

# Leading Transformation in the Ultrasound Workforce

**Dr Pamela Parker**  
**Consultant Sonographer, HUTH**  
**BMUS Workforce Strategy Officer**

# Declarations

- Head of Department – Ultrasound Hull University Teaching Hospitals
- Workforce Strategy Officer BMUS
- Steering group NHSE International Recruitment project



## Aims and Learning Outcomes

**Why do we need transformation?**

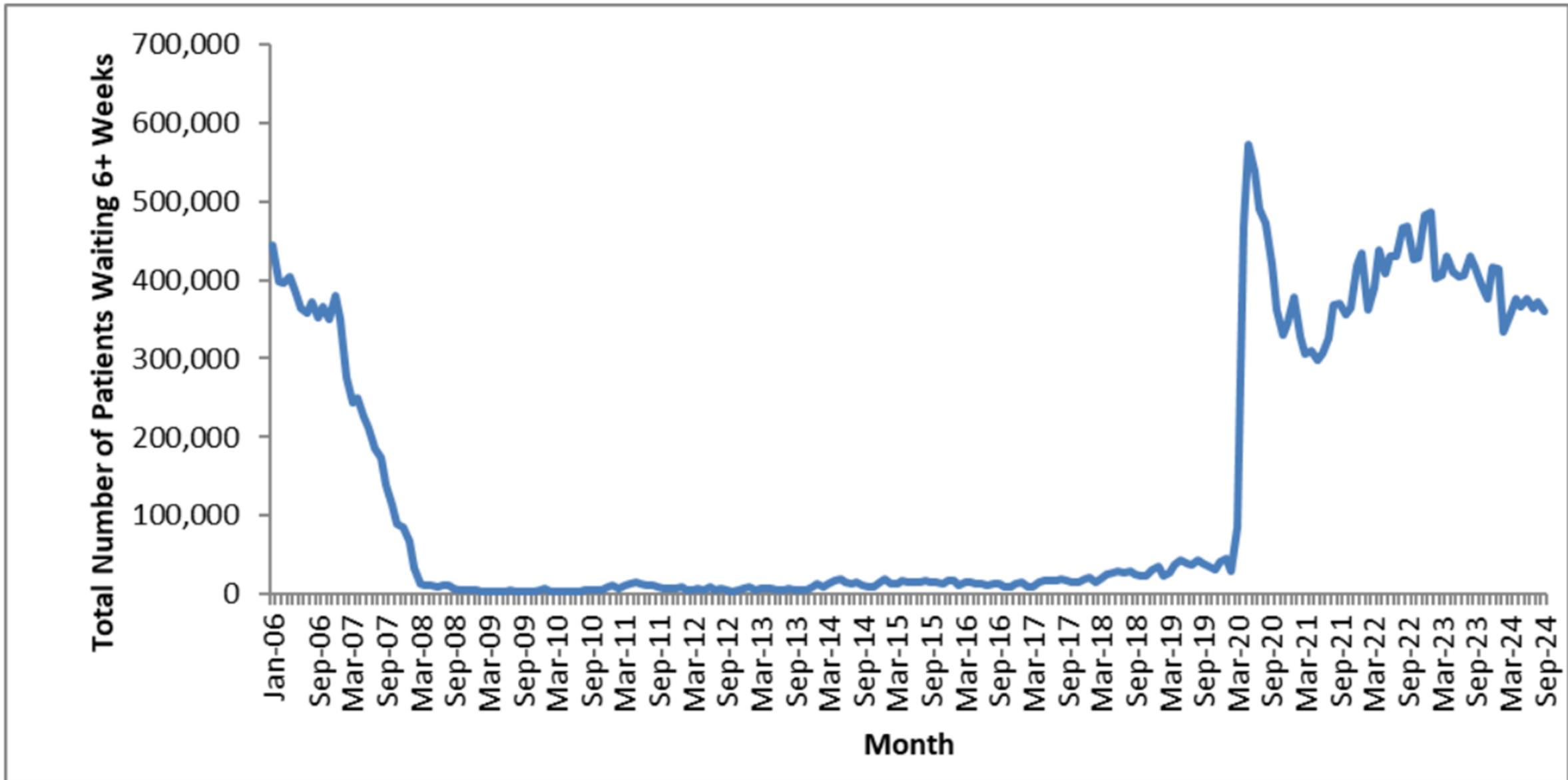
**Recruitment**

**Retention**

**Role Extension & promotion**

**What difference can sonographers make to pathways**

**Chart 1: Total number of patients waiting 6+ weeks at month end for all tests**  
**January 2006 to September 2024**

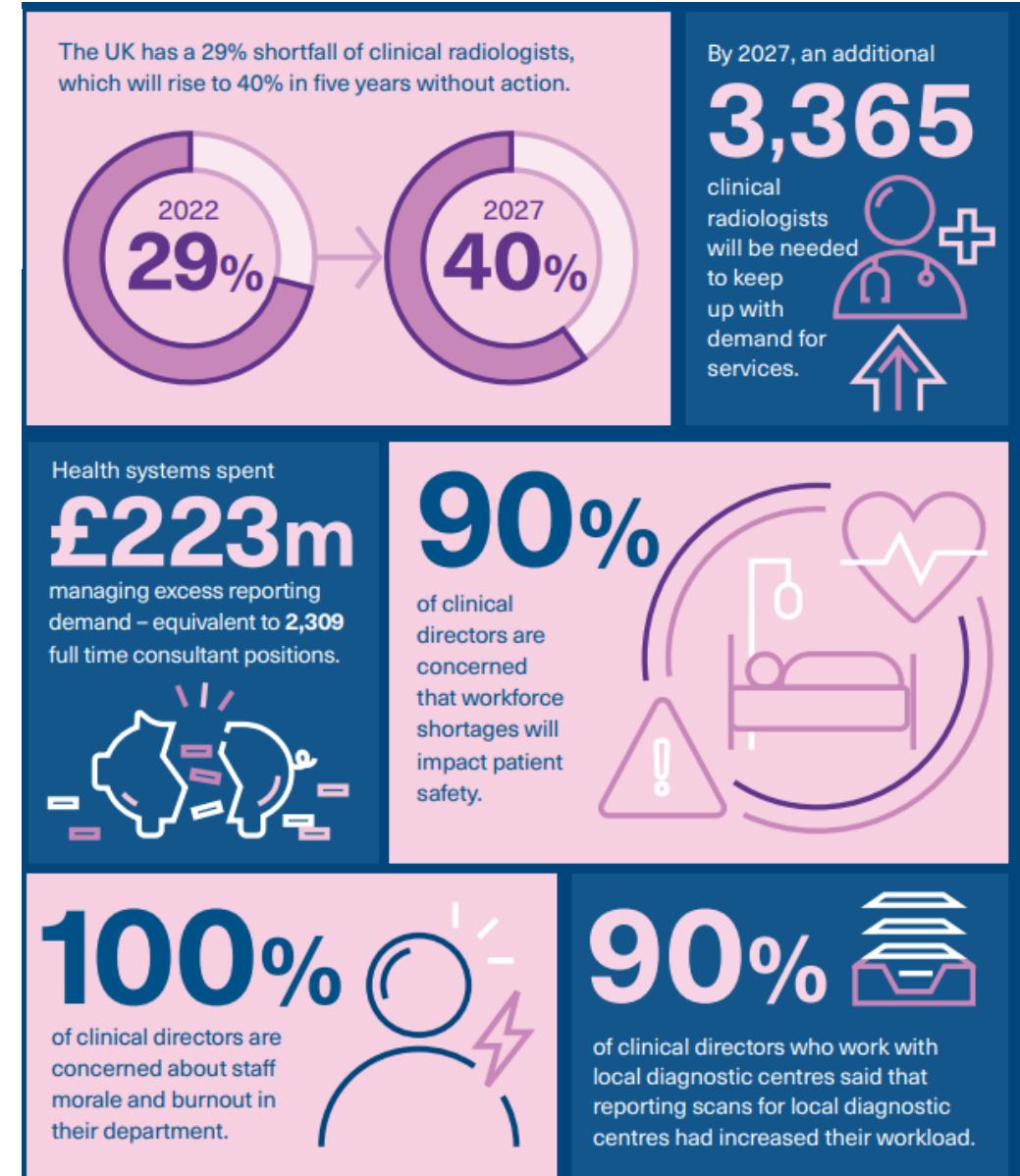


# U.K. turns to outsourcing to cope with 'chronic' staff shortages

Philip Ward  
Jun 7, 2023



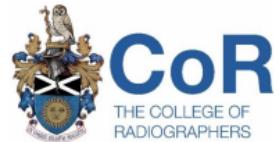
<https://www.auntminnieeurope.com/clinical-news/molecular-imaging/article/15657918/uk-turns-to-outsourcing-to-cope-with-chronic-staff-shortages>



RCR Clinical Radiology Workforce Census 2022

# The College of Radiographers

*Diagnostic Radiography*  
*Workforce UK Census 2020*



The average current UK vacancy rate across respondents is 10.5% at the census date of November 2020.



## Securing the future workforce supply

Sonography workforce review



March 2017

[www.cfwi.org.uk](http://www.cfwi.org.uk)

# Ultrasound Workforce Survey

Summary Report 2023



- Headline vacancy rate of 24% for Ultrasound Scientists
- Lack of very senior Ultrasound Scientist positions becomes a barrier when medical physicists are deciding on career options.

# Unfilled vacancies



- Aging workforce
- Aging population with poorer health
- Lack of training capacity within NHS
- Difficulty to retain staff within the NHS (often a direct result of competition from the private sector due to competitive salaries)

<https://www.bmus.org/mediacentre/news/bmus-response-to-nhs-10-year-plan/>

04.12.2024

# Age Profile



- 24% of the sonographer workforce is aged 51-60,
- The implications for the workforce in the coming years is potentially huge.

<https://www.belfasttelegraph.co.uk/news/world-news/oap-webcam-couple-are-youtube-stars/28658465.html>

<https://www.bmus.org/mediacentre/news/bmus-response-to-nhs-10-year-plan/>

# Current position.....?



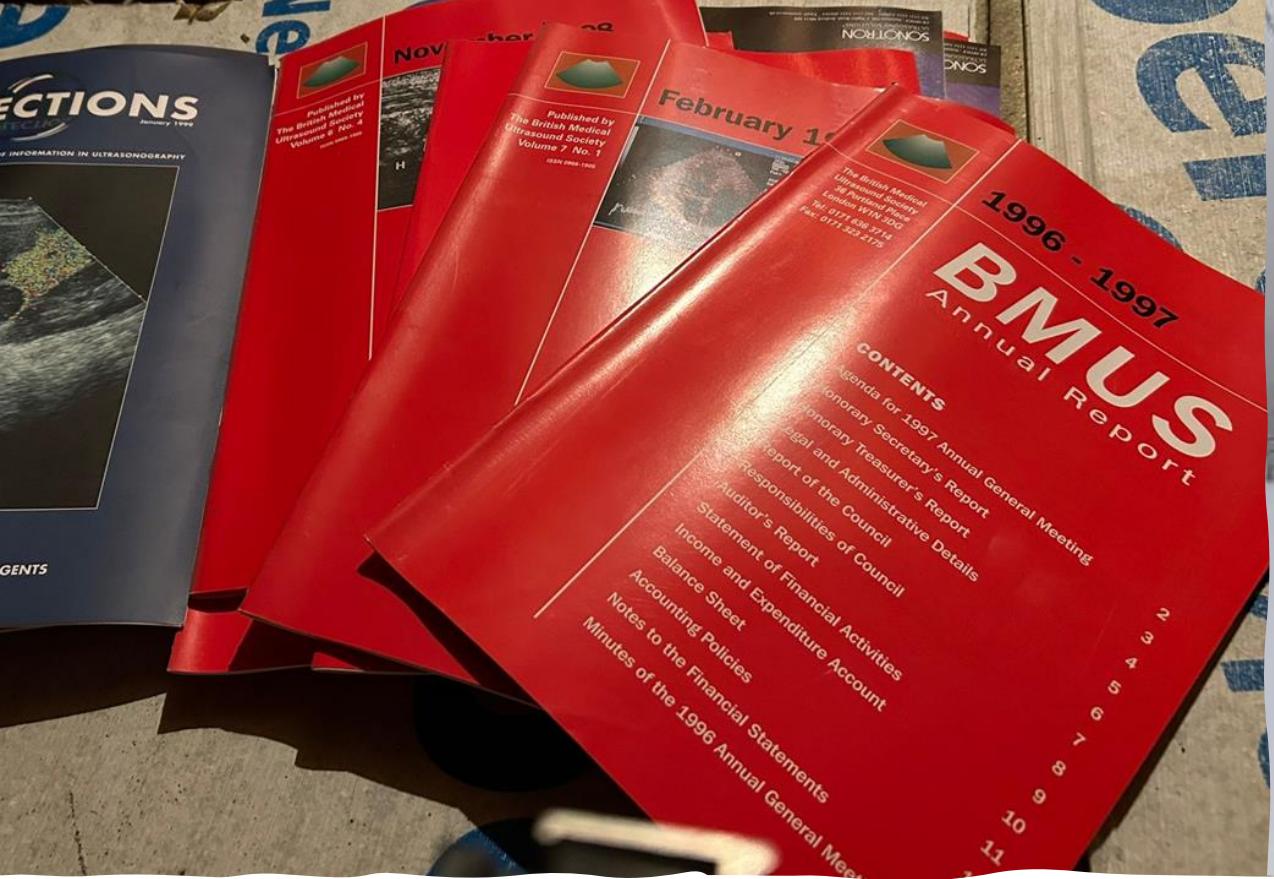
## **Sonographer input needed for the SoR Ultrasound Census**

Help shape the future of sonographer regulation by sharing your insights in the SoR 2024 Ultrasound Census

Published: 02 December 2024

Ultrasound

<https://www.sor.org/news/ultrasound/sonographer-input-needed-for-the-sor-ultrasound-ce>



# Back in the day.....

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# 1995.....2000's

Radiology U/S

Radiologist (s)

Senior I Radiographer

Basic Grade Trainee



Bates, J. A., Conlon, R. M. & Irving, H. C. (1994) An audit of the role of the sonographer in non-obstetric ultrasound. *Clinical Radiology*, 49(9), 617-620.

# The Previous Structure – AfC ~2004

## Radiology U/S

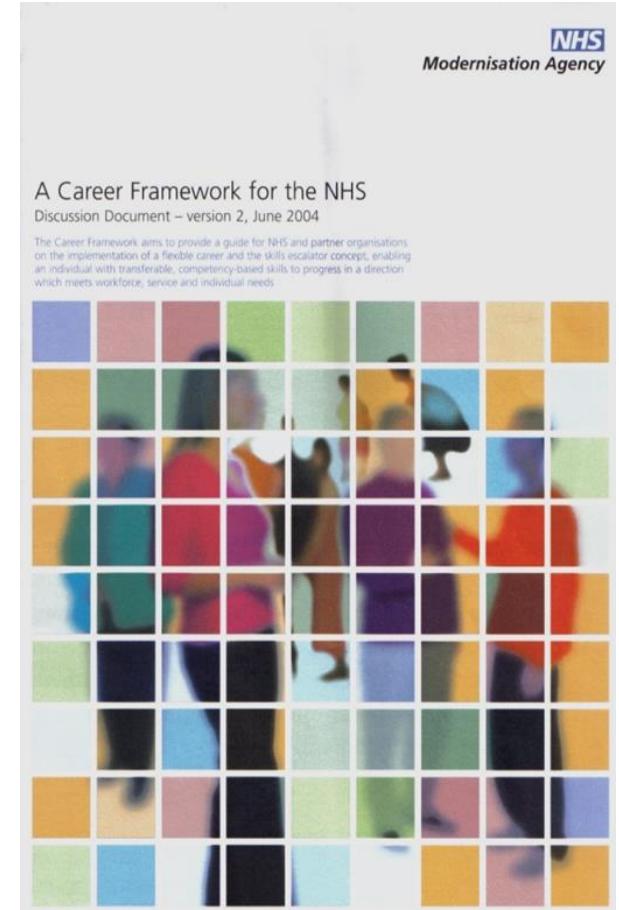
Radiologist (s)

Advanced Practitioners

Practitioner / Trainee



Leslie, A., Lockyer, H. & Virjee, J. P. (2000) Who should be performing routine abdominal ultrasound? A prospective double-blind study comparing the accuracy of radiologist and radiographer. *Clinical Radiology*, 55(8), 606-609.



# Sonography Profession

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Guidelines For  
Professional  
Working  
Standards

Ultrasound  
Practice

United Kingdom Association of Sonographers  
October 2008

# Changing Landscape

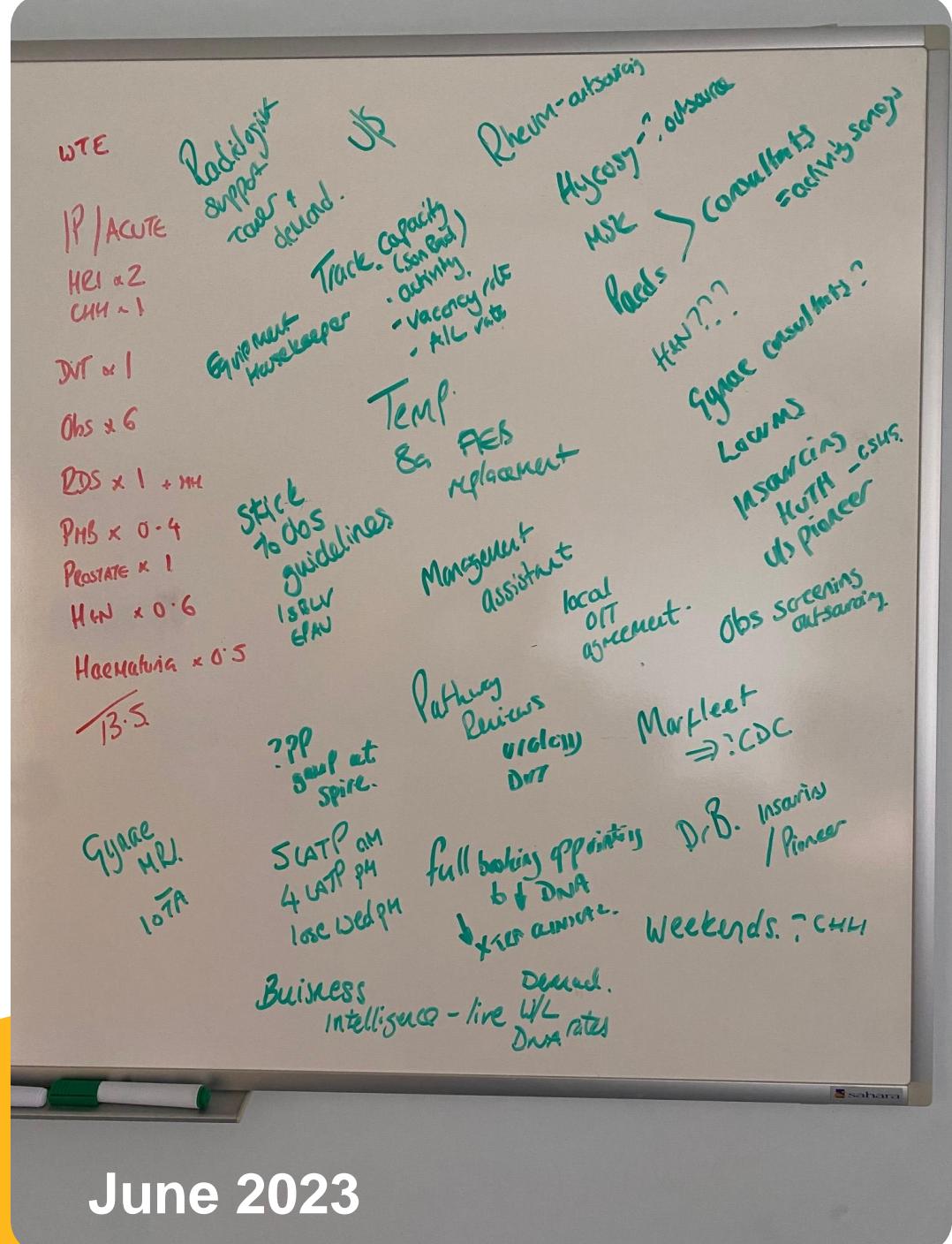
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- GP Fund Holding (~ 2001)
- Independent Sector Providers (~ 2010)
- Changes to NHS Careers funding (2012)
- Technology developments – 3D/4D leading to social scanning



# What options are there to cope?

- Ration services?
- Out-source?
- Radiologist input?
- POCUS
- Restructure?
- Recruit?
- Train more?



# Train and Recruit

- Developments, including direct access to Postgraduate ultrasound and the development of Undergraduate ultrasound courses (including apprenticeships), are revolutionising the pool from which sonographers can be recruited.



<https://www.bmus.org/mediacentre/news/bmus-response-to-nhs-10-year-plan/>

# Train and Recruit

- This apprenticeship is designed to teach the skills, knowledge and behaviours needed to develop clinical practice in ultrasound and diagnostic imaging.

Study

Research

Alumni

Study / Higher and degree apprenticeships / Health an

# Sonographer

Level 6 degree apprenticeship  
BSc (Hons) Medical Ultrasound

<https://www.shu.ac.uk/study-here/higher-and-degree-apprenticeships/health-and-social-care/sonographer>

# Train and Recruit



UNIVERSITY OF LEEDS

Students ▾

[Course Search](#)

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[Home](#)   [Undergraduate courses](#)   [Masters courses](#)

## **Medical Ultrasound (Sonography) BSc**

Comprehensive training in both technical knowledge and professional skills, and gain an understanding of medical ultrasound's scientific, technical and professional concepts

<https://courses.leeds.ac.uk/j755/medical-ultrasound-sonography-bsc>

# Train and Recruit

- Whilst these routes of education make recruitment availability broader, proficiency is still not quick to achieve; taking a minimum of 2-3 years, followed by a period of preceptorship.
- BSc Sonography is not eligible for bursary and expenses which the comparable BSc radiography students are

<https://www.bmus.org/mediacentre/news/bmus-response-to-nhs-10-year-plan/>

### Entry routes

All entry routes should be CASE accredited, or equivalent, from academic level 6\*

### Professional title

(SfH)

### Career Progression

### Career level

Se  
(\*sl

Expert practitioner with experience & ideally doctoral level qualification or equivalent

*\*\*registration upon qualification from approved course if feasible*

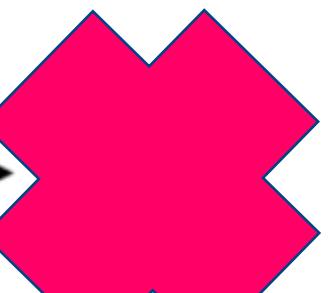
Practitioner with relevant Master's level equivalent ultrasound/ sonography qualification \*\*

Existing ~~post graduate~~ routes to be maintained

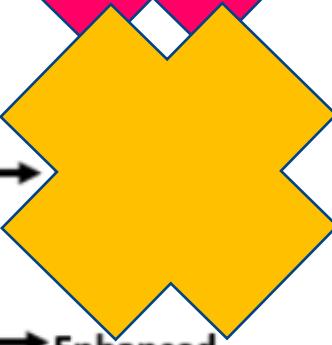
*\*\*registration upon qualification from approved course if feasible*

Relevant BSc (Hons) in sonography / medical ultrasound \*\*

Relevant postgraduate certificate, diploma or master's in sonography / medical ultrasound



**Enhanced Practice Sonographer**



**Sonographer**

### **Consultant Practitioners**

Progression: Master's degree. Working towards relevant doctorate or equivalent

### **Advanced Practitioners**

Progression: Working to develop skills to match Advanced Clinical Practice Framework Postgraduate, M-level education

### **Enhanced Practitioners**

Progression: Further education and training which meets CASE academic level 7 standards or equivalent

Structured preceptorship and skills development under capability framework essential

### **Practitioners**

Progression:

- Apprenticeship
- Accredited level 6 study

8

7

6

5

# FASP

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**NHS FASP** recommends that any person undertaking an ultrasound scan on pregnant women, for the purpose of screening and diagnosis of a related condition should hold, as a minimum, one of the following:

- **Certificate/Diploma in Medical Ultrasound** of the College of Radiographers (CoR) with evidence of appropriate CPD
- **Post Graduate** Certificate in Medical Ultrasound approved and validated by a Higher Institute of education and accredited by the Consortium for Sonographic Education (CASE or equivalent).
- Royal College of Obstetricians and Gynaecologists (RCOG) Royal College of Radiologists (RCR) Diploma in Obstetric Ultrasound or the Advanced Skills Training Module.





## CASE Programme Equivalence

*Issued April 2023*

It is not within the remit of CASE to comment on 'equivalence' of non-CASE accredited programmes or individual practitioner's qualifications. As ultrasound is not a registered profession in the UK, the ultimate responsibility for assessing the equivalence of an award held by any employee, and ensuring that the knowledge, skills, and competence of sonographers are appropriate for UK practice, resides with the employer. This applies to **any** sonographer with or without a CASE accredited award and regardless of the country of qualification

# Non-CASE Recruitment

This guidance document aims to assist ultrasound teams and recruiters in the recruitment and preceptorship of sonographers without a CASE accredited award by referring to relevant information.

It does not replace good recruitment and selection processes currently in place locally

[Guidance Pages | BMUS](#)



## **Recruitment of sonographers without a CASE accredited award: Guidance for employers**

Society of Radiographers and British Medical Ultrasound Society

First edition

October 2024

ISBN:

# International Recruitment

**Community Diagnostic Centres  
Sonographer International Recruitment  
steering group**



# International Recruitment



**Community Diagnostic Centres  
Sonographer International Recruitment  
steering group**

# Sonographer international recruitment plan

The Sonographer International recruitment plan adopts the process from 23/24, takes the learning from this recruitment and the considerations put forward by members of this steering group. Skilled candidates with proficiency in scanning as per mapped equivalence to UK competencies will be appointed into funded posts with a 3-month funding provided for bridge training as well as all relocation costs.

Trusts will be asked to sign up to a permanent position with a minimum 2-year contract and 5-year visa. The core streams of work and objectives are as follows:

**Objective 1: Develop and implement a conversion program for international candidates that enables registration and assures equivalence**

**Objective 2: Develop international attraction strategy and supply pipeline**

**Objective 3: Recruit up to 42 international sonographers substantively by March 2025**



# Sonographer international recruitment plan

## Project Plan

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**Objective 1:** This scheme aims to provide a registered, CASE accredited route for international sonographers. The scheme will engage with training academies to deliver a CASE equivalence clinical assessment and competency training program that meets the requisite standards.

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**Objective 2 and 3:** To enable the supply an attraction strategy that profiles the candidates' qualifications and opens the international supply to the UK with a clinical sonographer validation and assessment process.

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The core countries include Canada, Australia, New Zealand, South Africa and Ireland. Trusts will commit ensuring candidates are appointed into post with assurance for a 2-year contract as a minimum.

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# Retention



- The goal of this is to establish a work environment that encourages employee satisfaction, engagement, and loyalty,

# First Post Retention

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## Why apply to be endorsed?

- The scheme has been designed to help departmental managers and ultrasound leads support, develop and retain their valuable workforce

<https://www.bmus.org/preceptorship-endorsement-scheme/>



**BMUS Preceptorship  
Endorsement Scheme**

Produced by the British Medical Ultrasound Society

# Preceptorship

## **Suggested Scope of Practice during preceptorship programme:**

- Obstetrics:**

1st and 2nd trimester FASP screening performed independently, subject to FASP requirements and acquisition of DQASS number.

A range of obstetric examinations which includes early pregnancy and third trimester cases and lower risk multiple pregnancies.

- Gynaecology:**

GP and hospital cases, as competencies develop

- General medical:**

Abdominal and pelvic scans for GP and hospital cases, as competencies develop

- Vascular**

DVT

Liver Doppler

Other examinations might be performed in a supervised capacity. Areas of practice could develop over time, with experience, further learning, competency 'sign-off' and with clear schemes of work in place

## **Radiology**

## **Department** **ULTRASOUND**

## **Sonographer Preceptorship** **Package for the Newly** **Qualified Practitioner**

1

Remarkable people.  
Extraordinary place.

[www.hull.nhs.uk](http://www.hull.nhs.uk) | [facebook.com/hullhospitals](https://facebook.com/hullhospitals) | [twitter.com/hullhospitals](https://twitter.com/hullhospitals)

# Annex 21 of NHS Terms and Conditions

For trainees where periods of training last for between one and four years, pay will be adjusted as follows:

- up to 12 months prior to completion of training: 75 % of the pay band maximum of the fully qualified rate;
- more than one but less than two years prior to completion of training: 70 % of the pay band maximum of the qualified rate;
- more than two but less than three years prior to completion of training: 65 % of the pay band maximum for the qualified rate;

**Annex 21 - Arrangements  
for pay and banding of  
trainees**

## Appendix A

### Outline Career and Progression Framework – Final V4. Updated March 2023

Entry routes

All entry routes should be CASE accredited, or equivalent, from academic level 6\*

Professional title

(SfH)

Career Progression

Career level

Expert practitioner with experience & ideally doctoral level qualification or equivalent

Consultant Sonographer

**Consultant Practitioners**

8

\*\*registration upon qualification from approved course if feasible

Practitioner with relevant Master's level equivalent ultrasound/ sonography qualification \*\*

Advanced Practice Sonographer

**Advanced Practitioners**

7

Existing post graduate routes to be maintained

Enhanced Practice Sonographer

**Enhanced Practitioners**

6

\*\*registration upon qualification from approved course if feasible

Relevant BSc (Hons) in sonography / medical ultrasound \*\*

Sonographer

Progression: Further education and training which meets CASE academic level 7 standards or equivalent  
Structured preceptorship and skills development under capability framework essential

**Practitioners**

5

Relevant postgraduate certificate, diploma or master's in sonography / medical ultrasound

Assistant Sonographer

Progression:  
• Apprenticeship  
• Accredited level 6 study

**Assistant Practitioners**

4

\*\*\*May not be CASE accredited

Relevant qualification or competency 'sign off' in specific area of practice \*\*\*

# Career Development

This document outlines the training and assessment criteria required for practitioners in radiology when undertaking new skills outside of their core learning and development programme.

Upon completion of training, competency assessment is required and will take the form of a Clinical Competency Assessment tool - Radiology Direct Observation of Procedural Skills (Rad-DOPS).

## Radiology

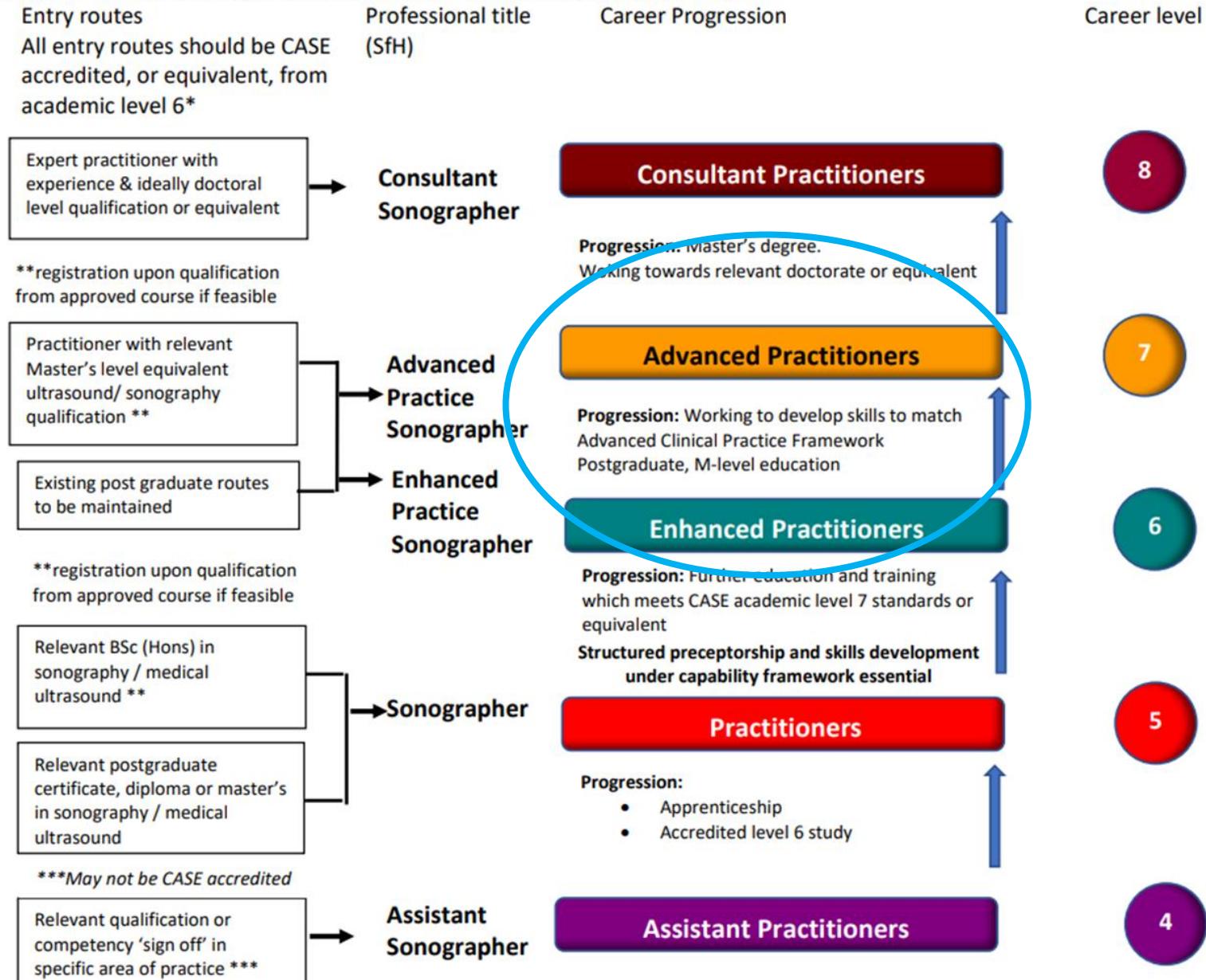
## Department

## ULTRASOUND

**Training and Assessment  
Programme for Additional  
Clinical &/or Interventional  
Skills**

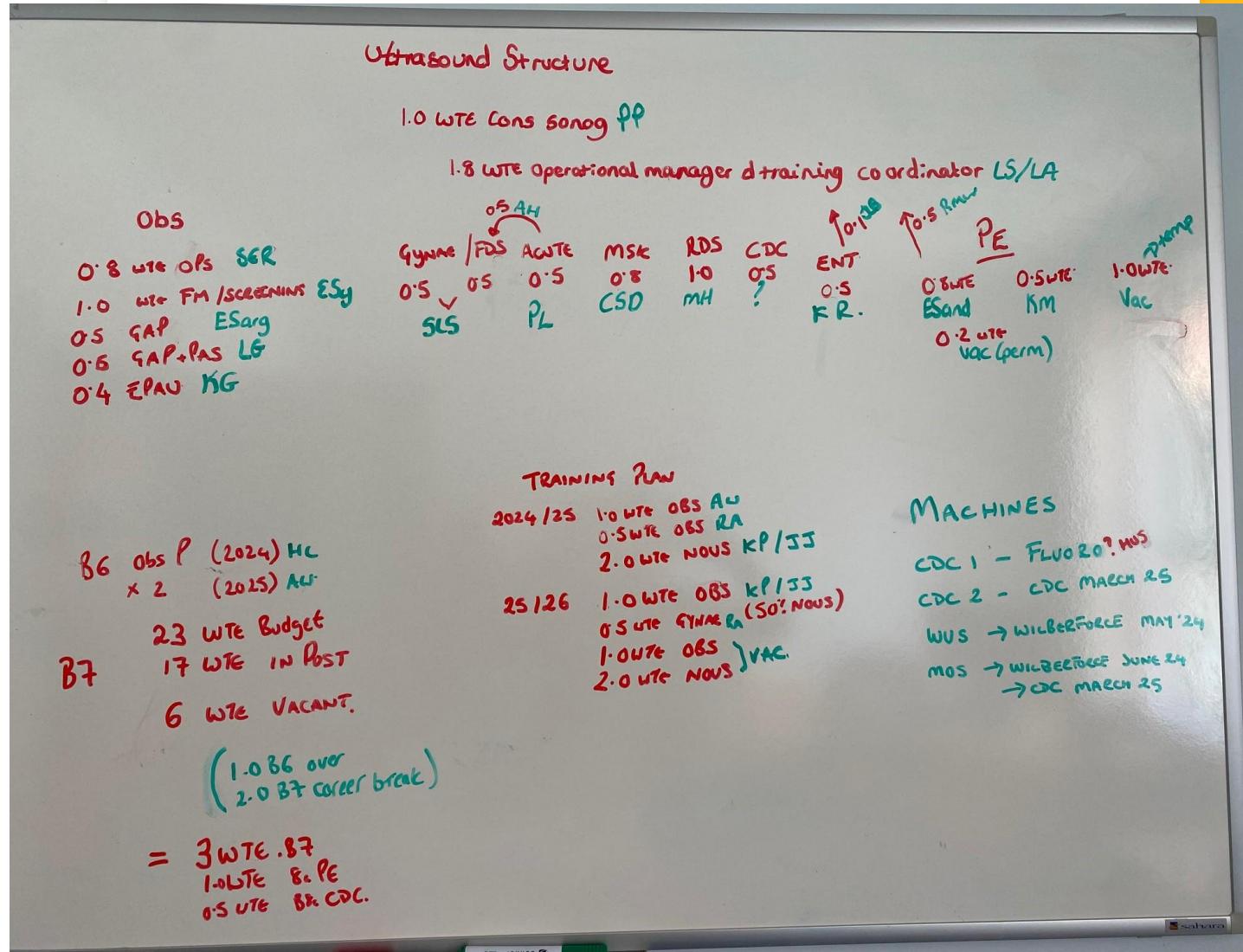
## Appendix A

### Outline Career and Progression Framework – Final V4. Updated March 2023



# Structure

Identify what structure needs to look like for your service, not just what individuals want



Consultant Sonographer  
1.0 WTE B8b

Head of department  
1.0 WTE B8a

Management assistant  
1.0 WTE B4

Equipment and data  
management  
1.0 WTE B4

CS MSK  
1.0 WTE B8a

CS elective lead  
1.0 WTE B8a

CS H&N  
0.5 WTE B8a

CS RDS  
1.0 WTE

CS Acute lead  
1.0 WTE B8a

CS Elective gynae &  
gynae oncology  
1.0 WTE B8a

CS Paediatrics  
0.5 WTE B8a

**Totals:**  
**1.0 WTE B8b**  
**9.5.0 WTE B8a**  
**2.0 WTE B4**  
**17 WTE B7**  
**2.0 WTE B6**  
**3.0 WTE B5**

Training and staff  
development

Undergrad, Postgrad,  
reg, regional relations  
1.5 WTE

Preceptorship and  
staff development  
1.5 WTE

# Funding

Business plan included review of cost per session for sonographers, radiologists, and other clinicians in team.

Review examinations / tariffs / contracts



# Engagement



Engage with HR, finance, clinical director, care group managers



SWOT analysis of structure undertaken including pro's of role extension for patient pathways





## Implemented pathways

- Rapid diagnostic service
- Prostate cancer pathway

# Pathway 1 : Non-Site Specific Symptom Pathway



Non-specific symptoms pathways are for patients who do not fit into a single 'urgent cancer' referral pathway, but who are at risk of cancer.



'Non-specific' symptoms include unexplained weight loss, fatigue, abdominal pain or nausea; and/or a GP 'gut feeling' about cancer.



Purpose is to achieve earlier and faster cancer diagnosis

# RDS - NSS / Vague symptoms

Low  
suspicion

- CXR & USS

Imaging, PMH, presentation scenario, & core filter tests reviewed by sonographer / radiologist.

High  
suspicion

- CT TAP

Outcome added

Onward referral / advice to GP

# Outcomes

Outcome	Action for referrer
1	Suspected/confirmed cancer
2	Significant non-cancerous finding
3	Discrepant findings / incomplete investigations
4	NAD – discharge with safety netting

# RDS Outcomes

Ultrasound and CXR performed by sonographers

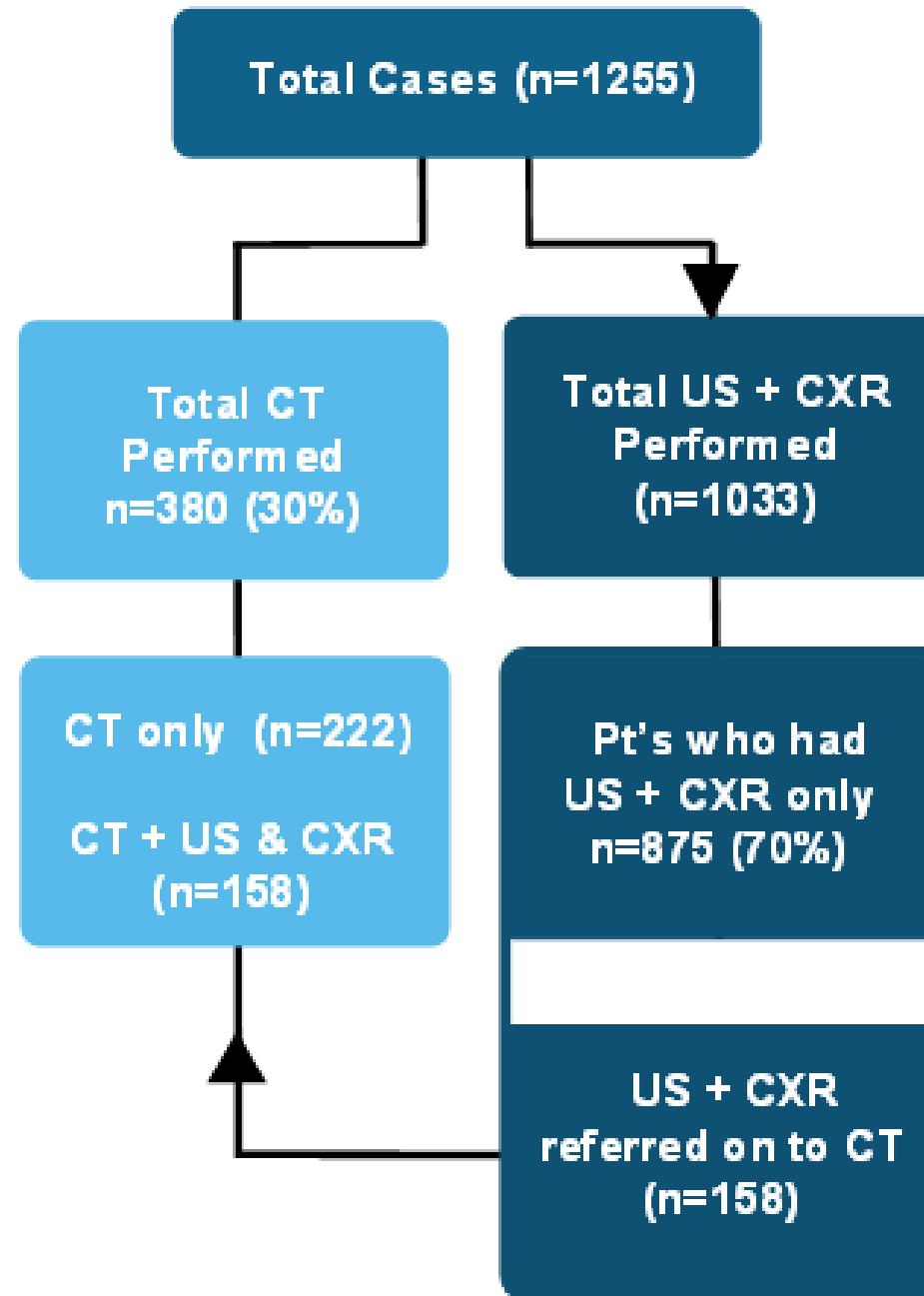
CXR reported by radiographer (48 hrs)

Ultrasound reported by sonographer

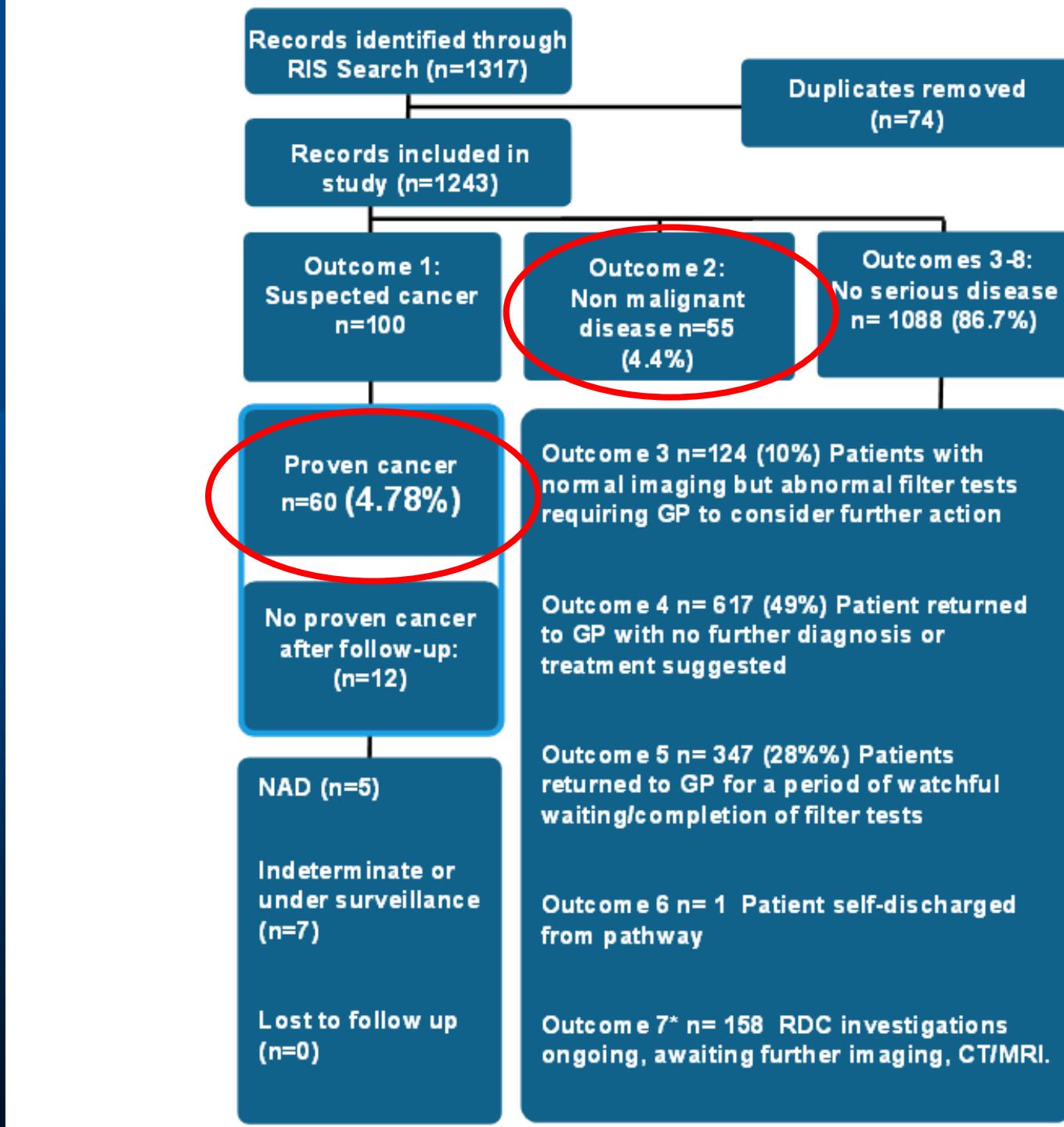
Both reviewed and outcome added by sonographer

CT TAP Reported and outcome by radiologist

# HUTH RDS Service



# RDS Outcomes



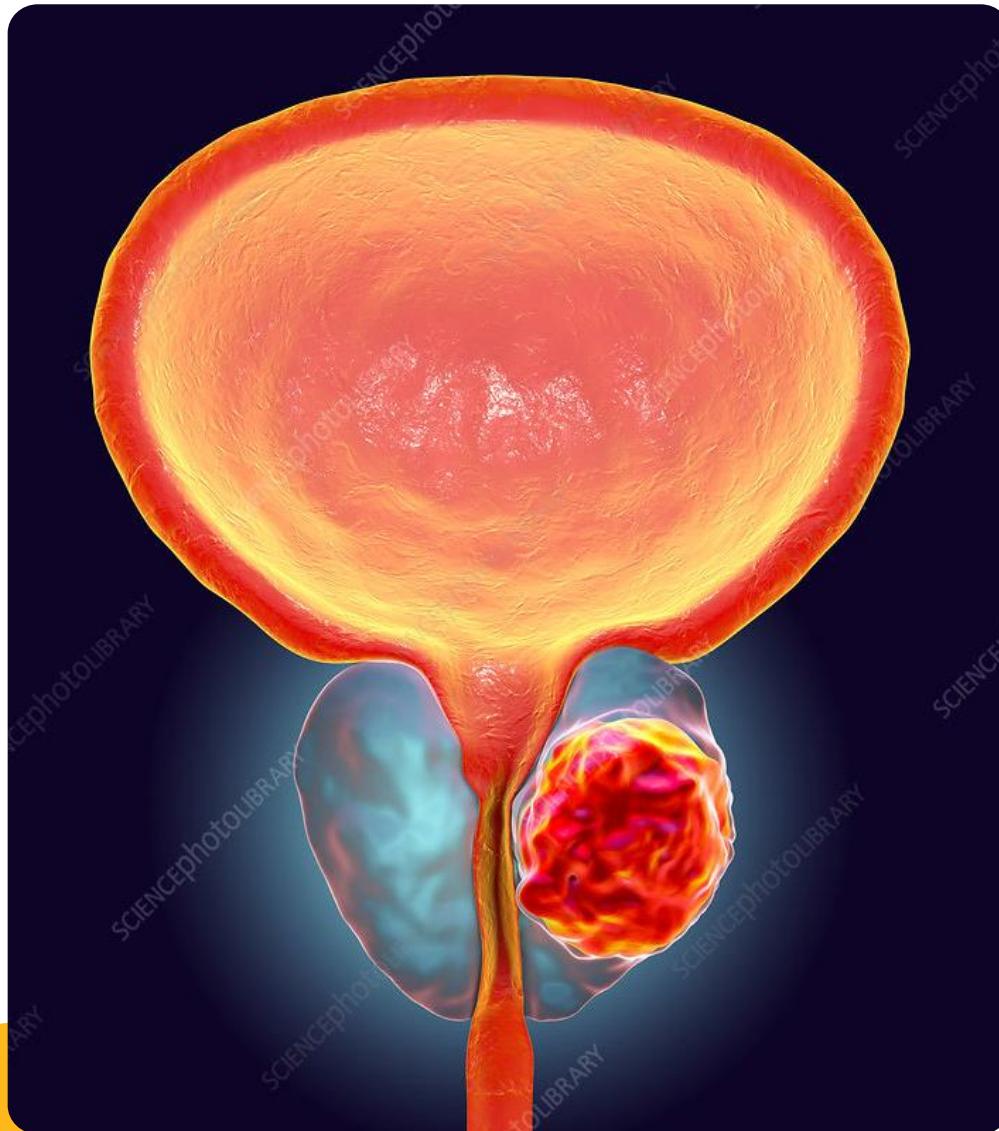


# Improved Pathway

**HUTH RDS performance Sept 23 – Sept 24:**

**Diagnosis or cancer ruled out within 28 days of referral**

**96.8% (75%) either reassured or given a diagnosis within 28 days**



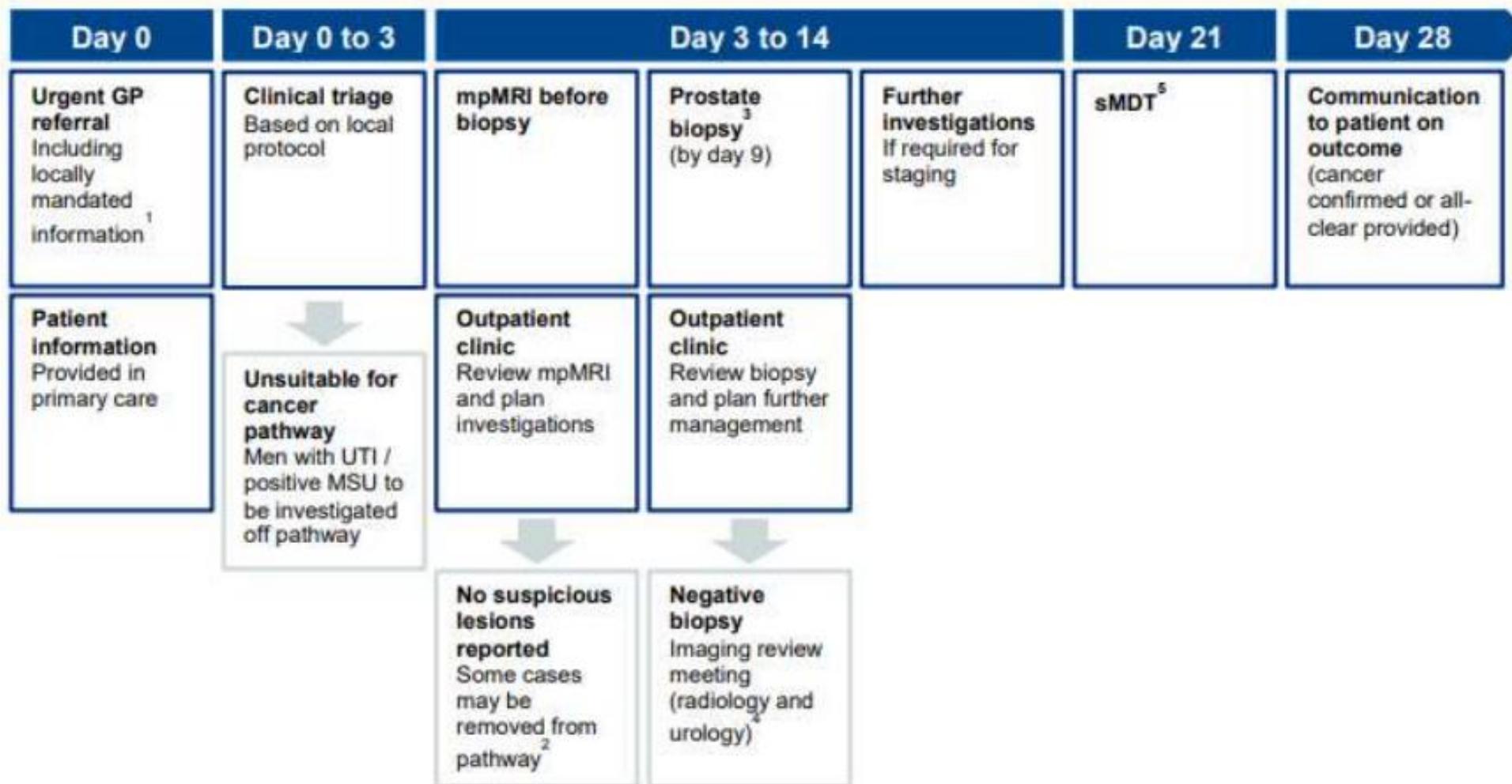
## Pathway 2: Prostate Cancer

1 : 8 men

1 : 4 black men

52,000 new case per annum

78% men survive prostate  
cancer for 10 years or more



Maximum target times provided

This is a straight to test pathway using mpMRI. The 21 day pathway should be used when an immediate MRI is not required or is contraindicated.

# Sonographer role in PCa pathway

MRI Results  
and  
counselling

Consent and  
perform  
biopsy

Monitor result  
return and  
review

Add outcome;  
inform pt /  
inform urology

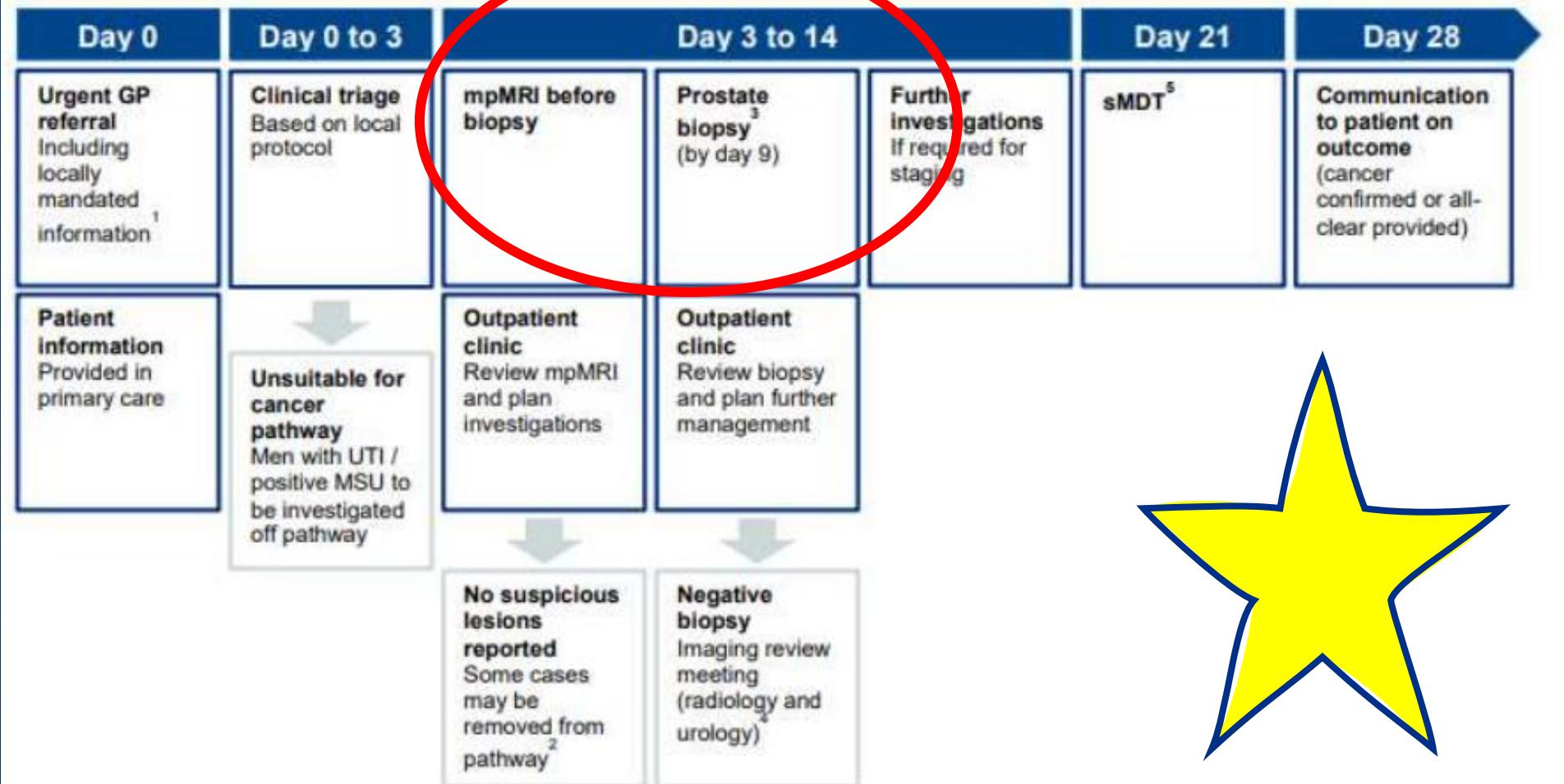
# Prostate Outcomes

Outcome Code	Description	Histology	Action
<b>RPP1</b> <b>Outcome 1</b>	Prostate Cancer	Gleason 3+3 and above	MDT discussion or clinical review
<b>RPP 2</b> <b>Outcome 2</b>	Clinically significant Benign disease	High Grade PIN, ASAP	Not for MDT but follow up in urology.  <b>Sonographer contacts patient with results.</b> Contact recorded and 2ww clock stopped
<b>RPP 3</b> <b>Outcome 3</b>	Disparity between MRI and biopsy. ie PIRADS 4 and 5 on MRI	High Grade PIN, ASAP or benign disease	MDT Discussion required
<b>RPP 4</b> <b>Outcome 4</b>	Clinically insignificant Benign disease. (Includes low grade PIN, acute inflammation and prostatitis)		Not for MDT. <b>Sonographer contacts patient with results.</b> Contact recorded and 2ww clock stopped.

# 28-Day timed pathway

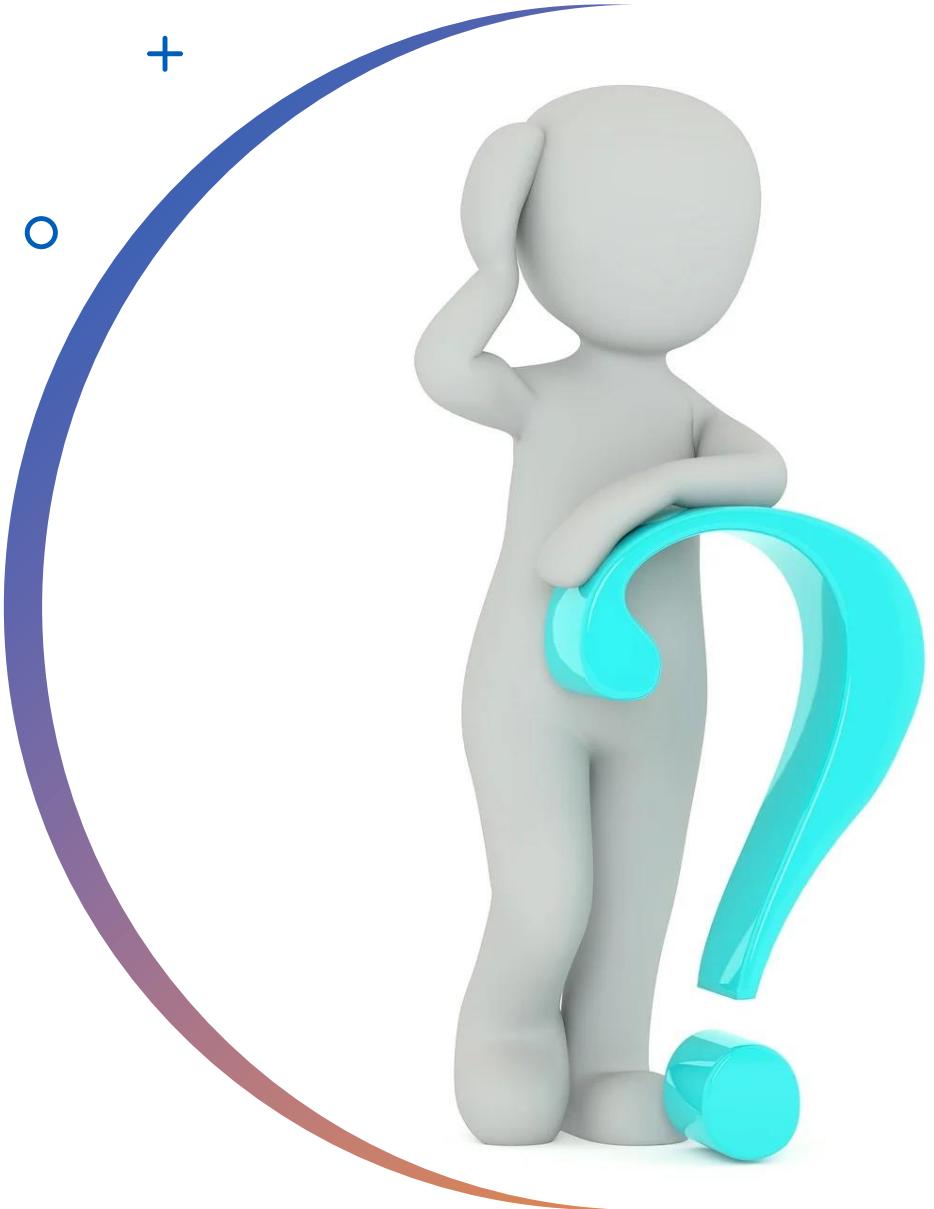
- Average wait from referral to clinic = 7 days
- Average wait to MRI = 3 days.
- Average wait to MRI to biopsy = 6 days
- Average wait from biopsy to outcome = 14 days
  
- Average wait for whole pathway = 30 days

## 28 day pathway



Maximum target times provided

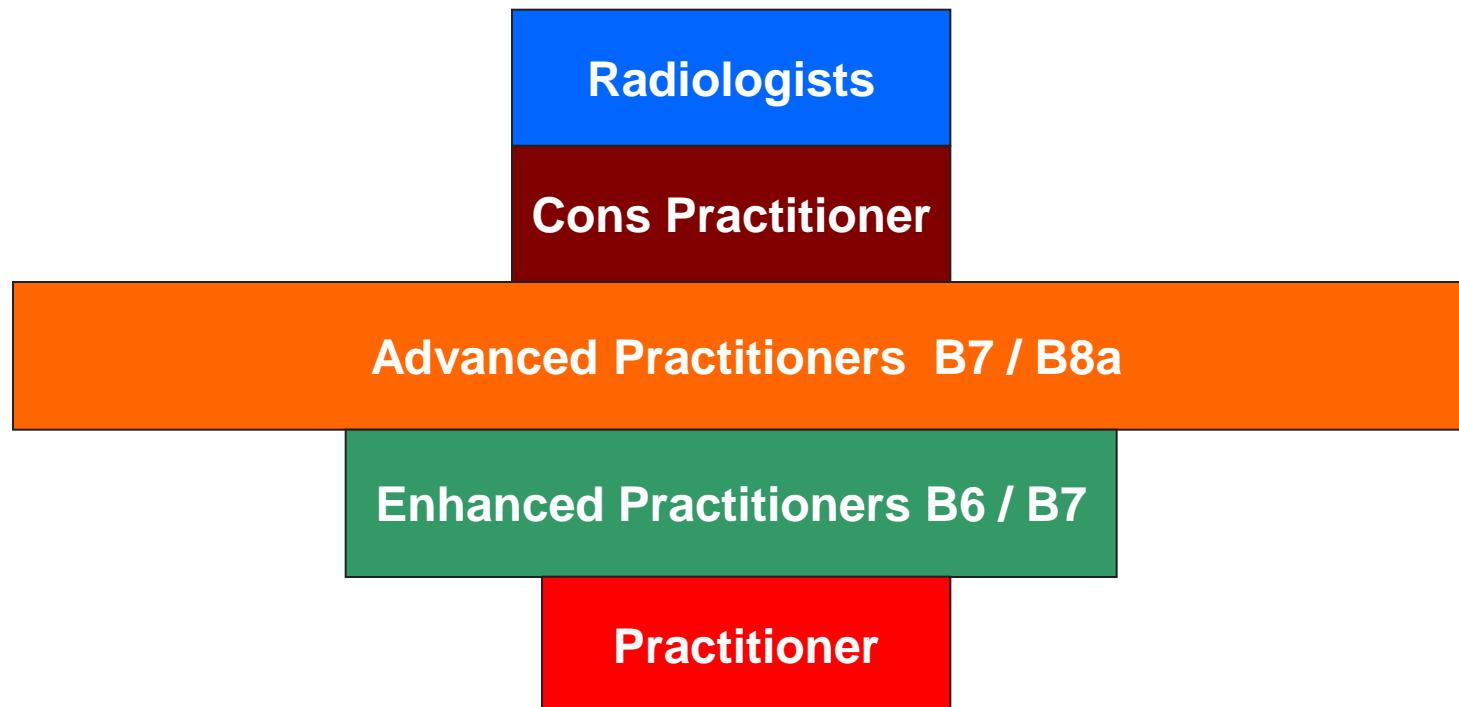
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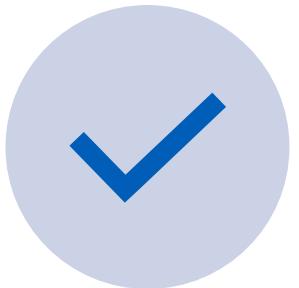
# Why?

- Performance
- Job satisfaction
- Fulfilment of the 4-pillars of advanced / consultant practice
- **Why not?**

# Transforming the Career Structure



# Summary



Transforming the workforce has a positive impact on patient pathways



Improves recruitment and retention



Increased job satisfaction & team moral



Everyone is a winner!

**There is no I in TEAM!**

Thanks for your attention

Any questions?

