

SCOTTISH MEDICAL PHYSICS AND CLINICAL ENGINEERING TRAINING SCHEME



**A day in the life of a Clinical Scientist in...
Diagnostic Radiology and Radiation Protection**

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Overview



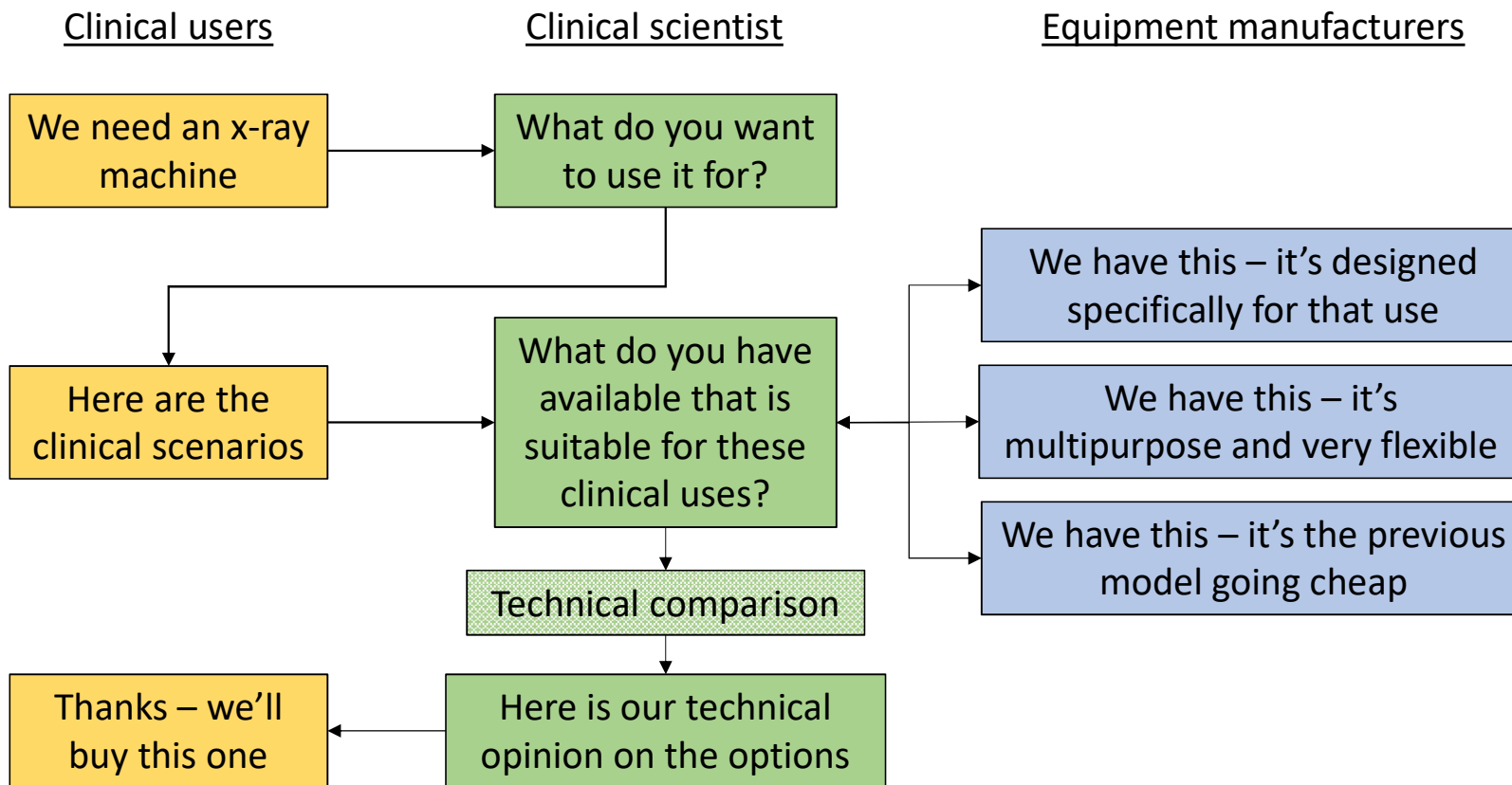
- What might a clinical scientist in Diagnostic Radiology do on any given day?
 - Concerning X-ray equipment
 - Concerning optimisation
 - Concerning patient dose
- What might a clinical scientist in Radiation Protection do on any given day?
 - Installation design
 - Installation testing
 - Audit of arrangements
 - Liaise with inspectorates
- What might both have to do on any given day?
 - Provide and undertake training
 - Teaching
 - Maintain certifications
 - Continuous professional development
 - Research and innovation

The role of a clinical scientist in...

Diagnostic Radiology



- X-ray equipment – technical expertise during procurement

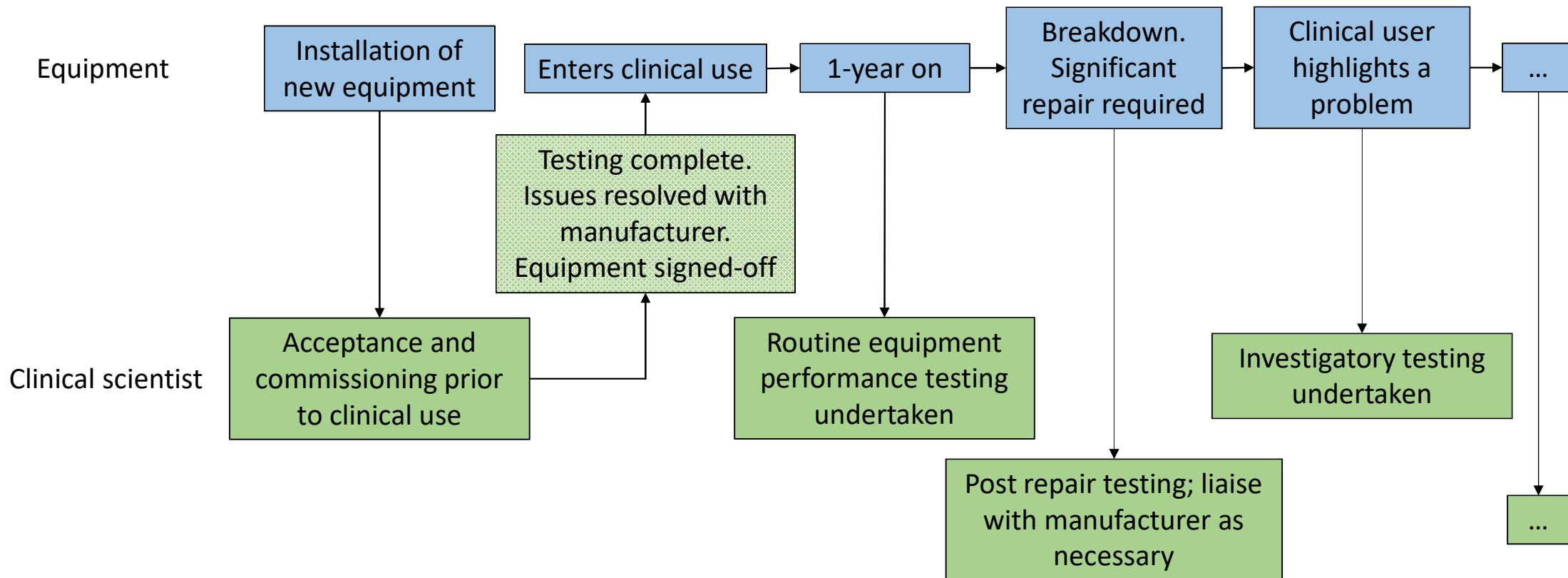


The role of a clinical scientist in...

Diagnostic Radiology



- X-ray equipment – testing

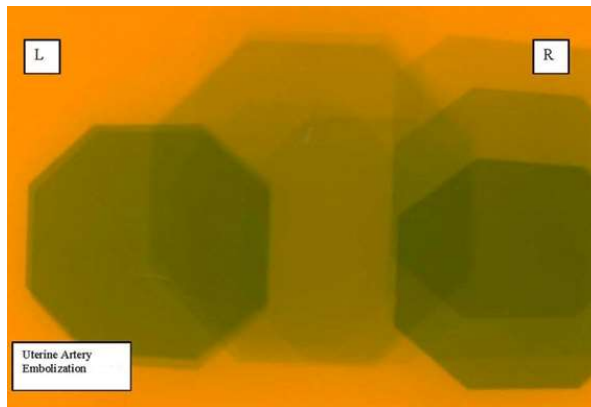
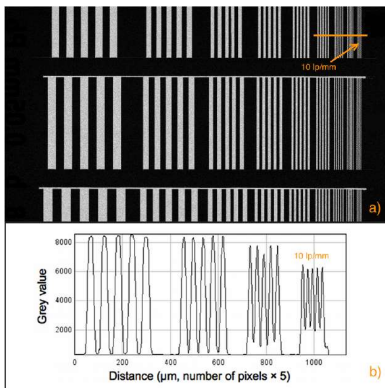
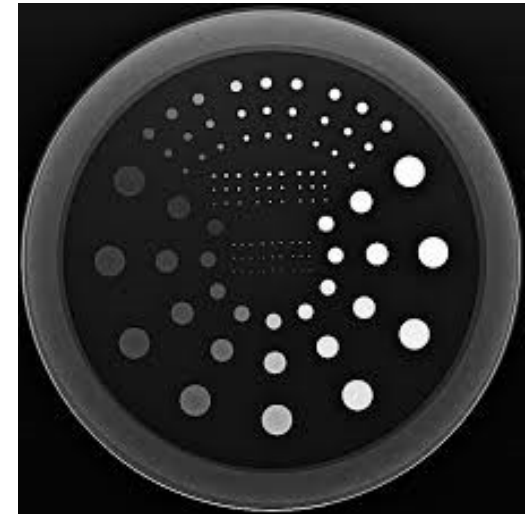


The role of a clinical scientist in...

Diagnostic Radiology



- X-ray equipment – testing

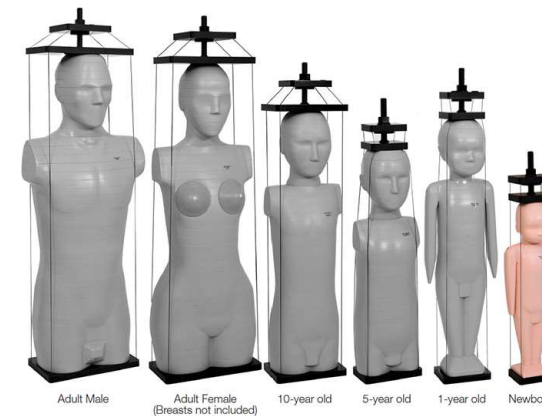
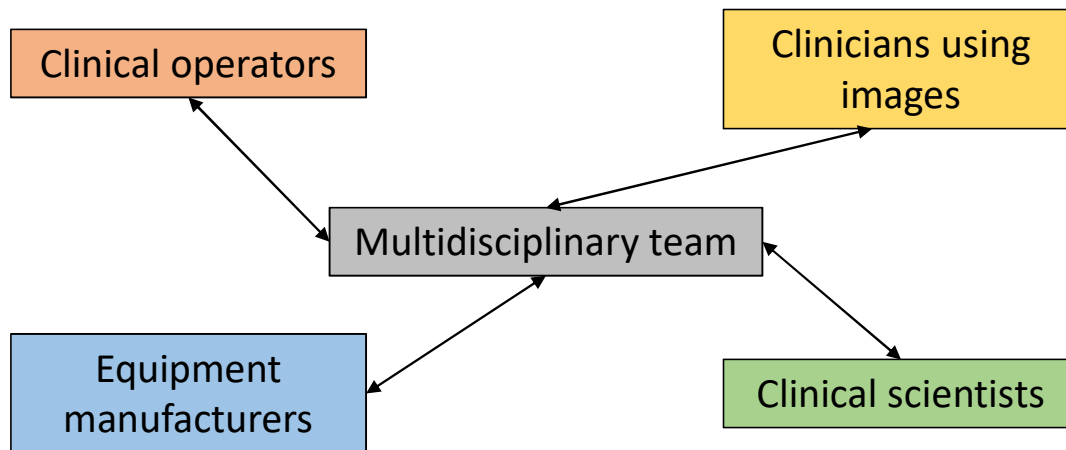


The role of a clinical scientist in...

Diagnostic Radiology



- Concerning optimisation – our images aren't good enough
- Concerning patient dose – our median patient doses are higher than other centres

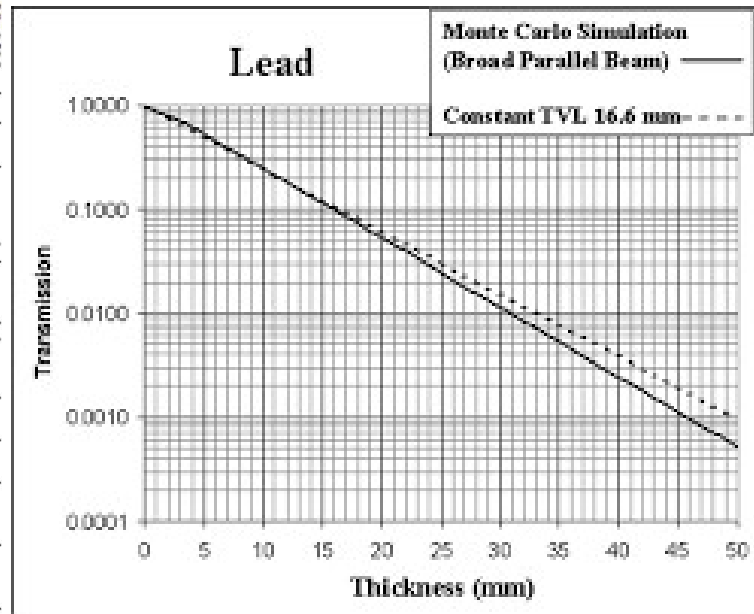
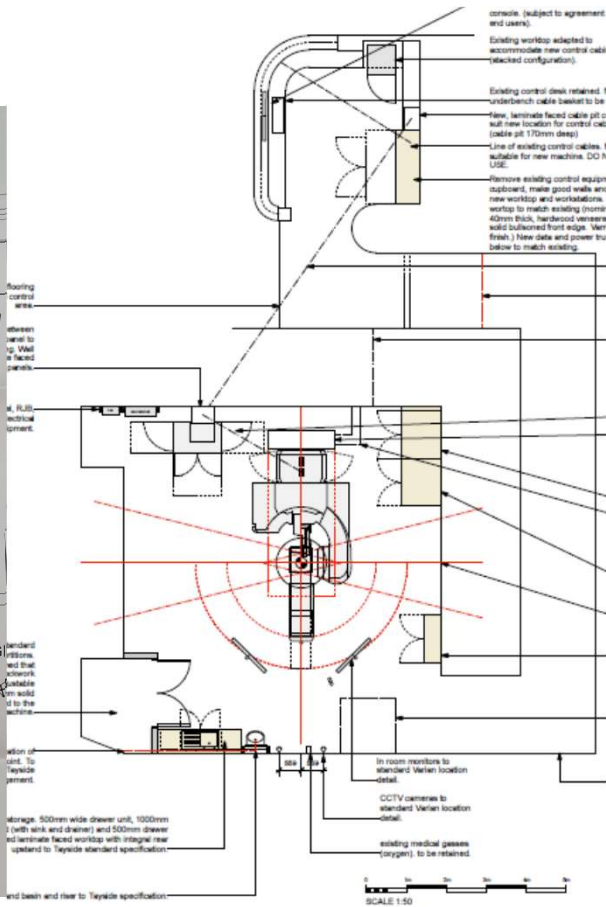
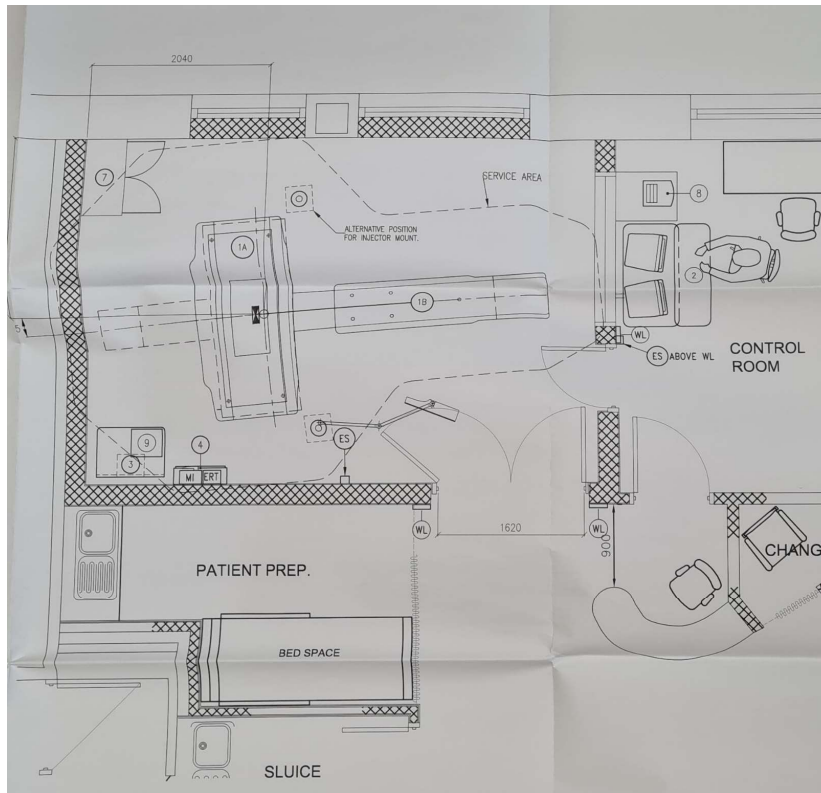


The role of a clinical scientist in...

Radiation Protection



• Installation design



The role of a clinical scientist in...

Radiation Protection

- Installation testing

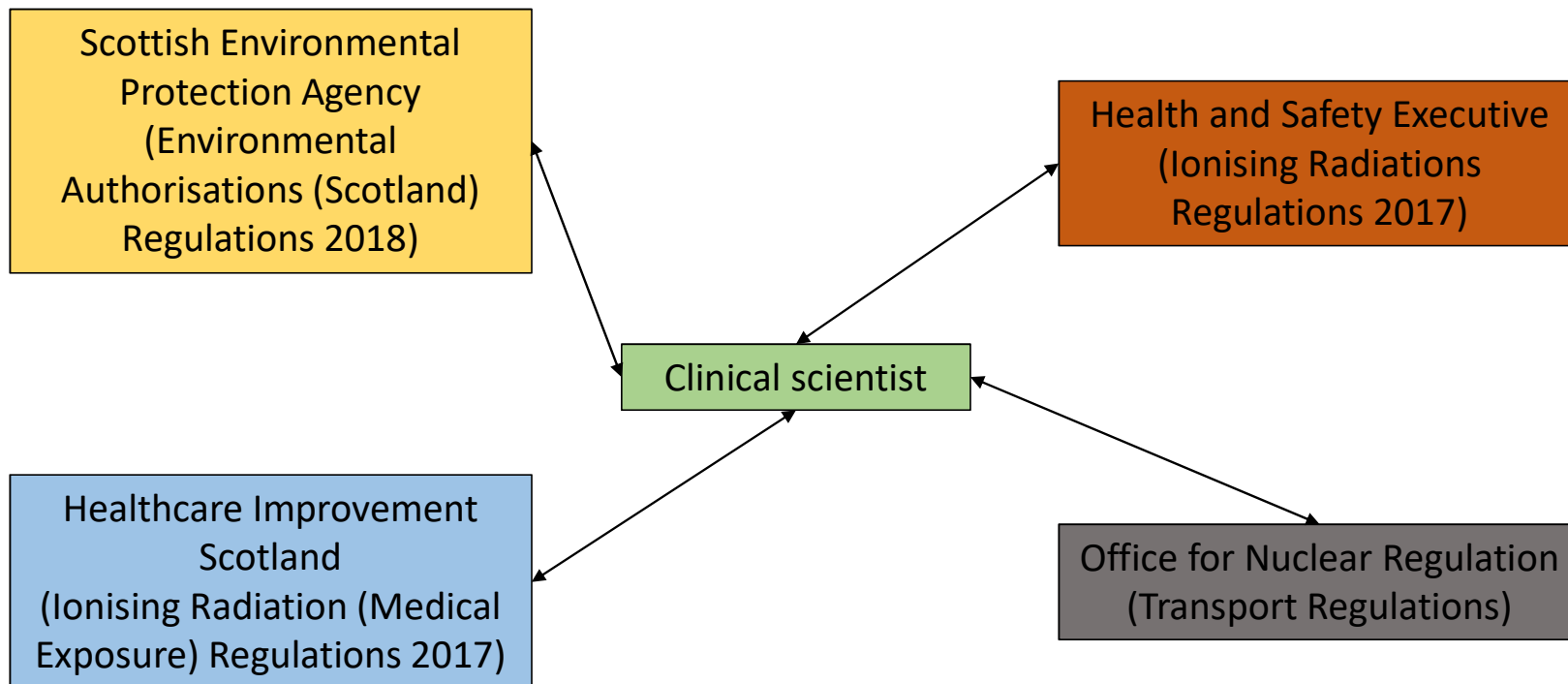


The role of a clinical scientist in...

Radiation Protection



- Liaise with inspectorates

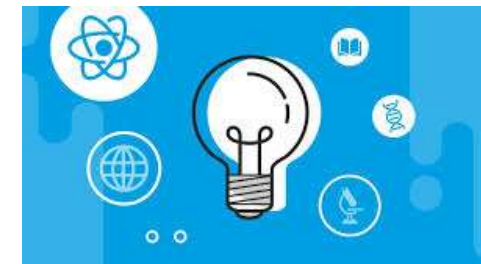


The role of a clinical scientist in...

Diagnostic Radiology and Radiation Protection



- Training (providing and receiving)
 - On new technologies and developments
 - On the radiation protection implications of new examinations and procedures
- Teaching
 - For Universities and professional bodies
- Maintain certifications
 - Radiation Protection Adviser
 - Radioactive Waste Adviser
 - Medical Physics Expert
 - Laser Protection Adviser
 - All required by law; all require recertification on a 5 year cycle
- Continuous professional development
 - All HCPC registrants must maintain CPD
- Research and innovation
 - Encouraged, where there is a clear benefit to the NHS



The role of a clinical scientist in...

Diagnostic Radiology and Radiation Protection



- **Additional information;**

[https://medphys.dundee.ac.uk/~sjgandy/STS/Scottish Medical Physics and Clinical Engineering Training Scheme/Open Day 2021/](https://medphys.dundee.ac.uk/~sjgandy/STS/Scottish_Medical_Physics_and_Clinical_Engineering_Training_Scheme/Open_Day_2021/)

- **Questions?**

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