How to build a department around undergraduate sonographers

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Where it all began.....

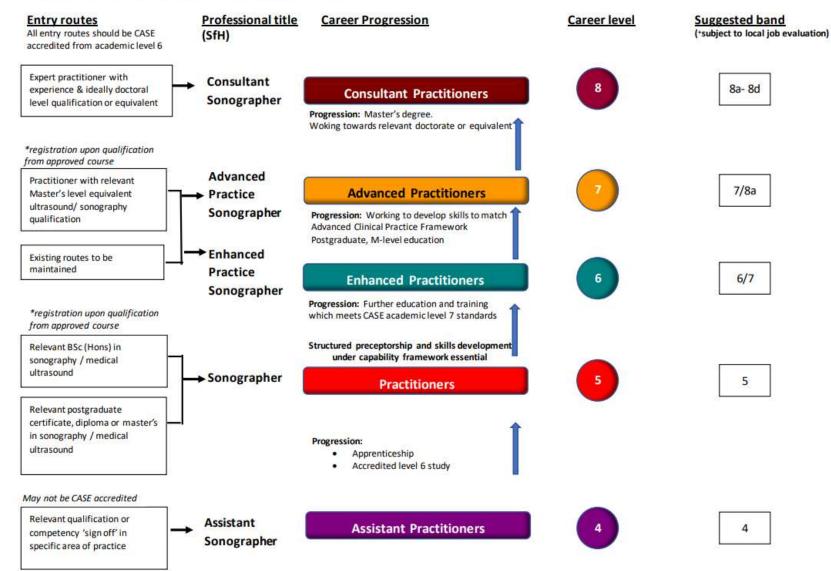
- Approx.10 years ago there was a large workforce summit in the West Midlands tasked with identifying ways to increase sonographer numbers.
- Birmingham City University became the first direct entry undergraduate Medical Ultrasound provider.
- 3 year BSc in Medical Ultrasound
- Addition of a 1-year PG Certificate in Preceptorship (Medical Ultrasound)





Sonographer Career Framework

Outline Career and Progression Framework – V2. Updated June 2022



Career Level	Career Level Descriptor	Scope of Role	Clinical Reporting, Accountability and Practice	Scope Practice	Role development, education and training required to progress	Service delivery aspirations
Career Level 5 (SfH)	Practitioner (SfH career framework)	This role is focussed on the new practitioner. It could equate to the preceptorship period following qualification. They will work autonomously within their scope of practice and will be mentored by an experienced practitioner. The role is as a competent, safe sonographer with the knowledge, understanding and ability to independently undertake, interpret, analyse and report ultrasound scan findings within their scope of practice, with appropriate supervision available.	Carry out, interpret and analyse scan findings, within a defined scope of practice. Produce a written report on normal examinations and common abnormal findings within a focused and clearly defined scope of practice. Expectation that clinical practice will be independent but working as part of a team. Appropriate supervision must be readily available. Reporting skills developed under appropriate preceptorship and capability framework. No lone working in for example satellite units or out of hours	Examples might include: All of the above plus: Obstetrics: Supervision will be required for FASP examinations during the capability development period. A range of obstetric examinations including early pregnancy and third trimester. Gynaecology / General medical / Vascular / MSK and other non-obstetric exams (dependent on modules studied and scope of practice): Non-complex, non-urgent referrals with clear clinical history and clinical question. Such referrals will be vetted by senior staff with reference to RCR iRefer and / or BMUS 'Justification of Referrals' document and will be prioritised as a routine referral with low expected presence of pathology Normal cases will be reported, using standardised reports. Abnormal findings will be reviewed by a senior colleague to provide interpretative / actionable reports and further management advice. All examinations undertaken during the capability development period will be performed in a supervised capacity. Areas of practice will develop over time, with experience, further learning, and competency 'sign-off' and with clear schemes of work in place.	Consolidate practice and capability development A well-defined, structured preceptorship period of between 12 – 18 months is essential to support the transition to post-registration independent practice (see additional guidance document). The period of capability development will be a formal programme that supports the development of autonomous and independent practice across the full scope of the role. Monitoring of performance and progress to be undertaken within a well-defined assessment programme. Actively participates in CPD. Career Progression: Education and training during this will take the form of Pg Certificate / Diploma in for example: • a chosen clinical specialty • interpretative reporting • communication in complex settings • further pathophysiology Any education and development provided must meet CASE academic level 7 learning outcomes.	This is a transitional role. The expectation is that practitioners in this role are supported to develop skills and successfully complete the capability development period, prior to progressing to career level 6. To be independently & autonomously performing a limited range of examinations, with appropriate direct supervision readily available. Initially 100% of reports reviewed by enhanced practitioner sonographer, using BMUS peer review tool, reducing to a minimum of 50% of reports as capability develops. Learning points from peer review to inform development needs Aspiration: To be independently producing a report on a maximum of 50% of cases undertaken. This aspiration is given to encourage discussion and subsequent skill development of the individual during their capability development period.

Key Points.....

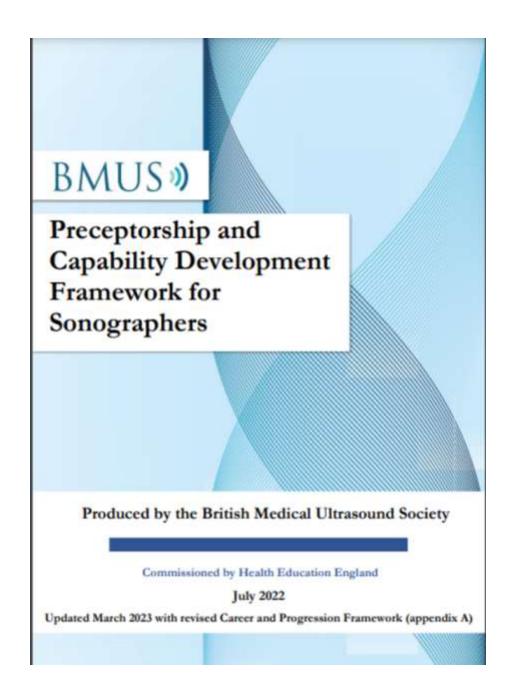
- Practitioner level is for a new sonographers and could equate to the preceptorship period following qualification
- Carry out, interpret and analyse scan findings and produce a written report for non-complex cases within a defined scope of practice
- Clinical practice will be independent but working as part of a team. Appropriate supervision must be readily available.
- No lone working in for example satellite units or out of hours

Obstetrics: Supervision required for FASP examinations during the capability development period.

- Normal cases will be reported, using standardised reports.
- Abnormal findings will be reviewed by a senior colleague to provide interpretative / actionable reports and further management advice.
- Initially 100% of reports reviewed reducing to a minimum of 50% of reports as capability develops

Preceptorship

- The aim :- to provide structure for all sonographers from newly qualified to those aspiring to advanced practice and consultant roles.
- Gives departments the building blocks to develop their preceptorship programme



What does preceptorship include?

- Assign a mentor / preceptor
- Audits of work
- Case reviews
- Reflective pieces
- Competency sign offs
- Other experiences e.g Visiting clinics, Breaking bad news courses.
- Build a portfolio!!!

What is the purpose of preceptorship?

- Develop confident, autonomous practitioners
- Reduce level and amount of supervision / support.
- Increase skills and knowledge to expand the range of examinations which can be performed.
- Have a workforce who can train and support future trainees
- To have job satisfaction and feel valued by the team.
- To have a strong future workforce which can support the increasing demands of the service

Worcestershire Experience

- Discussion with Chief Nurse regarding HCPC registration
- 12 month Preceptorship Sonographer post (B5)
- Complete competency documents for each area of scanning.
- FASP examinations Full supervision until PG Cert was completed.





ULTRASOUND DEPARTMENT - TRUSTWIDE

COMPETENCIES FOR SONOGRAPHERS PERFORMING ABDOMINAL SCANS

Sonographers trained via the undergraduate (direct entry) route are currently unable to register with the HCPC as Sonographer' is not a protected title. All non-registered staff are required to demonstrate all of the competencies within this document prior to being able to scan independently and this must be stored within their personal file as evidence and three must be completed annually.

Completion of these competencies is also a requirement for all new starters and those completing in-house training and on completion of PG training

RECORD OF COMPETENCIES FOR ABDOMINAL SCANS

TRUST FOUCY / PROTOCOLS and SOPs	Sign (Trainee)	Sign & Print Name of Supervising Sonographer	Date
Read and understand the departmental protocol for Abdominal ultrasound			
Read and understand the Trust Chaperone Policy (WAHT-CG-606)			
Read and understand the departmental protocol for GB polyps			
Read and understand the departmental protocol for incidental Findings			
Read and understand the departmental SOP for Renal Masses and Haemangioma			
Know how and when to refer due AAA and read relevant protocols		j	
Nead and completed competencies in SOP for Osening Ultrasound probes in Trust imaging Departments. (WAHT-KD-024)			
Read and understand - Urgent clinical Sedings Trust Policy (Policy for the Communication of Critical or Urgent Radiology Reports)			
Read and understand - Vetting SOP			
Aware of and use "short codes" within CRIS			
SCAN TECHNIQUE	Sign (Trainee)	Sign & Print Name of	Date

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• MDTs

- Cross sectional reporting sessions with radiologist
- Specialist clinics e.g hysteroscopy
- Fetal Medicine Clinics
- Be involved in audits
- Attend ARC course
- REALMs





Review of an SI Investigation – Partial Molar Pregnancy

3 review performed by W&C Divisional Governance Group - For circulation with Radiotogy Sonographers

GERM CELL TUMOURS

SEMINOMA

- Slow growing.
- Very sensitive to radiotherapy/chemotherapy
- Usually associated with better prognosis
- Ability to metastasize
- · Occur in mainly 30-40 year olds

NON SEMINOMA

- Fast growing.
- Less responsive to radiation and chemo
- · Metastasize by the lymph system
- · Occur in late teens early- early 30's



Identification	
Modality/Exam	ULTRASOUND
Date of Learning	MAR 2021
Description	Patient attended for routine UDAVY
	Clinical History: 6 weeks viability. Fartility patient.
	US report:
	There is a single live fetus present within an intrauterine gestation sac.
	Fetal heart beat visualised. CRL: 3.4 mm (6 weeks).
	Within the left adness there is a well circumscribed heterogeneous area
	with an echo poor centre and an increase in vascularity, measuring 27 x 27
	x 21 mm, it is unclear if this is seperate from the ovary 7 collapsing corpus
	luteal 7 coexisting ectopic pregnancy. Free fluid is noted within the left adnexa measuring to a maximum pool depth of 15 mm.
	Right overy is unremarkable.
	Conclusion: The ultrosound appearances are consistent with a viable
	intrauterine pregnancy; however a coexisting ectapic pregnancy cannot be wholly excluded based on the ultracound appearances, clinical correlation is required.
	is required.
	* * / / / / ·



The Anxious Patient: How to Improve Care ...

- . Offer a warm reception
- Patient was seen OOE, no reception staff.
- Engage Earnestly
- Start the appointment by siding about and manerally loanning to their concress. If an annious patient their beard, they'll be more confident in your medical recommendations.
- . Preview the appointment
 - Other as memory of what will happen during the must, such along what you'll do and uity. Knowing what to expect can help reduce the patient's anxiety.
- Address concerns head on
- If you arrive someroe is assured, it's OK to ask about it.
- Express empathy
 - Empatheting with a percent fear and accomplicing the experience can help them feel colour. Even if you deal with this medical modifiest frequently, it may be new and many for them.

Welly, M. 2020.

NHS

Worcestershire Acute Hospitals

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What next?.....

- On completion of PG Cert returned to university to complete PG Diploma (B7 - Annex 21). Further clinical modules in DVT and Testes and research module.
- On completion of PG Diploma B7 Role as Sonographer at enhanced practitioner level.
- Potential to continue to MSc.
- Involved in training of students and registrars
- Able to work independently, including OOH and community locations
- Able to support with reviewing reports and support newly qualified staff

Negatives ?

- Initially require full support and supervision, this may include longer scan slots.
- They may lack experience of the broader healthcare setting and pathways.
- Ideally need to be supernummary, gradually increasing the areas of autonomous practice
- Require support from a preceptor/ mentor as well as the wider team.
- Lack of registration

Positives ?

- They have 3 years of scanning and educational experience prior to starting ... you will not be starting with a beginner!
- Areas of competency can be signed off as the individual develops.
- Develops a career framework within the department
- Potential for further study will allow them to support other areas of scanning
- Direct entry into ultrasound.
- New ways of training to expand the workforce.

BMUS Endorsement

BMUS»

Certificate of Endorsement

The British Medical Ultrasound Society endorses Ultrasound Department, Worcestershire Acute Hospitals NHS Trust

as providing a suitable environment focused on supporting its staff.

All requirements, as stated in the BMUS Preceptorship Endorsement Scheme, have been met. Endorsement valid for three years from 1st of June, 2023.

Catherine Kirkpatrick

Adrian Lin

Hazel Edwards Professional Office



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BMUS Preceptorship Endorsement Scheme for Ultrasound Departments and Vascular Laboratories



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The future

- BCU course no longer running
- BSc Apprenticeship Sonography SHU
- Need departments understand the role of BSc trained sonographers and how they can build their team
- Managers to understand the career framework and want to develop this in their own departments
- Universities need to think of how they can support preceptorship period with PG modules etc

