Caithness maternity and services for new born babies at Caithness General Hospital; Q & A

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Context

A report on the public health review into the Caithness maternity and neonatal services at Caithness General Hospital has been published (Friday 18th November 2016). One of the main recommendations is to move to a midwife-led Community Maternity Unit.

The review was triggered by the potentially avoidable death of a newborn baby in Caithness General Hospital (CGH) in September 2015.

A copy of the report is HERE and a copy of the media release issued is HERE

The board of NHS Highland considered the recommendations when it met on 29th November HERE and approved a move to a Community Maternity Unit

The Qs &As will be constantly reviewed and will have appropriate version control.

Q & A

The following questions have been raised by members of CHAT, Caithness redesign Programme Board, appeared on social media, or have come in via direct contact from individuals. The responses have been prepared by senior doctor and nurses including paediatricians, midwives and clinical director for Caithness General Hospital.

How does a Community Maternity Unit (CMU) differ from what we already have?

The main difference from the current arrangements is that there will be no 24/7 on-site obstetricians and so emergency sections should they be required would take place in Raigmore.

How will a CMU make the service safer when we won’t have an obstetrician?

The report carried out by Professor van Woerden highlights that providing obstetric interventions in the absence of specialist paediatric/newborn support results, sooner or later, in avoidable perinatal deaths (during labour or shortly after birth). Having 24/7 presence of consultant obstetricians mean that some higher risk cases are
being kept in Caithness rather than being transferred to Raigmore. The findings from the report show that this can lead to increased risk for the mother and the baby because Caithness General Hospital does not have adult or neonatal special care facilities.

**How would the CGH Unit work as most women go to Raigmore now – will we need it anymore?**

Yes it is needed. It would work in the same way as all our other CMUs – we have seven. Currently about two thirds of women travel to Raigmore but under the proposed new arrangements more first time mums would give birth in CGH.

The unit in Caithness General Hospital is also the central base for the midwifery team and many aspects of the service such as antenatal care, planned monitoring, postnatal care and group work, are provided from Henderson Wing.

**Is the statistic three local births per week accurate?**

Yes the three births per week at CGH reflected the situation just before the current restrictions - for the year 2014/15 it was 3.23.

As summarised in the report there have been on average around 265 births from women resident to the district of Caithness over the last three years (table 2). Since the number of the potential maternity population is projected (by the National Records of Scotland) to decrease (table 3), the three births per week at CGH will be an over-estimation unless there is an influx of younger people to the area.

**Without consultant obstetricians do we lose our obstetrics and gynaecology services?**

No. There will still be locally delivered consultant-led obstetric services including antenatal clinical and gynaecological procedures. Only the local on-call obstetrician arrangements and this will change to support for the unit midwives being provided from Raigmore.

**If we are to lose our obstetricians, what happens in the event of an emergency caesarean section or cord prolapse, when there is no time to transfer the patient to Inverness?**

We understand that this is a concern. In some parts of NHS Highland it is always possible to describe scenarios that might be difficult to manage. However it is important to understand that we have plans, protocols and training in place to manage all sorts if scenarios.

The UK incident of cord prolapsed is between 0.1 and 0.6% (RCOG Green Top Guideline 2014). One of the reasons it is so low is that the associated risks are managed in order to prevent the situation occurring in the first place. These risks are assessed by midwives and we know from our other mid-wife led Community Maternity Units that this works well.

Midwives, as well as the wider hospital emergency response team, have regular training and education to maintain skills in the management of obstetric and emergencies of new born babies - this includes cord prolapse.

With support from our Emergency Planning Officer we also run emergency exercises.
No model in CGH (or anywhere) can be 100% risk free. As the report highlights we already have a number of risks from mums and babies. We can take steps to significantly reduce these risks but very rare events will happen. In the opinion of the external review team as well as all the other evidence the move to a community maternity unit overall offer less risk

More generally a CMU lessens the chance that any woman requiring emergency care will present. This is due to strict risk management and selecting only the safest births for CGH. As occurs in our other CMU’s there are rare episodes where intervention is required. In these instances local intervention will initially aim for a safe transfer prior to birth.

If that is not possible then the birth will occur locally up to the skills of the midwifery team and transfer will follow after. We have many years of experience of this but it is a balance of risks. Clearly without obstetricians, interventions such as emergency c-sections will not be possible but CMUs have overall proven to be a very safe model of care.

**What happens when a low risk, ‘green pathway’ pregnancy suddenly takes a turn for the worse and becomes a high-risk labour – who will be there to intervene?**

If labour progresses quickly, the midwives in the maternity unit will be able to manage the situation in the same way as they do now. If there is a need to transfer to Raigmore due to the condition of the mum or the baby, this would be dealt with in the same way as currently happens. Senior midwives and local medical staff with back-up from consultants in Raigmore will assess the situation and timely transfer will be arranged. In fact a CMU reduces the chance that any woman requiring emergency care will present. This is due to strict risk management and selecting only the safest births for CGH.

As occurs in our other CMU’s there are rare episodes where intervention is required. In these instances the aim would be for a safe transfer prior to birth, if that is not possible then the birth will occur locally up to the skills of the midwifery team and transfer will follow immediately. We have many years of experience of this but it is a balance of risks. Clearly without obstetricians, intervention such as emergency c-sections will not be possible but that is true for other CMUs and they have proven to be safer.

**Will green and red pathways stay the same?**

Women are risk assessed throughout their pregnancy and low risk ‘green’ women can be changed to high risk ‘red’ at any stage of the pregnancy.

At each point, if labour was imminent, then the midwife assessing a mum would need to decide if it was safer for her to stay or be transferred. We would much prefer a system that allows these decisions to be made in plenty of time wherever that is possible.

In summary red and green pathways change all the time as they are subject to ongoing assessment and this won’t change.

**Would we keep consultants?**

The overall delivery of services in Caithness General Hospital is consultant-led through a mix of on-site consultants (surgeon, anaesthetist, obstetricians) and
rotation of physicians and surgeons from Raigmore. The role of the obstetrician input to Caithness General going into the future is subject to review. Should there be a change to a Community Maternity Unit then this would change their role. There would not be 24/7 on-site input and this would mean there would no longer be local elective or emergency caesarean sections. However, there would continue to be obstetrics input to Caithness as part of a Hub and Spoke model with a visiting consulting service to provide antenatal clinics and gynaecological expertise.

There is currently a visiting outpatient consultant paediatric service and this too would continue. The Community Maternity Unit would also be supported by telephone and video-conference links by the consultant team in Raigmore as well as other staff as appropriate.

Do Rural Practitioners (RPs) have paediatric expertise?

Yes. Rural Practitioner’s (RP’S), have a contractually requirement to be competent in all forms of resuscitation, including neonatal care (new born babies). Most RP’s come from a general practitioner (GP) or emergency background and therefore having a greater expertise in paediatrics than surgical, medical or obstetric consultants.

They will see any clinical presentation and function to a set level in all specialties. They are used to dealing with paediatrics and new born babies and work alongside the midwifery team comfortably. There are three full time equivalent RP’s in CGH at the moment and we are advertising for more. We have also trained additional advanced nurse practitioners which aids in the general hospital capability and capacity to respond.

However it is important to recognise that the skills of RPs represent an enhancement to local skills and experience. Consultant surgeons, physicians and obstetricians are not routinely trained in neonatal care. If there were no on-site obstetricians, for instance, this in itself does not alter the paediatric expertise on site.

In terms of midwifery the responsibility for normal childbirth is held by the Midwifery profession. In the vast majority of such deliveries in a midwife led community maternity unit there will be no requirement for any other professional to be involved.

The Rural Practitioner team will be part of the emergency response team that can be activated by the midwifery team if that need arises. They will assist with all aspects of an emergency in childbirth to address the acute needs of the mother or child. Our external and internal reviews have indicated that safety is best achieved by delivering only low risk mothers in Caithness. However the lack of paediatricians and a paediatric intensive care unit cannot be remedied by the presence of the Rural Practitioner team. Please see separate response to your question around why NHS Highland believes a paediatrician is not viable for Caithness General

What role could Rural Practitioners have in the birth of babies in Caithness? Could they be called in to help in emergencies given they have paediatric training and could a model be built around Rural Practitioners and Obstetricians to give a full and safe service in Caithness?

Nationally the responsibility for normal childbirth is held by the Midwifery profession. In the vast majority of such deliveries in a midwife led community maternity unit there will be no requirement for any other professional to be involved. The Rural Practitioner team will be part of the emergency response team that can be activated by the midwifery team if that need arises. They will assist with all aspects of an emergency in childbirth to address the acute needs of the mother or child. Our external and internal reviews have indicated that safety is best achieved by delivering
only low risk mothers in Caithness. However the lack of paediatricians and a pediatric intensive care unit cannot be remedied by the presence of the Rural Practitioner team. Please separate attachment as to why 24/7 paediatric unit is not viable.

**Caithness General has a high dependency unit but no intensive care – would this be used if necessary in emergencies involving pregnant women?**

Caithness General has an area within the acute assessment unit where enhanced monitoring can be undertaken. This is not a High Dependency Unit as defined by national standards but is used for any patient requiring enhanced monitoring. While there is no barrier to a pregnant woman being cared for in one of these beds our aim would be to safely transfer such women towards the capabilities of Raigmore in a safe manner as quickly as possible.

**Would birth rate fall so low it would affect professional practice of midwives?**

No. While the birth rate in CGH would fall to approximately 100 births per annum other CMU’s in Highland have births ranging from 20-40 births per annum. This issue would however require that CGH midwives are regularly updated and rotated for experience to for example, Raigmore.

It is also important to recognise that the professional practice of a midwife covers a number of areas and not just the birthing element and so would be involved in all mums pre and post birth care.

**I understand that Orkney carries out elective and emergency sections?**

Yes that is correct. There are some different arrangements in place for some of the islands boards but Caithness is the only mainland board with obstetricians but no onsite paediatric and intensive care support. Previously the local service did deliver elective and emergency sections but we now know this model is not as safe as it could be. Figure 8 – page 21 of the Report indicates that CGH has the highest caesarean section rate in Scotland and is consistent with sub optimal care

**How can it be safe when transfers are so unpredictable etc etc?**

It is expected that the number of intrapartum transfers (during labour and delivery) will rise from the historical average of 20 to 24 per annum if the rules of a CMU are applied. The number of neonatal transfers is expected to fall. Having a CMU model will support early identification of potential issues and appropriate assessment and decisions regarding transfer. In unusual circumstances deliveries may not happen as planned but we are not aware of any babies having suffered an adverse outcome. Again this is about balancing risks.

**What will happen with beds at Raigmore? Six bedded rooms with babies are not appropriate**

We have six bedded rooms in Raigmore as this was the appropriate configuration when the unit was built. New builds would suggest four bedded rooms. That said we adhere to all control of infection guidelines and have recently had a successful Health Environment Inspection (HEI) visit.

We use single rooms when available and have two Special Care Baby Unit (SCBU) rooms for mum’s that have babies in the special care nursery. High dependence is a four bedded room.
Reflecting on feedback the issues mainly raised are around the request for single rooms. Many want a single room because they don’t want to share with anyone and we do try and keep ante natal separate from post natal. Some mothers enjoy sharing with other new mothers.

In the Henderson Unit there are three side rooms. Once the new labour, delivery and post natal room is completed following reconfiguration there will be a total of four beds available should it be required.

**We are not getting a good standard of post natal care in Raigmore at present without more demand on the service there**

The review has recommended that the hub and spoke model is strengthened. In effect, this means that facilities at Raigmore have to be appropriate for all mums and for whichever stage of their pregnancy they are in.

The key to good care for mums and babies is to have the right number of midwives for the women who are in the ward to provide the appropriate care.

Post natal care in Caithness means local midwives are available to new mums and babies to support them immediately after birth at home. The review team would support women being transferred back home to Caithness as soon when it is medically safe for both mum and baby so they can receive the care they need close to home.

We would recommend that you encourage anyone with concerns to get in touch so we can investigate any individual circumstances. We are aware of two complaints relating to accommodation and some transport issues. Both of these issues have been highlighted in the report and paper to the board. We are keen to work with families to make any improvements around homely accommodation. We are also working closely with SAS over transport.

In terms of patient experience we have an ongoing programme of patient feedback in Raigmore and that is positive.

We prioritise discharges for women who have to travel the furthest to get home, Skye/ Caithness women.

**With labouring women requiring fixed wing transportation, do we have sufficient provision?**

We are working closely with Scottish Ambulance Service on issues of transport. If the new arrangements are put in place overall there will very few additional transfers of mums and overall fewer neonatal transfers. With good early assessment and management there should be very few labouring women requiring transfers and those who do will be transferred and escorted accordingly.

**It is not always possible to get access to helicopter – look at what happened in Golspie**

What happened in Golspie is subject to SAER and it is inappropriate to comment further until we understand the outcome from the review. However such events are unusual and while not as planned and very regrettable we are not aware of any babies having suffered an adverse outcome in such unusual circumstances.
With the Scottish Ambulance Service (SAS) already under major pressure from the increased number of patient transfers, how will they find the resources to provide more ambulances?

As above. If appropriate pathways are followed we don’t believe there will be additional ambulance transfers. But should that situation arise that would be discussed between SAS, NHS Highland and the Scottish Government.

What happens in the event of a road closure due to accident or adverse weather?

It is always possible to describe scenarios that might seem and be difficult to manage. However it is important to understand that we have plans, protocols and training in place to manage all sorts of scenarios and all hospitals and services have what we call Business Continuity Plans and Emergency Plans. Whatever model we have in Caithness could be subject to accident or adverse weather. What is important is to have plans in place to manage the situation and to make sure staff are aware and trained to respond. Training exercises take place to support staff.

Will facilities still be available for intubation/resuscitation within the reconfigured unit long term? Will there be any medical equipment that is currently available, removed?

The neonatal retrieval team is available 24/7 and brings equipment and expertise. There will be no reduction in available local equipment. Resuscitation skill and equipment (including intubation) will still be available locally although neonatal intubation will depend on the skills of the anaesthetist currently employed. NHS Highland Advanced Neonatal Nurse Practitioners will continue to visit CGH and train midwives in Neonatal Resuscitation. Local medical staff are also invited to this training which may include RP’s in the future.

Who will scan in the event of an incident like a miscarriage or for re-assurance checks for mothers?

The hospital has 24/7 radiographer cover and some of the team have Ultrasound skills. The proposed changes do not impact on the scanning arrangements because obstetricians do not carry out scanning during the out of hours period.

If an US trained radiographer is not available for whatever reason then the case will be assessed and transferred to Raigmore. Most US scanning is undertaken in daytime hours, whether in Raigmore or CGH.

Will a mother (not in labour) with complications/complaints/concerns now be required to travel to Raigmore to receive medical care and/or check-up?

No, antenatal care will remain as current with outpatient clinics available locally involving visiting obstetricians and local midwives. There is no plan to reduce the number of consultant clinics. If a woman presents outwith clinic time the midwives will assess and then consult remotely with the Raigmore obstetrician.

Since CGH will no longer be manned 24hrs, will out of hours calls now be dealt with by a midwife in Raigmore?

This is not correct. CGH will be manned 24hrs by the general medical/nursing team. The midwives will be on-call but available. Their response if required will be triggered after the phone call assessment undertaken by the experienced Raigmore team. This means there is always an awake/alert clinician taking the call and no answer machines/call backs needed. Records are available digitally and in the patient held
We will look closely at this in the interim to see if it can be further improved and the new model will form part of a strengthened hub and spoke. Raigmore Maternity already triage / take calls from women from all other areas of NHS Highland.

NHS Highland Community midwife units and Raigmore Postnatal wards use the Paediatric registrar as their first point of call, if they have concerns or if they are not available the call should be directed to the On call consultant Paediatrician. For calls to obstetrics, the on-call rota in Raigmore is a combination of Consultants and senior registrars.

The review discusses the neonatal retrieval team being available “within hours” Will consideration be given to this service being unavailable and are their specific response times they need to meet? Will there be assurances that travel issues/concerns will be addressed prior to the transition to a CMU?

Across Scotland there is always a retrieval team available. It is drawn from specialists in other boards and thus can be affected by their response times and the weather affecting transport. Experience indicates that six to eight hours is a common response time before the team arrive in a rural area. This service has recently been taken over by SCOTSTAR (http://www.neonataltransport.scot.nhs.uk/about-us) and this unified retrieval service has a larger pool of staff/aircraft to draw from. It is thus hoped that response times will improve. This is one of the reasons why high risk deliveries need to be avoided whenever possible in remote locations.

**What is the number of births in Caithness Hospital in 2014/15 and 2015/16?**

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<tr>
<td>The number of births in Caithness Hospital</td>
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**Total number of pregnant women from CGH who have been transferred to Raigmore in past 12 months, and how many have delivered at CGH?**

We have provided information for 2016 and interpreted this as where mothers gave birth.

In 2016 to date there have been 37 births in Caithness. Caithness women delivered in Raigmore – 156 (to end of November)

**Can you provide the number of elective caesareans performed at Raigmore since emergency measures were put in place at CGH.**

1st of January 2016 until 9th of December 2016:

36 women delivered in Raigmore by elective caesarean section from Caithness

**Does the increasing number of elective caesarean sections suggest that many consider this method to be safer and painless?**

Some mums opting for elective caesarean sections as this was more convenient and they could plan child care better. While this was understandable, the literature review does not support the undertaking of caesarean sections at CGH and particularly not before 39 weeks stage.
Will more beds be available if required?

Yes. The bed numbers were based on bed occupancy statistics prior to the interim measures being put in place and the reduction is not due to the move to CMU. There will be options available if additional beds are required as is always the case. The number of beds and staff are not set to reflect exceptions but rather what happens in the vast majority of the time. The exceptions are individually managed.

What is the number of pediatric referrals to Raigmore in past 12 months

We have interpreted this as the number of occasion’s neonates (within the first seven days of birth) born in Caithness General have been transferred to Raigmore for care.

Sept-2010 to Aug-2015 inclusive (years) the Public Health Review had identified 52 (equivalent to approx. 10 per year over that time period). These numbers were based on the triangulation of data from three different sources: SMR02; SBR (Scottish Birth Records) and the Caithness log (kept by Caithness Midwives).

Cost of providing air ambulances for CGH-Raigmore transfer

NHS Highland does not hold this information but the information has been requested.

Can NHS Highland give assurances that there will be enough ambulance cover for transfers of pregnant women, both before birth for more difficult cases and in an emergency to Raigmore?

NHSH and SAS are working very closely together. While the impact of any change of removing obstetrician will be negligible we are working together to look at all transfers including emergencies. Scottish Ambulance Service, have just introduced a new evidence-based clinical model has to ensure that the most serious cases are prioritised and seen more quickly.

Will there be one point of contact to ensure smooth operation of the service when ambulances are needed in any form, from air to road transfers?

Yes e are also working on making sure all requests for Ambulance Transport are done in an appropriate time frame. One call conference call (PAS – Perinatal Advisory Service) will be implemented to agree best mode of transport for mother/baby.

There appears to be different ideas of what air transport will be used in emergencies – will it be fixed wing, coastguard helicopter or ambulance helicopter?

One call conference call (PAS – Perinatal Advisory Service) would be used to agree best mode of transport for mother/baby in an appropriate time-frame and depending clinical condition where being transferred to and weather conditions. In extreme weather conditions /block roads severe weather when neither a land ambulance or the air ambulance are able to get to the area, a request would be made to the coastguard to use our SAR helicopter.

Any request would be looked at on a case by case basis. The aircraft carries a paramedic and a suite of medical facilities and on such occasions the aircrew often look at bringing both the casualties medical team with them and may take the casualties husband/partner to the destination if able.
The current status of the National Review of Maternity Services – when do you expect the report to be published?

We understand that the National Review is in the process of being finalised and it is expected to report to Ministers early in the New Year

Will NHS Highland be exempt from the review?

No. We highlighted the National Review in our paper to the board and stated that we would have to take cognisance of and respond to any recommendations. In terms of the CMU we don’t believe there will be anything in the review that will change the decision because we have made it on grounds of safety. However, we await the outcome

What is the number of times the Raigmore maternity unit has been at capacity and therefore had to refuse transfer requests.

Raigmore has never refused a transfer request. They do not close to admissions from any North Highland area and if they were full a contingency plan would be to step down anything that was not an emergency.

In terms of access to Special Baby Care Unit (SCBU) if it was closed or the baby was below 28 weeks gestation we would ascertain where cot availability elsewhere in Scotland. Then depending on individual circumstance, weather conditions we would agree a plan to transfer to Raigmore stabilise and then move onto where the cot is available.

If the mother has already delivered then they may by pass Raigmore and the neonatal retrieval team would go to Caithness and take back to their base.

Regarding the other Midwife-lead Maternity Units in NHS Highland, what is the distance to transfer from each unit to Raigmore and the time taken for transfers, both by road and air?

We have two other CMUS in the Highland Council areas that would refer into Raigmore. These are Dr Makinnon’s in Broadford and Belford in Fort William. If they were transferring from the Units then the travel time by road would be around two hours.

However both units serve a very large catchment area and are also served by ferries. If people needed to come in direct from home to Raigmore then clearly the travel times would vary a lot but could be up to four hours. We also have a number of CMUs in Argyll and Bute and some mothers have to travel to Glasgow with similar travelling times. They also have many more inhabited islands with ferries but some also with airports.

A big issue for the community is child-care and accommodation for children, partners and other relatives in Inverness if a woman has to be transferred to Raigmore for the birth of her baby. Parents need to know, what accommodation they are entitled to, where it will be, and, especially for single mothers, who will look after her other children if sent to Raigmore?

The local midwifery team are in direct contact with all mums on the caseload and have provided them with contact details for the lead midwife for the area should they have any concerns. It has always been part of planning for the midwives to discuss plans around travel, accommodation and child care.
Accommodation will generally be provided at Kyle Court, or the Ronald MacDonald Women and Family Centre in Raigmore. If there are no rooms available, alternative accommodation close to Raigmore Hospital will be organised in a nearby hotel.

**Accommodation for partners or the person accompanying will also be organised if needed. Under the Highlands and Islands Travel Scheme usually two free nights of accommodation is provided by NHS Highland. However, in special circumstances additional nights can be organised.**

NHS Highland met with CHAT on Monday 19th and discussed wider engagement and information to support the new arrangements including accommodation

Help with child-care may be needed by some mothers but if children have to be in social care for a time there needs to be time to talk to children about the temporary nature of the care. A worry was that some mothers may be anxious about children going into foster care and how that might be judged by others.

There is no single solution and personal circumstances vary but nearly always this will be organised with support from family, friends or neighbours. If this not possible, for whatever reason, this would be discussed with the midwife.

In the event that a mum seeks support to make any arrangements for the care of her children, we would work in partnership with the mum, Highland Council and the third sector to ensure that there are child care arrangements in place for the time it was required.

The Council’s children’s services may already be supporting a family – not just social work, but other areas of service. In addition, regarding child care, like other providers, the Council provides wraparound care. They also have Family Resource Co-ordinators, who can advise on the availability and suitability of local child care provision. In reality in the vast majority of cases families, neighbours and friends do a great job of supporting each other.

With respect to Fostering though, it’s a statutory process and would not be considered or appropriate in the scenarios being debated.

**How will Gynaecological cases be dealt with at Caithness General? Will the service operate 9am to 5pm, Monday to Friday?**

In the first step of the transition there are no changes. Gynaecological cases will be dealt with as they are now. Gynaecological clinics and investigations will be coordinated by the consultant obstetrician who will continue have a presence in the hospital from 9am-5pm. The obstetricians will also provide emergency care and interventions presenting from patients, GP’s and the emergency department in conjunction with the general hospital team (junior doctors, nurses, rural practitioners).

From 1700-0800 (out of hours) the general hospital team will manage the initial presentation, taking any necessary immediate actions and seeking advice from the on-call Gynaecologist in Raigmore Hospital.

If higher level care is required the patient will be carefully prepared and safely transferred either by the Scottish Ambulance Service or by the SCOTSTAR retrieval service.
Could a system be put into operation at Raigmore where doctors could discharge mums and babies from Caithness as early as possible in the morning to allow them to travel home during daylight hours?

As with all discharge the key is good communication and planning as individual circumstances vary and we try to accommodate requests around timing. In general to support good flow of patients through the unit being able to discharge people early in the day is helpful.

One point raised was that babies are now recommended to be in baby seats for not more than 30 minutes at a time. What advice will mothers be given to ensure the safe transportation of their babies home?

The issue around baby seats and 30 minutes is not a recommendation. This is very early academic work and nowhere near the level of evidence to support the production of a change on the guidelines. This would have implications for many families Highland and Argyll and Bute.

We offer car seat awareness advice accompanied with a leaflet which was developed by our Advanced Neonatal Nurse Practitioners. This advice is aimed at babies less than 35 weeks gestation, less than 2.2 kilograms and for any baby who has required respiratory support for more than 5 days. Parents bring their car seat in several days before discharge, the baby will be positioned in the car seat and appropriate head and body positioning is discussed. Advice is also given if taking long journeys to have regular breaks and lifting the baby out of the car seat and if possible an adult should travel next to the baby.

For babies out with the criteria we offer standard advice applies. It's important to continue to use car sets as required by law and to keep a watchful eye on babies travelling in a car seat. Taking regular breaks and lifting baby out of the car seat for long journeys are also discussed.

Can partners of women being transferred by ambulance be with them in the ambulance?

Yes its not unusual for a patient to have an escort to come with them in an ambulance. It is a judgement call by the crew, who will make a dynamic assessment of the situation. If the patient is seriously ill and treatment en route is intensive, we may suggest that a loved one doesn't travel. But since having someone with them might benefit the patient, we try to accommodate this, if we can.

Can you provide figures to compare baby deaths at Raigmore with the figures quoted in the review for Caithness General?

There are various categories of maternity units. Caithness was classified as an EGAMS (Expert Group on Acute Maternity Services) Level 2a whereas Raigmore is Level 2c. This means Raigmore manages all the high risk babies in Highland and so the figures are not comparable.

What other units were classed as this and whether Orkney Health Board could send their births to here.

Caithness is the only Egams2a unit in Scotland. The different Island Boards use a variety of models, some GPs/Midwives. It was highlighted that the Island Boards are all experiencing their own problems re delivery of maternity services and the forthcoming National Review is expected to highlight these concerns.
It is recognised that Caithness can have weather issues and is often classed as a land locked island but there is a difference in that there is no stretch of water.

**Can you clarify the term “maternal case mix”***?

This refers to the risk factor in each case. At the antenatal clinic the history of the mum is taken as to social situation, previous maternal history, medical history and these inform the risk pathway for the mother, with red being a high risk pathway and green normal. A Community Midwifery Unit would only accept lower risk cases.

**How equipped is Raigmore Hospital to adapt to the new model?**

The impact was expected to be 4% of the current workload and they have adapted well while the interim arrangements were put in place. There is strengthening of the links between Raigmore and Caithness General with clear leadership and ownership. There is additional investment in IT to support information sharing. Work is ongoing during the transitions phase.

**Can you explain the leadership and management structure to support the transformation to a CMU?**

NHS Highland has a robust midwifery leadership structure in place. Overseen by the board’s head of midwifery, Dr Helen Bryers, the North and West Operational Unit is led by lead midwife Mary Burnside, with the Caithness Community Midwife Unit (CMU) led by midwifery team leader Laura Menzies.

In order to implement the board’s decision made on 29th November 2016, during the transition period we are being able to call on support from across NHS Highland, including a consultant midwife who has travelled up to Wick, and members of the board’s maternity training and development team who routinely travel to provide assistance to CMUs.

In addition, the expertise of maternity team leaders from the seven existing CMUs has been made available and dedicated telecommunication links set up to help further facilitate and strengthen this support and also minimise unnecessary travel.

Also, following the board’s decision, a Caithness CMU Transformation Oversight Group has been set up chaired by Dr Roderick Harvey, NHS Highland’s medical director. The group was specifically set up to oversee the Caithness CMU transition and strengthen the maternity and neonatal services and networks across the North Highlands, including Caithness.