high costs, variations in practice which affect client care, and the presence of staff interest. But they argue that pathways can be "Difficult to develop … where there are often multiple pathologies or where clinical management is very variable". Lowe (1998) suggests that where pathways are used primarily to implement evidence into practice and achieve adherence to national guidelines, they are best targeted at conditions which are already treated in a broadly standardised manner, and are thus amenable to this approach. Meanwhile, pathways for complex conditions (or where care is complex) concentrate on organisational rather than clinical effectiveness.

2.5.2 Practitioner involvement:
 Pathways are normally devised to cover the entire care process for a particular condition, bringing together different practitioners (or organisations) who may previously have worked relatively separately (Bryan, et al., 2002). They are usually developed locally by the entire, multidisciplinary team. Client involvement in the development of pathways is rare, and at best tokenistic, despite the rhetoric of client-centredness and empowerment which is often evident (Berg, 1997; Pinder, et al., 2005). From the literature reviewed, clients appear mainly being on the receiving end of information about care which has already been planned, rather than as active co-designers of the pathways (Berg, 1997; Bryan, et al., 2002; Jones, 2000).

One of the most important tasks facing a group designing a pathway is to map out the entire care process, including key events in the client's journey, major decisions, and who is responsible for each element of the process. As Wigfield and Boon (1996) suggest, this process makes different professionals' understandings of the sequence of care explicit, and highlights the distinctiveness of how they think and work. It also makes the entire care process visible, allowing greater accountability. The development of a pathway necessitates close communication between professions so that all the anticipated sequences of care are amalgamated into a whole.

Mapping out the care process allows current practice to be reviewed critically and revised (Cheah, 1998). Where pathways are designed to standardise care and implement evidence, the other key task at this stage is to identify best practice through examining research evidence and guidelines (Campbell, et al., 1998). This allows current practice to be reconfigured to match best practice, and to create an ideal 'patient journey' (Bryan, et al., 2002). Like protocols more generally, the development of pathways is concerned with identifying a single, optimal way of organising treatment (Berg, 1997). This is seen as universal, and knowable in advance, without the need to investigate its applicability to different local contexts. But this may fail to capture both the range of factors which influence clinical decision-making, and the inevitable role played by contextual influences, which often lead to variations in practice (Berg, 1997; Merritt, et al., 1999).

2.5.3 Identifying the evidence base:
Although some studies imply a simplistic, linear process whereby external evidence is located and used to improve current ways of working, a number of problematic aspects are apparent. One problem is what pathway developers should do when no external evidence exists, or its quality is questionable (Jones, 2003). Robotham and Cro (2001) and Fox (2004) suggest that the solution is to base pathways on the current consensus of what is 'best' practice (see also Miller and Kearney, 2003). However, what constitutes 'best practice' may vary from area to area and between professional groups. This was the case during the development of the NLP, as there were gaps in the research evidence available. So whilst pathways are often viewed as a form of standardisation, achieved by implementing evidence into practice, in reality they may actually be something very different, representing local solutions with wide variations, based on the very kinds of knowledge which pathways sometimes claim to displace (Robotham and Cro, 2001).

Another problem faced by pathway developers is how to synthesize and rank multiple sources of evidence (Rolfe and Gardner, 2005). Evidence may include published research, national and local guidelines, practitioners' experiential knowledge, and the views of clients and carers. As Currie and Harvey (2000) point out, there can be no guarantee that practitioners developing a pathway will agree with the evidence being reviewed, and this can lead to variance and non-standardised treatment being built into the pathway documentation. One respondent in Currie and Harvey's study described how "When we wrote the ICP [integrated care pathway] … two of the consultants had research which said 40 milligrams once a day, and the other consultants felt that 20 milligrams was sufficient … rightly or wrongly we couldn't get them to agree … so we actually had to put 20 or 40 milligrams depending on which consultant it was …" (p319).

Fox, et al. (2003) point out that the task of critically reviewing the existing evidence may be too demanding for an individual healthcare organisation, who may lack both time and critical reviewing skills. This means that pathways often utilise existing systematic reviews (Campbell, et al., 1998). This raises issues about the relative status of qualitative and quantitative research, as qualitative research is generally considered to rank 'low' in the

accepted hierarchy of evidence. Quantitative, population-based research may also not be the most appropriate source of evidence for care designed to meet context-specific local requirements, and the unique needs of individual clients (Jones, 2000).

It is also the case that pathway documents themselves value some forms of information over others. As Berg (1997) has noted in his critique of protocols in general, pathways tend to favour the collection of data which is easily recordable and quantifiable, especially given their role as audit tools, and their aim of reducing documentation. Thus 'scientific' medical data (symptoms, bodily functions and outcomes) are often collected, whilst the more intuitive knowledge which forms a key part of the nursing and midwifery process may be lost. Pinder et al. (2005) argue that one of the major problems of the pathway approach is that the holistic experience of individual clients is undermined, since the document is structured around a standardised care process. Although certain elements of the client's experience may be documented, these are taken out of their original context. As Heartfield (1996) has claimed in relation to nursing documentation, pathways are concerned with discrete body parts and illnesses, rather than the embodied, affective client as a whole.

2.6 Putting pathways into practice:
The implementation of clinical pathways is a distinctive stage with different challenges to the developmental phase. It involves raising staff awareness of the documentation, providing information about its use, and cultivating commitment and enthusiasm amongst practitioners. Implementation usually includes undertaking an audit of 'variances' from the pathway, and revising the document or taking action to address variations (Bryan et al,. 2002; Caminiti, et al., 2005). A pathway facilitator is commonly employed to fulfil this role, often acting as change agent for the implementation process. This role is considered to be central to successful implementation (Bragato and Jacobs, 2003; Hockley, et al., 2005; Johnson and Smith, 2000), although few specific examples are provided in the literature.

The NLP implementation process followed these usual procedures: as described in Chapter One, a pathway facilitator co-ordinated the steering group and led the overall planning, publicity and implementation processes. An audit system was also set up. The challenges of the initial NLP implementation phase forms part of the findings and is discussed in detail in Chapter 4.

The implementation phase of clinical pathways is generally less well researched in comparison with the developmental phase. Studies frequently take a rather simplistic and mechanistic view of the implementation process, thus limiting insights into the complex and subtle changes that may result. For example, many studies assume a positive response from healthcare professionals as a natural follow-on from the developmental stage (Jones, 2000). There have been few studies of how staff actually respond to and use clinical pathways. Those that do exist (Atwal and Caldwell, 2002; Jones, 1999, 2000; Pace, et al., 2002; Pinder, et al., 2005) suggest that this stage is

far from problem free. Implementation does not involve merely getting practitioners to use and accept the pathway; rather, implementation is an active stage of the pathway's development, and practitioners may reshape the document. This is certainly true of the NLP, as will be seen in the findings chapters.

2.6.1 Responses of practitioners:

As Berg (1997, p.1082) notes, "protocols are often circumnavigated, tinkered with, and interpreted in many different ways", and this would also appear to apply to pathway implementation. In his study of a clinical pathway for clients with schizophrenia, Jones (2000, p.219) found that despite the input of enthusiastic key players committed to the project's success, there was a lack of commitment and engagement (including hostility) from many clinicians. He attributes this response partly to contextual influences - i.e. structural changes in the research site and workforce shortages, and also to practitioners' lack of familiarity with this approach to care.

In addition, Jones (1999, 2000) describes a more complex resistance to pathway implementation, underpinned by professional ideologies. This professional opposition has also been noted by Atwal and Caldwell (2002), Berg (1997), Bragato and Jacobs (2003), Caminiti, et al. (2005), Christakis and Rivara (1998), Clarke et al (2007) and Merritt, et al. (1999), with a variety of practitioners voicing concerns that clinical pathways fail to encapsulate the complexities and subtleties of healthcare work. From this perspective, the emphasis on standardisation of care is in tension with professional ideologies which emphasise individualised care.

Standardised care also conflicts with the exercising of clinical judgement, which practitioners consider essential for providing individualised care (Campbell, et al., 1998; Lavender and Malcolmson, 1999; Jamous and Peloille, 1970). This appears to be particularly the case for complex and unpredictable clinical conditions, where practitioners may question the quality of the research evidence base and draw on experiential knowledge to inform their decision-making (Jones, 1999). The findings of this study indicate similar responses from some participants: as we will see, midwives with longer clinical experience were particularly likely to question the appropriateness of using a clinical pathway in childbirth and expressed concerns that its use could constrain their clinical judgement.

The ways in which pathways are used in real-life clinical settings are therefore often out of the control of the original pathway designers. The low adherence to pathway systems (Caminiti, et al., 2005; de Luc, 2000), and refashioning of pathway process and design (Atwal and Caldwell, 2002; Jones, 1999) that has been observed in some studies reflects Lipsky's (1980) theory of 'street level bureaucracy'. In reality, public policies are made 'on the ground', with workers adapting guidelines and protocols in order to maximise occupational autonomy and professional discretion. There have been similar observations of healthcare workers adapting other rule-based expert systems, such as nurses resisting the standardised, computer-based clinical assessment systems used in NHS Direct, tailoring advice in line with their own knowledge

and expertise (Greatbatch, et al., 2005; Ruston, 2006). Exercising clinical judgement is central to a sense of occupational autonomy, and several studies have identified the important role this plays in the job satisfaction of nurses and midwives (Hunter, 2004; Mrayyan, 2004; Sandall, 1997).

It is also interesting to note that it appears to be more recently qualified staff who respond positively to pathways (Atwal and Caldwell, 2002; Merritt, et al., 1999), and there are similar findings from this study. This may reflect a sea change in professional culture, whereby new practitioners are accustomed to pathway use and incorporate this into their everyday practice. The written framework provided by the pathway has potential advantages for both students and newly qualified staff (Atwal and Caldwell, 2002; Bryan, et al., 2002; Lavender and Malcolmson, 1999; Merritt, et al., 1999) as a checklist for decision-making. However, this positive response may also reflect limited clinical experience, with more recently qualified practitioners lacking awareness of the limitations of pathways or the potential impact on clinical judgement described above.

2.7 Variance and individualised care:
Implicit in the definition of a clinical pathway is the attempt to standardise practice and reduce variations or 'variance'. However, although identifying and auditing variance is considered to be an essential stage in effective implementation, what is understood by 'variance' lacks conceptual clarity and appears to be variously interpreted within the literature (see table, Appendix Two for examples of differing definitions).

A simple definition of variance, such as that proposed by Atwal and Caldwell (2002, p363) ("any deviation from the proposed standard of care listed in the pathway"), leaves scope for many interpretations. This is evident in accounts of pathway implementation, where various categories of variance are evident. For example, variations may be due to the client (e.g. change in clinical condition), to the clinician (e.g. treatment not given, for whatever reason) or to the system (e.g. delay in applying 'correct' procedures) (Wigfield and Boon, 1996).

Attitudes towards the acceptability (and inevitability) of these variations appear to differ, depending in part on how variance is defined. Some authors claim that pathway variance is largely unavoidable and a useful way of identifying clients whose clinical trajectory is unexpected (Campbell et al., 1998, Fox, et al., 2003). Others argue that the ultimate goal is to reduce and ultimately eliminate variance (Bryan, et al., 2002; Merritt, et al., 1999), so that more clients experience 'ideal' care. However, whilst Bryan, et al. (2002) consider this to be a positive outcome, other authors (e.g. Jones, 1999, 2000; Merritt, et al., 1999) caution that this is essentially problematic for professionals. As Merritt, et al. (1999, p.172) observe: "attempts to reduce all forms of variation defy both the art and science of professional practice (a combination of compassion, scientific evidence and art form)". They question whether variation is necessarily a source of poor outcomes, or an inevitable aspect of differing contexts, clients and practitioners that has little effect on

quality of care. From this perspective, there will always be situations where it will not be appropriate or possible to use a pathway.

Despite these ambiguities, auditing of variance ('variance analysis') is described as a key aspect of the implementation process. By enabling identification of deviations in treatment and care, differing client needs may potentially be highlighted and problems within healthcare delivery systems noted. Variance analysis may also facilitate identification of gaps in the practice knowledge base, suggesting areas for further research (Campbell, et al., 1998; Currie and Harvey, 2000). Atwal and Caldwell (2002) claim that variance analysis provides practitioners with an opportunity to exercise clinical judgement, and is thus a means of enhancing individualised care (see also Bryan, et al., 2002; Fox, et al., 2003).

However, any audit is only as useful as the data collected and variance analysis may not be as meaningful as anticipated. Merritt, et al. (1999) comment that audit of pathway variances frequently lacks rigour, thus limiting its usefulness and making it impossible to determine pathway effectiveness. It is also highly dependent on the involvement of staff, who may vary in their understanding of, and commitment to, the process (de Luc, 2000). It may also be the case that variance analysis has more subtle purposes. Fox, et al. (2003, p.105) observe that audit "also encourages staff to adhere to protocols and guidelines set in the pathway", thus implying that variance analysis has a surveillance function. This takes us back to the earlier observation, that clinical pathways play a key role in governments' modernisation agendas, by attempting to standardise practice, and moreover, to make this standardisation visible to management. Following Gastaldo and Holmes (1999) it could be argued that the recording of variances by practitioners, and the subsequent analysis of them at the local level is a form of self-regulation. Whilst the literature on clinical pathways provides no clear, common definition of what exactly variance is, this does not detract from the potential consequences of large-scale audit of practitioners' work which it facilitates (Power, 1997).

2.8 Impact of pathways:
Surprisingly, there has been limited research into the effectiveness of clinical pathways, despite their widespread implementation (Barnes, 2000; de Luc, 2000, Pinder, et al., 2005). The paucity of "critical discussion and rigorous evaluation" noted by Campbell, et al. (1998) is still apparent, although recent published reviews (Dy, et al., 2005; Renholm, et al., 2002) have synthesised the current state of knowledge in particular medical specialisms (see also Vanhaecht, et al., 2006). Long-term, longitudinal studies seem particularly rare.

The available research evidence is largely restricted to before/after studies and descriptions of implementation (Campbell, et al., 1998; Merritt, et al., 1999). There have been few RCTs conducted, and even fewer qualitative studies looking at the broader, more complex impact of pathway use. Jones (1999) and Merritt, et al. (1999) question the evidence base that does exist, observing that outcomes may be misattributed and causal links wrongly

inferred. Merritt, et al. (1999) note that, unlike other clinical interventions (such as new drug therapies), which require extensive clinical trials prior to implementation, clinical pathways are often incompletely tested. Thus although pathway proponents call on the language of evidence based practice to justify their use and value, there is a lack of compliance with the principles of this approach.

This apparent disregard appears to indicate an underlying assumption that clinical pathways are neutral devices. However, the evidence reviewed suggests that this is far from true: implementation of clinical pathways is a complex process, which may have subtle and unanticipated consequences. Although the focus of pathways may be the achievement of clinical aims, there may be other unexpected outcomes (for example, enhanced communication between healthcare professionals (Campbell, et al., 1998), or reinforced occupational divisions, (Pinder, et al., 2005), as in this study.

2.8.1 Client care and satisfaction:
Although clinical pathways are ostensibly intended to improve the quality of client care, there is surprisingly little evidence that this has been achieved. Apparent client benefits such as reduction in length of stay in hospital and reduction of resource utilisation have been described (Bragato and Jacobs, 2003; Campbell, et al., 1998; Currie and Harvey, 2000; Jones, 2000). However, as Jones (2000) cautions, although these reductions may meet managerial approval, they are not necessarily experienced positively by clients or carers. Moreover, these studies do not take into account any concurrent impact on health care staff. It is as though the pathway exists independently of such considerations. Studies where pathways failed to impact positively on client outcomes, however, suggest that it is social processes and context that are of central importance. For example, Sulch, et al. (2002) noted that stroke rehabilitation clients cared for by conventional multi-disciplinary team care had higher functional recovery scores than those cared for on an integrated care pathway. They argue that by rigidly following the pathway, practitioners were not able to exercise their usual flexibility when responding to diverse client needs, and thus the quality of individualised care was compromised.

Although some studies may appear to support the claim by Walsh (1997) that pathways have the potential to 'empower' clients, this assertion needs careful examination. Some pathways do aim to involve clients (for example, by encouraging them to read or contribute to pathway documentation), and this appears to be viewed positively by both clients and practitioners as a means of enhancing understanding (Bragato and Jacobs, 2003; de Luc, 2000; Fox, et al., 2003). However, from the literature reviewed, the client's role in these situations appears to be more as a recipient of expert information than active co-producer of care plans. Thus Bragato and Jacobs' (2003, p.173) assertion that clients were 'empowered' because 'they became able and sometimes did look at their documentation to see what they could expect to be performed each day" reveals more about professional interpretations of client empowerment than it does about a real shift from passivity to active involvement.

2.8.2 Professional identities and relationships:

In contrast with the lack of evidence regarding client benefits, there is substantial evidence that pathways impact on professional relationships, both positively and negatively. Improvements in multidisciplinary communication and collaboration have been noted in many studies, often to a greater extent than anticipated in the initial planning process (Atwal and Caldwell, 2002; Caminiti, et al., 2005; Campbell, et al., 1998; Currie and Harvey, 2000; Fox, et al., 2003).

As a result, pathways appear to impact on care indirectly. Enhanced communication between different professionals potentially increases understanding of respective roles and contributions to the client's trajectory, and in turn the organisation of care may be streamlined. Interestingly, these effects appear to occur mainly during pathway development, rather than implementation (Currie and Harvey, 2000; de Luc, 2000; Furåker, et al., 2004; Merritt, et al., 1999). Thus it is the process of discussing client care from differing perspectives, and the related consensus building activity and goal setting that is of benefit, rather than the tool which is created. Interestingly, this process was largely missing from the development of the NLP, which as we have seen, had limited input from other professional groups.

However, there is also the potential for pathways to increase rather than reduce interprofessional tensions (Atwal and Caldwell, 2002). Pathways make the decisions made by different professionals more visible (Barnes, 2000; Furåker, et al., 2004) and as a result may "reflect and reproduce the very tensions … that they strive to resolve" (Pinder, et al., 2005, p.774). The process of pathway development may act as a mirror for workplace hierarchies, privileging 'scientific' medical knowledge over intuitive knowledge. Thus, as Jordan (1997) observes, what counts as 'authoritative knowledge' is reinforced and further legitimised. '

Pathways may also remap professional boundaries (Pinder, et al., 2005), by creating new roles and responsibilities. Again, this may lead to conflict rather than equanimity. For example, by extending nurses' or midwives' traditional roles, professional identities may be transformed (Barnes, 2000; Berg, 1997) and occupational territories expanded. This appears to have been the case with the NLP. In this way, pathway formation could be viewed as a 'professional project' (Witz, 1992). Whilst this process of re-skilling and role expansion may be welcomed by some, the concurrent de-skilling of other professionals (Berg, 1997) may lead to hostility and entrenchment. Remapping professional territories is far from a benign process; fragile occupational eco-systems may be disrupted, resulting in boundary maintenance work and emotional labour (Hunter, 2005). As Pinder, et al. (2005, p.776) caution, breaking down inter-professional boundaries threatens occupational identities and "risks undermining the values which hold professional communities together". Destabilising professional identity in this way might well affect the quality of care provided and impact on client experiences.

2.8.3 Written documentation:

Clinical pathways differ from other clinical guidelines and client records in that they combine an explicit (and reputedly) evidence-based course of action with a written record of care. Thus how care is documented, and by whom, is an important element of the pathway process. It serves as a visible record of practitioners' work (with all the related legal implications that entails), but also as a communication device between professionals (and occasionally, between professionals and clients). Clinical pathways are also designed to serve as data collection tools via auditing of variances.

Multi-professional documentation - a feature of many pathways (Atwal and Caldwell, 2002), has the potential to enhance communication between all those involved in the care of a particular client (Campbell, et al., 1998). However, in order for this to occur, proper completion of the pathway is essential (Atwal and Caldwell, 2002; de Luc, 2000). Although multi-professional documentation on a single pathway document should reduce duplication of notes (Campbell, et al., 1998), there is evidence that professionals may still prefer to keep their own records "in order to retain their professional identity" (Atwal and Caldwell, 2002, p.365; see also Pinder, et al., 2005). Failure to complete pathway documentation correctly may disrupt communication, and fragment or disrupt client care (Atwal and Caldwell, 2002), particularly if professionals rely on written communication to replace the need for face-to-face contact.

The simplified format of the pathway may have other, more subtle consequences for healthcare work. Berg (1996) draws attention to the active part played by client records in constituting the work of professionals, so that who records what, where, and in what format is an integral part of complex healthcare systems. Berg argues that medical records are not only a record of clinicians' thought processes – they are part of the thought process itself. What are the implications then of using pathways which minimise writing, making use of tick boxes and signatures recorded against prescribed 'interventions' (Wigfield and Boon, 1996)? In most pathways, recording written information is 'by exception' (i.e. only if there are significant deviations from the care prescribed by the pathway. This is a departure from traditional practice, particularly within nursing and midwifery, whereby extensive records were made on the premise that 'if you haven't recorded it, it wasn't done'. Once again, this change should not be seen as purely mechanistic.

Minimal recording and the status of the pathway document as a legal record of care are relatively untested; it is not surprising then to find concerns expressed regarding practitioner accountability, particularly given the significant change in record keeping that has resulted (Jones, 2000). Campbell, et al. (1998) reassure practitioners that there is no evidence that pathways increase litigation, and Wigfield and Boon (1996, p.2) note that "the legal profession has indicated that as long as agreed standards are in place (as indicated by the CP [sic]) and the delivered care is endorsed by a signature, then no problem should occur". However, this does seem to imply that professionals should be complying with pathway guidelines, thus questioning the place (and legitimacy) of clinical judgement. It is also

relatively early in the development of clinical pathways to draw any firm conclusions.

2.9 Clinical pathways and maternity care:
The literature search identified relatively few papers discussing the use of clinical pathways in maternity care and these were mainly descriptive accounts of the implementation and use of specific pathways (Briody 1996, Fox 2004, Hardacre 2005, Clarke et al 2007) and opinion papers (Ferguson 2003, Robotham and Cro 2001). A few were identified, such as Jones et al (1999), which described formal clinical evaluations of clinical pathway use; however, the impression was that there had been few research based studies.

The literature reviewed suggested that the use of clinical pathways varies: some focus on specific aspects of perinatal care such as the postnatal inpatient period (Briody 1996), whilst others focus on total care from admission to discharge, for women having vaginal deliveries and their babies (Jones et al 1999). Clinical pathways are more often used to manage the care of mothers or babies in high risk situations e.g. the care of a mother following Caesarean section, rather than in low risk situations such as the Normal Labour Pathway. A recently published paper (Clarke et al 2007), however, describes the development of an integrated care pathway to support 'natural birth' at Birmingham Women's Hospital. This initiative appears to have been at least partially influenced by the Welsh NLP.

Several pathways were identified for aspects of intensive neonatal care (Campbell 2006, Krebs 1998, Merritt et al 1999, Schwoebel and Jones 1999) particularly within the USA. Some of this evidence suggests that they may have particular benefits for enhancing communication and collaboration between the many professionals involved in the care of the sick neonate, although Merritt et al (1999) caution that there is minimal evidence that neonatal outcomes have been improved.

Not surprisingly, as clinical pathways were first developed by an American nurse (Zander 1988), many maternity care clinical pathways are American and reflect the concerns of providing US managed care packages (Bower 1997, Jones et al 1999). As such, the focus is on achieving both clinical and financial outcomes: as Jones et al (1999 p.3) observe, pathways 'required the health care team to forecast and standardize outcomes for populations at specifically developed time intervals….This analysis would lead to actions, which would maintain and improve clinical practice, while eliminating unnecessary use of resources and reducing length of stay.' Interestingly, the clinical pathway which they describe did not alter length of stay or lead to financial savings, but it did establish collaborative processes for reviewing and assessing care. As we have seen in earlier in this chapter, clinical pathways appear frequently to achieve different outcomes than those initially intended, and often these new outcomes are related to communication between professionals.

In their evaluation, Jones et al (1999) discuss the challenges for inter-professional communication encountered during the initial pilot, as physicians

'rebelled' against perceived limitations on their practice by refusing to use the pathway documentation. Their response to the 'doctor problem' was to redesign the pathway so that the physician's records were embedded into the pathway, thus 'this change moves the pathway from a nursing tool to one for use by all disciplines in the care of the maternal and infant patients' (Jones et al 1999 p10).

One of the few research based studies of clinical pathways in maternity care identified is the OPAL study of Part 1 of the NLP (Spiby et al 2006), which reported back at the end of 2006 (at the time that this study was concluding). One of the aims of the OPAL study was to investigate the telephone component of the NLP as an example of a new strategy for assessing women in early labour, drawing on the experiences of midwives and new mothers. The study was designed to provide contextual information against which the findings of a large scale RCT (The Early Labour Support and Assessment Trial) could be interpreted. Two focus group discussions were conducted with a sample of 21 midwives from various areas of Wales. In addition, questionnaires were devised for midwives unable to attend focus groups and six of these were returned. Computer assisted telephone interviews were carried out with 46 new mothers. Sample sizes were much smaller than originally intended, and this is acknowledged as a limitation of the study.

The findings indicated that midwives were generally positive about Part 1 of the pathway. Reasons given were that it was evidence based; enhanced communication with women and improved consistency of advice; and that it encouraged women to remain at home in early labour. There were some differences between the views expressed in focus groups and in the questionnaire, particularly in relation to clinical judgement. Whilst midwives participating in the focus groups thought that the NLP was flexible and could complement clinical judgement, midwives responding to the questionnaire voiced concerns about possible rigid application of the NLP and failure to exercise clinical judgement. As will be seen in Chapter Six, these diverging views mirror those of midwives in this study.

Women's experiences of Part 1 of the NLP varied. Dissatisfaction was associated with not feeling welcome to attend the maternity unit or being sent home after attending hospital in early labour. The NLP leaflet (see 1.2.4) was viewed positively, particularly if there had been opportunities to discuss the content with a midwife. Satisfaction was associated with being treated as an individual, having had antenatal preparation, and having longer and fewer phone calls to the maternity unit. Many of these positive and negative views were also identified during interviews with new mothers in this study.

The OPAL study thus provides information of relevance to this study of the whole NLP, with the potential for some comparison of findings. However, the focus was on support in early labour, rather than on the use of clinical pathways in maternity care per se; and their study was not designed to evaluate the NLP as a whole. The need for such evaluation is emphasised in their report: "there is a significant evidence gap in what is known about the Pathway in terms of clinical outcomes for women and their babies. (…) Whilst

the opportunity for evaluation through introduction in a randomised controlled trial no longer exists in Wales, we would recommended that any further implementation outside of Wales take place within a robust evaluation framework" (Spiby et al 2006 p159).

2.10 Discussion and conclusion:
This critical review of the literature indicates that clinical pathways have multiple aims, and present challenges at both design and implementation stages. They may impact in unexpected ways, and with unanticipated consequences. In general, clinical pathways have a weak evidence base, and their mechanisms of action are generally poorly understood, despite their widespread adoption. This would appear to be particularly problematic because they make claims for efficacy in terms of being evidence-based. The popularity and acceptance of clinical pathways, however, means that debates in the healthcare literature lack a critical, theoretically driven edge and this was evident in many papers reviewed. It appears that pathways may bring about significant and fundamental changes to healthcare work, re-drawing professional boundaries, transforming core dimensions of practice (e.g. note taking and clinical autonomy), but these have not really been questioned.

There is a need for a sustained programme of research in the field of clinical pathways, both to assess their effects and to critically examine the appropriateness of this approach. This literature reviews indicates that clinical pathways work in some situations and for some conditions, but not others. Thus the generalisability of standardised pathways must be questioned, given the complexities of health care practice.

Future research requires a range of different methodological approaches in order to increase understanding. Whilst RCTs or other quantitative studies may be most useful in identifying broad outcomes, we also need in-depth qualitative studies to understand the process by which pathways achieve outcomes: how (and why) pathways are devised, what evidence is drawn on, and how they are implemented and used. In particular, we need to gain more insights into the broader consequences of clinical pathway creation and implementation for practitioners and clients. This study of the Welsh NLP will add to the existing knowledge base, by providing in-depth qualitative data to enhance our understanding of these complexities and consequences.

Chapter 3: Research design and conduct of study

The study used a policy ethnography approach to investigate the 'real life' experiences of those most affected by the pathway i.e. midwives, mothers, midwifery managers and doctors. The study was conducted in three phases over a two year period (October 2002 - October 2004).

The **aims** of the study were:
  i.   *to investigate the use of the NLP by observing its use in context*
  ii.   *to evaluate the implementation of the NLP from the perspectives of key stakeholders*

3.1 Research approach:
A qualitative approach to the study was considered most appropriate, as it would allow an in-depth exploration of the experiences and views of those involved in the implementation of the strategy, within the natural setting in which this occurred (Mason 1996). Whilst a quantitative methodology such as a survey would have allowed access to a larger sample, with the potential to identify relationships between significant variables, the data obtained would have provided only superficial insights into the meaning of the strategy for the individuals involved and thus not address the study aims.

A multi-method qualitative approach to data collection was taken, in order to gain a variety of perspectives on the situation and hence provide a more well-rounded and in-depth picture. A combination of research methods including interviews, observation, focus groups and documentary analysis were used to create a policy ethnography.

Policy ethnography is a social science research method which aims to explore how policy is put into action, from the viewpoint of the key players, thus increasing our understanding of organisations in action (Griffiths 2003). This approach facilitates a detailed consideration of processes, as it allows for the journey of a policy from initial conception to implementation to be investigated. It is underpinned by a belief that, although policy may appear to be made 'at the top' by policy makers, in reality it is the local interpretation and adaptation of policy by grass roots workers that is of significance. It is thus important to access the experiences of policy users, in order to gain insights into key issues affecting policy implementation. These insights have the potential for practical application; thus policy ethnography is an excellent method for researching health care organisations with the intention of improving effectiveness and service delivery (Griffiths 2003).

3.2 Methods:
Data were collected via semi-participant observation, focus groups and interviews in order to access a range of perspectives. Observation of midwives using the pathway provided insights into the effects of the pathway on everyday practice. Focus group and interview schedules were then

developed on the basis of this observational data. The study was conducted in three phases[5]:

i. *Phase One*: *Background information*
   - Semi-structured interviews with key individuals involved in the initial stages of devising, planning and implementing the pathway (BH and RA).
   - Documentary analysis of documents relating to the above (RA).

ii. *Phase Two*: *Maternity Unit A:*
   - Semi-participant observation of midwives caring for women using the NLP, followed by an interview with the midwife concerned (BH).
   - Focus group discussions and semi-structured interviews with a range of hospital and community-based midwives (BH and RA).
   - Semi-structured interviews with mothers who had been cared for 'on the NLP', maternity unit doctors and midwifery managers (BH and RA)

iii. *Phase Three*: *Maternity Unit B:* replication of Phase Two.

3.3 Research settings: Phases Two and Three
Maternity Units A and B were selected for the purposes of comparison. A total of five months data collection was spent in each site (Unit A: January - May 2005; Unit B: November 2005 - March 2006).

Maternity Unit A was a medium-sized unit in a semi-rural area, undertaking approximately 1400 births per year. Midwives worked predominantly in midwife-led integrated teams, which were community-based and provided midwife-led care to 48% of women. Women who were cared for 'on the NLP' gave birth either in the main labour ward, or more rarely, at home.

Maternity Unit B was a large tertiary referral unit in an urban area, undertaking 3600 births per year. Midwives worked in either hospital or community settings. Most women being cared for on the NLP gave birth in the integrated birth centre, situated within the main hospital but separate from the main labour ward (with a small number of women also giving birth at home. See Table One).

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[5] The initials indicate the researcher responsible for each aspect of the data collection. BH = Billie Hunter, RA = Research Assistant

Table One: Birth statistics for 5 month period of data collection per site [6]
(percentages rounded up to nearest decimal point)

Type of birth	Unit A	Unit B
Total births	548	1506
Hospital births (including birth centre)	518 (94.5%)	1497 (99.4%)
Home births	30 (5.5%)	9 (0.6%)
Normal births (SVB)	357 (65%)	972 (64.5%)
Instrumental births	68 (12.4%)	118 (7.8%)
Caesarean section (elective)	55 (10%)	194 (12.9%)
Caesarean section (emergency)	65 (11.9%)	222 (14.7%)
% of women exiting NLP before birth	23.6%	34%

The research settings thus varied not only in terms of the populations they served and numbers of births, but also in relation to the numbers and locations of midwives employed (see Table Two) and the organisation of maternity care. They had also implemented the NLP at different stages: *Unit A* had commenced using the NLP early on in the All Wales implementation process (early 2003), whereas *Unit B* was one of the later implementers (late 2003).

Table Two: Overall numbers of midwives per unit

Midwife numbers	Unit A	Unit B
Total number of midwives (F/T & P/T)	75	160
Community based	42	66
Hospital based	33	94

Maternity statistics for the two units also varied, both according to data collected from locally held records during fieldwork periods (see Table One) and to data from centrally collected annual maternity statistics (www.BirthChoiceuk.com). In 2005, *Unit A* had a home birth rate of 5.6%, whereas *Unit B* had a home birth rate of 3.3% (Welsh national average = 3.61%).The Caesarean section rate for *Unit A* was 27.3%, and for *Unit B* it was 27.2% (both higher than the Welsh national average of 24.5%) (www.BirthChoiceuk.com).

3.4 Participants:
3.4.1 Inclusion/exclusion criteria:
- All midwives and doctors with current or past experience of the NLP were eligible to participate in the study.
- All women taking part must have been cared for on the NLP during their labour i.e. they were considered 'low risk' according to the criteria for entry onto the NLP. Thus women considered 'high risk' in terms of past obstetric or medical history were automatically excluded.

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[6] Data collection period: Unit A: Jan - May 2005. Unit B: Nov 2005 - March 2006

3.4.2 Sampling strategy:

Purposive sampling was used to ensure that participants represented a range of experiences. In Phase One, individuals with particular insights into the creation of the NLP were invited to participate. In Phases Two and Three participants opted into the study; this self-selected group was then purposively sampled, in order to ensure that data was obtained from a relevant and representative range of clinicians. Purposive sampling is a form of non-probability sampling commonly used in qualitative research and is considered an appropriate method of accessing respondents of most relevance to the research aim and questions (Morse and Field 1996, Bryman 2001).

Phase One:

Key individuals involved in the initial stages of devising, planning and implementing the pathway were invited to take part in semi-structured interviews. A variety of documents related to the initial setting up and creation of the NLP were identified for documentary analysis, including minutes, publicity and presentations.

Phases Two and Three:

Midwives: The initial proposal was to recruit 90 midwives, 45 in Unit A, 45 in Unit B, and to use purposive sampling to ensure that these midwives were representative of a wide range of clinical grades and lengths of clinical experience. It was proposed that five midwives per site would take part in the observations and subsequent interview, with the reminder participating in eight focus groups (four per site). (Final recruitment numbers and details in provided in Chapter Four).

Managers: All midwifery managers were invited to take part in semi structured interviews (total sample size of four proposed).

Doctors: All doctors at registrar grade and above were invited to take part in semi-structured interviews (total sample size of ten proposed).

Mothers: It was planned to recruit ten mothers to take part in the observational part of the study and a further ten mothers to be interviewed in the postnatal period (total of twenty mothers, ten per research site).

3.5 Ethical approval and access

Ethical approval and access to research sites was obtained from the Local Research Ethics Committees and the Research and Development Committees for each of the participating NHS Trusts. Access was also negotiated with the Heads of Midwifery and a senior obstetrician from each site.

3.6 Recruitment:

3.6.1 Recruiting heath care professionals

Phase 1: Key individuals in involved in the initial stages of devising, planning and implementing the pathway were sent personal letters inviting them to take part.

Phases Two and Three:

The study was publicised by attending maternity unit meetings to explain the purpose of the research and clarify what participation would entail. Posters

were displayed in various locations on each site, providing an overview of the study and contact details of the research team. In addition, all midwives, midwifery managers and doctors in each site received a personal letter, sent to their work address, providing information about the study. This letter included an invitation to participate, a consent form and a SAE for return. Midwives consenting to take part in the study were asked to indicate whether they were a) willing to participate in a focus group b) willing to take part in the observational aspect of the study. The midwifery and obstetric members of the Project Advisory Group also played a key role in encouraging recruitment by discussing the study informally with colleagues.

3.6.2 Recruiting mothers:
Recruitment of mothers into the study required careful ethical attention, as it is acknowledged that women are particularly vulnerable during pregnancy and childbirth (AIMS/NCT1997). As only women cared for 'on the pathway' met the inclusion criteria, it was not possible to obtain consent until they were in established labour, or had given birth.

Obtaining consent from women when they are in labour is clearly not ideal. How to achieve this with the greatest sensitivity was discussed with the Project Advisory Group and with the Ethics Committees. It was agreed that a self-selected convenience sampling approach should be taken. All women were informed during the antenatal period that the study was taking place, and that there was a possibility that they might be contacted regarding potential participation. Posters were displayed to this effect in antenatal clinics and wards, and all women were given an information sheet at the 36 week antenatal visit by community midwives. In addition, the research team visited some community-based pregnancy groups to further publicise the study. The information sheet gave full details of the study and reassurance regarding anonymity and confidentiality. Researcher contact details were provided so that additional queries could be answered.

For observations: Each maternity unit had details of when BH was 'on call' to undertake observations. On these days, the unit would be contacted to find out if any midwives who had consented to participate were on duty, and if they were caring for any women using the NLP. The midwife would then discuss the research study with these women and provide them with a Patient Information leaflet. If the woman was willing to participate, the midwife would seek verbal consent on the researcher's behalf and inform the research team.[7] This (necessarily) complex process was facilitated by having Link Midwives at each site (who were also members of the Project Advisory Group), who liaised with all key individuals.

When the researcher arrived at the maternity unit, she ensured that all participants understood the study and written consent was obtained. Women were assured that the researcher's attendance throughout their labour and

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[7] This proved to be a complicated process. The combination of factors i.e. the need for consent from both woman and midwife, and researcher's availability to respond at short notice, made the observational aspects of the research design challenging. As a result, a smaller number of labours were observed than originally planned.

birth was subject to ongoing negotiation, and they were assured that they could withdraw from the study at any time. It was emphasised that the focus of the observation was on the midwifery staff and their use of the pathway.

As noted, the inclusion criteria for the study were that participants must be cared for using the NLP. This effectively excluded women who were considered 'high risk', and thus more likely to experience intervention, as they have would already been screened by clinicians as inappropriate candidates for the NLP. However, it was decided that observations of the care of women who had commenced on the NLP but were subsequently discontinued (because the labour had become 'abnormal' in some way) would also be included in the data, although the observation would cease once they had left the pathway. It was considered important to include both 'normal' and 'abnormal' cases, in order provide greater insights into the use of the NLP and how this might contribute to the decision making process (although, as it turned out, none of the observed labours resulted in women 'exiting' the NLP).

For interviews:
Women who had given birth on the pathway were contacted either via their community midwives, or during the periods of fieldwork, whilst they were in hospital following the birth of their babies. A Patient Information Leaflet was provided and the researcher arranged to telephone them two weeks later to discuss whether they would like to participate. Women were offered a choice of location for the interview (either in the maternity unit or at home). All chose to be interviewed at home and a convenient time was negotiated. Interviews took place within six weeks of the birth wherever possible, to maximise recall. They lasted between half an hour to one and a half hours.

3.7 Conduct of study
3.7.1 Observations:
Three midwives in each unit were observed while they cared for a woman on Part Three of the NLP. The initial plan had been to conduct five observations on each site. In reality, this proved difficult. Women who were being cared for on the NLP were usually in well established labour by the time they arrived in the maternity unit, and it was then often not possible for the researcher (BH) to get to the unit in time.

The observation continued for as long as the woman remained on the NLP, and usually lasted for several hours. With the permission of the woman, the researcher remained for the birth of the baby. A semi-participant observation approach was taken. In order to ensure that the setting was as 'natural' as possible, it was agreed that the researcher would help the midwife with minor tasks and write up field notes when and where appropriate. In this way it was hoped to minimise any intrusion upon the labour and birth. (For discussion of ethical issues see below). Both mothers and midwives were assured that the researcher would leave the room or stop the observation at the request of either. All mothers and midwives were aware that the researcher was a qualified midwife, well experienced in this type of research, and holding an honorary contract with the Trust. Field notes were made focusing on the

midwife's use of the NLP. These were then written up in more detail immediately after the observation.

The observed midwives were also interviewed regarding their use of the pathway in this particular labour. These interviews were usually conducted on the maternity unit in a side room, and as soon as possible after the birth. All interviews were tape-recorded.

From these observations, the interview schedules for the focus groups and semi-structured interviews were developed.

3.7.2 Focus groups:
Seven focus groups were held (four in Unit A, three in Unit B), consisting of a total of thirty one midwives. These focus groups were held in hospital seminar rooms in both units. Permission had been given by the respective Heads of Midwifery for the focus groups to be conducted during the 'handover' period, when two shifts of midwives were overlapping.

Refreshments were provided and as a natural a discussion as possible was encouraged. The groups were heterogeneous, in that, although they contained only midwives, the participants worked in a variety of settings and represented a range of clinical grades and lengths of clinical experience. Only one focus group consisted of a pre-existing midwifery team.

The facilitator role was undertaken by BH, with a research assistant undertaking the observer role (including organising the equipment and taking notes during the discussions). All focus groups were tape recorded. Following each group, a de-briefing session was held where the researchers could compare notes about the process and content of the discussions.

3.7.3 Interviews
In Phases Two and Three, a total of twenty-five semi-structured interviews were carried out (in addition to the post-observation interviews). Five of these interviews were with midwifery managers, four with clinical midwives who had been unable to attend the focus group sessions, six with doctors, and ten with mothers. The interview schedule was developed from information gained during the observational stage of the study.

Location of interviews varied from practitioners' offices to clients' homes. Interviews lasted between twenty minutes to two hours. All interviews were audio-recorded with the participants' permission and later transcribed. Several of the interviews with mothers were conducted with other family members (and even neighbours) present. This had not been expected, and meant that the interviewer had to be careful to ensure that the interview remained focused on the topic. However, the most important consideration was that the mother felt relaxed and comfortable so that she could discuss her experiences as she thought appropriate, and if this meant that she wanted other people present, then this was not considered a problem[8].

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[8] Indeed, although these other people had not consented to participate in the study, they were keen to discuss their own experiences of childbirth. Some of the issues raised have indicated areas for further

The interviews with mothers did present some difficulties, however, as the semi-structured interview schedule had been designed to focus on their knowledge of the NLP. It soon became apparent, however, that most women interviewed knew very little about the pathway (see Chapter Eight). This meant that the questions had to be adapted; a more unstructured approach was taken, asking women to 'tell the story of their labour and birth', focusing on whether they considered this to have been a normal birth, how important having a normal birth was for them personally and for women in general, and what they would classify as an abnormal birth. One of the advantages of a qualitative approach is that it allows for this type of flexibility. As will be seen, this unanticipated line of questioning led to some interesting responses and has highlighted the need for further research in this area.

3.8 Ethical issues:
Key ethical issues in this study relate to consent and privacy of data. Ideally, all participants had at least 24 hours to consider before giving consent, and for some this period extended to one month. As discussed previously, the exception was those women who were invited to take part in the labour observation. All attempts were made to ensure that women did not feel under any pressure to participate, and wherever possible, at least an hour was allotted for the woman to consider her decision and consult with her partner, family and the midwife before deciding whether or not to participate.

All attempts were taken to minimise discomfort, anxiety and interference to participants. Staff interviews and focus groups were held during working time (with management approval and contingent on service demands) and on hospital premises, unless the participants requested otherwise. Mothers were interviewed after the birth of their baby, in a location of their choice and at a time convenient to them. No additional visits or expense were incurred by any participants.

It was acknowledged that the observational aspects of data collection had the potential to be intrusive, for both midwife and mother. As described, sensitive attention was paid to the needs of labouring women and their attendants, who were assured that the researcher would leave the room or stop the observation if so requested. As the researcher was an experienced midwife, she was able to anticipate the time when her presence could be difficult (e.g. during vaginal examinations). Women were informed that the focus of the observation was how midwives make use of the pathway, rather than on their birth experience. Midwives were assured that the focus of the study was on their experience of using the NLP, and that their skills and knowledge were not being assessed.

All participants were assured that they would remain anonymous from the moment of data collection. This included ensuring that no identifying features were provided in any research papers or reports.

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research (e.g. fathers' experiences of providing support during labour; fathers' interpretations of 'normality' in childbirth).

All data was stored securely. Electronic data were stored on a password protected computer, and hard copies of research material were kept in a locked filing cabinet. Transcripts were all anonymised using pseudonyms known only to the research team.

3.9 Data analysis:
As is usual in qualitative research, data analysis was contemporaneous with data collection (Field and Morse 1996, Mason 1996). Preliminary analysis began in the early stages of data analysis, in order to commence the process of identifying significant themes and issues.

Fieldnotes from the observations were written up as soon as possible. Audio tape recordings from focus groups and interviews were transcribed by one of the research assistants and an external transcribing service. Transcriptions and fieldnotes were then analysed using a form of thematic analysis, a method of interpreting written data by identifying key codes and categories and the relationships between them (Coffey and Atkinson 1996). This process was managed by using a computer-assisted package N6.

The trustworthiness and rigour of the analysis was enhanced by peer validation (Bryman 2001), whereby some data coding was also undertaken 'blind' by one of the research assistants experienced in qualitative data analysis. Rigour of data analysis was increased as all data were inspected and analysed, with attention to the possible presence of 'deviant cases' (that is, data that are not consistent with the hypothetical explanations being developed) (Silverman 1993 p44).

The credibility of the study was also supported by the opportunities for interaction with maternity service providers offered by the Project Roadshow. The Roadshow was a very effective means of facilitating early dissemination of key findings to maternity care practitioners throughout Wales. Eight presentations were given (in South, South West and North Wales), to which a large number of clinicians (midwives and doctors), managers, policy makers and representatives from service user organisations were invited. These were generally very well attended (including study participants) and provided opportunities for discussion and debate. In addition, audience members were invited to complete an evaluation form, commenting on both content and format of the presentation. It was notable that many comments suggested that the findings were not unexpected: e.g. *"no surprises in the findings" "it's what I would have expected but it is good to have proper evidence".* Although the Roadshows cannot be viewed as a formal means of 'respondent validation' (Bloor 1997), they nevertheless indicate the overall trustworthiness of the data.

3.10 Conclusion:
The ethnographic approach used was aimed at exploring the 'real-life' experiences of those most affected by the NLP. The study was designed in order to effectively access a relevant and representative range of participants, bearing in mind the need for careful attention to ethical concerns. The use of two study sites enabled insights to be gained into the implementation of the

NLP in differing settings and for comparisons to be made. In the following four chapters, the findings are described in detail. Chapter Four discusses the initial creation and implementation of the NLP and Chapter Five considers how the NLP is used both as a record of care and as a protocol. Chapters Six, Seven and Eight explore the impact of the NLP on midwives, doctors and mothers, as well as on maternity care in Wales in general. Chapter Nine draws together the findings in the conclusion, and considers the implications for practice and policy.

Chapter 4: Creating and implementing the pathway

The findings are presented in the following five chapters in the form of a narrative account, using data extracts to illustrate as appropriate. Interviews and focus groups are identified by code (e.g. Interview A, Focus Group 1) and brief descriptors are provided (e.g. profession, research site).

4.1 Participant information:
A total of seventy one participants took part in the study, as follows:

Table Three: Details of sample and data collection methods (all phases)

Data collection method	Participant type	Sample size
Interviews	Key informant	4
Observations and interviews	Midwives	6
	Mothers	5
Focus groups (7)	Midwives	31
Semi-structured interviews	Midwives	4
Semi-structured interviews	Doctors	6
Semi-structured interviews	Midwifery managers	5
Semi-structured Interviews	Mothers	10

Phase One:
- Four key informants involved in the initial stages of devising, planning and implementing the pathway took part in semi-structured interviews (no further details are provided, in order to protect anonymity). At the request of one individual, this took the form of written feedback in response to the interview schedule, rather than a face to face interview. These individuals are all identified by the code 'KI' in the text, in order to disguise individual identities. A balance of quotations from all key informants is used.
- In addition, documentary analysis was undertaken of a variety of documents related to the initial setting up and creation of the NLP, including minutes, publicity and presentations.

The data obtained in this phase is integrated throughout the findings chapters as appropriate, rather than being discussed separately.

Phases 2 and 3:
Midwives: A total of forty one midwives took part in the study, twenty one in Unit A, twenty in Unit B. Of these, twenty five midwives were G grades, eleven were F grades and five were E grades. Lengths of clinical experience varied between one year and thirty five years.

It was notable that most midwife participants in Unit A had longer clinical experience than those from Unit B. (i.e. sixteen midwives in Unit A had 11-35 years experience, compared with only six midwives in Unit B. In contrast, fourteen midwives in Unit B had between 1-10 years experience, compared with five midwives in Unit A. See Table Four). As detailed in Table Three, six midwives (three per site) took part in the observations and subsequent interview. Thirty one midwives took part in seven focus groups (four in Unit A, three in Unit B) (see Table Five for composition of focus groups). A further four from Unit B took part in semi-structured interviews based on the focus group questions (as they had been unable to attend any of the planned focus groups).

Table Four: Phase Two and Three: Details of midwife participants - length of clinical midwifery experience

Length of experience	Unit A	Unit B
1-5 years	3	10
6-10 years	2	4
11-35 years	16	6

Table Five: Phase Two and Three: Details of focus groups

Focus group number	Number of participants	Clinical grade	Length of clinical experience	Clinical location
1	3	G	4.5 - 20 years	Community (3)
2	4	F & G	2 - 28 years	Hospital (2) Community (2)
3	6	G	18 - 30+ years	Hospital (1) Community (5)
4	4	F &G	3 - 18 years	Hospital (1) Community (3)
5	3	F &G	10 – 22 years	Hospital (3)
6	5	E, F &G	4 – 13 years	Community (5)
7	6	E & F	3 - 6 years	Hospital (5) Community (1)

Managers: five midwifery managers took part in semi structured interviews. These were drawn from both sites; no further details are given to preserve anonymity, given small sample size.

Doctors: Six doctors of varying grades (at registrar and above) and length of experience took part in semi-structured interviews. Three doctors per site participated. No further details are provided in order to ensure anonymity, given small sample size.

Mothers: Five mothers took part in the observational part of the study, and ten mothers were interviewed in the postnatal period (total of fifteen mothers).[9] Limited demographic data were collected about the mothers (see Table Six). There were differences in parity of mothers between the two sites, with Unit B having only primiparous participants, whilst Unit A participants were both primiparous and multiparous. All Unit B participants had given birth in the Birth Centre, whilst in Unit A, six had given birth in hospital and one at home and all had received midwife-led team care.

Table Six : Phase Two and Three: Details of Participants: Mothers

	Unit A	Unit B
Observation	2	3
Interview	5	5
Primip	2	5
Multip	3	0
Place of birth	1 home 6 hospital	8 hospital
Model of care in Unit	Midwife-led, community based team	Antenatal and postnatal care from community midwives, intrapartum care from birth centre midwives
Ethnic group	All white British	1 Asian, 7 white British

4.2 The initial stages of NLP creation and implementation:

The findings chapters begin by considering the way in which the NLP was initially devised and implemented, drawing on the accounts of all participants in Phases One, Two and Three. Participant accounts focused on personal experiences of the implementation process as well as the broader organisational underpinning (i.e. the work of the Steering Group, the piloting process and audit).
There were key differences:

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[9] There is a discrepancy between the number of mothers taking part in the observation (5) and the number of midwives (6). This is because a total of five labours were observed, but a change of midwife occurred during one of these. As it was anticipated that these midwives would have differing approaches and experiences in relation to the use of the NLP, it was considered appropriate to count these as two 'cases'.

- in the experiences of midwives and doctors, particularly in relation to their perception of the initial consultation process
- between the two research sites, regarding perceived support during the implementation stage.
- between some of those involved in setting up the NLP and the users of the pathway

4.3 Devising the pathway

Discussions of the early stages of NLP formation focused on the **original idea**, the **composition** of the Steering Group and the **process** by which this group devised the pathway. These issues were discussed mainly by key informants, managers and doctors. This was not an issue on which many of the clinical midwives commented, unless they had been personally involved in some way.

4.3.1 The original idea:

The original idea for creating the NLP was described by the key informants. These individuals had all played various roles in moving the NLP from an initial idea into a policy to be used throughout Welsh maternity care. Some key informants had significant functions in relationship to the Welsh Assembly Government; these functions focused particularly on getting support, advice and funding for the NLP.

The initial idea for developing a clinical pathway appears to have been opportunistic. The Welsh Assembly Government (WAG) was committed to developing and implementing clinical pathways in health care, and had already supported the development of a pathway for the care of people at the end of life (Jones and Johnstone 2004). This meant that there was both encouragement and funding available. Alongside this, a problem had been encountered with the prescribing of drugs by midwives and how this was affected by legal requirements. Pharmacy representatives at the WAG suggested that a clinical pathway, which included the giving of medication, could provide a neat solution to the problem. From the beginning it appeared that there was an idea that this pathway could also include the aim of supporting normal labour:

"(name) went back to read about clinical pathways and started to talk about it with a few heads of midwifery 'just by the way, would there be any value in developing a clinical pathway around normal labour which would include us being able to give drugs?' So it was a sledgehammer to crack a nut, but (name) got more interested in the notion of a clinical pathway for normal labour' (Interview KI).

The use of the NLP to support midwives' prescribing eventually proved to be unfeasible. However, the idea of using a clinical pathway to support normal labour continued. There had been growing interest amongst service and policy leads in Welsh midwifery about promoting a normality model of childbirth. This led to the development of a new Welsh maternity policy, ('Delivering the Future in Wales: A Framework for Realising the Potential of Midwives in Wales' WAG 2002). Normal birth was central to this policy: *"to*

encourage midwives to see birth as a normal physiological process. That was top of the list - enabling birth to be normal" (Interview KI). The maternity policy was being worked on at the same time as the clinical pathway idea was being suggested, and there thus seems to have been a marrying of the two ideas:

"(Name) threw this one in (…) 'hey this has come up at the same time and (…) there was a little bit of money to start the ball rolling in developing a clinical pathway. So ever the opportunist, (name) thought 'well if there is the money available to develop something why don't we say yes?" (Interview KI).

Funding was secured from the WAG for a midwife to be seconded from practice to do some initial groundwork, in particular to gather information about clinical pathways i.e. how they had been used previously and whether any had been used for labour. This midwife was also expected to produce a first pathway draft. Funding was initially available for a two day a week secondment for three months, although this was subsequently extended to eighteen months as it became apparent that additional time and resources would be needed. This midwife became the pathway co-ordinator.

Two groups were created to support the development of the NLP: an internal WAG reference group which met for several months in the initial stages (consisting of representatives from relevant WAG departments), and the external steering group (discussed in more detail in 4.3.2). The internal group was described as being *"to oversee what we are doing and to offer advice and guidance" (Interview KI)*, although *"we never got more than two or three people to the meeting. It was hard to get people together – they were busy people. It all felt like a paper exercise and whether that's my naivety… (…) It didn't feel like they were contributing to it in any great formal way- it was just a matter of making sure that nobody could turn around at the end and say 'well, I wasn't aware this was going on" (Interview KI).*

Originally, the NLP appears to have been envisaged as something that would be optional, *"(we would) offer it to Trusts to use if they wanted" (Interview KI).* However, because NLP development was taking place concurrently with the development of new maternity policy (which included the development of a National Service Framework for Children, Young People and Maternity Services in Wales, the NSF) there had been an indication from the WAG that the NLP could possibly become policy: *"(He said) if it seems that it could have an effect, if it's more than a bright idea when it starts developing, then we could look at whether it could be incorporated in the NSF as a standard. But that was a long way away. That was never a promise" (Interview KI).*

The NLP did indeed become policy, although in the end this appears to be the result of the involvement of the All Wales Risk Group. This Group are responsible for producing 'Standards', which must be adhered to by all Trusts in Wales in order for the Welsh Risk Pool to provide financial cover for any claims made against Trusts. If the Trust has not met these standards, they could then be financially liable in litigation cases. The accounts suggest that the Risk Group were asked to comment on the NLP in its final stages. Their response was very positive, as clinical pathways are viewed as useful tools

for risk management[10]: *"trust-based pathways are great at managing risk but all Wales is much greater because (…) it has even more weight. And if it's a gathering of the best evidence for now, then it's the best way to risk manage and they chose to set it as standard" (Interview KI).* The decision to establish the NLP as a Risk Pool Standard, which would form part of the NSF and become mandatory throughout Wales, was thus taken out of the hands of the external steering group.

Views on this diverged amongst the key informants. Whilst some thought that the response from steering group members had been very positive: *"As a group they were absolutely delighted, because that enabled them to push for it to be implemented" (Interview KI),* others were more critical:

"Suddenly it found its way into the Welsh Risk Pool guidelines which I wasn't happy about. (…) What I was told was that this was all based on good research evidence and there wasn't a problem with it being part of the Welsh Risk Pool. But I felt that midwives could be criticised for not using it or not using it properly (…) I did think that it was very premature (…) from something that hadn't been (its) intention. It had never been discussed in the steering group either – it was suddenly there. And it wasn't only suddenly there, it was suddenly there with 'isn't this fantastic that it's in the Welsh Risk Pool Guidelines!' And I didn't feel that myself" (Interview KI)

Ownership and responsibility for the NLP appeared to the subject of some ambiguity. Although the NLP had become embedded in Welsh maternity policy by becoming a Welsh Risk Pool Standard, it was argued by some of the key informants that it was not actually a WAG document but instead belonged to the Trusts: *" I keep saying that it is not a policy document from the Assembly. It is something that clinicians have developed with our support." (Interview KI)*

There is certainly no WAG logo or endorsement on the pathway documents, and the WAG is mentioned only in relation to providing financial assistance for the NLP development.

Creating a sense of 'ownership' at Trust level had been attempted by ensuring that each maternity unit had a Steering Group member, who would act as 'Pathway leader'. A key function of these leaders was to liaise between the Group and the midwives and obstetricians in their various units. Expectations of these leaders appear to have been high, particularly in terms of responsibility: *" get them to be responsible for teaching and informing and discussing with obstetricians what the pathway meant to their Trust, and keeping the Head of Midwifery informed. (…) The pathway leader – after every meeting – would go back and say 'this is what we've done, this is the issue now'. So that each pathway leader would be discussing different issues like – definition of active labour. So we'd debate that at the meeting and they would bring it back and talk to the midwives (in the Trust) and get opinions*

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[10] Indeed, as discussed in Chapter 2: 2.3, clinical pathways have their origins in North America as key components of managed care packages, offered by health insurance companies and aimed specifically at standardising care and managing risk.

from them and bring it back to the group so we could reach a decision"
(Interview KI).

At times, this responsibility may have proved problematic, especially when negative reactions to the NLP were expressed: *"My colleagues in Z are having a horrendous time (…) You know there's real venomous dislike about it. (..) I feel very sad for the person who was on the steering group, I think they have had a very hard job"* (Interview KI)

As a consequence, difficulties experienced with the NLP were constructed as 'Trust issues', and not the business of the Steering Group or the WAG. For example, in relation to concerns expressed by obstetricians and midwives:

" There's been a couple of times when obstetricians have said 'I think it's the pathway' (when there had been an 'unexpected incident'). *But I don't need to know the ins and outs of the cases and I don't need to be involved. It's not my business, it's to do with the Trust"* and later: *"Some midwives have accepted that they are going to have to use the pathway and they are happy to do so. And some accepted that they are going to have to use it and are not happy. Because it's change. That's an issue for the Trust"* (Interview KI)

This ambiguous ownership of the NLP is curious. At times it appeared that the WAG representatives were pleased to take the credit for the successes of the NLP, but any difficulties encountered were constructed as Trust problems, or even the problems of specific individuals. However, as will be seen in the following chapters, the NLP certainly is viewed as being WAG 'policy' by those using it on the ground (with some even considering it to be policy that has been imposed on clinicians by the WAG). There was little evidence of a sense of NLP ownership in the two research sites, although the managers in Unit A were a notable exception (see Chapter Six 6.1.1).

4.3.2 Steering group composition:
As noted in Chapter One, the Steering Group consisted mainly of midwives, with one obstetrician, one paediatrician, one representative from midwifery education and one representative from a UK service user organisation. The medical presence was thought to be important from the outset:

" We needed a body of clinicians and we discussed the balance of midwives versus obstetricians, and the internal reference group - the policy makers - and (name) believed it was a midwifery initiative but that we would absolutely want the support of obstetricians. Because it can't work in isolation" (Interview KI).

However, some participants expressed concern that having only one obstetric member did not provide adequate representation[11]. This view was expressed by the doctors, and also some of the managers.

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[11] Documentary analysis of minutes suggests that the obstetrician regularly attended meetings. The paediatrician appears to have attended initial meetings.

"it would have helped if they (doctors) were more involved in the implementation and the development (...) I think they should have had more than one on it - if you want to implement something new, you need to get lots of stakeholders on board" (Interview S, Manager Unit B)

"We were made aware of it but I felt we had no say in the matter. Right from the beginning, we disagreed with some of the stuff in there. I do think if you want to get the doctors on board, you need to do more of an effort. (…) And doctors don't like being told this is good, this is what's going to happen (…). So I think that wasn't handled completely well". (Interview J, Doctor Unit B)

The obstetrician was a member of an Obstetrics and Gynaecology committee which reported to the WAG, and was thus considered an appropriate representative of obstetricians in Wales. The obstetric input into the NLP process was perceived as providing *'the obstetric rather than the midwifery opinion',* rather than being practically involved in *'the devising or designing of the pathway'* (Interview KI).

Other members of the group had experienced this obstetrician's participation very positively. For example, one manager who had also been involved in the steering group commented:

"The obstetrician that was on the group was very supportive. I think it was really important that there was an obstetrician sitting on the group. Most definitely" (Interview B, Manager Unit A)

One of the key informants, however, looking back on the experience in the light of subsequent criticisms from doctors, wondered whether *"we needed to either have more representation or someone who's more aggressively going out there with it. I don't know – it's hard to say. I wonder if we couldn't have managed it a bit better?"* (Interview KI)

There were no comments in relation to other aspects of Steering Group composition e.g. numbers of service users, other possible representatives. The selection of these individuals appears to have been ad hoc, a matter of the personal choice of the steering group conveners: *" We had an educationalist and I can't remember how that was decided upon. We had a user representative and again I can't remember how that particular person ended up".* (Interview KI)

In terms of midwifery representation, in some maternity units it was a midwife with managerial responsibility who joined the Steering Group. In others, membership had been delegated to clinical midwives; in these cases, the need for effective feedback to management was stressed (although this appeared to have been variable in quality). Midwife members represented all the main maternity units in Wales, so that sometimes this meant more than one midwife representative per Trust . The advice given to the Heads of Midwifery was that the midwife chosen to be on the Steering Group needed to have *" a passion for normal birth. (…) we didn't want someone sent that was*

not committed. They had to be passionate and they had to want to transform birth" (Interview KI).

The resulting large group size was considered necessary for future 'ownership' of the NLP: *"we wanted all trusts to have the opportunity to input into the pathway so that they could use it and own it" (Interview KI).* At times this meant that the process of reaching consensus was challenging, as we will see in the next section.

The predominance of one set of professionals on the NLP steering group is a key difference between this pathway and most others (as discussed in Chapter Two). Given that, for many of these other pathways, key benefits were derived from working in collaboration with other professionals, this may have been a missed opportunity for the NLP steering group.

4.3.3 Steering group process:
The process of creating the NLP was described as complex, a) because good quality evidence was not always available to support some of the proposed changes and b) because reaching consensus was challenging when there was a range of views. This was commented on by those who had participated in this process:

"It was interesting because there were lots of different people's views and there were some we had to put to one side and go back and look at. So it certainly wasn't an easy process. And there's lots of information that doesn't have the evidence to back it - it's historical but with no evidence to back it up." (Interview B, Manager Unit A)

" I like to remember that there tended to be agreement - but really we spent hours and hours and hours debating minutiae so there must have been – there was discrepancies and people finding it hard to come to an absolute consensus. But there weren't massive disagreements" (Interview KI)

" It took at least three individual meetings to discuss what was the onset of labour and how it would be defined in the pathway. So it was very difficult to get a consensus opinion between, you know, what was a multidisciplinary group, as well as midwives who had completely different opinions, who work in different areas. Some who work in rural parts of Wales or very normal units, and then midwives who work in (consultant led units). (Interview, KI)

The initial attitudes of the steering group members to the concept of the NLP were described differently by various participants. Compare, for example, the two following accounts of the first steering group meeting:

" There were lots of people who had lots of doubts about it for lots of reasons – whether this was appropriate for labour? Whether it was appropriate for midwives? Whether it would be too prescriptive? That was obviously a <u>big</u> concern that the midwives on the steering group had – that it would lead to us not having as much autonomy" (Interview KI)

" Very quickly at the first meeting we realised that it was a <u>fantastic</u> group and I would say that to anybody. <u>Fantastic</u> midwives with <u>huge</u> energy and commitment for normal birth. They were really eager for some support and – something that might support them in their efforts to transform birth. So that made it marvellous. I could see their energy, enthusiasm, commitment and passion and it was a very difficult group to chair because they were – so <u>keen"</u> (Interview KI)

The process was also on a grander scale than some had envisaged:

" I don't know if anybody else at the first steering group meeting had any idea what it would involve or what a big project it was or how much time it would take you just to write the pathway – because there were thirty plus individuals all from different areas, different disciplines really and different midwives from all the units in Wales" (Interview KI)

However, it was evident from documentary analysis that attendance at meetings was high and that the steering group managed to sustain commitment from its membership: *"The greatest things about this pathway is that people still turn up (…) So to have people consistently turning up and really committed to it, I don't know how that happened, how that drive and passion was there, but there was real commitment to that project and continues to be" (Interview KI)*

There was evidence of some ambiguity regarding the authorship of the NLP. The official version of events was that this was a 'bottom up' process which began with a 'blank sheet':

" It wasn't government policy. We were just enabling clinicians to develop guidance. I mean I know that's subtle but I can perfectly appreciate the difference. This isn't the Welsh assembly government top down saying 'you must normalise birth and this is how you will do it' – absolutely not! It was (name) having some money to have a blank sheet of paper with the idea of a clinical pathway. So that was the only structure. A clinical pathway which is really (pause) the evidence to support normal birth. Good practice guidance for normal birth. So it wasn't because (name) said so. (…) They had a blank sheet of paper to fill in the evidence. And so they got really excited about it because they did own it and it's not facetious to say they owned it. They absolutely owned it. So it isn't the assembly's work. (…) So it is theirs and it is still theirs. It's not an assembly policy document" (Interview KI)

The experience of other steering group members was that in reality much of the writing had been done by the pathway co-ordinator and in fact was already well underway as a result of the initial work carried out by the WAG based team:

" As far as the writing of it was concerned – that was done by the (pathway co-ordinator) who was seconded to do that job. (…) We'd discuss what we thought should be in the pathway, she would go away and bring back what they'd done in terms of documentation (long pause) - I don't know. I often felt

that things that we said <u>were</u> going to get done in the meeting, perhaps didn't get down as rigorously as we (…) would have hoped. (…) It was going to happen in the format they wanted it to . The steering group was being steered in the direction they wanted it to go" (Interview KI)

However, this 'steering' was attributed at least partially to the challenges of working with a large group. As two of the key informants acknowledged:

"we only ever got anywhere if (name) put it down on paper and sent it out to them for consultation (…) although there's all this talk about us starting with a blank piece of paper - we <u>did</u> start with a blank piece of paper but then it would be about (name) writing things down on this blank piece of paper and handing it to them. (…) Otherwise I think it's very hard for anyone really to envision how this pathway would look like" (Interview KI)

" That's a disadvantage of being in a group like that – someone has got to be in control. Disparate people who've got a completely different perspective and someone has to keep drawing it together I suppose. And it's inevitable that the people co-ordinating it are going to get their way in the end" (Interview KI)

As discussed in Chapter Two, the difficulties of reaching consensus and identifying appropriate evidence have also been noted in accounts of other clinical pathway formation (Currie and Harvey 2000, Fox et al 2003). There was, however, no mention that this evidence was taken into account during the steering group process. Discussions of 'the evidence' were focused on the evidence relating to normal birth, particularly progress in normal labour, rather than the evidence base relating to the advantages and limitations of clinical pathway use.

Some of the key informants had more knowledge and understanding of the purpose and format of clinical pathways than others. It was acknowledged that the NLP was unlike other clinical pathways, in that:

"It's broken the rules of pathways because it's supposed to be local. It's often (for) a condition that has lots of agencies – health care professionals - dabbling. So pulling together a multi-agency, multi-professional, user approach (…) it should be small and locally owned" (Interview, K1 2).

Indeed another key informant observed that:

"(Name) said 'it doesn't matter whether it's an all Wales clinical pathway or an all Wales guideline or protocol- it doesn't matter what words you use, what she wanted to do was to get people up to date, I guess, on what research says about normal labour. I think she used 'clinical pathway' because it's a buzz word and there's meant to be money around that (…) because if you read the purest view on it, it doesn't fit into it quite that well" (Interview KI)

4.3.4 Prior knowledge and consultation:
Once it had been decided that the NLP was a Risk Pool Standard and thus implementation was mandatory, the WAG representatives visited all the Trusts:

"We offered to come to talk about the background, what it is, how it will enable them to work with women to encourage them to see birth as a normal process and what it will mean to them in practice. (...) and lots of time for debate and discussion" (Interview KI).

These visits were described as being something of a public relations exercise: *"A lot of time was taken up going around Wales to talk to midwives (…) trying to get them on board "(Interview KI).*

There were key differences between doctors' and midwives' views of the initial consultation process.

Some midwives appeared to have been well informed about the NLP and had attended presentations and training sessions. There was evidence that a sense of 'ownership' did exist amongst some midwife participants, particularly amongst those who had been members of the Steering Group themselves, or who had close personal contact with members. However, it should be noted that this was not a universal view. Other midwives seemed less well prepared and several expressed the opinion that the NLP was something of a 'fait accompli' – a WAG initiative that was already in motion and which could not be halted. As discussed in 4.3.2, this contrasts with the views of some key informants, i.e. that *"it is not a policy document from the Assembly. It is something that clinicians have developed with our support." (Interview KI)*

"It was seen as a directive from the Assembly and it was something that we had to do and there was no question about whether it was appropriate to the unit or not. It was interpreted as a directive - this is what we were doing whether we liked it or not" (Interview J, F grade midwife Unit B)

"I'm not sure there was a lot of consultation, but there may have been and I wasn't party to it. I think it was a fait accompli at that time, that was my perception." (Interview F, Manager Unit B).

The intended process previously described, whereby pathway leaders would consult with colleagues in their units about the content and format of the NLP and act as 'go betweens ' with the Steering Group, thus appears to have been of variable effectiveness.

The sense of imposition and inevitability experienced by some midwives was strongly reflected in the views of the doctors. The accounts of the doctors indicated that they had not had any specific preparation for the introduction of the NLP and many described finding out about the NLP by word of mouth. A few had attended the presentations by representatives from the WAG, but felt that the decision to implement the pathway had already been made. None

mentioned any discussions with the pathway leaders, although it had been intended that they would liaise with both midwives and doctors in their units.

The only obstetric input into the initial process had been via the obstetrician on Steering Group. This system appears have created some problems, as in the perception of those interviewed, it had not resulted in an effective consultation process within the obstetric community. There was a general sense of lack of involvement and consultation in the accounts of doctors:

"It seemed to sort of arrive – people came down and told us about it, but like 'this is what we're going to do'. (Interview A, Doctor Unit A)

"We had no information at all from any other sources, even when we came into the department. We had no sort of briefing notice or something about the normal care pathway no. (…) All we know is midwife led care means that they look after the patient A-Z and they just come in if there's a problem".
(Interview M, Doctor Unit A)

This contrasted, however, with how one of the key informants described of the discussions with doctors during the presentations*:*

"(The doctors) were invited to come to our session. Absolutely welcome. Some came, some didn't and some were very supportive and some were fairly argumentative. And some were great debaters. We want debate. We want discussions, we want to know when they are not happy because we have to work with them. I mean not have to - want to." (Interview KI)

Some midwives expressed concern about the lack of medical involvement. As described earlier, some midwives thought that there should have been greater obstetric involvement in the steering group process. There was also a feeling that doctors had been ill prepared for the impact that the NLP would have on their practice:

Facilitator: so are you saying the doctors haven't been well enough prepared for the pathway?
All: yes.
(FG 2, F/G grade midwives, Unit A)

Whilst it could be argued that that this lack of obstetric involvement was appropriate, given that the focus of the NLP is on the practice of midwives, it may also be a rather naïve omission. It certainly suggests that there was limited acknowledgement of the complementary nature of these two roles and occupational territories. Given that the focus of the midwifery is on normal childbirth, and that the focus of the obstetrician is on abnormal childbirth, then any policy that impacts on the role of one, inevitably impacts on the role of the other. This is especially so if the policy is aimed at clearly delineating the boundaries between normality and abnormality, as in the case of the NLP (and even more so, as the NLP shifts the parameters of what is considered 'normal'). It would also seem to be a crucial consideration given that the

underpinning rationale for the NLP was the reduction in unnecessary intervention in childbirth.

It was apparent from the doctors' accounts that the NLP had implications for their role and workload. These feelings of initial non-involvement are important, as they appear to underpin the strong feelings of exclusion described by doctors in relation to the impact of the NLP on practice. We will return to this in Chapter Seven.

4.4 Implementation:
Discussion of the implementation process covered three issues: the piloting process, training and support (both initial and ongoing) and the pathway audit.

4.4.1 Piloting process:
The NLP was piloted for a total of three months in two contrasting units (one month in one unit, two months in the other). According to the midwife participants, the purpose of the pilot was thought to be 'trying out the paperwork' and this was confirmed by the key informants:

"The purpose of the pilot was to see if the pathway as a document would support your care in labour. We weren't looking at that point whether the onset of labour was the right point or the progress in labour was right". (Interview KI)

"Really we were auditing the tool – does it work? (…) The only changes we made were to the layout- so the space to write, the space to sign and boxes that weren't big enough to put your initials in. The practical things" (Interview, KI)

The value and quality of this process was questioned by some, who suggested that this would have been better set up as a more rigorous trial of the NLP, with a formal evaluation. As we will see, this perspective is similar to concerns raised regarding the value of the audit.

"From what I understand they had two pilot sites, I think it was three months and then it was rolled out throughout Wales and we were told to do it, end of story! (laughter) It's a pity there wasn't a better evaluation of the pilot sites. I think that the pilot sites should have implemented it as a trial and then gone back to what they were doing, an evaluation made, difficulties with it changed and then re-implemented with more guidance - that would have been the better way. But it was like 'oh the pilot sites have been fine' and I saw the original audits and I said 'yeah but what's this telling us about the use of it?'" (Interview S, Manager Unit B)

"The pilot sites were <u>supposed</u> to have looked at the kinks, (but) we found there wasn't enough writing - there wasn't places to write enough. That was unfortunate because you had to use it for a year before you could actually change it" (Interview E, Manager Unit A)

4.4.2 Training and support:

The philosophy of the Steering Group was that training sessions would be available for all midwives to attend, but that the responsibility for attending resided with the midwife. It was apparent, however, that in relation to the training and support offered to staff, key differences existed between Unit A and B.

Unit A, which was one of the first sites to implement the NLP, provided substantial internal support. During first week of implementation, senior midwives (including managers) worked 'hands on' on the labour ward in order to provide advice and support. This approach was reported very positively by both managers and clinical midwives. In general, there was more sense of staff involvement in the whole implementation process:

"We spent a lot of time on the labour ward and for the first week there were four senior members of staff and we spent every shift on labour ward to make sure that the staff were happy to use the pathway" (Interview B, Manager Unit A)

In contrast, Unit B (one of last sites to implement) appeared much less prepared. There was limited training for staff, and evidence of local interpretation of pathway use. It is important to note that by this time WAG involvement in setting up the NLP had finished and senior midwives described feeling 'left to it':

"Those that were training didn't have training sessions. So it was basically me and another midwife got together and spent days and days looking at it thinking 'what does this mean? How do you do this?' It was very stressful because the responsibility of interpreting it was down to us" (Interview S, Manager Unit B)

Clinical midwives on both sites described the importance of ongoing training, although many indicated that this was not as available as they would have wished. They emphasised the need for regular updating, and ensuring that new staff were effectively trained in its use (especially those arriving from outside Wales, who would not be conversant with using the NLP).

"I think we could all do with updating, especially new midwives, refreshing, because the more I became familiar with it the more sense it made" (FG 5, F/G grade midwives, Unit B)

Midwife: I'd done it once or twice (as a student) *but then having to do it as a qualified midwife with no training….*
Facilitator: Oh really? you didn't go on any training days?
Midwife: nothing at all - 'she's on the normal care pathway, there we are, that's it'. (Interview I, E Grade Midwife Unit B)

There was also a general feeling, expressed by clinical midwives and managers, that there should have been more in the way of ongoing support from WAG e.g. funding, follow on support and updating, support with audit.

" when the development period stopped, the people involved in it were moved out and there's nobody there to follow it through (…) and the funding's never there to follow it through (…) It's so important to have funding here, if something's worthwhile then it's got to be properly supported and backed up" (Interview S, Manager Unit B)

It is interesting to note that, from the perspective of the key informants, this removal of WAG support was part of the process. This resonates with the emphasis of local ownership of the NLP at Trust level. The emphasis in these accounts is on mutual support between Trusts: *"What seems to be of help is to help each other. We've got Unit Y, we've got Unit Z – we suggest someone around them implements next. So it's like a feeding off of each other. And then the person from the accompanying trust can support them with the implementation"* (Interview KI)

4.4.3 Audit:
The importance of undertaking an audit as a means of evaluating the effects of NLP (including its impact on clinical safety) was emphasised by both midwives and doctors. However, many participants questioned the value of the auditing that has actually been carried out to date. The content of the audit was challenged, with participants querying the value of the information gathered (e.g. does the audit really only monitor compliance with documentation?) and asking whether the 'right things' were being audited.

For example: *"all it does is look at compliance really, with the tool. I did question that several times in the steering group meeting, but the answer to that being that because it was evidence based – the pathway – there was no question about whether it was useful or effective. The point of auditing pathways apparently (…) is that you audit compliance with them, and it's <u>that</u> that's important. (…) It doesn't tell us anything that might decrease the caesarean section rate or decrease the number of women having interventions because the audit tool isn't designed that way. It's only designed to ensure that we're adhering to the letter of the pathway"* (Interview KI)

There was a sense that this had been a missed opportunity, and that data of interest to clinicians were not being collected. Some expressed concerns that there was a danger of concluding too much from the audit as it stands:

"I'd like to see the data. I have yet to see the evidence that it's done anybody any good. Well, if it has, fine. But where is it?" (Interview A, Doctor Unit A)

"There is audit going on but (we need to) *look whether they are auditing the right things. I don't think, even if proper auditing and research was done, that you are going to pick up huge differences. Because you probably need hundreds of thousands of women to see that maybe they are in a subgroup of women where the decision to start oxytocin was made later and therefore they've delivered three hours later than they could have and they are more exhausted"* (Interview J, Doctor Unit B)

" There is a national audit going on but it's more to do with how many start it, how many come off it" (Interview S, Manager Unit B)

One participant observed that the audit tool could impact on clinical judgement, by acting as a surveillance tool:

"Because it's got an audit tool that goes with it, everyone's afraid to do any intervention in case they show up on the audit tool – that they did something that isn't written within the pathway. So for example, it says 'were the membranes ruptured - when there was no reason for it?' and nobody wants to say 'yes' even though there might have been good reason to. (…) 'Were vaginal examinations performed more than every four hours?' and that's telling people if there were more, then that's wrong. But it isn't always wrong" (Interview KI).

However, some managers did feel that one benefit of the audit was that it provided data that had not been available before, especially in relation to the care of low risk women.

Problems were also identified with the conduct of the audit. This job usually fell to a senior clinical midwife in each unit, adding to her workload. The need for these additional resources and costs had not been recognised initially. It would appear from the Phase One data that the audit was added at a later date, and was not included in the original NLP plans:

"Without doubt I feel that it (audit tool) has been the hardest part of developing the pathway – no question about it. It was the bit we thought we could tag on the end. It's just been really hard, and continues to be really hard, because we're so desperate for it to give us interesting, fascinating, accurate data. And that's really tough to get. Although (name) asked everybody that they could at the time, there wasn't experience around of that sort of en masse auditing – there wasn't the expertise there really. So you sort of throw something together as best you can with all the advice you can get" (Interview, KI).

This would explain the limited consideration given to the type of the data to be collected, and also to the day to day responsibility for the audit process at trust level. From wider discussions with senior midwives in Wales, and from the Roadshow discussions, it is apparent that the audit data is of variable quality, and that there are significant differences between Trusts in relation to the audit data collection process.

4.5 Discussion and Conclusion:
This chapter has provided insights into the initial planning and implementation process of the NLP, drawing on the accounts of key informants involved in the initial stages, and clinicians 'on the ground'.

Of particular interest are the different experiences of midwives and doctors, and the different perspectives of those involved in creating the NLP with those using it at grass roots level. It was notable that those responsible for setting up the process had assumed that the Steering Group process would ensure an effective two way process with all clinicians, whilst in reality this was

infrequently achieved. This was particularly the case with the communication with doctors. Whilst the stated philosophy of those driving the creation of the NLP was that this should be a 'bottom up' approach, with ownership and responsibility located locally with clinicians, this rarely matched the experience of those working 'on the ground'.

These findings were not surprising to those attending the Pathway Roadshow presentations. In particular, the concerns regarding the value and quality of the audit data were reinforced.

Chapter 5: Using the Pathway:

This chapter discusses the way that the NLP was used in practice, and in particular how it functioned as both a record of care and as a protocol for practice. As we saw in Chapter Two, a unique feature of clinical pathways is that they have this dual role, and this was reflected in the accounts of participants. The first part of the chapter focuses on how the NLP was used as a record of care; the second part discusses how it was used as a protocol to inform practice.

5.1 Pathway as record of care:
The discussion relating to the NLP as a record of care was extensive and present in the accounts of both clinical and managerial midwives, indicating some strongly held views. Clinically-based midwives discussed a variety of issues relating to the design and format of the pathway, including the implications for litigation cases. Managers made only brief comments about the design of the pathway; their comments focused more on issues related to accountability and litigation.

In general, the new NLP documentation was the subject of strong feelings. No-one appeared to be neutral about the paperwork; midwives' accounts were either positive or negative. Interestingly, it was the often the same issue that generated strong feelings. For example, the 'tick box' approach of the NLP was experienced very positively by some midwives, and very negatively by others. It was notable that, in general, it was the more recently qualified midwives (i.e. with clinical experience of one to five years) who expressed positive views about the NLP, and midwives with lengthier clinical experience expressed more reservations.

5.1.1 Positive aspects of NLP design:
Four key positive aspects of NLP design were identified:
- User friendly
- Reminder
- Standardisation of advice
- Continuity

The NLP was considered to be 'user friendly' because it simplified documentation. The NLP is based on the principle of 'documentation by exception' i.e. as long as everything is progressing normally, there is no need to comment. Signatures in the 'tick boxes' demonstrate that various aspects of care have been attended to. Any comments that need to be made are via the recording of 'variances', requiring the use of variance codes.

This 'tick box approach' was popular with many participants, particularly those who were more recently qualified. These midwives were critical of past practice, when it was felt that too much time had been unnecessarily spent on record keeping. There were many comments along the lines of: *"we used to write reams and reams – it's not necessary" (FG 1, G grade midwives, Unit A).* As a result, many midwives described having more time to give care to mothers, as paperwork both during labour and after the birth was 'easier'.

There were many comments along the lines of 'I have more time for the women'. For example:

" the less writing I'm doing, the more time I have got to give women care in labour, so it's perfect from that point of view" (Interview M, G grade midwife Unit B)

Midwife 1: You can spend more time with the woman actually giving emotional and psychological support.
Facilitator: so it's freed you up then?
Midwife 1: absolutely, rather than sitting there sort of scribing a lot of notes, which if everything is normal are not necessary.
Midwife 2: Like you were saying, you've got more time to spend with the woman. (FG 4, F/G grade midwives, Unit A)

It should be noted, however, that although this is the midwives' perception, it is difficult to ascertain whether midwives did **actually** spend more time with mothers. The observational part of the study certainly demonstrated that midwives spent relatively short periods of time completing NLP records during labour care, but whether they were spending more time with mothers as a consequence, or whether this time was being used for other aspects of work, it is not possible to conclude from this study. None of the multiparous mothers mentioned that the midwife had spent more time caring for them than in their previous births[12].

The NLP was also valued because it functioned as a reminder for midwives. It was described as a 'memory jogger' and 'checklist':

Midwife 1: you've got all the questions that you're asking the woman, so you're reminded about things which you may forget if you haven't got a pathway in front of you. You know, like - have you spoken to them about vitamin K?
Midwife 2: you know what you are doing, so you know when you're going to mobilise them (…) because it's there in black and white, you've got the algorithm to follow and it makes it a bit easier (FG 6, E/F/G grade midwives, Unit B)

This reminding function was thought to be particularly useful for newly qualified midwives*: "if you're just newly qualified (…) the pathway keeps you right. Okay, I've done my telephone advice and now I've moved onto my part Two" (Interview N, G Grade midwife, Unit A)*

However, as we will see in the next chapter, some experienced midwives did not like this prompting function, as they felt it compromised their clinical judgement and could lead to prescriptive care.

Standardisation of advice was also thought to be beneficial, as it should result in less conflicting advice for women*: "my immediate reaction to it was (…) it would be uniform - we should all be singing from the same hymn sheet".*

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[12] This question was not routinely put to women; however, if they did compare the present birth with others, this issue was raised.

(Interview F, Manager, Unit B). The NLP was also considered to facilitate continuity of care, by proving opportunities for midwives to share information with each other. For example, Part 1 (Telephone advice) requires a record to be made of the advice given to women in early labour. This record is kept on the labour ward or in the birth centre, so that if the women telephones again, the next midwife is able to review the previous advice given, thus informing her discussions with the woman*: "if they are ringing into a labour ward then somebody can see what was said to them last time and what was happening" (FG 1, G grade midwives, Unit A).* This advice would not previously have been recorded.

However, context was all important here - as we will see in the next section, this function was of much less importance to the community-based midwives in the study.

5.1.2 Negative aspects of NLP design:
Negative responses to the design and format of the NLP were focused on three key areas:
- not user friendly
- detail - inappropriate, duplications, omissions
- tick box approach

In contrast to the comments that the NLP was a user-friendly document, other participants thought that it was not user friendly, particularly because it lacked logical, chronological flow. This was a very common response. Midwives described having "to go backwards and forwards" through the document (particularly Part Three) and this led to concerns that important points might be missed:

"On the layout of the pathway, I do find it a bit strange that the suturing is before the actual delivery! It is a bit topsy turvy and you are back and fore from one to the other" (FG 5, F/G grade midwives, Unit B).

"It's a hard document to use, it's all over the place. There's no flow through from it, you have to search for the codes" (Interview S, Manager Unit B)

This could also create problems for managers*:*
 "when you came to audit it and do any sort of issues to do with risk management - it was really really difficult to find out what had actually happened, because you were going back and forth all the time. You've got your birth before your partogram and it doesn't make sense. It's not a criticism - but until you actually go and use it yourself …everything is there but it's not in the right order." (Interview E, Manager Unit A)

Information from members of the Pathway Implementation Group indicates that this has problem now been addressed, and the 'flow' will be improved when future copies of the NLP are printed.

Other non user friendly aspects of the pathway include the problem of Parts 1, 2 and 3 becoming separated and in danger of being lost. It was suggested that it would be useful to have them in one booklet or file.

The level of detail required by the NLP was also questioned. Some midwives considered that there was duplication of information, others that important detail was omitted. Some information required was thought to be unnecessary or inappropriate (e.g. midwives questioned whether it was necessary to add the times that discussions with clients had taken place). During interviews and focus groups, midwives illustrated these concerns to the researchers using the copies of the NLP that were available:

"There's 'skin to skin' given here and then we turn the page and we have to say it again. Why do we have to say it again? If it's 'skin to skin contact' with the mother, then it's 'skin to skin contact' with the baby isn't it? And no head circumference on here, which we need because that's in the other notes (paediatric records) and we have to put it on the computer" (FG 2 F/G grade midwives, Unit A).

"As regards all these dates and times - I mean for goodness sake, you're just going around filling out the times. I mean, look here (shows Part Three) - 'lochia minimal - what time?' Well, you'll be looking at that constantly. Again, the 'contraction of the uterus' - you just don't do it once, put the time down and forget about it. So I just find myself writing for loads of things 'done throughout postnatal recovery period on labour ward' (Interview E, Midwife F grade Unit A).

This example of making adaptations to the intended use of the pathway was not uncommon, particularly amongst midwives who had negative responses to the NLP; this will be discussed further in the next chapter.

Context appeared to be important. For example, community-based midwives in Unit A thought that Part 1 (Telephone Advice) was really designed for a labour ward in large hospital where midwives do not know the women, and was not appropriate for community-based care, especially if providing continuity of care, as in their case. The language used e.g. 'admissions assessment' was also not relevant for women being cared for at home, especially at a home birth. Community-based midwives in Unit A also commented that the discussions about care during labour that are recorded in Part Three (for example, the importance of 'mobilisation' and eating and drinking), should ideally have taken place during pregnancy, not during labour:

"One thing that really annoys me - it's there as part of routine care during labour: 'you may wish to discuss all these things' (quoting from NLP) Well we should have discussed those in the birth plan. During labour it's not actually appropriate" (FG1, G grade midwives, Unit A).

There were also practical difficulties for community-based midwives in transferring Parts 1 and 2 between midwives, or onwards to the hospital if they were not able to accompany the woman into the unit to attend the birth:

"you know what primips are like. We could go out to them each night on the trot and have three nights running. So then you'd have these forms and they'd be all over the place - we'd have hundreds of them, so we tend not to do them until the time they actually go into labour- but really you should be doing them every time somebody calls you isn't it?' (Interview E, G grade midwife Unit A)

5.1.3 Tick box approach:
The key discussion point in this theme was related to the 'tick box approach' of the NLP, which generated considerable discussion and was thought to have various important implications for record keeping. This issue is therefore discussed in some detail.

As we have seen, midwives' views differed in relation to 'documentation by exception'. In general, more experienced midwives were more likely to raise concerns about this new approach to record keeping, and junior midwives expressed more positive views. Midwives acknowledged that it had taken some time to become familiarised with this approach and had initial fears of "missing something out". However, even once they had become used to the new process, many still expressed concerns, and stressed that this was not because they were resistant to change; even if they preferred writing less from a practical point of view, they nevertheless had underlying professional concerns about the implications of this approach to record keeping.

These concerns, present in the accounts of both midwives and managers, all related to the fact that there was "no story" within the NLP. This meant that no narrative existed, either of the midwives' work or of the women's experience. This was considered to have implications for:

- Litigation, as details of care and clinical reasoning were lacking
- Loss of midwifery narrative: No reminder of the experience to share or reflect on in future
- Loss of woman's story: Potential future difficulties for discussing birth experience with women

These concerns appeared to be the key reason for adapting the NLP, as will be discussed in the next chapter.

The doctors did not express concerns about this 'lack of story' in the midwives' records. From a medical perspective, the partogram was considered to contain all necessary information needed if a woman to 'came off the pathway' (i.e. key clinical observations), and a verbal handover from midwife to doctor could fill in any gaps. One doctor in Unit B was aware that some midwives were anxious about gaps in record keeping and the potential impact on any future litigation cases.

5.1.3.1 Litigation:

This was a key concern raised in every midwifery interview and focus group. A high level of anxiety about litigation and complaints already exists within UK midwifery and the NLP does not seem to have ameliorated this. In fact, because of the issues described here, it may actually have increased these worries. Concerns relating to potential litigation focused on three areas: lack of detail; no 'memory joggers'; unclear legal status of NLP. These are discussed in turn.

The lack of free space within the NLP and the focus on minimal recording meant that there was no 'official area' to document details of care or details of clinical reasoning and decision making. This lack of detail meant that there would be little evidence to support or defend a midwife in the case of a complaint or if a case were taken to court.

"Midwife 1: there were certain things that I felt I wanted to report that there wasn't a place on the pathway to do it. For example, if you're at home, to say that you've called a second midwife. Or if you are at home in early labour and the woman decides - or you jointly decide between you - that now's the time to go in. About that sort of decision making
Midwife 2: Because I quite like having the story. Women's labours are a story, they're not a series of tick boxes. (…) you end up putting it on a little story bit at the end.
Midwife 1: I think it's really important to document decision making processes - 'well I thought about this and I noticed such and such'- which isn't in there. You have to use extra pages for it' (FG 1, G grade midwives Unit A).

Recording of detail was thought to be especially important where the situation was not totally clear. Midwives described this as the *"grey area"*, where there were the beginnings of concerns about labour progress, but which did not yet require the woman to exit the pathway:

"*There's a little bit of a line, isn't there, between when they are beginning to go off the pathway but they haven't gone off the pathway. There's a little bit in between - a little sort of just hanging in the air between one and the other. Once you know you're off that's fine, you just carry on with your writing. And if everything's normal you don't do any writing and that's fine. But if things are sort of teetering on the edge (…) You get this funny little feeling that things aren't quite right but there's nothing to put your finger on. Where do you put that?" (FG 2, F/G grade midwives, Unit A)*

In this situation, traditional labour records would have enabled documentation of these concerns, whereas the NLP made provision only to record *what* not *why*. Unit A had added an extra sheet precisely for this purpose. A manager from Unit B summarised the difference between 'old style notes' and the NLP as*:*

 "*one gives you information and one gives you a statement. (…) Writing 'request for epidural' tells you nothing. She could be requesting an epidural*

and be very calm- but she could be screaming the house down and her complaint could be that 'the midwife did not listen to me'. The midwife looks at the notes and says 'oh she wanted an epidural so I transferred her' and does not remember the fact that she asked a hundred times'. (Interview F, Manager, Unit B)

The lack of story also results in NLPs which all look alike; the details which act as 'memory joggers' about particular clients and situations will no longer be available. In the second account below, one of the managers in Unit B provides a specific example of the importance of such detail:

Midwife 1: In ten years' time one set of notes is going to look like another set of notes. And there's no way you are going to remember
Midwife 2: Bear in mind the length of time that notes are kept - we are putting ourselves on the line by putting this in practice
Midwife 3: Yes - we've implemented it and we are just hoping that everything will be okay (FG 4, F/ G grade midwives, Unit A)

"It doesn't allow for the individual woman. So unless it was a particularly joyous or horrendous experience for the midwife it may not trigger a memory. An example of that is - I went to a young girl in the community, and it was a concealed pregnancy and a BBA (Born before Arrival of midwife). Now if I'd used the normal pathway I would have ticked boxes, that's all I would have done. Because she fell into the realms of normal birth, normal placenta blah blah. I would not have put that her mother was downstairs under the influence (of alcohol) (…), that the girl wanted to see her father (because) she felt he was a support person. That when they were all in the room they actually communicated well, that they were very supportive to this young girl. Five months later this baby died of a non-accidental injury. So I was asked to come and speak to the police - all I would have had was a normal pathway. But I actually had the social documentation of that birth (…) It drew a picture so that they could actually see what happened. The normal pathway might not quite get that (…) Little triggers on what you've written actually brings a case back" *(Interview F, Manager, Unit B)*

Documentation by exception is a significant change from past practice whereby midwives were encouraged to write everything down as evidence that care had been given. The following focus group discussion was typical of many:
Midwife 1: Writing something every fifteen minutes was almost sort of proof that you were actually there and paying attention.
Midwife 2: Yes, I think it's been impressed on us so much hasn't it?
Midwife 3: If it's not written down then it's not done (FG 1, G grade midwives Unit A)

However, some midwives did express the opinion that it was better to 'write too little, than too much', although this was not a commonly expressed view:

"you can write too much, and you can hang yourself as well! If it's not written down they can't prove nothing either way can they?" (FG 1, G grade midwives, Unit A)

It is certainly true that the legal status of the NLP is as yet unknown. At the time of data collection, it was not known whether the NLP would "hold up in court" and whether it would provide adequate support for midwives. It is also unclear how it will it fare long-term. The following focus group extracts are representative of many discussions, and the level of anxiety in relation to this issue was very notable:

Midwife 1: It's always in the back of your mind - what happens in twenty years time in the courts …. it is quite scary
Midwife 2: If that pathway protects you from litigation? Yes you did the pathway, that means everything must have been great. But what if the pathway gets thrown out in three years time, then where would we be? (FG 2, F/G grade midwives, Unit A)

"It's always in the back of your mind that if this goes to court, where would I stand?" (FG 5, F/G grade midwives, Unit B)

"I went on a study day and there was a lawyer there and she said (that) in a court of law she didn't think it would stand up. And she was actually a lawyer for a Trust and I thought oh god!" (FG 5, F/G grade midwives, Unit B)

Midwife 1: Don't you miss the writing?
Midwife 2: I do miss it and I worry about it - would we be supported in a court of law, that's my worry
Midwife 3: I'm almost looking for a reason to come off it (NLP) (…) it's the litigation side that's a worry
Midwife 2: in ten years time would we be supported if somebody complained about our care in labour and we've got nothing to say?" (FG 7, E/F grade midwives Unit B)

Midwives also felt that they received conflicting messages from their managers in relation to how much should be documented in the NLP:

"There have always been these two things coming at us from on high a) you're writing too much and b) you have to write down everything, because if it's not written down then you're not covered" (FG 1, G grade midwives, Unit A)

These conflicting messages are not surprising, as it was evident that the concerns expressed by clinical midwives in relation to litigation were shared by many of the managers. In particular, managers and some senior midwives expressed concerns (especially in Unit B) that the legal status of the NLP was yet untested. Although they knew that the 'official line' was that the NLP had the approval of the Welsh Risk Pool and had been accepted as a Risk Pool Standard, they expressed private fears that this might not be totally dependable, and that midwives could be putting themselves at risk:

" I know the lawyers in the Welsh Risk Pool have passed it and said it would be fine but there really hasn't been a case yet (…) it would be the mother's word against the midwife's word and there's nothing (written) down there. So that is one concern - it hasn't been tried and tested as yet" (Interview L, G grade midwife Unit B)

"I think one of the tests is going to be litigation and my gut feeling is - it's the midwife who's involved in it who is going to get slated for record-keeping" (Interview C, Manager Unit B)

"From a managers' point of view, I do have some mixed feelings about it. When people come to you with a problem there's nothing to fall back on. If they've ticked a box, all that tells you is, they've ticked or initialled the box. Every labour and every woman is different. We're not used to it, we're used to writing things down. In our training, you were told to create picture, because in twenty years time you need a picture there" (Interview F, Manager Unit B)

Even some of the key informants interviewed in Phase One acknowledged that the legal standing of the NLP was not yet known. One expressed concerns about the lack of information contained in the document and observed that other members of the original NLP steering group had similar experiences:

"They (midwives) are concerned that they won't have evidence to support them if something untoward happened in a case. And that does concern me as well because I audit the notes and I see how limited the information is. (…) It seemed that the idea was quite straightforward and you just had to use your common sense – but of course it's documenting things in a completely different way to what we are used to. And because we do that, I tend to find that things are omitted the whole time. (…)This idea being that you use the codes (variance codes) for anything if you want to. But what happens is that nothing gets documented (…) I know that this isn't only the case here because we've discussed it in the steering group. (…) The midwives have to protect themselves – they are very exposed I think" (Interview, KI)

Another felt reassured by the advice that had been given to the NLP steering group but commented:

" we've been very reassuring of what – I hope I don't live to regret it – all the way through, that if you fill it in properly you are – we've been reassured by people that a dot is fine and as long as you write on the front[13], it's fine and as long as you do this it's fine. As long as someone says it's okay, it's okay" (Interview, KI)

All the managers stressed the importance of midwives completing the NLP 'properly', and gave examples of poor NLP record keeping - e.g. ticking not signing the boxes, not using variance codes correctly. As a manager in Unit A cautioned, the NLP extends the usual boundaries of normality, thus it is

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[13] I.e. Add name and signature of midwife in attendance on front page of NLP

particularly important for midwives to follow the NLP protocols and document accurately:

"the most important thing is to follow the pathway because you're already giving women extra time to labour and therefore you can't afford to hinder or to stray away from the pathway - you can't afford not to call the doctor when they need to be called. The most important thing is that you use the pathway properly" (Interview B, Manager Unit A)

Differences were noted between Unit A and B, with Unit A managers expressing more positive views about the NLP than those in Unit B. These differing managerial responses are discussed in more detail in the next chapter (6.1.1 and 6.1.2).

5.1.3.2 Loss of midwifery narrative:
The loss of a midwifery narrative i.e. the story of the midwives' work - was considered problematic by some of the experienced midwives and managers. Practical concerns were identified, as well as more subtle implications for practice.

Pragmatically, the loss of this descriptive text meant that there was no detailed reminder of the experience to share with colleagues or reflect on in future:

Midwife 1: At handover, it's nice to look back on the previous person's notes and see what they've written and it gives you a better picture I think
Midwife 2: It's difficult if you haven't taken a handover from someone and then you try and look back at the notes (NLP) and it's just very clinical - there's no sort of emotion behind it. I find it quite cold (FG 6, E/F/G grade midwives, Unit B)

Midwife 1: I quite liked seeing that narrative flow - that sense of the woman's labour as a story.
Midwife 2: You'll often look back, won't you? when you are with somebody in labour and you've dug the notes out, have a quick look through and see what labour was like last time. As you say, you've got the story there and you can get some sense of how it was and what happened" (FG 1, G grade midwives, Unit A)

More subtle implications were also identified, with the suggestion that this could lead to midwifery work becoming increasingly invisible:

"I feel it has robbed midwives of their narrative, of writing down their story. If I were to modify it, it would be nice to include a story telling section, if midwives wanted to use it" (Interview J, F grade midwife Unit B)

Knowledge about the wide variations that exists within normal birth could also be lost. This is interesting given the current call for midwives to increase their knowledge base in relation to normal childbirth physiology (Downe 2004).

"Women who have normal births can have quite wide variances in their experiences, and I wonder if that doesn't need documenting?" (Interview F, Manager Unit B)

There was the potential for 'knock on' effects onto other record keeping. Some managers observed that midwives were beginning to document less than needed on the obstetric notes. Midwives with lengthy clinical experience also questioned what the long term effects of using pathways might be on new midwives. Would there be a tendency for over-reliance on the NLP, with a consequent lack of internalisation of practice knowledge?

"My concern is, it just gives you what you should be doing, and for people who are used to doing it like this, without it - would they then be able to remember? Is it taking you away from thinking about it? It could be problematic for new midwives coming in because they've got it and then if all of a sudden they haven't got it, will they forget what they should be doing?" (Interview L, G grade midwife Unit B)

Linked to this was the possibility for the NLP to begin to shape midwifery practice (Berg 1996). One experienced midwife noted how midwives may be constrained by the document, giving the example of shoulder dystocia: midwives know that they should be recording something, but because the pathway has no obvious place to record this information, it is omitted. These more subtle implications for midwifery practice are linked to concerns about the impact on clinical judgement, discussed in the next chapter.

5.1.3.3 Potential future difficulties for discussing birth experience with women
The loss of a detailed story to share with women, either in formal counselling or debriefing sessions, or in more informal postnatal encounters, was highlighted by some midwives. Although it was acknowledged that 'the woman's story' would still be through the eyes and words of the midwife, nevertheless it was felt that this could prove to be a significant loss:

"it's taken away the story of the woman's birth. There isn't a story for women to read afterwards. To debrief with women if they want to talk to you about it. (…) I encountered a woman asking if she could read the record of her labour and birth and there was nothing there to show her at all apart from tick boxes. Whereas a year before there would have been a narrative of her labour written by the midwife" (Interview J, F grade midwife Unit B)

"There's no indication that she's gone from somebody rubbing her back to a tens machine, to entonox, to using a warm bath. Because it's part of 'normal labour'. So all the variations within that, where a woman is screaming wanting something else and they say 'let's try a bath' - that's not documented. So a woman's perception of her labour is not indicated at all" (Interview F, Manager Unit B)

Summary:
As a new type of maternity care record, the NLP was the subject of some strongly expressed views. As we have seen, both midwives and their managers identified positive and negative aspects of using the NLP. It was the issue of 'documentation by exception' (or in the words of the participants, the 'tick box approach') that gave rise to the strongest feelings. Whilst some midwives felt that this was a 'user friendly' and time saving approach to record keeping, there was also considerable concern about the implications for litigation and practice.

5.2 Pathway as protocol for practice:
In the second part of this chapter, the way that the NLP was used as a protocol for midwifery practice is discussed. This issue generated extensive (and often heated) discussions with midwives, managers and doctors. There were three key themes identified within this data, which will be discussed in turn:
- the evidence base of the NLP
- time factors in NLP protocol
- inclusion and exclusion criteria

5.2.1 Evidence base:
Concerns regarding the quality of the NLP evidence base were expressed, especially by doctors. This was in relation both to the wider evidence that had been drawn on to create the NLP, and also in relation to the evidence base supporting the use of the NLP. The following view, questioning the scientific basis for the NLP, was typical of the doctors' responses:

"I'm unsure as to its status - is this an experiment, in which case has it got ethical committee permission? Has it got a control group for comparison? Has it been properly audited? It was intended to reduce intervention. Now as a hypothesis for having reduced intervention, it's perfectly fair and reasonable. But there's no evidence it actually does. You have to compare it with something else - and don't just say 'oh because we have read lots of books it's going to work', because it isn't necessarily" (Interview D, Doctor Unit A)

A few midwives also expressed similar concerns, and cautioned that the questionable quality of the evidence base, as they perceived it, did midwifery credibility no favours:

"It would be nice to have more and better evidence around some of the things that are part of it - because a lot of it when you look at it is 'level c' which is just usual practice. (FG 1, G grade midwives, Unit A)

"When the pathways and the reference list first went on the website, I looked at them but they seemed quite out of date and some of them didn't seem evidence based. Now I know a lot of practice isn't evidence based, but from what I could see the reference to the latent phase was actually a catalogue for educational equipment - it was a poster. Well if you want credibility you shouldn't be using posters as references and I think that started my negativity about it. (…) We have to get the obstetricians on side to use it and give it

credibility and if they looked at the references some of it was laughable. (…) If they are going to do it, please do it properly! (Interview S, Manager Unit B)

This critique was echoed by one of the key informants:

"Everyone felt that if we were going to use this (NLP), they have to be based on really good rigorous evidence, which should be available for everybody and we discussed in the group that that would happen. But I think as a group we never saw much evidence for that eventually. I haven't seen a lot of it, even though we constantly asked for it in the steering group" (Interview, KI).

However, in general it was notable that midwives appeared confident about the evidence base underpinning the NLP. The fact that the NLP was an evidence-based document was widely mentioned in their accounts, especially in relation to the perception that this provided 'back up' for a midwifery model of practice (see Chapter Six). The manager above is unusual: it was rare for midwives to have read any of the research evidence on which the NLP was based (unlike the doctors, many of whom had accessed and reviewed it).

The research evidence that had been used was questioned by doctors; for example, how this had been selected, how rigorous the review process had been, how the quality of the studies had been evaluated. In particular, the evidence that had been used to support the increase in time allowed for cervical dilatation was questioned:

"No good explanation was given as to how they got to the kind of evidence that they were using. (…) I've actually looked at the evidence and I think it's a bit scanty - it's not as strong as what X (member of steering group) says it is, in terms of how fast or not fast the labour should go. (…) My worry is that the description of what a normal labour is, is still not known completely. I think we're swapping one lot of vague-ish evidence for another lot of vague-ish evidence - and wait and see if anything goes wrong or not. We normally would like to see better evidence before a changeover." (Interview J, Doctor Unit B)

Some also thought that there should have been more effective piloting of the NLP before its widespread implementation, or that an experimental study should have been undertaken, to evaluate the clinical impact of the pathway. Again, it was mostly doctors who voiced this view:

"I think things should have been researched before they introduced it. You're implementing something without the basic research" (Interview M, Doctor Unit A)

*"I think that the pilot sites should have implemented it as a trial and then gone back to what they were doing, an evaluation made, difficulties with it changed and then re-implemented with more guidance. (They sent me) the original audits from the two pilot sites and at the time I said 'yeah but what's this telling us about the **use** of it?' (…) I wanted more proof that it was going to be beneficial." (Interview S, Manager Unit B)*

Two of the key informants, reflecting on the piloting process also observed that, in hindsight, a more rigorous evaluation should have been conducted:

"If I had the time to do it again differently, I would do my audit tool first and I would audit for a year before I implemented the pathway. Because the tragedy is that we haven't got good comparative data" (Interview KI)

"I felt that it should have been evaluated in some way, other than about just looking at if we were adhering to what it said. I really do feel that was a big error. Even if they'd just done the pilot for a period of time – something to go on. There just seems to be a belief that it's going to be effective and it's a bit evangelical really in that sense – that it's going to work and that's it! There can't be any faults with it (Interview KI)

5.2.2 Time factors: cervical dilatation rate:
As indicated above, the issue of key medical concern was the alteration in cervical dilatation rate. The NLP allows for a dilatation rate of half a centimetre per hour, as opposed to the previously accepted rate of one centimetre per hour[14]. Reactions to this change were strongly expressed, and there were clearly contrasting views from midwives and doctors, making this an important theme. In general, midwives thought that this increased time was positive, and doctors thought that it was negative.

The commonly held view of midwives was that the NLP *'gives women more time'* for *'nature to take its course'* thus avoiding the need for premature intervention[15]. Indeed, some midwives considered that the increased time 'allowed' for cervical dilation was the key difference that the NLP had made to their practice and to maternity care in general.

"that's the key difference - it does allow more time before you have to be thinking 'perhaps I should be informing somebody about this' " (FG 1, G Grade midwives Unit A)

"it gives me the confidence to give women more time" (Interview F, F Grade Midwife Unit B)

"If somebody's got an OP position, on the old style partogram where it was one centimetre an hour, you'd often run into problems. Whereas with this you give them the opportunity, if all else is well, to allow that baby to turn, to allow her to progress in her labour (…) It gives a lot more time to the labour which I think is beneficial" (FG 5, F/G grade midwives Unit B)

Implicit within these positive responses was the sense that the NLP had given midwives 'permission' to shift the parameters of acceptable labour progress. There is evidence from other studies (Hunter 2002, Stewart 2005) that

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[14] It should be noted that this change is congruent with more recent UK wide recommendations (NICE intrapartum guidelines, due for publication October 2007 http://www.nice.org.uk). Thus the concerns expressed by doctors in relation to the NLP may to have been allayed.
[15] It is interesting to note that, although midwives often described this change as "giving women more time", many then elaborated on this by describing the effect on their own work e.g. "it buys you more time" "gives you more time".

midwives have tended to 'bend the truth' when assessing cervical dilatation. (For example, by recording that a woman has a 'lip of cervix' rather than that the cervix is fully dilated, the midwife delays the 'official' onset of the second stage of labour). The justification is that this allows more time for normal physiological processes, although the covert nature of the activity has meant that what is accepted as 'normal progress' has remained unchallenged. The NLP thus serves an important function in removing the need for such subversive activity (what Kirkham describes as 'doing good by stealth' Kirkham 1999 p.736) and legitimising a more liberal approach to progress. As one very experienced midwife acknowledged, the NLP enabled her to be *"an honest practitioner" (Interview M, G grade midwife Unit B)*, noting that *"many midwives tell porkies (lies) about cervical dilations to protect their backs and protect their woman - and that (NLP) has had a big impact because you don't need to be dishonest" (Interview M, G grade midwife, Unit B).*

The doctors, however, had concerns about this change and its implications for clinical safety. As we have seen, they questioned the evidence base for this alteration. The general feeling was that the increased time allowed would be too long for some women's labours, so that necessary intervention would be delayed and safety compromised. Some experienced midwives also echoed these concerns.

"They have given too much time, so by the time you are asked for help it is too late" (Interview S, Doctor Unit A)

"The main problem for us is the time-lapse between VEs and they only have to progress half a centimetre an hour" (Interview J, Doctor Unit B)

"Four hours is a long time in utero if it's not right. That's a bit of a worry with the pathway" (Interview P, G grade midwife Unit A)

Midwife 1: I quite like it being half a centimetre - it's just that it's rather tentative to the evidence it's based on, you'd like perhaps to have a little bit more…
Midwife 2: meaty and substantial
Midwife 3: it's a bit woolly isn't it? (FG 3, G grade midwives Unit A)

In general, the managers did not comment specifically about the possible advantages and disadvantages of the increased parameters for cervical dilatation: however, they did caution that if women had to come 'off the pathway', midwives needed to act quickly as extra time for labour progress had already been given.

Linked to the concerns about increased dilatation time were concerns about the timing of vaginal examinations. The NLP protocol recommends that these need to be performed every four hours, whereas in many Welsh units two hourly vaginal examinations had previously become the norm. Four hours between examinations was thought by doctors (and some experienced midwives) to be too long, especially as it meant there would be more likelihood of a change of shift and hence a change of midwife undertaking the

examination. There were also concerns that, according to the NLP, the first vaginal examination did not need to take place until four hours after admission (previously it would have been customary to do this fairly soon after the woman had arrived in the maternity unit).

5.2.3 Inclusion/exclusion criteria:

The process of deciding which women can be cared for 'on the pathway' is determined with reference to specific inclusion and exclusion criteria. Midwives had mixed feelings about these criteria, with both benefits and limitations being identified. The issue was rarely mentioned by doctors (only in relation to the importance of appropriate selection of women to be cared for on the NLP). For the managers, the strictness of the criteria was regarded positively as an effective risk management tool.

Midwives described how using the NLP had made them think more carefully about what was normal and abnormal within labour. Rather than assuming that a woman was 'normal until proved otherwise', they now needed to weigh up the evidence at the beginning of the woman's care, in order to decide whether she met the NLP inclusion criteria:

" you've got to think more about what's normal and what's abnormal because it's created a greater distinction between the two" (Interview N, G grade midwife Unit A)

However, some experienced midwives expressed concerns that the NLP criteria were too strict. The result was that many women who would previously been classified as 'normal' could no longer be considered as low risk (e.g. those having a prostin induction, those with a slightly raised BMI). Midwives provided specific examples of these women:

"Like a gravida eight we had and she had all normal births and she didn't have a problem with any of them but because she was a grand multip she was automatically taken off the pathway - but there was no real reason why really she couldn't be normal pathway because we didn't do anything that we wouldn't have done" (Interview N, G grade midwife Unit A).

They questioned what the clinical impact on these women might be (e.g. they might now have electronic fetal monitoring during labour when this would not have happened previously). It was felt that a 'gray area' had been created, where women were not low risk enough to meet the inclusion criteria to be cared for on the NLP, but were also not 'high risk'. This problem was compounded when being on NLP or not determined the place of birth e.g. whether the woman could be cared for in the birth centre as in Unit B.

Midwife 1: you think 'why can't they be on the pathway?'
Midwife 2: Yes if the BMI is a bit raised or something
Midwife1: that's another piece of research, are there increased interventions in people who are not on the pathway - by labelling them?

Midwife 2: yes because they don't all need continuous monitoring. Is it changing people's practice 'oh she's not on the pathway, therefore we automatically monitor her' (FG 1, G grade midwives Unit A)

Some midwives observed that the strictness of criteria meant that the women who gave birth on the pathway were those who would have given birth normally anyway, thus the NLP would have little impact on their experience. The women who might benefit from the approach of the NLP (such as some of those in 'the gray area') were not eligible.

There was also the feeling that the strict normality/abnormality divide was too simplistic:

Midwife 1: There's grey areas aren't there? It (NLP) implies there's normal and there's abnormal, whereas the trouble - and the really interesting bit - about midwifery is that whole continuum - it doesn't divide that neatly does it? Midwife 2: Women don't always fit into the boxes do they? (FG 1, G grade midwives Unit A)

Experienced midwives commented that they would still use their clinical judgement in deciding when to commence or exit the pathway, and therefore at times they would override the criteria:

"There is a written list but basically if I am going out to see somebody then I use my own discretion. If I think that somebody should be on the pathway then I put them on the pathway. If I think they need to come off the pathway then I'll take them off" (Interview N, G grade midwife Unit A)

Finally, these concerns about the appropriateness of the NLP criteria led into more general concerns about the overall appropriateness of using a clinical pathway for childbirth. Interestingly, it was often the doctors who expressed these views, arguing for a more flexible approach to childbirth which might be more expected to be found in the accounts of midwives:

"Labour is not something to be so much dependent on the pathway because it doesn't follow the rules most of the time" (Interview S, Doctor Unit A)

"I believe labour is not a straight thing - nothing in life is a straight line I think" (Interview J, Doctor Unit B)

"If somebody's going to have a tonsillectomy then it's quite obvious that you'd have a straightforward pathway for that isn't it? But birth can be unpredictable" (Interview C, Manager Unit B)

"If you're caring for somebody who's had surgery and they have to go through a certain set routine and it reminds you of things you have to do (…) that would be fine, But labour isn't like that. It's not that kind of process is it? (…) I don't personally think you can see labour in that way. It's not a conveyer belt. It's not something that follows a strict pattern and you stick with it" (Interview KI)

5.3 Discussion and conclusion:
This chapter has considered how the NLP is used in practice, and in particular how it has changed the ways that care is recorded and delivered. There would appear to be many implications for the practice of midwives, which will also potentially impact onto the care that women receive. It is interesting to note that, although in some respects the NLP has increased the parameters of normality by increasing the time allowed for cervical dilatation, in other respects it has reduced the pool of women who can be considered to be in normal labour.

Chapter 6: The Impact of the pathway on midwives' ways of working

In this chapter, the key ways in which the NLP has impacted on the work of midwives will be considered. The data extracts used are mainly, although not exclusively, from clinical midwives and their managers. Important factors influencing the responses of participants were the length of their clinical experience and the clinical context in which they worked.

The impact of the NLP on midwives' ways of working was a major theme in the data. The clinical context of midwifery practice appeared to be a significant factor affecting this. In the two maternity units studied, there were important differences in how the NLP was used and interpreted, with adaptations being made to the NLP in one unit. These differences were confirmed during the Roadshow presentations: midwives from a variety of NHS Trusts described local differences in interpretation of the document and provided examples of some actual changes that had been made.

The adaptation of NLP at a local level is not surprising from a sociological perspective. Although from a policy makers' point of view, the aim is for uniform implementation and usage, there is evidence from social science research that grass roots workers frequently adapt policies 'on the ground' (Lipsky 1980). This lack of consistency makes any empirical comparison of the impact of a policy very difficult, especially if a quantitative approach is taken, as it is not possible to compare like with like. A key advantage of the policy ethnography approach used for this study is that it enables subtle differences in local interpretation to be illuminated.

The first section considers the impact of clinical context, elaborating on some of the issues discussed above. The key themes are then considered in turn:
- support for midwifery model of practice
- questioning of 'traditional practice'
- promotion of normality
- impact on clinical judgement (enhances or reduces)
- midwives' responses: resistance, adaptation and motivation

6.1: The impact of clinical context
During fieldwork, it became apparent that there were key differences between the two research sites in relation to their experiences of using the NLP.

6.1.1 Unit A
In Unit A, there had never been great expectations that the NLP would have a significant impact on midwifery practice or clinical outcomes. As described in Chapter Three, this unit already had a high level of midwife-led care (48% of women received this type of care during the period of data collection), a higher than average home birth rate (5.6 % in 2005 http://birthchoiceuk.com/Professionals/index/htm), and a 'normality approach' to maternity care. It was thought that the NLP could potentially have more impact in obstetric-led units, where midwives needed more support for a midwifery model of practice:

"We didn't think that it was going to make that much of a difference within this unit (...) We felt that for those women that were suitable to labour normally, we already did a lot of what was on the pathway. However, I think that the larger or more medicalised units across Wales really did think - or hope - that it would change the medicalisation of childbirth and that the pathway would allow them to be able to provide care without any intervention. But on this unit I don't think we were expecting it to make a huge difference and I really don't think it has" (Interview B, Manager Unit A)

Midwife 1: I don't think that for the most of us it's made a huge difference in the way we practice (Group agreement)
Midwife 2: I'm not certain that the outcomes have changed - if the section rates have gone down and our normal birth rates have gone up?
Facilitator: I think it's relatively the same isn't it? (Group agreement)
Midwife 2: I must admit that I would be surprised if it had made a difference because I think that the way that we practice midwifery and do normal birth is very similar to what's in the pathway (Group agreement) (FG 3, G grade midwives Unit A)

Particular features of the organisation of midwifery care in Unit A meant that certain aspects of the NLP format and design were not relevant or appropriate. For example, many midwives worked in community-based midwife led teams, providing continuity of care. This meant that they knew the women in their caseload well, and had discussed many issues relating to the birth during the pregnancy, particularly when devising the birth plan. Thus the recording of labour care discussions in Part 3 (i.e. during intrapartum care) was not appropriate.

They also were able to assess women at home during early labour. As we saw in the last chapter, this meant that there were practical difficulties in getting the Part 1 and 2 documents from the community to the labour ward. It could also prove problematic to transfer NLP records between team midwives (for example, if a midwife was going off duty for several days, or away on holiday). The result was that NLP records could end up in a variety of locations. Midwives described their preference for 'the white book', a previously used document that was held by the woman and kept in her home, and allowed for recording of antenatal, intrapartum and postnatal care.

Midwives in Unit A also criticised the focus and language of the NLP forms as being hospital related, rather than home related. Parts 1 & 2 were seen as being very much 'hospital labour ward' type forms, both in format and purpose (see also Chapter Five):

"They are probably more useful if they (women) are ringing into a labour ward, then somebody can go back and find this and see what was said to them last time, and what was happening to them. In our case it is often the same midwife who's talking to them. And this bit (on Part 3) 'offer refreshments' - well, who's offering who here? Yes, thank you, the tea and biscuits were lovely! (Group laughter)" (FG 1, G grade midwives Unit A)

This lack of appropriateness led to some midwives deciding not to complete these parts of the NLP, or completing the records in retrospect (and thus not conforming to the NLP aim of contemporaneous record keeping):

"Midwife 1: The Part I is the worst bit because when you are in a team you know your patients. You really know all the answers before and when you are woken in the night and you're answering the phone - it's writing it in retrospect really.
Midwife 2: I think it's good in some situations and for some it's not. I must say that Part 1 and Part 2, neither is very helpful to us in our situation. But maybe for doing phone calls at night on the ward, part I would be. (FG 3, G grade midwives, Unit A)

"In the community we never do Part 1 or Part 2 or otherwise we'd be filling them out till they come out of our ears" (Interview E, G grade midwife, Unit A)

Similar views to these were expressed in all the focus groups and interviews with community-based midwives in Unit A.

It was also the case that the demographic profile of Unit A midwife participants differed from that of midwives in Unit B. Unit A midwives tended to have much lengthier clinical experience (see Chapter Four, Table 4) and had greater levels of clinical responsibility (as defined by their clinical grade at the time). As we will see later in this chapter, midwives with lengthier clinical experience were more likely to express concerns that the NLP could reduce or constrain their clinical judgement. They were also more likely to appear resistant (or even hostile) to the introduction of the NLP.

It is of note that, despite the reservations expressed by the clinical midwives in Unit A, the managers were more positive than those in Unit B. In the interviews, they demonstrated better working knowledge of how to use the documentation , and indeed had used it themselves (managers in Unit A were more likely to be engaged in some clinical 'hands on' practice than those in Unit B). Their emphasis was on the need for 'proper use' by midwives, and on balance they considered it to be a beneficial innovation. The NLP was felt to be particularly useful for managers as it allowed for easy identification of the midwife responsible for care. As described in Chapter 4, Unit A had been one of the first sites in Wales to introduce the NLP and the midwifery managers seem to have approached this positively, putting energy and resources into implementation. There was a sense that the managers in this unit saw themselves as pioneers for the NLP, thus their enthusiasm and ongoing commitment is not surprising.

6.1.2 Unit B:
In contrast, Unit B had more to gain from introducing the NLP. This was partly because of what was described by midwife participants as the previous dominance of an obstetric-led model of maternity care there:

"When I first became a midwife I was working in (Unit B) and it was really hard. I spent all the time battling to be normal. Having to justify why you

weren't monitoring people. Actually this (NLP) would have made a big difference" (FG 4, F/G grade midwives Unit A)

It was also significant that the NLP had been introduced not long before the opening of a stand-alongside birth centre within the Unit (that is, a midwife-led area focusing on the care of low risk women in normal labour, with a philosophy of supporting physiological birth. The birth centre stood 'alongside' the obstetric unit i.e. in close proximity on the same hospital site). It was notable that two initiatives (introduction of NLP and opening of birth centre) tended to be discussed synonymously by participants. This required careful clarification during focus group and interview discussions.

This inter-relationship between NLP and birth centre also makes it difficult to attribute cause and effect in relation to any changes in clinical outcomes. Commenting on whether the NLP could increase normal birth rates, one manager in Unit B observed:

"Is it the pathway or is it the fact that the birth centre has been successful? It's too early yet to decide whether it is the pathway or whether it is just the fact that we have a facility that now facilitates normal birth. Which came first? The pathway or the birth centre? Well the pathway came first, but if it had been the other way round, would it have made any difference- and unfortunately, I don't know if we'll ever be able to know that answer" (Interview F Manager, Unit B)

There were many connections between the two initiatives. All the women in the birth centre were cared for on the NLP (although not all women on the NLP were always cared for in the birth centre). The criteria for admission onto the NLP were also the criteria for admission to the birth centre, thus in many ways the NLP supported the work of the birth centre. Many of the midwife participants in the study worked in the birth centre (eleven out of twenty participants) either as part of 'core birth centre team' or as part of a rota of cover provided by the community teams. The birth centre was viewed very positively by these midwives, and it was seen as an important development in strengthening midwifery and providing better quality of care for low risk women. In general, these midwives held positive views about the NLP, and these were often expressed at the same time as describing the benefits of the birth centre. The positive views about the NLP may therefore be at least partially linked to positive views about the birth centre, as the NLP is seen as facilitating its work and effectiveness.

In contrast, the Unit B managers were less likely than the clinical midwives to identify any benefits of using the NLP. They were also less positive about the NLP than the Unit A managers. In comparison with managers in Unit A, they had much more of an administrative role, and none seemed to have used NLP themselves. They were less knowledgeable about its use and more wary about the approach of 'documentation by exception'. As noted in Chapter 4, Unit B was also a 'late implementer', and there was less enthusiasm expressed by managers in relation to the initial implementation stage.

This observed difference between the two units may have many underlying causes. The differing implementation times may be of significance; fieldwork also showed that the workplace cultures differed, and differing managerial roles and styles were observed. It is interesting to note, however, that despite the enthusiasm of the managers in Unit A, in general the midwives there were more critical of the NLP than those in Unit B, and vice versa. Thus the attitude of managers did not appear to be as significant in rallying the enthusiasm of grass roots staff as might be expected. This contrasts with the findings of a recent study by Hollins Martin (2007), which demonstrated midwives' reluctance to challenge their managers, even when 'obedience' meant behaving in ways that conflicted with personal beliefs about correct actions.

What did appear to influence responses to the NLP was the level and type of clinical experience: Unit A midwives had longer clinical experience than those in Unit B and there were very few newly qualified staff. They were also used to working predominantly in a midwife-led care system, with higher levels of autonomy, and undertaking more midwife-led births than Unit B. There were many comments that the 'midwifery model' approach of the NLP was how they were working already in Unit A, so that there had been no change to their hands on practice.

6.2 Support for a midwifery model of practice - 'gives you the ok'.
Many midwives from both units described how they felt that the NLP had given them 'the okay' to work within a midwifery model of practice, i.e. anticipating a normal birth and encouraging normal physiology. This was a very common response, irrespective of length of clinical experience. Midwives explained that the NLP 'gave permission' for them to practice in this way:

"It's sort of given you permission to say 'I don't have to put her on the monitor. I haven't got to tell the doctor" (FG 1, G grade midwives Unit A)

Linked to this was a feeling of increased confidence in maintaining a 'normal' approach, especially in the face of opposing views (both from other midwives and doctors):

"It gives you the confidence to practice in the way that you've probably always practised but you have got the justification for it now, whereas maybe previously you were at the mercy of the co-ordinator on labour ward. (…) Now you think nothing of giving them a piece of toast and a drink when they are in the early stages of labour, whereas before you didn't have the permission to do it, you were doing it off your own back and doing it rather sneakily in case the people in charge saw you and didn't like it".(FG 5, F & G grade midwives Unit B)

However, some of the more experienced midwives qualified their comments by saying that they thought midwives should not need support of a pathway to enable them to practice in this way:

"Expected progress in labour and action - it's a pity they've had to put it down (in writing), because we midwives should know that really" (Interview L, G grade midwife, Unit B)
"It puts it in black and white and perhaps you shouldn't have to rely on something like that, but at that time I wasn't as confident or assertive as I am now" (Interview A, F grade midwife, Unit B)

This sense of support and enhanced confidence was thought to be especially important for newly qualified midwives:

"It supports those - especially newly qualified midwives - who believe in the normal. It supports them in saying 'right I'm actually doing as the NCP[16] says'. So I think the newly qualified, they will gain a lot from it. Frankly, it took me twenty odd years to work that way" (Interview E, Manager Unit A)

" I think it's helped me to have the confidence really to practice with the way I wanted to practice (…) it gives you a little bit more confidence to say 'this is what the normal pathway suggests and this woman falls into the normal pathway therefore this is what I am going to do." (FG 4, F/G grade midwives, Unit A: recently qualified midwife speaking)

However, even some highly experienced midwives 'admitted' that it had boosted their confidence. Even though they claimed that their actual practice had not altered, the NLP had increased their ability to practice 'honestly', rather than 'sneakily' as in the extract above:

"I realised that actually it was quite protective to the type of midwifery which I like to do, which is absolutely normal midwifery (…) It hasn't changed my practice, it's enhanced my practice. Because I can be an honest practitioner" (Interview M, G grade midwife, Unit B)

As discussed in Chapter Four, this lack of honesty was often in relation to documentation of cervical dilatation; the increased time allowed for labour progress was considered by experienced midwives to be a very significant feature of the NLP:

"It has sort of given midwives permission not to time labour in the way it was timed previously. (…) although I don't think that was the main purpose of the pathway, in some ways that's the biggest thing it's done for me is that the timing of labour is less rigid than it was" (Interview J, F grade midwife, Unit B)

"Because so many midwives tell porkies (lies) about cervical dilatation to protect their backs and to protect their woman and that's had a big impact because you don't actually need to be dishonest" (Interview M, G grade midwife, Unit B)

This sense of 'permission' was partly attributed to the perception that the NLP was evidence based:

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[16] Normal care pathway: an alternative term for NLP

Midwife 1: a good thing is that you've got it all written out and everything is referenced. And really if the woman is on the normal care pathway, there shouldn't be any medics coming in saying "what is she doing? Why are you doing ...?"
Midwife 2: yes, it's protection for us in a way isn't it? (..) I like using the pathway because it gives you a sense of greater autonomy'
(FG 2, F & G grade midwives, Unit A)

As discussed in the last chapter, it was common for midwives to assume that the quality of the evidence base underpinning the NLP was sound. Evidence based practice (EBP) has become something of a mantra within contemporary UK health care (Rolfe and Gardner 2005) and some midwives used the language of EBP to support their views. This was particularly true of midwives with less experience and those working in Unit B, the more medicalised unit:

"Midwife 1: it's backed by research which is really how midwifery should be practised, rather than that's how it's always been done blah blah
Midwife 2: It's written down and because it's coming from research, you've got all the references in front of you as to what type of research has been used and it sort of … just backs you up" (FG 5 F & G grade midwives, Unit B).

There are similar findings in the OPAL study (Spiby et al 2006) in relation to Part 1 of NLP. In this study, data were collected from midwives participating in two focus groups (n=25) and from questionnaires (n=6). In general, midwives thought Part One of the NLP supported their practice in relation to normal birth and increased their confidence, and the fact that the NLP was evidence based was central to these perceived benefits.

The sense of being given 'permission' was also linked to the fact that the NLP had legitimacy by being part of Welsh policy and thus had *"support from on high"*:

"Midwife 1: People in Wales are pretty proud of Welsh things.
Midwife 2: It makes it a bit more powerful (…) particularly if you are getting criticism from the doctors to be able to say 'This is an All Wales - this is not just some little quirk that we thought up here" (FG 1, G grade midwives Unit A)

This enhancement of midwives' confidence had been anticipated by those involved in devising and setting up the NLP:

"I really really believe that it's given them the confidence to say 'well the pathway – it's not what it says on the pathway". And because it's been introduced on All Wales level, they can't argue against that" (Interview KI)

The impression gained during fieldwork was that midwives had previously been tackling these issues as individuals, rather than as a professional group. They had often experienced difficulties when defending a normal midwifery

approach, and thus their tendency had been to 'do good by stealth' (Kirkham 1999 p 736) e.g. inaccurate recording of cervical dilatation in order to allow more time for labour progress. The NLP has an important function as it acts to legitimise a normal approach; this legitimacy is reinforced by the fact that has been 'rubber stamped' i.e. it is part of WAG policy and also because it is perceived as having a sound evidence base.

It is also interesting to note that for some midwives, the very existence of the NLP appeared to be enough to give a sense of 'back up'. When asked directly, many midwife participants found it difficult to articulate exactly how the NLP achieves this, suggesting that there is something almost 'talismanic' about the NLP:

Midwife: I think it's really good for us as team midwives because we don't intervene unless we really need to and we try and keep it as normal as possible anyway, but it does keep you more focused
Facilitator: Is that because of the evidence that's written down in there?
Midwife (doubtful tone): I don't think it's as much the evidence – as much as it's giving you the okay to do that. (….) You don't have to justify what you are doing because it is there. You know it's there to back you up" (Interview N, G grade midwife, Unit A)

The support that the NLP provides for a midwifery model was acknowledged by some doctors, who despite their other misgivings about the NLP, did comment that midwives appeared to feel *"more empowered" (Interview M, Doctor Unit A)* as a result of its use.

"What seems to be the purpose is to take the doctors out of normal delivery. Give the midwives more of a support system to keep the doctors out, so that they don't have to call us as fast as they had to do in the past. And I mean I do accept that doctors – when they are called, they do interfere!" (Interview J, Doctor, Unit B)

This reference to 'keeping the doctors out' suggests that the NLP has impacted on midwife/doctor territories. This certainly appeared to be the case, from the perspectives of both midwives and doctors. The combination of enhancing midwives' confidence in a midwifery model of practice, coupled with the other changes that the NLP has brought about in relation to changed parameters of normality and labour progress, were very likely to lead to a shift in power dynamics within maternity care. This was frequently expressed by midwives using war-like metaphors:

"It does give you a little bit of ammunition" (FG 2, F/G grade midwives, Unit A)

"It's ammunition against the doctors, which is an awful thing to say, but it has given you something, that you know from your evidence that you can support what you practice" (Interview N, G grade midwife Unit A)

The impact of the NLP on midwife/doctor relationships is discussed more fully in the next chapter.

6.3 Questioning of traditional practice

There was also evidence that using the NLP had led some midwives to adopt a more questioning approach to practice, in particular to what was described as 'traditional practice'. For example, midwives described thinking more about the appropriateness and timing of interventions such artificial rupture of membranes (ARM) and electronic fetal monitoring (CTG)[17], and also how to justify an intervention if it was carried out. They also reported undertaking fewer vaginal examinations and adopting a 'low tech' approach as the first option:

"Before if she hadn't made progress you would examine her again (…) break her waters, whereas with this you tell her to mobilise, eat something, so that perhaps the contractions will become a bit more - give her the energy to - before you break the waters." (Interview I, E grade midwife, Unit B)

"It requires you to think and justify - before you do something like an ARM or putting someone in the monitor" (FG 1, G grade midwives Unit A)

Whether actual practice had changed as a result of this questioning was less clear. Many of the experienced midwives made the point that the NLP had not changed their fundamental midwifery practice, although it had altered the amount of paperwork and time allowed for labour progress. The following accounts were typical:

"The documentation has changed. But the way you assess things, the way you make your decisions hasn't" (FG 2, F/G grade midwives Unit A)

"It doesn't affect my practice (….) I'd be doing exactly the same. I don't think it's changed my practice at all – but it does make you think" (Interview P, G grade midwife Unit A)

Some midwives also claimed that, although the NLP had not changed their own personal practice, it had changed the practice of other midwives (that is, those who were described as being 'more medicalised'):

"Some of us were practising very like that (the NLP), others not. (…) because you always get midwives in units who are not 'normal' midwives, and you've also got those who like obstetric interventions. So especially for some units where you've got the interventions, it makes you think before you do an intervention" (Interview E, Manager Unit A).

However, the potential for this to result in long term change was a matter of controversy, as in the following focus group discussion:

"Midwife 1: (to others in group) Do you think that this (NLP) will help midwives who do practice more medically and become more medically minded – do you think it's going to make a difference to their practice?

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[17] Especially the 'admissions CTG' i.e. a twenty minute electronic trace of fetal heart, traditionally carried out when a woman in labour is first admitted to the maternity unit.

Midwife 2: I think it's a piece of paper and a piece of paper is not going to make a blind bit of difference to people's practice. I think further education, training, support and experience in normal birth with other people to gain confidence is what's going to make a difference. To be honest" (FG 4, F/G grade midwives, Unit A)

6.4 Promotion of normality:

Linked to this questioning of practice, was the midwives' experience that the NLP promoted a normal approach to labour. It did this partly by encouraging the 'hands off' approach described above (i.e. no routine CTG or ARM, reduced number of VEs), which in turn reinforced "a belief in normal physiology": *" It's allowed me to believe a bit more in nature, rather than intervening all the time" (Interview I, E grade midwife, Unit B).* It also promoted normality by increasing the time allowed for cervical dilatation (as discussed in Chapter Five[18]).

The NLP focus on normality is significant as midwifery as a profession is defined by expertise in normal childbirth. The NLP clearly delineates midwifery territory, by identifying which women are appropriate for midwife led care, and by providing documentation that is exclusively for the use of midwives. Interestingly, as discussed in Chapter Five, the NLP has the potential to both expand and reduce the pool of women identified as 'normal'. Shifting the parameters of normality thus has territorial implications for both midwives and doctors.

6.5 Impact on clinical judgement

So far, the findings discussed in this chapter suggest that midwife participants were positive in their responses to the NLP. However, in discussions of the impact on clinical judgement and the potential future implications of this, midwives were much more divided. The impact on clinical judgement was a major category within this overall theme.

Opinions about the relationship between the NLP and clinical judgement appeared to be affected by length of clinical experience. The NLP was thought to be most beneficial for supporting the clinical judgement of more recently qualified midwives, from both the perspective of this particular group, and also from the perspective of midwives and doctors with lengthier experience.

In relation to the impact of the NLP on their own clinical judgement, however, midwives with lengthier clinical experience expressed more reservations. Some felt patronised by the 'prescriptive' nature of the NLP, whilst others described continuing to use their own clinical judgement to override the NLP on the basis of their experience. These reservations were echoed by the doctors, who emphasised the importance of midwives' clinical experience and ability to exercise clinical judgement, particularly given the unpredictability of childbirth.

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[18] Although, as also noted in Chapter Five, the strict inclusion criteria also has the effect of reducing the number of women who can be classified as 'normal'.

It was unclear how overt or covert the midwives' exercising of clinical judgement was. During fieldwork, several experienced midwives were observed performing an ARM (artificial rupture of the membranes) as a means of hastening progress when the first stage of labour that was slower than anticipated. Although this intervention was only one of the options available, and ranked last in the menu of options, these midwives made use of this strategy as an early rather than last resort. There was no apparent consulting of the NLP protocol and the impression gained from the observation was that this was the usual practice for that midwife, which she was comfortable with. This observation was mentioned during the subsequent interview, and each midwife justified the use of the ARM on the basis of her clinical judgment.

The differing views of midwives in relation to impact on clinical judgement are reflected in the Opal study (Spiby et al 2006), investigating Part One of the NLP. Similar contradictory responses were identified: some midwives expressed concerns about the potential for over rigid application of NLP and consequent reduction of clinical judgement, whilst others felt that it was a flexible framework that could be used to complement clinical decision making. As discussed in the literature review, it is common for professionals to cite concerns regarding reduced clinical judgement as a criticism of clinical pathways.

6.5.1 Enhances clinical judgement:
The accounts describing how the NLP enhanced the clinical judgement focused on more recently qualified midwives. It appeared to achieve this mainly by acting as a prompt:

"It gives guidance, especially to newly qualified midwives. And gives them the confidence to follow the NCP (…) As a back up – and gives them prompts as well" (FG 3, G grade midwives Unit A)

"You know what you are doing – if she's four centimetres and then four hours later she's still four centimetres, you know what you are doing, so you know you are going to get them up, you're going to mobilise them. You're going to try other things (…) you've got the algorithm to follow and it does make it a bit easier really, because you know that you can wait that little bit of time, to just give the woman the chance to sort of get on with it herself" (FG 6, E/F/G grade midwives, Unit B. Midwife with five years' experience speaking)

As implied in the account above, the algorithm in Part Three of the NLP provides structure and functions as a decision making tool, so that "you know what you are doing" and confidence in practice is increased.

More recently qualified midwives contrasted their responses to the NLP with those of their more experienced colleagues[19]:

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[19] This was particularly illuminating in the focus groups which comprised of participants with varying lengths of clinical experience, as in the extract which follows. Discussion in these groups enabled participants to clearly contrast their differing experiences.

"I think you are speaking as an experienced midwife and I think probably a lot of the midwives with that opinion are midwives who have a lot of time (experience), and I think perhaps it's not as easy for newly qualified midwives (…) What seems obvious to you might not be as obvious to a newly qualified midwife, so I think that it does help the newer midwives to get onto the keeping them normal. But I can see why you think it's undermining you – because it seems obvious to you, but I think it isn't so obvious to newer midwives" (FG 4, F/G grade midwives, Unit A. Midwife with less than 3 years' experience speaking)

"Midwife: You've got things in black and white, how we should be going. It's not taking away our autonomy, but it's giving us guidelines isn't it? (…) Somebody else may interpret it slightly different perhaps, if they've been qualified donkey's years. But with me, I have some clear guidelines to follow, but I've still got space within that. And if I've got a doctor telling me what to do, well my autonomy's completely gone isn't it?
Facilitator: But you've got this? (NLP)
Midwife: yes, even though someone's telling you, even though it's written, it's better for the woman, so I feel better for it". (Interview I, newly qualified E grade midwife Unit B)

The reference to midwives who have been *'qualified for donkey's years'* (i.e. a long time) who may *'interpret it slightly differently'* suggests that this is a subject of debate, and indeed, such debates were evident in the focus group discussions and fieldwork. This account is somewhat ambiguous in relation to the impact on clinical judgement: the NLP is acknowledged as being prescriptive, "having it in black and white'", whilst also claiming that autonomy can be maintained. However, it would also appear that the prescriptiveness of the NLP is considered acceptable, as what is being prescribed is seen as congruent with midwifery model: "It's better for the woman, so I feel better for it". (In fact, the inference is that the constraints imposed by the NLP are preferable to those that may be imposed by doctors).

Only one very newly qualified midwife (under one year since qualification) participated in the study. Another four had clinical experience of three years and under, and described themselves as being 'recently qualified'. Whilst they all described similar benefits to those in the account above, one also described how the NLP had brought its own pressures. In her experience, she had felt torn between two imperatives: complying with NLP versus complying with doctors' instructions. Unlike the more experienced midwives, any possible compromise of her own clinical judgement was not part of this dilemma, suggesting that this was still at a relatively embryonic stage of development:

"For someone who is only recently qualified and hasn't got a huge experience sometimes it can be a bit difficult. (…) where the doctor may say to you 'why have you done this, haven't you done this?' The audit form (on back of NLP) says 'why have you done this?' So you can be a little bit in the middle there, especially if you haven't got the experience. (..) It can get me in a bit of a position between perhaps the care pathway and the reg (registrar). Having to

justify because I'm trying to keep to my care pathway." (FG 2, F/G grade midwives Unit A).

An interesting account of using the NLP to enhance decision making at a home birth was provided by a midwife in Focus Group Six. The account emphasises the rationality of the NLP, and contrasts this with the perceived emotionality of the midwife, whose clinical judgement is thought to be potentially endangered by her desire to achieve a home birth. This account is therefore rather different than others; rather than focusing on the normalising potential of the NLP, this midwife values it as a risk management tool. Similar observations about the risk management potential of the NLP were made by some managers:

"I like using it (NLP) with a home birth, because you can become quite emotionally involved. We were at a home birth the other day and she had a prolonged second stage – you so want them to stay at home and deliver, and everything was fine, the obs (clinical observations) *were fine but you could see that the second stage was becoming prolonged (…) The pathway made you focus on what you **should** be doing and not what you wanted to do really. Your woman versus midwife sort of conflict and the emotional side of it. When you really wanted her to deliver naturally at home, but she's going outside the relevant markers and she does need to be transferred in. So some people might criticise that, and that might be a criticism of the pathway (…) but we had her doing everything and it was no go and she was happy to be transferred. But other community midwives might have done differently" (FG 6, E/F/G grade midwives, Unit B).*

The discussion continued, focusing on the 'other community midwives' alluded to, who might have continued care at home. The assumption was that the rational and standardised protocol of the NLP was preferable to the use of clinical judgement.

6.5.2 Reduces clinical judgement:
Both experienced midwives and doctors expressed concerns regarding the impact of the NLP on the use of clinical judgement, and many midwives raised this as an issue. These concerns were broadly related to a) the appropriateness of clinical pathways for professionals in general b) the appropriateness of clinical pathways for childbirth in particular. Specific concerns about the NLP focused on the labour algorithm (especially the cervical dilation rate and timing of VES), and the strict inclusion and exclusion criteria. Some participants also questioned the potential long term effects on the development of clinical judgement in less experienced practitioners.

Midwives:
A common criticism of the NLP was that it meant there was "no need to think for yourself". This was thought to lead to "robotic" care, and a reduction in use of creative or lateral thinking (referred to as "not thinking outside the box"). Being able to make decisions based on clinical judgement was considered integral to being a professional.

Timing of VES and the inclusion/exclusion pathway criteria were often given as examples of how the NLP may restrict use of clinical judgement:

"Midwife 1: I somehow feel that it almost stops you thinking for yourself. There may be a tendency to use it in a more prescriptive way and say 'I shouldn't examine this woman under four hours and I shouldn't do this and I shouldn't do that' (Group agreement). It just maybe takes away a little bit of your own common sense and your own way of caring for women in labour. It may just be used a bit prescriptively". (FG 2, F/G grade midwives Unit A)

"Midwife 1: She's forty one and her sixth baby – why can't you go on the normal care pathway?
Midwife 2: (…) it's that you can't use discretion
All: no
Midwife 2: or your knowledge
Midwife 3: In the end a robot could do it" (FG 1, G grade midwives, Unit A)

This reference to the 'robotic' tendency of the NLP was made in several interviews and focus groups, with one discussion questioning whether there was a hidden agenda in its use, as it could allow for care in labour to be carried out by someone less qualified than a midwife:

"Midwife 1: It makes me think that it could be done by somebody who is not necessarily a midwife. So where are we going with this? Like a maternity assistant
Facilitator: So it could be used by an untrained person or less skilled?
Midwife 1: some bits of it can be you know – it makes you wonder (FG 4, F/G grade midwives, Unit A)

There were also concerns about long term impact, in particular whether regular use of the NLP would lead to over-reliance:

"The only concern I've got is – it just gives you what you should be doing (…) and if they (midwives) had to revert to doing without this, would they be able to remember? Because it is all written down for you, what you should be asking. So is it taking away from you thinking about it, as a midwife? Whereas when you examined a woman, you would do it from top to toe, this is doing it for you so you don't have to think as much you know? It could be problematic for new midwives coming in because they've got it and then all of a sudden they haven't got it and will they forget what they should be doing? (…) Really their autonomy has been taken away from them a bit (Interview L, G grade midwife Unit B)

There was evidence that midwives experienced the NLP as challenging to their professionalism, with some expressing this view as a strong criticism, as in the third account below:

Midwife 1: We should be able to look after a woman normally without having to adhere to a bit of paper. (…) We should all be able to define what is normal and what isn't. So it goes against the grain a little bit to have somebody come

along and say 'well this is normal'. It just makes it feel as if midwives aren't trusted to be able to do it without a piece of paper to show them (…)
Midwife 2: I don't think professionals tolerate it (FG 4, F/G grade midwives Unit A)

"I've got to be honest, it's a bit too dictatorial for me. It's part of my job to remember when I'm speaking on the phone to a woman in early labour, what's relevant to that woman. (...) You don't need instructions telling you how labour progresses. Things like that should be part of your midwifery practice, rather than your memory needing to be jogged every time you care for a woman in labour" (Interview J , F grade midwife, Unit B)

"I find it a quite an insulting form really, it's like an idiots' guide to midwifery (…) You feel as if something's maybe been taken away from you" (Interview E, G grade midwife Unit A)

For these midwives, the NLP threatens professionalism by what is perceived as its prescriptiveness and failure to acknowledge midwives' existing knowledge. This knowledge may include a range of 'ways of knowing', as in the following account:

"I think it stifles us as a profession (…) I don't think having something as prescriptive as that is good for midwifery. I think that the only thing that is good is using good clinical experience, clinical skills and judgement, and being able to use your intuition and to be able to stand up and say 'that's what we're doing'. Because that's what I thought our skill is – our skill isn't reading a piece of paper and adhering to it and saying 'we've stuck to the rules', that's not practising anything. It's not doing anything for us." (Interview KI)

It appeared that these concerns resulted in many midwives continuing to use their clinical judgement as before, and disregarding the NLP protocols:

"I use my own discretion. If I think somebody should be on the pathway, then I put them on the pathway. If I think they need to come off the pathway then I'll take them off the pathway (Interview N, G grade midwife, Unit A)

"I do listen I quite frequently and if I've any doubt I do tend to put them on the monitor" (Interview M, G grade midwife, Unit A)

Managers:
In contrast to many of the experienced clinical midwives, the managers generally considered that the NLP should complement rather than replace personal clinical judgement, arguing that clinical judgement could still be used by midwives. This is the 'official view', stated on the front page of each Part of the NLP: "This clinical pathway has been developed by clinicians throughout Wales for 100% of women in normal labour. It is a guide and encourages clinical judgement to be used and documented".

The following accounts from one of the key informants and two managers involved illustrate this 'official view':

"It's a pathway and we can veer off it – and it's guidance. It's an evidence based framework – and an evidence based framework is just that – it gives you a framework within which to practice. (But) I think that some people are thinking 'this is what I've got to do'. (…) So there's a huge education for midwives and we need to keep on and keep on saying to midwives that 'the most important thing is your knowledge and your skills'. And you use them with the frameworks that are there – like the pathway" (Interview KI)

"People are sometimes using it too rigidly and not using their clinical judgement which is a shame. It's guidance and it's there to use your clinical judgement, but to guide you in that. I think some people feel their clinical judgement has been taken away from them because they think they've got to follow it in a rigid way" (Interview S, Manager Unit B)

"I know some midwives initially said that they felt it was more prescriptive in terms of it saying how they should manage the care. However, I think once they started to use it and realised that it was a pathway and that their clinical judgement was still a huge part of that decision making process then they felt more reassured about it. (…) It's about doing what you need to do at that given time and not what the pathway tells you to do. It does mean that - even more so - you need to think. You need to decide. You need to justify it (Interview B, Manager, Unit A)

The experienced clinical midwives, however, observed that, despite these reassurances, the NLP may have its own imperative, particularly for recently qualified midwives:

"People feel twitchy if they do anything that's not (according to NLP) – they feel like a bad midwife. If say, you get some instinct to listen to the FH a little bit more often. 'Well, why are you listening to that more than half an hourly?' People are afraid to do what they would do, in case it's not there (in NLP)' (Interview E, G grade midwife Unit B)*

Even midwives with lengthy clinical experience described occasions where they had complied with the NLP algorithm and protocol against their own judgement, or not complied and felt anxious about the consequences:

"Sometimes you've got to do an ARM to see what's happening. And you know with the pathway, it doesn't give you that choice so it may be restricting your way really. And I don't think you can have a hard and fast rule with midwifery, you've got to have an open space because every case is individual" (Interview P, G grade midwife, Unit A)
"Midwife: I think if it wasn't for the pathway I would have done an ARM a little bit earlier in fact.
Facilitator: So is it having an effect on your clinical judgement?
Midwife: yes (Interview M, G grade midwife, Unit A)

Interpretation of the NLP seems all important. Despite the managers' insistence that clinical judgement must still be used, this study suggests that

some clinical midwives feel constrained by its very presence. As Berg (1996, 1997) has observed, records are not neutral devices, but can impact on and alter working practices. The NLP appears to be much more than just a new type of paperwork, rather it brings with it expectations. For example, one of the managers noted how she had to encourage midwives to do ARMs when necessary, as they *'thought they shouldn't anymore'*:

"It sometimes makes them loathe to do anything. They say 'no, I can't do this' - 'well yes actually you can'. And that's what we have found, the ARM level, it did drop (…) and maybe to some extent it reduced it too much. Because there will always be a position for an ARM at some point with some women" (Interview E, Manager Unit A)

A member of the original steering group commented on the unexpected nature of this impact on clinical judgement:

"I found the complete opposite happened to what I thought. I thought that midwives would find it too prescriptive and say that 'I'm not prepared to do this' (...) but what they do is they follow it completely to the letter and don't use any clinical skills. (…) what we hoped was that the midwife would use their clinical judgement and think 'well you would expect to see something happening in terms of progress'. Not by doing a vaginal examination but just by looking at the woman, seeing what the contractions were like and (…) standing back and watching. But I found that hasn't happened. (…) Everyone says 'well the pathway says….I don't really think we intended that to happen. I think we hoped people would use the pathway in conjunction with their clinical experience' (Interview KI)

These hidden imperatives of the NLP were alluded to by other participants: For example, one midwife observed that it could lead midwives into a more task orientated approach, as they felt compelled to follow the logic and structure of the NLP:

"It's interpreted by some colleagues as being prescriptive –that it's ticked and timed and initialled, and that somebody feels they have to go through all of these, rather than it's something you can use partly – as appropriate. So if a woman comes in in advanced labour you might find some midwives feel they've got to go through all these bits (…) so they can tick the box and say they've done it". (Interview J, F grade midwife Unit B)

Managers were generally in agreement that, by acting as a guide for clinical judgement, the NLP was advantageous for risk management and optimising safe practice. However, one manager did express concerns about the potential for an increase in unsafe practice because of the 'extra leeway' NLP allows. Whilst this would not be a problem for competent midwives, she was concerned that for those who "get away with it by the skin of their teeth", the NLP could allow them to become even less vigilant in their care. Citing the example of such midwives not spotting that there was a problematic delay in progress which required intervention, she observed:

"That was always our fear at the beginning of the introduction of the pathway, that people wouldn't exercise outside of their box" (Interview C, Manager, Unit B).

Again, this alludes to the concern that the NLP may limit the development, or use of clinical judgement.

Doctors:
All the doctors expressed negative views about the effects of NLP use on clinical judgement. Their comments echoed those of the experienced midwives. In particular, they cautioned that because birth is unpredictable, the use of clinical judgement is imperative. They emphasised the need to keep a holistic view of birth, and draw on experiential knowledge:

"Protocols are protocols for normal guidance – they are not absolute" (Interview M, Doctor Unit A)

"The only strength is for those who are not very confident about their management part – it gives them a defined structure to follow, they can stand on it and walk the way it is taking. So it gives them a bit of support, but then at the same time, if they don't have a larger vision then they get too carried away and not see it properly. Labour is not something to be so dependent on the pathway, because it doesn't follow the rules most of the time" (Interview S, Doctor, Unit A)

Interestingly, they anticipated that the NLP could be useful as a guide for newly qualified midwives (although cautioning about the dangers of following the protocol too rigidly) and also that they would expect experienced midwives to use their clinical judgement to override NLP.

It was evident that midwives' clinical judgement was highly valued by these doctors, who were reliant on the midwives' skills and knowledge in assessing and monitoring women and thus 'gate keeping' the borders of normality and abnormality. The clinical judgement of the midwife also affects the work of the doctor (for example, by being called prematurely or unnecessarily, or conversely when a necessary intervention is overdue). Clinical judgement is thus an important factor in teamwork and good working relationships:

"I think a lot of consultants have a lot of reservation about so-called guidelines (…) especially I think with midwifery-led care, because one of the factors which will be very important is the experience of the midwife herself. Because at the end of the day, assessments are very clinical. (…) I think that's where the experience of a good midwife comes in. (…) A midwife who has a lot of experience, clinical experience will say 'ok, something's not okay. Something's dodgy. I'd better get her early', rather than waiting and waiting and prolonging labour hoping for a normal delivery. (Interview M, Doctor Unit A)

It is important however, to note that these accounts are underpinned by the overarching medical concern that a) the NLP has shifted the parameters of

normality (most particularly by increasing the time allowed for cervical dilatation) and b) the NLP has firmly established the model of 'midwife led care' and which women may be cared for using this approach . Thus their views about the impact of the NLP on clinical judgement are likely to be informed by these concerns, rather than reflecting concerns about clinical pathways per se. It may be that there would have been less concern expressed if the NLP protocol had represented a more medically managed approach, and followed more conventionally accepted protocols (for example, a cervical dilatation rate of 1 cm. per hour).

6.6 Midwives' responses: resistance, adaptation and motivation
Midwives' responses to the NLP varied. Midwives tended to be either positive or negative in their reactions, and a neutral voice was extremely rare. Some midwives described becoming 'converts', whilst others were more sceptical and resistant (and at times, even hostile).

Many experienced midwives described their initial reluctance to using the NLP, although, by the time of data collection it was evident that it had become increasingly integrated into usual practice and they had *"learnt to live with it" (FG 2, E/F/G grade midwives Unit A)*. However, this did not mean that the NLP had been universally welcomed or accepted, rather that any resistance tended to be covert, taking the form of adaptation or overriding the NLP, rather than overt challenge.

6.6.1 Resistance.
Resistance to the NLP was identified as coming mostly from midwives with longer clinical experience, on both sites. It was described by these midwives themselves, by their more junior colleagues and by the managers.

This resistance was related to many of the issues discussed in the earlier part of the chapter and in Chapter 5. To summarise, the reasons identified were:
- NLP being seen as prescriptive, impacting negatively on clinical judgement, not appropriate for professionals
- NLP requiring midwives to change their usual practice
- Concerns regarding lack of documentation and consequences for litigation
- Concerns regarding change in cervical dilatation time and the potential for delay in necessary intervention.

Midwives who were positive about the NLP tended to classify resistors as those with a more medicalised view of birth e.g. *"I do think that midwives are so entrenched in obstetric nursing that they're looking for reasons to take this woman off the pathway" (Interview M, G grade midwife Unit B)*. From this perspective the NLP is emblematic of a new kind of midwifery, whereby resistors are characterised as being the 'Old Guard', and supporters as being forward thinking:

"We have a lot of people who have been around a long time and they're the ones – they're like dinosaurs aren't they? They find it more difficult to – and are always looking for problems with it, whereas there are (…) maybe newer,

newly qualified or younger in years qualified and they are maybe thinking 'yeah, that's positive'." (FG 5, F/G grade midwives Unit B)

Overt resistance is made visible by the expression of critical attitudes to NLP: *"We do blame it a little bit – 'the pathway's rubbish"* (FG 2, E/F/G grade midwives Unit A) *"It's a totally tick box idiots' guide to midwifery (…) I write some sarky* (sarcastic) *things or leave it blank"* (Interview E, G grade midwife Unit A).

In general however, resistance was covert rather than overt, for example, looking for opportunities to take women off the pathway at the first opportunity, and adapting the NLP: *"I'm almost looking for a reason to come off it because I don't like it but I think that might be my own insecurity with it"* (FG 7, E & F grade midwives, Unit B)

6.6.2 Adaptation
Adaptation of the NLP was frequently described: *"you sort of improvise the pathway to show that you've done things"* (FG 6, E/F/G grade midwives Unit B). Adapting or overriding the pathway was often an expression of using clinical judgement, and sometimes appeared to operate as a form of covert resistance. The key forms that adaptation took were writing more than required by the NLP and non-completion.

Writing more than the expected 'documentation by exception' was frequently described. This was generally a response to the concerns expressed about the function of the NLP as a record of care, discussed in Chapter Five. A key example of this was the addition of a continuation sheet in Unit A expressly for this purpose[20]. "Writing more" was observed during fieldwork and was also described by managers and midwives. Midwives were aware that this practice *'goes against the pathway'* and that they were *'going back to the old way'* (FG7, E & F grade midwives, Unit B), observing that *"We are doing our own version of the pathway"* (FG 2, F/G grade midwives, Unit A).

Writing more than the NLP required was especially likely when there were 'grey areas':

"*Midwife 1: I still document a lot. If it's not normal, but not quite abnormal, but not enough to take them off the pathway, I will document then because I just can't remember everything otherwise (...) you improvise the pathway to show that you've done things".* (FG 6, E/ F/ G grade midwives, Unit A)

Some midwives also described adding a summary of the labour/birth at the end of Part 3, to give a précis of the 'story'.

Non-completion took the form of partial completion of NLP forms, not completing them in the intended way or total non-completion. As discussed at the beginning of the Chapter (6.1.1), this was especially noted by community based midwives in Unit A in relation to Parts 1 & 2 of the pathway.

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[20] In Unit A, a variance code was noted on Part 3 of NLP and free text was written onto continuation sheet to explain further.

6.6.2.1 Managers' responses in relation to adaptation:
These adaptations could prove problematic for managers, as they deviated from the expected NLP format. However, in Unit A, the idea of adding an additional sheet had actually been approved by the managers. These managers defended this alteration by justifying it in relation to the midwifery culture in that unit, and also claiming that this was only a minimal change, which did not divert from the underpinning philosophy. It was also evident that there could be benefits to management from the inclusion of this additional detail.

It was unclear where the idea of adding a continuation sheet had originated; the accounts were ambiguous, with mangers attributing it to the midwives, and midwives attributing it to the managers:

"The midwives shoved another piece of paper in there to add to it. Because they are like that here, if they want to write they will. (…) So we always encourage the midwives now that if things – if you are not happy with things, then please write it down, you can add the extra sheet. It doesn't make any difference but it does make it easier for us to look through later" (Interview E, Manager Unit A)

"Midwife I: They decided in the end not to use the variations and codes (…)
Midwife 2: They put a cross through here and then put a continuation sheet on the back instead.
Midwife 1: I think that they actually felt that was too much – trying to divide it up and that actually yes, they wanted to get that story there" (FG 1, G Grade midwives, Unit A)

In Unit B, there was no similar 'official' adaptation. However, one of the managers described being aware that midwives write more than 'they are meant to' (Interview S, Manager Unit B), and that she understood their reasons for doing this:

"There's a lot of people using the pathway but actually doing all their record keeping on continuation sheets because they feel more comfortable with that. And they say to me 'oh. Should I be doing that? And it'd very difficult to say –if that's what you feel comfortable with just do it. Because I think it's unfair to put so much stress on somebody that they – if all the stress is a bit of paperwork, does it matter? (Interview S, Manager Unit B)

6.6.3 Motivation
Midwives who were positive in their responses to the NLP expressed their motivation for 'staying on the pathway'. In these accounts, a sense of achievement when a woman gave birth 'on the pathway' appeared to be related more to the midwife's experience than to the experience of the woman:
" You want to stay on the pathway so you're looking at normality and you want to keep that even more because of the pathway – it's made it clearer and you feel better in yourself if you stay on and you get a normal birth and you think

'wow, we've done it'. And it's satisfaction. I don't think for the woman it makes any difference – but for us it is a big satisfaction if you stay on" (Interview P, G grade midwife Unit A)

"Midwife 1: Now there's an awful lot of women out there who don't think it's normal to be suffering in pain. And yet as soon as they say that they need an epidural, they come off the pathway because it's not normal. So (…) if you're looking at trying to keep women on the normal care pathway, you want this one to be on the normal care pathway and she says 'oh I want something for pain' – nobody is going to say 'no, no, no you don't want that' – when in actual fact, you do want that
Midwife 2: People say 'oh she's always coming off the pathway' – you know, is she a bad midwife or is she a midwife who listens to women when they say 'I want an epidural'? It's open to interpretation isn't it? Unless you are actually in the room (…)
Midwife 3: I think that there is an element of sometimes feeling that you've failed as a midwife if women end up with an epidural when they've got quite a lot of the way in their labour and you sort of feel sometimes…. I do just try to adjust my mind to that, but I think you sort of fail as a midwife when you haven't managed to keep them from all the technology" (FG 4, F/G grade midwives Unit A)

Some participants voiced concerns that motivation of this type could lead midwives to encourage normal birth at the expense of women's needs and requests:
"People could become so 'thing' that they just want to normalise without a thought of what the woman wants. I have seen cases where the woman wanted an epidural and she wasn't given it until fairly late on and she said to me ' all I heard was the midwife saying the pathway, the pathway' - the woman didn't know what the pathway was" (Interview C, Manager Unit B)

There was certainly evidence that some midwives were offering women less choice in how they were cared for as a result of the NLP:

"Midwife 1: I don't present that (type of fetal heart monitoring) as a choice to be made anymore. Rather, this is how it's normally done
Midwife 2: It's like it's being shifted over to midwife-led care. Initially it was a sort of choice, if you want to you can have midwife-led care, and now it's much more 'unless there's factors against it, this is what we are offering you (…)
Midwife 3: It's trying to get women away from what's clinical and what is more normal now isn't it? New mothers coming into the system will get used to the way we are doing things now and won't even think about it" (FG 1, G grade midwives, Unit A)

6.7 Discussion and conclusion:
The impact of the NLP on midwives' ways of working was multi-layered, and formed a significant part of the data. It was affected particularly by clinical context and length of clinical experience. As we have seen, midwives generally experienced the NLP as being supportive of a midwifery model of

practice and promoting a normalising approach to labour and birth. This was received positively, and was considered to be confidence boosting. However, the effect on midwives' clinical judgement was more contentious. The NLP was perceived by many midwife participants as being a constraint on clinical judgement, despite the reassurances of the NLP document itself and the advice of managers. Similar concerns have been identified by other professional groups in relation to clinical pathway use (see 2.6.1).

It was also interesting to note some paradoxes thrown up by the data. Although the NLP enables midwives to practice more 'honestly' in some ways (for example, they do not have to 'work the system' as they may have done in the past to promote normal birth), there is now a new form of covert resistance evident, as midwives adapt the NLP or find reasons to 'take women off it'. Thus the focus of midwifery resistance seems to have changed. Midwives' tendency to respond in covert ways to external authority has been noted elsewhere (Kirkham 1999). This study provides additional evidence of this aspect of midwifery culture, suggesting that it would be an fruitful area for further study and debate.

The findings in this theme were supported by the discussions following the Roadshow presentations, where it was evident once again that midwives were divided in their views about the pathway. These discussions also indicated that Unit A was not the only maternity unit to make local adaptations to the NLP, suggesting that any aim of the NLP in relation to standardisation has been relatively ineffective.

Chapter 7: The impact of the pathway on doctors

One of the aims of this study was to explore how the NLP may have impacted on the other key groups involved in maternity care i.e. doctors and mothers. As noted in the previous chapter, a significant amount of the research data was collected from midwives and their managers; this was appropriate, given that the NLP is used exclusively by midwives and is therefore most likely to affect their practice. However, the NLP will also potentially impact on mothers (who are on the receiving end of any change in midwifery practice) and doctors, who as the other professional group involved in maternity care, are inevitably affected by the scope and nature of what midwives do.

The number of doctors and mothers who participated in the study was relatively small in comparison with the number of midwife participants. Nevertheless, their accounts indicate that the NLP has impacted on both groups, and that there is much in their experiences that is worthy of further research.

The next two chapters consider how the NLP has affected these groups. Chapter 7 considers the impact of the NLP on doctors. Chapter 8 explores the impact on mothers (both from the perspective of the midwives, and the perspective of the mothers themselves) and the impact of the NLP on maternity care in Wales in general.

7.1 Doctors' experiences:
All the doctors who participated in the study appeared to have strong feelings about the NLP, and these were mostly negative. This was true of both study sites, indeed, it was interesting to note that, unlike the midwives, the views of doctors were remarkably similar in whichever clinical context they worked.

Doctors were keen to take part in the research, and sought out the research team to offer their views. In particular, their accounts reflected concerns regarding a perceived shift in existing midwife/ doctor territories as a result of the NLP. As discussed in the previous chapters, by identifying some women as appropriate for care solely by midwives, the NLP clearly demarcates these territories. What is significant (and new) here is that it is the midwives who have instigated this change and it is the individual midwife who decides which women are cared for 'on the pathway'. As the NLP is used exclusively by midwives, the midwife controls access to the client and her clinical records.

The NLP thus represents an essential and significant shift in power within Welsh maternity services. It also serves to illuminate the very differing perspectives of midwives and obstetricians in relation to maternity care, in particular the contrasting underpinning models of childbirth.

Analysis of the accounts of doctors indicated four key ways in which the NLP has impacted upon medical practice:
- feelings of exclusion
- role change
- safety concerns: delay in necessary intervention

- alterations in doctor-midwife relationships (underpinned by conflicting models of childbirth)

7.2 Feelings of exclusion:
Feelings of exclusion were a key feature of the doctors' accounts. This data was coded separately during data analysis, although it was noticeable that a sense of 'feeling excluded' permeated many of the other data categories. As seen in Chapter Four, exclusion was experienced during the early stages of the NLP planning and development, and continued as the NLP was implemented into maternity units throughout Wales. Exclusion was experienced primarily in relation a) limited knowledge about the clinical situation b) decreased involvement with low risk clients.

7.2.1 Limited knowledge about clinical situation:
As a midwifery document to support midwife led care, the NLP excludes doctors from information about and access to low risk clients and their care. The doctors expressed concerns that this resulted in them having very limited knowledge about the clinical situation. For example, they would have no information about an individual woman's progress, and this was considered especially problematic if the doctor was called in for advice by the midwife:

"I think it's better even if she's midwifery led care to be aware of what's going on because I don't like to work by crisis. (…) The patients who are not on the pathway - we are briefed what's going on, so we know because we are acting in control. (But) here's somebody who is still a patient on labour ward – in the same setting that we are dealing with, only you don't know anything about the patient until the patient runs into a problem" (Interview M, Doctor Unit A)

"If it's a midwifery led care it's fine and we don't go into the room. But at the same time we would like to be aware of what is going on, because at the end of the day, if things go wrong – you're stuck then (Interview S, Doctor Unit A)

They also expressed concerns that they had no overview of the overall 'workload' in the maternity unit, and that this was necessary for them to plan their working day. As one doctor explained, the whiteboard which is used to provide an overview of all clients being cared for in the labour ward (and which in the past would have provided details about the woman's parity, gestation, cervical dilatation and any other notable clinical features), now contained only the statement 'midwife led care' (MLC):

Doctor: Midwife led care means they (midwives) look after the patient A-Z, and we just come in if there's a problem. So basically you don't know anything what's going on with patient...
Interviewer: And do you think that's a problem?
Doctor: It is a problem (…) We only get called when we're paged. If I come to the board, nobody's going to tell me. I just read 'MLC'. So all this says is that it's midwife-led care. They won't tell me anything more than that. But I know if there's a problem, I've got to go in and it's like you are basically called in to bail out…. (Interview M, Doctor Unit A)

It was also the case that doctors were not included in decisions about whether women should commence care 'on the pathway' or whether they should 'exit the pathway'. They were thus highly reliant on the clinical judgement of midwives, as discussed in the last chapter. Some doctors expressed concern about whether the NLP inclusion /exclusion criteria were always applied appropriately, although most concerns were related to midwives' responses to slow progress in labour (discussed in 7.5):

"Doctor: I think they (midwives) should know the limit okay. This patient is fit, this patient is not fit. Even on the normal care pathway – when to stop. I think that's important
Interviewer: And that has been a problem sometimes has it?
Doctor: I think sometimes the problem is because of the assumption 'oh this is normal care pathway and this is the way I'm going to go'. That means that as much as possible the patient should deliver normally. They feel very very reluctant to call you and it's 'oh she's on the pathway and now it will be consultant doctor led'. And you get a feeling you are like a reluctant passenger coming on board". (Interview M, Doctor Unit A)

7.2.2 Decreased involvement with low risk clients:
There were also concerns that there was now no possibility of establishing a relationship with low risk clients; doctors described how in the past they would have 'popped their head around the door' just to make contact with the woman and her partner, in case they should get involved in her care at a later stage, but that this was no longer acceptable to the midwives:

"If you're only being called in at a time of crisis, your relationship with the patient is very different from what you had already – even if it was only saying 'good morning, how are you?' (…) So we are placed in a much more technical position, and not so much a human position I think. It's maybe all in my mind – but it is what I perceive is happening to us, and I've had other doctors feeling that as well and saying that to me" (Interview J, Doctor Unit B)

The exclusionary nature of the NLP was also noted by midwives. Although some acknowledged that this presented difficulties for the doctors, and indeed expressed sympathy for them, the need for medical exclusion appeared to be generally accepted as inevitable, given the nature of the NLP.

Midwife 1: When you call them, they are so cross because they feel they haven't known anything about this woman and now all of a sudden you expect them to come in and sort it out and they know absolutely nothing about her. (…) I think that's something they are struggling with. The fact that they are not needed or wanted and suddenly you're asking them to come in like the cavalry
Midwife 2: I can see it from their point of view
Midwife 1: Yes. They are at a little bit of a disadvantage I think sometimes, because they are not best pleased when they come in (FG 2, F/G grade midwives Unit A)

"The doctors are very critical of it (NLP) and from what I can pick up from them the biggest criticism is this cervical dilatation (…) I think they disagree with it, but having spoken to some of them, they're more frightened of it. They're frightened, it's a big change in thinking processes for them and maybe it would have helped if they were more involved in the implementation or development of it. (Interview S, Manager Unit B)

The midwives who were more empathetic to the doctors' altered situation emphasised the importance of continuing to work as a team:

"Midwife 1: The doctors get to know us and work alongside of us – not that it's us and them really, we work in a partnership (…)
Midwife 2: But on the other hand, it (NLP) can be – make it 'you and them', you know, 'us and them'. I mean we're quite a small unit and everybody knows everyone and so it's usually quite nice. You know, everybody would be trusting everybody, wouldn't they?"(FG 2 F/G grade midwives Unit A)

7.3 Role change:
As implied in the accounts of the doctors above, this exclusion from any involvement in the care of low risk women had led to a change in the medical role. Doctors frequently used phrases such as *'bailing out' 'coming in like the fire brigade'* to describe experiences that emphasised their instrumental function, in which it was their technical skills rather than their interpersonal skills that were required (As in Interview J above: *"So we are placed in a much more technical position, and not so much a human position I think. Interview J, Doctor Unit B).* It was felt that this had increased since the introduction of the NLP.

"Doctor: We don't get to see those women (on NLP)
Interviewer: And is that a problem for you – not seeing them?
Doctor: Well maybe in a way because a woman gets to see you at the point when she is stressed. She's been there so long and she knows something is wrong. So you don't get to see her in a friendly way, as the midwife has been there with her for so long and they have a relationship. You get to see her when you are supposed to do something, save the situation, and if you don't do that she will not be very happy" (Interview C, Doctor Unit B)

"There is a loss of that relationship (with women) and also the loss of being present with more normal deliveries. So I think that it's a poorer experience for us. (…) If you want doctors to be holistic practitioners, then you should give them a chance – we have been pushed into this technical area. (Interview J, Doctor Unit B)

During the Roadshow presentations, midwives often expressed surprise at these views. From the perspective of these midwives, doctors should expect this emphasis on technical skills and 'bailing out', given that midwives were the experts in normal childbirth and obstetricians the experts in abnormal childbirth. In general, the comments of these midwives concurred with views of the participating midwives i.e. that they did expect (or see the need for) the doctors to form 'friendly relationships' with low risk women.

The perceived role change was also problematic for some doctors as they were now less in control of their workload. The NLP meant that midwives were 'in charge' of low risk cases, and involved doctors only if they thought this to be necessary. Doctors had only minimal information about the low risk women who were being cared for in the maternity unit, and thus no longer had an overview of all cases. As noted, this represents a significant shift in power dynamics. It was evident in one interview that this role change had led to anxieties about possible future job security[21]:

"No matter what you say, I think you always need an obstetrician, because things can go haywire, and the concern we're raising is this sort of assumption that midwifery led care means we don't need obstetricians. That's a stronger feeling we are getting day by day. So some people are saying 'close some of the units. We don't need an obstetrician'. (Interview M, Doctor Unit A)

It is unclear how much the NLP has actually impacted on doctors' workload, as this information has not been collected. This study is able to provide insights only into doctors' perceptions of the changes. For example, some doctors noted that the introduction of the NLP had slightly reduced their workload (e.g. shortened word rounds, less involvement in 'routine' interventions) but also observed that it had concurrently increased other aspects of their workload, as a result of requests to 'bail out' at late stage:

"It's relieved my workload a little bit. I don't get the phone calls about VEs and syntocinon as much as before. But it has increased my workload when the problems come up and then we have to start picking up the pieces" (Interview D, Doctor Unit B)

Some doctors also raised concerns about the long term implications for doctors of having no exposure to normal birth. It was felt that this could decrease doctors' understanding of the physiology of normal birth, and reduce confidence in the achievability of normal birth for many women:

"Doctor: It is a problem for the doctors going into training without doing normal deliveries and going directly to the ventouse and forceps (…) the only normal deliveries somebody has had were as a student and I think that's actually insufficient (Interview C, Doctor Unit B)

Doctor: I think if you want doctors to be sensitive to normality, you've got to expose them to normality and not just show them abnormal things, and I think that's being lost because of this (NLP) (…) You don't show doctors normality and the range of normality by taking it completely away out of their hands. (Interview J, Doctor Unit B)

7.4 Safety concerns: delay in necessary intervention
Underpinning many of the negative comments in the doctors' accounts were fears about compromised clinical safety. This was a key concern for all doctors, in both sites, and was primarily related to the increased time allowed

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[21] This view was likely to be compounded by a Welsh Assembly Government Review of the Maternity Services that was taking place at around the time of data collection.

for cervical dilatation. These accounts emphasised the unpredictability and risk of birth and frequently expressed doctors' apprehension in terms of worry for the woman's wellbeing e.g. prolonged labours could lead to exhaustion, demoralisation, unnecessary pain, and associated pathologies:

"It (NLP) seems to allow for prolonged labour, which we know is a risk factor for postpartum haemorrhage and deep vein thrombosis, and it's not necessarily what women want – to be in labour for ever and ever. (Interview A, Doctor, Unit A)

"What if the midwife had given the toast at that point and given the woman another four hours? These hours are labour for her, so she's a woman who hasn't got an epidural, hasn't got major pain relief. So giving another four hours of labour that's not very good. (…) They get exhausted and the number of instrumental deliveries after that is increased of course" (Interview C, Doctor, Unit B)

These concerns are further compounded by other aspects of the NLP, for example, the reduced number of vaginal examinations and what is perceived to be a questionable evidence base for these changes:

"I've actually looked at the evidence and I think it's a bit scanty - it's not as strong as what X (member of steering group) says it is, in terms of how fast or not fast the labour should go. (…) I think we're swapping one lot of vague-ish evidence for another lot of vague-ish evidence - and wait and see if anything goes wrong or not. (…) To me the limitations are that there could be disasters that happen because we've gone to accepting these new limits which are not absolutely observed I think" (Interview J, Doctor Unit B)

"I think that the schedule of assessment in labour as four hourly introduces a number of problems. One of them is the physiology of the uterus – after a while it becomes fatigued. You can look at this in terms of the biochemistry of it and talk about what happens to calcium movements or ATP metabolites or anything else you want to (…) but in the end, it gets tired. Now if you're going to intervene (...) then you have to intervene while the thing's going to work. (...) So you're running late, you can't pick up deviations early and jump on them early" (Interview A, Doctor Unit A)

And of course, all these concerns will be further compounded by the feelings of exclusion from women's care previously described.

Concerns about delays in necessary intervention were not only expressed by the doctors. Some experienced midwives raised similar concerns i.e. that some women could be 'missed' as a result of the new emphasis on normality, especially when midwives did not use (or had not yet developed) clinical judgement and tacit knowledge.

"Most experienced midwives will argue that if a woman is going to take half a centimetre an hour in labour – to go from three centimetres to ten, there's a potential there of it being a fourteen hour labour and that's without the second

stage. (...) Even though the pathway says that's okay, but in practice you know there should maybe be some signals really triggering off – that if it's genuinely that long in the first stage, from established labour, then there is something underlying you know" (Interview J, F Grade midwife Unit B)

"Because of this allowing the half a centimetre per hour (…) I think that does allow the time for OP[22] positions to rotate and that sort of scenario (…) but I'm not sure women can actually cope with that. I think the midwife can – but I'm not sure that the women can (Interview F, Manager Unit B).

One doctor observed that whilst the NLP may benefit some women, who may be protected from unnecessary intervention, there are others who do need intervention and may have this delayed: *"Perhaps it has the ability to keep intervention away from the women who don't really need it. But there is a subgroup who **do** need intervention and there you are delaying it".* (Interview J, Doctor Unit B).

Differentiating between these two groups of women is crucial to good quality maternity care, and it is not known whether the NLP is an effective tool for assisting this assessment, or whether it creates new problems:
" I can remember when I was up on labour ward, a couple of cases were brought up because the slow progress was allowed to go on for such a long time without intervening and the outcome wasn't good" (FG 7 E/F grade midwives)

7.5 Alterations in doctor-midwife relationships: conflicting models of childbirth:
It was apparent from the accounts of both doctors and midwives that the NLP had led to alterations in doctor-midwife relationships, particularly as a result of a shift in power. Underpinning these accounts, very different models of childbirth were evident.

It was reported that there had been a decrease in team working. Previous positive experiences of working as a maternity unit team were described, particularly by the doctors. They appeared to have preferred to work in this way and valued this sense of cooperation:

"I don't believe that just no medical input is the best way because we work as a team. For me it is that 'no intervention unless it is necessary' (...) Too many caesareans is not nice. It is not one thing, it's the overall structure which includes midwives, doctors, junior staff and the whole team approach that is important, and at the moment the pathway involves only the midwives" (Interview S, Doctor Unit A)

It was interesting to note that for some doctors, it was clearly problematic to have women in the unit for whom they had no clinical responsibility. Two

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[22] Occipito-posterior position of the fetus, commonly associated with prolonged labour.

doctors mentioned that if women were 'on the pathway' they should be cared for in a different setting e.g. birth centre or at home:

"If the hospital has a birth centre, I think women on normal pathway should only be there. They should not come to labour ward" (Interview C, Doctor Unit B)

"If you are going to specifically bring the patient to the hospital, I think we've got to know what's going. Otherwise, my question is 'why bring them to hospital? If you are sure of everything going fine, why not deliver at home?' (Interview M, Doctor Unit A)

Many of the doctors described how the NLP had resulted in midwives becoming 'territorial': *"Often when we are doing ward rounds we're told that one's on the pathway, that one's not on the pathway, you're not going in there. I mean it's not rigid but it is a bit territorial" (Interview J, Doctor Unit B)*

"It's become really a defensive – you know 'it's my territory' 'this is my territory, this is my patient and I'll call you if we have any problems'. (Interview M, Doctor Unit A)

The midwives' accounts indicated that many midwives acknowledged this territorial behaviour, but they considered this to be necessary in order for them to firmly establish a midwifery model of care, aimed at promoting physiological birth:

"I think it does sort of put a little tag on that woman as a way of saying, 'leave her alone'. Which I think some doctors respect and some don't" (FG 1, G grade Midwives Unit A)

"They do their rounds on labour ward and you tell them 'oh we are okay in here. She is on the normal care pathway and progressing fine'. So they are okay with that then – or you'll have 'oh! You won't be on the normal care pathway for very long!' (FG 2, F/G grade midwives, Unit A)

"Manager: The problem is the obstetricians and it will always be a problem. We are lucky that we don't have that much interference within midwife-led care down here. I know a lot of places have a lot of problems with obstetricians. (…) I just encourage the midwives to say 'hang on a minute, this is the normal care pathway, there's no reason to be involved'.
Interviewer: I wondered what it was like when you get new doctors that come in, who may not be used to that way of working?
Manager: It just takes time really. It's training them- the midwives rule! (laughter) (Interview E, Manager, Unit A).

As implied in these accounts, the territories of midwives and doctors are underpinned by very different approaches to childbirth. In particular, there are core differences in how best to interpret and respond to the uncertainties of birth. Attitudes to childbirth are inextricably tied up its unpredictability. Hence the medical model emphasises potential risk and thus the need for medical

involvement (entailing monitoring, management and possible intervention). In contrast, the midwifery model (represented by NLP), works from the premise that all will go well until shown otherwise, and that women need to be protected from the medical gaze to facilitate normal physiology. These differing (and usually conflicting) approaches can be summed up as: "Birth is risky, and can only be said to be normal in retrospect" (doctors) versus "Birth is by nature uncertain, but normality is anticipated" (midwives). From a medical perspective, the midwifery approach is potentially very risky, whilst from a midwifery perspective, the medical model is risky.

These conflicting approaches are clearly evident in the following accounts, in which two different belief systems are presented. The doctors emphasise the dangerous nature of birth, and the importance of their medical knowledge; the midwives express their confidence in normal physiology and midwifery knowledge:

"From a medical point of view, their perspective will be different from the midwifery issues. Because our attitude towards labour is different – because our approach is different. And although we overlap in a common area, but we still find that our approach is totally different. And sometimes I feel that (…) they (midwives) are trying to find the answer to a question that as a medical person we already have an insight to that answer" (Interview S, Doctor Unit A)

" From what I understand, a normal care pathway means that this patient is presumed absolutely normal and will have absolutely normal labour, which I have a big reservation about because in labour, even if the patient had no problems before, you never know until the patient is delivered and the placenta is out. (…) I'm getting worried because people are pushing so much to this direction, assuming that everything is absolutely normal and we don't need an obstetrician – 'she's midwife led care, we don't need you. We'll call you when we need you'. I think there's a lack of common sense – you see the problem with obstetrics is that some of them are very, very dicey and dangerous. (…) Although the patient is okay at the moment then things can go pear shaped any time" (Interview M, Doctor Unit A)

From the midwives' perspective:

Midwife 1: The doctors are coming at it from the other side and are always thinking in terms of what goes wrong (sighs). They are more worried about missing things, than about the effect on all women that you classified as borderline or abnormal
Midwife 2: That's been a big uphill struggle, especially with the GPs, to convince them that some women can deliver normally, that they can deliver at home – I think that doctors are slowly coming round but that they have a long way to go" (FG1, G grade midwives unit A)

"They (doctors) want the women to have ARM and be monitored. (…) They just don't have that belief in normal physiology. It's sad to me, they just cannot believe that women will get on and do it themselves if you give them a chance to do it. (…) They've got to be seen to be doing things. They get their hand in,

rather than say 'hang on a minute, just step back. Let her be given a bit longer' (Interview E, Manager Unit A)

"It takes a lot for the midwives to challenge the doctors because they are assumed to have the greater knowledge. But when it's normal it's our field and that's where our strengths lie". (FG 5, F/G grade midwives Unit B)

7.6 Discussion and conclusion

From the perspectives of the doctors who participated in the study, the NLP has resulted in role change (including decreased knowledge of the clinical situation and decreased contact with low risk women), and concerns about clinical safety, particularly in relation to potential delay in necessary interventions. Feelings of exclusion were apparent in all of the accounts, whether these reflected a perceived exclusion from the initial NLP planning process, or exclusion from the day to day management of low risk labours.

The NLP has also altered the power dynamics of doctor-midwife relationships. In doing so, it has highlighted the contested territories of maternity care, and made explicit the conflicting models of childbirth.

The NLP increases midwifery autonomy. It is midwives who decide which women are cared for 'on the pathway', and who transfer to obstetric care if they deem it appropriate. This is a fundamental change to the traditional order, whereby obstetricians have taken overall responsibility for maternity care, and decided which women are appropriate (i.e. at a low enough obstetric risk) for midwifery care. It should be noted however, that this is a comparatively recent situation: until the mid 20th century the territories of midwives and doctors were relatively distinct, based on a relatively clear divide between 'normality' and 'abnormality'. Midwives cared for all 'normal' pregnancies and births, calling for medical assistance if they considered this to be necessary (Leap and Hunter 1993). As Arney (1982 p.26) explains, it was the introduction of scientific obstetrics and its potential for surveillance and intervention that shifted interpretations of normality and abnormality:

"What is important is that the concepts of "normal" and "abnormal" took on a new relationship to one another. No longer was there a clear demarcation between the two; a gray area had been created that was capable of taking on added dimensionality. A machine is not "normal" or "abnormal"; it is either "effective" or "ineffective". (…) With a new metaphor informing childbirth, one could "do well" or "do poorly". Rationalism freed birth from the constraints of nature and opened it to improvement, and the boundary between normal and abnormal births became a matter for dispute and contention".

The creation of this 'gray area' meant that it was considered appropriate for all pregnancies to come under the jurisdiction of the obstetrician, with inevitable consequences for the role of the midwife.

The impact of the NLP on the power dynamics of doctor-midwife relationships was widely acknowledged by participants. As one of the key informants observed: *"while midwives are rejoicing, there's concerns from other*

disciplines. As this consultant said to me 'I and my colleagues are worried about losing control – she was very open about it." (Interview, KI). It was evident that many of the participants were acutely aware of these tensions, which had led to difficulties in working relationships. However, although for the midwives this appeared to be consistent with their general experiences of a 'midwife-doctor divide' (i.e. one that had been in existence long before the introduction of the NLP), this appeared to have come as more of a surprise to their medical colleagues (perhaps because it was their authority that was being challenged).

This was particularly the case in Unit A, where the impression received was that relationships had been relatively harmonious and the doctors had been *'really good at allowing the midwives to manage normal labour anyway'.* This manager reported that the NLP had *'put some doubts in their minds and it made them really think about - were they going to lose that control? ' (Interview B Manager Unit A).* It is acknowledged that the numbers of participating doctors were small. However, similar difficulties in midwife-doctor relationships in other maternity units were reported during the Roadshow discussions, and at times the very tensions reported in the data were apparent in the interactions between members of the audience.

This negative impact of the NLP on working relationships is worrying. The importance of effective communication and good relationships between doctors and midwives has been identified in recent maternity care reports. The absence of these is identified as a key factor in situations where there has been failure to deliver effective and safe maternity care (for example, in the investigation into maternal deaths at Northwick Park Hospital conducted by the Healthcare Commission 2006). Thus it is imperative that midwives and doctors tackle any tensions that have arisen as a result of the NLP implementation as a matter of urgency.

Given that both midwives and doctors are the key professionals in maternity care, and thus should be expected to share responsibility for the quality of the maternity services, it is very important that they are both involved in any changes made to maternity care. It is naïve to think that the practice and experiences of one professional group will not impact on the practice and experiences of the other. This is even more the case, given the longstanding territorial divisions between the two groups, often referred to as 'turf wars', which can be traced historically (Arney 1982, Donnison 1977, Witz 1992).

This is even more imperative, given that the key aim of the NLP was to reduce unnecessary intervention in childbirth. As this is presumably of concern to all involved in the provision of maternity services, it would seem to be essential to tackle this problem collaboratively. It is interesting to note that, in other studies of clinical pathways, there is an emphasis on multi-professional working, partnership and inclusion, which is thought to be beneficial (if not essential) for effective planning and implementation of pathways. For example, Jones et al (1999) refer to a 'rebellion' of doctors in the initial pilot of a maternity care pathway. The doctors refused to use the pathway documentation; this was tackled by additional discussions to identify their

prime concerns and to 'get the doctors on board'. The pathway was eventually redesigned so that the physician's records were embedded into the pathway, and the pathway could be used 'by all disciplines in the care of the maternal and infant patients' (Jones et al 1999 p10).

Indeed, the literature reviewed suggests that enhanced inter-professional working is one of the primary benefits of developing clinical pathways, and it is disappointing that, at the time of data collection at least, this does not seem to have been achieved in the case of the Welsh NLP.

Chapter 8: The impact of the pathway on mothers and maternity care in Wales

This chapter begins by exploring the impact of the NLP on mothers. This is considered both from the perspective of the midwives (i.e. how the midwives think that the NLP has impacted on mothers), and the perspective of the mothers themselves. The second section considers participants' perceptions of the NLP impact on the broader picture of maternity care in Wales.

8.1 Impact of NLP on mothers (from midwives' perspective):
Discussion of how the NLP may have affected women's experiences tended to be embedded within other discussions. The primary focus of midwives' accounts was the impact of the NLP on their own working practices, and there was limited discussion of the impact on women, unless this was specifically raised by the interviewer. This may be an artefact of the research design; however it is also likely to be linked to the finding that the dominant view of midwives was that the NLP was of relevance only to them. Most of the participating midwives did not inform women about the NLP and gave the impression that they did not think that this was necessary.

The exception to this was the NLP antenatal leaflet, designed to explain to women what early labour is and how best to manage it (see Chapter 1: 1.2.4). However, the impression received was that this was treated as a stand alone leaflet, and generally was not discussed in relation to the other parts of the NLP. There was no evidence that midwives had discussed the underpinning philosophy of the NLP to women, or that they had explained its role within Welsh maternity policy.

Some midwives (particularly in Unit A) described giving the leaflet to women during pregnancy, and were positive in their evaluations of its usefulness. It was thought to be especially beneficial for women and their families in helping them to understand the latent phase of labour, and when it was appropriate to go into hospital i.e. not too early. This view was reiterated by the mothers: those who had seen the leaflet liked it and had referred to it.

"It's given them some advice and I have found that women are not ringing you quite so early (group agreement). Because when we do their birth plan, we go through it and explain it all to them, so they're a little bit more confident then that when they get their first pain or whatever that this might not be labour – so let's wait a little bit. I'm not saying all women but some women – so it's helped them in that way" (FG 1, G grade midwives Unit A)

"I always explain it to them and give them that (the leaflet) – the important bit about the latent phase isn't it? And explain that they can be uncomfortable and often it feels like they're in labour but they are not really, but it just stops them coming in too soon and I find that (the leaflet) really helps because it tells them what to do and when active labour is actually happening. So that's good for them as a reference. Yes, I like that, I use that a lot. (FG 6, E/F/G grade midwives Unit B)

The leaflet was used differently in the two sites. Unit A had inserted it into the woman's pregnancy record, thus the leaflet was available to all women in that area. In Unit B however, it seemed to be distributed only to some women. Not all women interviewed had seen the leaflet, and not all midwives in Unit B knew about the existence of the leaflet.

A few midwives mentioned using the main NLP documents (i.e. Parts 1, 2 & 3) with women to explain labour progress and care, however this was rare[23]:

" We say (…) because you are on this, we'll give you another two hours, but what we recommend you do – do this, and this is the reason why and they normally accept that" (Interview I, E grade Midwife, Unit B)

"Facilitator: And do women know that they are on the pathway?
Midwife 1: probably not, no
Midwife 2: well that's interesting (…) because the women that I've looked after, I have discussed it with them and I wouldn't have thought they wouldn't have known! (…)
Midwife 3: I think as long as it is something that perhaps isn't going to directly affect them (…) they're not kind of in that zone to want all that detail (…) it just sounds like a bit more confusing. I suppose as long as they get whatever they want, they wouldn't really need to know. It wouldn't have made much difference to their understanding of what was going on, as long as they got what they wanted" (FG 5, F/G grade midwives, Unit B)

The lack of explanation of the NLP by midwives to women is surprising, given the aims of the NLP and the different approach to labour and birth that it represents.

The main ways in which the NLP was thought to impact on women's experiences related to a) decreased admissions in early labour b) midwife/women relationships and c) the normalising approach of the NLP (in particular, giving women more time to progress in labour).

8.1.1 Decreased admissions in early labour:
As noted, one of the benefits of the antenatal leaflet was identified as its aim of encouraging women to stay at home until labour was well established. From the midwife's perspective, this was further supported by Parts 1 & 2 of the NLP, which provide guidance for the midwife in assessing and advising the woman.

Most midwives thought that remaining at home for as long as possible was of benefit to women, as it meant that they would establish labour more effectively in the relaxed surroundings of their own home, and also because they would be less likely to receive interventions such as augmentation of labour. Their perception was that admissions in early labour had decreased

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[23] It is interesting to note that one of the doctors from Unit A expressed concerns that women who knew that they were 'on the pathway' might have unrealistic exceptions of achieving a normal birth. However, given this evidence, this fear would seem to be unfounded.

as a result. The following extracts suggest that this had been achieved by a combination of the advice in the leaflet and explicit advice from the midwife:

"Midwife 1: By giving them information in the parentcraft classes about the normal care pathway (leaflet) I think it has kept them...
Midwife 2: It has kept more out, yes
Midwife 3: It keeps a lot of them at home until….
Midwife 1: and (when they come in) we do give them the option of going home again and we often send women home. Last week I sent somebody home and she stayed about three hours and came back at midnight and had her baby at three in the morning. So she did go home for several hours and I think she felt better for it. (Group agreement)" (FG 3, G grade midwives Unit A)

"Midwife 1: I think it's cut that out (admissions in early labour) because we used to have loads of people on the ward that should have gone home and would be there overnight and they would have stopped doing anything and by the morning they would be fast asleep coochie byes (…) I tell all mine that – unless you're absolutely creased over in agony and something's happening, you're going home. End of story. If you're not in labour, you know – they've got to understand, haven't they, that different parts of labour are different" (FG 6, E/F/G midwives Unit B)

The first data extract suggests a rather ambiguous approach, which seems to, on the one hand, promote user choice whilst continuing to operate in a paternalistic manner: *"we do give them the option of going home again and we often send women home".* This paternalism, and what appears to be a rather unsympathetic approach by the midwife in the second extract, should be borne in mind when considering some women's descriptions of their experiences in early labour, discussed in section 8.2.2.

However, not all midwives were so authoritarian in their style. Some noted that women still needed support and reassurance in the latent phase. Another member of the previous focus group softened Midwife One's approach, saying:

"Midwife 2: I always tell the women (…) we will support you during this latent phase and (…) we understand that you need the reassurance at this time but we will be encouraging you to stay at home" (FG 6, E/F/G midwives Unit B)

This decrease in admissions was also of benefit to the managers of maternity services: *"I think the strength is that if you fill out Part One properly and you give the woman advice, hopefully we are preventing unnecessary admissions. And the strength of Part Two is once you have assessed the woman, if she's not in established labour, hopefully she can go home. So hopefully we have prevented unnecessary admissions. We don't have the early labourers on the ward anymore. We still have the odd one because we know that there are women that have prolonged latent phases, but we don't get the amount of admissions we used to have with women contracting one in ten and not wanting to go home" (Interview F, Manager Unit B)*

The system in the two maternity units differed. Unit A, with its system of community based midwife led care teams, was able to provide telephone advice to women from one of their team midwives i.e. a midwife who was familiar to them. It was also possible for them to visit women at home in early labour and assess them there. Unit B had no opportunities for home visiting. Unless booked for a home birth, women would phone the maternity unit and speak either to a midwife in the birth centre or in the labour ward. It was very unlikely that they would have met one of these midwives previously. These contextual differences may explain some of the early labour experiences of mothers, discussed in 8.2.2.

8.1.2 Midwife/woman relationships
As discussed in Chapter Five, most midwives expressed the view that the NLP allows them to spend more time with women, because there is less paperwork. Thus, from the midwives' perspective, there was a positive knock-on effect on the quality of their relationships with women. The following accounts were typical:

"Midwife 1: It doesn't change your practice regarding what you're going to do, but in another way you have more time to chat to the couple or the woman because you are not documenting everything
Midwife 2: It's quite nice at the beginning if you know they are on the normal care pathway, you're not bogged down by lots of paperwork to start with, and that's nice because you can build a good sort of rapport can't you?" (FG 2 F/G grade midwives, Unit A)

"It means that we spend more time with the women and I think that's – at the end of the day – is the most important thing. That's why I wanted to become a midwife, not to do paperwork' (Interview I, E grade midwife, Unit B)

" I feel that before you tended to write reams and reams and perhaps that took you away from caring for the mother – you'd got your nose in the notes writing away there. (Now) you are not sort of concentrating so much on what you are writing down but you're more involved with the person that you are looking after - which is how it should be really". (FG 3, G grade midwives, Unit A)

It was difficult to ascertain from the observational fieldwork whether midwives were actually spending more time with women (and there was no pre-NLP data to compare this with). The fieldwork observations recorded that midwives were often out of the room, carrying out other tasks (e.g. making phone calls, arranging discharges, obtaining equipment and supplies) or caring for other women.

It was also interesting to note that, when the midwives in Unit A discussed the quality of their relationships with mothers, this generally focused on the importance of 'knowing the woman'. As most of the midwife participants worked in the midwife led care teams (16 out of the total 21 midwife participants), 'knowing the woman' was a familiar experience for them. During the focus group discussions, it was necessary for the facilitator to explore whether the good quality relationships that they described were as a result of

this form of midwifery care, or whether they were the result of the NLP. In general, it appeared to be the result of continuity of care. The benefits of continuity have been widely described in the research literature (for an overview, see McCourt et al 2006).

" Midwife 1: Being with them at home, they obviously know you anyway and then you go to their home and they know you, the family know you and you can stay at home with them, just sitting in their own sitting room and talking to them and having a cup of tea and a piece of cake (laughs). You know it relaxes them, you don't have to rush and they forget about their pain. Even if it's only for half an hour, that half an hour makes a difference to when you bring them in.
Facilitator: So them knowing their midwife makes a real difference?
Midwife 1: Yes. And then you say 'okay let's go' and they get in their car and you get in your car and you meet them there (maternity unit). And you just carry on from where you left off at home" (FG 1, G grade midwives, Unit A)

8.1.3 Normalising approach
The decreased interference in normal labour which is part of the NLP protocol (e.g. no admission CTGs, less VEs, encouraging women to move around) were viewed as beneficial for women, as they were thought to increase women's confidence, and encourage their belief in birth as a normal physiological process.

"They've got that freedom, they've got the space to be with their partner to have that experience. They don't have to be strapped to a monitor all the time, not to be flat on their backs, they can walk around the room" (FG 7, E/F grade midwives, Unit B)

"Midwife 1: The women have more confidence as well because they are not interfered with too much and they don't want this great interference that they used to have before
Facilitator: so it sort of helps them have more confidence in their bodies do you think?
All: Yes
Midwife 1: It's sort of empowering women without us telling them 'you have to have this monitor on and you have to have a VE at this time' – it's allowing them to give birth" (FG 1, G grade midwives Unit A)

However, there were fewer discussions of the benefits of a normalising approach than might be expected, given the aim of the CP to increase normal births. When this was discussed, it was often difficult to ascertain whether the midwives attributed the increased potential for a normal approach to birth to the introduction of the NLP, or whether it was related to midwife-led care in general. In particular, the opening of a midwife led birth centre in Unit B was identified as being very supportive of a normality approach.

8.2 Impact of NLP on mothers (women's perspective)
There were differences noted between the perspective of the midwives (i.e. how the midwives think that the NLP has affected women), and the perspective of the mothers themselves.

Ten interviews were undertaken with mothers who had been cared for 'on the pathway', five in each unit. (Demographic details are provided in Table 6, Chapter Four). All five participants from Unit B were primigravidae; two of the five in Unit A were primigravidae. All gave birth in hospital except for one woman in Unit A. All Unit B women gave birth in the birth centre; all Unit A women had care from one of the midwife-led teams.

The sample size is very small, and thus interpretation of the findings should be treated with caution. It is interesting to note, however, that many of these findings are reflected in the larger study carried out by Spiby et al (2006), which gives them added credibility.

The interviews with mothers were originally designed to explore their knowledge of the NLP and their experiences of being cared for on this. As mentioned in Chapter Three (3.7.3), this presented some difficulties, as it quickly became apparent that most of the mothers interviewed knew very little about the pathway.

This meant that the interview schedule had to be adapted; a more unstructured approach was taken, asking women to 'tell the story of their labour and birth'. The interviewer encouraged them to focus on whether they considered it to have been a normal birth, how important having a normal birth was for them personally and for women in general, and what they would classify as an abnormal birth. Although the interviews with mothers did not provide the information originally expected, this unanticipated line of enquiry led to some interesting responses, which has highlighted the need for further research in this area.

The findings suggest that what was most important to mothers was the care they received (particularly in early labour), and their relationship with the midwife (including their trust in midwives' skills and knowledge, and the attitude of the midwives). It was also interesting to note that when asked about their understandings of normal birth, a range of experiences were discussed, suggesting that women's interpretations of normality may be more complex that those of midwives.

The accounts of mothers are discussed under the following themes: a) knowledge of the NLP b) early labour support c) relationships with midwives d) definitions of normality.

8.2.1 Knowledge of NLP:
Only half of the mothers interviewed knew anything about the NLP. There were no differences between the two research sites. Of those who knew about the NLP, knowledge was very limited: two women equated 'the pathway' with the antenatal leaflet, and another two women realised that the

midwives had 'new paperwork', from their experience in subsequent pregnancies.

Only one of the ten mothers had received an explanation of the new NLP paperwork. She was the only mother who knew that the NLP was a new approach to care, underpinned by a different philosophy of birth. No mothers knew that it was part of WAG maternity policy. The study by Spiby et al (2006) found a similar lack of knowledge of the NLP.

In the interviews, the interviewer began by reiterating the information contained in the mothers' consent packs about the purpose of the study, including a brief description of the NLP. The following exchange was typical of interviews with the five mothers who knew nothing about the NLP:

Facilitator: So, as I was saying about this clinical pathway – it is like a written document. It tells the midwives what the current knowledge is about the best practice and what you should do in different situations. Did you know they were using this when…?
Mother M: No
Facilitator: ….they were caring for you?
Mother M: No (Interview M, Mother Unit A)

Of the mothers who had heard of the pathway, two noticed that the midwives had new forms. Both had been cared for by the same team of midwives for previous births, and thus were well placed to compare their practice:

"Mother G: When she pulled out new paperwork I did think 'what was that?' But she explained what it was and…
Facilitator: What did she say it was?
Mother G: New paperwork
Facilitator: New paperwork, yes (both laugh) And did you notice any difference with other times? With what the midwives were filling in?
Mother G: No, not really no.
Facilitator: Because one of the ideas of it is that the midwives don't have to write as much as they used to write. But I don't know if that's noticeable to anyone but the midwives probably?
Mother G: I can't say I noticed. (Interview G, Mother Unit A)

The other mother had actually looked at the NLP when it was left behind in her home whilst she was in early labour. She commented that the documentation was similar to that she had used during NVQ training[24]. It is interesting to note that the explanation of the NLP she was given by her midwives was framed in terms of documentation i.e. midwifery work, rather than the philosophy of the NLP:

"She left them (NLP documents) here, thinking that she'd come out in the middle of the night with me. Nothing happened. So I was looking at it then and I thought it similar to when I did NVQs – you had to fill it in and do it in order –

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[24] National Vocational Qualifications, based on a competency approach. Boxes are ticked when competencies are achieved.

boxes. When (midwife) first came out she said 'I've got to write in this (...) and if somebody comes tomorrow, if you haven't gone in, then they'll be writing in it too". (Interview M, Mother Unit A)

The two women who thought that the NLP referred to the antenatal leaflet only were positive about the usefulness of the leaflet:

"Mother R: I was given a copy of it at one of the antenatals (…) it was useful. Facilitator: Did anyone explain it to you or were you just given it? Mother R: No, no, nobody really physically said here it is, this is the pathway, this is the way it's probably going to happen. (Interview R, Mother Unit B)

"Mother F: I don't know how many times I looked at that (the leaflet)! (Laughter) Thinking – have I done this? No, no, no. But I found it quite useful, yes. It was very good, especially before labour started then, cos you know you have little niggles (…) and you're going to check the book then" (Interview F, Mother Unit A)

This latter mother was also the only one to have had the new approach of the NLP explained to her, during her previous pregnancy:

"From my first to my second it had changed. On the second one (midwife) showed me in the book 'we've changed now, we won't monitor' – because on the first one I had this belt round me, very uncomfortable. She said it had changed, we're just going to keep an eye on you" (Interview F, Mother Unit A)

Women who had given birth before did not mention that midwives were doing less paperwork, or that the midwife had spent more time with them on this occasion.

8.2.2 Early labour support:
An unexpected finding was the concern expressed by women in Unit B about their care in early labour. Although the number of these participants was very small (n=5), their reasons for dissatisfaction mirror those of women who expressed dissatisfaction in the Spiby et al (2006) study, thus making it less likely that these were isolated cases.

The provision of midwifery care in early labour differed in the two units. Although both were using Part One of the NLP to assess women in early labour, in Unit B women had to phone the birth centre or go into hospital to be assessed, whereas in all women from Unit A had been assessed at home by one of their team midwives. Home assessment by a known midwife was viewed very positively, whilst phone and hospital assessment varied in quality, with negative experiences being described. For some of those interviewed, these negative experiences had been distressing. Once women had been admitted to the unit, however, their experiences of labour and birth were described very positively. It was negotiating access to the unit that was problematic.

Unhelpful situations were those where women had felt dismissed, or where they did not feel that their concerns had been acknowledged. In these situations, women felt that responsibility had been given back to them (or to them as a couple); this was particularly difficult as this was their first birth. They described being frightened by not knowing how much worse things were likely to get. Conflicting advice from different midwives about when to phone back was also described.

"Mother: My waters went about quarter past two in the morning, and then we phoned the hospital and they said 'oh well don't come in yet', but we ended going in about six o'clock or so and they looked at me there and examined me and sent me home again! So then about eleven o'clock I decided I can't cope with this any more and so we rang them up again and – I think they did try and delay me going in again because obviously when they'd seen me I was only in the very very early stages.
Facilitator: And how did you feel - when you came in and they sent you home again – how did you feel about that?
Mother: yeah, that was quite – that was scary, I mean I could have – having gone through it now, it wouldn't be so bad – but it was not knowing (trails off). I got to a point where I felt that I really couldn't cope with the pain and then to be told 'oh well, it's probably hours yet' was quite – and that had to be our decision (…) That was the only bit that I was a bit concerned about, you know it would have been more encouraging for them to say 'well come in but be aware that we might send you home again or something like that'. It's that not knowing you know" (Interview N, Mother Unit B)

The impression received was that these women were waiting for 'permission' from the midwives to go into hospital. They commented that they did not want to 'waste midwives' time', and described being scared of being sent home if they were not in 'proper labour':

" When we got there we were both praying – because I had said, my fears were – I had read about so many ladies who go into hospital and being in unbearable pain but not having dilated much and being sent home. And I thought well, if this is me I'm going to find it very hard to cope with that. But they examined me and I was five centimetres, I was overjoyed" (Interview E, Mother Unit B)

" So I'd rung the birth centre and this is my only criticism of how it went really – I rang them about twenty four hours beforehand when I thought something was happening and they said 'no, no, no, stay at home, don't come in'. I think they thought because I was a first timer I was panicking a bit and 'wait until you're five minutes apart and lasting for a minute and then give us another ring. Take some paracetamol if you need to, but you know you're fine. Stay at home'. But then about ten hours later, they were five minutes apart lasting one minute. So I rang them again and they said 'well look you know you really need to be three minutes apart consistently for a period of time, lasting one minutes, take some paracetamol'.(…) They were three minutes apart and getting more and more painful."

She had an antenatal clinic appointment with the community midwife that morning, and the hospital midwives told her she should attend this: *"I went along to the antenatal routinely and jumped the queue because the other lady there, she said 'I think you should go in first! (Laughter) Saw (Community Midwife), she examined me, I was four centimetres. Sent me straight down to the birth centre."*

When commenting on what had made this a difficult experience, she observed: *"It was the phoning in and the difference of communication that I got. First of all it was five minutes apart, and then it was three minutes apart. Then it was – 'look you're fine, just go to your antenatal and they'll sort you out'. Because I was working towards the five minutes apart you see and I thought well, once I'm there that's it, then I go. And then I rang them and then it's three minutes apart and I thought – okay! And it's a different person, you see, so they had a different outlook or whatever. (…) well, you get their okay - you get their permission to say 'it's okay, you can go in now, you're not wasting anybody's time. It's okay, you're in labour and it's fine' " (Interview R, Mother, Unit B).*

Staying at home seemed to be acceptable whilst labour pain felt manageable (and reassurance was forthcoming from midwives), however women described losing confidence in their assessment of the situation as labour progressed. The impression gained from the interviews was that women would have preferred to go into the unit sooner, but tried to postpone this because of the feedback they received from midwives. The birth stories of these women showed that all were well established in labour by the time they were eventually admitted (all the first time mothers in Unit B had cervical dilatations of between 4-6 cms on admission). This means that they had experienced a substantial amount of their labour with only their partner or family for support.

However, phone contact with the maternity unit did not have to be a negative experience: helpful support during early labour was described. For example, in positive experiences, women felt encouraged and reassured by the midwives' manner, and were given detailed advice about what to do (rather than just being told to 'take paracetamol'). They were also given more information and told when to phone back. There were similar reasons given for positive experiences in the Spiby et al (2006) study:

"We rang the birth centre and they were brilliant, they were really reassuring on the phone 'look stay as long as you can at home' – which is what we'd already planned on- 'and ring us at 8 o'clock'. I was pacing backwards and forwards and then we rang the centre by about half past eight and they said 'well come down when you are ready'. (Interview E, Mother Unit B)

8.2.3 Relationships with midwives:
The importance that women attach to their relationships with midwives stood out in the data. Although women were not specifically asked about these relationships, they nevertheless offered these accounts unprompted and described what they valued in a midwife in some detail.

"Knowing the midwife" was especially important for women in Unit A, who were cared by midwives working in the midwife-led teams. This meant that women usually knew the midwife who was with them at the birth, having met her during the antenatal period. The multiparous women often knew the midwives from their previous pregnancies. Several women described this experience very positively, describing the midwife as being "like a friend".

"Facilitator: so you knew them before did you?
Mother: yes yes
Facilitator: And do you think that makes a difference?
Mother: definite. Yes. (…) I knew (midwife) from the last two and I went to see her a lot in antenatal. I've known her for ten years now.
Facilitator: And what is it about knowing them that makes it…?
Mother: I don't know. Because (midwife) delivered (last baby) at home and when I went to see her, when I found out that I was pregnant with this one - I was quite glad to see her there and know that she'd be there – you build up a friendship (Interview G, Mother Unit A)

"Knowing the midwife" facilitated trust and reciprocity. In this interview, the mother described how this familiarity enhanced the communication between midwife and mother. Her account is included in its entirety as it describes many of the key features of midwife/mother relationships that other mothers described as important: trust, being listened to, feeling cared for, having a sense of personal connection:

"I was managing on gas and air and it was very nice to have somebody I knew with me, the midwife. (…) She'd seen me about four times probably in midwife clinic, which helped. And she did the birth plan with me the week before. And we said then 'well I don't like the baby to be given to me straight away, can you wipe him and whatever', things like that. So she knew me well and she was better. (…) I think by the end I needed like a stronger pain relief and she said 'oh there's no point having pethidine, because by the time it's taken effect that baby will be here'. So I listened to her (…) and I just took more gas and air and yes she did tell me the truth, the baby was there. So I mean it was very nice of her to say that I was better off without the pethidine. (…) I knew her and she gave me good advice there. (…) The midwife then took really good care of me, taking me from the labour ward back to (postnatal ward). You know, it was very much a one to one relationship. You didn't feel as if you were in hospital and just been dumped there. You felt that that they did worry where you were (…) and it's nice then that they come out to see you at home. And you know they're always caring, they're always at the end of a phone as well. (…) You're more ready to phone them about different things and they're not like – they're not like a midwife are they? They're like um (sighs) you could say that they know you so well they're like a friend isn't it? And that's how they should be" (Interview F, Mother Unit A)

"Knowing the midwife" was valued by the mothers who had received this type of care. For those who had not (mostly in Unit B where continuity of care was

not available[25]), it was generally not thought to be important. This was especially so for care around the time of birth; the general impression was that *"you just want anyone to help you" (Interview N, Mother Unit B)*. One mother in Unit B commented that she had liked having different midwives, and thus getting different perspectives, although she had not expected this to be so:

" I've seen a different midwife every time – initially I thought I really want to build up a relationship with the midwife – so you have this kind of rose tinted view of you and your midwife being the best of buddies, but actually it was more beneficial that they were different midwives (…) It actually doesn't take that long to build up that rapport with them (…) they've all got so much to offer that seeing all of them really didn't matter to me in the end" (Interview R, Mother Unit B)

As in the interview above, what was important was the rapport between mother and midwife, and this was alluded to in all the interviews. There were many descriptions of midwives' attitudes that were valued, and these were common throughout the accounts: being encouraging and reassuring; having a positive approach; appearing calm and confident but also approachable; being sensitive to the 'atmosphere' and the couple's wishes. Mothers needed to trust the knowledge and skills of the midwife, and to feel well informed and listened to (for example, getting feedback about their progress and how they were coping). Women particularly commented on those midwives who did *'more than expected'*, for whom nothing seemed to *'be a bother'*, who appeared to take great pleasure in their work, and who appeared to genuinely care and be *'more like a friend'*. Although aspects of the birth environment were commented on positively (for example, the homely surroundings of the birth centre), this did not seem to be nearly as significant for women as their relationship with the midwives. For example, in the following accounts, the first mother gave birth in the Unit B birth centre, and the second in the Unit A labour ward. It is, however, positive memories of their interactions with the midwives that dominate their descriptions:

"They were all so calm and they were just so lovely. (…) they just whispered really in hushed tones, words of encouragement, and the only time they ever touched me was to monitor the baby. And I think the minimum intervention thing, it just felt so empowering you know, it was great (…) and I just feel really proud but you know I probably couldn't have done it without any of them there, they were amazing they said all the right things. They kept the atmosphere to a really relaxed state (…) they were quiet throughout the whole labour and I wanted peace really and my husband was very much an active part of the labour as well, which was important for me and to him (…) They took their lead from me and my husband ." (Interview E, Mother Unit B)

" She (midwife) explained everything that was happening, that I'd gone soft and that's brilliant and that I'd started to dilate and I was one centimetre (…) and she said 'it's just a matter now of the next big ones are going to open you

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[25] Continuity of care was usually available only for women giving birth at home.

up' and 'oh! You're brilliant!' and she kept calling me 'angel' (...) she made me feel like 'oh, you haven't bothered me, this is my job'." And later, when she was in established labour: *" I found (midwife) really calming and explained everything, even to the point where I was asking for an epidural. Instead of saying – I think if she'd said 'the baby's going to be born too soon and things and you can't have it' – which I've been told before (…) and I felt quite frustrated then – instead of saying that, she was saying things like 'oh, I'll tell you what, we'll wait to see – ten minutes. Can you hang on ten minutes and I'll check you out to see how far you…' – and I think she knew that perhaps I'd be pushing before then so… But it felt more like I had something to aim for. Okay ten minutes, I was watching the clock, ten minutes and then she'd check me out and then I can have my epidural. It was really good."* (Interview M, Mother Unit A)

8.2.4 Definitions of normality

It was evident from the accounts of mothers that 'normal birth' was not a simple concept. During the interviews, women were asked about their personal experiences: whether they thought that their own birth had been 'normal'; what would have made it abnormal; whether it had been important for them to have a normal birth and why; how they had managed to have a normal birth. They were also asked broader questions about normal childbirth in general: whether they thought that this was an important issue for all women, what they thought about the policy aim of increasing the normal birth rate.

Their responses suggest that normal birth is a complex issue. Women defined 'normal birth' differently, indicating that normality is a highly individualised concept (i.e. it is *"what's normal for you"*). Participants emphasised the significance of differences between women, so that what one woman would consider normal, another would think abnormal, and vice versa. The unique needs of the individual woman in response to her particular labour and birth were emphasised, especially in relation to coping with labour pain. Participants made no value judgements about this:

"I don't think it (her water birth with only entonox for pain relief) *would suit everyone to be honest. I am trying to imagine some of my friends (…) I think a lot of my friends were terrified. And even though I was scared, I wouldn't say I was terrified (…) I think the pain factor is probably it, and the uncertainty of what's ahead really isn't it?"* (Interview E, Mother Unit B)

"If a woman wants something then you have to respect that and that's as natural as it's going to get for her" (Interview R, Mother Unit B)

It was interesting to note that the women interviewed did not seem to perceive 'normal birth' as synonymous with 'natural birth'. This contrasts with the midwives' accounts, where the terms 'normal' and 'natural' appear to be used interchangeably. All the women interviewed thought that Caesarean section would be classed as an abnormal birth, but views differed as to whether

instrumental births (e.g. forceps deliveries and ventouse deliveries) should be categorised as normal or abnormal[26].

Use of pain relief also received differing responses: some women thought that epidural use took the birth outside the realm of normality, whilst others thought that use of any form of analgesia should be counted as normal. Use of entonox was categorised as 'normal' by all participants. An example of these differing, and sometimes ambiguous, attitudes can be seen in response to a question about whether women would categorise epidurals as 'normal' or not:

"I think to experience the fullness of giving birth, to have had an epidural would not have been normal, just because you lose your control, you lose your sensation that is part of it. So I would have said that if I'd had an epidural I wouldn't have considered it normal, but I wouldn't also have considered it – it wouldn't have been a problem, it would have been because I needed it and therefore it would have been normal" (Interview R, Mother Unit B)

"What is normal birth? Like my one, weren't it? You don't want a caesarean type of thing now isn't it? Cos I did turn round and say I'd have that (caesarean section) *next time. (…) No, I wanted to have everything normal didn't I? I didn't want any epidural. But I was demanding it by the end of it! (Laughter)" (Interview M, Mother Unit A)*

"Mother: Oh gosh, I hate saying this – because I'd say pain relief should be kept to a minimum. I mean, epidurals, they have their place but surely ….
Facilitator: You would see it as normal?
Mother: No I wouldn't. I would want to feel very single bit of it, every thing, every second (Interview E, Mother, Unit B)

It became apparent during the interviews that several mothers had been aiming for as normal a birth as possible throughout their pregnancies (as evident in their intention to give birth at home or in water). For these women, a normal birth was one where there would be no medical intervention, and where they would be able to move around and 'do what you want'. There was an emphasis on being in control of the experience, being able to respond to the labour in whatever way felt right, and also to experience the labour and birth as fully as possible:

"I was absolutely clear from day one I wanted a water birth (…) That was a big thing for me all the way through (…) in my notes it's got consistently ''wants water birth, wants water birth'. (…) I actually didn't think I was in labour at one point, I thought I'd stopped! (…) It (being in water) cut the pain by fifty per cent I'd say. And I was just wurring around, it was lovely. (…) The waters broke, back in the water for delivery. (Husband) actually delivered the baby and cut

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[26] Several women offered views about maternal choice for Caesarean section, which was topical in the media at the time. These views varied from those who felt that this should be a matter of maternal choice, to those who felt that Caesarean section should be performed only on medical grounds.

the cord and so that was really good for him, quite an experience" (Interview R, Mother Unit B)

"I said straight away 'well I would really like to try the pool'. I am comfortable in water and I wanted to give it a go (…). The water definitely brought instant relief. I felt incredibly calm and the heat just helped lots. (…) The weightlessness of the water was just tremendous and as her head was coming down my husband said I gave the entonox back to him then and I didn't have anything. (..) All in all I just feel totally privileged to have had that kind of birth and I would do it a million times – it was great! (..) I thought, I'm really enjoying this in a strange kind of way, this is fab and when her head crowned I just remember hearing my husband kind of go 'my gosh, oh my gosh' and I remember thinking whoa, that's given me the energy I need because he was blown away by that birth " (Interview E, Mother, Unit B)

Other women appeared to be more fatalistic. They had no expectation that the birth would be normal, and *"whatever happened, happened"*:

"I was quite open about it. I mean what happened, happened, I am a great believer in that you know. A lot of my friends recently have had traumatic times and emergency C sections and things like that, so I know that it happens - and what will happen, will happen" (Interview N, Mother Unit B)
"Facilitator: This aim of trying to keep childbirth as normal as possible, do you think it's an important thing to do or does it not bother you?
Mother: No it doesn't bother me to be honest
Facilitator: But was it important for you yourself to have a normal birth?
Mother: Yeah. But obviously, if I'd had to have something different then I would have – you've got to accept it haven't you?' (Interview A, Mother, Unit A)

However, all the women interviewed (apart from Interview G, where the mother had a planned home birth) described 'keeping an open mind' in relation to pain relief and the possible need for intervention. "Keeping an open mind" was a common expression. Even the two women above who had hoped for a water birth explained that they were aware of the unpredictability and unknown-ness of labour and felt that they needed to remain flexible in their plans:

"What helped me was that I hadn't written a birth plan in concrete. I remember talking to someone about this and they had written a plan, how they wanted it totally natural, no intervention and they were very strict in that. And of course as soon as labour started they felt they had failed by asking for pethidine, so they felt pretty miserable about the whole experience. So I had made up my mind to say 'I would like to try water, the TENS[27] etc but if I need anything I will know to ask. And I remember thinking – I was floating in the water[28] - well gosh, if I need it then I can have it and I didn't feel that I had failed already sort of thing" (Interview E, Mother Unit B)

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[27] TENS = transcutaneal electronic nerve stimulation, a 'low tech' form of pain relief
[28] In the birth pool in the birth centre

"I wanted to do whatever I could to keep it as normal as possible. Even though I'd said to (husband) 'Look I don't want an epidural', I had also said all the way along I'll be open minded and if need be I'll take the normal pain relief route of paracetamol, then entonox, then your pethidine if need be, but if I can manage it without then I would rather. I said all along that if it really got unachievable then I would realistically say I'm open minded about it"
(Interview R, Mother Unit B)

The exception to this was the mother who chose to give birth at home (Interview G). This decision was made as a direct response to her previous negative birth experience in hospital, in which she felt the experience *"was taken out of my hands totally"*. Rather than *"keeping an open mind"*, she was quite clear that she had intended to create a birth environment in which she was in control and in which she felt safe[29]:

"Facilitator: The pathway's about trying to make childbirth as normal as possible, so as many women as possible have that experience. Do you think that's an important thing to do?
Mother: Yes, definitely, definitely.
Facilitator: And why is that?
Mother: Um – I had a bad birth with my second one and I was in hospital then. It was just as if everything was taken over. My waters broke at seven in the morning and I hadn't dilated enough by twelve o'clock so automatically they've put up a drip (…) Three hours after he was born I haemorrhaged. So that's the main reason why I didn't want a hospital birth because I didn't want anybody doing – I wanted to do it on my own. I didn't want no intervention.
(…) It was taken out of my hands totally
Facilitator: Did you have a normal birth in the end?
Mother: Yes
Facilitator: But the labour – did you feel it was normal?
Mother: No, it was forced, wasn't it? (…) It was so much better at home, you could just do what you want. You just wander around and both the midwives are there, they're calm, they know what they're doing. You know you're safe
Facilitator: So it was very important for you that you were going to have a normal childbirth was it?
Mother: Yes (…) it's so much better to be left alone. Thank you to home births. No fussing and palaver, no injections or drips. Oh no, not for me"
(Interview G, Mother Unit A)

It was interesting to note that the role of the midwife was frequently referred to in relation to these discussions of normality, as in the account above. When women were asked how they had managed to have a normal birth, it was often the attending midwife who was mentioned rather than other aspects of maternity care (e.g. antenatal preparation classes, birth environment). Although this was not usually stated explicitly, what the midwife said and did was intertwined in all these accounts. It appeared that the midwife who had provided care during labour had helped 'keep it normal' because of the

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[29] The account suggests that the mother felt safer at home than in hospital, challenging conventional notions of clinical safety and birth environment.

qualities and skills described in the previous section (7.2.2.3). This was true for all the women interviewed:

"They were encouraging me 'you're doing very well, you are doing very well. (…) And it all depends on praise then" (Interview L, Mother Unit B)

"I was demanding it (an epidural). I would have gone off my head if she'd said no. She didn't say no, but she said 'we'll try now because you've gone so far without it' and just like that - 'one more push (…) she was really good. (Interview M, Mother Unit A)

"I had plenty of reassurance from the midwives. They went 'everything's fine' you know. (…) If the encouragement hadn't been there then you know, I'm thinking oh god, I don't know what I would have done, I really don't. Full of encouragement" (Interview M, Mother, Unit B)

"My birth was quite normal but that was assisted massively by the midwife's attitude. Because I went in thinking 'right, what do I do now? Tell me what to do next' and they're saying 'I don't tell you what to do, we just facilitate what you want to do and if you need us we're here" (Interview R, Mother Unit B)

8.2.5 Discussion:
There are noticeable contrasts between the midwives' views about the impact of the NLP on women, and the women's perspectives. Most notably, many women's experiences of remaining at home in early labour were less positive than anticipated by the midwives. Whilst midwives thought that it was best for women to remain at home until labour was well established, for some women in Unit B, this had been a negative and worrying experience. Although the numbers of women participating were very small, and it is important not to over-interpret the data, the findings are given added credibility as many are congruent with those of the larger Spiby et al (2006) study (which focused particularly on women's experiences of assessment in early labour i.e. Part One of the NLP).

Negative experiences identified in this study were those where women felt that:
- their individual needs and concerns had not been acknowledged
- they were being 'kept out' of the maternity unit by the midwives and that they had no control over this.

This resulted in increased anxiety for these women, particularly first time mothers.

Positive experiences were related to feeling supported and reassured by the midwife. This most commonly occurred in Unit A, where contact in early labour was usually with a known midwife; however, it was also reported in phone conversations with unfamiliar midwives in Unit B. In the study by Spiby et al (2006 p125), it was similarly found that satisfaction was associated with receiving assurance, information and encouragement, being given choices about going into the unit or not, and not being made to feel unwelcome.

Factors contributing to dissatisfaction included: a lack of support and reassurance, not being made to feel welcome to come in, being sent home.

Women's lack of knowledge of the NLP, including its underpinning philosophy and place within Welsh maternity policy, was also identified in both this study and in the Spiby et al study (2006). This gap in knowledge and understanding is hardly surprising, given that most of the midwives who participated in this study did not share information about the NLP with mothers.

This appears to be a missed opportunity. Spiby et al (2006 p128) similarly note that "Overall very few women in any of the satisfaction groups mentioned any discussion of the Pathway. There was a tendency to equate 'the Pathway' to 'the leaflet'". Commenting on the omission of the NLP philosophy from the antenatal leaflet, they caution that: "if the practical manifestation of the philosophy of supporting normality throughout labour is to stay at home longer in order to reduce unnecessary intervention, and it is in the woman's best interest to do this, then this should be made more specific in the literature and in discussions with women" (p129). One of their recommendations for practice is that "Women should receive information about the Pathway and have the opportunity to discuss it with a midwife during pregnancy so that they also understand the underlying philosophy" (Spiby et al 2006 p.161). The findings of this study add further weight to this recommendation.

The other findings from this study which relate to women's experiences are not specifically related to the NLP. They are included because they provide rich and detailed insights into what mattered to these women. The importance of the relationship with the midwife, and the significance of the midwife's qualities and skills were evident throughout the data. These findings are not new or surprising. They support the wealth of research evidence from other UK and international studies which have investigated what women value in their midwife (for example, Anderson 2000; Berg et al 1996; Edwards 2005; Halldorsdottir and Karlsdottir 1996; Wilkins 2000). As the sample size was small, it is not possible to comment on the contribution that continuity of care makes to the midwife-woman relationship, although for those women who did experience this, it was valued highly. It was also evident that the midwives who provided continuity of care considered it to be not only of benefit to the women, but also enhancing for job satisfaction. It may be, as argued by Van Teilingen et al (2003) that women are only able to assess new models of care positively (or negatively) if they have experienced these for themselves.

What is new and unexpected in these findings is the complexity of women's definitions and understandings of normal labour. The findings suggest that mothers and midwives may have very different interpretations of normality and abnormality. Women's descriptions of labour and birth emphasise the uniqueness of the experience for each woman, and the spectrum of normalities which this may include. "Keeping an open mind" and not prematurely foreclosing the possibility of pain relief or intervention was considered to be important. It was also clear that the midwife had a key role to play in supporting and encouraging women to have normal births. The range and complexity of views expressed makes this is an area which is clearly

worthy of further research, as it is likely to have implications for effective communication and quality of care. A PhD study is currently being undertaken at Swansea University to explore these issues further.[30]

Returning to midwives' views of how the NLP had affected women, it was noticeable that this formed a very small part of the midwives' data. The general view was that the aim of the NLP (to increase the normal birth rate and decrease unnecessary intervention) was to be achieved via altering the parameters for normal birth and strengthening the autonomy of the midwife. The involvement of women in this enterprise was rarely commented on. Although many midwives personally acknowledged how relationships between mothers and midwives could significantly affect quality of care and the woman's birth experience, these issues are not the concerns of the NLP. (Indeed, some participants did allude to this e.g. *'I don't think for the woman it makes any difference to the woman' Interview P, G grade midwife Unit A*).

The quality of the birth environment is similarly not given any prominence in the NLP documents. Enhancing birth environments and increasing numbers of midwives in order to improve overall quality of care would be costly strategies; in contrast, the NLP is likely to have been a much more cost effective option, and thus more appealing to policy makers and managers. This may in part explain its introduction at this point in time.

So where do women fit in the overall 'story' of the NLP? As we saw in Chapter Four, there was only one user representative on the initial Steering Group, and documentary analysis of minutes and related literature indicates that the needs of women were not considered in any detail. Women in the two research sites were not well informed about the NLP and the midwives themselves generally did not think there was any need for women to know about it. It appears that, in relation to the NLP, women are seen as recipients of maternity care, rather than being active partners and co-producers of this care. This reflects the evidence from the literature reviewed in Chapter Two. Although the rhetoric of empowerment is frequently visible in clinical pathway literature, in reality pathways appear to be used more as information giving devices, which reinforce the power differential between practitioner and client, than as tools for facilitating authentic partnerships. The NLP is no different from other pathways in this respect. This ambiguity is evident in the following passage from an opinion-based article about the NLP. Whilst 'sharing' of knowledge between midwives and mothers is mentioned, the ways in which this will be achieved suggests an expert/client relationship rather than a partnership model:

"In Wales, midwives will be sharing their knowledge with women. All 'low risk' women will be given written information about the clinical pathway and what they can do to reduce unnecessary intervention in labour. (…) If this seems rigid, in one sense it is. We have the evidence base and the clinical pathway just represents that evidence. It is a statement of intent – if midwife and

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[30] Susanne Darra: Normal Birth Stories study

women want to work together to achieve a normal birth this is the path to follow" (Ferguson 2003, pp 4-5).

It may also be significant that women do not have any choice as to whether they are cared for on the NLP or not, as this is solely the midwife's decision. Given that the NLP entails a particular 'normalising' approach to maternity care, it is perhaps surprising that women are not able to opt in or out of this initiative.

The lack of involvement of women throughout the whole NLP process suggests that it was seen primarily as a professional concern rather than being 'women's business'. However, this would appear to ignore the fact that there are key changes which have resulted from the use of the NLP which will inevitably have implications for women. Most notably: the altered parameters of normality (e.g. the alteration in 'allowed' cervical dilatation time) and decrease in record keeping (with the various implications discussed in Chapter Five). Some of the unanticipated consequences that we have identified could also have possible implications for women e.g. the potential impact on midwives' clinical judgement and on midwife-doctor relationships.

8.3 The impact of the NLP on maternity care in Wales

Finally, we need to consider how the NLP has affected maternity care in Wales in general. As noted in the introduction to this report, the aim of this study was not to provide a quantitative evaluation of the impact of the NLP on clinical outcomes. It is therefore not possible to ascertain what this impact, if any, has been. As noted, a clinical audit is ongoing within Wales at a Trust level, but this is largely focused on process issues (i.e. how many women commence the NLP, how many women give birth on the NLP). There is no data being collected which would enable the NLP to be assessed in terms of its clinical advantages or disadvantages for mothers and babies. This represents a significant gap in the evidence.

This study did however provide some insights into the participants' **perceptions** about the impact of the NLP on the 'big picture' of maternity care in Wales.

8.3.1 Impact on childbirth statistics:

There was a very widely held view amongst health professional participants (whether they were midwife, doctor or manager), that the NLP had not affected the overall childbirth statistics i.e. there had been no alteration in normal birth rates or intervention rates, at either local Trust or all Wales level.[31] This is upheld by Welsh Assembly Government Maternity Statistics for the period http://www.wales.gov.uk/statistics . Although there was an initial small increase in rates of unassisted births (i.e. baby born by maternal effort) in 2003-04, the level has since dropped to 63%, lower than that prior to NLP introduction. (However, as noted in Chapter One, as no evaluation study was set up concurrently with the implementation of the NLP, it is not possible to make any correlation between these statistics and the NLP).

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[31] Only one participant, a recently qualified midwife did think that normal birth rates had increased, although this was not supported by the Trust data.

Several reasons were given for this perceived lack of impact. Firstly, both doctors and midwives argued that the strictness of the NLP inclusion criteria meant that women needed to be at such a low level of clinical risk to give birth 'on the pathway', that they would do so anyway:

"I think most women who are going into labour and deliver normally here are going to do it whether they are on the pathway or not (...) I can't see any obvious evidence that the clinical pathway has increased normality in (Unit B) and our statistics don't show that our caesarean sections rate is decreasing alongside the pathway being implemented." (Interview J, F grade midwife Unit B)

"They think by doing the care pathway you are going to reduce incidence of these things (Caesarean sections and instrumental deliveries). I don't think so. If you are going to reduce sections and ventouse it should be through a different route – because those that are going to deliver normal are going to deliver normally anyway. (...) So people who say 'section rate is going to come down' – I tell you forget it! It's not going to come down" (Interview M, Doctor Unit A)

It was also the case that numbers of women starting 'on the pathway' had been much lower than originally anticipated:

"All along the problem doesn't seem to be the women that are on it (NLP), it's more the poor numbers of normal labourers. There's always a reason to take women off. That's a bit demoralising really, when you think about these units with high birth rates (…) and there are four or five labours on the board and one of them might be on the pathway and you're thinking 'crikey, what's going on here?' (Interview KI)

"When you look at the numbers of women who even start the pathway, it's probably only about a third (…) and out of that small number, probably a third come off the pathway for whatever reasons during the process of labour. And then I could say that all those who are left, who go on and give birth on it, had very normal labours – very quick labours and probably wouldn't have benefited from being on the pathway (…) they just delivered in the way they did anyway, without any intervention, because they were so normal and labour was so uneventful (Interview, KI)

In addition, clinical context was important. Unit A had not anticipated any change in maternity statistics, as they already had a well established system of midwife-led care and considered that their practice not really been affected by the NLP:

"Midwife 1: The section rate hasn't gone down has it?
All: No

Midwife 1: It seems like our stats, our section rates haven't changed, our episiotomy rate hasn't changed.
Midwife 2: And maybe you've been working more or less along the pathway lines anyway, so it won't make any difference to you, because that's how you've been practising anyway" (FG 2 F/G grade midwives, Unit A)

Unit B was a referral unit for high risk women and thus intervention rates were inevitably higher than for some other maternity units; participants therefore thought that the chance of reducing intervention rates was minimal:

"*Our intervention rates are the same. But we are a high risk unit and we do have from all around areas. So the caesarean section rate is the same here – I've looked at it since 2002 and it was the same every year and it's the same now". (Interview C, Manager Unit B)*

The culture of the unit and organisation of care were also identified by one midwife as contributing to the intervention rates:

"*I think it's a hugely complicated series of events, it's a medically dominated environment and alongside that comes midwifery practices that are ingrained in that hospital. In the birth centre, they do try and create a nice environment, they try, but the midwives there are - one minute they can be working on the main labour ward looking after high risk cases, and then the next they're back down on the birth centre. There's always this underlying assumption that labour isn't always – that something can always go wrong. There's no evidence to show that it's improved our overall statistics". (Interview J, F grade midwife, Unit B)*

Other perceived reasons for high levels of intervention were identified, which were also outwith the scope of the NLP. These included concerns about possible litigation (thought to result in intervention to 'be on the safe side') and the contemporary emphasis on patient choice. The latter was perceived to result in women opting for elective caesarean sections and induction of labour. However, there was only anecdotal evidence to support this claim, and it was unclear whether there had been an actual rise in women's preference for intervention. Both doctors and midwives commented that they had seen an increase in women's fear of childbirth, in particular its unpredictability. The influence of the media was seen as an important influencing factor in this.

Many participants expressed the view that reasons for high intervention rates were complex, and unlikely to be addressed by the NLP. Even one of the key informants involved in the initial devising of the NLP acknowledged that the likelihood of the NLP having a major impact on intervention rates had been minimal, although more subtle effects on morbidity and women's experience could be achieved:

"*I think everybody wanted to see this dramatic fall off of caesarean section rates when the pathway was introduced. Which – you know – wasn't going to happen. Realistically, it's not going to have that sort of impact. If it was as easy as that it would have happened twenty years ago. There's loads of*

reasons we've got the section rates that we have. It's not that sort of stuff. The stuff that we're talking about, the morbidity, the fact that women might escape from having some syntocinon and be in a bath and progress because she's in water – that's such sensitive stuff, it's hard to pick up" (Interview KI)

Other participants expressed concerns that the NLP could actually lead to increased intervention rates for some women; partly because of potential delays in necessary intervention (as discussed in Chapter Seven) and also because some women who did not meet the NLP criteria would now be cared for as though they were 'high risk':

"My intuition is that there will be two groups – one group who will benefit and another group who will not benefit from that relaxed approach. Perhaps it (NLP) has the ability to keep intervention away from those women who really don't need it. But there is a subgroup of women who do need intervention and then you are delaying the intervention. I think in the past we've probably intervened too early in everybody, so now you're going to sift out the ones who correct themselves, but you will possibly delay decision making in the ones who actually need it" (Interview J, Doctor Unit B)

"Midwife 1: That's another piece of research – are there increased interventions in people who are not on the pathway? By labelling them?
Midwife 2: yes, because they don't all need continuous monitoring
Midwife 1: no exactly, that's what I'm thinking
Midwife 2: Is it changing people's practice there or is it 'oh, she's not on the pathway' therefore we automatically monitor her.
Midwife 1: we just jump in and do things (Focus Group 1, G grade midwives Unit A)

8.3.2 Public attitudes:
Some participants wondered whether the NLP could have an impact on public attitudes, especially in relation to promoting a normalising approach to birth. The perception was that this would be unlikely, as the other influences on public attitudes e.g. media impact and a cultural shift towards choice and litigiousness were seen as much more significant. It is also the case that the lack of public and user involvement in the planning and day to day use of the NLP, noted in the previous section, has meant that public awareness of the policy is inevitably minimal.

There were however, ways in which the NLP was perceived to have impacted positively on maternity care in Wales. Most significantly, the NLP was thought to have 'put Wales on the map' as a site for innovative maternity care:
" I do think overall it's been very positive and I mean certainly England are very keen to get their hands on it and to look at their own system and use – if not the same system- a very similar system" (Interview F, Manager Unit B)

Midwives described being visited by midwives from English maternity units, who were interested in implementing the NLP there, and the research team received several requests for details of this study and its findings, from the UK

and internationally. Although this interest was morale boosting, some participants expressed caution:

"Everybody gets sort of washed along with it. There's been a lot of hype associated with it. It's built up to be something really important that we've managed to do in Wales – midwives came from (English location) because they were so interested in what we were doing. (…) It had its own momentum. It was going to go wherever it was going to go, it's still rolling onwards, because as I said midwives are coming here to speak to (senior midwife) from across the country about using it themselves" (Interview KI)

8.4 Discussion and conclusion:
The strong impression received from the health care professional participants was that the NLP had had little impact on measurable outcomes, for example levels of childbirth intervention, and that this had been an unrealistic initial aim of the NLP developers. The participants painted a picture of childbirth as a complex web of interwoven threads, with many influencing factors and key players. From this perspective, culture, context, public attitudes, the media, women's experiences, professional territories and ideologies all have significant roles to play in determining how birth is viewed and conducted. Rather than being able to impose itself as the dominant model and override these other issues, the NLP appears to have become another part of this complex web.

As we have seen throughout the findings chapters, the NLP has had both intended and unintended consequences for the key stakeholders: midwives, mothers, managers and doctors, and also for maternity care in Wales in general. The final chapter of the report draws together these key findings and considers their implications for practice, policy and research.

Chapter 9: Conclusion

In the conclusion, the findings of the study are summarised, and their implications for practice, policy making and research are considered.

The study set out with two key aims. To use a policy ethnography approach to:

i   investigate the use of the All Wales Clinical Pathway for Normal Labour by observing its use in context (that is, how it is used 'on the ground', in real life settings)

ii   evaluate the implementation of the All Wales Clinical Pathway for Normal Labour from the perspectives of key stakeholders i.e. midwives, mothers, doctors and managers

These aims have been substantially achieved, and the study has provided rich and detailed insights into the experiences of key stakeholders using the NLP in two contrasting maternity units. The use of a policy ethnography approach enabled an in-depth exploration of how a new policy was put into action, demonstrating that policies do indeed become transformed as they travel from 'meeting room to bedside'. As Lipsky (1980) argues, it is how policies are interpreted (and adapted) at a local level by grass roots workers that is significant, certainly for those on the receiving end of care.

There are however a number of limitations which must be borne in mind when interpreting the findings:

9.1 Limitations:

- Data were collected in only two different maternity units, and thus may not be representative of the experiences of stakeholders in all Welsh maternity units (although the Roadshow discussions and written evaluations of these events did suggest that the findings were common experiences).

- Fewer labours and births 'on the pathway' were observed than originally intended, because of practical difficulties in achieving this.

- The study explored the NLP as a whole entity. It became apparent during data collection that midwives perceived it as three separate documents (i.e. Part 1, 2, 3) and experiences of these different parts varied. In hindsight, it would have been preferable to focus the study on just one of the NLP documents.

- The recently established birth centre in Unit B created confusion at times, as it was difficult to ascertain whether the issues being discussed (by all participants) were linked to the NLP or to the birth centre. It would have been preferable to have selected a research site where a change in model of care had not been happening concurrently.

- As with any qualitative research, what this study provides is a rich snapshot of a moment in time. Since the fieldwork was undertaken, time has passed, and it may be that some of the issues identified in the findings (e.g. heightened tensions between midwives and doctors) will have now reduced as the NLP has become embedded in practice and in Welsh maternity service culture.

- Investigating new policies presents a number of problems, especially when key players may be easily identifiable. These problems are compounded by the use of a qualitative approach within a relatively small geographical area. In such situations, individuals may be well known, particularly those in leadership roles, and this may make it difficult to disguise identities within participant accounts. This has created particular problems for dissemination of the findings. A decision was made within the research team that some data would have to be omitted for this reason. Every attempt was taken to maintain participant anonymity, and at times this meant that accounts needed to be edited to remove identifying features.

9.2 Summary of Findings:
Complexity was a key theme throughout the data and hence throughout this report. The key finding from this study is that the NLP is far from being just a new type of maternity care documentation. Rather, it is a **complex, multi-faceted intervention with complex outcomes**, some of which appear to be unintended.

The complex nature of the NLP should not be surprising, as the literature on clinical pathways in general suggests that although, pathways aim for simplicity, in reality complexity is a common feature (Atwell and Caldwell, 2002; Hunter and Segrott, 2007; Pinder et al, 2005). Clinical pathways frequently start out with one aim and find themselves achieving another. These unintended consequences may be positive (for example, enhanced communication between professionals: Currie and Harvey, 2000; de Luc, 2000) or negative (increased inter-professional tensions, Jones et al 1999).

It is thus not possible to give any simple answers to enquiries about whether the NLP has 'worked' in Wales, or whether clinical pathways are 'good' or 'bad' for maternity care. Indeed, to narrow down the discussion to these issues would be to ignore the significance of complexity in any analysis of health care policy.

It is also the case that maternity care is a particularly complex aspect of health care: 'A highly charged mix of medical science, cultural ideas and structural forces' (De Vries 2004 p15). De Vries (2004) argues that this differs from other forms of health and medical care, where the influence of culture is much less evident. For example, there are wide variations in maternity care practices between countries (such as widely diverging caesarean section rates and home birth rates), that appear to bear no relation to obstetric or medical necessity. De Vries (2004) suggests several reasons for the distinctive nature of maternity care, including the emphasis on supporting normal physiology (as contrasted with the emphasis on disease and pathology of other areas of health care); the significance of maternity care for the reproduction of society; and the social significance of birth in relation to 'ideas about sexuality, about women and about families' (De Vries 2004 p15). In addition, maternity care is also an area of contested territories, where the competing historical claims of midwives and doctors for occupational jurisdiction have been well documented (Donnison 1977; Witz 1992). It is

within this complex arena that the normal labour pathway has attempted to impose a rational, logical and standardised approach to midwives' decision making. It is not surprising that it has encountered many challenges and various interpretations along the way.

It is also important to acknowledge that the NLP is far from being a neutral device. Although there has been a tendency to treat clinical pathways (and protocols in general) as technical, ideologically neutral tools (Barnes, 2000; Berg, 1997; Pinder, et al., 2005), this overlooks the importance of how they are socially constructed and produced. Clinical pathways are written by specific authors, and incorporate particular kinds of information and rationalities (Berg, 1997). In his critical analysis of expert decision support tools, Berg observes that they privilege the voices of some practitioners over others: 'every tool silences some voices and amplifies others; every tool helps to strengthen some knowledges and helps to forget others…' (Berg 1997 p170) This was clearly evident in the creation of the NLP, where the views of midwives were dominant and particular forms of evidence were drawn on to support the tool that was being created. As Berg suggests, the history and locatedness of such devices should not be ignored.

9.2.1 Why a clinical pathway? Why now?
In attempting to understand more about the journey of a policy from initial creation to its use 'on the ground', it is important to ask key questions about why this particular policy was created at this particular time and in this particular format? In relation to the NLP, I was interested in exploring how and why the NLP had been devised, in particular, what the triggers had been for creating the NLP and why a clinical pathway model had been used.

As discussed in Chapter Four, the creation of the NLP took place within the political context of a relatively young government (WAG), with freedom to create new health policies of relevance to the needs of the Welsh population. Clinical pathways had been identified as an innovative and effective means of introducing evidence-based care in Wales, as a means of enhancing quality of care. Welsh health policy has a strong commitment to reducing health inequalities (WAG 2005 b), and it was anticipated that clinical pathways could assist in this by standardising care, thus ensuring parity of provision.

There was thus support, both financial and ideological for developing clinical pathways. At the same time, concerns were being expressed across the UK in relation to rising intervention rates and falling normal birth rates. These concerns informed the development of two new Welsh maternity related policies: Delivering the Future (WAG 2002) and the NSF for Children, Young People and Maternity Services (2005a). Rather than focusing on 'patient choice', as is the case in English health policy, the Welsh policy emphasis is on equity of provision and access to services and, in the case of Delivering the Future, promoting a normal approach to pregnancy and birth. As one of the key informants described, there was an opportunity to marry these two aims: that is, to use a clinical pathway approach to tackle unnecessary intervention in childbirth.

Thus, in answer to the questions: 'why a clinical pathway and why now?', it would seem that this was an opportunistic and pragmatic response to developing a new maternity policy which would meet strategic aims. It would also differ from maternity policies in the rest of the UK. Whilst this does not appear to have been acknowledged initially, this difference has become increasingly important, as it has served to position Welsh maternity care (and most specifically, Welsh midwifery) as innovative and forward thinking (Boden 2006).

9.2.2 An ambitious project?
The NLP appears to be a particularly ambitious type of clinical pathway. Firstly, it deviates from the usual pathway format i) by being a national rather than a local document, ii) by being used by only one group of professionals (midwives) and iii) by having the aim of creating a fundamental shift in approaches to care, rather than just standardising care for a particular condition. It thus stands apart from the other clinical pathways reviewed in Chapter Two of this report, to such an extent that its classification as a clinical pathway could be questioned.

The NLP is also ambitious because it does not focus on a particular discrete condition, where patients will have relatively predictable trajectories and related treatments. For example, pathways for the care of an individual after surgery are used to map out the patient journey pre and post operatively, and to co-ordinate procedures provided by the range of health care professionals who may be in attendance (doctor, nurse, physiotherapist, occupational therapist etc). These conditions may lend themselves more to the linearity and reductionism of a clinical pathway than childbirth, which is renowned for its high levels of uncertainty (De Vries 2004, Downe 2004, Enkin 2006).

Most of all, the NLP was ambitious in its aim of decreasing unnecessary intervention in childbirth. The complexity of childbirth means that it would be highly unlikely that any one strategy could successfully tackle this issue. There have been many well documented attempts to manage childbirth, each with their own intended and unintended consequences. What these often ignore are the multiplicity of interwoven factors that influence each woman's pregnancy and birth.

A recent guest editorial by Murray Enkin in Birth (Enkin 2006) eloquently expresses this mismatch between the fundamental nature of childbirth and the desire of practitioners to predict and control it. Enkin (2006, p.267-268) observes:
'Many, if not most, of our remaining problems are complex ones, rather than merely complicated. They have multiple, interrelated, interconnected, interwoven, hopelessly tangled causes. They respond in unexpected ways to well-intentioned interventions, even ones based on good evidence. (…) The fundamental mistake of evidence based medicine, evidence based obstetrics, is to treat complex problems as if they were merely complicated'.

Enkin argues that evidence based on RCTs is limited by this lack of attention to complexity; his argument is all the more compelling because, as he himself

acknowledges, he has played a key role in the movement for evidence-based maternity care. Using the 'current epidemic of caesarean sections' as one example of such a complex problem, he argues that 'Naïve efforts to simplify the management of pregnancy and childbirth through standardized formulas, evidence-based protocols, are failing, and we are beginning to recognise anew the complexity of pregnancy and birth as life events to be experienced, rather than diseases to be managed' (Enkin 2006 p 268)

From this perspective, the fundamental goals of clinical pathways (i.e. to standardise practice by implementing evidence based care) are at odds with the fundamental individualised nature of childbirth. Thus a 'cookbook for maternity care is not in the cards' (Enkin 2006, p.268).

It was evident from the data that the NLP had not taken into account many of the complex factors that may lead to unnecessary intervention in childbirth. In particular, it was highly unlikely that this could be addressed by focusing on the work of one group of professionals i.e. midwives, and failing to effectively engage all other involved in the co-production of normal birth. The lack of knowledge and understanding of the purpose and underpinning philosophy of the NLP by both doctors and mothers was one of the unexpected findings of this study.

9.3 Strengths of the NLP:
However, the findings did indicate a number of benefits that appeared to be a direct consequence of the NLP creation and implementation. These related particularly to the work of midwives. The NLP has normal birth as its raison d'etre, and thus provides within its protocol a number of strategies known to increase the likelihood of achieving a normal birth (for example, encouraging women to remain at home until labour is established, encouraging women to remain mobile and to eat and drink during labour). As midwives are defined by their expertise in normal birth, this foregrounding of normalcy (and by extension, a midwifery model of practice) is supportive of midwives and enhancing for their confidence.

Increased confidence was frequently described by participating midwives, who represented a wide range of clinical responsibility and clinical experience. This was attributed directly to the supportive function of the NLP. As noted, this support was achieved not only by the tangible protocol provided by the NLP, but also by the less perceptible aspects e.g. the sense of 'empowerment' provided by having a midwifery document enshrined in policy.

It may be that there are other significant strengths of the NLP. For example, the increased time allowed for labour progress may well prove beneficial for mothers and babies, as was the view of many midwives interviewed. However, as discussed earlier, the lack of a rigorous built in evaluation from the start of the NLP implementation means that it is not possible to ascertain what the impact has been on clinical outcomes for mothers and babies.

9.4 Limitations of the NLP:

A number of limitations relating to the NLP creation and implementation have been identified. Exclusion was a central theme. The creation of the NLP as a midwifery project has resulted in the exclusion of doctors and users of the service at various stages of its journey from policy to practice. The accounts of doctors suggest that, in their perception, they were not effectively in the initial stages of consultation and development, and that this sense of exclusion was compounded during the implementation stage.

This has led to increased tensions between doctors and midwives. These tensions have in turn been exacerbated by the tendency of the NLP to make explicit the diverging, and often conflicting, models of childbirth held by doctors and midwives. Although these differing perspectives are widely acknowledged (and were there long before the NLP was ever thought of), it is nevertheless the case that the NLP clearly demarcates the territories of these two occupational groups. In addition, it has shifted the balance of power. Whilst past approaches to maternity care such as Changing Childbirth (DOH 1993) may also have impacted on occupational territories, I would argue that the NLP takes this to a new level by transferring many aspects of power directly to midwives: for example, it is midwives who decide which women are appropriate for care 'on the pathway' and only midwives who have access to these low risk clients and their records. As Berg et al (2000 p786) argue, from a sociological perspective, health care records contain symbolic meaning, and 'mediate the creation and maintenance of hierarchies between professional groups'. The creation of a uni-professional record is thus a powerful statement about relative positions of power.

However, although the study highlighted this shift in power and increased tensions, it also demonstrated that both groups describe themselves as working towards same aim: i.e. a safe and rewarding experience for mother and baby, albeit to be achieved through different approaches. This shared aim should offer a way forward for reducing these tensions.

The other group who were relatively excluded from the creation and implementation process were the mothers. The review of the literature indicated that this was a common experience: there was little evidence that clients' views were incorporated into the designs of pathways, despite the claim made by many pathway exponents that pathways are empowering and client centred.

This exclusion was not identified as problematic by the mothers who were interviewed, because they were largely unaware of the NLP and how it represented a new approach to maternity care in Wales. As noted in Chapter Eight, this appears to have been a missed opportunity. Women can be key allies for health care professionals in tackling problems within maternity care (see for example, the significant achievements of mothers and midwives in New Zealand, Pairman 2000). The aims of the NLP are clearly relevant to those on the receiving end of care, and much could have been gained from sharing these goals. For example, the difficulties experienced by some mothers in early labour may have diminished if they had understood the

rationale for staying at home for as long as possible. This means that the midwives needed to have explained this approach and its underpinning evidence base during pregnancy. However, working in partnership in this way also lays professionals open to challenge and questioning.

9.5 What we still don't know
This study has highlighted a number of interesting issues, but leaves many questions still to be answered.

One key question is how the NLP will affect the 'terrain' of maternity care in Wales in the long term. As Berg (1997 p172) observes 'the production and use of the map *transforms* the terrain – where we can go now and could not before – and what is hidden from view'. In this case the NLP acts to re-map maternity care by repositioning the key players and altering the parameters of normality. As Berg implies, this opens up new possibilities and closes down others. It is also the case that new ways of working become embedded in practice, so that their history and locatedness are forgotten.

There are many ways in which the NLP could 'transform the terrain'. There were interesting insights provided by participants relating to the possible impact on midwives' knowledge and ways of knowing, especially the development of clinical judgement. The NLP makes visible certain aspects of practice and obscures others; it also provides important messages about what is valued in midwifery work. Clinical pathways by definition simplify conditions and the care provided; this is integral to their function. They cannot accommodate complexity. This means that their focus is on signs, symptoms and interventions that can be objectified, rather than the 'messier' aspects of care e.g. the clients' social situation or emotional reactions to their care. This was certainly true of the NLP. As a result, there is the potential for clients be reduced primarily to 'discrete body parts' (Barnes 2000), which can be monitored and assessed. Clients are also de-contextualised, with the pathway 'highlighting some aspects of the patient experience, whilst silencing others' (Pinder et al. 2005 p 763). In relation to traditional clinical record keeping, Kirkham (1997 p186) has warned that there is 'real danger of reductionism and missing the essence of the matter'. By limiting what can be recorded to tick boxes and variance codes, the NLP is likely to compound this danger (Hunter and Segrott 2007). In the long term, this focus on objectivity and reductionism could result in the knowledge base for midwifery being subtly re-written.

This impact on 'ways of knowing' may be further compounded by the emphasis on 'documentation by exception'. Berg (1996) draws attention to the active role played by client records in mediating healthcare work by entering into 'the 'thinking' processes of medical personnel and into their relationships with clients and with each other' (Berg, 1996, p.520). Berg argues that medical records are not only a record of clinicians' thought processes – they are part of the thought process itself. Pathways, however, minimise writing, making use of tick boxes and signatures recorded against prescribed 'interventions'. There is the potential that ceasing to document the details of care will run the risk of making the complex skills of midwifery practice

invisible. Many kinds of information may be lost. The NLP does not provide discretionary space for intuitive, experiential knowledge to be recorded, particularly in relation to clinical reasoning. The longer term implications of this can only be surmised. It is possible however that removing detailed narratives of practice will in turn alter the embodied memory of midwives (and in particular leave future historians of midwifery practice highly frustrated at the limited archive material available (Hunter and Segrott 2007). As Bowker and Leigh Starr (1999 p263) observed in their study of Nursing Intervention Classification systems, altering documentation may lead to 'organisational forgetting': ' it is by definition hard to remember what has been removed from the archive when the archive itself is basically the only memory repository at hand'.

It would appear that in many ways the NLP represents a 'professional project' (Witz 1992 p64); that is 'a strategic course of collective action' which acts to close off aspects of work to other groups and 'employ(s) distinctive tactical means in pursuit of the strategic aim ….'. The aim of such projects, Witz proposes is to 'establish a monopoly over the provision of skills and competencies in a market for services.' In many ways, this could be said to be true of the NLP. According to Witz (1992), subordinate groups aim to achieve their aims by resistance to the dominant group, and by consolidating their position via position by 'exclusionary tactics'. In the case of the NLP, it could be argued that midwives are challenging the dominance of the medical profession within maternity care by setting up a system whereby they have privileged access to 'normal' women and their clinical records, control over pathway evidence base and control over which women are admitted onto/ off the pathway.

The NLP has enabled midwives to increase their autonomy and capacity for practicing normal midwifery (albeit within what appears to be a more circumscribed area of practice, as the boundaries of normality and abnormality have been redrawn as a result of the inclusion and exclusion criteria). This could be viewed as increasing the professional status of midwives vis a vis doctors, although some midwives were sceptical about this. It is a common expectation of those in professions allied to medicine that the creation of clinical pathways will enhance status, by providing what is perceived as an increased scientific basis for practice and expanding the scope of practice. In reality, Berg et al (2000 p766) warn that there is an 'inherent tension' within any form of guideline or protocol. Although such instruments may increase the scientific image of a professional group, they do so by reducing practitioner autonomy. Hence they may be something of a 'double edged sword', as they open up practice to increased surveillance and make decision making processes 'more vulnerable to 'meddling' by outsiders' (Berg et al 2000 p766). Bowker and Leigh-Starr (1999 p29) observed similar tensions in their study of the effects of introducing classification systems in North American nursing. These systems walked a 'tightrope between increased visibility and increased surveillance; between overspecifying what a nurse *should* do and taking away discretion from the individual practitioner".

Although clinical pathways are generally implemented with the fundamental aim of ensuring high quality client care (and thus by implication, excellent practice), it is not at all clear whether this aim is actually achieved on the ground. Many of the ingredients which clients may identify within a positive experience may not be measured (or indeed be easily measurable) in current evaluations of pathway use, if and where they exist. There are many forms of expert based decision making tools currently being developed and used (for example, the algorithms used by NHS Direct, Greatbatch et al 2005). It is far from clear however, whether these do in fact facilitate the development of expert practitioners? Benner's (1984) famous discussion of the ways in which nurses move from being novices to experts sets out the proposition that developing expertise is far from a linear process. Expert knowledge is not easy to articulate or to measure. Benner (1984 p.43) cautions that, although attempts may be made to 'model of make explicit all the elements that go into a nursing decision, (but) experts do not actually make decisions in this elemental, procedural way. They do not build up their conclusions, element by element, rather they grasp the whole'. When working with clients, experts draw on a rich body of tacit and experiential knowledge 'which cannot easily be put into abstract principles or even explicit guidelines' (Benner 1984 p37).

Finally, this study raises questions about occupational territories. Although the concerns of doctors were directed at the NLP tool and the way in which it was created and implemented, it was often apparent in the interviews that at the nub of these concerns was the associated shift in power effected by the NLP. That is, it was midwife-led maternity care that was frequently the problem, rather than the NLP per se. In fact, several midwives pointed out that the NLP was used as a scapegoat for broader territorial concerns. This leaves us with the question: is destabilisation of the midwife / doctor relationship inevitable in any project which aims to normalise childbirth?

In the final section, the implications of this study for practice, policymaking and future research are considered.

9.6 Implications for practice:
- Given the extent of the concerns voiced, the emphasis on documentation by exception should be reviewed. Practitioners should be able to add to documentation at their discretion (e.g. by use of continuation sheet as in Unit A)
- Women need to be informed of this new approach to their care and provided with opportunities to discuss this with midwives, in order to understand the rationale for this and its implications for their labour and birth experience.
- Support for women in early labour is essential. Telephone advice needs to be reassuring, supportive and encouraging, with the needs of individual women being addressed. Support from a known midwife is experienced positively.
- Proactive efforts must be made to ensure any tensions between midwives and doctors are minimised. Opportunities for collaborative working (e.g. on research projects or clinical innovations) should be actively sought, in order to enhance mutual understanding and tackle

areas of conflict. Both groups need to work in partnership to address issues of importance within maternity care, with an emphasis on shared aims and objectives. High caesarean section rates are everyone's business. The work currently being carried out in Kings Health District in London (Warwick 2007) is an excellent example of such a collaborative approach.

- Careful attention should be paid to the development of clinical judgement in student and newly qualified midwives, given the potential for the use of clinical pathways to impact on this. This has implications for pre-registration and post-registration midwifery education, as well as for preceptorship and support for newly qualified midwives.
- Ongoing training and support for all practitioners is needed. Once off training is not enough. Midwives require regular updating, and new staff will need training and support (particularly if previously employed outside Wales). This training should include discussions of the underpinning philosophy and aim of the NLP. Similar training and support should be offered to doctors and other staff working within maternity care (e.g. maternity care assistants).

9.7 Implications for policy making:

- 'Soft technologies' such as clinical pathways are not neutral devices but have the potential for unexpected, far reaching consequences. They therefore need rigorous evaluation as would be expected for any other type of intervention. All new policies should have evaluation built in from the onset. This evaluation needs to be designed by those with appropriate skills.
- It is very important to ensure that all possible stakeholders are fully consulted at each stage of the policy making process, in order to minimise feelings of exclusion and alienation. This information should be fed into all stages of development, implementation and monitoring.
- Effective communication between health care professionals should not be taken as a given; rather time and resources must be set aside to ensure that this becomes a reality rather than an ideal.
- Audit tools need to be designed in the initial stages of projects, with careful attention paid to the types of information that will be useful to all stakeholders.
- Ongoing support is needed for projects, to ensure their efficacy.
- All of the above require funding and resources to be made available.

9.8 Implications for research:

- Longitudinal studies are needed to investigate the long term impact of clinical pathways on the development of clinical judgement and expert practice
- The NLP requires a long term study to monitor the effects of 'documentation by exception' (especially on litigation and complaints cases)
- Further research is needed to investigate the impact on clinical outcomes of using a half a centimetre per hour cervical dilatation rate as the norm.

- Further research is needed to explore women's understandings of normal birth, and to compare it with midwives understandings
- The lack of evidence pertaining to clinical outcomes for mothers and babies is of concern. Whilst it does not appear that the NLP has led to any serious negative consequences, it is not possible to say whether there have been any measurable benefits. Although it is no longer possible to evaluate the clinical outcomes of the NLP from its inception, (for example by using a randomised controlled trial), there may still be opportunities for quantifying some outcomes (for example, making use of historical data). This is recommended.
- Any other units considering implementing the NLP should ensure that rigorous systems of evaluations are in place.
- More qualitative research is needed to explore the complex effects of introducing 'soft technologies' into practice

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Appendix One : Summary of main studies reviewed

Author(s) and year	Main Country Studied	Clinical area	Methodology / Methods	Brief Description / Key Findings
Atwal & Caldwell	England, UK	Orthopaedic care	Action research	Found that an integrated care pathway designed to enhance interprofessional collaboration brought little improvement to communication and relationships.
Barnes (2000)	Australia		Ethnography & discourse analysis	Argues for an understanding of pathways as indirect regulatory mechanisms achieving alignment of clinical practice with governmental aims.
Bragato & Jacobs (2003)	Scotland, UK	Orthopaedic care		A pathway for total hip replacement was more successful in an elective unit, when compared with its use in a trauma unit.
Bryan, et al. (2002)	England, UK	Breast cancer		Describes the key steps in developing a pathway, discusses the concept of variance, and considers issues of task distribution and de-skilling.
Caminiti, et al. (2005)	Italy	Various		Evaluates the effectiveness of a multifaceted strategy to reduce negative variations in medical practice, and the importance of multidisciplinary teamwork.
Campbell et al. (1998)	UK			Provides a description of integrated care pathways, offers advice on their development and implementation, and reviews the "evidence of their effectiveness."
Cheah (1998)	Singapore		Personal perspective	Examines the growth, benefits and medico-legal implications of pathways, and applicability within the Singapore healthcare system.
Currie & Harvey (2000)	UK		Questionnaire, interviews	Conducted at 16 study sites. Identified main characteristics and key benefits of pathways being utilised, and major challenges encountered.
De Luc (2000)	England, UK	Midwifery; breast disease	Quasi experimental case study	Evaluation of changes in clinical care, client satisfaction and staff views achieved through pathway implementation.
Dy, et al. (2005)	United States	Surgery	Qualitative comparative analysis	Identifies factors associated with pathway effectiveness, and discusses the uncertainty regarding their mechanisms of action.
Fox et al.	England, UK			Outlines the key steps in developing and utilising integrated care

				pathways, and discusses their main advantages and disadvantages.
(2003)				
Fox (2004)	Wales, UK	Midwifery		Describes the aims and development of a clinical pathway for normal labour, designed to reduce unnecessary intervention during.
Furåker et al. (2004)	Sweden	Stroke care	Interviews (n=16)	Explored staff views about the impact of a pathway on quality of care and the nature of caring work.
Jones (1999)	England, UK	Mental health	Literature based	Considers the role of pathways within the broader UK modernization and clinical governance agendas.
Jones (2000)	England, UK	Mental health	Action research; interviews, participant observation	Discusses the challenges of pathway implementation, including other changes occurring concurrently in the care environment, and lack of engagement by staff.
Jones (2003)	England, UK	Mental health (Schizophrenia)	Interviews, observation	Explores staff perceptions of a care pathway, focusing on the achievability and applicability of an evidence-based approach to psychiatric care.
Johnson & Smith (2000)	England, UK		Quantitative analysis of clinical data-	Evaluation of a pilot integrated care pathway, and discussion of key success criteria, including staff commitment and the role of ICP facilitators.
Holtzman et al. (1998)	United States	Renal transplant		Examines the contrasting results of two similar pathways, and discusses the concentration of changes in key success indicators during the development phase.
Lowe (1998)	England, UK			Assesses the potential of pathways to deliver quality and cost effective care in the context of current UK health reforms, and identifies key clinical areas of applicability.
Merritt et al. (1999)	United States	Neonatalogy	Literature-based	Examines the evidence for effectiveness of clinical pathways, and discusses the existence of natural variation in medical practice.
Pace et al. (2002)	United States	Congestive heart failure	Case study	Identifies procedural inconsistencies and 'work group cultures' as factors in the non-utilisation of a pathway by practitioners.
Pinder, et al. (2005)	England, UK		Interviews and observations	Explores the process of pathway development, their configuration of clients, and their effect on professional identities and relationships.
Renholm et al. (2002)			Literature review	Evaluates impact of pathways on client care, key clinical areas where research has been undertaken, and the main methods employed.
Robotham & Cro (2001)	UK	Maternity care		Debate between two midwives on the suitability of care pathways for maternity care.

Sulch et al. (2002)	UK	Stroke Rehabilitation	RCT	Clients' quality of life was greater in clients receiving conventional multidisciplinary team care versus pathway delivered care.
Vanhaecht, et al. (2006)	23 countries	Multiple	Questionnaire survey	Examined pathway nomenclature used in different countries, the extent of pathway utilisation; and key approaches used during development, implementation and evaluation.
Walldal, et al. (2002)	Sweden	Stroke care	Case study; questionnaire	Evaluation of quality of care provided by pathway care. Identified areas for improvement relating to client participation/information and definition of 'key events'.
Walsh (1997)	England, UK	Orthopaedic care		Describes the process and outcomes of a care pathway for fractured neck of femur. Discusses interprofessional collaboration and communication.
Wigfield & Boon (1996)	England, UK	Orthopaedic care		Discusses the effect of care pathways on interprofessional collaboration, including making different practitioners' expectations of care sequences explicit.

Appendix Two: Definitions of variance in the literature

Study	Definition
Atwal and Caldwell (2002)	"… any deviation from the proposed standard of care listed in the pathway. … The recording of variances gives staff a means to practice professional autonomy as it enables them to individualize care …"
Bryan, et al. (2002)	"… deviations from the pathway standards … These variances may be system derived … or community derived … As the pathway evolves and is modified, fewer system- and community-derived anomalies should be detected. There will, however, continue to be the occasional patient variance due to unexpected complications."
Cheah (1998)	"… the unexpected events that occur during patient care – events that are different from what is predicted on the clinical pathways. … using clinical pathways … can reduc[e] avoidable variation in the clinical process."
Currie and Harvey (2000)	"… any deviation from the pathway …"
De Luc (2000)	"Any deviation from the care plan … [V]ariance analysis is the in-built system for recording unexpected events … which are different from those predicted in the pathway."
Fox, et al. (2003)	"any deviation from the expected care identified on the care pathway, as without the ability for health care professionals to vary treatment programmes according to patient needs, care cannot be individualised."
Johnson and Smith (2000)	Deviation from what is planned on the pathway.
Jones (2000)	Deviation of the patient or 'care provider' from the pathway.
Lowe (1998)	"Pathways … allow for individualization through the use of variation. Variation allows for documentation of a change from the pathway to suit the individual patient or a change in the situation."
Walsh (1997)	"The discrepancy between expected and actual events", including "comorbidity and personal psychosocial factors" and the co-ordination of care.
Wigfield and Boon (1996)	"Variances are differences between what is expected to happen and what does happen." They include patient, clinician, system and community variance.