# Right Test, Right place, Right time; Implementing the BMUS Best Practice Guidelines

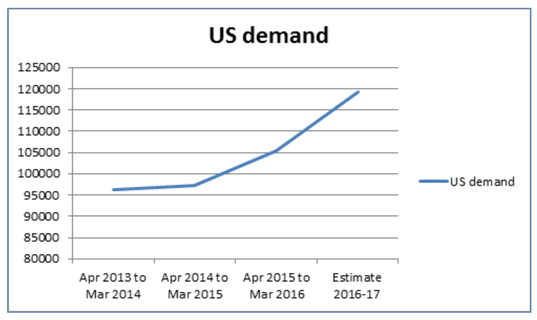
**P C Parker, O R Byass, J Hamilton, Radiology Dept,**

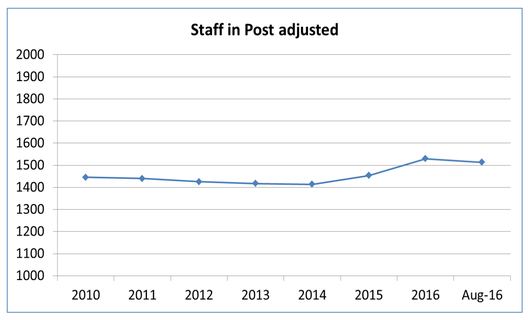
Hull and East Yorkshire Hospitals NHS Trust

## Background

All ultrasound service providers want to give the best care to their patients.. However, all services are under pressure. With a year on year increase in demand for ultrasound imaging in the region of 7.2% since 2013 making best uses of all resources, be it staffing, appointment capacity or hardware is paramount in the delivery of a cost effective and efficient ultrasound service.

Locally a significant peak in demand of 24% in 2015/16 was estimated. At this point action was required as additional resources in terms of staffing and room capacity could not be sourced. It was recognised that implementing the BMUS Best Practice Guidelines to justify referrals may aid in demand management




## Service Review

The increase in demand was being managed with a small increase in staffing capacity but was insufficient to deal with the significant rise in demand experienced.

Various options were evaluated as a mechanism to manage demand:

- Employ even more staff
- Create more US rooms
- Turn off the tap.

**More Staff?**

- Estimated 10% true vacancy rate for sonographer[1]
- Attrition to more lucrative agency work
- Non-comparable pay bands in NHS Trusts
- Training budget cuts

**More Rooms?**

**Too costly**

**Turn off the tap?**

**How?**

## Reducing Demand

**Utilise the BMUS RECOMMENDED GOOD PRACTICE GUIDELINES**

These have been produce with the intention to support referrers to Ultrasound and ultrasound providers in the appropriate selection of patients for whom ultrasound would be beneficial in terms of diagnosis and or disease management.

## Financial Sense

In 2016 the tariff for an ultrasound examination is at least £44 per examination rising to £78 for complex procedures. Making best use of resources is essential for sound financial management and good patient care.

## Clinical Sense

- **Right Test** ✓
- **Right Place** ✓
- **Right Time** ✓

## Will they work?

Prior to implementation a review of typical referrals for abdominal US in one week period was undertaken; 25% were deemed inappropriate.

Hypothesised that implementing guidelines could have a real positive impact on demand management

## Implementation

The radiologist and sonographer leads for ultrasound met with various GP's and the contracts teams to initiate discussion. A case was presented to the Local Pathway Management team of the regional Clinical Commissioning Group. A critical factor was the concurrent development of primary care CT referral pathway guidelines which compliment the ultrasound referral guidelines. These are an essential component to ensure appropriate imaging can be requested by the GPs when required.

Following discussion some local adaptations were added to the BMUS guidelines. The locally adapted guidelines were implemented in February 2017.

All cancelled referrals are recorded on the local RIS and are coded as RCANCEL (radiology cancelled referral) or RCHANGE (radiology changed referral)
All RCANCEL and RCHANGE are reported explaining the reason for rejection and any advice for additional information required, alternative appropriate imaging or appropriate management pathway. All activity is recorded by the Trust as Radiology Advice and Guidance and attracts tariff income accordingly. This has mitigated against loss of income due to loss of face-to-face patient contact activity.

BMUS

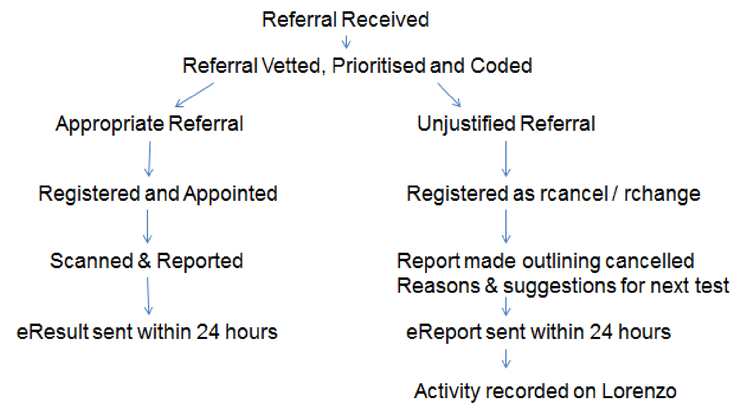
**BMUS RECOMMENDED GOOD PRACTICE GUIDELINES**

**JUSTIFICATION OF ULTRASOUND REQUESTS**

**REVISION 4: OCTOBER 2017**

[2]

## Process



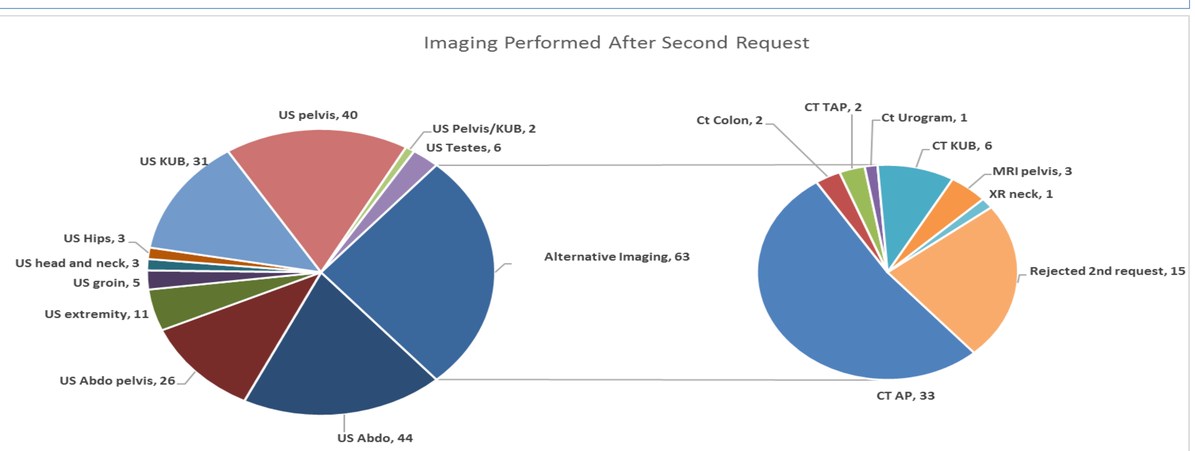

## Process Review

To assess the efficacy of the process a review of cancelled referrals in February, March and May 2017 was completed. The rejected referrals were reviewed to better understand the subsequent patient pathway and whether alternative imaging referrals had been received. A review of outcomes of subsequent imaging was performed. An inclusive criteria was used for classify pathologies regardless of clinical significance or important exclusion of sinister pathology, such as the presence of epididymal cysts.

A total of 9553 referrals were received from GP's in these 3 months; 507 (5.3%) were rejected. 232 (45.7%) of the rejected requests had a 2nd referral for either an ultrasound or an alternative imaging modality. A small number (n=15) were rejected again and a 3rd referral generated, which all – eventually - contained appropriate clinic details.

Pathology was detected in 77/232 (33%) patients who under went subsequent imaging. Pathology was detected by either second referrals for US containing relevant clinical details, examinations performed by more appropriate imaging modalities for the clinic question or by patients being managed on an appropriate pathway.

Graph 1 demonstrates the number and type of subsequent imaging. Graph 2 demonstrates the subsequent ultrasound referral pathway.

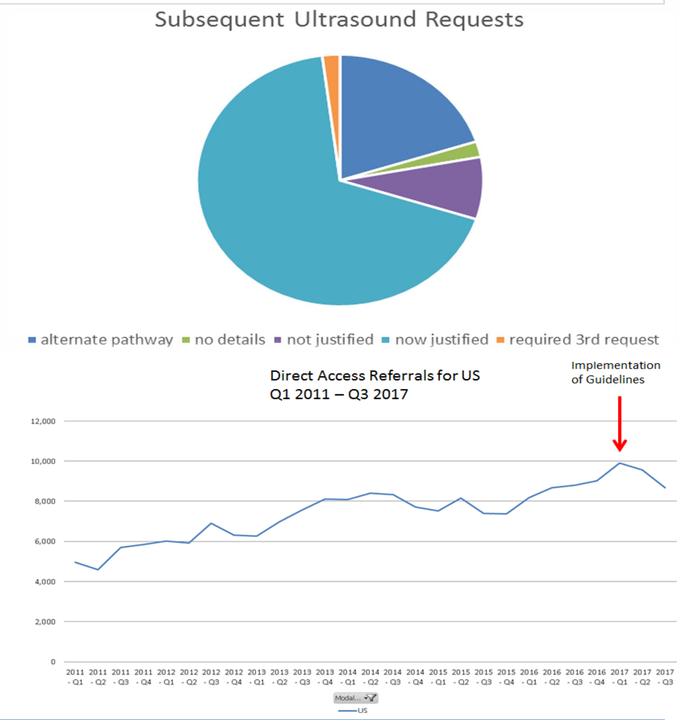



## Subsequent Referrals

53/77 (10.4%) patients had a second referral for US which subsequently demonstrated pathology. The pathology was deemed to potentially influence clinical management although the most common finding by far was the presence of hepatic steatosis. No significant life-threatening pathology was detected in subsequent imaging within this review.

Since implementing the guidelines there has been:

- A reduction in waiting times from 5 weeks to 2 weeks for GP referrals
- A reduction in waiting list volume
- A noticeable change in clinical details listed on referrals resulting in essential criteria being given by the referrer




## Conclusion

- Vetting of referrals using the locally agreed BMUS guidelines has not cause significant life threatening pathology to be missed
- Rejecting referrals using this process has improved communication with referrers and increased radiology advice and guidance activity
- Proactive vetting of the referrals has aided demand management and reduced waiting times

1) Centre for Workforce Intelligence, "Securing the future workforce supply," March 2017. [Online]. Available: https://www.gov.uk/government/publications/review-of-the-sonography-workforce-supply
2) BMUS, Oct 2017, Recommended good practice guidelines: Justification of ultrasound referrals. Available: https://www.bmus.org/policies-statements-guidelines/professional-guidance/justification-of-referrals-in-primary-care/