Best Start North

Project Report

December
2020

Digital Health & Care
Innovation Centre

Contents

Disclaimer

Digital Health & Care Innovation Centre

DHI is a collaboration between:

The Glasgow School of Art

University of Strathclyde Glasgow

Best Start NORTH

This cross board programme of work aims to carry out a review of Maternity and Neonatal services across NHS Western Isles, NHS Shetland, NHS Orkney, NHS Highland and NHS Grampian which seeks to understand the resources, constraints, challenges and opportunities in the current systems

The programme steering group will then oversee and direct the development and implementation of a model of care for Maternity and Neonatal services that operates as a single system across traditional Board boundaries and is sustainable and deliverable in line with the vision and principles of 'The Best Start: a Five Year Forward Plan for Maternity and Neonatal Services'.

Steering Group Objectives

- To support a multi-professional and cross Board culture of excellence in maternity and neonatal services.
- To provide senior leadership and direction from each of the relevant Boards for a strategic review and planning process.
- To provide senior clinical input and leadership on the services provided across the relevant Boards.
- To ensure that any planning processes or data gathering undertaken as part of the review is supported at Board level.
- To agree and support relevant communications and messages related to the review.
- To consider and contribute to the outputs from the review process, including interim and final reports
- To provide and optimise Board level leadership for the redesign of services
- To consider and provide feedback and direction on proposals or developments arising from the planning process.
- To provide information and advice to the programme of work on any issue posing a risk to deliver ability using appropriate escalation or reporting processes.
- To respond to direction from the Chair and Chief Executives Group, taking appropriate actions.

Digital Health & Care Innovation Centre (DHI)

The Digital Health and Care Institute (DHI) is one of eight Innovation Centres (IC) in Scotland. DHI's focus is in harnessing innovation to seek and solve key challenges for the health and care sector; transforming great ideas into real solutions.

It is a collaboration between the University of Strathclyde and the Glasgow School of Art and is part of the Scottish Funding Council's Innovation Centre Programme. It is part funded by Scottish Government. DHI support innovation between academia, the public and third sectors and businesses in the area of health and care.

The DHI has worked with partners to harness and co-design digital innovations that benefit service delivery, with project expertise in uncovering transformational opportunities in a range of conditions. Over this period DHI has developed a design led Innovation process which is in line with Scottish Design standards.

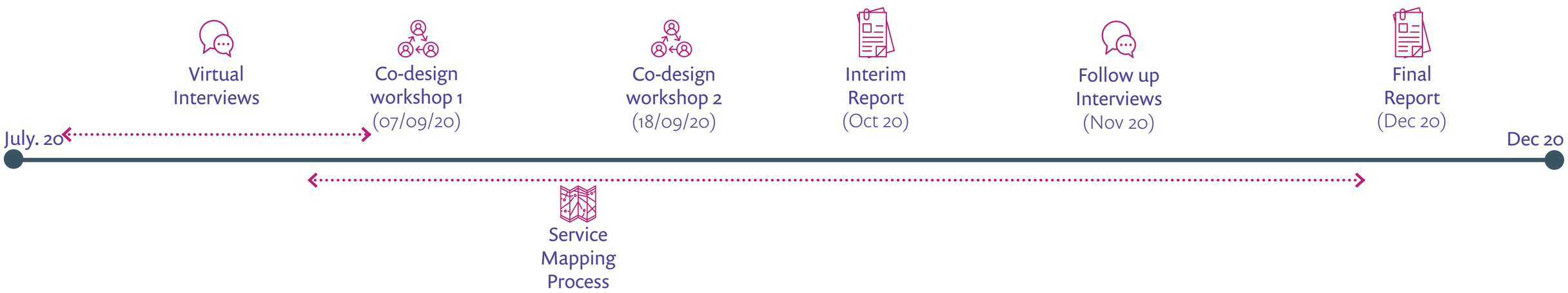
Project Overview: DHI Input

The support offered by DHI is in the form of current state mapping, virtual interviews and co-design workshops and to provide an introduction to digital possibilities for health and care.

Both parties recognised the magnitude and complexity of work involved in this area and see the benefit of involving a design led approach in seeking sustainable improvements. The engagement and co-design methodology adopted for the Sottish Access Collaborative would be developed and adapted by the DHI team for this work.

NHS Grampian were responsible for gathering preliminary materials and identifying and inviting interview and workshop participants. The DHI design team adapted tools for use in the virtual interviews and workshops based on the background information, lead the workshops and record decisions and insights during the workshops. The tools developed for these workshops supported participants during the workshops and recorded discussion on the focus areas and improvements.

Project Timeline



Current State Maps

Types of Maternity Unit and Regional Resource

Obstetric Unit– Maternity care is delivered by a multidisciplinary team made up of consultants and midwives. Midwives would provide care to all women antenatal whether low or high risk and would take primary care role for women with low risk characteristics during delivery. Obstetricians would take the primary care role for women that were deemed to be of a higher risk of complications. An obstetric unit will have access to neonatal and anaesthetic care available on site.

Midwifery Unit– Midwives will take responsibility for antenatal and intrapartum care. Midwifery units can offer care to women whose pregnancies are deemed low risk, as if there were any complications that required access to obstetric, neonatal or anaesthetic care this would mean transferring to the nearest unit. Higher risk pregnancies would usually be referred to an obstetric unit for delivery.

From interviews it appears that not all units fit rigidly into these definitions, most units have nuanced differences to suit the communities they cater for. However, broadly speaking Aberdeen Maternity Hospital and Raigmore Hospital operate as the areas two largest tertiary units with obstetric led care and the resources to manage the most complex cases. Both NHS Orkney and Shetland, as well as Dr Gray's Hospital* have a degree of obstetric cover but would not be resourced to support delivery for women with higher risks. The remaining units are midwife led and would only be able to offer intrapartum care to the lowest risk pregnancies, this is reflected in the numbers of births shown on page??.

The majority of the antenatal pathway can usually be facilitated in midwife led community maternity units, with exceptions for some women who require additional support and may require clinician input, in which case this may involve travel to the nearest consultant led service. It has been indicated that the desired state is such that where possible additional input is provided remotely or through community visits. Additionally, not all community units are resourced to deliver scans.

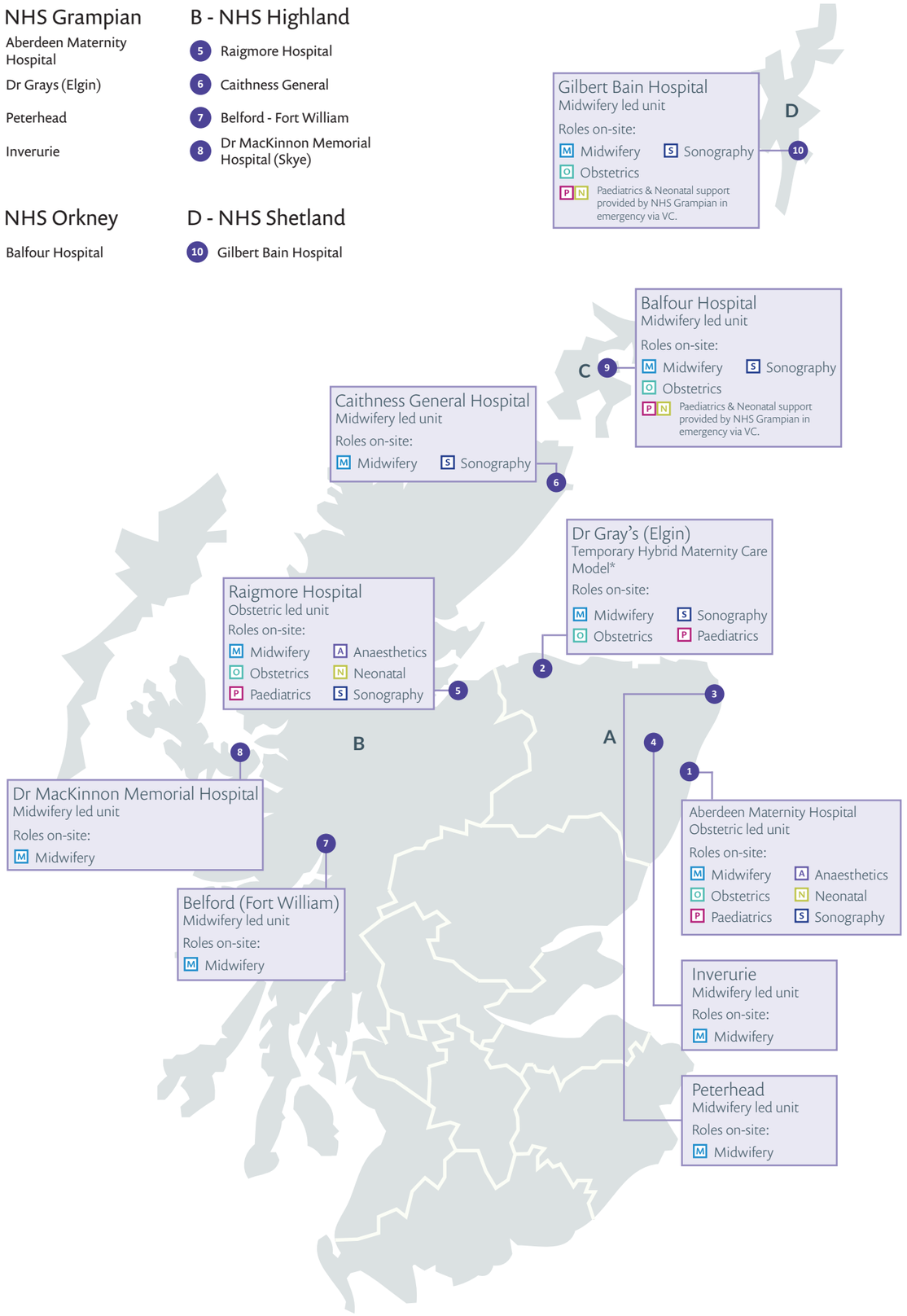
*Dr Gray's represents a unique case for the area where they are operating under a hybrid model of maternity care for more information see Dr Gray's context on page??.

A - NHS Grampian
1. Aberdeen Maternity Hospital
2. Dr Grays (Elgin)
3. Peterhead
4. Inverurie

B - NHS Highland
5. Raigmore Hospital
6. Caithness General
7. Belford - Fort William
8. Dr MacKinnon Memorial Hospital (Skye)

C - NHS Orkney
9. Balfour Hospital

D - NHS Shetland
10. Gilbert Bain Hospital



Staffing

The staffing data provided was incomplete and therefore this means there are significant limitations to the comparisons that can be drawn. However, combining quantitative and qualitative data from the engagement carried out there does seem to be subtle differences in staffing mix between the boards. This is to be expected due to the varying remits of each board. However, it may also present opportunities for cross boundary collaboration.

*Staffing data for both NHS Highland and NHS Shetland was incomplete
***No staffing data was provided for NHS Orkney

A - NHS Grampian

1. Aberdeen Maternity Hospital
2. Dr Grays (Elgin)
3. Peterhead
4. Inverurie

B - NHS Highland

5. Raigmore Hospital
6. Caithness General
7. Belford - Fort William
8. Dr MacKinnon Memorial Hospital (Skye)

C - NHS Orkney**

9. Balfour Hospital

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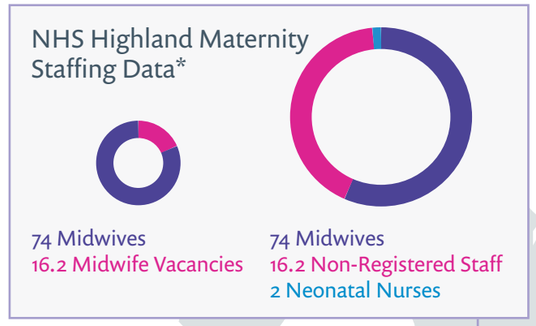
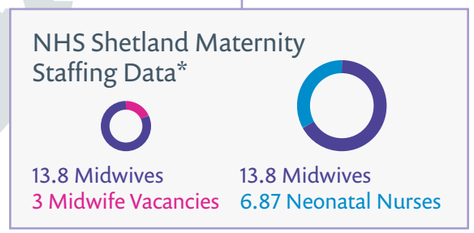




Births

Key
- Total Registered Births - by NHS board
- Deliveries
- Interventions

A - NHS Grampian

1 Aberdeen Maternity Hospital
- 5476
- 4921*
- 2586

2 Dr Gray's Hospital (Elgin)
- 816**
- 288
- 67

3 Peterhead
- 126
- N/A

4 Inverurie
- 136
- N/A

B - NHS Highland

5 Raigmore Hospital
- 2597***
- 1942
- 998

6 Caithness General Hospital (Wick)
- 10
- N/A

7 Belford Hospital (Fort William)
- 16
- N/A

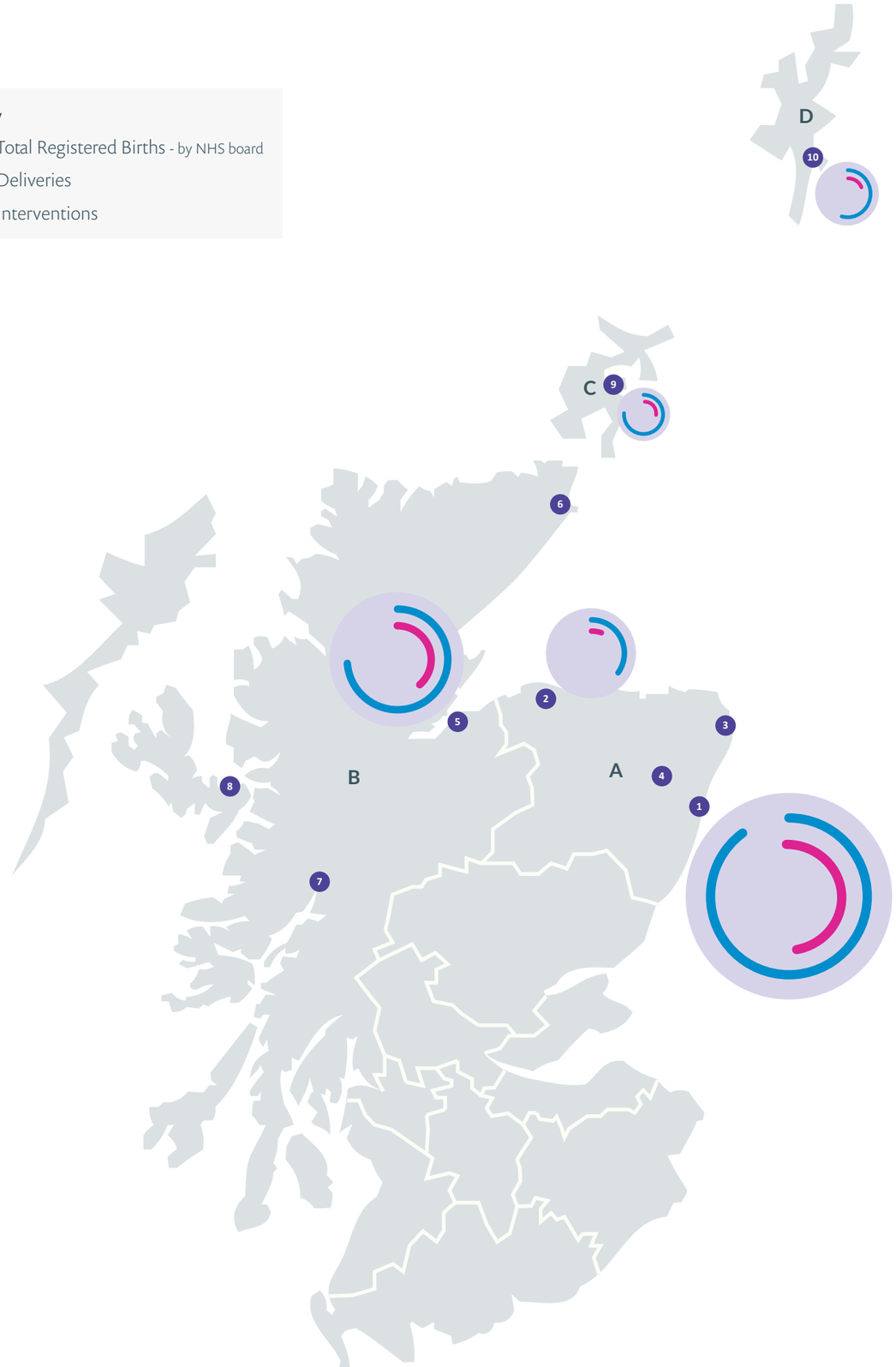
8 Dr MacKinnon Memorial Hospital (Isle of Skye)
- 10
- N/A

C - NHS Orkney

9 Balfour Hospital
- 182
- 139
- 49

D - NHS Shetland

10 Gilbert Bain Hospital
- 205
- 110
- 42

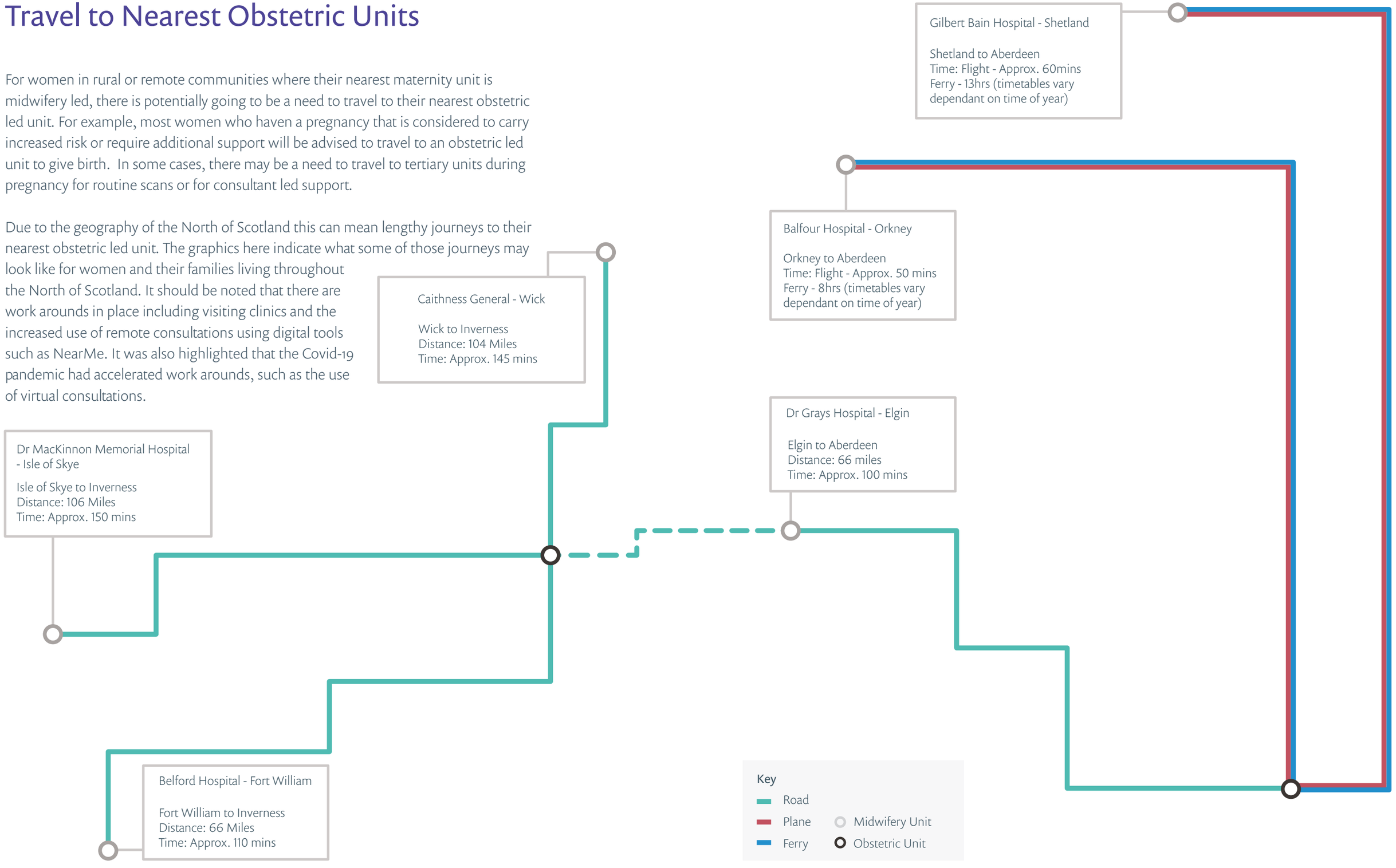


*Deliveries at Aberdeen Maternity Hospital includes transfers from NHS Orkney and NHS Shetland as well as births from throughout NHS Grampian.
**Registered births for Moray council area.
***Registered births for NHS Highland, some areas in NHS Highland are supported by tertiary centres in NHS Greater Glasgow and Clyde

Travel to Nearest Obstetric Units

For women in rural or remote communities where their nearest maternity unit is midwifery led, there is potentially going to be a need to travel to their nearest obstetric led unit. For example, most women who haven a pregnancy that is considered to carry increased risk or require additional support will be advised to travel to an obstetric led unit to give birth. In some cases, there may be a need to travel to tertiary units during pregnancy for routine scans or for consultant led support.

Due to the geography of the North of Scotland this can mean lengthy journeys to their nearest obstetric led unit. The graphics here indicate what some of those journeys may look like for women and their families living throughout the North of Scotland. It should be noted that there are work arounds in place including visiting clinics and the increased use of remote consultations using digital tools such as NearMe. It was also highlighted that the Covid-19 pandemic had accelerated work arounds, such as the use of virtual consultations.



Emergency & Retrieval Services

Emergency and retrieval services play a crucial part in maternity services, particularly in rural and remote areas. This graphic highlights the maternity emergency and retrieval activity across the northern region, highlighting where there is potential pressure on these services and the knock-on effects this can have for wider service provision.

Care Pathways & Options

One of the primary challenges to maternity care in the north of Scotland is providing parity of care to those in rural and remote communities. It is unrealistic to assume that the full range of maternity care could be provided in every community. This means that some women will have to travel substantial distances to access some of the care they require, as shown in previous graphics.

The following infographics show a maternity care pathway and the care options for pregnancies in various areas throughout the north region. The visual shows where care takes place and who is involved at each stage, highlighting when a woman may need to travel to another unit.

Maternity Care Delivery - Key

- **Core** Low risk pathway, primarily midwifery led care.
- **Extended** Additional care needs, requiring consultant input as well as midwifery led care.
- **Advanced** Additional care needs, requiring specialist input (often out with maternity care teams), as well as midwifery led care.
- **Emergency** Emergency care or support provided by Scottish Ambulance Service and ScotStar retrieval service

Maternity Care Pathway

First Trimester
01 - 13 weeks

Prior to booking appointment

Booking appointment

- **Midwife** - booked directly with midwife in local maternity unit.
- If any risk factors (such as a BMI over 30, or older mother) - then a **consultant appointment** will often be booked*

Dating scan & antenatal screening test

- **Sonographer & Midwife** - Ultrasound + bio-chemical screening - screen for possible conditions (including Down's Syndrome)
- If there are additional care needs there then a **consultant** may also be present

***Risk assessment & planning of care** - e.g. in case extra appointments or scans need to be booked. Planning for birth, management plans are put in place for those individuals who are high risk and travel to obstetric led unit for delivery. This will begin early in pregnancy.

Second Trimester
14 - 26 weeks

Antenatal clinic appointment

- **Midwifery Team** - Each antenatal clinic appointment consists of - a general chat about pregnancy progress, palpate and measurement - for estimate of babies growth (SFH - symphysis fundal height), measurement of heartbeat, check foetal movement, Blood pressure, Urine test (UTI)
- If there are additional care needs a **consultant** would be present as well as the midwife for some (or all) antenatal clinic appointments
- Dependant on additional care needs there may be input from outside of the maternity care team - **e.g. diabetic specialist.**

20 week scan

- **Sonographer & Midwife**
- if there are additional care needs there then a **consultant** may also be present

Antenatal clinic appointment

- **Midwifery Team**
- If there are additional care needs there then a **consultant** may also be present

Sonographer - Scan appointment for foetal echocardiography for women whose babies are at increased risk of a heart abnormality

It is important to note that these pathways are not necessarily linear, women may move in and out of these, dependant on their needs. It is also worth mentioning that where possible solutions such as virtual clinics or video calls are being implemented. Use of these remote solutions has been accelerated due to the Covid-19 pandemic.

Third Trimester
27 - 40 weeks

Antenatal clinic appointment

Routine blood screening & vaccines

- Midwifery Team
- **Oral Glucose Tolerance Test (OGTT)** may be done at this stage if there are concerns around gestational diabetes. Dependant on concerns or patients history this may be done earlier in pregnancy.

Antenatal clinic appointment

- Midwifery Team
- If moderate/ higher risk then **additional scans** may be planned during third trimester

Antenatal clinic appointment

Birth plan (formal discussion)

- Midwifery Team
- Birth plans will usually be discussed earlier in pregnancy, however if an **elected c-section then a discussion with a consultant** will usually happen around 34 -36 weeks

Antenatal clinic appointment

- Midwifery Team
- If there are additional care needs there then a **consultant** may also be present

- Growth Scans Later in Pregnancy

  If women have - High BMI, Previous baby (small or large) - Close to 50% require this.

  28, 32, 36, 39 Weeks

Delivery & Postnatal Care

Delivery

- **Midwife led care -** Spontaneous delivery
- **Obstetric led care - Includes:**
  - Spontaneous delivery
  - Induction of Labour
  - Assisted Delivery
  - Forceps or Ventouse Delivery
  - Planned C-Section
  - Emergnecy C-section
- **Obstetric led delivery with additional support - e.g. theatre staff**
- **Scottish Ambulance Service/ ScotStar -** Transfer before delivery, intrapartum transfer avoided.

Perinatal & neonatal care

- **Neonatal Support -** can be provided via virtual consultation with specialist in some instances or at a **Neonatal Unit.**
- **Perinatal Mental Health -** Services available in Aberdeen or central belt - (central belt tends to be more severe cases)
- **Scottish Ambulance Service/ ScotStar -** Neonatal retrieval

The infographics on the following pages, focus on different rural areas with midwifery led units throughout the region. Highlighting what care can be offered locally at each stage of the pathway and when woman may need to travel to an obstetric unit. This varies slightly for each area due to the resource, staffing and facilities available in each locality. It is also important to note that pathways won't always be this simple, and will likely vary slightly from one pregnancy to another.

Maternity Care Delivery - Key

Core · Extended · Advanced · Emergency

NHS Highland
Belford Hospital - Fort William

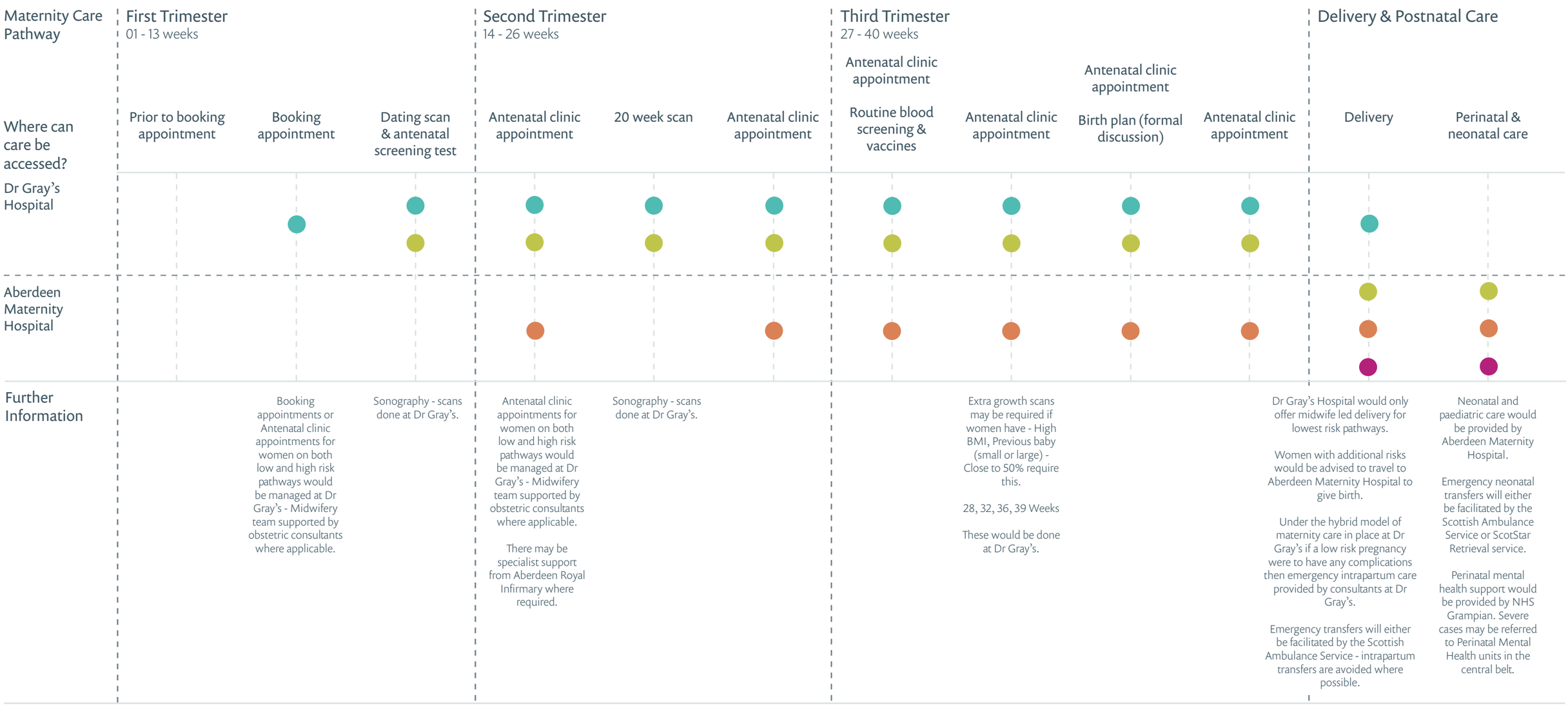
Maternity Care Pathway	First Trimester 01 - 13 weeks			Second Trimester 14 - 26 weeks			Third Trimester 27 - 40 weeks				Delivery & Postnatal Care	
Where can care be accessed?	Prior to booking appointment	Booking appointment	Dating scan & antenatal screening test	Antenatal clinic appointment	20 week scan	Antenatal clinic appointment	Antenatal clinic appointment Routine blood screening & vaccines	Antenatal clinic appointment	Antenatal clinic appointment Birth plan (formal discussion)	Antenatal clinic appointment	Delivery	Perinatal & neonatal care
Belford Hospital - Fort William		●		●		●	●	●	●	●	●	
Raigmore Hospital - Inverness			● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ● ●	● ● ●
Further Information		Booking appointments or Antenatal clinic appointments for women with low risk pregnancies can generally be completely midwife led and therefore can be delivered at the Belford Hospital.	Unable to sustain an Obstetric Sonographer in some rural areas including Fort William. This means women need to travel to Raigmore in Inverness for scans during pregnancy.	Low risk is managed by the midwife team at the Belford Hospital. For women with additional care needs that requires consultant input as well as midwifery led support this may mean travelling to Raigmore Hospital in Inverness for appointments. This would not always be the case as consultants will do outreach visits.	Unable to sustain an Obstetric Sonographer in some rural areas including Fort William. This means women need to travel to Raigmore in Inverness for scans during pregnancy.		If consultants are unable to do community visits then Near Me maybe used where possible for virtual consultations. The midwife would be present with the patient for these consultations.	Extra growth scans may be required if women have - High BMI, Previous baby (small or large) - Close to 50% require this. 28, 32, 36, 39 Weeks This would mean travelling to have the scans.			Belford Hospital would only offer midwife led delivery for lowest risk pathways. In NHS Highland most births in Raigmore Hospital, a very small percentage are in Community Maternity Units like Belford Hospital. Emergency transfers will either be facilitated by the Scottish Ambulance Service - intrapartum transfers are avoided where possible.	Neonatal and paediatric care would be provided by Raigmore Hospital. Emergency transfers will either be facilitated by the Scottish Ambulance Service or ScotStar Retrieval service.

NHS Orkney
Balfour Hospital - Kirkwall

NHS Shetland
Gilbert Bain Hospital - Lerwick

Dr Gray's Hospital in Elgin presents a unique case for the region of a hybrid model of care. The unit was shifted to this model of care due to ongoing staffing issues meaning that they were unable to offer a full obstetric led maternity care model. Under the temporary model for maternity services at Dr Gray's women on both low and higher risk pathways are cared for antenatally, however can only offer intrapartum care to low risk women (on green pathway). This was put in place as a temporary measure.

NHS Grampian
Dr Gray's Hospital - Elgin



Dr Gray's Hospital

Dr Gray's Hospital (DGH) in Elgin was originally established as a consultant led maternity unit in 1995, on the back of the keep mum campaign. This was partially to provide women with greater choice in where they gave birth and avoid the journey on the A96 to Aberdeen. Within the consultant led obstetric model certain higher risk pregnancies were always referred to Aberdeen Maternity Hospital to give birth.

As of mid 2018 maternity services at Dr Gray's was changed to midwife led intrapartum care for low risk women. This was in response to staff shortage, primarily within the junior staffing. This was initially intended to be a temporary service change until staffing levels could be returned to a position where service delivery could be assured.

Under the temporary model for maternity services at Dr Gray's women on both low and higher risk pathways are cared for antenatally, however can only offer intrapartum care to low risk women (on green pathway). The Obstetric clinician's role in Dr Gray's currently is that of delivering input into antenatal assessments where necessary, outpatient clinics, triage and life and limb support. Life and limb support is integral in clinical situations where a woman delivering at Dr Gray's requires input from the obstetrician in an immediately life-threatening incident for either mother or baby. Life and limb was put in place as a temporary hybrid model and was not meant as a long-term solution.

Life and limb is inarguably valuable where there is need for immediate intervention in a crisis. However, it has been suggested that this does not represent the full range of clinical situations that could arise and that in certain less immediately acute situations, transfer to another unit could result in uncertain maternal or foetal outcome. (reference) This, it was suggested, leads to complex decisions around timely transfer of patients and introduces a great deal of anxiety for both the mother and her carers. (reference)

NHS Grampian has been committed to a phased return of maternity services to Dr Gray's, with phase one seeing the re-introduction of elective caesarean sections already in place. However, the second phase of the reintroduction has not been realised as concerns were raised about the workforce required particularly from an anaesthetic standpoint. This would mean that a substantial capital investment was required to meet national standards, as currently Dr Gray's do not have around the clock resident anaesthetist.

This temporary model of care has now been in place for over two years and there is a growing need to move to a sustainable long-term model of maternity care at Dr Gray's.

2017

Total Births at Dr Gray's

962

2019

Total Births at Dr Gray's

288

In the two years since the change in the model of maternity care at Dr Gray's Hospital (DGH) there has been a **70% decrease** in the number of births at DGH. The majority of these mothers going to Aberdeen Maternity Hospital to give birth instead.

Process

Interviews

The process began with a series of semi-structured virtual interviews with a range of stakeholders identified by the Best Start North project steering group. Interviewees represented each of the NHS boards that make up the north region, as well as representatives from the Scottish Ambulance Service and ScotStar retrieval service.

Aim

The aim of these interviews was to capture perspectives of current service delivery from key stakeholders. This allowed the DHI team to get an overview of maternity services in each location, the options and limitations of care available and regional variations. Participants also got the opportunity to share their perceptions of the key challenges and identify existing assets within the current service.

Methodology

The method adopted for these interviews were semi-structured conversations aided by a visualised care pathway using a virtual whiteboard tool. This enabled the DHI team to discuss antenatal, perinatal and postnatal services and plot these along the pathway, gaining feedback and consensus as we went. This was an iterative process.

9 interviews carried out with **15** interviewees

- **NHS Highland**
- **NHS Grampian**
- **NHS Orkney**
- **NHS Shetland**
- **NHS Western Isles***
- **Scottish Ambulance Service & ScotStar**

**NHS Western Isles dropped out of work as Service Level Agreement (SLA) established with NHS Greater Glasgow & Clyde*

Roles Interviewed

- Regional Head of Service (Scottish Ambulance Service)
- General Manager (ScotStar)
- Nurse Director
- Deputy Director of Midwifery
- Head of Midwifery
- Midwifery Lead
- Obstetric Consultant
- Consultant
- Divisional Clinical Director
- Medical Director

Interview Insights

Following the interviews the DHI team performed a thematic analysis on the feedback and pathways, identifying recurring themes. A number of challenges emerged which overlapped between the boards, these are displayed on the table on the subsequent page.

These themes would form the basis of the discussion at the first co-design workshop.

1. Community Births
Community births were highlighted as a pinch point by some boards. NHS Highland highlighted that most births take place in the hospital and only a small number in the Community Midwifery Unit (CMU).

2. Recruitment & Retention of Staff
Recruitment and retention of staff was mentioned by all of the boards interviewed. This seems to be a wide ranging challenge that differs in each board, but ultimately has an affect on how easily the patient can access the care they need.

3. Community Obstetric Sonographers
Access to sonographers in some rural and remote communities was mentioned as a challenge, this meant that women were having to travel increased distances for scans. It was highlighted that cross-boundary working could support staff shortages of sonographers.

4. Staff Learning & Development
Continual professional learning and development was identified as a key theme and as an opportunity to explore increased collaboration in the region. This included considering rotation of staff across sites to ensure consistent clinical exposure and development of services, as well as ensuring the reciprocal sharing of best practice.

5. Cross Boundary Working
The theme of cross boundary working was mentioned numerous times. A current issue with trying to facilitate cross boundary working was hindered by a lengthy HR process. It was felt if HR processes better supported cross-boundary working that staff shortages across the region could be supported by staff from other boards/sites.

6. Mutual Understanding of Roles
It was felt that there was importance in building a better mutual understanding of the roles different teams play in maternity care and in ensuring shared decision making and input in planning. For example, there needs to be a full understanding of what Scottish Ambulance Service and ScotStar are here to do in order to support best practice care.

7. Inductions*
Mentioned as a challenge in Grampian. Approx 30% of pregnancies are induced, this is often dependent on flow in the ward. However, this is a time sensitive, pressured section of the pathway. Requires planning and balancing emergency flow and anticipated flow. Related to this issue in Aberdeen is adequate staffing for their two maternity theatres to operate simultaneously.

8. Complex Cases*
For more complex patient cases, it was highlighted by NHS Grampian that it can be difficult to engage consultants with an interest in specific areas.

9. Transferring Patients From Rural & Remote Areas
For women traveling from Orkney to Aberdeen, it can be a stressful experience being away from home for potentially several weeks. Discussions around birth-plan if mother requires a transfer can be difficult, and there is a general reluctance to be transferred to Aberdeen (currently a transfer rate of 25/30%). There is a question around how this transfer can be easier for women.

10. Expectations of Care
Patient's expectation of care was highlighted as an issue for women who are transferred to Aberdeen for risk factors that are more commonplace in Grampian. Here there can be a different threshold for the escalation of care and it can be difficult to set these women's expectations of care.

11. Neonatal Care and Transfers
Transferring cases in a timely manner, pressure points can occur when cases escalate, requiring SAS or ScotStar to transport more severely ill babies. There is a tension in balancing emergency, semi-scheduled and scheduled transfers. For example, there are roughly 10-15 transfers per week in Elgin, and depending on when the calls to request these transfers come in, it can put extra pressure on the system. Health Board borders add to this pressure by patients being transferred longer distances than necessary e.g. Elgin to Aberdeen rather than Inverness.

12. Expectations of Care
The configuration of the North can cause an issue for SAS and ScotStar in how they can best deliver their services across the region. This includes significant challenges with the ScotStar team getting involved in long transfers due to a team not being available in the given area, for example the ScotStar team from Glasgow making round trips to Aberdeen as a result of not having a closer team available. For SAS, in relation to re-structuring services, there is a need to balance local transfers with anything that takes a team out of their region.

**when discussed in the workshop it was agreed that inductions and complex cases should be combined as a focus area looking more generally at as rise in intervention rates.*

Codesign Workshop: 07/09/20

The first co-design workshop built on the information gathered during the interviews. Participants identified the following five areas as important to discuss further. These formed the focus for group discussions to unpick the challenges, discuss regional approaches and uncover any opportunities. Results from these discussions would then be used as the basis for the second co-design workshop.

1. Staff Learning & Development
2. Cross Boundary Working
3. Transferring Patients from Rural and Remote Settings
4. Neonatal Care and Transfers
5. Configuration of the North and Transferring of Patients

The five selected focus areas were narrowed down to three areas for discussion, by focussing on transfers as one area and combining staff development with staff recruitment and retention.

Cross Boundary Working

Transfers

Staff Recruitment & Retention (Staff Learning & Development)

Co-Design Workshop 07/09/20
Transfers

1.

Why focus on this?
Need to refine approaches for risk assessing women and improving the conversation to set patient expectations to reduce the amount of emergency transfers. Need for empowering women with the adequate information to make an informed decision on their birth plan.

Next Steps & Opportunities
There is an opportunity for shared learning and sharing regional practice. Wider opportunity for joint review of clinical practice and identifying root causes of emergency transfers.

2.

Why focus on this?
There is a need to identify and better understand the root causes of emergency transfers and share learning between boards. Reviewing the qualitative data is important for all parties. From a SAS/ScotStar perspective service time commitment gave a more accurate picture of the impact on their service

Next Steps & Opportunities
Opportunity for review and shared learning across the boards, based on existing evidence done through joint review of each boards and taking note of lived experience on previous transfers. Put this practice into joint planning and re-development of pathways.

3.

Why focus on this?
A potential consequence of a push to have more care delivered close to home as part of the wider Best Start national work is slightly higher risks are taken to deliver care in rural and remote areas. SAS/ ScotStar need to be involved in the key planning of this.

Next Steps & Opportunities
There is an opportunity for joint planning and decision making on re-designing care pathways in consultation with SAS/ScotStar.

4.

Why focus on this?
Developing a greater understanding of cross organisational processes is important - e.g. Definition of emergency is different between SAS and health boards - 999 calls for transfers give SAS little time to react and send the most appropriate resource.

Next Steps & Opportunities
There is an opportunity for learning/development and joint planning, in order to get alignment on process and to support CMU staff to deliver care whilst waiting for a transfer. There is already work underway between SAS and NHS Highland (Caithness). Opportunity to learn from this and roll out across the region.

Challenges Discussed:

1. Birth plans and setting expectations with patients
2. Joint review of processes and joint planning
3. Cross boundary communication
4. Cross organisational learning and development

Co-Design Workshop 07/09/20
Staff Recruitment & Retention
(Staff Learning & Development)

1.

Why focus on this?
Work/life balance issues with a degree of burnout amongst midwives are posing a problem alongside differing generational attitudes to work, challenges too specifically to geography and nature of role which can affect the continuity of care..

Next Steps & Opportunities
There is an opportunity to recruit through cross-board, collective campaigns to attract non-local clinicians, looking at improvements in the rota and adapting models of working e.g. offering part-time working, rotational posts and continuity of care model.

2.

Why focus on this?
Few students move outside area from which they train with a high proportion of students returning to the Central belt. Some boards are experiencing no long term benefits from placements; the UCAS non-targeted model doesn't help. May have an impact on the age demographic of workforce across some boards.

Next Steps & Opportunities
The UHI offers a programme that all the Island boards have benefited from so there will be further support for this. OU providing midwifery programme in pipeline to attract local candidates (qualified nurses and support workers) who want to stay local.

3.

Why focus on this?
There is a need for making cross boundary working easier e.g. if there is an urgent need for cover this isn't always easy to do especially on the Islands.

Next Steps & Opportunities
Streamline and simplify HR processes (cross boundary) - Could best practice be shared from an HR point of view?

4.

Why focus on this?
UK training becoming very narrow - tends to be sub specialised; lack of generalised skills/training that recognise remote and rural skillsets. At the moment Joint training happens across the disciplines to provide operational level of support but consultant units aren't part of this.

Next Steps & Opportunities
Develop some generic training to recognise remote and rural skillsets. Cross boundary training and support for smaller boards, alongside (nationally) interdisciplinary peer support/training for professional development that attract consultants alongside a portfolio career.

Challenges Discussed:

1. Staff recruitment and retention
2. Student recruitment and retention
3. HR processes
4. Training

Co-Design Workshop 07/09/20
Cross-cutting Themes

Following the first co-design workshop the DHI team performed a thematic analysis of the discussions which were recorded and identified the following cross cutting themes.

HR Processes

HR processes were identified as a challenging area within both cross boundary working and the recruitment, retention and development of staff.

Processes are seen as prohibitive and therefore impact the quality of service delivered. There is not a clear understanding of the root cause of the difficulties and therefore this represents an opportunity to develop a greater collective understanding through the mapping of processes and review of these through collaborative joint planning between the boards.

Learning & development

Cross organisation/boundary learning and development is a challenge both in the sense that there could be a greater understanding of regional and organisational practices, and how these impact each other, and a more joined up approach could be taken to staff development and skills maintenance.

Setting the correct expectations, to enable patient choice and collaborative decision making

Setting expectations was identified as an area for improvement within both transfers and cross boundary working. Within transfers setting the correct expectations around care and birth planning was seen as a way of empowering women to make informed choices about the safest scenario to give birth. Improving this in some areas is seen as a way of reducing emergency transfers from rural or remote areas. However, variations in practices and guidance across boundaries can be confusing for both staff and patients.

There is a need to collate and review working practices, current service level agreements, guidance and policies from each location, and make this information accessible for staff and patients. Building a greater understanding between boards/ organisations also enables joint planning and re-design of pathways where appropriate.

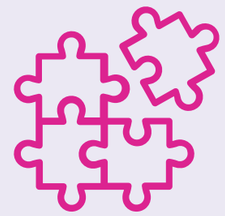
Co-Design Workshop 18/09/20

A second co-design workshop was delivered to further explore the discussions that had been started in the previous workshop. Prior to this workshop the DHI team further reviewed the cross-cutting themes and proposed that these were consolidated into two distinct broad topics:

- Right people, right skills, right place, right time
- Patient expectations and choice

These were sense checked in the plenary session to gain a general understanding and accord, before the workshop broke out into two groups to further explore these topics. The topics were framed as a series of how might we questions to generate conversation. These were:

1. How might we encourage and support cross boundary working? Ensuring the right staff, with the right skills, are in the right place, at the right time.
2. How might we supply clinical supervision, training and governance to support staff to provide the gold standard of care?
3. How might we ensure discussions with women empower them to make the best decisions? Regarding choices and what to expect.
4. How might we better prepare women for transfer to another centre?



Right People, Right Skills,
Right Place, Right Time

Patient Expectations
& Choice

Right People, Right Skills, Right Place, Right Time
How Might We's & Ideas

How might we...

Share regional practice and experiences to build understanding and create joined up processes/avoid processes developing in isolation?

Make processes and care pathways clear and visible to all including patients?

Ensure there is better planning around emergency care?

Find flexible ways of working across boundaries to ensure we deliver equity in the basic principles of care regardless of location or geography?

Ideas

Could we look beyond the traditional service level agreements we have?

Co-produce a Service Level Agreement for the whole north region.

Codesign a tool or process to support risk assessment, planning and importantly providing timely information to support decisions when a pathway may change due to additional care requirements.

Regional bulletins between boards sharing key information - e.g. available training and development

Patient Expectations & Choice
Information & Idea

From the group discussing patients expectations and choice there was a consensus that -

- We need to improve the shared decision making model of care for maternity
- Improve women's choices
- Connect everyone in a women's care team

To do this:

- Improve the 'handover' between sites.
- Take a collaborative approach: Clinician to clinician/Board to Board e.g. Shetland to Grampian (vice versa)/Clinician to woman/ birth partner
- Engage digital tools like near me in the system so women can meet members of their care prior to transfers etc.
- Include a women's own support network, partner, birth partner etc. in the process.
- Improve the links between the boards, to enable clinicians to help women make the right choices and work together to deliver better care.
- Care should be centred on the women, informed and realistic.
- Individualised care plans should be developed in collaboration.
- Ensure use of language is objective and unbiased.
- Early discussions taking place - evidence based/risk assessed/SAS assessed e.g. delays in transfer due to weather

Idea: Partnership Contract

Inform women of their rights and choices

Front facing (patient facing) but needs to be informed by joint decision - clinicians and patients - evidence based, local/individual context

Should establish better links between boards and patients, for continuity of care should result in a better handover

Steps to Implementation

Form a collaborative group - (involving the heads of the service) to take the 'partnership contract' forward

Refer to and learn from Highland best practice case study - informing women of their potential 'other' consultant/midwifery team

Follow Up Interviews

Subsequent to the second codesign workshop a series of follow up interviews were conducted.

Feedback on Workshop Outcomes

Feedback on ideas and how might we questions from the workshops reinforced the need for further consideration. It was highlighted that a partnership contract would need to be approached with caution as it could give the mother unrealistic expectations of their pregnancy and birth, leading to greater stress or anxiety if for any reason they had to deviate from the agreement. This highlights the second consideration mentioned, there needs to be a degree of flexibility as a woman's needs during pregnancy can change and therefore pre-defined pathways may need to change. Instead, **it was suggested that there be a focus on providing women and the maternity teams caring for them with the right information and tools to make informed decisions about their care.** Women should be empowered with the knowledge to make timely and safe decisions about their care. **This could take the form of a suite of tools or a specific tool supporting them to understand their care journey, setting the correct expectations and supporting them to make decisions.**

It was also noted that a regional service level agreement would understandably require considerable further planning. However, there were shorter term actions that were suggested that could be effective towards better cross-boundary working. These included a **joint cross boundary review of significant event reports.** In order to share qualitative learning across boards. Or, establishing a **regular regional briefing between boards and disciplines, that would communicate around infrastructure and resource.** This would cover aspects such as staffing levels, workloads or external influencers (e.g. Covid-19 cases) and could also touch on the sharing of best practice. Something similar to this is already in place from a Neonatal standpoint. There are daily calls, supported by ScotStar, covering transfers and cot availability. All of the maternity units across the country are already included in this and give a daily update on their status.

Dr Gray's Hospital

As well as sense checking interviews there was further follow up interviews to get a greater sense of the challenges faced at Dr Gray's and get a fuller understanding of the potential next steps towards a long-term solution to maternity service provision in the Moray area.

Findings
Key Themes

Through engagement we have identified three areas for focus in order to take steps towards the development and implementation of a model of care for Maternity and Neonatal services in the North region that operates as a single system across traditional Board boundaries. These are the two areas discussed in workshop two and also a focus on the emergency and retrieval services, as they play such a vital role maternity services in rural and remote locations.

Right People, Right Skills, Right Place, Right Time

Why this is a key theme?

There is a lack of clarity on guidelines and processes across boundaries, roles and organisations. There needs to be agreed and visible pathways.

Currently, there are barriers between the boards - whether this is members of staff working between boards to expand skills and experience or whether it is arranging a referral from one board or service to another. All of these aspects have been mentioned and seem to have some barriers in the process.

Key Question

How do we identify the barriers we put in our own way that prevent us from doing what we feel is right for the patient?

Patient Expectations & Choice

Why this is a key theme?

Overall we need to improve the shared decision making model of care for maternity, to support women in making informed, individualised choices, and connect everyone in a women's care team.

Key Question

How do we empower women to make informed decisions regarding their choices in care based on clinical evidence, risk assessment and their own personal circumstances?

Emergency & Retrieval Services

Why this is a key theme?

The Scottish Ambulance Service (SAS) and ScotStar retrieval service play a vital role in maternity care. However, some challenges have emerged through interviews and workshops that are important to consider.

The geographic nature of the northern region means that SAS/ScotStar face distinctive challenges, transfers can take an ambulance out of area for a considerable amount of time – e.g. Belford Hospital in Fort William has one resident Ambulance, a transfer to Raigmore may take that Ambulance out of area for a round trip that can take up to five hours. During this time any emergencies in the area rely on support from Ambulances in other areas, resulting in longer wait times for emergency support.

Communication & Joint Working – It was stressed that SAS are typically not involved in discussions around changes to models of maternity care at local levels. However, they are expected to adapt and deliver the same service, despite these changes potentially having a noticeable impact on service demand.

Although the geographic nature of the area is an inflexible challenge, improving joint working, setting expectations and building greater understanding of processes would be beneficial to future service provision. SAS/ScotStar's input into future planning will be crucial to developing a safe and efficient model for maternity care that transcends traditional boundaries.

Key Question

How do we improve joint working and ensure that SAS/ScotStar have input into future planning of maternity services in the North region?

Key Themes
Dr Gray's Hospital

These emerging themes are acutely represented within the challenges in establishing a sustainable long-term model for maternity care at Dr Gray's.

Right People, Right Skills, Right Place, Right Time

Staffing was a significant reason for the shift to a hybrid model of maternity care at Dr Gray's Hospital. The current model was not designed to be a long-term solution and the phased re-introduction of obstetric led maternity services has been hindered by the economic and workforce resource required. Therefore, a long-term solution that is safe, equitable and economically viable may involve taking a tailored approach to ensuring the right people with the right skills are available in an appropriate location to deliver care in a timely manner.

It is beyond the remit of this study alone to suggest what the appropriate future model for maternity care at Dr Gray's may be. However, ensuring that a frank, receptive approach is taken towards future conversations, that include the input of the full range of stakeholders and that are done in an efficient albeit considered manner, will be integral.

Patient Expectations & Choice

Patient expectations and choice of location of birth are central to the challenge that Dr Gray's faces. The work undertaken by DHI will be supported by engagement undertaken by Sensemaker which focuses on the public/patient perspective, experience and expectations. Therefore, Sensemaker's work will be better positioned to highlight patients/public perceptions on expectations and choice in greater detail. However, the DHI has had extensive engagement with clinical and midwifery staff, as well as patient representatives contributing to codesign workshops. It has been indicated that local public campaigns fervently advocate the resumption of a consultant led maternity service at Dr Gray's.

Emergency & Retrieval Services

As highlighted previously it was indicated that there is a need for greater communication and consultation on changes in models of service delivery that often impact demand on SAS and ScotStar. The shift to a temporary model of maternity care at Dr Gray's is an example of this, that would have benefited from joint planning, consultation and clear guidance around transfers. It has been suggested that there has subsequently been delays in timing of transfers and issues around the remit of the service at Dr Gray's – "resulting in SAS arriving on site with women that fall out with the remit of current services." (reference)

Next Steps
Short Term Actions & Long Term Goals

Short term actions...

These suggestions arose throughout our engagement and there was a level of consensus that they represented some steps towards overcoming some challenges mentioned and working towards having a maternity service that navigates traditional boundaries.

Cross-boundary joint review of incident and significant event reports. This could help in joint planning for future pathways and service provision that transcends traditional boundaries.

Review of HR processes and identify any barriers to cross-boundary working or movement of staff. Consider shared posts between health boards or locations.

Establish regular regional briefings between maternity teams. This would be a communication and collaboration tool focused on safety, infrastructure and resource - covering staff levels, work loads and external influencers (e.g. Covid-19 cases). This could also be a method of sharing best practice. To be noted - there are already national daily calls in place from a Neonatal standpoint.

Develop a suite or repository of useful resources to support the maternity care team and women in decision making. Having a collaboratively curated and maintained suite of tools available could help empowering pregnant women with timely in formation and encourage cross board sharing of practice.

Involve the Scottish Ambulance Service and ScotStar Retrieval Service in joint planning and review activities. It was evident from our engagement that there was an opportunity for greater collaboration and involvement. Changes to maternity services whether planned or circumstantial have a notable impact on the emergency and retrieval service as such their involvement in planning is valuable towards safe maternity service provision. There is also opportunity to review SAS/ Scotstar activity in the area including on campus transfers at NHS Grampian.

Create a collaborative group of stakeholders to explore solutions for sustainable future maternity service model at Dr Gray's Hospital. The interim model of care has now been in place for over two years and there is a growing need to move to a sustainable long-term model of maternity care at Dr Gray's. It is beyond this work to suggest exactly what that solution is. However it is integral that it considers the challenge from a variety of perspectives as such it would be recommended to create a group to explore this further comprising of but not limited to representatives from -

- Dr Gray's Maternity Department
- Moray Community
- Keep Mum Campaign
- LATNEM/Patient Rep's
- Scottish Ambulance Service & ScotStar
- Aberdeen Maternity Hospital
- Raigmore Maternity Unit
- Moray Council

Ideas...

These ideas were suggested however at this stage they require further exploration before being viable suggestions. There have already been barriers and considerations suggested about these that would need to be addressed before progressing. As such a further shorter- term action would be to **develop a multi-disciplinary team made up of individuals from across the four health boards to further explore ideas and progress actions suggested.**

Development of a regional Service Level Agreement covering the whole of the north. Breakdown traditional boundaries and encourage free movement of staff and patients across the area as required.

A tool or solution to support cross-boundary movement of staff. For existing example of a tool see Digital Staff Passport. https://www.england.nhs.uk/coronavirus/secondary-care/workforce/digital-staff-passport/

Appendix.

Maternity Unit Type Definitions

Summary of Insights

Interview Insights

These are visualisations of the care pathways generated through the semi-structured interviews and the key insights collected.

Trimester One: 1-13 weeks

Pathway Key

- **Community Midwife Team -** *These appointments can usually be done in community hubs, GP surgeries or even home visits.*
- **Consultant/Obstetrician Present** - *Appointments requiring the presence of a Consultant/Obstetrician, sonographer or MDT. Usually takes place in district hospital (although community outreach and Video Consultations are available in some cases)*

**Appointments requiring Obstetric sonographers can be done in some community hubs*

Interview Feedback Key

- NHS Highland
- NHS Grampian
- NHS Shetland
- NHS Orkney
- Scottish Ambulance Service & ScotStar

Maternity Care Pathway - *Low risk - pathway mainly midwife led care.*

Prior to booking appointment

May have a telephone call - for general advice - e.g. folic acid

→

Booking Appointment & Antenatal Screening Tests -Booked directly with Community Midwife

Sickle cell and thalassaemia to be done **before 10 wks**

8-12 wks

→

Dating Scan & Antenatal Screening Test

Ultrasound + bio-chemical screening - screen for possible conditions (including Down's Syndrome)

10-14 wks

Additional Care Options - *Increased risk - Women with additional care requirements - care is shared between a Midwife and an Obstetrician (in some circumstances a MDT) - standard appointments are adapted according to their needs.*

Additional Care

Women may have additional care requirements if any medical / obstetric / social risks are identified. This could be: **Age, Diabetes, high BMI, epilepsy, heart conditions, Previous complications of pregnancy – stillbirth or neonatal death, severe pre-eclampsia and/or Alcohol or drug misuse, significant mental health issues**

Additional care requirements can be highly variable, dependant on the needs of the woman - This may range from 1 extra appointment accross the duration of the pregnancy to appointments every week, or the inclusion of additional staff

Interview Feedback - *Key feedback, observations and any variations identified between boards.*

Issues around recruitment and retention particularly in remote areas - also issues recruiting obstetric sonographers (at Raigmore)

For women that are particulalrly vulnerable, have issues with substance misuse or social challenges - combined clinic with specialist midwife, obstetrician, drug workers, social workers to try to facilitate 'one stop shop' Visit frequency will normally be similar to routine pathway but can be as frequent as required

Setting expectations around birth plans - Women are informed of birth plan options, a women may choose not to go to Aberdeen if advised (Can only advise women to go to Aberdeen) - a robust risk assessment is performed for women who wish to give birth on the islands and they are informed of risks (women would sign this)

Unable to sustain radiographers/sonographers in some smaller areas - this leads to women having to travel further for dating scans - e.g. Women in Fort William and Skye travel to Raigmore (Inverness)

3 Best Start Community Midwifery Teams - ensure a given woman has continuity of care, seeing same midwife throughout whole pathway (at each appointment, at delivery and postnatally)

Continuity of carer will pair with the same midwife/team in previous pregnancy where possible

Aim is to be less pathway based (Green, Amber, Red) and offer more patient centred/individualised care - women's pregnancies can move between low and high risk, sometimes more than once, during pregnancy. Labelling as high or low is false and can lead to women receiving the wrong care

How education is delivered - There is a challenge around nearest sources of education. Currently, unless able to recruit women into the island, there isn't a route to train people in the islands. Midwives can only take their programme through RGU (Aberdeen) or territorial HDI.

Currently radiography sonographers doing the maternity scans - going to Grampian each year to aid in their practice and personal developmnent. There are two trainee obstetric sonographers (training at Glasgow Caley) hopefully to be in post by April 2021.

Trimester Two: 14 - 26 weeks

Pathway Key

Community Midwife Team - *These appointments can usually be done in community hubs, GP surgeries or even home visits.*

Consultant/Obstetrician Present - *Appointments requiring the presence of a Consultant/Obstetrician, sonographer or MDT. Usually takes place in district hospital (although community outreach and Video Consultations are available in some cases)*

**Appointments requiring Obstetric sonographers can be done in some community hubs*

Interview Feedback Key

- NHS Highland
- NHS Grampian
- NHS Shetland
- NHS Orkney
- Scottish Ambulance Service & ScotStar

Maternity Care Pathway - *Low risk - pathway mainly midwife led care.*

Antenatal Clinic Appointment

Each of these Antenatal Clinic Appointment consist of - *general chat about pregnancy progress, palpate and measurement - for estimate of babies growth (SFH - symphysis fundal height), measurement of heartbeat, check fetal movement, Blood pressure, Urine test (UTI)*

16 wks

→

20 week Scan

Sometimes referred to as the detailed scan

18-20 wks

→

Antenatal Clinic Appointment

22 wks

Additional Care Options - *Increased risk - Women with additional care requirements - care is shared between a Midwife and an Obstetrician (in some circumstances a MDT) - standard appointments are adapted according to their needs.*

Dependant on **additional care requirements** some (or all) **Antenatal Clinic** appointments could be with a consultant/obstetrician (or an MDT) as well as midwife.

Bio-chemical Screening - second trimester screening for downs syndrome (if not eligible/miss 1st trimester screening)

Scan

Scan appointment for fetal echocardiography for women whose babies are at increased risk of a heart abnormality

22 wks

Interview Feedback - *Key feedback, observations and any variations identified between boards.*

Consulatant outreach team will visit areas such as Skye, Fort William and Wick (Team from GGC visit Argyll & Bute) for women with additional care needs - Community midwife will also be present at these to ensure continuity of carer.

NearMe is being increasingly used for these appointments when the consulatant can't travel - having a community midwife presnet for these adds an extra level of support and someone to explain next steps

Patients have access to scans and information via an app (electronic record/Badger Net) - available for maternity and Neonatal care

Significant governance issue around scan images unable to be stored electronically due to server capacity

Try to organise MDT clinics - so that women can see everyone they need to see at the same time and don't have to attend multiple appointments - under new model midwife will go to clinics to help her feel less intimidated, provide consistent support

***(General Point)* Staffing and cross boundary working** - process to do this means that by the time this is sorted can be passed the crisis point - HR processes and collaborative processes difficult

Near Me (incresingly used due to Covid-19) - offers face to face contact, continuity of care and can offer more regular contact - for the islands this is very helpful for regular contact

***(General Point)* Scottish Ambulance Service and ScotStar have a part to play in whole pathway** - can reduce instances of reaching crisis, both in medical care and planning for the whole system. Being part of the team early on is key to being able to adapt to changes.

There needs to be a **full understanding of what these services (Scottish Ambulance Service and ScotStar) are here to do** in order to support best practice care.

Trimester Three: 27 - 40 weeks

Pathway Key

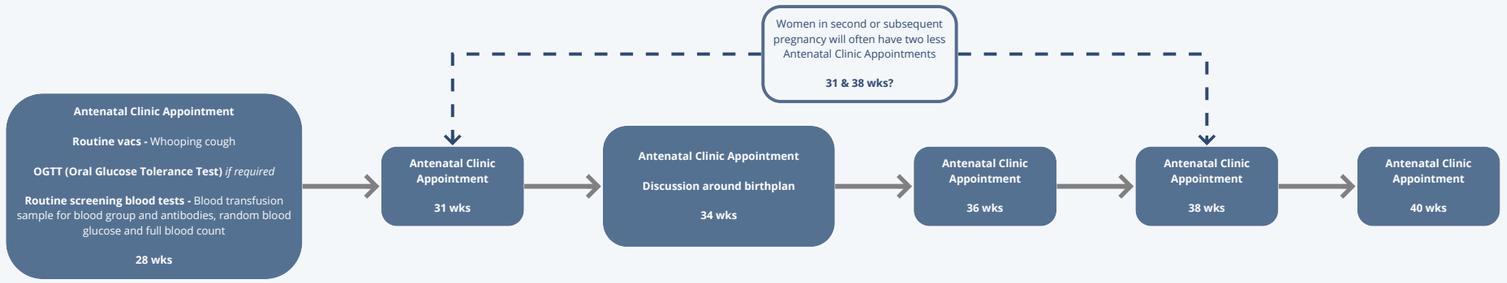
- **Community Midwife Team -** *These appointments can usually be done in community hubs, GP surgeries or even home visits.*
- **Consultant/Obstetrician Present -** *Appointments requiring the presence of a Consultant/Obstetrician, sonographer or MDT. Usually takes place in district hospital (although community outreach and Video Consultations are available in some cases)*

**Appointments requiring Obstetric sonographers can be done in some community hubs*

Interview Feedback Key

- NHS Highland
- NHS Grampian
- NHS Shetland
- NHS Orkney
- Scottish Ambulance Service & ScotStar

Maternity Care Pathway - *Low risk - pathway mainly midwife led care.*



Additional Care Options - *Increased risk - Women with additional care requirements - care is shared between a Midwife and an Obstetrician (in some circumstances a MDT) - standard appointments are adapted according to their needs.*

OGTT done at 24 wks under guidance - NHS Orkney

OGTT (Oral Glucose Tolerance Test)

If at risk of Gestational Diabetes - *Women who screen positive will have test earlier (usually previous case of GDM)*

24-28 wks

Requested Planned C-Section*

Discussion with **obstetrician**

34-36 wks

Offered Induction of labour if patient has not had baby by **42 wks -** *If mother has opted not to have an induction then offered increased monitoring from* ***42 wks***

***41 wks in Grampian** for post dates induction of labour

Growth Scans Later in Pregnancy

If women have - High BMI, Previous baby (small or large) - ***Close to 50% require***

28, 32, 36, 39 Wks

Interview Feedback - *Key feedback, observations and any variations identified between boards.*

Geography not seen as a significant challenge due to outreach clinics that are delivered in communities (e.g. Stonehaven, Inverurie, Peterhead, Buckie, Huntly)

Try to reduce the amount of travel time for women, by providing a one stop shop and joining up appointments and scans.

Discussions around birthplan if mother requires transfer can be difficult, there is a reluctance to be transferred to Aberdeen (Currently a transfer rate of 25/30%) - there is a challenge around accomodation (Orkney and Shetland rooms) - women only find out if room is available when they are there - if there is no room mother can stay on a ward (but partner would need to find accomodation)

Phlebotomy service provided by midwifery team - *is the same for NHS Orkney*

Shared responsibility & Collaborative decision making - A local strength is the conversations around birth plans and location of births - MDT risk assessment, level of comfort in making a shared decision discussed as a team - **part of a wider opportunity for sharing of best practice and cross boundary working being seen as reciprocal**

Differences in expectations of care - women transferred down to Aberdeen for risk factors that are more commonplace in Grampian and can have a different threshold for escalation of care - can be difficult to set expectations.

Lots of specialist generalists in the team - a lot of specialist interest roles for example midwives who are also sonographers. Opportunity to share a variety of ways of working.

If diagnosed with GDM (or Type 1 or 2 diabetes) and diet controlled then this is managed in Orkney with support from an MDT (Obstetrician and Diabetologist - Aberdeen, Dietician and ANP - locally) - Appointments done using NearMe (previously they would travel to Grampian and appointment may only be 15 mins) this is less daunting and midwife can be there for continuity of carer, and helps with support, reinforcement and clarification on what is being said.

(ScotStar) The islands are very good at planning transfers - Element of risk aversion (in a positive sense) - not a high number of emergency transfers

Delivery & Neonatal Care

Maternity Care Pathway - *Low risk - pathway mainly midwife led care.*

Spontaneous Delivery

Home Birth
Community Maternity Unit

Additional Care Options - *Increased risk - Women with additional care requirements - care is shared between a Midwife and an Obstetrician (in some circumstances a MDT) - standard appointments are adapted according to their needs.*

Spontaneous Delivery

Consultant Led Unit

Induction of Labour

Assisted Delivery

Forceps/Ventouse Delivery

Delivery room or sometimes theatre depending on complexity (can result in caesarean section)

Will be performed by Obstetrician - Can be 'trainee' obstetrician from year 3 of training on - NHS Grampian

***Planned Caesarean Section**

Emergancy Caesarean Section

Interview Feedback - *Key feedback, observations and any variations identified between boards.*

Most births take place in a Hospital - a very small percentage take place in Community Maternity Units (CMU)

A fair proporation of births take place in Community Midwifery Clinics

Staffing for maternity theatre can be a significant pinch point - Can require help from other theatre teams to allow 2 theatres to operate simultaneously but should have adequate staff to allow this

Induction of labour can be a pinchpoint - approx 30% of cases require induction - pressured section of the pathway, as it is time sensitive and sometimes cannot be anticipated - planning around emergancy flow and anticipated flow

Neonatal Support - First point of call neonatal unit in Grampian - good working relationship and understanding of their set-up and what they can do, provide good advice until retrieval care can come

NHS Western Isles - Virtual Ward (Neonatal) - cases that don't require transfer but another set of eyes / second opinion - work closely (VC) to review & create plan of care with colleagues in Glasgow - provides reassurance of care.

No Peadiatric Presence/Neonatal Support - most important pinchpoint - would be good to have an advanced neonatal nurse practitioner - could support in training & consultation/advice

Most delivery options available on island - Most spontaneous delivery, inductions and caesareans are managed locally as well as the availability of birthing pools for water births - Epidural referred to Aberdeen, but there is not much demand

Retrieval Service - Get a lot of support through the Scot Star Team - but retrieval can take 4/5 hours to get unwell baby to Aberdeen - cases of difficulties retrieving women from outer islands (helicopters can't always land) and always thinking about weather/difficulties of getting to the island.

Difficult to support home births - partly due to staffing and partly due to logistics - managing home births depletes the team

Operational impact of re-structuring services altering patient flow, particularly in rural/remote areas - a change in patient flow may have an indirect impact on the services that the Scottish Ambulance Service/ScotStar provide (impacting emergency response times) - **a need for all to be involved throughout planning.**

Avoid reaching a crisis point where possible (Neonatal) - Pressure points tend to be when a team feel a case can be handled and then the case escalates - leads to hanging on to a case for too long and requires transfer of a more severely ill baby

Significant challange with ScotStar team getting involved in long transfers, because of the way North is configured - example given of ScotStar team from Glasgow making round trip to retrieve a baby (transfer from Dr Gray's to Aberdeen and then on to GGC) due to not having a team available

Sizeable commitment for on campus transfers, this takes up considerable time for Aberdeen based ScotStar team (160 transfers per year and roughly 80 of these are on campus) this puts strain on response time and requires support from Glasgow based ScotStar team.

Co-Design Workshop 07/09/20: Tool

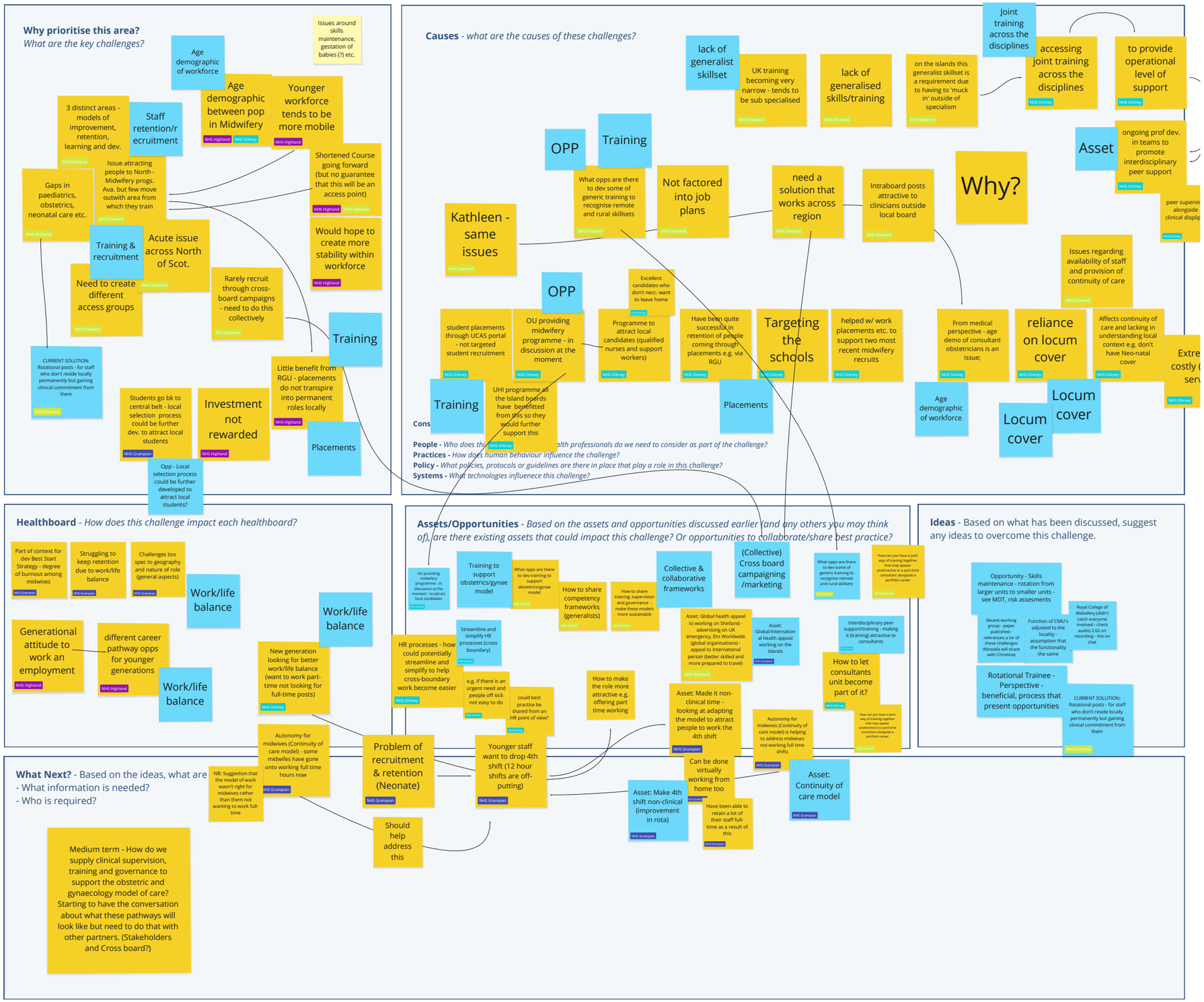
The co-design tool that was used to help facilitate and structure discussion in the first of two codesign workshops hosted by the DHI.

Defining the Challenge

Recruitment, staff retention and learning & development

DIGITAL HEALTH & CARE INSTITUTE

Link to recording: https://web.microsoftstream.com/video/edf0acb2-06d5-4124-88b0-86b12808c704



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ANNEX

REASONS FOR NOT PROVIDING INFORMATION

The Scottish Government does not have the information

The Scottish Government does not have some of the information you have asked for as collection of this information falls within the operational responsibilities of NHS Boards and Digital Health & Care Innovation Centre (DHI) rather than the Scottish Government.

This is a formal notice under section 17(1) of FOISA that the Scottish Government does not have the information you have requested regarding *"How many local Caithness people were consulted as part of this report? How many Caithness staff were consulted as part of this report?"*