The evolving role of radiographers in symptomatic mammography image interpretation

A.M. Culpan, PhD, MRes, MHSc, PGCHEP, DMU, DCR(R)
Senior lecturer in Breast Imaging

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Aim

To explore the roles of radiographers interpreting and reporting mammography images in UK symptomatic breast clinics

- Commenting
- Delayed double (second) reporting
- Instant single reading
  - mammography image interpretation only
  - mammography image interpretation +/- ultrasound, sampling
Realist evaluation (Pawson & Tilley, 1997)

• articulate, develop and test ‘theories’ which explained how and why practice varied across institutions

• identified ‘triggering’ contexts and consequential ‘outcomes’
Qualitative data

Purposive sampling - sites & participants

- 8 sites - unstructured interviews
  - clinical lead radiologist; 31 mammographers
    - (10 CP; 16 AdvP; 4 RP; 1 ARP)
- 2 sites - non-participant observation & ‘teacher – learner’ interviews
  - 11 radiographers (5 CP; 6 AdvP)
  - 10 one-stop clinics (91 patients)
  - 5 MDT meetings (104 patients)
Phase 1 findings

In times of workforce shortage at a particular level, some tasks can be undertaken by other workers (Nancarrow, 2004)

- Responsibility for interpreting mammograms transferred from radiologists to radiographers
  - Two models of practice
    - Blended care
    - Holistic care
Blended model of care

- Patients met **multiple radiographers** during their clinical visit
- Practitioners worked **collectively** to co-ordinate patient care and transfer information along the chain of diagnosis

Radiographers with only one advanced practice breast imaging skill

peer review
double reporting
release radiologist
logistic bottlenecks
novice / part-time
Task substitution

- allocation of clinical responsibilities to lesser or more narrowly trained healthcare professionals (Hoskins, 2012)
Holistic model of care

- Single radiographer performs all imaging investigations
- Direct **continuity** of care and communication

Radiographers multiskilled in all advanced practice breast imaging skills

patient focussed ‘ordering’ bias
knowledge synthesis
logistic flexibility
continuity of provision
Holistic model of care

• A typical feature of the experienced advanced practitioner or the consultant practitioner

• Radiographers had
  • dedicated their practice to the ‘breast’ clinical domain
  • acquired expertise across the full range of advanced practice techniques over an extended period of time

• Role substitution
  • aspects of a previously defined role are undertaken by another professional usually a non-medical practitioner (Hoskins, 2012)
Evolving non-medical roles can be plotted on a spectrum (Hoskins, 2012)
Interprofessional working

- communication & cooperation to achieve common goal
  Ovretveit et al. (1997)
- share resources, skills and responsibility
- interdependent team members
- professions work alongside but independently
  Leathard (1994)
- share knowledge
- respect individual autonomy of professional groups
- surrender professional territory where necessary
  Carrier and Kendall (1995)
Other professions begin to understand and accept the new role and its specific knowledge

Accepted and respected

The (substitute) professional group claim the area of work as their own

Confident clinical decision makers

she does exactly what I do…

she’s treated in the same way

[Site 7 R]

I feel confident giving my opinion…

I can do the diagnostic MDT…

that’s part of my role… to make a decision…

[Site 3 CP]

the surgeons ask your opinion…

the cases are discussed… they see

who’s reported… (they) are aware of how good you are

[Site 3 CP]

‘our consultant radiographer works independently… she makes her own… decisions … exactly the same as a consultant radiologist ’

[Site 9 R]

[Site 9 R]
The new breed of workers contribute towards successful service delivery.

they can deal with breast imaging to the same standard if not better…
[Site 9 R]

… [radiographers] are more flexible - they can (do) additional clinics… we can keep to targets because the radiographer’s here all the time…[Site 9 R & AdvP]

they are a complete package… but at a cheaper price…
[Site 6 R]

It's not very easy to get a breast radiologist… when there were hardly any… (radiographers) had to step up… (or) the symptomatic service would have collapsed [Site 6 R & CP]
Professional substitution

Radiographers single read mammograms in symptomatic clinic
• Task substitution
• Role substitution
• Interprofessional working

- equivalent diagnostic accuracy
- cost savings
- maintain / increase capacity
- address radiology workforce shortage

Radiographers with advanced practice skills in MIIR


