



CENTRE
FOR
WORKFORCE
INTELLIGENCE

Maternity Care Pathways *Tool*



Health Education England



Guidance document

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Introduction to the tool

Purpose of the tool

The Maternity Care Pathways Tool is designed to support maternity service providers in planning their future workforce and service design. Using the tool, maternity services can capture a high level summary of current workforce numbers and service activity to compare with possible change scenarios - for example a change in birth rate, a proposed service improvement or the impact of changing skill mix. The tool has been designed to provide the following:

- A clear, visual representation of how a service’s staff are deployed along summary care pathways that are mapped and agreed in-house.
- Team-based workforce planning support: the tool encourages team decision-making and discussion to agree care activity timings.
- A communication tool which can be used with staff, workforce planners and commissioners to convey information about the service’s care pathway activities.
- Reports bespoke to your service, enabling you to see the results of a change.

The MCP tool is:	The MCP tool is not:
Designed for use by providers of maternity services as an aid to better informed workforce decision-making.	A replacement for other established tools such as Birthrate Plus.
Designed to analyse a service’s maternity workforce along summary care pathways.	Designed to capture every detail of your service – it is a summary modelling tool to support the visualisation of change scenarios and service planning.
Aligned with the maternity tariff.	An accounting tool – all costs are based on the mid-point of staff salaries and are intended only to aid the understanding of the cost implications of service change.
Designed to provide analysis about possible future change scenarios.	A source for the ‘right’ answer, it is part of the toolkit to support decision making.
Reliant on data inputted by the service.	A benchmarking tool – the tool only uses data inputted by the service. It will only allow you to compare your current service with a change that you model to your service, not local or national standards.
Excel-based and flexible to local requirements. Each service can decide what to model, what activities to capture and build a picture that is bespoke to the service itself.	Designed to provide direct service-to-service comparisons as different decisions can be made in each locality. It can however support discussions between services or within networks on service design and planning.

Key principles for use of the tool

In order for the tool to be personalised to each service it requires service data (birth and workforce data) and estimates of time, based on clinical experience of care provision (activity timings). All tool outputs provide an annual overview and high level summary of the current service based on current activity. Changes can then be modelled by adjusting existing data (birth data, workforce data and activity timings) to map change scenarios. The following key principles should therefore be noted:

- The tool should not be used as an accounting tool. All costs are calculated based on mid-point staff salaries. No other costs, such as equipment, bank and agency staff and overtime are accounted for.
- The tool requires each service to agree activity timings that are delivered for one 'typical' woman on any given pathway. All women are different and the care and support that services deliver every day is completely individual. Agreeing typical timings is intended solely to allow service modelling. It does this by creating as representative a snapshot as is possible whilst still working at a summary level. A summary tool does not require you to capture every detail of your service. Please remember that this tool is designed to be a support to planning and workforce decision-making and captures only as much information as is required for that purpose.
- The tool is not designed for benchmarking and is bespoke to each service. All calculations in the tool are based solely on the data that each service inputs into the tool and therefore they do not refer to local or national benchmarks.
- The tool will produce reports showing workforce numbers in a modelled environment. Please remember that the modelled numbers provided in the tool's output indicates the theoretical number of staff your service would require or the theoretical number of cases the team could support if every woman received exactly the minutes of care that you agreed in your activity timings. **This output is based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**
- The model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand – however, you may find it useful to refer to the monthly intrapartum reports to compare monthly fluctuations in demand to the annual overview.

Key information for using the tool

Please read this guidance document prior to using the tool as it provides a detailed, step-by-step explanation of the process involved in using the Maternity Care Pathways Tool. It is important that you also refer to it as you are using the tool.

This guidance document accompanies version 1 of the tool and will tell you:

- how to prepare for using the tool
- the team you should bring together to effectively use the tool, and their roles
- how to use the tool, including how to complete each section of the tool and interpret its output.

System requirements

Before you start using the tool it is important to note that you will need Adobe Reader 8.1 (or a later version) and Microsoft Excel 2007 (or a later version). This will ensure that you have access to the full functionality of the Maternity Care Pathways Tool. The tool uses macros which need to be enabled by clicking on the 'Options' box at the top of your screen and selecting 'Enable this content'. If you do not enable the macros when prompted, the tool may not function fully.

Screen resolution requirements

The tool is best viewed using 1280x720 screen resolution. To check or change your screen resolution, select 'start' on your computer, click on 'Control Panel', then click on 'Display' and then select the 'Settings' tab. The tool has an in-built function which will allow you to zoom in and out of each page to suit your viewing needs.

Printing requirements

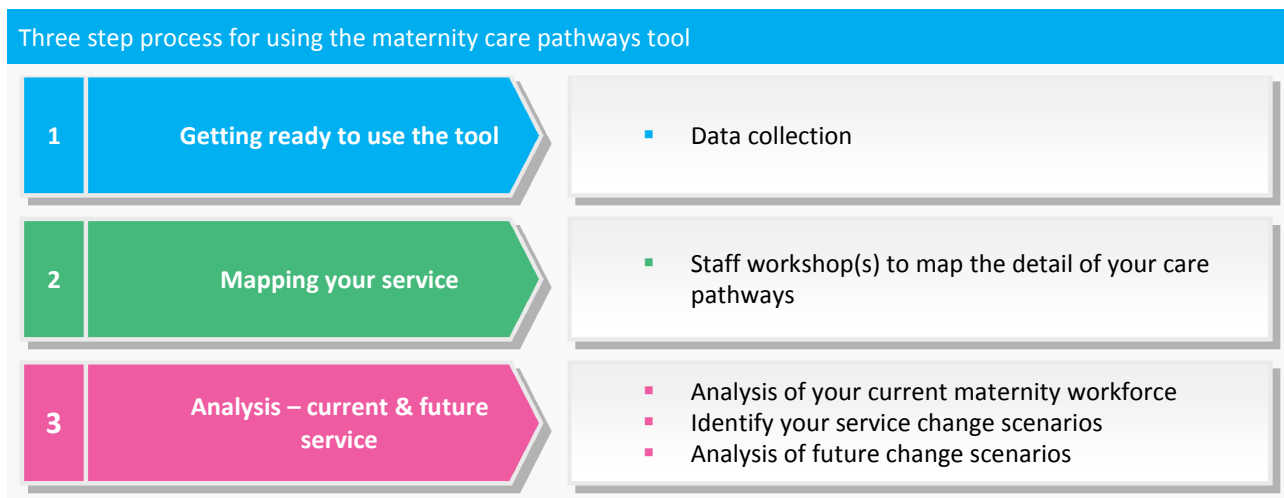
When printing the tool, black and white printing is not recommended. The care pathways are colour coded and the colours will facilitate completion of activity timings. There is a print button built into the tool, which will allow you to print each page of the tool without having to change the print settings on your computer. It is recommended that you do not print the pathways any smaller than A3, to allow for easier reading.

Navigation buttons

There are navigation buttons built into the tool, which will allow you to move easily from page to page. This includes a '**Zoom & Scroll**' button which allows you to zoom into particular parts of each pathway. The '**Contents**' page, allows you to navigate directly to specific pages of the tool without going through all previous pages. To ensure that these buttons are active, the macros must be enabled (as explained above).

Approach to using the tool

As a starting point, the tool should be used to model your current service. Once you have created a map of your service as it currently operates, you can start making changes to demand, workforce numbers or service delivery to model a change scenario. But it is important to agree the model of your current service in the first instance. This guidance document will walk you through how to model your current service, and also how you can then model change scenarios. It breaks down the process of using the tool into three stages, as displayed in the graphic overleaf.



The tool requires three types of data:

1. the number of women using your service
2. workforce data
3. summary activity timings.

Initially, you will need to capture your current service by inputting the current number of women using your service, current members of staff in your team, and, current summary activity timings. Once you have agreed this information, you can then model a change scenario by manipulating any of these three types of data to assess the impact on your service.

1. Getting ready to use the tool

1.1 Preparation

Following the decision to use the Maternity Care Pathways Tool, a brief preparation stage should be undertaken to set out how you will use the tool to suit your service.

Using the tool does require resource from across the team. This is a process of ‘peaks and troughs’ of activity, but it does not require any staff to work on it full-time for any period of time. However, it is recommended that a team is established for using the tool and a preparatory meeting is held with these team members.

During the preparation stage the team needs to agree the roles as listed in section 1.1.1. The graphic below gives a checklist you can use during the preparatory stage.

Preparation stage checklist

A list of the key outcomes of the preparation stage of using the Maternity Care Pathways tool

Preparation stage	
<input type="checkbox"/>	Establish tool team
<input type="checkbox"/>	Assign activities with timescales
<input type="checkbox"/>	Identify change scenarios

The team can then use the process plan illustrated in the figure overleaf to discuss and assign the activities needed for using the tool with timescales to suit.

1.1.1 Roles required to use the tool

In order to use the tool, a service needs to identify a number of roles to work on the tool. These roles can be combined or delegated as suits you best. This guidance document provides estimates of the resource requirements for each role, but this may vary depending on what you would like the tool to do, who is available to undertake the different roles, and how much discussion there is on pathways in your service. Please note that preparing the tool for use does take time and effort, particularly agreeing the individual activity timings. However, this effort is required to set up the tool in the first instance. Once the tool is initially completed, it can then be amended and used as frequently as needed without repeating the full process.

Leadership:

The head of midwifery would need to engage the service in using the tool throughout the process. They would need to allow time for reviewing the pathway timings and service data. It is estimated that the leadership role requires a total of three days over the course of using the tool. It is important that the leadership role takes note of the key principles for use of the tool, as outlined on page 4 of this document. This is particularly crucial when leading the team whilst using the tool and in any discussion of any outputs from the tool.

Management:

A senior team member (this may be combined with the leadership role or another senior member of staff) will be required to manage the use of the tool throughout the process. This includes leading the workshops, ensuring the data is validated, and running the tool for analysis of change scenarios. Modelling change scenarios may require further staff

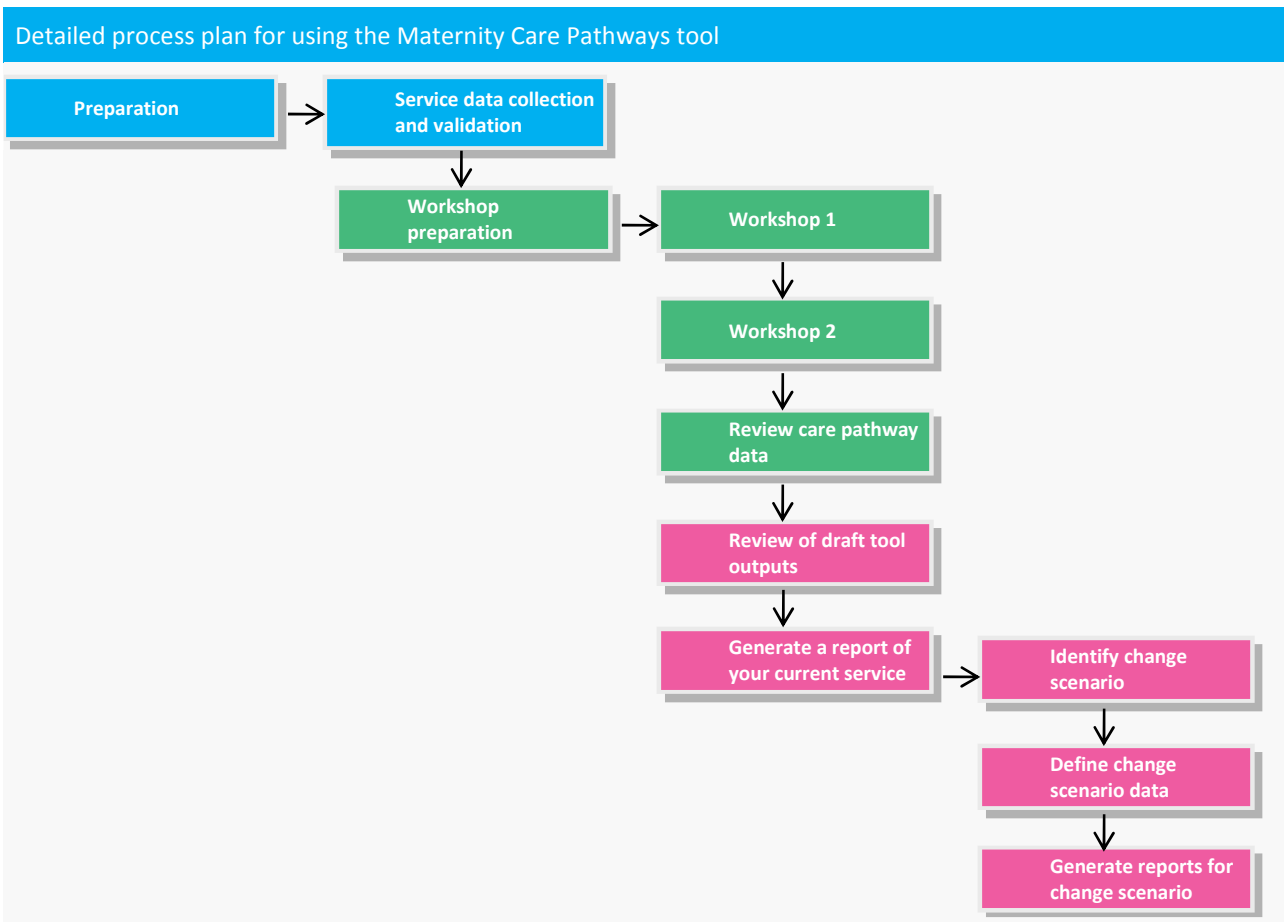
time, but this is dependent on the change scenarios you wish to model. It is estimated that the management role requires approximately ten days in total over the course of using the tool. It is important that the management role takes note of the key principles for use of the tool (as outlined on page 4) when leading the workshops and in any discussion of any outputs from the tool.

Organisation:

In order to establish the detail of your care pathways, a member of staff needs to set up in-house workshops. Please refer to section 2 of this document for detailed information about setting up and running workshops for the Maternity Care Pathways Tool. It is estimated that two half-day workshops are required in order to agree the care pathway timings, but it may require longer sessions depending on the level of debate. It is estimated that it requires approximately five days to organise workshops, including the actual workshop time. We recommend that you run workshops, however if this is not possible for your service, then individual meetings with staff members can be used as an alternative method of collecting data for the care pathway activity timings. However, this method will not enable debate, challenge or wider engagement with the process.

Data:

One member of staff will be required to collect and input existing service data into the tool, and also input the pathway data during the workshop(s). The level of input is dependent upon the availability of the required data, as detailed in section 1.2. It is estimated that it can take between two and four days to collect and validate the required service data.



1.2 Service data collection and validation

In order to use the tool, there are two key sets of service data required – birth data and workforce data. Checklists are provided for all data sources that you need to obtain. A member of staff will be required to collect and input this existing service data into the tool on the '**Birth data**' page and the '**Maternity workforce**' data page.

1.2.1 Birth data

The purpose of this sheet is to capture the demand on your service; therefore birth data inputted into the sheet should be as reflective of your service's cases as is possible. In order for your service's demand to be accurately represented please consider the following:

- The tool has been set up to reflect that women may move between different maternity services. Therefore the number of antenatal, intrapartum and postnatal cases do not need to be equal. Birth data inputted into this sheet should reflect the total number of women who receive care within each pathway.
- Birth data inputted into the sheet should be representative of the number of women who have used your service, rather than the number of babies delivered.

Please use the checklist on the following page to ensure you obtain all the birth data needed for the tool.

Birth data checklist

Annual birth profile data required for the Maternity Care Pathways tool.

	Data
<input type="checkbox"/>	Annual number of women on the antenatal standard primip pathway
<input type="checkbox"/>	Annual number of women on the antenatal standard multip pathway
<input type="checkbox"/>	Annual number of women on the antenatal intermediate social pathway
<input type="checkbox"/>	Annual number of women on the antenatal intermediate obstetric pathway
<input type="checkbox"/>	Annual number of women on the antenatal intensive pathway
<input type="checkbox"/>	Home births, by month
<input type="checkbox"/>	Birth centre, births by month
<input type="checkbox"/>	Delivery unit – normal delivery births, by month
<input type="checkbox"/>	Delivery unit – assisted delivery births, by month
<input type="checkbox"/>	Emergency caesarean births, by month
<input type="checkbox"/>	Elective caesarean births, by month
<input type="checkbox"/>	Annual number of women induced preceding delivery
<input type="checkbox"/>	Annual number of women on the postnatal standard pathway
<input type="checkbox"/>	Annual number of women on the postnatal intermediate pathway
<input type="checkbox"/>	Annual number of women on the postnatal intensive pathway

You may need to make informed assumptions to calculate some of the above data. For instance, if your data does not detail the antenatal standard primip and multip split, then apply an informed percentage assumption to each category. For example, if you cared for 1,000 antenatal standard women per year and felt that 60 per cent were primip births and 40 per cent were multip births, then you would enter 600 antenatal standard primip women and 400 antenatal standard multip women.

Please note that you need to enter intrapartum data by month. The tool will then automatically calculate your annual intrapartum data in the blue boxes, as shown in the graphic overleaf.

Birth data input sheet

Insert your annual antenatal and postnatal, and monthly intrapartum birth data in the green boxes on the 'Birth data' sheet.

Birth data

Enter your birth data below.

Antenatal care	Annual number
Standard primip	
Standard multip	
Intermediate social	
Intermediate obstetric	
Intensive	
Total	0

How to complete this sheet:

Using the green cells enter your annual antenatal, induction of labour and postnatal data. Intrapartum data should be entered by month and the tool will automatically calculate the annual intrapartum data from your monthly figures (in the blue boxes). Ensure that data accounts for the total number of women booked, not the total number of babies delivered.

Once you have entered all your maternity data, click the next button at the top of the page.

Intrapartum	Annual number
Home birth	0
Birth centre	0
Delivery unit - normal delivery	0
Delivery unit - assisted delivery	0
Emergency caesarean section	0
Elective caesarean section	0
Total	0
Induction of labour	0

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	0	0	0	0	0	0	0	0	0	0	0	0

Postnatal care	Annual number
Standard	
Intermediate	
Intensive	
Total	0

1.2.2 Workforce data

Accurate workforce data is also required for the tool. You will need to know the number of staff in each workforce role (Full Time Equivalent (FTE) not headcount) that is part of the maternity establishment. Tick off the checkpoint below when you have obtained this.

Please note that not all staff roles need to be completed. If your service does not include a particular role, you can leave it blank without affecting the tool. Similarly, if you are only interested in modelling midwifery roles, you can leave other roles blank.

Workforce data checkpoint

The workforce data required in order to use the Maternity Care Pathways Tool.

Data

Number of staff (FTE, not headcount) for each maternity workforce role

As shown in the graphic overleaf, the purpose of the 'Maternity workforce' data sheet is to capture the workforce available to deliver care. Therefore workforce data inputted into the sheet should be as closely reflective of your service as possible. In order for your service's maternity workforce to be accurately represented, please consider the following:

- Workforce numbers should be representative of your current in-post FTE's available to deliver care. This should not therefore include vacancies. However, should you wish to model your service were all vacancies to be filled, this can be modelled as a change scenario in a later version of the tool.

- Workforce numbers should be representative of staff funded by your maternity service. If staff undertake maternity care but are not part of the maternity establishment, they should not be entered in the tool (for example, translators employed throughout a trust or intensive care unit staff).
- Do not include overtime, bank workers and agency staff in your data.
- There will be an opportunity to adjust for training and development, sickness absence and maternity leave on the following page.

Please note that the tool does not allow you to add additional roles which are not already included in the list. Should you need to capture the FTE of a staff member not included in the existing role list please insert the FTE into the most comparable existing role.

Maternity workforce data input sheet

Insert your FTE number of staff for each maternity workforce role in the green boxes on the 'Maternity workforce' sheet.

Maternity workforce

Enter the full-time equivalent (FTE) against the roles in your maternity workforce.

Roles	Agenda for Change band/medical grade														
	1	2	3	4	5	6	7	8a	8b	8c	8d	FHO	Registrar	SAS	Consultant
Role 1															
Role 2															
Role 3															
Role 4															
Role 5															
Role 6															
Role 7															
Role 8															
Role 9															
Role 10															
Role 11															
Role 12															
Role 13															
Role 14															
Role 15															
Role 16															
Role 17															
Role 18															
Role 19															
Role 20															

How to complete this sheet:

Using the green cells enter the full-time equivalent (FTE) numbers for each staff role employed in your maternity service, according to Agenda for Change pay bands/medical grades.

If there are no staff employed in a particular role or not employed by your maternity service, leave the box empty.

When complete, click next.

1.2.3 Workforce settings

The purpose of the workforce settings sheet is to capture the amount of time your workforce has available to deliver care and support on the pathways after additional activities have been accounted for. The graphic overleaf will show the factors and assumptions you can apply to each role. On this sheet you can set the ratio of time each role (with the exception of business roles) spends on pathway care and/or other activity. This is separated into three categories:

1. **Pathway time** refers to the proportion of time which is spent providing and delivering care pathway activity to women on all pathways.
2. **Management and leadership time** refers to the proportion of time which is spent on management or leadership activities such as shift management/coordination, or attendance at business and finance meetings.
3. **Midwifery supervision time** refers to the proportion of time spent by more senior members of staff on providing supervisory activity to other team members.

As each role is split into pathway time, management and leadership time, and midwifery supervision time, the cumulative time you apportion to each role will equal 100 per cent. The tool will not allow you to exceed this amount and so the three factors are linked and all three will move together to adjust accordingly. For example if in your service senior midwives spend on average 30 per cent of time delivering pathway care, 20 per cent of time on management and leadership activities and 50 per cent of time providing midwifery supervision to other team members, then **Pathway**

time' would be set to 30 per cent, **'Management and leadership time'** would be set to 20 per cent and **'Midwifery supervision time'** would be set to 50 per cent. If you wish to increase time spent on the pathway to 40 per cent, the other two factors will automatically decrease so that cumulatively the proportions still equal 100 per cent. You will see the other percentages move to adjust accordingly. You will need to adjust and readjust each percentage to ensure all three are set at the level you wish to apply. Please note that these factors cannot be adjusted for both business roles (**'Business manager'** and **'Business support'**).

Time spent managing or co-ordinating shifts can also be recorded here. For example, if your service has ten senior midwives and it is usual for two of these senior midwives to spend all of their time on shift management or coordination, then 20 per cent should be captured in the **'Management and leadership time'** on top of time allocated for time spent on other management and leadership activities. The model will treat this allocation the same whether it is 20 per cent of each senior midwife's time, or two members of your total team of ten.

Please note that you must set pathway time on the workforce settings sheet for all staff roles which are involved in delivering care and support on the pathway. If pathway time is left at 0 per cent on the workforce settings sheet then the tool will discount any activity timings entered later for that role on the pathway sheets. Use your estimate for total pathway time as a percentage here, and the tool will do the appropriate calculations using the minutes you enter later.

Once you have allocated proportions of time for each role (for pathway time, management and leadership time and midwifery supervision time), you can then set the proportion of time taken away from each role due to other factors. These factors are separated into three further categories:

1. non-pathway training and development
2. sickness absence
3. maternity leave.

These three factors are also linked in the tool, but in a different way to the previous three. They will not move together as you set each. However, the tool will still not allow you to exceed 100 per cent in your overall total.¹

Non-pathway training and development time refers to time spent by members of staff receiving training, for example health and safety or information governance training. Non-pathway training and development time does not refer to or include any time spent receiving midwifery supervision. It is assumed that any time spent receiving midwifery supervision would be included within **'Pathway time'**. Therefore time spent receiving midwifery supervision should not be included under **'Non-pathway training and development'**. Additionally non-pathway training and development time does not refer to or include time that senior members of staff spend on providing midwifery supervision. This should be captured in **'Midwifery supervision time'**.

¹ For these factors, the tool automatically reduces the total time by each factor as it is applied. For example, if the senior midwife role were to be set at 15 per cent of time for non-pathway training and development, 2 per cent on sickness absence and 3 per cent on maternity leave, the tool will not reduce by the sum of these three i.e. it does not simply apply a total of 20 per cent. Rather, it will take 15 per cent from 100 per cent of available time and then it will take 2 per cent from the remaining 85 per cent of time, *not* from the original 100 per cent. The tool reduces for each factor accordingly, so do not expect the three totals to reduce or increase as the previous three do. The tool will still make these adjustments for you automatically.

Workforce settings input sheet

Insert the annual amount of management or non-clinical time in FTE for the given maternity workforce roles in the green boxes on the management and non-clinical roles tool input sheet.

Workforce settings

Use the slider bars to set the percentage of activity time for each role in your maternity workforce.

Roles	Ratio between pathway time, management and leadership time and midwifery supervision time			Time not available to pathway and/or other activities		
	Pathway time	Management & leadership time	Midwifery supervision time	Non-pathway training & development time	Sickness absence	Maternity leave
Role 1	Head of midwifery	0%	0%	0%	0%	0%
Role 2	Midwifery leadership	0%	0%	0%	0%	0%
Role 3	Senior midwife	0%	0%	0%	0%	0%
Role 4	Specialist midwife	0%	0%	0%	0%	0%
Role 5	Midwife	0%	0%	0%	0%	0%
Role 6	Maternity support worker advanced	0%	0%	0%	0%	0%
Role 7	Maternity support worker	0%	0%	0%	0%	0%
Role 8	Healthcare assistant (HCA)	0%	0%	0%	0%	0%
Role 9	Administrative support	0%	0%	0%	0%	0%
Role 10	Consultant obstetrician	0%	0%	0%	0%	0%
Role 11	Obstetrician	0%	0%	0%	0%	0%
Role 12	Sonographer	0%	0%	0%	0%	0%
Role 13	Anaesthetist	0%	0%	0%	0%	0%
Role 14	Operating department practitioner (ODP)	0%	0%	0%	0%	0%
Role 15	Registered nurse	0%	0%	0%	0%	0%
Role 16	Theatre nurse	0%	0%	0%	0%	0%
Role 17	Nursery nurse	0%	0%	0%	0%	0%
Role 18	Housekeeper	0%	0%	0%	0%	0%
Role 19	Business manager	0%	100%	0%	0%	0%
Role 20	Business support	0%	100%	0%	0%	0%

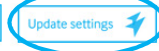
Once you have adjusted your workforce settings, please click on the 'Update settings' button as shown in the graphic below. You can update your workforce settings as often as you choose, but the tool will only use your updated percentages once you have clicked the 'Update settings' button.

Workforce settings

Once you have made adjustments to your workforce settings, please click on the 'Update settings' button.



Maternity Care Pathways Tool



Workforce settings

Use the slider bars to set the percentage of activity time for each role in your maternity workforce.

Roles	Ratio between pathway time, management and leadership time and midwifery supervision time			Time not available to pathway and/or other activities		
	Pathway time	Management & leadership time	Midwifery supervision time	Non-pathway training & development time	Sickness absence	Maternity leave
Role 1	Head of midwifery	0%	0%	0%	0%	0%
Role 2	Midwifery leadership	0%	0%	0%	0%	0%
Role 3	Senior midwife	0%	0%	0%	0%	0%
Role 4	Specialist midwife	0%	0%	0%	0%	0%
Role 5	Midwife	0%	0%	0%	0%	0%
Role 6	Maternity support worker advanced	0%	0%	0%	0%	0%
Role 7	Maternity support worker	0%	0%	0%	0%	0%
Role 8	Healthcare assistant (HCA)	0%	0%	0%	0%	0%
Role 9	Administrative support	0%	0%	0%	0%	0%
Role 10	Consultant obstetrician	0%	0%	0%	0%	0%
Role 11	Obstetrician	0%	0%	0%	0%	0%
Role 12	Sonographer	0%	0%	0%	0%	0%
Role 13	Anaesthetist	0%	0%	0%	0%	0%
Role 14	Operating department practitioner (ODP)	0%	0%	0%	0%	0%
Role 15	Registered nurse	0%	0%	0%	0%	0%
Role 16	Theatre nurse	0%	0%	0%	0%	0%
Role 17	Nursery nurse	0%	0%	0%	0%	0%
Role 18	Housekeeper	0%	0%	0%	0%	0%
Role 19	Business manager	0%	100%	0%	0%	0%
Role 20	Business support	0%	100%	0%	0%	0%

Due to different versions of Excel, there may be variations in the appearance of arrows and scroll bars. This will not impact on the function of the tool or the buttons, but please use the 'Zoom and scroll' button to adjust the screen to best suit your viewing.

1.2.4 Total available workforce

The purpose of this sheet, shown in the graphic overleaf, is to represent in FTE the total available workforce for pathway care delivery. That is the total availability each role has remaining for pathway activities, once time has been apportioned to other activities (management and leadership time and midwifery supervision time) and other factors have been deducted (non-pathway training and development, sickness absence and maternity leave). The FTE expressed on this sheet will therefore be different to the FTE you inputted on the '**Maternity workforce**' data sheet, due to timings that have been deducted from FTE for management and leadership time, midwifery supervision time, non-pathway training and development time, sickness absence, and maternity leave. The FTE in this sheet are for your reference and can be used to sense-check the proportions of times you have adjusted on the '**Workforce settings**' sheet.

You do not need to input any data or information into the sheet. It is simply for you to review the data you have inputted into the tool up to this point.

Total available workforce (pathway time only)

This table displays your maternity service’s total available workforce once management and leadership time, midwifery supervision time, non-pathway training and development time, sickness absence and maternity leave have been deducted.

Total available pathway workforce

Total available workforce (pathway time only)		Agenda for Change band/medical grade														
Roles		1	2	3	4	5	6	7	8a	8b	8c	8d	FHO	Registra r	SAS	Consulta nt
Role 1	Head of midwifery															
Role 2	Midwifery leadership															
Role 3	Senior midwife															
Role 4	Specialist midwife															
Role 5	Midwife															
Role 6	Maternity support worker advanced															
Role 7	Maternity support worker															
Role 8	Healthcare assistant (HCA)															
Role 9	Administrative support															
Role 10	Consultant obstetrician															
Role 11	Obstetrician															
Role 12	Sonographer															
Role 13	Anaesthetist															
Role 14	Operating department practitioner (ODP)															
Role 15	Registered nurse															
Role 16	Theatre nurse															
Role 17	Nursery nurse															
Role 18	Housekeeper															
Role 19	Business manager															
Role 20	Business support															

How to use this sheet:

This sheet represents the full-time equivalent (FTE) numbers for each staff role employed in your maternity service, once time for management and leadership, midwifery supervision, training and development, sickness absence and maternity leave have been accounted for (on previous workforce settings sheet).

The roles shown here will be the roles to which activity timings are allocated on the pathways.

Please ensure that the FTE is correct for all clinical roles. If not, you can amend the previous sheets to ensure that the proportion of time spent on management and leadership, midwifery supervision, training and development, sickness absence and maternity leave are more accurately reflected and therefore representative of the workforce you have available to deliver care directly.

It is recommended that the head of midwifery or a senior team member review the birth and workforce data once inputted into the tool.

2. Mapping your service

It is recommended that staff workshops are used to map the details of your service's care pathways. It is estimated that two half-day workshops are required in order to agree the care pathway activity timings, but it may require longer sessions depending on the level of debate. The suggested timeframes and layouts for workshops are stated later in this chapter; you can organise and run these as best suits you. **Before the workshops, it is strongly recommended that a member of the team familiarises themselves with all the pathway activities, the accompanying definitions of activities and the list of additional actions to consider outlined in Appendix A of this guidance document.** This is to ensure that the workshop is led and guided without the need to frequently refer to definitions.

Every woman is individual and average timings can be a challenge to agree. However the Maternity Care Pathways Tool is a modelling tool which aims to provide a high level summary of your service. It cannot capture every permutation of care you provide to every woman. It is a modelling tool designed to support the visualisation of change scenarios and service planning. Therefore it is particularly important for there to be a workshop facilitator to guide debate, discuss, and consider extremes, outliers and exceptions, but focus on agreement of a typical time and return to the key purpose of the tool.

If staff workshops are not suitable for your service, you may want to consider using alternative methods to obtain care pathway activity timings such as existing team meetings and conducting individual staff interviews. However, this method will not enable debate, challenge or wider engagement with the process.

It is also recommended that the use of any available data is considered, which may help you with summary activity timings and assist you with the completion of the pathways. This can be undertaken before the workshop to partially populate some of the care pathways in the tool. This research will need to be led by a senior team member, likely to be the maternity care pathway management role. **Please note: it is not assumed that a pre-existing data source will be available for all activity timings. Hence, timings will be agreed based on the clinical experience of the team.**

2.1 Workshop preparation

A member of staff will be required to set up in-house workshops, as stated in section 1.1. These workshops require input from a good cross-section of maternity staff, and the checklist on the next page shows the staff members suggested for attendance to these workshops.

It is recommended that the workshop leader and member of staff entering data into the tool meet before the workshops to plan the workshop content (please refer to section 2.2), and to familiarise themselves with the tool, tool activities and the tool definitions in Appendix A. The workshop leader and member of staff entering data into the tool may also want to decide on the parameters of activities by considering what additional actions should be accounted for within each activity e.g. administration, travel time and record keeping. All of these additional actions must be recorded for future reference and can be listed in the notes box on each of the pathway pages.

When using the tool, it is important that you base all care pathways on the care provided to a 'typical' woman on that pathway. It is also important that you use staff activity timings on a 'per woman' basis. Therefore, in your workshops please discuss and agree the 'average' staff time (in minutes) per woman for each activity along each pathway. Do not spend too long on any one activity timing. Useful prompts are provided in Appendix A.

Workshop staff checklist

We recommend at least one of each of the following roles attend your care pathway mapping workshops.

	Data
<input type="checkbox"/>	The Maternity Care Pathways Tool management role to lead the workshop (please refer to section 1.1)
<input type="checkbox"/>	The Maternity Care Pathways Tool data role to input pathway data into the tool (please refer to section 1.1)
<input type="checkbox"/>	Community-based midwife
<input type="checkbox"/>	Acute-based midwife
<input type="checkbox"/>	Consultant obstetrician
<input type="checkbox"/>	Midwifery support role
<input type="checkbox"/>	Administrative support role

2.2 Running your workshops – Workshops 1 and 2

It is advised that the workshops are led by the Maternity Care Pathways management role (a senior team member). This guidance document contains suggested agendas for the two half-day workshops on pages 16 and 17. It is estimated that the timings provided in the agendas will allow you to agree the detail of your care pathways, but it may require longer sessions depending on the level of debate.

In the workshops the use of a projector to display the live tool is recommended. You can then set-out the activities along your care pathways and add the staff timings for each activity directly into the live tool.

Alternatively, you can print off multiple copies of the pathways for attendees to complete by hand if this is more suitable for you. When printing the tool it is recommended that you print in colour as the care pathways are colour coded and the colours will facilitate completion of activity timings. You will need to print the pathways no smaller than A3 size to allow for easier reading. The print area has been set automatically to include all the details of the pathways, but not the notes boxes.

2.2.1 Workshop 1

A suggested agenda has been provided for the first half-day workshop on the following page. It is recommended that in your first half-day workshop you cover the antenatal pathways. It is advised that you discuss each antenatal pathway by initially setting the number of activities along the pathway. You can do this by following the steps in section 2.3.

Workshop 1 agenda

A suggested agenda with timings and what to cover in workshop 1.

Item/pathway	Time (minutes)
Introduction – outline the purpose of using the tool and the timings to be agreed	15
Define typical and average and explain purpose of summary approach	5
Antenatal: standard primip pathway	30
Antenatal: standard multip pathway	20
Antenatal: intermediate social pathway	35
Antenatal: intermediate obstetric pathway	35
Antenatal: intensive pathway	40
Close – checking you have all of the required timings and stating the purpose of workshop 2	30
Allowance for breaks	30
Total	4 hours

2.2.2 Workshop 2

A suggested agenda for the second half-day workshop is provided overleaf. It is recommended that in your second half-day workshop you cover the intrapartum and postnatal pathways.

It is advised that you discuss and complete each intrapartum pathway before moving onto the next pathway, for example completing all three activities for the home birth pathway then starting to complete the birth centre pathway.

In the intrapartum pathway, activities do not need to be turned on or off unless your service does not have the facilities for certain deliveries. For example, where a service does not have a birth centre all birth centre activities can be turned off using the same '**Activity takes place**' switch as the antenatal pathways, as will be illustrated later.

Workshop 2 agenda

A suggested agenda with timings and what to cover in workshop 2.

Item/pathway	Time (minutes)
Introduction – a recap of workshop 1 and outline the data you require from workshop 2	10
Intrapartum: home birth pathway	20
Intrapartum: birth centre pathway	20
Intrapartum: delivery unit – normal delivery pathway	20
Intrapartum: delivery unit – assisted delivery pathway	20
Intrapartum: induction of labour	15
Intrapartum: elective caesarean pathway	30
Intrapartum: emergency caesarean pathway	30
Postnatal: standard pathway	10
Postnatal: intermediate pathway	10
Postnatal: intensive pathway	10
Close – checking you have all of the required data	15
Allowance for breaks	30
Total	4 hours

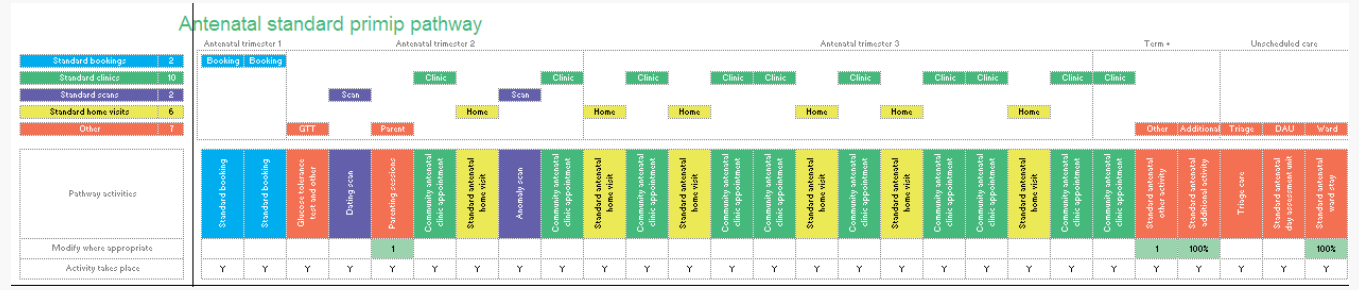
2.3 Completing pathway sheets

The purpose of all pathway sheets is to capture a high-level summary of your service’s activity undertaken to care for a ‘typical’ woman by staff role on each respective pathway. As these sheets are intended to be bespoke to your service, they should be populated with your service’s timings as agreed by your maternity team. **The tool does not have any built-in benchmarking calculations; therefore the tool will only allow you to compare your current service with a change that you model to your service.**

All pathways are completed in the same way. For each activity, an average time needs to be entered against each staff role involved in the care delivered to a ‘typical’ woman. It is suggested that you start off pathway sheets by agreeing which activities on that pathway your service undertakes, as you can see in the graphic overleaf. This will allow you to adapt the tool to reflect your service’s current care and support, before you start agreeing individual activity timings.

Tool pathway map for an antenatal standard primip pathway

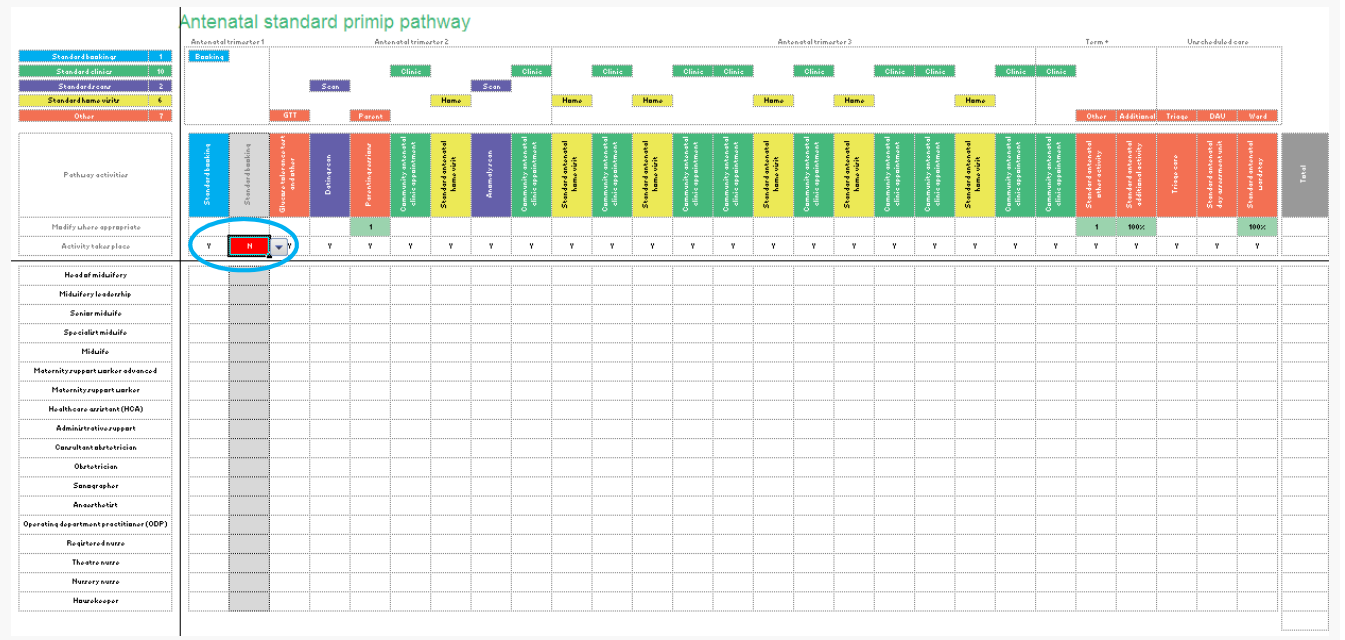
An example of a pathway map in the maternity care pathways tool



You may find that some activities listed in the tool may not be applicable to your service at all, or for a 'typical' woman on that pathway. If this is the case then please turn them off. Activities can be turned on or off using the 'Activity takes place' switch as displayed below, where greyed-out boxes will appear when an activity does not take place. If an activity does not take place then the tool will not use any timings entered for that activity.

Tool activity takes place switch

Use the 'Activity takes place' switches in the tool to turn on or off activities along your care pathways. Y=yes; N=no



Once you have agreed your service's overall activities on each of the pathways, please proceed to enter the staff time required to deliver these activities in the boxes below, as highlighted in the graphic on page 21. If there are multiple staff roles involved in undertaking one activity then please enter timings next to the appropriate roles. The tool will automatically calculate the total of all the activity timings you enter. For your convenience and ease of use, the activities at the top of the screen and staff roles to the left of the pathways remain static while you scroll down or along the pathways.

Please keep in mind that when completing the pathway sheets, it is important to base all activity timings on care provided to a 'typical' woman on each pathway. It is also important that you use staff activity timings on a 'per woman' basis. Therefore, in your workshops please discuss and agree the 'average' staff time (in minutes) per 'typical' woman for each activity along each pathway. Every woman is individual and average timings can be a challenge to agree. However the Maternity Care Pathways Tool is a modelling tool which aims to provide a high level summary of your service. It cannot capture every permutation of care you provide to every woman. It has been designed to support the visualisation of change scenarios and service planning and captures only as much information as is required for that purpose.

The final total minutes you agree for any one activity may be made up of multiple actions. For example, a 'Clinic' may require 60 minutes of midwife time, which you will record in the model. But, this could be made up of 30 minutes for the clinic itself, plus 20 minutes for travel and 10 minutes for record keeping. During the discussion of the pathway activity timings in your workshops or individual discussions, you should consider other actions to include within your timings. For example within a booking appointment you may want to account for the following activities in your typical timing:

- arrangement of standard booking appointment time
- notes and preparation prior to booking
- blood taking
- management of referral
- documenting/ data entry/record keeping after booking
- travelling time

There is a list of activity definitions in Appendix A of this guidance document, along with a list of other actions you may want to include in your activity timings. Whilst the lists are not intended to be exhaustive or prescriptive, they may be helpful as prompts for other actions to consider. Please keep a record of all other actions included and associated minutes in the notes boxes on each of the pathways. This will enable you to make specific alterations in future change scenarios, such as an increase in travel time. You can also use the other actions notes page in Appendix B of this guidance document.

Entering staff time in the tool

Enter staff time per activity (minutes) on a 'per woman' basis using the table below the care pathway map, indicated in blue below.

The screenshot displays the 'Antenatal standard primip pathway' tool. At the top, a timeline shows activities across trimesters: Antenatal trimester 1 (Booking, Booking, Scan, Clinic, Scan, Clinic), Antenatal trimester 2 (Home, Home, Home), Antenatal trimester 3 (Home, Home, Home, Home, Home, Home, Home, Home, Home, Home), Term+, and Unscheduled care (Other, Additional, Trips, DDU, Ward). Below the timeline is a table of activities with columns for 'Y' (Yes) and 'N' (No). A large blue-bordered grid is overlaid on the bottom half of the page, intended for entering staff time per activity (minutes) on a 'per woman' basis. The grid is organized by staff role, including: Head of midwifery, Midwifery leadership, Senior midwife, Specialist midwife, Midwife, Maternity support worker advanced, Maternity support worker, Healthcare assistant (HCA), Administrative support, Casualty obstetrician, Obstetrician, Sonographer, Anaesthetist, Operating department practitioner (ODP), Registrar nurse, Theatre nurse, Nursery nurse, and Housekeeper.

2.3.1 Alternative or additional activities

The activity titles are fixed and you cannot relabel any activity titles in the tool. Every effort has been made to include all activities a service is likely to need to record on each pathway, however there are a number of options should you have an activity you wish to include for which there is no specific activity box. The activity titles do not affect the functionality of the tool per se, and so you can use any of the boxes to record any activity should you choose to. However if you have used an activity box for an activity that is different than labelled it is essential to keep a record in the notes box, as highlighted in the graphic below. Please note the tool outputs will still list that activity as it is titled in the tool, not as you have chosen to use it.

Notes boxes
Use the notes boxes to the right of the 'Total' column to record any changes to activities such as re-purposing existing activity titles or including additional activity times within existing activities.

		Unscheduled care														
<table border="1"> <tr><td>Standard bookings</td><td>2</td></tr> <tr><td>Standard clinics</td><td>10</td></tr> <tr><td>Standard scans</td><td>2</td></tr> <tr><td>Standard home visits</td><td>6</td></tr> <tr><td>Other</td><td>7</td></tr> </table>		Standard bookings	2	Standard clinics	10	Standard scans	2	Standard home visits	6	Other	7	Triage	DAU	Word		
Standard bookings	2															
Standard clinics	10															
Standard scans	2															
Standard home visits	6															
Other	7															
Pathway activities		Triage care	Standard antenatal day assessment unit	Standard antenatal ward stay	Total	Notes										
Modify where appropriate				100%												
Activity takes place	Y	Y	Y													
Head of midwifery																
Midwifery leadership																
Senior midwife																
Specialist midwife																
Midwife																
Maternity support worker advanced																
Maternity support worker																
Healthcare assistant (HCA)																
Administrative support																
Consultant obstetrician																
Obstetrician																
Sonographer																
Anaesthetist																
Operating department practitioner (ODP)																
Registered nurse																
Theatre nurse																
Nursery nurse																
Housekeeper																

The preferred method is to record additional activities using the 'Other' or 'Additional' activity boxes, as illustrated overleaf. These boxes are available for use on all pathways, and are designed for a service to capture any activity for which there is not an existing activity box. Should you wish to use these activity boxes, there is the option to multiply this activity as required, or to choose a proportion of women to whom the activity is typically delivered.

For example, under 'Other' activity, there is a modification box which allows you to state the number of times that activity is undertaken, such as if it occurs once or multiple times. Similarly, under 'Additional' activity, there is a modification box which enables you to list an activity which is only undertaken for a percentage of women on that pathway. Please be aware that each modification box differs in its function; please see section 2.3.2 for further information. The tool will display a message describing its function when you select each of one the modification boxes.

Recording other or additional activity
Use the 'Other' or 'Additional' activity boxes to capture activity which you wish to record separately.

	Term 3	Term 4	Unscheduled care												
Standard bookings	2														
Standard clinics	10	Clinic	Clinic	Clinic	Clinic										
Standard scans	2														
Standard home visits	6	Home	Home												
Other	1					Other	Additional	Triage	DAU	Ward					
Pathway activities	Standard antenatal home visit	Community antenatal clinic appointment	Community antenatal clinic appointment	Standard antenatal home visit	Community antenatal clinic appointment	Community antenatal clinic appointment	Antenatal assessment other activity	Standard antenatal additional activity	Triage care	Standard antenatal day assessment unit	Standard antenatal ward stay	Total	Notes		
Modify where appropriate							1	100%							
Activity takes place	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
Head of midwifery															
Midwifery leadership															
Senior midwife															
Specialist midwife															
Midwife															
Maternity support worker advanced															
Maternity support worker															
Healthcare assistant (HCA)															
Administrative support															
Consultant obstetrician															
Obstetrician															
Sonographer															
Anesthetist															
Operating department practitioner (ODP)															
Registered nurse															
Theatre nurse															
Nursery nurse															
Housekeeper															

2.3.2 Modifying activities

While you are completing the pathways, you will encounter these activity boxes, as shown in the graphic on page 25. Please note that beneath these activity boxes there is a function which allows that activity to be modified. These modifiers are all highlighted in green in the tool. For all other activities which are not modifiable, the tool takes each activity timing, assumes it is for one woman, and applies that activity once to every woman on that pathway.

The modifiers allow the activities to be **multiplied**, **divided** or applied only to a **percentage** of women on the pathway. The modifiers can therefore be used to either divide the stated activity by the number of women receiving the care in a group activity such as parenting classes; or multiply the stated activity if it occurs more than once on a pathway; or reduce the stated activity by the proportion of women on the pathway who typically receive this care. As shown in the next graphic, the 'Modify where appropriate' box under 'Pathway activities' allows you to make these adjustments. The modifier works in the following ways on each of the pathways.

Antenatal pathways:

- **Parenting sessions** (all): for use when parenting sessions are delivered to a group rather than individually. **The modifier functions as a divider.** Therefore use the modification box to state the average number of people attending these group sessions. Please enter the total time each staff role takes to deliver this activity overall and then the model will automatically divide by the number you enter in the modification box.
- **Safeguarding meetings** (antenatal intermediate social): **The modifier functions as a multiplier.** Please use this button if this activity occurs multiple times (on average) per 'typical' woman on the antenatal intermediate social pathway.
- **Unscheduled care – ward stay** (all): an activity which you can modify to state the percentage of women who receive this level of care. This additional activity box will allow you to enter activities which are workforce-intensive but are not provided to all women. **The modifier functions as a percentage box.** Therefore use the

modification box to state the percentage of women who are admitted onto the ward and receive unscheduled antenatal ward stay care. Examples of this could include women admitted prior to established labour due to placenta previa or pre-eclampsia.

Antenatal and postnatal pathways:

- **Other activity (all):** other activity which you specify if there is no activity box elsewhere on the pathway. **The modifier functions as a multiplier.** Therefore if the activity occurs multiple times, please use the modification box to state on average the number of times your specified activity occurs for the 'typical' woman.

All pathways:

- **Additional activity:** additional activity which you specify. This additional activity box will allow you to enter activities which are not provided to all women. **The modifier functions as a percentage box.** This function is intended to capture activities which require significant activity to be delivered, but only to some women on that pathway, rather than all. Therefore use the modification box to state the percentage of women for whom the activity takes place:
 - **For Antenatal** – an example could be additional activity for those women who develop gestational diabetes.
 - **For Intrapartum** – an example could be increased levels of care when giving birth, such as an additional allowance for complications during delivery.
 - **For Postnatal** - an example could be additional activity for maternal readmission.

Messages will display when you click on each of the modification buttons to remind you of their function. The message box will remain visible until you select another part of the tool. Please note that changes will automatically occur in the total timing boxes to the right of the pathway and the model automatically calculates the modified value.

Modifying activities

Use the 'Modify where appropriate' box in the tool for activities which occur multiple times, activities which occur in groups and for activities which are only undertaken for a percentage of women

The screenshot displays the 'Antenatal standard primip pathway' tool. At the top, there are four main sections: Antenatal trimester 1, Antenatal trimester 2, Antenatal trimester 3, and Term 4. Below these, a flowchart shows various activities like 'GTT', 'Scan', 'Ultrasound', 'Hemo', 'Other', 'Additional', 'Triess', 'DBU', and 'Ward'. A table below the flowchart lists 'Pathway activities' and 'Modify where appropriate' for each activity. The 'Activity labour place' row shows 'Y' for most activities and 'N' for 'GTT'. A large table at the bottom lists various professional roles and their corresponding activity counts across the pathway stages.

Pathway activities	Antenatal trimester 1	Antenatal trimester 2	Antenatal trimester 3	Term 4	Unscheduled care	Total
Standard baseline	1					
Standard follow	10					
Standard review	2					
Standard home visit	6					
Other	7					
Modify where appropriate	1					
Activity labour place	Y	N	Y	Y	Y	Y

2.3.3 Development of complications

The tool enables you to capture a high level summary of care provided to women who develop complications during pregnancy (antenatal pathway), delivery (intrapartum pathway) and after delivery (postnatal pathway). This would include, for example, women on the antenatal standard pathway who develop gestational diabetes. In order to do this use **one of the two** methods outlined below:

- **'Additional' activity box.** Using the additional activity boxes illustrated in the graphic on page 21, you can input the typical activity timings of the additional care provided to women who develop complications on a particular pathway and state the proportion of women to whom this applies. For example, if a woman on the antenatal standard primip pathway were to develop a complication, you should input the typical amount of additional care from different staff members she would receive for this. You would then use the modification box to state the proportion of women to whom this applies – i.e. if 5 per cent of women on the antenatal standard primip pathway develop gestational diabetes, add the additional activity timings in the **'Additional'** activity box and type '5' in the modification box. The model will then apply the minutes of additional activity to 5 per cent of the women on the antenatal standard pathway.
- **'Birth data' page.** Using the birth data page illustrated in the graphic on page 10, you can adjust the number of cases on each pathway according to the number of women who require additional care activity. This can be achieved by moving the proportion of women on to the pathway which best represents the activity they ultimately receive in terms of care and support. For example, if 3 per cent of 1000 women on the antenatal standard primip pathway developed gestational diabetes then on the birth data page, 30 cases could be deducted from **'Antenatal standard primip pathway'** and moved to **'Antenatal intermediate obstetric pathway'**.

In order to keep track of the modifications you have applied to your activities, please use the notes boxes provided at the end of each pathway, as shown in the graphic on page 20. It is essential to keep a note of all adjustments you make and the rationale for each for future reference.

2.4 Review of all care pathways data

It is recommended that the head of midwifery or a senior team member review all completed care pathways data once inputted into the tool.

Following the review of the pathways data, you may wish to revisit some of the activity timings agreed at the workshops. Further staff engagement may be required via staff interviews if clarification is required about particular pathways or activities. The team should note this possible additional time during the preparation stage (please refer to section 1).

As highlighted at the beginning of this guidance document, the purpose of the Maternity Care Pathways Tool is to capture a high level summary of your service in order to support the visualisation of change scenarios and service planning. The first step in this is to ensure that the model captures a summary of your current service as accurately as possible. It is therefore important that activity timings are as reflective of your service as possible in order to capture the current demand on your service. If you omit major activities or substantially underestimate timings, the model will show that you have greater capacity in your team than you do. You can sense check your activity timings by reviewing the draft tool outputs (see section 3). You may find that this is an iterative process, as all changes to activity timings in the pathways will automatically update in the tool outputs. Review and adjust the workforce settings and the activity timings until the model accurately reflects your current service.

3. Analysis – current and future service

3.1 Review of draft tool outputs

When the tool has been populated with all service data and care pathway activity data, you will reach the '**Guidance: summaries and reports**' page which can be seen in the graphic below. From here, you can navigate to all of the graphs and tables produced by the tool. It may be useful to print your tool's output so that you can easily review the graphs and tables against the activity timings you have inputted along the pathways.

Following the review of tool outputs, further clarification may be required about particular service or pathway data that could need further staff engagement. This is likely to be an iterative process, making adjustments until the team are satisfied that the model captures a reflective high level summary of the current service.

The Maternity Care Pathways Tool has three central outputs, which, unless otherwise stated, are calculated on an annual basis:

- Time in hours.
- FTE (full-time equivalent).
- Cost in GBP (£) – please note that cost is calculated using the mid-point of Agenda for Change (AFC) bands and medical staff grades.

The three outputs can be calculated for:

- individual care pathway activities – for example community clinic appointments
- staff roles – all maternity workforce roles
- AFC bands and medical staff grades

On the next three pages is a description of each tool output page, which you can navigate to on the '**Guidance: summaries and reports**' page of the tool, as shown in the graphic below.

Generating reports of tool graphs and tables

On the '**Guidance: summaries and reports**' page of the tool you can go to different graphs and tables using the links indicated. Click the button in the tool to generate a PDF document containing all of your graphs and tables.

Guidance: summaries and reports

This section contains summary tables and graphs based on the information you have inputted.

The graphs and tables show different analyses of workforce time, FTE and cost, broken down by pathway stage, Agenda for Change (AFC) band and medical grade.

Use the menus on the right to jump to specific summaries. Alternatively, click next (above) to navigate through them all.

Individual reports can be copied and pasted into your own reports and spreadsheets or you can use the "generate PDF of tables & graphs" button below to create a PDF report of all the tables and graphs.

Generate PDF of
tables and graphs 

Summary:

overview
top 5 hours
top 5 cost
top 5 FTE
by activity
by staff role

Staff roles:

antenatal
intrapartum
postnatal
management
MW supervision
training
sickness absence
maternity leave

Time:

by stage
by AFC band
by staff role

FTE:

by AFC band
by staff role

3.2 Generate a report for your current workforce

After the final tool outputs have been reviewed and agreed, the tool can produce a PDF report containing all the graphs and tables using the '**Generate PDF of tables and graphs**' button, as displayed in the graphic on the previous sheet.

3.3 Interpreting the reports

Tool outputs are generated solely from data inputted by the service. The tool uses birth data, workforce data and summary pathway activity timings to produce reports showing cost, time, and staff numbers, both actual and modelled. **Please remember that modelled numbers provided in the tool's output indicate the theoretical number of staff your service would require if every woman received exactly the minutes of care that you have agreed in your activity timings, or the theoretical number of cases the team could support if every woman received exactly the minutes of care that you agreed in your activity timings.** This output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.

The model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand. You may find it useful to refer to the monthly intrapartum reports to compare monthly fluctuations in demand to the annual overview.

Please refer to the following definitions when reviewing the tool outputs:

Actual FTE: The number of staff actually in your team, using those roles you have listed in the workforce data sheet and incorporating the allocations of time that you have made in the workforce settings sheet.

Modelled FTE: This output is produced by multiplying the number of minutes of care you have defined for each activity by the number of women receiving that care. The total is divided into the equivalent number of staff (FTE) required to provide exactly those minutes to that number of women. This incorporates the allocations of time you have made on the workforce settings sheet and includes a proportional allocation of FTE based on those settings. This output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.

Modelled cost: This output expresses the theoretical cost of any given activity, using an appropriate proportion of mid-point salary of all staff involved. This proportion is produced by calculating a per minute cost for each role and then multiplying this by the number of minutes you have agreed for each particular activity. This incorporates the allocations of time you have made on the workforce settings sheet and includes a proportional allocation of cost based on those settings. Please note that the fluctuations in cost in the monthly intrapartum reports are theoretical, as salary costs in reality will not fluctuate in this way throughout the year. The cost expresses changes in activity, rather than changes in actual costs. Please refer to the key principles of using the tool for all cost interpretations.

Modelled time: This output expresses the total amount of time spent on any given activity (on or off the pathways) using both the number of minutes you have defined for each activity, and the allocations of time that you have made on the workforce settings sheet. This is expressed in hours rather than minutes, for ease of reference.

Summary: overview

Table of:

- Total modelled pathway time and modelled cost.
- Top five activities in descending order by total modelled time, modelled cost and modelled FTE for all pathways, management and leadership and midwifery supervision time.
- Top five roles by total modelled time, modelled cost and modelled FTE for all pathways, management and leadership and midwifery supervision time.

Summary: top 5 activities by hours

Table with a summary of the top five activities by modelled time categorised by midwifery role.

Summary: top 5 activities by cost

Table with a summary of the top five activities by modelled cost categorised by midwifery role.

Summary: top 5 activities by FTE

Table with a summary of the top five activities by modelled FTE categorised by midwifery role.

Summary: activities

Table with a summary of the total modelled time, modelled cost and modelled FTE for all activity by care pathway.

Summary: staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role for all care pathways, management & leadership and midwifery supervision time.

Summary: antenatal staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role on the antenatal care pathways.

Summary: intrapartum staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role on the intrapartum care pathways.

Summary: postnatal staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role on the postnatal care pathways.

Summary: management & leadership staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role for management and leadership time. This output uses the allocations of time that you have made in the workforce settings sheet.

Summary: midwifery supervision staff roles

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role for midwifery supervision time. This output uses the allocations of time that you have made in the workforce settings sheet.

Summary: non-pathway training and development

Table of the total modelled time, modelled cost and modelled FTE for each maternity workforce role for non-pathway training and development time. This output uses the allocations of time that you have made in the workforce settings sheet.

Summary: sickness absence

Table of the total modelled time, cost and FTE for each maternity workforce role for sickness absence time. This output uses the allocations of time that you have made in the workforce settings sheet.

Summary: maternity leave

Table of the total modelled time, cost and FTE for each maternity workforce role for maternity leave time. This output uses the allocations of time that you have made in the workforce settings sheet.

Analysis: time by stage

Graph showing the total modelled time for antenatal, intrapartum and postnatal care pathways. This sheet illustrates the total annual amount of modelled time (in hours) spent on providing care on each stage (antenatal, intrapartum and postnatal care). Total timings are based on activity timings which you entered on each of the pathway sheets.

Analysis: time by AFC band

Graph showing the total modelled time for staff at each AFC band and medical grade for all care pathways, management and leadership and midwifery supervision time.

Analysis: time by staff role

Graph showing the total modelled time for each maternity workforce role for all pathways, management and leadership and midwifery supervision time.

Analysis: FTE by AFC band

Graph showing the total modelled FTE for staff at each AFC band and medical grade for all pathways, management and leadership and midwifery supervision time. This sheet illustrates FTE numbers by staff band/medical grade.

Analysis: FTE by staff role

Graph showing the total modelled FTE for each maternity workforce role for all pathways, management & leadership and midwifery supervision time. This sheet illustrates FTE numbers by staff roles.

Analysis: cost by AFC band

Graph showing the total modelled cost for staff at each AFC band and medical grade for all pathways, management & leadership and midwifery supervision time. This sheet illustrates the annual cost of staff by band/medical grade. Costs are calculated using mid-point salary scales, and **do not include overtime, bank and/or agency staff and equipment.**

Analysis: cost by staff role

Graph showing the total modelled cost for each maternity workforce role for all pathways, management & leadership and midwifery supervision time. This sheet illustrates the annual cost of staff by role. Costs are calculated using mid-point salary scales, and **do not include overtime, bank and/or agency staff and equipment.**

Analysis: comparison between care pathway activity and actual FTE by AFC band

This sheet provides a comparison between your actual FTE staff numbers by AFC/medical grade banding and modelled FTE staff numbers by AFC/medical grade banding. Actual FTE staff numbers are the number of actual staff in your team, using those roles you have listed in the workforce data sheet and incorporating the allocations of time that you have made in the workforce settings sheet.

The modelled FTE is produced by multiplying the number of minutes of care you have defined for each activity by the number of women receiving that care. The total is divided into the equivalent number of staff (FTE) required to provide exactly those minutes to that number of women. This incorporates the allocations of time you have made on the workforce settings sheet. **This output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**

The graph shows the total modelled FTE for staff at each AFC band and medical grade for all pathways, management and leadership and midwifery supervision time, compared with your actual staff FTE per band and medical grade.

Analysis: comparison between care pathway activity and actual FTE by staff role

Graph showing the total modelled FTE for each maternity workforce role for all pathways, management & leadership and midwifery supervision time, compared with your actual staff FTE per role. This graph provides a comparison between your actual FTE staff numbers by staff role and modelled FTE staff numbers by staff role.

Actual FTE staff numbers are the number of actual staff in your team, using those roles you have listed in the workforce data sheet and incorporating the allocations of time that you have made in the workforce settings sheet. Modelled FTE is produced by multiplying the number of minutes of care you have defined for each activity by the number of women receiving that care. The total is divided into the equivalent number of staff (FTE) required to provide exactly those minutes to that number of women. This incorporates the allocations of time you have made on the workforce settings sheet. **This output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**

Analysis: antenatal numbers based on care pathway activity and actual FTE

This sheet compares your modelled total number of antenatal cases based on the inputted antenatal care pathway activity timings with the capacity of your actual FTE i.e. the number of staff actually in your team. This output is produced by adding the total number of minutes of care you have defined for all antenatal activities. The model then uses the actual FTE available in your team and divides these roles by the appropriate minutes of modelled activity - i.e. if every woman on the antenatal pathway received exactly the minutes of care listed in your antenatal activity timings, then how many of these theoretical, identical cases could your current, actual FTE support?

The sheet also displays the top five roles as they affect the modelled number of antenatal cases and highlights where the actual FTE is lower than the required modelled FTE. The modelled number of antenatal cases is based on the first role in the table, as this role has the largest difference between modelled and actual FTE. In a 'modelled' environment where every woman receives exactly the minutes of care defined in activity timings, this first role is the role that would 'run out' of capacity first. It would be expected that the modelled case figure would be lower than the actual number of antenatal cases a service supports, as the tool does not include bank or agency staff or overtime. **Please note that this output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**

Analysis: intrapartum numbers based on care pathway activity and actual FTE

This sheet compares your modelled total number of intrapartum cases based on the inputted intrapartum care pathway activity timings with the capacity of your actual FTE i.e. the number of staff actually in your team. This output is produced by adding the total number of minutes of care you have defined for all intrapartum activities. The model then uses the actual FTE available in your team and divides these roles by the appropriate minutes of modelled activity - i.e. if every woman on the intrapartum pathway received exactly the minutes of care listed in your intrapartum activity timings, how many of these theoretical, identical cases could your current, actual FTE support?

The sheet also displays the top five roles as they affect the modelled number of intrapartum cases and highlights where the actual FTE is lower than the required modelled FTE. The modelled number of intrapartum cases is based on the first

role in the table, as this role has the largest difference between modelled and actual FTE. In a 'modelled' environment where every woman receives exactly the minutes of care defined in activity timings, this first role is the role that would 'run out' of capacity first. It would be expected that the modelled case figure will be lower than the actual number of intrapartum cases a service supports, as the tool does not include bank or agency staff or overtime. **Please note that this output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**

Analysis: postnatal numbers based on care pathway activity and actual FTE

This sheet compares your modelled total number of postnatal cases based on the inputted postnatal care pathway activity timings with the capacity of your actual FTE, such as the number of staff actually in your team. This output is produced by adding the total number of minutes of care you have defined for all postnatal activities. The model then uses the actual FTE available in your team and divides these roles by the appropriate minutes of modelled activity - i.e. if every woman on the postnatal pathway received exactly the minutes of care listed in your postnatal activity timings, how many of these theoretical, identical cases could your current, actual FTE support?

The sheet also displays the top five roles as they affect the modelled number of postnatal cases and highlights where the actual FTE is lower than the required modelled FTE. The modelled number of postnatal cases is based on the first role in the table, as this role has the largest difference between modelled and actual FTE. In a 'modelled' environment where every woman receives exactly the minutes of care defined in activity timings, this first role is the role that would 'run out' of capacity first. It would be expected that the modelled case figure would be lower than the actual number of postnatal cases a service supports, as the tool does not include bank or agency staff or overtime. **Please note that this output is therefore based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.**

Analysis: monthly intrapartum comparison tool by pathway

A monthly graph that displays the modelled cost, modelled time or modelled FTE by birth type for the selected staff role. The graph can be used to compare different birth types by selecting them using the checkboxes below the graph. **It is important to note that this graph displays modelled cost, modelled time or modelled FTE for the intrapartum care pathways only.** Where the rest of the model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand, this output will allow comparison between monthly fluctuations in demand to the annual overview.

Analysis: monthly intrapartum comparison tool by staff role

A monthly graph that displays the modelled cost, modelled time or modelled FTE for the selected birth type. The graph can display this for all birth types and can be used to compare different roles by selecting them using the checkboxes below the graph. **It is important to note that this graph displays modelled time, modelled cost or modelled FTE for the intrapartum care pathways only.** Where the rest of the model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand, this output will allow comparison between monthly fluctuations in demand to the annual overview.

4. Identifying a change scenario

After you have modelled your current service and generated a report for this, you will be ready to model change scenarios. The tool allows you to model a range of 'what if' questions such as:

- What if there is an increased number of complex cases in my service next year?
- What if I increase the role of maternity support workers in standard community postnatal care?
- What if I add an activity on some or all of the pathways?
- What if current vacancies were filled?

Modelling change scenarios may require further engagement, but this is dependent upon the change scenarios you wish to model. For example, modelling the implications of changing birth rate could take minutes by simply changing the numbers on the birth data page. However, modelling the implications of adding a new activity on some or all pathways could require more staff input to estimate the activity timings and workforce roles involved in that activity.

If further staff engagement is required, individual staff member consultations are likely to be the most efficient method of agreeing activity timings and staff roles involved. If further workshops are required for change scenarios then these can be organised and run in a similar way to workshops 1 and 2 as detailed in section 2.

4.1 Modelling a change scenario

You can model change scenarios by adjusting numbers already inputted into your tool for your current service and the tool will automatically update its output. **The tool will not make any internal comparisons within one version of the tool. Therefore please save a final version of the tool when you are satisfied it captures your current service before you begin modelling a change scenario, so you can revisit the analysis of your current service if you wish to.**

Following this, please save a new version of the tool to capture your change scenario, or multiple versions if you decide to model more than one change scenario. We recommend that you save any versions using names which clearly identify your change scenario. To save a new version, click on the minimise/maximise screen icon in the top right hand corner of your screen. This will bring the Excel toolbar back into view and you can save the tool as you would for any other file.

Please see below for the types of changes you can model using the tool, by making changes to the birth data page, the workforce data page, the pathways – or all three:

Birth data page

You will have already completed a version of the tool inputted with birth numbers to reflect your current service. You can use this birth data page, as shown in the graphic on page 34, to model any changes to demand (either an increase or a decrease in case numbers) for your service across all pathways such as

- changes in any one total of antenatal pathway cases
- changes in all total antenatal pathway cases
- changes in all total intrapartum cases
- changes in any one of the intrapartum delivery types
- changes in any one total of postnatal pathway cases
- changes in all total postnatal pathway cases

For example, if you wish to model an increase in demand on your total antenatal service, you can by model this by increasing all the antenatal numbers on your birth data page according to your projected increase in demand, as demonstrated in the next graphic.

Or, to model an increase of 10 per cent of cases on more complex antenatal pathways, you would add 10 per cent to the appropriate case numbers. The model will then recalculate all the graphs and tables, and show you the workforce implications of a 10 per cent increase in cases on the more complex antenatal pathways. Please keep a record of the changes you make to your birth numbers in your change scenarios using the notes box at the end of each pathway or in Appendix B of this guidance document.

Increased birth rate as a change scenario
Adjust the numbers in your birth data page

Birth data

Enter your birth data below.

Antenatal care	Annual number
Standard primip	564
Standard multip	697
Intermediate social	109
Intermediate obstetric	778
Intensive	310
Total	2458

How to complete this sheet:

Using the green cells enter your annual antenatal, induction of labour and postnatal data. Intrapartum data should be entered by month and the tool will automatically calculate the annual intrapartum data from your monthly figures (in the blue boxes). Ensure that data accounts for the total number of women booked, not the total number of babies delivered.

Once you have entered all your maternity data, click the next button at the top of the page.

Intrapartum	Annual number
Home birth	103
Birth centre	100
Delivery unit - normal delivery	1434
Delivery unit - assisted delivery	384
Emergency caesarean section	316
Elective caesarean section	215
Total	2562
Induction of labour	500

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Home birth	10	10	12	4	11	7	10	11	9	10	2	7
Birth centre	5	10	12	6	8	7	4	5	7	11	12	13
Delivery unit - normal delivery	118	107	120	100	129	111	118	125	147	132	107	120
Delivery unit - assisted delivery	37	26	35	32	26	35	35	27	29	30	33	39
Emergency caesarean section	32	18	29	26	29	25	24	33	30	27	23	20
Elective caesarean section	16	14	17	21	19	17	24	18	14	24	16	15
Total	218	185	225	189	222	202	215	219	236	234	193	214

Postnatal care	Annual number
Standard	1278
Intermediate	860
Intensive	100
Total	2238

Once you have modelled a case numbers-based change scenario by adjusting the numbers on the birth data page, the output of the tool will automatically update. You can then compare the output from this version of the tool with the output from the version of the tool capturing your current service, by comparing the reports generated as a PDF. As the tool's outputs use birth numbers for various calculations, there will be changes throughout the tool's reports (please see section 3 for guidance on how to interpret the reports). However you may be particularly interested in the following reports:

- Analysis: antenatal numbers based on care pathway activity and actual FTE.
- Analysis: intrapartum numbers based on care pathway activity and actual FTE.
- Analysis: postnatal numbers based on care pathway activity and actual FTE.

If you have modelled a demand change scenario by adjusting your intrapartum numbers on the birth data page, you may also be interested in the following interactive reports:

- Analysis: interactive monthly intrapartum comparison tool by pathway
- Analysis: interactive monthly intrapartum comparison tool by staff role

Workforce data page

You can model any changes to your current workforce by adjusting numbers you have inputted on the workforce data page as shown in the graphic on page 35, such as:

- change in numbers of a specific role(s)
- your service with all vacant posts filled
- additional staff roles, rather than only staff currently funded by your maternity service. **Please note the model will use salary calculations at mid-point for additional staff and include them in the total costings.**

For example, if you wish to model a change scenario reflecting increased recruitment of midwives to the team, then you would increase the FTE next to the ‘Midwife’ role, as shown the next graphic. Please keep notes of the changes you make to your workforce numbers in your change scenarios using the notes box at the end of each pathway or in Appendix B of this guidance document.

Increased workforce numbers

Adjust the numbers in your workforce data page

Maternity workforce

Enter the full-time equivalent (FTE) against the roles in your maternity workforce.

Roles	Agenda for Change band/medical grade														
	1	2	3	4	5	6	7	8a	8b	8c	8d	FHO	Registrar	SAS	Consultant
Role 1 Head of midwifery													1		
Role 2 Midwifery leadership									1	1					
Role 3 Senior midwife							10								
Role 4 Specialist midwife							0								
Role 5 Midwife						6	50								
Role 6 Maternity support worker advanced			10	6											
Role 7 Maternity support worker		16													
Role 8 Healthcare assistant (HCA)		4	5												
Role 9 Administrative support		6	4	1											
Role 10 Consultant obstetrician															6
Role 11 Obstetrician													2	6	10
Role 12 Sonographer						1	2	3	4						
Role 13 Anaesthetist												3	1	5	1
Role 14 Operating department practitioner (ODP)					2	1									
Role 15 Registered nurse					2	2									
Role 16 Theatre nurse					1										
Role 17 Nursery nurse		1	2	3											
Role 18 Housekeeper	3	6													
Role 19 Business manager								1							
Role 20 Business support					2	1									

How to complete this sheet:

Using the green cells enter the full-time equivalent (FTE) numbers for each staff role employed in your maternity service, according to Agenda for Change pay bands/medical grades.

If there are no staff employed in a particular role or not employed by your maternity service, leave the box empty.

When complete, click next.

Once you have modelled a workforce change scenario by adjusting the numbers on the workforce data page, the output of the tool will automatically update. You can then compare the output from this version of the tool with the version of the tool capturing your current service, by comparing the reports generated as a PDF. As the tool’s output uses workforce numbers for various calculations, there will be changes throughout the tool’s reports (please see section 3 for guidance on how to interpret the reports). However you may be particularly interested in the following reports:

- Summary: management and leadership staff roles.
- Summary: midwifery supervision staff roles.
- Summary: non-pathway training and development staff roles.
- Summary: sickness absence staff roles.
- Summary: maternity leave staff roles.
- Analysis: antenatal numbers based on care pathway activity and actual FTE.
- Analysis: intrapartum numbers based on care pathway activity and actual FTE.
- Analysis: postnatal numbers based on care pathway activity and actual FTE.

Pathways

You can model any changes to service delivery by adjusting the summary activity timings you have inputted on your pathways as shown in the graphic on page 36, such as:

- changing staff role undertaking activities
- addition of activities on any care pathway
- change in timing for other actions captured within activity timings, such as an increase in travel time

For example, if you wish to model a change such as an increased role for maternity support workers in the delivery of parent education, then you would enter the additional typical timing for this next to the ‘**Maternity support worker**’ role and reduce the existing time you have inputted for midwives accordingly, as demonstrated in the next graphic. Please keep notes of the changes you make to your activity timings in your change scenarios using the notes box at the end of each pathway.

The tool also enables you to model changes to your service delivery which applies only to a proportion of women. For example, if you wish to model a change where only 20 per cent of women on each of the antenatal pathways were to receive an additional activity, you would enter the additional typical timing of the activity to the ‘**Additional**’ activity and enter ‘20’ in the modification box in every antenatal pathway. This function is intended to capture activities which require significant activity to be delivered, but only to some women on the pathway, rather than to all. Again, please ensure that you keep note of the changes you make to your activity timings in the notes boxes at the end of each pathway. Please refer to section 2.3.2 on modifying activities as you do this.

Changes to service delivery

Adjust the summary activity timings in your pathways

		Antenatal standard primip pathway																				Total								
		Antenatal trimester 1					Antenatal trimester 2					Antenatal trimester 3					Term +					Useful life care								
		Booking 1	Booking 2	Booking 3	Booking 4	Booking 5	Scan	Paracet	Home	Scan	Home	Home	Home	Home	Home	Home	Home	Home	Home	Home	Home	Other	Additional	Tricase	DMU	Word	Total			
		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%	100%	Y	
Head of midwifery																														
Midwifery leadership																														
Senior midwife																														
Specialist midwife																														
Midwife		100 min					340 min	30 min			40 min	20 min	20 min				60 min	20 min	20 min	20 min	60 min			60 min					510 min	
Maternity support worker advanced																														
Maternity support worker																														
Healthcare assistant (HCA)																														
Administrative support		30 min																												30 min
Consultant obstetrician																														
Obstetrician																														
Sonographer			15 min							20 min																				45 min
Anesthetist																														
Operating department practitioner (ODP)																														
Registered nurse																														
Theatre nurse																														
Nursery nurse																														
Housekeeper																														
																														115 min

Once you have modelled a service delivery change scenario by adjusting the activity timings on the pathways, the output of the tool will automatically update. You can then compare the output from this version of the tool with the output from the version of the tool capturing your current service, by comparing the reports generated as a PDF. As the tool’s output uses pathway activity timings for various calculations, there will be changes throughout the tool’s reports (please see section 3 for guidance on how to interpret the reports). However you may be particularly interested in the following reports:

- Summary: activities.
- Summary: antenatal staff roles.
- Summary: intrapartum staff roles.

- Summary: postnatal staff roles.
- Analysis: time by stage.
- Analysis: comparison between care pathway activity and actual FTE by staff role.

You can also make simultaneous changes to each of the pages. For example, if you wanted to model your service with a decrease in standard antenatal cases, but an increase in the complexity of cases and additional activity to support these, you would decrease the standard case numbers on the birth data page but increase the intermediate and intensive cases. You would also increase or add new activity timings in the pathways according to the increased level of care provided by your service in your change scenario.

4.2 Comparing changes between your current service and change scenario

Once you have amended the data in the tool to reflect your change scenario, you can then review the tool outputs and generate a report in the same way as described in section 3. After generating the output for your change scenario, you can then compare reports with the current service output to analyse the workforce implications of the change scenario.

For example, if you have modelled an antenatal demand change scenario by increasing the case numbers on the birth data sheet, you can compare the '**Analysis: antenatal numbers based on care pathway activity and actual FTE**' report with the same report from the tool capturing your current service.

Once you have downloaded the tool, there is no limit to the number of change scenarios you choose to model within your service using the tool. You can update the current service information in the model as frequently as you wish, and then go on to model change scenarios as and when you need, to support your service's workforce planning.

You may find the reports useful for communicating the implications of planned service changes that you have modelled in the tool. However it is important to highlight the key principles in using the tool, to ensure that the output is interpreted accurately. These are:

- **The tool should not be used as an accounting tool.** All costs are calculated based on mid-point staff salaries. No other costs, such as equipment, bank and agency staff, over-time or out-of-hours services are accounted for.
- **The tool requires each service to agree activity timings that are delivered for one 'typical' woman on any given pathway.** All women are different and the care and support that services deliver every day is completely individual. Agreeing typical timings is intended solely to allow service modelling, by creating as representative a snapshot as is possible whilst still working at a summary level. A summary tool does not require you to capture every detail of your service. **Please remember that this tool is designed to be a support to planning and workforce decision making and captures only as much information as is required for that purpose.**
- **The tool is not designed for benchmarking and is bespoke to each service.** All calculations in the tool are based solely on data each service inputs into the tool and therefore do not refer to local or national benchmarks.
- **The tool will produce reports showing workforce numbers in a modelled environment.** Please remember that modelled numbers provided in the tool's output indicate the theoretical number of staff your service would require if every woman received exactly the minutes of care that you have agreed in your activity timings, or the theoretical number of cases the team could support if every woman received exactly the minutes of care that you agreed in your activity timings. This output is based on a theoretical, modelled environment and does not convey quality or safety standards in actual care delivered.
- **The model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand.** You may find it useful to refer to the monthly intrapartum reports to compare monthly fluctuations in demand to the annual overview.

5. Frequently asked questions (FAQs)

Agreeing timings for a 'typical' woman is not possible, maternity services are personalised and individual - there is no such thing as a typical woman. How can we get around this?

Every woman is individual and average timings can be a challenge to agree. However the Maternity Care Pathways Tool is a modelling tool which aims to provide a high level summary of your service. It cannot capture every permutation of care you provide to every woman. It is a modelling tool designed to support the visualisation of change scenarios and service planning and captures only as much information as is required for that purpose. Agreeing the care delivered to a 'typical' woman is essential for this. There are prompts listed in Appendix 1 of this guidance document which you may find useful to come back to throughout the process - does this happen more often than not? Is this usual? What would it look like most frequently in our service?

We cannot agree timings for how long activities take 'on average'. It depends so much on members of staff and the needs of the woman. Can we still use the tool?

In the same way that no woman is 'typical', the tool does not imply that any midwife and the care and support they provide to women and their families are 'average'. However the Maternity Care Pathways Tool is a modelling tool which aims to provide a high level summary of your service. It is a modelling tool designed to support the visualisation of change scenarios and service planning and captures only as much information as is required for that purpose. Agreeing average timings is essential for this. There are prompts listed in Appendix 1 of this guidance document which you may find useful to come back to throughout the process - does this happen more often than not? Is this usual? What would it look like most frequently in our service?

What is meant by average?

By 'average' we are referring to the mean. However, it is not expected that you would calculate the exact mathematical mean for every activity timing. It is recommended that the use of any available data is considered, which may help you with summary activity timings and assist you with the completion of the pathways. However, it is not assumed that a pre-existing data source will be available for all activity timings and the timings will need to be agreed based on the clinical experience of the team during the workshop process.

We have no data source for some timings, how can we complete the pathways?

The tool uses a team-based workforce planning approach and is designed to draw on your team's clinical experience as a data source for the tool. The team-based approach has been demonstrated to be one of the key benefits of using the tool, enhancing a shared understanding of the future of the service. It is recommended that the use of any available data is considered, which may help you with summary activity timings and assist you with the completion of the pathways. However, it is not assumed that a pre-existing data source will be available for all activity timings and the timings will need to be agreed based on the clinical experience of the team during the workshop process.

Can I model by geographical location, like opening a new birth centre or by individual teams?

The tool has been intended to be as flexible for you to use as possible. Whilst we have provided you with a tool that can capture your whole service, you do not need to complete all the data input boxes provided in the tool. Should you wish to model a single geographical site, you can input birth and workforce data and pathways according to the demand, workforce and service delivery of just that geographical site. You will need to build a version of that tool just for that team or location. You would need therefore to agree birth data, staff roles and activity timings just for that team or location. Remember that this can reflect an existing team using actual numbers, or model a planned team or location using estimates agreed internally.

How does this tool work with Birthrate Plus?

The Maternity Care Pathways Tool is designed for analysis of the whole maternity workforce, and is intended to be an aid to better informed workforce planning. The tool is there to support decision making at a local level and is reliant on data inputted by the service. It is not a replacement for other established tools such as Birthrate Plus, but the tool and its outputs can be used alongside them.

The model shows I have more capacity in one modelled staff group than I know I have in reality. Does that mean I am overstaffed in that role?

No, not necessarily. Modelled numbers are theoretical and do not convey quality or safety standards in actual care delivered. The modelled numbers of staff provided in the outputs indicate a theoretical number of staff your service would require if every woman were to receive exactly the minutes of care you have stated in your activity timings. Actual numbers of staff may be higher than modelled numbers for various reasons. It may be that your activity timings are too low for some activities, or you may have omitted other actions within those timings which your team undertake. You may also have missed activities which you need to add in using the 'Other' or 'Additional' activity boxes. Once you have reviewed all your activity timings and are satisfied these reflect a summary of activity in your service, it is also worth noting that the model works on an annual basis and does not reflect daily, weekly or monthly fluctuations in demand. You may find it useful to refer to the monthly intrapartum reports to compare monthly fluctuations in demand to the annual overview.

My costs don't match my finance team figures. Why?

The tool should not be used as an accounting tool. All costs are calculated based on mid-point staff salaries. No other costs, such as equipment, bank and agency staff, over-time or out-of-hours services are accounted for. Please refer to the key principles in the use of the tool when using or discussing the outputs for your service.

We would like to compare our pathways and outputs to another service or within a network. Can we?

Because the tool is flexible, each service can make assumptions and include activities and other actions that suit their needs best. This means that the model is bespoke to that service, and the assumptions and included activities may not be the same from service-to-service. It is therefore not recommended that *direct* comparisons are made between services using outputs from the tool. However, the pathways and outputs can be used to support discussion and debate between services and across networks. Please refer to the key principles of using the tool whenever model outputs are discussed.

I have questions, who can I ask?

For further information, please contact the Centre for Workforce Intelligence at HEE.workforceplanning1@nhs.net.

Appendix A: Tool definitions

Tool definitions

Terminology	Definition
Average	By 'average' we are referring to the mean. It is not expected that you would calculate the exact mathematical mean for every activity timing. The timings will need to be agreed based on the clinical experience of the team during the workshop process.
Typical	A 'typical' woman represents the most usual case. You may find it useful to ask throughout the pathway mapping process; does this happen more often than not? Is this usual? What would it look like most frequently in our service?

Care pathway definitions

The pathways in the tool follow the Payment by Results (PbR) maternity tariff, with the addition of a further division on the standard antenatal pathway (primip/multip) and on the intermediate antenatal pathway (social/obstetric).

Stage	Stage boundaries/definitions	Care pathway	Definition (where applicable)
Antenatal	Represents the care provided by maternity staff from booking, during pregnancy and up to the onset of established labour.	Standard primip	Those within the standard primipara tariff, who are giving birth for the first time and whose care is low risk.
		Standard multip	Those within the standard multipara tariff, who have had more than one pregnancy and whose care is low risk.
		Intermediate social	Those within the intermediate antenatal tariff, whose care relates to social issues, such as drugs/alcohol misuse and complex social factors.
		Intermediate obstetric	Those within the intermediate antenatal tariff, whose care relates to medical factors, such as hypertension, epilepsy, Hepatitis B and C or previous obstetric history such as preeclampsia.
		Intensive	Those within the intensive antenatal tariff. This includes women who are expecting twins or more babies and those

			with HIV, cardiac disease, cancer, diabetes and renal disease.
Intrapartum	Represents the care provided by maternity staff once a women presents in established labour. Care on this pathway includes postpartum care or care of the mother and baby directly after delivery.	Home birth	Delivery in the home.
		Birth centre	Includes both freestanding and alongside birth centres.
		Delivery unit – normal delivery	Delivery in a delivery unit with lower levels of intervention (not instrumental).
		Delivery unit – assisted delivery	Delivery in a delivery unit with increased levels of intervention (instrumental).
		Induction of labour	Induction of labour prior to delivery.
		Emergency caesarean section	Surgical delivery of child.
		Elective caesarean section	Surgical delivery of child which has been planned in advance.
Postnatal	Represents the care provided by maternity staff to the mother and baby once discharged to the community postnatal service.	Standard	Core community care provided to mothers and babies.
		Intermediate	Community care provided when mothers have complicating factors, including mothers with complex social factors, substance/alcohol misuse, mental health issues, obesity, twins or more babies and gestational diabetes.
		Intensive	Community care provided when mothers have a renal disease or HIV.

Role definitions

The roles included and notes provided in the definition box below have been based on consultations with maternity services across the country during the development and testing of the Maternity Care Pathways Tool.

Role	AFC Band	Notes
Head of midwifery	8a, 8b, 8c, 8d	
Midwifery leadership	8a, 8b, 8c, 8d	
Senior midwife	7	
Specialist midwife	6,7	Those with specific roles and responsibilities such as safeguarding midwife, or risk management midwife.
Midwife	5, 6	
Registered nurse	5, 6	Only include where part of the maternity establishment (employed by the maternity service).
Theatre nurse	5, 6	Only include where part of the maternity establishment (employed by the maternity service).
Maternity support worker advanced	3, 4	Also known as maternity care assistants. Assumed to be higher grade i.e. 3 and 4.
Maternity support worker	2	Also known as maternity care assistants. Assumed to be lower grade i.e. 2.
Health care assistant (HCA)	2, 3	Only include where part of the maternity establishment (employed by the maternity service).
Nursery nurse	2, 3, 4	Only include where part of the maternity establishment (employed by the maternity service).
Housekeeper	1, 2, 3	Only include where part of the maternity establishment (employed by the maternity service).
Sonographer	5, 6, 7, 8a	Only include where part of the maternity establishment (employed by the maternity service).
Operating department practitioner (ODP)	5, 6	Only include where part of the maternity establishment (employed by the maternity service).
Consultant obstetrician	Consultant	Only include where part of the maternity establishment. Salaries obtained from 2013 HSCIC data.

Role	AFC Band	Notes
Obstetrician	FYD, ST1-7, SAS	Only include where part of the maternity establishment. Salaries obtained from 2013 HSCIC data.
Anaesthetist	Consultant, FYD, ST1-7, SAS	Only include where part of the maternity establishment (employed by the maternity service). Salaries obtained from 2013 HSCIC data.
Business manager	8a, 8b, 8c, 8d	
Business support	5, 6, 7	
Administrative support	2, 3, 4	Ward clerks and office assistants.

Pathway activity definitions

Antenatal care pathway activities

The lists are not intended to be exhaustive or prescriptive but may be helpful as prompts for activities to consider. Please keep a record of all activities included and associated minutes in the notes box in the tool. This will enable you to make specific alterations in future change scenarios, such as an increase in travel time. You can also use a paper format found in Appendix B.

Antenatal pathways	Activities	Definitions and activities to consider
Standard primip	Standard booking (2)	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of standard booking appointment time • Notes and preparation prior to booking • Blood taking • Management of referral • Documenting/data entry/record keeping after booking • Travelling time
	Glucose tolerance test and other	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Booking history and information • Blood taking • Administration of anti-D injection • Documenting/ data entry/record keeping of results
	Dating scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Scan • Weighing and measuring the mother • Blood taking • Documenting/data entry/record keeping after the scan

Antenatal pathways	Activities	Definitions and activities to consider
	Parenting sessions	<p>Allocation of time required for parenting support. Insert total staffing time for whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. Please use the modification box to state on average how many women attend these sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Parent education classes • Breastfeeding classes
	Community antenatal clinic appointment (10)	<p>Examples of community antenatal clinic appointments are community midwifery clinics, including clinics held at GP surgeries and health centres. Please use one activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Blood taking • Checking of blood pressure • Measuring fundal height • Taking urine samples • MRSA screening • Membrane sweep • Checking results • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Antenatal home visit (6)	<p>Option to use where care for women on standard pathways is provided at home instead of via an antenatal clinic appointment. One activity for each home visit that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Checking blood pressure • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Anomaly scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Scan • Issuing of MAT B1 • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Standard antenatal other activity	<p>Other standard antenatal activity which is not included explicitly in the pathway and which you wish to include. Use the modification box to state the number of times this activity occurs on average for a 'typical' woman.</p>

Antenatal pathways	Activities	Definitions and activities to consider
	Standard antenatal additional activity	Additional standard antenatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
	Unscheduled care	<p>Triage: Allocation of time to women who present with concerns about their pregnancy or baby's health. Estimate a typical per woman timing for the triage of women presenting for unscheduled care. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Telephone contact • Discussion/advice for the mother • Documenting/data entry/record keeping after the contact
		<p>Standard antenatal day assessment unit: Responsive care following triage and monitoring of women with concerns about their pregnancy or baby's health. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Administering a cardiotocography (CTG) test • Checking blood pressure • Taking urine samples • High vaginal swabs • Low vaginal swabs • Scans • Review of records • Documenting/data entry/record keeping after contact
<p>Standard antenatal ward stay: Allowance for women on who stay on the antenatal ward for a period of time before established labour. Enter staff time in minutes per woman based on a typical 24 hour staffing pattern and the typical number of days/length of stay per woman. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Checking blood pressure • Taking urine samples • Internal examination • Discussion/advice for the mother 		
Standard multip	Standard booking (2)	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of standard booking appointment time • Notes and preparation prior to booking • Blood taking • Management of referral • Documenting/ data entry/record keeping after booking • Travelling time
	Glucose tolerance test and other	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Booking history and information • Blood taking

Antenatal pathways	Activities	Definitions and activities to consider
		<ul style="list-style-type: none"> Administration of anti-D injection Documenting/ data entry/record keeping of results
	Dating scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> Arrangement of appointment time Scans Weighing and measuring the mother Blood taking Documenting/data entry/record keeping after the scan
	Parenting sessions	<p>Allocation of time for women for parenting support. Insert total staffing time for whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. Please use the modification box to state on average how many women attend these sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> Arrangement of appointment time Parent education classes Breastfeeding classes
	Community antenatal clinic appointment (10)	<p>Examples of community antenatal clinic appointments are community midwifery clinics, including clinics held at GP surgeries and health centres. Please use one activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> Arrangement of appointment times Blood taking Checking of blood pressure Measuring fundal height Taking urine samples MRSA screening Membrane sweep Checking results Discussion/advice for the mother Documenting/data entry/record keeping after contact Travelling time
	Antenatal home visit (6)	<p>Option to use where care for women on standard pathways is provided at home instead of via an antenatal clinic appointment. One activity for each home visit that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> Arrangement of appointment times Checking blood pressure Discussion/advice for the mother Documenting/data entry/record keeping after contact Travelling time
	Anomaly scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> Arrangement of appointment times

Antenatal pathways	Activities	Definitions and activities to consider
		<ul style="list-style-type: none"> • Scan • Issuing of MAT B1 • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Standard antenatal other activity	Any other standard antenatal activity which is not included explicitly in the pathway and which you wish to include. Use the modification box to state the number of times this activity occurs on average for a 'typical' woman.
	Standard antenatal additional activity	Any additional standard antenatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
	Unscheduled care	<p>Triage: Allocation of time to women who present with concerns about their pregnancy or baby's health. Estimate a typical, per woman timing, for the triage of women presenting for unscheduled care. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Telephone contact • Discussion/advice for the mother • Documenting/data entry/record keeping after the contact
		<p>Standard antenatal day assessment unit: Responsive care following triage and monitoring of women with concerns about their pregnancy or baby's health. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Administering a cardiotocography (CTG) test • Checking blood pressure • Taking urine samples • High vaginal swabs • Low vaginal swabs • Scans • Review of records • Documenting/data entry/record keeping after contact
<p>Standard antenatal ward stay: Allowance for women on who stay on the antenatal ward for a period of time before established labour. Enter staff time in minutes per woman based on a typical 24 hour staffing pattern and the typical number of days/length of stay per woman. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Checking blood pressure • Taking urine samples • Internal examination • Discussion/advice for the mother 		

Antenatal pathways	Activities	Definitions and activities to consider
Intermediate social pathway	Intermediate booking (2)	<p>Booking appointment for women on intermediate care pathways. You can input the same amount of time as for a standard booking or can allow for additional time due to intermediate requirements. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of booking appointment time • Notes and preparation prior to booking • Blood taking • Social services referral • Documenting/ data entry/record keeping after booking • Travelling time
	Glucose tolerance test and other	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Booking history and information • Blood taking • Administration of anti-D injection • Documenting/ data entry/record keeping of results
	Dating scans	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Scans • Weighing and measuring the mother • Blood taking • Documenting/data entry/record keeping after the scan
	Parenting sessions	<p>Allocation of time for women for parenting support. Insert total staffing time for whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. Please use the modification box to state on average how many women attend these sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Parent education classes • Breastfeeding classes
	Safeguarding meetings	<p>Allocation of time for women on the intermediate-social pathway for safeguarding meetings and associated support. Insert the total staffing time for the whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Child protection plan • Multi-disciplinary team meetings (all staff attending)
	Community antenatal clinic appointment (15)	<p>Examples of community antenatal clinic appointments are community midwifery clinics, including clinics held at GP surgeries and health centres. Please use one activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times

Antenatal pathways	Activities	Definitions and activities to consider
		<ul style="list-style-type: none"> • Blood taking • Checking of blood pressure • Measuring fundal height • Taking urine samples • MRSA screening • Membrane sweep • Checking results • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Intermediate antenatal home visit (15)	<p>Option to use where care for women is provided at home instead of via an antenatal clinic appointment. One activity for each home visit that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Checking blood pressure • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Anomaly scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Scans • Issuing of MAT B1 • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Intermediate antenatal other activity	<p>Any other intermediate antenatal activity which is not included explicitly in the pathway and which you wish to include. Use the modification box to state the number of times this activity occurs on average for a 'typical' woman.</p>
	Intermediate antenatal additional activity	<p>Any additional intermediate antenatal activity which you specify and which only occurs for a proportion of women but requires a high level of input from the maternity team.</p>
	Unscheduled care	<p>Triage: Allocation of time to women who present with concerns about their pregnancy or baby's health. Estimate a typical, per woman timing, for the triage of women presenting for unscheduled care. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Telephone contact • Discussion/advice for the mother • Documenting/data entry/record keeping after the contact
		<p>Intermediate antenatal day assessment unit: Responsive care following triage and monitoring of women with concerns about</p>

Antenatal pathways	Activities	Definitions and activities to consider
		<p>their pregnancy or baby’s health. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Administering a cardiotocography (CTG) test • Checking blood pressure • Taking urine samples • High vaginal swabs • Low vaginal swabs • Scans • Review of records • Documenting/data entry/record keeping after contact <p>Intermediate antenatal ward stay: Allowance for women who stay on the antenatal ward for a period of time before established labour. Enter staff time in minutes per woman based on a typical 24 hour staffing pattern and the typical number of days/length of stay per woman. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Checking blood pressure • Taking urine samples • Internal examination • Discussion/advice for the mother
Intermediate obstetric pathway	Intermediate booking (2)	<p>Booking appointment for women on intermediate care pathways. You can input the same amount of time as for a standard booking or can allow for additional time due to intermediate requirements. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of booking appointment time • Notes and preparation prior to booking • Blood taking • Management of referral • Birth plan • Organisation of follow-up appointment • Documenting/ data entry/record keeping after booking • Travelling time
	Glucose tolerance test and other	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Booking history and information • Blood taking • Administration of anti-D injection • Documenting/ data entry/record keeping of results
	Dating scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Scans • Weighing and measuring the mother • Blood taking • Documenting/data entry/record keeping after the scan

Antenatal pathways	Activities	Definitions and activities to consider
	Parenting sessions	<p>Allocation of time for women on the pathway for parenting support. Insert total staffing time for whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. Please use the modification box to state on average how many women attend these sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Parent education classes • Breastfeeding classes
	Community antenatal clinic appointment (15)	<p>Examples of community antenatal clinic appointments are community midwifery clinics, including clinics held at GP surgeries and health centres. Please use one activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Blood taking • Checking of blood pressure • Measuring fundal height • Taking urine samples • MRSA screening • Membrane sweep • Checking results • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Intermediate antenatal appointment (15)	<p>Clinic appointment(s) for women on the intermediate-obstetric care pathway, requiring a higher level of care and some monitoring by an obstetrician. One activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Birth plan consultation • Discussion/advice for mother • Documenting/data entry/record keeping after contact • Travelling time
	Anomaly scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Scans • Issuing of MAT B1 • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Intermediate scan (8)	<p>Additional scans of women on the intermediate obstetric pathway. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Scans

Antenatal pathways	Activities	Definitions and activities to consider
		<ul style="list-style-type: none"> • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Intermediate antenatal other activity	Any other intermediate antenatal activity which is not included explicitly in the pathway and which you wish to include. Use the modification box to state the number of times this activity occurs on average for a 'typical' woman.
	Intermediate antenatal additional activity	Any additional intermediate antenatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
	Unscheduled care	<p>Triage: Allocation of time to women who present with concerns about their pregnancy or baby's health. Estimate a typical, per woman timing, for the triage of women presenting for unscheduled care. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Telephone contact • Discussion/advice for the mother • Referral for review • Documenting/data entry/record keeping after the contact
		<p>Intermediate antenatal day assessment unit: Responsive care following triage and monitoring of women with concerns about their pregnancy or baby's health. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Administering a cardiotocography (CTG) test • Checking blood pressure • Taking urine samples • High vaginal swabs • Low vaginal swabs • Scans • Review of records • Referral for review • Documenting/data entry/record keeping after contact
	<p>Intermediate antenatal ward stay: Allowance for women who stay on the antenatal ward for a period of time before established labour. Enter staff time in minutes per woman based on a typical 24 hour staffing pattern and the typical number of days' length of stay per woman. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Checking blood pressure • Taking urine samples • Internal examination • Discussion/advice for the mother 	

Antenatal pathways	Activities	Definitions and activities to consider
Intensive pathway	Early consultation	Option to use where a consultation is held prior to a booking for women on the intensive pathway.
	Intensive booking (2)	<p>Booking appointment for women on the intensive pathway. You can input the same amount of time as for a standard or intermediate booking or can allow for additional time due to intensive requirements. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of standard booking appointment time • Notes and preparation prior to booking • Management of referral • Blood taking • Organisation of follow-up appointment • Documenting/ data entry/record keeping after booking • Travelling time
	Glucose tolerance testing and other	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Booking history and information • Blood taking • Administration of anti-D injection • Documenting/ data entry/record keeping of results
	Dating scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Scans • Weighing and measuring the mother • Blood taking • Documenting/data entry/record keeping after the scan
	Parenting sessions	<p>Allocation of time for women on the standard primip pathway for parenting support. Insert total staffing time for whole antenatal pathway, so if multiple sessions take place then insert the total time for all sessions. Please use the modification box to state on average how many women attend these sessions. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Parent education classes • Breastfeeding classes
	Community antenatal clinic appointment (10)	<p>Examples of community antenatal clinic appointments are community midwifery clinics, including clinics held at GP surgeries and health centres. Please use one activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Blood taking • Checking of blood pressure • Measuring fundal height • Taking urine samples

Antenatal pathways	Activities	Definitions and activities to consider
		<ul style="list-style-type: none"> • MRSA screening • Membrane sweep • Checking results • Discussion/advice for the mother • Documenting/data entry/record keeping after contact • Travelling time
	Obstetric appointment (6)	<p>An option to use where women on the intensive pathway see an obstetrician separately from the multi-professional, intensive appointments. One activity per appointment. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Birth plan consultation • Test result feedback • Discussion/advice for the mother • Documenting/data entry/record keeping after contact
	Intensive, multi-professional antenatal clinic appointment (15)	<p>Clinic appointment(s) for women on the intensive pathway, requiring a higher level of care and active monitoring by an obstetrician. One activity for each clinic appointment that takes place. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Review of records • Discussion/advice for the mother • Documenting/data entry/record keeping after the scan
	Anomaly scan	<p>Required for all pathways. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Scan • Issuing of MAT B1 • Discussion/advice for the mother • Documenting/data entry/recording keeping after the scan
	Intensive scan	<p>Option to use where additional scans are provided as part of routine monitoring for women on the intensive pathway. One activity per scan. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment times • Review of records • Scans • Additional scan time for twins • Discussion/advice for the mother
	Intensive antenatal other activity	<p>Any other intensive antenatal activity which is not included explicitly in the pathway and which you wish to include. Use the modification box to state the number of times this occurs on average for a 'typical' woman.</p>

Antenatal pathways	Activities	Definitions and activities to consider
	Intensive antenatal additional activity	Any additional intensive antenatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
	Unscheduled care	<p>Triage: Allocation of time to women who present with concerns about their pregnancy or baby's health. Estimate a typical, per woman timing, for the triage of women presenting for unscheduled care. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Telephone contact • Discussion/advice for the mother • Documenting/data entry/record keeping after the contact
		<p>Intermediate antenatal day assessment unit: Responsive care following triage and monitoring of women with concerns about their pregnancy or baby's health. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Administering a cardiotocography (CTG) test • Checking blood pressure • Taking urine samples • High vaginal swabs • Low vaginal swabs • Scans • Review of records • Documenting/data entry/record keeping after contact
<p>Intermediate antenatal ward stay: Allowance for women who stay on the antenatal ward for a period of time before established labour. Enter staff time in minutes per woman based on a typical 24 hour staffing pattern and the typical number of days' length of stay per woman. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Checking blood pressure • Taking urine samples • Internal examination • Discussion/advice for the mother 		

Intrapartum care pathway activities

The lists are not intended to be exhaustive or prescriptive but may be helpful as prompts for activities to consider. Please keep a record of all activities included and associated minutes in the notes box in the tool. This will enable you to make specific alterations in future change scenarios, such as an increase in travel time. You can also use a paper format found in Appendix B.

Intrapartum pathways	Activity	Definitions and activities to consider
Induction of labour (IOL)	Induction of labour	<p>Include 'average' time taken by each staff role for induction of labour for one 'typical' woman. There is one activity box for you to record your activity timings for induction of labour. Please agree the on the 'average' and most usual. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Admission onto the ward • Monitoring of mother during IOL • Administration of Prostin • Administering a cardiotocography (CTG) test • Administration of Epidural • Administration of Syntocinon
Home birth	Birth planning home visit	<p>Antenatal visit at around 36 weeks to plan a home birth. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Arrangement of appointment time • Notes and preparation prior to booking • Documenting/ data entry/record keeping after contact • Travelling time
	Home birth intrapartum	<p>Delivery in a home. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Travelling time of staff roles involved • Birth care • Disposal of equipment and placenta • Documenting/data entry/record keeping after contact
	Home birth intrapartum additional activity	<p>Additional home birth intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team. This may include transfer.</p>
	Home birth postpartum home visit and newborn and infant physical examination (NIPE)	<p>Home visit within 24 hours of a home birth including NIPE. You may want to account for the following activities in your timings:</p> <ul style="list-style-type: none"> • Travelling time • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
Birth centre	Birth centre intrapartum	<p>Delivery in a birth centre. You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Admission of woman to the birth centre • Checking blood pressure

Intrapartum pathways	Activity	Definitions and activities to consider
		<ul style="list-style-type: none"> • Taking urine samples • Internal examination • Birth care • Suturing
	Birth centre intrapartum additional activity	Any additional birth centre intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team.
	Birth centre postpartum stay	Care provided to mother directly after the delivery of baby. Staff time per woman based on the typical length of postpartum stay in the birth centre. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of mother after delivery of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
	Birth centre NIPE	If NIPes are carried out by a paediatrician, then do not include this on the pathway maps. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
Delivery unit – normal delivery	Delivery unit – normal delivery intrapartum	Delivery in a delivery unit with lower levels of intervention (not instrumental). You may want to account for the following activities: <ul style="list-style-type: none"> • Admission of mother into the delivery unit • Checking blood pressure • Internal examination • Birth care • Suturing
	Delivery unit – normal delivery intrapartum additional activity	Additional normal delivery intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team.
	Delivery unit – normal delivery postpartum ward	Care provided to mother directly after the delivery of baby. Staff time per woman based on the typical length of stay in the postnatal ward after a normal delivery in the delivery unit. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of mother after delivery of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
	Delivery unit – normal delivery NIPE	If NIPes are carried out by a paediatrician, then do not include this on the pathway maps. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother

Intrapartum pathways	Activity	Definitions and activities to consider
Delivery unit – assisted delivery	Delivery unit – assisted delivery intrapartum	<p>Delivery in a delivery unit with increased levels of intervention (instrumental). You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Admission of mother into the delivery unit • Checking blood pressure • Internal examination • Administering a cardiotocography (CTG) test • Administration of Epidural • Birth care • Suturing
	Delivery unit – assisted delivery intrapartum additional activity	Any additional assisted delivery intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team.
	Delivery unit – assisted delivery postpartum ward	<p>Care provided to mother directly after the delivery of baby. Staff time per woman based on the typical length of stay in the postnatal ward after an assisted delivery in the delivery unit. You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Examination of mother after delivery of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
	Delivery unit – assisted delivery postpartum transfer	<p>Care activity at transfer of the mother and baby to another setting (either to another ward or to the community). This includes the transfer of the mother from obstetrician care. You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Reviewing mother’s antenatal and delivery records • Reviewing birth plans made during antenatal stages • Discussion/advice for mother • Discharge
	Delivery unit – assisted delivery NIPE	<p>If NIPEs are carried out by a paediatrician, then do not include this on the pathway maps. You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
Emergency caesarean section (CS)	Emergency CS intrapartum	<p>Delivery via an emergency caesarean section. You may want to account for the following activities:</p> <ul style="list-style-type: none"> • Admission of mother onto ward • Pre-operation preparation • Administration of anaesthetic • Surgical time • Birth care
	Emergency CS intrapartum additional activity	Additional emergency caesarean intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team.

Intrapartum pathways	Activity	Definitions and activities to consider
	Emergency CS recovery bay	Staff time per woman based on the typical length of stay in the recovery bay following an emergency caesarean delivery. You may want to account for the following activities: <ul style="list-style-type: none"> • Documenting/data entry/recording • Discussion/advice for the mother • Administration of additional pain killers
	Emergency CS postpartum ward	Staff time per woman based on the typical length of stay in the postnatal ward after an emergency caesarean delivery. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of mother after delivery of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
	Emergency CS postpartum transfer	Care provided during the transfer of the mother and baby to another setting (either to another ward or to the community). This includes the transfer of the mother from obstetric care. You may want to account for the following activities: <ul style="list-style-type: none"> • Reviewing mother's antenatal and delivery records • Reviewing birth plans made during antenatal stages • Discussion/advice for mother • Discharge
	Emergency CS NIPE	If NIPEs are carried out by a paediatrician, then do not include this on the pathway maps. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
Elective caesarean section (CS)	Elective CS pre-operating assessment	Clinic appointments prior to an elective CS. You may want to account for the following activities: <ul style="list-style-type: none"> • Discussion/advice for mother • Weighing and measuring the mother • Blood taking
	Elective CS antenatal admission	Carrying out necessary health assessment and administrative requirements when booked for an elective caesarean. You may want to account for the following activities: <ul style="list-style-type: none"> • Discussion/advice for mother • Surgical preparation • Reviewing of mother's antenatal and delivery records
	Elective CS intrapartum	Delivery via an elective caesarean section. You may want to account for the following activities: <ul style="list-style-type: none"> • Administration of anaesthetic • Surgical time • Birth care

Intrapartum pathways	Activity	Definitions and activities to consider
	Elective CS intrapartum additional activity	Additional elective CS intrapartum activity which you specify and which only occurs for a proportion of women but requires high level of input from team.
	Elective CS recovery bay	Staff time per woman based on the typical length of stay in the recovery bay following an emergency caesarean delivery. You may want to account for the following activities: <ul style="list-style-type: none"> • Documenting/data entry/recording • Discussion/advice for the mother • Administration of additional pain killers
	Elective CS postpartum ward	Staff time per woman based on the typical length of stay in the postnatal ward after an elective caesarean delivery. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of mother after delivery of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother
	Elective CS postpartum transfer	Care provided during the transfer of the mother and baby to another setting (either to another ward or to the community). This includes the transfer of the mother from obstetrician care. You may want to account for the following activities: <ul style="list-style-type: none"> • Reviewing mother's antenatal and delivery records • Reviewing birth plans made during antenatal stages • Discussion/advice for mother • Discharge
	Elective CS NIPE	If NIPEs are carried out by a paediatrician, then do not include this on the pathway maps. You may want to account for the following activities: <ul style="list-style-type: none"> • Examination of baby • Documenting/data entry/recording after contact • Discussion/advice for the mother

Postnatal care pathway activities

The lists are not intended to be exhaustive or prescriptive but may be helpful as prompts for activities to consider. Please keep a record of all activities included and associated minutes in the notes box in the tool. This will enable you to make specific alterations in future change scenarios, such as an increase in travel time. You can also use a paper format found in Appendix B.

Postnatal pathways	Activity	Definitions and activities to consider
Standard	Community standard postnatal care	Total time for core care provided to one 'typical woman' on this pathway. You may want to account for the following activities: <ul style="list-style-type: none"> • Travelling time • Arrangement of appointment times • Feeding support • Discussion/advice for the mother • Documenting/data entry/record keeping after contact
	Standard postnatal other activity	Any other standard postnatal activity which is not included explicitly in the pathway and which you wish to record separately. Use the modification box to state the number of times this activity occurs on average for the 'typical' woman.
	Standard postnatal additional activity	Any additional standard postnatal additional activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
Intermediate	Community intermediate postnatal care	Total time for a 'typical' woman with intermediate postnatal care needs, such as a mother with complex social factors, obesity, substance/alcohol misuse, mental health, diabetes, inherited disorder, rhesus isoimmunisation/other significant blood group antibodies or cardiovascular disease. You may want to account for the following activities: <ul style="list-style-type: none"> • Travelling time • Arrangement of appointment times • Feeding support • Discussion/advice for the mother • Documenting/data entry/record keeping after contact
	Intermediate postnatal other activity	Any other intermediate postnatal activity which is not included explicitly in the pathway and which you wish to record separately. Use the modification box to state the number of times this activity occurs on average for the 'typical' woman.
	Intermediate postnatal additional activity	Any additional intermediate postnatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.
Intensive	Community intensive postnatal care	Total time for a 'typical' woman with intensive postnatal care needs, such as a mother with HIV or renal disease. You may want to account for the following activities: <ul style="list-style-type: none"> • Travelling time • Arrangement of appointment times • Feeding support • Discussion/advice for the mother

		<ul style="list-style-type: none"> • Documenting/data entry/record keeping after contact
	Intensive postnatal other activity	Any other intensive postnatal activity which is not included explicitly in the pathway and which you wish to record separately. Use the modification box to state the number of times this activity occurs on average for the 'typical' woman.
	Intensive postnatal additional activity	Any additional intensive postnatal activity which you specify and which only occurs for a proportion of women but requires high level of input from the maternity team.

Appendix B: Additional actions notes

Pathway activity – additional activity notes

The final total minutes you agree for any one activity may be made up of multiple actions. For example, a ‘clinic’ may result in 60 minutes of midwife time, which you will record in the model. This could be made up of 30 minutes for the clinic, 20 minutes for travel, and 10 minutes for record keeping. Please use the notes boxes in the model to record all additional actions which contribute to the total activity time, along with the time in minutes.

These sheets can also be used to enable you to keep track of specific actions within each activity and will help you with modelling service changes (for example an increase in travel time for specific activities). You will then be able to refer to these sheets for every version of the model you create.

ANTENATAL STANDARD PRIMIP & MULTIP PATHWAYS		
Model version: Current service		
Activity as seen on pathway	Additional actions	Minutes for each additional actions
E.g. clinic	E.g. Travel	20 minutes
	E.g. Record keeping	10 minutes

ANTENATAL STANDARD MULTIP PATHWAY

Model version:

Activity as seen on pathway	Additional action	Minutes for each additional action

ANTENATAL INTERMEDIATE SOCIAL PATHWAY

Model version:

Activity as seen on pathway	Additional action	Minutes for each additional action

ANTENATAL INTENSIVE PATHWAY

Model version:

Activity as seen on pathway	Additional action	Minutes for each additional action

INTRAPARTUM ALL PATHWAYS

Model version:

Activity as seen on pathway	Additional action	Minutes for each additional action

POSTNATAL STANDARD PATHWAY		
Model version:		
Activity as seen on pathway	Additional action	Minutes for each additional action

POSTNATAL INTERMEDIATE PATHWAY		
Model version:		
Activity as seen on pathway	Additional action	Minutes for each additional action

Appendix C: Acknowledgments

The CfWI sought input from a wide range of stakeholders throughout the development of the Maternity Care Pathways Tool. The team would like to particularly thank all the maternity services listed below who contributed to the project at various stages of the development of the tool for their time, commitment, input and advice which have been invaluable.

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- Lancashire Teaching Hospitals NHS Foundation Trust
- Leeds Teaching Hospitals Trust
- Mid-Cheshire Hospitals NHS Foundation Trust
- One to One Midwives Limited
- Portsmouth Hospitals NHS Trust
- Salisbury NHS Foundation Trust
- South Devon Healthcare NHS Foundation Trust
- Stockport NHS Foundation Trust
- Tameside Hospital NHS Foundation Trust
- Taunton and Somerset NHS Foundation Trust
- University Hospital Coventry and Warwickshire NHS Foundation Trust
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