Ultrasound Requesting

- Diagnostic ultrasound scans are typically perfomed by Sonographers (who have undergone specialist post-graduate training), by Radiologists, or by appropriately experienced Radiology Registrars.

- Images are obtained by using a gel to ensure no air is present between the probe/transducer and the patient's skin.

- The probe sends sound waves into the body. The sound waves are reflected back to the probe by boundaries between tissues in their path and turned into a moving image (e.g. the boundaries between different soft tissues, or between fluid and soft tissue, or tissue and bone). The operator then compiles a report of their findings.

- Adverse effects from diagnostic ultrasound are very uncommon, however Ultrasound may produce heating, pressure changes and mechanical disturbances within tissues.

- Things for the Referrer to consider before referring a patient for an ultrasound scan:

- Is ultrasound a suitable imaging modality to answer the clinical question? Consult resources such as RCR I-Refer, BMUS Justification of ultrasound requests guidance, local Referral Management guidelines or the radiology department if unsure.

- Imaging requests should include a **specific clinical question**(s) to answer, and

- Contain **sufficient information** from the clinical history, physical examination and relevant laboratory investigations to support the suspected diagnosis(es)

- Although US is an excellent imaging modality for a wide range of abdominal diseases, there are many for which US is not an appropriate first line test (e.g. suspected occult malignancy)

- Ultrasound scans often require patient preparation (for example, most abdominal scans require the patient to be fasted, and many renal requests require a full bladder).

- Ultrasound might not be able to effectively image all patients; **visualisation is reduced with increased patient habitus, bowel gas and imaging under bone** – ultrasound does not travel through air or bone.

- **Patient's pain levels** - Some patients are unable to tolerate the pressure needed to be able to image organs adequately

- **Mobility –** Is the patient able to transfer to the ultrasound couch easily? Is their mobility restricted to the extent they may need help, or a hoist to transfer safely. **Please indicate any mobility restrictions on the referral**. Will the patient be able to roll, or move into position to allow the sonographer to visualise all necessary structures/organs?

- If you think that your patient might not be able to tolerate ultrasound or might not be suitable due to lack of mobility or levels of pain etc please contact the ultrasound team at your Trust to discuss prior to referral.

- **Interventional procedures –** Some ultrasound referrals may request an interventional element (for example a guided injection, biopsy or aspiration). The interventional component will be undertaken at the discretion of the sonographer/radiologist undertaking the examination. Please indicate on the referral if the patient is taking anticoagulants, as these may need to be paused ahead of the appointment.