New Zealand Northern Region - Advice for Community
Maternity Ultrasound (level 4 restrictions)

Produced by the Northern Region Maternity Ultrasound Quality Group v1.2 26/3/2020

The basic principles of this advice are to attempt to maintain essential maternity ultrasound services while minimising risk to community sonographers, other staff and the public. To achieve this we must reduce referral volume and minimise scan times.

This is an initial reduction which is likely to change fluidly with the evolving crisis

No high risk or SARS CoV 2 / COVID-19 positive individual or family is to be scanned or allowed in private ultrasound practices (these practices do not currently have the PPE required).

Any high risk or SARS CoV 2 /COVID-19 positive individual should have all non-urgent maternity imaging deferred until identified as cleared / recovered and non-infectious by public health. Any urgent imaging in these individuals must be performed in centres with adequate PPE and training, which is currently only available at DHB providers.

All women are to arrive and be scanned alone except when an associate is required as translator or in procedures with a high risk of pregnancy loss or other significant finding such as threatened miscarriage or suspected ectopic. In those instances a single support person is allowed. All other family / support persons should not enter the practice.

Reduced scan times and staggered appointments can reduce exposure and the number of women in the waiting room. The times below are guides only and will vary between practices and individuals. The times do not reflect the expected standard time for these procedures. Critical components of the scan should not be compromised in the interests of reducing time.

Use of CINE loops and minimalist labelling are recommended to assist in reducing scan time

First trimester 11-13+6 week scans

- Attempt to limit scan times to approximately 15 minutes, ideally less
- Do not recall for second attempt – recommend substitution with MSS2
- Early anatomy assessment of major structures is still required

Anatomy scans

- Attempt to limit to approximately 20 minutes, ideally less
- Avoid recall for incomplete anatomy except where major structures are not visualised
- E.g. not for arches only with otherwise normal heart views, facial profile or closed hands
- Delay follow up recall scans until after lockdown, where able
- No social scanning e.g. 3D face imaging or more than a single attempt at gender assessment
- Consider storing portions of the scan as cine loops where appropriate
- Incomplete anatomy scans are NOT to be referred for completion at a tertiary centre
- Abnormal findings are to be referred as usual
Early pregnancy dating/viability – decline all requests without adequate indication

- Attempt to limit to approximately 10 minutes, ideally less
- Dating and viability scans are NOT indicated in an otherwise normal early pregnancy
- For common accepted indications, refer to the National Guidelines (1).
- Maternal concern alone is not sufficient indication.
- Considering ToP is still an indication.

Growth scans - decline all requests without adequate indication

- Attempt to limit to approximately 10 minutes, ideally less
- Routine growth scans are NOT indicated
- For common accepted indications, refer to the National Guidelines (2).
- For BMI>35 weeks and maternal smoking, perform a single growth scan at 37-38 weeks
- Maternal concern alone is not sufficient indication.
- 30 minute Biophysical Profile should not be performed without specialist request

Other notes

- No social scanning such as 3D face images.
- We are not aware of added risk of exposure from performing TV scan. Continue to use as appropriate.
- "Package deals" should not be offered as they may encourage additional scans.
- The sonographer may reserve the right to terminate the scan if they are uncomfortable with patient or support person behaviour or undeclared symptoms such as coughing
- Where possible, limit each sonographer to working at a single site
- Reports performed under the above conditions should be labelled as "Performed with restrictions imposed by COVID-19"
- Referring LMCs should be informed of these changes
- Multiple pregnancies should only be booked with experienced staff capable of reduced scan times

Produced by Dr David Perry
on behalf of the Northern Region Maternity Ultrasound Quality Group, 25/3/2020

Indications for early pregnancy scan <12 weeks (1 – National Maternity Ultrasound Guideline)

- bleeding or pain in early pregnancy, or concern about pregnancy loss (section 88 codes TA and EP)[1]
- consideration of termination of pregnancy (section 88 code CT)
- unknown dates* (section 88 code BA)
- hyperemesis gravidarum
- trauma
- pregnancy with an intrauterine contraceptive device (IUCD) in situ
- previous ectopic pregnancy (section 88 code EP)
• complex medical conditions where a change of medication may be indicated such as warfarin.

*Please note:
Confirmation of dates by ultrasound is not routinely required before the 12-week scan

Indications for third trimester growth scans (*2 – National Maternity Ultrasound Guideline*)

- High clinical risk of fetal growth restriction (maternal hypertensive disease, pre-eclampsia, maternal smoking, IVF, previous FGR/SGA, maternal medical disease) or as per the Growth Assessment Protocol (GAP)
- Current FGR, SGA or reduced interval fetal growth (section 88 codes: GR and GF)[1]
- Diabetes (NIDDM, IDDM, gestational diabetes)
- Placental location (code: PL)
- Malpresentation (code: MP)
- Antepartum haemorrhage (code: AH)
- Abdominal pain (code: AP)
- Reduced fetal movements (code: FC)
- Follow up for fetal abnormality (see below), for example, renal dilatation – see also Appendix 7: Fetal renal tract dilation charts
- Maternal red cell antibodies/Rhesus incompatibility (see below)
- Spontaneous or preterm premature rupture of membranes (see below)
- Polyhydramnios / oligohydramnios (see below)
- BMI >35 (addition to this list)

Full infection control procedures are outside of the scope of this document however sample protocols for ultrasound equipment cleaning and general risk reduction are included below. These are sample only and can be superseded as information evolves or replaced by local practice.

- Use of gloves is recommended.
- Minimum daily change of scrubs / uniform
- Use of other PPE will depend on availability and local protocol.

Example of cleaning protocol
*Produced by Carol Bagnall, National Women’s Ultrasound*

- All non essential transducers are to be removed from the machines and stored on a transducer rack and covered or stored in a transducer box.
- Every machine and transducer on the machine is to be fully cleaned with the Sanicloth at the start of every day, at midday and again at the completion of the day.
- Between patients, any transducer used during a scan is to be cleaned with a Sanicloth including cable and the keyboard and front of machine is to be wiped down with Sanicloth.
- Preferentially place transducers necessary for an examination but not in use on the leftward side of the machine.
- Liberal use of the Trophon for high level disinfection
- All keyboards and bench surfaces within the U/S offices are to be wiped down at the start of the day, midday and again at the end of the day at a minimum.
- Clean door handle if door was closed for privacy.

There will be a cleaning coordinator assigned to each of the departments and indicated on the roster as ‘CC’. Where we have a Clinical Specialist this role will fall under their remit. Where there is no Clinical Specialist or in the Clinical Specialists absence another of the team will be assigned and it is their responsibility to ensure that the cleaning is occurring. It
is not their responsibility to do all the cleaning but to ensure that the team assigned to the department have done it. The cleaning is the responsibility of everyone in the department.

Cleaning Co-ordinator is to record on the spreadsheet every day that the cleaning has been done and by writing their name, assumes responsibility for it having been done. Clinical Director will be monitoring this daily.

**Example protocol for managing risk at a community ultrasound provider**

*Produced by Dr Rachael McEwing, Pacific Radiology*

**PRE-APPOINTMENT BOOKINGS:**

**A.**
Run through the following checklist over the phone for symptoms and history of travel or contact:

1. **Influenza-like symptoms**
   a. Fever
   b. Cough
   c. Sore throat
   d. Shortness of breath
   e. Diarrhoea and/or vomiting

2. **History of Travel within last 14 days**
   a. Date of travel
   b. Place of travel

3. **High Risk Occupation**
   (e.g. laboratory workers, healthcare workers)

4. **History of Contact with a confirmed COVID 19 case or suspected positive case.**

If any of the above apply, and the scan is *non-urgent*, recommend that the woman re-book after the Level 4 period, if she remains asymptomatic and if appropriate, is cleared by public health. This includes nuchal scans if rebooking after 28 days means that they fall outside of the recommended timing for NT assessment. Recommendation for these women is second trimester serum screening (MSS2), and possibly an early anatomy scan > 28 days later.

At this stage, all high risk or known SARS CoV 2 / COVID-19 patients are to be directed to the local DHB with prior discussion with DHB Radiology. This process may be reviewed.

**B.**
Advise all women booking for *routine* scans that *no* accompanying people, including children, are allowed at this time.
This is to protect them, and our staff from unnecessary exposure.

When the clinical indication is for TA (threatened miscarriage) or high clinical suspicion for ectopic pregnancy (EP), *one* accompanying person (not a child) may be permitted, as the woman may require a support person if there are adverse scan findings.

**C.**
Consider staggered appointments to minimise number of women in the waiting room.

**RECEPTION:**
A. Receptionist to run through the checklist above verbally (no paper) and manage as above.

Women with a history of symptoms, contact or recent travel asked to leave and rebook by telephone unless the scan is urgent.

If urgent, ask the woman to wait outside and check with the Radiologist or Branch Manager.

B. Ask all accompanying people to leave unless scan indication is TA or EP (one support person only is allowed in these cases) or if one is required to translate.

C. Patients to sanitise their hands and sit at a distance of at least 2 m from other patients.

D. Reduce use of paper at Reception - ask the patient to place their request form into an open plastic folder.

E. Ask patient to pay her invoice before entering the scan room to minimise interactions.

SONOGRAPHERS:

- minimise handling of paper eg. requisition forms
- wear gloves for the scan
- minimise length of scan where possible, without compromising quality. Consider using cines and stop annotating images
- do not get women to return later the same day for follow up imaging where this cannot be completed for technical reasons
- practice good hygiene including regular handwashing in both clinical and non-clinical areas including break rooms
- stagger lunch breaks to minimise people in the break rooms.
- wipe ultrasound probes, keyboards and screens (as per manufacturer instructions) and hard surfaces after the scan with anti-viral wipes after each case

V1.1 - added advice on twin pregnancy scanning 25/3
V1.2 – added 37-38 weeks scan for BMI >35 and women who smoke during pregnancy 26/3