

Supporting Radiographers in Research

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The Royal Marsden



Research Centre of Excellence

- *NIHR Funding Grants*
- *BRC Funding*
- *RMH Charity Funding*

Radiology Work

- *Over 800 trial involve imaging across 2 sites*
- *Dedicated MRI Physics department*

Funded 'AI Hub

- *Run by radiology and physics*
- *Fully separate from main department*



Research in Radiography – The Reality

- 1 MRI Research Superintendent (not full time)
- 2 MRI Research Radiographers (not full time)
- NO dedicated research staff to support other modalities
- Research staff also have clinical duties
- NO dedicated research or development time for staff

However – within our department in the last few years

- 3 radiographers on SoR FoRRM programme (2 previous, 1 current)
- 2 radiographers gained pre-doctorate fellowship grants
- 1 radiographer undertaking professional doctorate
- Multiple papers published, poster presentations, lectures



Supporting research within in your department

- What is research
- How can it fit into your department
- Getting support
- What can be offered
- Getting support outside your department
- Reality and Expectations



What is research



Research is a wide-reaching term.

Ability to learn new information or new understanding of an issue

Research
Audit
Service Evaluation



	Research	Audit	Service evaluation
Purpose	Generalisable new knowledge	Inform delivery of best care	Define or judge current care
Question	Test hypothesis (quant), explore themes (qual)	Does it reach a pre-determined standard?	What standard does this service achieve?
Objective	Specific research objectives	To measure service against accepted / defined standard	To measure current service without reference to a standard
Interventions	Novel use or application	Already in use	Already in use
Data additional to usual care	Yes, including invasive tests	Can include questionnaire / interview	Can include questionnaire / interview
Allocation to intervention	Yes, usually	No	No
Randomisation	Maybe	No	No

<https://o.quizlet.com/M78Tz24JDIO97j5HSJIP5g.png>

This is most peoples starting point
 Research is not just the 'big headline' projects
 Often, we are participating without realising



First Steps in Research

- Make your superintendents aware
 - If you are the superintendent, tell your service manager
- Find out what is already happening in the department
 - Reject Analysis / Image Quality
 - Cannulation skills
 - Hand Hygiene
 - Portering
 - Request quality analysis
- Does your department have/applying for QSI
 - Need to have an audit plan
- Ask what you can help with



Adequate Completion of Radiology Request Forms [QSI Ref: XR-501]

Background

The usefulness of a radiological examination can be reduced if the clinical background and the specific problem to be answered is not provided with the request.

Inadequate information can also lead to mistakes in patient identification and delay in returning reports to the correct destination, and can reduce the value of the report.

Providing adequate clinical information is an essential component of IR(ME)R 2000.

The Cycle

The standard:

All radiology request forms should contain adequate clinical and demographic information which identifies the patient and the destination for the report.

All referrals should include the following:

- the clinical background
- the question to be answered
- the patient's name, age, address and number
- the ward or location of the patient
- the name of the requesting practitioner and the name of the consultant or GP looking after the patient

Target:

100%



Assess local practice

Indicators:

Percentage of request referrals with adequate information.

Data items to be collected:

For each request referral, record the presence or otherwise of each of the items in the standard.

Suggested number:

200 consecutive referrals.

Suggestions for change if target not met

- Hold meetings with individual clinical firms to discuss the findings of this audit, and the requirements of the Department of Clinical Radiology
- Include the basic principles at induction of new staff
- In specific cases:
 - Send back individual referrals which are incomplete
 - Check the patient's notes to confirm the reason for the request
- Consider including mandatory fields - much easier to do now in most systems where the referral process is electronic, rather than paper.

Resources

Prospective data collection as requests are received is advised, as otherwise vetting process should have removed all inappropriately completed requests

4–6 hours



Moving Forward

- Start small – You can't jump straight into a big project
- Learn your skills – how do you run a project
- What are your skill gaps
- Show ability and worth
 - Produce talks, posters, papers
 - Local or National?



Internal and External Support

- Training
 - May not be through radiology
 - Diagnostic staff – approach your radiotherapy colleagues.
 - Approach other AHP groups or nursing
- External training
 - CATO – Based at Imperial
 - NIHR Radiographer incubator
 - CAHPR
 - SCoR





- Pairs a radiographer with an experienced researcher
- Helps them develop skills, and form new networks
- Supports staff to undertake work and produce output



- NIHR Funded
- Aim to support and develop radiographers
- For experienced and new researchers



Convincing you manager

- There are no guarantees of success
- Show you are interested
- Show you have the skills
- Show its value to the department
- Show you can prove success or implement change
- QSI Accreditation / CQC Inspections
- HCPC/CPD Requirements
- Positive promotion for the department



The Marsden (Radiographer) Way

- Peer Support
 - Being each others cheerleader
 - Introductions
 - Information sharing
 - Reading/editing papers and posters
- Lunchtime Research Group
- Journal Clubs
- Dept Audit Meetings
- All of this takes time



What I do - As a peer and a manager

- Staff member approaches me directly
- My First questions..
 - What is your topic/area of interest?
 - What have you done already?
 - Where do you want to end up?
- Make an initial plan
 - Start a project (start small and build)
 - Find ways to address missing skills
 - Agree on support required
 - Promote to other leads
- Be realistic with them about what the department can offer
- Be encouraging, check in regularly where appropriate
- Ensure there is an output for any results



Networking

- Inside your hospital
 - Audit committee leads
 - Internal research teams
 - Radiologists
- The outside world
 - SCoR
 - NIHR
 - Journal / Professional Magazines



Present your findings

Why do this and tell nobody?

Find the appropriate outlet for your findings

- Department Journal Clubs
- Trust audit / clinical meetings
- Conferences
 - BAMRR / UKIO / ECR / ISMRT
 - Poster or Presentation?
- Journals



Final Thoughts

- There is an 'in' to research for those who want it
- Have your positives ready
- Find your champions in the department
- Not a quick process
- You need to build the right skills
- Starting small is normal
- Promote your output
- Promote yourself – people will listen!



References / Further Information

<https://www.rcr.ac.uk/career-development/audit-quality-improvement/auditlive-radiology-templates/>

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