NHSBSP

# NEW WAYS OF WORKING IN THE NHS BREAST SCREENING PROGRAMME

SECOND REPORT ON IMPLEMENTATION

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**CONTENTS**

**ACKNOWLEDGEMENTS**

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## SUMMARY

This report follows the May 2002 survey which looked at training and utilisation of staff [6]. Here we present a review of staffing levels and status of implementation for New Ways of Working (NWoW) in the NHS Breast Screening Programme (NHSBSP) at the end of December 2003. This report expands upon the previous survey: it reviews the progress of programme expansion against the Cancer Plan targets [7, 8], it examines the implementation of the new model of service delivery through the radiology skill mix specifications [9, 10] and updates the 1998 information on assessment clinics [2]; evaluating the new data against the Forrest Report [1] and the guidelines for screening assessments [5].

It shows that by December 2004 the majority of units expect to have completed programme expansion. It demonstrates an increase in workforce numbers: a 34% increase in the assistant practitioner workforce and a decrease of one third in the number of vacancies for radiologists [6, 15] since 2002. It shows that whilst there are still vacancies for radiology staff, as the number of assistant practitioners increases and as advanced practitioners begin to undertake more advanced practice elements, this shortage should be eased. This report also presents an increase in the number of units carrying out all assessment procedures at the first visit and highlights the increase in attendance of all core assessment team members at clinics and meetings.

This report gives a picture of a service which is slowly recovering from a severe staff shortage and is moving forward in implementing the NHS Cancer Plans targets [7]: to reduce mortality and bring the service level up to the best in Europe.

## INTRODUCTION

The NHS Cancer Plan [7] recognised that a major limiting factor in achieving its aims was the shortage of radiology staff. Thus the plan was backed by a commitment to expand capacity through investment in the cancer workforce. The Skill Mix Working Party concluded that an innovative service delivery model was needed which would introduce skill mix changes to the workforce. This led to the construction of the four tier model in breast screening.

This model had four aims: to create new roles based on skills and experience rather than profession, to improve recruitment and retention of staff, to promote life long learning through extended roles and to help all practitioners develop to their full potential [9]. In April 2000 this NWoW model was piloted in four development sites in England. These sites were chosen as they reflected many of the problems being faced by the service. Strategic groups were established for each site to coordinate the implementation of the model and review its effectiveness in resolving the staffing situation.

In February 2002, following a full evaluation, it was agreed by the Department of Health Radiography Workforce Task Group that the NWoW development project was a safe, robust and effective model for service delivery. Consent was given for the model to be implemented in other breast screening units. A few months later many units had begun to implement these new roles. In May 2002 the Department of Health requested a survey to assess the recruitment, training and utilisation of staff within these new roles. A questionnaire was formulated and circulated to the 87 breast screening units in the NHSBSP.

A follow up questionnaire (the subject of this report) was then conducted in 2003 to assess progress and give a broader representation of the service (see appendix 1 for a copy of the questionnaire). The specification of this questionnaire was to: evaluate the implementation of the four tier service, give the position on staffing levels, report on programme expansion status, and update the 1998 data on assessment clinics.

## RESULTS

We received a high response rate (82.6%) with 72 of the 87 units responding within the given time frame. One unit was unable to fill in the questionnaire, as they were not due to become a stand-alone unit for another 3-6 months, so we had 71 replies to use in this report. The results of each section of the questionnaire are presented below. The raw data is given in appendix 2 sections A-R.

### PROGRAMME EXPANSION

(See appendix 2 Section A: Programme Expansion Tables1.1 – 1.8b, for raw data)

#### *TWO VIEWS*

Out of the 71 units, 63 (88.7%) had implemented two views at the time of the questionnaire. Most had started implementation in 2002/03, but one unit had always carried out two views.

**Date Started Two Views Implementation**

| Date | Always | 1989 | 1990 | 1995 | 1998 | 1999 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 29 | 22 | 2 |

Out of the 8 units that were not doing two views, two had started but then stopped. All units planned to have implemented two views by the end of 2004.

**Date Planned for Starting Two Views Implementation**

| Date | Jan 04 | Feb 04 | April 04 | June 04 | Sept 04 | Nov 04 |
|---|---|---|---|---|---|---|
| No. of Units | 1 | 1* | 3* | 1 | 1 | 1 |

* These figures contain 'started then stopped' data

The most frequent reasons given for not having started two views or having started and then stopped were staff shortages and funding.

#### *AGE EXTENSION*

Out of the 71 units, 29 (40.8%) had implemented age extension at the time of the questionnaire. This is an impressive figure, as the target date for implementation of age extension is not until December 2004.

**Date Started Age Extension**

| Date | 1997 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 11 | 12 | 4 |

Out of the 42 units that had not implemented age extension, 3 had started implementation but had to stop. Nearly all the units planned to be carrying out age extension by the target date.

**Date Planned for Starting Age Extension Implementation**

| Date | Jan 04 | Mar 04 | Apr 04 | Jun 04 | Sep 04 | Oct 04 | Nov 04 | Dec 04 | Jan 05 | Unable to say |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 4 | 4* | 2 | 2 | 3 | 4 | 10 | 2 | 10* |

* These figures contain 'started then stopped' data

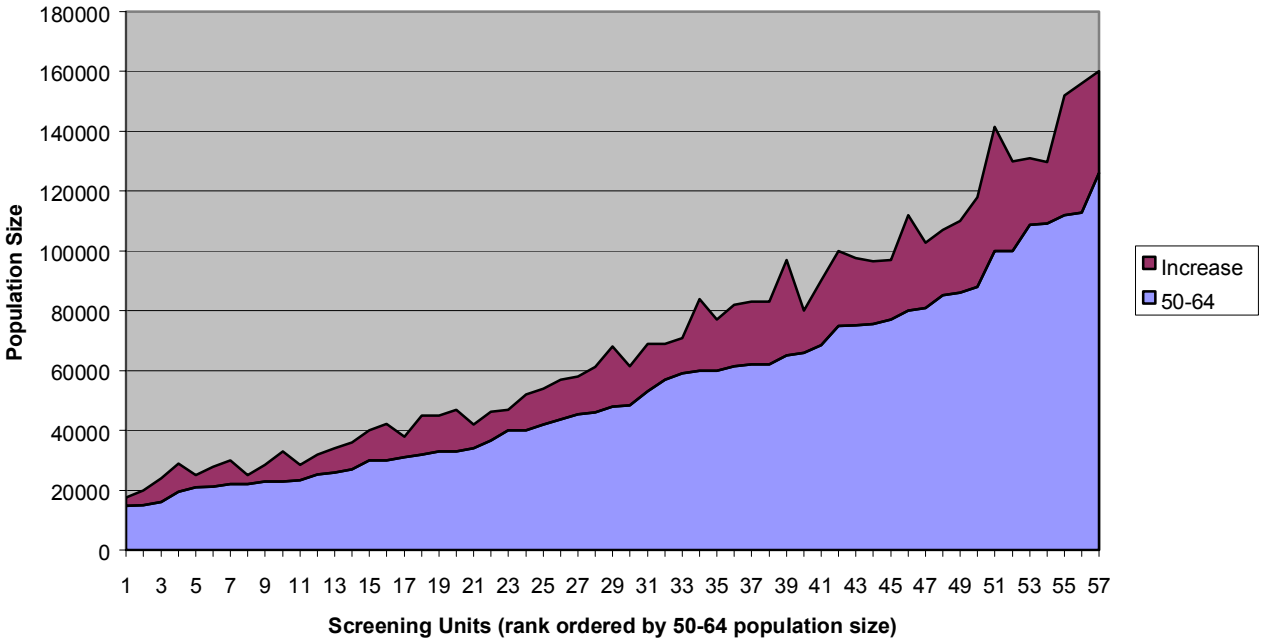
The most frequent reasons given for not having started age extension, or having started then stopped were staff shortages and funding.

## POPULATION INFORMATION

(See appendix 2 Section B: Population Information Tables1.9a – 1.13, for raw data)

The population size for each unit varied widely from 14846 to 126000 for women aged 50-64 and 17500 to 160000 for women aged 50-70. This gave a percentage increase of approximately 26% complying with the projections made in the 2002 background paper [15]. The graph below demonstrates this proportional increase; we suggest that the 'spiky' nature of parts of the graph can be explained by many units giving estimates and/or roundings for their population sizes.

**Figure 1: Population Increase due to Age Extension**




***WOMEN INVITED FOR SCREENING PER HOUR***

*STATIC SITES*

The most common number of women invited per hour was 10. Some units were inviting 16 and even 20 women per hour. However, in these cases the units had two mammography machines and were running concurrent appointments.

**Number of Women Invited per hour at Static Sites**

| No. Women | 3 | 5 | 6 | 7 | 8 | 9 | 9.2 | 10 | 12 | 14 | 15 | 16 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 12 | 2 | 6 | 6 | 1 | 19 | 6 | 1 | 1 | 2 | 2 |

One unit was a special appointment clinic and only invited 3 women per hour. Another unit invited different numbers of women depending on their staffing situation. They invited 11 women per hour when they had 3 radiographers and 6 women per hour when they had 2 radiographers. Only 6 units stated that they were not doing two views at all rounds.

*MOBILE SITES*

Mobile sites presented a similar picture, with 10 being the most frequent number of women screened per hour. One mobile site was found to be screening 20 women per hour, however when contacted, this unit informed us that they had two mobile sites and were thus producing double the throughput.

**Number of Women Invited per hour at Mobile Sites**

| No. Women | 7 | 8 | 8.5 | 9 | 9.2 | 10 | 11 | 12 | 20 |
|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 6 | 1 | 6 | 1 | 35 | 2 | 6 | 1 |

Eight mobile units were not doing two views at all rounds. Of these, one unit was in the process of converting to two views. This unit stated different numbers of women seen per hour depending on daily screening practice: 11 women per hour for single views and 9 women per hour for two views.

## ASSESSMENT CLINICS

(See appendix 2 Section C: Assessment Clinics Tables 2.1 – 2.7c, for raw data)

This section was designed to update the 1998 survey [2] on assessment clinics and to assess compliance with the expectations laid down in the Forrest Report [1]. The 1998 survey called for the production of guidelines on assessment protocols [5], which have now been produced and will be used in the discussion of this section.

### *NUMBER OF CLINICS RUN EACH WEEK*

The most common number of assessment clinics held per week was 2. More than 4 assessment clinics per week was quite unusual, although units with large population sizes tended to hold more assessment clinics.

**Number of Assessment Clinics Run**

| No. of Clinics | 1 | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 14 | 2 | 23 | 1 | 17 | 7 | 2 | 3 | 1 | 1 |

The number of women invited to an assessment clinic also varied. The most frequent number of women invited was 12, but this was dependent on the size of the unit and the demand for these clinics. Four units informed us that the number of clinics run was dependent on demand.

**Number of Women Invited Per Hour**

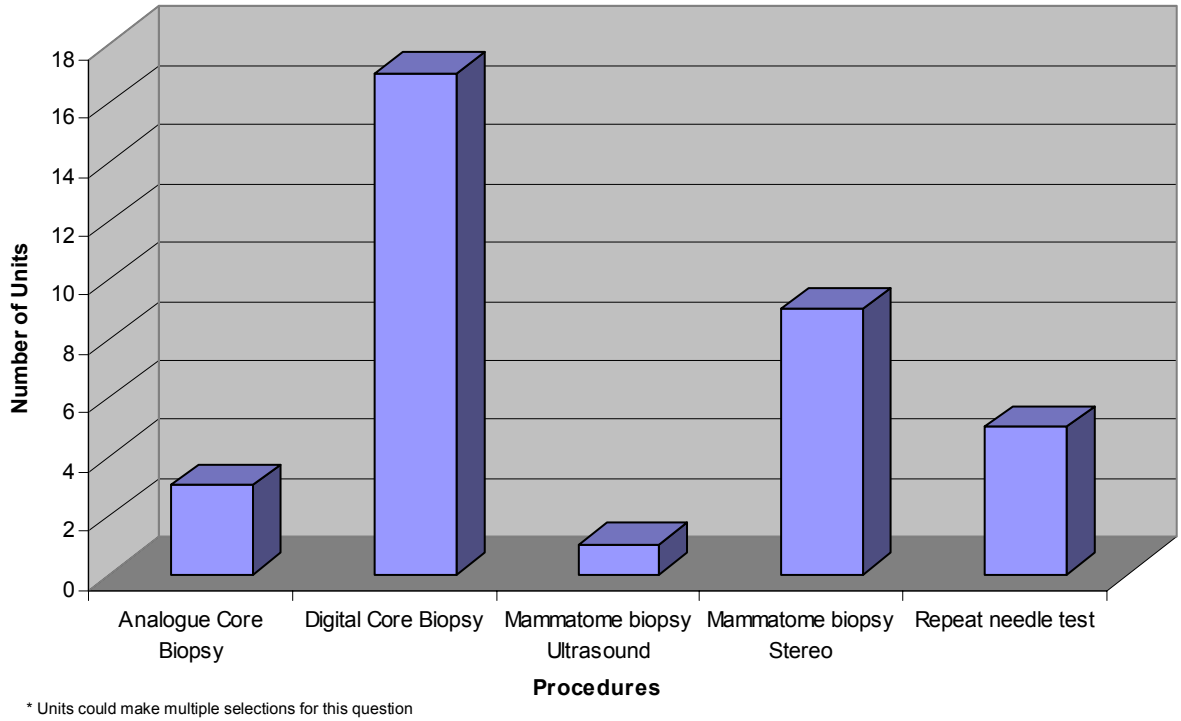
| No. of Women | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 24 | Declined |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 2 | 3 | 13 | 4 | 12 | 3 | 14 | 1 | 1 | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 1 |

This 2003 data is very similar to the 1998 survey, which reported that 72% of all units ran 1 or 2 assessment clinics per week and invited on average 11 women per clinic.

### *PROCEDURES*

Most units (67.6%) carried out all the listed procedures at the first visit. Of the 23 units which required a subsequent visit, the most common procedure to be called back for was a digital core biopsy, with 17 units recalling women for this procedure.

**Figure 2: Procedures Carried out at Subsequent Visit***




* Units could make multiple selections for this question

In the 1998 survey, 59% of units reported completing all the tests at the first visit: 45 units called women back to the clinic to have stereotactic or ultrasound guided FNA or core biopsies. A further 24 units called women back for a third visit to carry out more procedures.

***PROFESSIONAL MIX***

The Breast Screening Report [3], the Clinical Guidelines laid down for Breast Cancer Screening Assessment [5] and the document on Organising Assessment [4] all state that the core clinical assessment team should ideally comprise of:

- A consultant radiologist (or equivalent)
- A clinician (including: radiologist, surgeon, breast clinician)
- A clinical nurse specialist in breast care
- A radiographer

The guidelines also state that the advanced practitioner role should be integrated into the core assessment team.

The 1998 data showed that only 9% of clinics reported having the full breast care team in attendance at all assessment clinics. Five years on, this figure has increased to 20%. Indeed if we exclude advanced practitioners from this figure, (as this post has not yet been fully implemented in all units or integrated into all clinical areas), the figure increases to 51.4%.

It should be noted that the guidelines also suggest that administrative staff should be part of the core assessment team. However, only a very small proportion of units (4.3%) were actually using these staff members. A sample of units contacted, reported that this was because one of the clinical team members performed the administrative tasks.

**Number of Core Clinical Assessment Professionals at an Assessment Clinic (2003)***

| Core Professionals | Clinic Nurse | Radiographer | AdvP | Radiologist | Clinician |
|---|---|---|---|---|---|
| **No. of Units** | 53 | 69 | 32 | 69 | 52 |

* NB figures are out of a total of 71 units

From the 2003 data we can see that other professionals are involved in the assessment clinics. Technical / professional helpers feature highly in the assessment clinics professional mix, with 61.4% of units using them. Assistant practitioners (15.7%) and BMS/ lab technicians (5.7%) are also involved in clinics at some units.

**Number of Other Assessment Professionals at an Assessment Clinic (2003)***

| Other Professionals | Assistant Practitioner | Tech / Prof | BMS / Lab Technician | Administration |
|---|---|---|---|---|
| **No. of Units** | 11 | 43 | 4 | 3 |

* NB figures are out of a total of 71 units

## RADIOLOGISTS

(See appendix 2 Section D: Radiologists Section Tables 2.8 – 2.16b, for raw data)

Out of the 71 units that replied, a total of 226 radiologists were found to be working in the breast screening programme. These radiologists were carrying out a total of 620.4 sessions per week, with most individually carrying out between 2 and 10 sessions a week.

**Number of Radiologists Working in a Unit**

| No. of Radiologists | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 5 | 27 | 15 | 9 | 9 | 1 | 1 | 2 | 1 |

Most of the units had 2 or 3 radiologists working in them, however 5 units only had one radiologist. This raised concern, as annual leave and sickness would be difficult to cover. Most radiologists were aged between 45 and 54.

### *VACANCIES*

Over half of all units had vacant posts for radiologists, with nearly all of these units needing just one radiologist or 0.5 WTE to be at full complement. From the data collected, 43 extra radiologists (25.3 WTE) were needed.

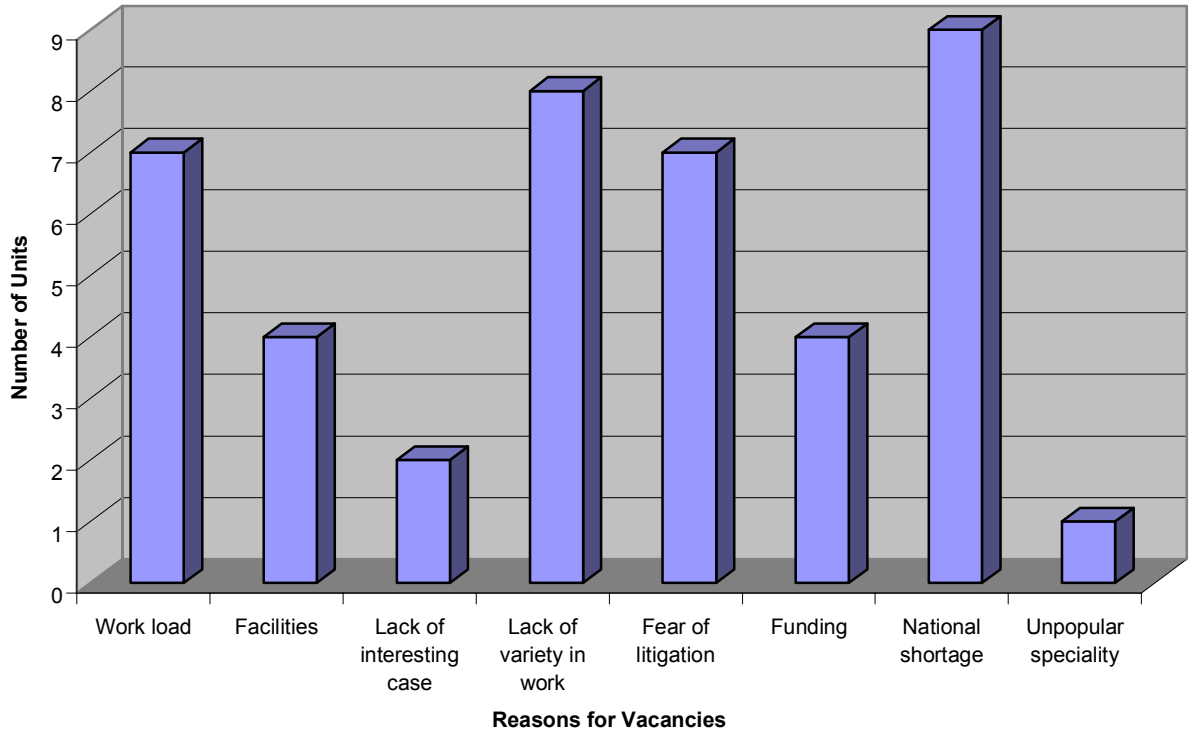
**Number of Vacancies for Radiologists**

| No. Vacancies | 1 | 1.5 | 2 | 3 | Not stated |
|---|---|---|---|---|---|
| No. of Units | 30 | 1 | 4 | 1 | 1 |

This vacancy figure suggests that the shortfall in radiologists has actually reduced by approximately a third since 2002, when a shortfall of 40 WTE radiologists was quoted [15].

Most units thought that the national shortage of radiologists was the reason for the vacancies, although workload, lack of variety in work and fear of litigation featured highly in selected options.

**Fig 3: Reasons for Radiologist Vacancies**




Most units stated that they were combating the shortage of radiologists by training radiographers in advanced practice. Indeed from the units that replied to the questionnaire, 151 advanced practitioners (111.8 WTE) could be seen in post.

### CONSULTANT PRACTITIONERS

(See appendix 2 Section E: Consultants Section Table 2.17, for raw data)

Out of the 71 units that replied, none had a consultant practitioner. However, one unit was preparing to advertise the post. Another unit felt they should mention a member of their staff, who they called a '*speciality practitioner*', her role did not quite fit the consultant specification, but lay between advanced practitioner and consultant.

### ADVANCED PRACTITIONERS

(See appendix 2 section F: Advanced Practitioner Section Tables 3.1 – 3.9, for raw data)

Out of the 71 units, 61 had advanced practitioners, another 3 had radiographers doing the work, but not holding the title. Only 7 units stated that they did not have advanced practitioners. Five of these units did not state why they had not implemented the role. Of the other 2 units, 1 stated that it was because the 4-tier system was not in place at their unit, and the other stated that it was due to staff shortages. Of the 61 units that had advanced practitioners, 36 stated that they were planning more posts in the future.

Most units had 1 or 2 advanced practitioners in post, this equated to a total of 151 advanced practitioners (111.8WTE) in post throughout the breast screening service. Most of these practitioners were aged between 40 and 49.

**Number of Advanced Practitioners in Units**

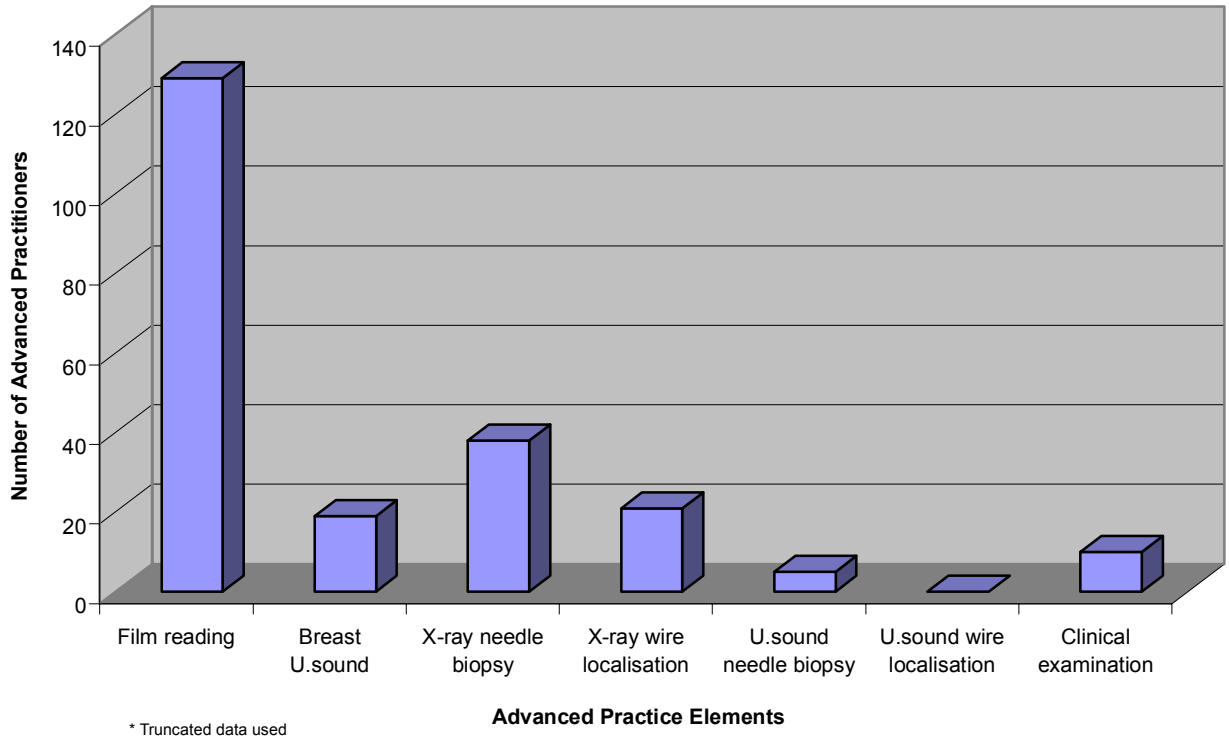
| No. of Adv. Practitioners | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| No. of Units | 17 | 19 | 11 | 8 | 5 | 1 |

This number of advanced practitioners was a slight increase from the 2002 questionnaire, which reported that out of the total 87 units, 63 had implemented the post, and that there were 143 advanced practitioners working in breast screening [6].

#### *ELEMENTS OF ADVANCED PRACTICE*

An important fact noted by this questionnaire was that whilst nearly all advanced practitioners had completed their training, a large percentage (62.3%) were only doing film reading.

**Fig 4: Number of Advanced Practitioners Performing Each Advanced Practice Element***

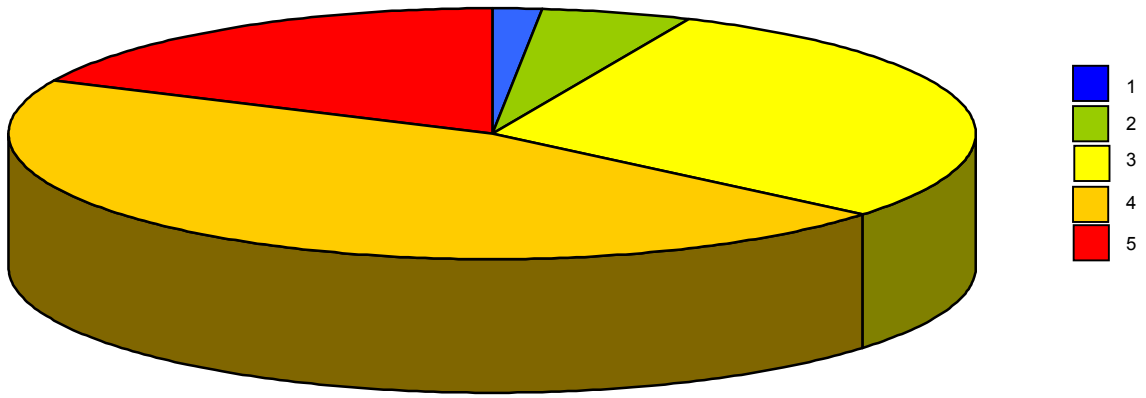



* Truncated data used

***TRAINING AND CAREER PROGRESSION***

Out of the 61 units that had advanced practitioners 63.9% rated the training received as either good or excellent.

**Fig 5: Ratings Given to Advanced Practitioner Training**




Since a high percentage of units positively rated the advanced practitioner training, it is surprising that only 34.4% of units stated that one of their advanced practitioners planned on becoming a consultant. However, this is probably due to the recent introduction of the four tier model. Many training centres are only now beginning to offer courses that advanced practitioners could use on their pathway to consultant status.

***VACANCIES***

Only 3 of the 61 units stated that they had vacancies for advanced practitioners, and all three only needed one more advanced practitioner to be at full complement. Of these three, two units stated that they had vacancies because of the time it takes to train, the other unit stated that they were in the process of training. All three units informed us that they were training radiographers in advanced practice to deal with the shortage.

## RADIOGRAPHERS

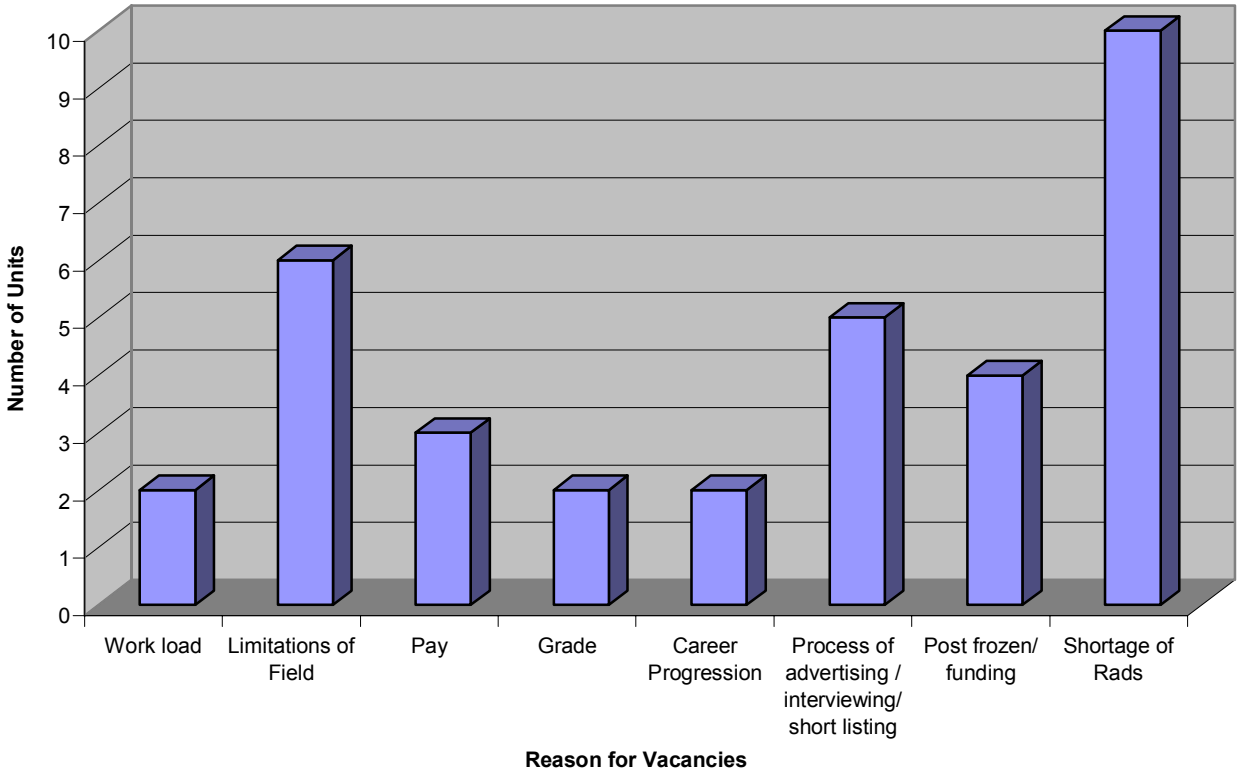
(See appendix 2 Section G: Radiographers Section Tables4.1 – 4.15, for raw data)

The total number of radiographers in practice has stayed fairly constant from the 2002 survey. The 2003 questionnaire found 806 (616.41WTE) radiographers in post, with 108 (97.2WTE) of these being superintendent radiographers. Most units had one superintendent and 6 - 8 radiographers. Most superintendents were aged between 45 and 59, and most radiographers were aged between 45 and 54.

### *VACANCIES*

Thirty-six of the units stated that they had vacancies for radiographers, with most needing 1 or 2 to be at full complement. The most common reason given for the unfilled posts was the national shortage of radiographers.

**Fig 6: Reasons Given for Vacancies**




When units were asked what they were doing about the shortage, most said that they were: advertising the post, trying to recruit, or in the process of short-listing radiographers. Despite the hope that the four-tier system would help ease the shortage of radiographers, only 4 out of the 36 units stated they were implementing the assistant practitioner role to help with the radiographer shortage.

### *THOUGHTS ON ADVANCED PRACTICE*

52 of the 71 units stated that at least 1 or 2 of their radiographers were considering advanced practice, this equated to 110 actual radiographers. When asked what was stopping them, most either stated that nothing was stopping them and that they were taking part soon, or that there was no post available at present / the unit does not need them. Most units stated that pay incentives would encourage them to take part in advanced practice. It should be noted that Agenda for Change (if accepted by the Society and College of Radiographers) should help with this pay issue, as staff will be “paid on the basis of the jobs they are doing and the skills and knowledge they apply to these jobs” [11].

## ASSISTANT PRACTITIONERS

(See appendix 2 Section H: Assistant Practitioners Section Tables 5.1 – 5.17, for raw data)

Thirty-nine of the 71 units stated that they did not have assistant practitioners in post. Of these, the most common reason given for not implementing the post was that they were not required i.e. no shortage of radiographers. However, the point should be made that if radiographers are going to develop into more advanced roles to support the radiologist workforce, then assistant practitioners must be in place to allow this to move forward.

Of the 32 units which did have assistant practitioners, most had 2 assistants working in them. This equated to 84 assistants (79.39WTE) in total, with most being aged between 31 and 39. This is a big increase from the 29 (27.4 WTE) assistant practitioners that were in post in 2002 and demonstrates good progression and implementation of NWoW.

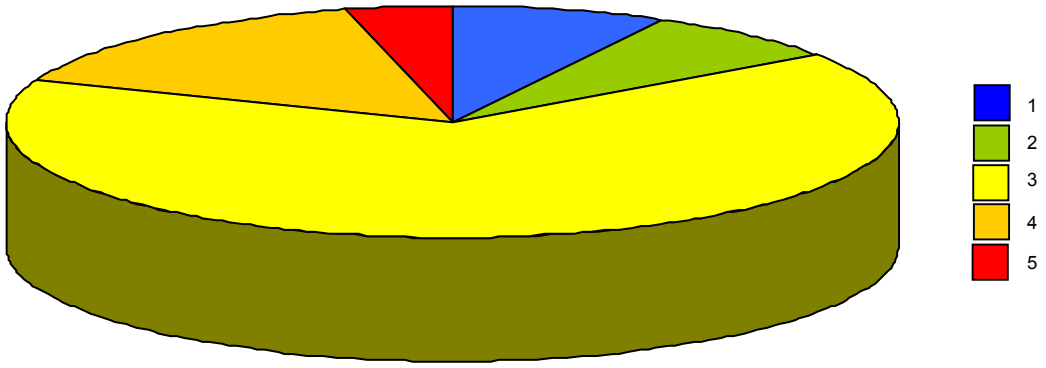
**Number of Assistant Practitioners in Post**

| No. of assistants | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| No. of Units | 6 | 16 | 2 | 4 | 1 | 2 | 1 |

### *TRAINING*

Nearly all assistants were trained through the NVQ (93.8%) system, only 2 units followed the BTEC route. 87.5% of units favourably rated the training received, giving scores of 3, 4 or 5.

**Fig 7: Ratings Given to Assistant Practitioner Training**




Only 4 units gave the training a score of 1 or 2. These four units major comments were that the training was basic, non-specific, the support was poor and the work was sometimes beneath the level of the assistants. This was possibly partly because these assistants were already qualified health care practitioners and so already knew much of what they were being taught. The new career framework [12] should help with these comments, as it will allow easier entry and exit to the career escalator.

Over half of the assistants (59.4%) stated that they were interested in becoming a radiographer. With the implementation of the new career framework [12] it will now be possible for assistant practitioners to access these courses easily.

Nearly all units had formally appointed trainers, with most being from the units radiographic team. The vast majority of these trainers either held an NVQ assessor's qualification, or the D32, 33, 34 qualifications.

### *VACANCIES*

Only 4 of the 32 units had vacancies for assistant practitioners, needing only 1 or 2 assistants (0.5/06/2 WTE) to be at full complement. The reason given for why they had vacancies was pay. To rectify the short fall in staff they stated that they were trying to recruit and train assistants.

### PROFESSIONAL / TECHNICAL HELPERS

(See appendix 2 Section I: Professional / Technical Helpers Section Tables 6.1 – 6.7, for raw data)

Of the 71 units that responded to the questionnaire 64 had professional / technical helpers. Most units had 2 or 3 helpers, which equated to 160 professional / technical helpers (116.12 WTE) in total. Just over one fifth of units had a vacancy for professional/ technical helpers.

**Number of Professional / Technical Helpers Per Unit**

| No. Prof/Tech | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| No. Units | 1 | 3 | 7 | 17 | 24 | 12 |

Most helpers were aged between 31 and 44, and came from a wide range of backgrounds ranging from: care assistant, nurse and laboratory assistant to hairdresser, florist and sewing machinist (see appendix 2 section I, table 6.5 for the full list of previous employment). This long list indicates possible advertising avenues to attract new workers into breast screening.

Nearly one third of helpers would consider becoming assistants. This is very interesting as with the implementation of the new career framework it will now be possible for professional / technical helpers to access assistant practitioner courses [12].

### PROGRAMME MANAGERS

(See appendix 2 Section J: Programme Managers Section Tables 6.8 – 6.10, for raw data)

Of the 71 units, 64 had a programme manager, the vast majority (57.8%) had a background in radiography.

**Programme Manager Background**

| Background | A+C | Declined | Medical | Nurse | Radiography | Other |
|---|---|---|---|---|---|---|
| No. Managers | 10 | 2 | 7 | 2 | 37 | 6* |

* Doctor, Finance, IT, Law, NHS, Paramedic

Most of the programme managers were full time, and were aged between 45 and 54.

### ADMINISTRATION / CLERICAL STAFF

(See appendix 2 Section K: Administration / Clerical Section Tables 6.11 – 6.15, for raw data)

From the 71 units that replied, all had administrative / clerical staff, with most units having between 5 and 6 members of staff. This equated to 537 administrative / clerical staff (403.27WTE) in total.

**Number of Admin / Clerical Staff**

| No. Admin | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 20 | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. Units | 1 | 5 | 7 | 10 | 12 | 7 | 4 | 2 | 1 | 5 | 6 | 2 | 3 | 1 | 2 | 1 | 2 |

There was a wide age range for administrative / clerical staff, with most ranging from 31 to 54.

#### *VACANCIES*

Only 28.2% of the units sampled had vacancies for administrative / clerical staff, and while most did not state why they thought this was, some believed it was due to their grade. Agenda for Change should be able to help with this issue, as staff will be “paid on the basis of the jobs they are doing and the skills and knowledge they apply to these jobs” [11].

### BREAST CARE NURSES

(See appendix 2 Section L: Breast Care Nurses Section Tables 6.16 – 6.18, for raw data)

Of the 71 units in the sample collected, 66 stated they had nurses. The most common number of nurses per unit was 3, equating to 192 nurses (123.86 WTE) in total.

**Number of Nurses**

| No. Nurses | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Declined |
|---|---|---|---|---|---|---|---|---|---|
| No. Units | 5 | 12 | 12 | 22 | 11 | 4 | 2 | 2 | 1 |

There was wide variation in the age of nurses, but most fell between 31 and 44.

### SURGEONS

(See appendix 2 Section M: Surgeons Section Tables 7.1 – 7.2, for raw data)

Out of the 71 units sampled, 66 said that they had surgeons. The total number of surgeons in the sample was 184, with 2 being the most common number per unit. These surgeons perform 211 sessions altogether, with most of them carrying out 2 or 3 sessions per week.

**Number of Surgeons**

| No. Surgeons | 1 | 2 | 3 | 4 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| No. Units | 9 | 29 | 13 | 9 | 2 | 2 | 2 |

### PATHOLOGISTS

(See appendix 2 Section N: Pathologists Section Tables 7.3 – 7.4, for raw data)

Out of the 71 units sampled, 66 said that they had pathologists. The total number of pathologists in the sample was 203, with 4 being the most common number per unit. These pathologists perform 210.5 sessions altogether, with most of them carrying out 2 sessions per week.

**Number of Pathologists**

| No. Pathologists | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 9 |
|---|---|---|---|---|---|---|---|---|
| No. Units | 1 | 7 | 22 | 11 | 14 | 6 | 4 | 1 |

### OTHER MEDICAL POSTS

(See appendix 2 Section O: Other Medical Posts Section Tables 7.5 – 7.7, for raw data)

27 units stated they had between 1 and 3 other medical posts not listed on the questionnaire. These workers mostly performed 1 or 2 sessions per week.

**Names of Other Medical Posts**

| Post title | Associate specialist | Breast clinician | Breast physician | Clinical assistant | Oncologist | Surgeon staff grade | Other |
|---|---|---|---|---|---|---|---|
| No. in Post | 4 | 11 | 2 | 2 | 2 | 2 | 13* |

* BMS/ Lab tech, Breast Clinician surgeon, Clinic Nurse, Clinical coordinator, Clinician, Coordinator radiologist, Trust grade registrar, Cytologists, Hospital practitioner, Medical Physics, Registrar (radiology), Specialist registrar, Staff grade

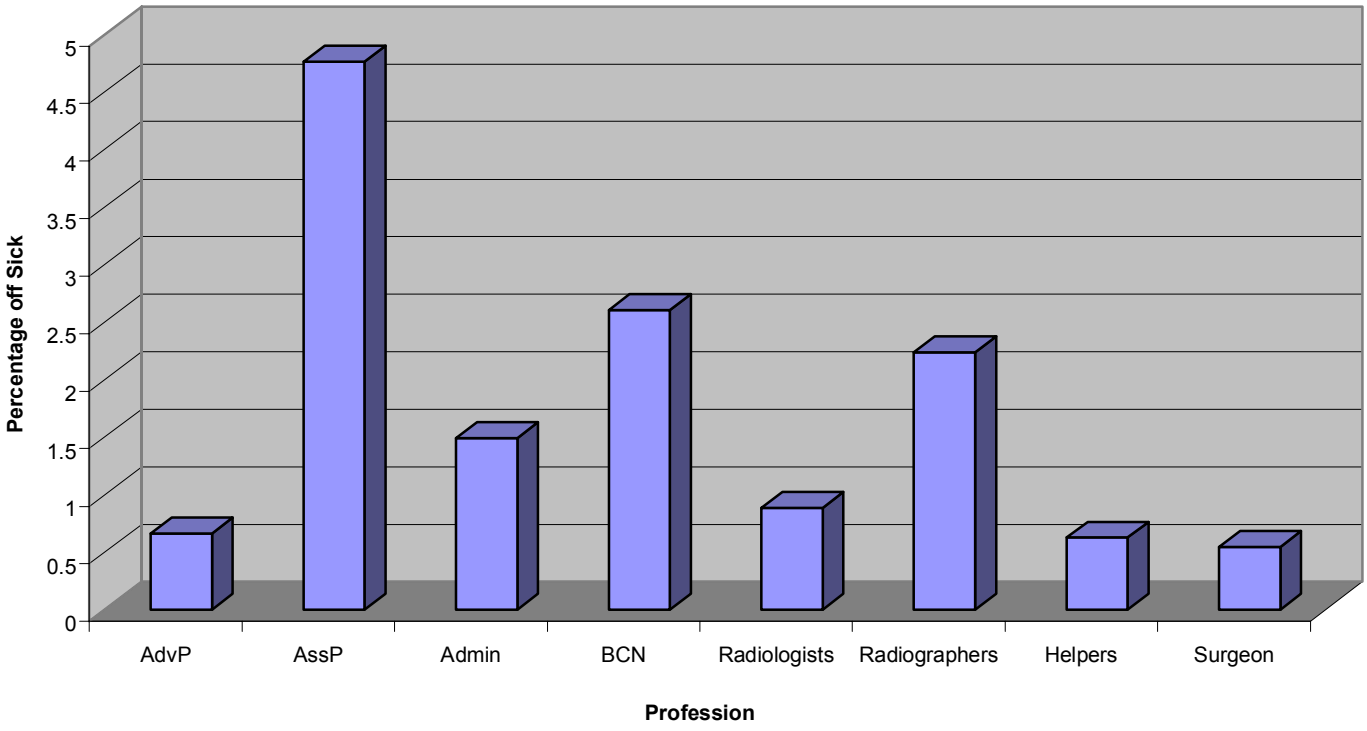
Out of these 27 units, there were 19 professions not listed on the questionnaire. This gave a total of 36 extra posts in the breast screening service.

## LONG TERM SICK LEAVE

(See appendix 2 Section P: Long Term Sick Leave Section Tables 7.8 – 7.10, for raw data)

Of the 71 units sampled, 35.2% had staff on long term sick leave (long term sick leave was defined as over 4 weeks). Most units only had one member of staff off sick, although one unit had four members of staff off sick. The graph below presents the percentage of each profession on long term sick leave.

**Fig 8: Percentage of Each Profession on Long Term Sick Leave**




These figures are within the national average for NHS workers [17].

## MULTIDISCIPLINARY CLINICAL MEETINGS

(See appendix 2 Section Q: Long Term Sick Leave Section Tables 7.11 – 7.12, for raw data)

The most common attendees of the multidisciplinary clinical meetings (MDCM) are: breast care nurses, radiologists, radiographers, surgeons and advanced practitioners, (see appendix 2 table 7.11 for full break down of attendees). It was stated that 84.5% of the core assessment team were present at all MDCM.

**Number of Core Assessment team Members in Attendance at MDCM**

| Profession | Adv. Practitioner | Breast Care Nurse | Radiologists | Radiographer | Prof/Tech Helper |
|---|---|---|---|---|---|
| No. at MDCM | 60 | 70 | 69 | 69 | 66 |

* NB figures are out of a total of 70 units

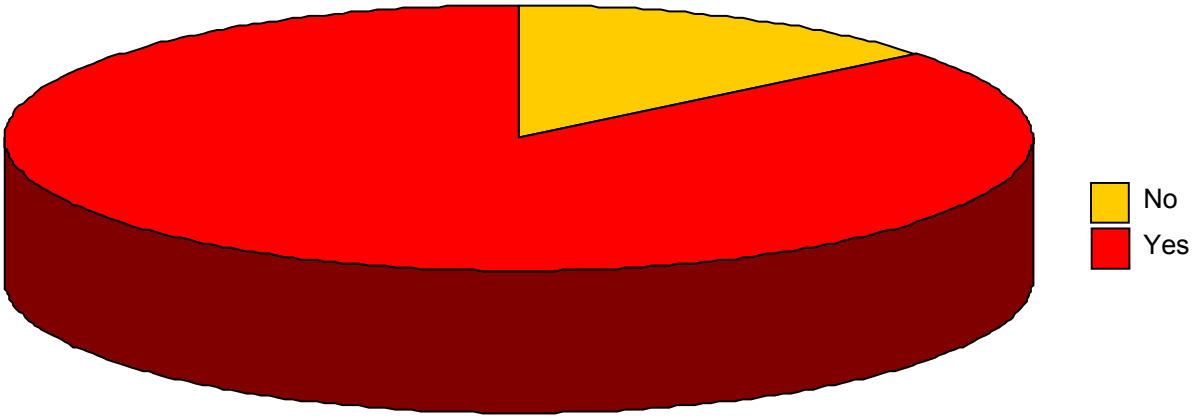
Out of the units that replied to the questionnaire, only 15 stated that someone chairs the meeting, of these 15; 8 were chaired by radiologists, 5 by surgeons, 1 by a breast clinician surgeon and one by a 'breast clinician other'.

## DIAGNOSTIC / SYMPTOMATIC SERVICES INFORMATION

(See appendix 2 Section R: Long Term Sick Leave Section Table 7.13, for raw data)

Of the 71 units, 85.9% (61 units) were also involved in the diagnostic / symptomatic services.

**Fig 9: Proportion of Units Involved in Diagnostic/Symptomatic Services**




Of these 61 units, 14 did not state how many mammograms were performed in 2002-2003. Of the remaining 47 units, the number of mammograms performed varied widely with the size of the unit, ranging from 1100 to 8000. This equated to approximately another 6.1% of work being carried out by these units.

It should be noted that the workload for the diagnostic service might increase in the near future with the publication of the NICE guidance on familial breast cancer [13]. Whilst a recent report by Secta [14] suggests that the extra number of annual screens needed will be relatively small* (21000 screens per year, i.e. less than a 2% increase), the setting up of the family history clinics, including recruitment and training of staff will be relatively large. The report suggests an additional 160 nurses specialists will be needed along with many other members of staff. It also suggests the need for specialist training courses in counselling and risk assessment, and states that with the implementation of the guidance, there will be a need for fortnightly family history clinics, inviting around 10 women per clinic.

* Annual screens are recommended the by the Royal College of Radiologists for women with increased risk of breast cancer [16]

## DISCUSSION

This report presents good progression since 2002, both in terms of the implementation of NWoW [6] and programme expansion. In 2002 the Royal College of Radiologists breast group estimated that there was a 40% shortfall in radiology staff [15]. In this report a reduction in vacancy rates for radiology staff can be seen along with an increase in assistant practitioners and qualified in-house trainers. This report highlights the very limited number of consultant practitioners currently in post, but suggests that this is due to the recent introduction of the four tier model and the post itself. It suggests that this will be a role many advanced practitioners will develop into in time. Many training centres will soon start to offer consultant practitioner training suggesting that advanced practitioners may now be ready for the next step in their career pathway. Indeed the publication of the NICE Guidance on Familial Breast Cancer [13] may necessitate further use of consultant practitioners in family history clinics.

This report updates the 1998 data on assessment clinics. It presents a service which has similar demands placed upon it in terms of the number of assessment clinics required and the number of women invited. However, the report highlights the dramatic increase in the number of units having all the core members of the assessment team at each clinic, and the near 100% attendance of these core workers at the MDCM. It highlights the increased ability to perform all assessment procedures at the first visit, thereby in each case, helping to implement the clinical guidelines for assessment [5] and providing a better service to women.

Overall, this report presents a service which is beginning to address the staff shortages. The introduction of the new career framework [12] will allow easier access to radiographer courses for the 60% of assistant practitioners who wished to advance their career in this way. It will also provide a clearer pathway for the 33% of technical / professional helpers who stated that they were interested in becoming assistant practitioners.

This survey will now be run each year to assess progress in all key areas assessed here, plus any additional areas of interest which may arise. We may in future analyse vacancy rates for other professionals working in breast screening such as nurses and surgeons and, if possible, ask for reasons why staff are off sick (work related / not work related / not known). We may also ask for attendance rates at clinics so we can compare within and between region attendance rates to obtain a more satisfactory overview of the service.

# APPENDICES

**APPENDIX 1**

**The 2003 Service Questionnaire**

**APPENDIX 2**

**Sections A-R: Raw Data Tables**

# APPENDIX 1

## THE SERVICE QUESTIONNAIRE

Programme Expansion
Population Information
Assessment Clinics
Radiologists
Consultants
Advanced Practitioners
Radiographers
Assistant Practitioners
Professional Technical Helpers
Programme Manager
Administration / Clerical Staff
Breast Care Nurses
Surgeons
Pathologists
Other Medical Posts
Long Term Sick Leave
Multidisciplinary Clinical Meetings
Diagnostic / Symptomatic Services Information

## SERVICE QUESTIONNAIRE FOR THE NHS BREAST SCREENING PROGRAMME

NHS
Cancer Screening Programmes

### 1. UNIT DETAILS

Breast Screening Unit: _____ *(please give full title)*

Address: _____

_____

_____ *(please give full address)*

QA Region: _____ *(please give full regional title)*

### Purpose Of This Questionnaire

This questionnaire has been designed to evaluate the implementation of the four-tier service, the position on staffing levels and to update the 1998 data on assessment clinics. Breast screening units are now in the process of expanding and often redesigning their teams. We now need to assess this, find out what is working well and what needs improving. You may have already given some of this information individually in the past, but we would appreciate it if you could still answer all the questions as fully as possible. We will analyse the data submitted and prepare an anonymised report of the findings, of which you will receive a copy.

We thank you for you assistance with this, and would be very grateful to receive your completed questionnaire by January 31st 2004.

### Instructions For Completing This Questionnaire

This questionnaire has been designed to be as user friendly as possible and take up the least amount of your time, whilst maximising the information collected. It will provide information on all members of the multidisciplinary team, providing us with a clear understanding of each unit's situation.

In most cases questions only need answering by ticking the relevant option or inserting dates and figures that you should have easily to hand. In the cases where a description or 'wordy' answer is required, an 'option box' is often provided, to allow you to select an option number that is most applicable to your circumstances, this not only speeds up completion, but also helps us in our analysis. However, you should note that we want 'real answers' and so if your circumstances are different or require an option that is not given, then there is space for you to write your answer.

**PLEASE NOTE THAT THIS QUESTIONNAIRE APPLIES ONLY TO THE SCREENING SERVICE**

## 2. PROGRAMME EXPANSION

TWO VIEWS:

Stage of Implementation for 'Two Views'

*(Please tick and complete the section that best describes your current situation)*

☐ Currently operating 'two views'

When did you start? _____/_____/_____ *(please state date)*

☐ Started 'two views' then stopped / will have to stop shortly *(delete as appropriate)*

Why was / is this? _____

*(please select an item number from 'Options Box 1' below or list reason if not given)*

When do you expect to restart? _____/_____/_____ *(please state date)*

☐ Not started operating 'two views' yet

Why is this? _____

*(please select an item number from 'Options Box 1' below or list reason if not given)*

When do you expect to start? _____/_____/_____ *(please state date)*

AGE EXTENSION:

Stage of Operation for Age Extension

*(Please tick and complete the section that best describes your current situation)*

☐ Currently screening women up to and including the age of 70

When did you start? _____/_____/_____ *(please state date)*

☐ Started age extension then stopped / will have to stop shortly *(delete as appropriate)*

Why was / is this? _____

*(please select an item number from 'Options Box 1' below or list reason if not given)*

When do you expect to restart? _____/_____/_____ *(please state date)*

☐ Not started screening women up to and including the age of 70 yet

Why is this? _____

*(please select an item number from 'Options Box 1' below or list reason if not given)*

When do you expect to start? _____/_____/_____ *(please state date)*

| Options Box 1 | 1) Building Problems | 2) Staff Shortages | 3) Equipment Problems | 4) Funding | 5) Other |
|---|---|---|---|---|---|

## 3. POPULATION INFORMATION:

What is your current target population of women aged 50-64: _____ *(please state number)*

What will be/ is your target population of women aged 50-70: _____ *(please state number)*

How many women do you invite for screening per hour? *(please tick type of site and state numbers of women for each site)*

☐ Static sites _____ *(please circle all figures that are for two views at all rounds)*

☐ Mobile sites _____ *(please circle all figures that are for two views at all rounds)*

## 4. ASSESSMENT CLINICS SECTION

On average how many assessment clinics do you run each week? _____ *(please state number)*

How many women do you book for an assessment clinic? _____ *(please state number)*

Are all procedures carried out at this visit? YES NO *(please circle)*

If 'NO' which procedures are carried out at subsequent visits? _____

*(please select all applicable item numbers from 'Options Box 2' and list any procedures not given)*

| Options Box 2 | Stereo core biopsy: | 1) Analogue | Mammatome biopsy: | 3) Ultrasound | 5) Repeat needle test |
|---|---|---|---|---|---|
| | | 2) Digital | | 4) Stereo | 6) Other - state |

Generally, what is your professional mix at an assessment clinic? _____

*(please select all applicable item numbers from 'Options Box 3' and list any members not given)*

| Options Box 3 | 1) Clinic Nurse | 2) Radiographer | 3) Adv Practitioner | 4) Ass Practitioner |
|---|---|---|---|---|
| | 5) Radiologist | 6) Surgeon | 7) Clinician - GP | 8) Clinician - Surgeon |
| | 9) Clinician - Other | 10) Tech / Prof Helper | 11) BMS / Lab Technician | 12) Other- specify |

## 5. RADIOLOGISTS SECTION

STAFFING DETAILS:

Number of radiologists in post: _____ *(please state number)*

_____ *(please state total number of sessions)*

What age band does each of your radiologists fall into? *(please select an age band from 'Options Box 4')*

☐ Rad 1 ____ ☐ Rad 2 ____ ☐ Rad 3 ____ ☐ Rad 4 ____ ☐ Rad 5 ____

| Options Box 4 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

VACANCIES:

Do you have any unfilled posts for radiologists? YES NO *(please circle)*

If 'YES' how many _____ *(please state number)*

_____ *(please state in WTE)*

Why do you think this is? _____ *(please select an item number from 'Options Box 5' or list reason)*

| Options Box 5 | 1) Work load | 2) Facilities | 3) Lack of interesting cases | 4) Lack of variety in work | 5) Litigation | 6) Other |
|---|---|---|---|---|---|---|

What is the unit doing about this? _____ *(please select an item number from 'Options Box 6' or list reason)*

| Options Box 6 | 1) Training radiographers in advanced practice | 2) Training clinicians | 3) Other |
|---|---|---|---|

## 6. CONSULTANT PRACTITIONER (RADIOGRAPHER) SECTION

Do you have a consultant practitioners in your team? YES NO *(please circle)*

If 'YES' please fill in the following section

STAFFING DETAILS:

Number of consultant practitioners in post: _____ *(please state number)*

_____ *(please state in WTE)*

What age band does your consultant practitioner fall into? _____ *(please select an age band from 'Options Box 7')*

| Options Box 7 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

## 7. ADVANCED PRACTITIONER (RADIOGRAPHER) SECTION

Do you have any advanced practitioners in your team? YES NO *(please circle)*

If 'NO' why is this? _____ *(please specify and go straight to next section)*

If 'YES' please fill in the following section

STAFFING DETAILS:

Number of advanced practitioners in post: _____ *(please state number)*

_____ *(please state WTE)*

Are you planning any more advanced practitioner posts? YES NO *(please circle)*

What age band do your advanced practitioners fall into? *(please select an age band from 'Options Box 8')*

☐ AdvP1 _____ ☐ AdvP2 _____ ☐ AdvP3 _____ ☐ AdvP4 _____

| Options Box 8 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

At what level are your advanced practitioners? *(please select a suitable level from 'Options Box 9')*

☐ AdvP1 _____ ☐ AdvP2 _____ ☐ AdvP3 _____ ☐ AdvP4 _____

| Options Box 9 | Band 1) Induction | Band 2) Mid way | Band 3) Novice | Band 4) Competent |
|---|---|---|---|---|

What elements of advanced practice is each advanced practitioner undertaking?

*(please write all applicable numbers from 'Options Box 10' next to each advanced practitioner)*

☐ AdvP1 _____ ☐ AdvP2 _____ ☐ AdvP3 _____ ☐ AdvP4 _____

| Options Box 10 | | |
|---|---|---|
| | 1) Film reading | 2) Breast ultra sound |
| | 3) X-ray guided needle biopsy | 4) X-ray guided wire localisation |
| | 5) Ultrasound guided needle biopsy | 6) Ultrasound guided wire localisation |
| | 7) Clinical examination | 8) Other please state |

TRAINING AND CAREER PROGRESSION:

How did your Advanced Practitioners generally find the training process? *(please circle appropriate number)*

1 Poor 2 3 4 5 Excellent

Comments _____ *(if any)*

Do any of your practitioners plan on becoming consultants? YES NO *(please circle)*

VACANCIES

Do you have any unfilled posts for advanced practitioners? YES NO *(please circle)*

If 'YES' how many _____ *(please state number)*

_____ *(please state in WTE)*

Why do you think this is? _____

*(please select an item number from 'Options Box 11' or list reason if not given)*

| Options Box 11 | 1) Access to training | 2) Pay | 3) Grade | 4) Responsibility | 5) Work load | 6) Training time | 7) Other |
|---|---|---|---|---|---|---|---|

What is the unit doing about this? _____

*(please select an item number from 'Options Box 12' or list reason if not given)*

| Options Box 12 | 1) Provide easier access to training | 2) Pay incentives for advanced competence | 3) Other |
|---|---|---|---|

## 8. RADIOGRAPHERS SECTION

STAFFING DETAILS:

Number of radiographers in post: _____ *(please state number)*

_____ *(please state in WTE)*

Number of superintendent radiographers in post: _____ *(please state number)*

_____ *(please state in WTE)*

What age band does each of your radiographers fall into?

*(please select an age band from 'Options Box 13', if you have more than 10 radiographers in your team please submit a separate sheet)*

☐ Supt Rad 1 _____ ☐ Supt Rad 2 _____

☐ Rad 1 _____ ☐ Rad 2 _____ ☐ Rad 3 _____ ☐ Rad 4 _____ ☐ Rad 5 _____

☐ Rad 6 _____ ☐ Rad 7 _____ ☐ Rad 8 _____ ☐ Rad 9 _____ ☐ Rad 10 _____

**Options Box 13** 1) ≥ 30 2) 31 - 39 3) 40 - 44 4) 45 - 49 5) 50 - 54 6) 55 - 59 7) 60+

VACANCIES:

Do you have any unfilled posts for radiographers? YES NO *(please circle)*

If 'YES' how many _____ *(please state number)*

_____ *(please state in WTE)*

Why do you think this is? _____

*(please select an item number from 'Options Box 14' or list reason if not given)*

**Options Box 14** 1) Work load 2) limitations of specialist field 3) Pay 4) Grade 5) Career progression 6) Other

What is the unit doing about this? _____

*(please select an item number from 'Options Box 15' or list reason if not given)*

**Options Box 15** 1) Pay incentives 2) Provide accommodation 3) Provide childcare facilities 4) Offer return to practice schemes 5) Other

THOUGHTS ON ADVANCED PRACTICE:

Are any of your radiographers considering Advanced Practice? YES NO *(please circle)*

If 'YES' how many of your team_____ *(please state number)*

What is stopping them? _____

*(please select an item number from 'Options Box 16' or list reason if not given)*

**Options Box 16** 1) Nothing, taking part soon 2) Educational support 3) Access to training 4) Funding for training 5) Pay 6) Other

What do you think would encourage more radiographers to do advanced practice? _____

*(please select an item number from 'Options Box 17' or list reason if not given)*

**Options Box 17** 1) Provide easier access to training 2) Pay incentives 3) Other

## 9. ASSISTANT PRACTITIONER (RADIOGRAPHER) SECTION

Do you have any assistant practitioners in your team? YES NO *(please circle)*

If 'NO' why is this? _____ *(please specify and go straight to next section)*

If 'YES' please fill in the following section

### STAFFING DETAILS:

Number of assistant practitioners in post: _____ *(please state number)*

_____ *(please state in WTE)*

What age band does each of your assistant practitioners fall into?

*(please select an age band from 'Options Box 18' for each assistant practitioners on your team)*

☐ AssP 1 _____ ☐ AssP 2 _____ ☐ AssP 3 _____ ☐ AssP 4 _____

| Options Box 18 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

At what level are your assistant practitioners? *(please select a suitable level from 'Options Box 19')*

☐ AssP 1 _____ ☐ AssP 2 _____ ☐ AssP 3 _____ ☐ AssP 4 _____

| Options Box 19 | Band 1) Induction | Band 2) Mid way | Band 3) Novice | Band 4) Competent |
|---|---|---|---|---|

### TRAINING:

What route did / are your assistant practitioners taking? *(please write route, e.g. NVQ, BTEC)*

☐ AssP 1 _____ ☐ AssP 2 _____ ☐ AssP 3 _____ ☐ AssP 4 _____

How did your Assistant Practitioners generally find the training process? *(please circle appropriate number)*

1 Poor 2 3 4 5 Excellent

Comments _____ (if any)

Are any of your assistants interested in becoming a radiographer? YES NO *(please circle)*

Do you have formally appointed trainers? YES NO *(please circle)*

If 'YES' what qualifications do they have? _____ *(please state full qualifications)*

Are they from your breast screening radiographic team? YES NO *(please circle)*

### VACANCIES

Do you have any unfilled posts for assistant practitioners? YES NO *(please circle)*

If 'YES' how many _____ *(please state number)*

_____ *(please state in WTE)*

Why do you think this is? _____

*(please select an item number from 'Options Box 20' or list reason if not given)*

| Options Box 20 | 1) Access to training | 2) Pay | 3) Grade | 4) Work load | 5) limitation of specialist field | 6) Other |
|---|---|---|---|---|---|---|

What is the unit doing about this? _____

*(please select an item number from 'Options Box 21' or list reason if not given)*

| Options Box 21 | 1) Providing easier access to training | 2) Pay incentives | 3) Other |
|---|---|---|---|

## 10. PROFESSIONAL / TECHNICAL HELPERS SECTION

Do you have any helpers in your team? YES NO *(please circle)*

If 'NO' why is this? _____ *(please specify and go straight to next section)*

If 'YES' please fill in the following section

STAFFING DETAILS:

Number of prof / tech helpers in post: _____ *(please state number)* _____ *(please state in WTE)*

What age band does each of your helpers fall into? *(please select an age band from 'Options Box22')*

☐ Helper 1 _____ ☐ Helper 2 _____ ☐ Helper 3 _____ ☐ Helper 4 _____

| Options Box 22 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

What was your helpers' previous employment? *(please state)*

☐ Helper 1 _____ ☐ Helper 2 _____ ☐ Helper 3 _____ ☐ Helper 4 _____

VACANCIES: Do you have any unfilled posts for helpers? YES NO *(please circle)*

TRAINING: Do any helpers plan on training to become assistants? YES NO *(please circle)*

## 11. PROGRAMME MANAGERS

STAFFING DETAILS:

What professional background is your programme manager from? _____ *(please state)*

Are they part time or full time? PART TIME FULL TIME *(please circle)*

What age band does your programme manager fall into? ____ *(please select an age band from 'Options Box23')*

| Options Box 23 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

## 12. ADMINISTRATION / CLERICAL STAFF

STAFFING DETAILS:

Number of admin / clerical staff in post: _____ *(please state number)* _____ *(please state in WTE)*

What age band does each of your admin / clerical staff fall into?

*(please select an age band from 'Options Box 24' if you have more than 4 admin staff in your team please submit a separate sheet)*

☐ Admin 1 ____ ☐ Admin 2 _____ ☐ Admin 3 _____ ☐ Admin 4 _____

| Options Box 24 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

VACANCIES: Do you have any unfilled posts for admin / clerical staff? YES NO *(please circle)*

Why do you think this is? _____ *(please select an item number from 'Options Box 25' or list reason if not given)*

| Options Box 25 | 1) Pay | 2) Grade | 3) Variety of work | 4) Other |
|---|---|---|---|---|

## 13. BREAST CARE NURSES

STAFFING DETAILS: *NB please give information relating to the screening service only, use estimates if necessary*

Number of breast care nurses in post: _____ *(please state number)* _____ *(please state in WTE)*

What age band does each of your breast care nurses fall into? *(please select an age band from 'Options Box 26')*

☐ BCN 1 ____ ☐ BCN 2 _____ ☐ BCN 3 _____ ☐ BCN 4 _____

| Options Box 26 | 1) ≥ 30 | 2) 31 - 39 | 3) 40 - 44 | 4) 45 - 49 | 5) 50 - 54 | 6) 55 - 59 | 7) 60+ |
|---|---|---|---|---|---|---|---|

## 14. SURGEONS

STAFFING DETAILS: *NB please give information relating to the screening service only, use estimates if necessary*

Number of surgeons in post: _____ *(please state number)*

_____ *(please state total number of sessions)*

## 15. PATHOLOGISTS

STAFFING DETAILS: *NB please give information relating to the screening service only, use estimates if necessary*

Number of pathologists in post: _____ *(please state number)*

_____ *(please state total number of sessions)*

## 16. OTHER MEDICAL POSTS

What other medical personnel are involved in your breast screening unit? *(please attach a separate sheet if needed)*

Title of post _____ *(please state)* Number of sessions _____ *(please state)*

Title of post _____ *(please state)* Number of sessions _____ *(please state)*

## 17. LONG TERM SICK LEAVE *(NB long term sick leave = 4+ weeks)*

Are any of your staff currently on long term sick leave? YES NO *(please circle)*

If 'YES' please indicate how many and from which profession *(please tick all that apply)*

- ☐ Consultant Practitioners _____ *(please state number)*
- ☐ Advanced Practitioners _____ *(please state number)*
- ☐ Assistant Practitioners _____ *(please state number)*
- ☐ Admin / Clerical Staff _____ *(please state number)*
- ☐ Breast Care Nurses _____ *(please state number)*
- ☐ Radiologists _____ *(please state number)*
- ☐ Radiographers _____ *(please state number)*
- ☐ Prof / Tech Helpers _____ *(please state number)*
- ☐ Surgeons _____ *(please state number)*
- ☐ Other _____ *(please state number)*

## 18. MULTIDISCIPLINARY CLINICAL MEETINGS

Who attends the multidisciplinary clinical meetings? *(please tick all that apply and circle the member who chairs the meeting)*

- ☐ Consultant Practitioners
- ☐ Advanced Practitioners
- ☐ Assistant Practitioners
- ☐ Admin / Clerical Staff
- ☐ Breast Care Nurses
- ☐ Radiologists
- ☐ Radiographers
- ☐ Prof / Tech Helpers
- ☐ Surgeons
- ☐ Breast Clinician GP
- ☐ Breast Clinician Surgeon
- ☐ Breast Clinician Other
- ☐ BMS / Lab Technician
- ☐ Programme Manager
- ☐ Other _____ *(please state)*

## 19. DIAGNOSTIC SERVICES INFORMATION

Is your unit also involved in diagnostic/symptomatic services? YES NO *(please circle)*

If 'YES' how many mammograms were performed in 2002 - 2003? _____ *(please state number)*

## 20. COMPLETION DETAILS

Date questionnaire completed _____/_____/_____ *(please state date)*

Name(s) of person(s) completed questionnaire _____

Contact phone number for queries _____

**MANY THANKS FOR COMPLETING THIS QUESTIONNAIRE, YOUR HELP IS MUCH APPRECIATED**

# APPENDIX 2

### Sections A-R: RAW DATA TABLES

| | |
|---|---|
| Section A: | Programme Expansion Raw Data Tables |
| Section B: | Population Information Raw Data Tables |
| Section C: | Assessment Clinics Raw Data Tables |
| Section D: | Radiologists Raw Data Tables |
| Section E: | Consultants Raw Data Tables |
| Section F: | Advanced Practitioners Raw Data Tables |
| Section G: | Radiographers Raw Data Tables |
| Section H: | Assistant Practitioners Raw Data Tables |
| Section I: | Professional Technical Helpers Raw Data Tables |
| Section J: | Programme Manager Raw Data Tables |
| Section K: | Administration / Clerical Staff Raw Data Tables |
| Section L: | Breast Care Nurses Raw Data Tables |
| Section M: | Surgeons Raw Data Tables |
| Section N: | Pathologists Raw Data Tables |
| Section O: | Other Medical Posts Raw Data Tables |
| Section P: | Long Term Sick Leave Raw Data Tables |
| Section Q: | Multidisciplinary Clinical Meetings Raw Data Tables |
| Section R: | Diagnostic / Symptomatic Services Information Raw Data Tables |

## SECTION A: PROGRAMME EXPANSION

Table 1.1: Implementation of two views

| Implemented two views? | Yes | No | Started then stopped |
|---|---|---|---|
| No. of Units | 63 | 6 | 2 |

Table 1.2: Date started two views implementation

| Always | 1989 | 1990 | 1995 | 1998 | 1999 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 4 | 29 | 22 | 2 |

Table 1.3: Date predicted for starting two views implementation

| Date (2004) | January | February | April | June | September | November |
|---|---|---|---|---|---|---|
| No. of Units | 1 | 1* | 3* | 1 | 1 | 1 |

* These figures contain 'started then stopped' data

Table 1.4a: Reasons for not implementing two views

| Reason | 1,2,3 | 1,2,3,4 | 2 | 2,4 | 4 | No reason given |
|---|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 2 | 1 | 2 | 1 |

**Key** 1) Building Problems 2) Staff Shortages 3) Equipment Problems 4) Funding 5) Other

Table 1.4b: Reasons for not implementing two views: *Reduced table*

| Reason | Building problems (1) | Staff Shortages (2) | Equipment Problems (3) | Funding (4) | No reason given |
|---|---|---|---|---|---|
| No. of Units | 2 | 5 | 2 | 4 | 1 |

Table 1.5: Implementation of age extension

| Implemented age extensions? | Yes | No | Started then stopped |
|---|---|---|---|
| Number of units | 29 | 39 | 3 |

Table 1.6: Date started age extension

| Date | 1997 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 11 | 12 | 4 |

Table 1.7: Date predicted for starting age extension implementation

| Date | Jan 04 | Mar 04 | Apr 04 | Jun 04 | Sep 04 | Oct 04 | Nov 04 | Dec 04 | Jan 05 | Unable to say |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 4 | 4* | 2 | 2 | 3 | 4 | 10 | 2 | 10* |

* These figures contain 'started then stopped' data

Table 1.8a: Reasons for not implementing age extensions

| Reason | 1 | 1,2 | 1,2,3 | 1,2,3,4 | 1,4 | 2 | 2,3 | 2,4 | 3,4 | 4 | 5 | Declined |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 6 | 2 | 4 | 1 | 3 | 7 | 1 | 4 | 1 | 8 | 1 | 4 |

**Key** 1) Building Problems 2) Staff Shortages 3) Equipment Problems 4) Funding 5) Other

Table 1.8b: Reasons for not implementing age extensions: *Reduced table*

| Reason | Building problems (1) | Staff Shortages (2) | Equipment Problems (3) | Funding (4) | Other: not stated (5) |
|---|---|---|---|---|---|
| No. of Units | 16 | 19 | 7 | 17 | 1 |

**SECTION B: POPULATION INFORMATION**

Table 1.9a: Target Population 50 – 64

| Population size (1000's) | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 | 100-110 | 110-120 | 120-130 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 4 | 11 | 9 | 6 | 5 | 6 | 5 | 4 | 0 | 4 | 2 | 1 |

NB 14 units did not state their population size (8 of this 14 was because they had already started AE)

Table 1.9b: Target Population 50 – 70

| Population size (1000's) | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 | 100 - 110 | 110 - 120 | 120 - 130 | 130 - 140 | 140 - 150 | 150 - 160 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 2 | 8 | 6 | 8 | 6 | 6 | 3 | 7 | 5 | 3 | 2 | 2 | 2 | 2 | 3 |

NB 6 units did not state their population size

Calculation: Percentage increase from population size 50 – 64 to 50 – 70

160000 + 17500 = 177500
126000 + 14846 = 140846

$$\frac{(117.5 - 140.846)}{140.846} \times 100 = 26\%$$

Estimated percentage increase = 25%

Table 1.10: Number of women invited per hour at static sites

| No. Women Per hour | 3 | 5 | 6 | 7 | 8 | 9 | 9.2 | 10 | 12 | 14 | 15 | 16 | 20 | Not stated | Dependent |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 12 | 2 | 6 | 6 | 1 | 19 | 6 | 1 | 1 | 2 | 2 | 1* | 1** |

NB: 9 units stated they do not have static sites
* 58/day
** 11 women invited when 3 rads working / 6 women invited when 2 rads working

Table 1.11: Two views carried out at all rounds on static sites?

| 2V at all rounds? | No | Yes | Do not have | Declined |
|---|---|---|---|---|
| No. of Units | 6 | 55 | 9 | 1 |

Table 1.12: Number of women invited per hour at mobile sites

| No. Women Per hour | 7 | 8 | 8.5 | 9 | 9.2 | 10 | 11 | 12 | 20 | Not stated | Dependent |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 6 | 1 | 6 | 1 | 35 | 2 | 6 | 1 | 2* | 1** |

NB: 9 units stated they do not have mobile sites
* 58/day and 52/day
** Not yet doing two views fully: invite 11 women when doing 1V and 9 women when doing 2V

Table 1.13: Two views carried out at all rounds at mobile sites?

| 2V at all rounds? | No | Yes | Sometimes | Do not have | Declined |
|---|---|---|---|---|---|
| No. of Units | 7 | 53 | 1 | 9 | 1 |

## SECTION C: ASSESSMENT CLINICS

Table 2.1: Number of assessment clinics run

| No of Clinics | 1 | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 14 | 2 | 23 | 1 | 17 | 7 | 2 | 3 | 1 | 1 |

Table 2.2: Number of women invited per hour

| No of Women | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 24 | Declined |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 2 | 3 | 13 | 4 | 12 | 3 | 14 | 1 | 1 | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 1 |

Table 2.3: Are all procedures carried out at the first visit?

| All procedures at first visit? | Yes | No |
|---|---|---|
| No. of Units | 48 | 23 |

Table 2.4a: Procedures requiring subsequent visits

| Procedures | 1 | 2 | 2+4 | 2+4+5 | 2+5 | 3+4 | 4 | 4+5 | 5 |
|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 3 | 11 | 3 | 1 | 2 | 1 | 3 | 1 | 1 |

**Key** Stereo core biopsy: 1) Analogue 2) Digital Mammatome biopsy: 3) Ultrasound 4) Stereo 5) Repeat needle test 6) Other - state

Table 2.4b Procedures requiring subsequent visits: *Reduced table*

| Procedures | Analogue Core Biopsy | Digital Core Biopsy | Mammatome biopsy Ultrasound | Mammatome biopsy Stereo | Repeat needle test |
|---|---|---|---|---|---|
| No. of Units | 3 | 17 | 1 | 9 | 5 |

Table 2.5: Number of professionals attending a clinic

| No. of professionals at clinic | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| No. of Units | 1 | 9 | 13 | 28 | 15 | 4 |

Table 2.6: Type of professional at clinic

| Professional | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | Admin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 53 | 69 | 32 | 11 | 69 | 24 | 7 | 3 | 18 | 43 | 4 | 3 |

1) Clinic Nurse 2) Radiographer 3) Adv Practitioner 4) Ass Practitioner
5) Radiologist 6) Surgeon 7) Clinician - GP 8) Clinician - Surgeon
9) Clinician - Other 10) Tech / Prof Helper 11) BMS / Lab Technician 12) Other- specify

Table 2.7a: Which core professionals attend the clinics

| Which core professionals do you not have? | 1 | 1, 6-9 | 1,3 | 1,3 6-9 | 1,3,5 | 1,3,6-9 | 2,6-9 | 3 | 3,6-9 | 6-9 | None | Declined |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number | 5 | 3 | 4 | 1 | 1 | 1 | 1 | 22 | 9 | 9 | 14 | 1 |

NB 6-9 is a catch notation all for the occupation 'Clinician'

Table 2.7b: Which core professionals attend the clinics: *Reduced table*

| Core Professionals | Clinic Nurse | Radiographer | AdvP | Radiologist | Clinician |
|---|---|---|---|---|---|
| Number | 53 | 69 | 32 | 69 | 52 |

Table 2.7c: Number of other assessment professionals at an assessment clinic

| Other Professionals | Assistant Practitioner | Tech / Prof | BMS / Lab Technician | Administration |
|---|---|---|---|---|
| No. of Units | 11 | 43 | 4 | 3 |

## SECTION D: RADIOLOGISTS SECTION

Table 2.8: Number of radiologists working in a unit

| No. of Radiologists | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 5 | 27 | 15 | 9 | 9 | 1 | 1 | 2 | 1 |

Total = 226 Radiologists

Table 2.9: Number of sessions carried out by radiologists

| No. of Sessions | 0 | 0.4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 24 | 26 | 27 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 1 | 2 | 7 | 5 | 4 | 10 | 6 | 2 | 6 | 8 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Total = 620.4 Sessions

Table 2.10: Age of radiologists

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. of Radiols | 1 | 36 | 39 | 52 | 42 | 18 | 16 | 22 |

Table 2.11: Vacancies for radiologists

| Do you have vacancies? | Yes | No |
|---|---|---|
| No. of Units | 37 | 34 |

Table 2.12:Number of Vacancies for radiologists

| No. Vacancies | 1 | 1.5 | 2 | 3 | Not stated |
|---|---|---|---|---|---|
| No. of Units | 30 | 1 | 4 | 1 | 1 |

Total = 42.5 Radiologists

Table 2.13: Number of Vacancies for radiologists WTE

| WTE | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.75 | 0.8 | 0.9 | 1 | 1.5 | 4 | Not Stated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 3 | 3 | 5 | 7 | 5 | 1 | 2 | 1 | 2 | 5 | 1 | 1 | 1 |

Total = 25.3 WTEs

Table 2.14: Why are there vacancies?

| 1 | 2 | 3 | 4 | 5 | 6 Not stated | Don't Know | Funding | National Shortage | Unpopular speciality |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 4 | 2 | 8 | 7 | 11 | 5 | 4 | 9 | 1 |

**Key** 1) Work load 2) Facilities 3) Lack of interesting cases 4) Lack of variety in work 5) Litigation 6)

Table 2.15a: What are you doing about the shortage?

| Selection | 1 | 1+2 | 1+3 | 2 | 3 | Not doing anything |
|---|---|---|---|---|---|---|
| No. of Units | 20 | 4 | 4 | 1 | 3 | 6 |

**Key** 1) Training radiographers in advanced practice 2) Training clinicians 3) Other

Table 2.16b: What are you doing about the shortage: *Reduced table*

| Selection | Training Radiographers | Training Clinicians | Other | Not doing anything |
|---|---|---|---|---|
| No. of Units | 28 | 5 | 5 | 6 |

## SECTION E: CONSULTANT PRACTITIONERS SECTION

Table 2.17: Do you have any consultant practitioners?

| Do you have consultant Practitioners | Yes | No |
|---|---|---|
| No. of Units | 0 | 71 |

## SECTION F: ADVANCED PRACTITIONERS SECTION

Table 3.1: Number of advanced practitioners and reasons

| YES | | NO | | |
|---|---|---|---|---|
| **Yes** | **Not recognised** | **No reason given** | **Staff shortages** | **4-teir system not in place** |
| 61 | 3 | 5 | 1 | 1 |

Table 3.2: Number of advanced practitioners in units

| No of Adv. Prac | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| **No. of Units** | 17 | 19 | 11 | 8 | 5 | 1 |

Total = 151

Table 3.3: WTE for advanced practitioners in units

| WTE | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | 1 | 1.2 | 1.4 | 1.5 | 1.6 | 1.8 | 2 | 2.2 | 2.4 | 2.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **No. of Units** | 2 | 6 | 1 | 2 | 5 | 7 | 1 | 2 | 4 | 1 | 1 | 7 | 2 | 3 | 1 |

| WTE | 2.6 | 2.8 | 3 | 3.2 | 3.3 | 3.5 | 3.8 | 4 | 4.6 | 4.8 | 5 | Not stated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **No. of Units** | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 |

Total = 111.8WTE

Table 3.4: Age of advanced practitioners

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| **No. of AdvP** | 2 | 18 | 40 | 40 | 34 | 7 | 3 | 7 |

Table 3.5: What level are the advanced practitioners at?

| Induction | Midway | Novice | Competent |
|---|---|---|---|
| 4 | 14 | 13 | 120 |

Table 3.6a: What elements are the advanced practitioners undertaking?

| 1 | 1,2 | 1,2,3 | 1,2,3,4 | 1,2,3,4,7 | 1,2,3,4,5,7 | 1,2,5 | 1,2,7 | 1,3 | 1,3,4 | 1,3,4,7 | 1,3,5 | 1,3,7 | 1,4 | 1,7 | 2 | 2,5 | 3 | 3,4 | 3,4,7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 94 | 11 | 1 | 2 | 1 | 1 | 1 | 2 | 6 | 6 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 9 | 6 | 2 |

| Key | | |
|---|---|---|
| | 1) Film reading | 2) Breast ultra sound |
| | 3) X-ray guided needle biopsy | 4) X-ray guided wire localisation |
| | 5) Ultrasound guided needle biopsy | 6) Ultrasound guided wire localisation |
| | 7) Clinical examination | 8) Other please state |

Table 3.6b: What elements are the advanced practitioners undertaking: *Reduced table*

| Elements | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| **No. of Units** | 129 | 19 | 38 | 21 | 5 | 0 | 10 | 0 |

Table 3.7: How did the advanced practitioners find the training process

| Rating | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **No. of Units** | 1 | 3 | 18 | 28 | 11 |

| Key | 1 = Poor | 5 = excellent |
|---|---|---|

Table 3.8: Would any advanced practitioners consider becoming a consultant?

| NO | YES | DON'T KNOW |
|---|---|---|
| 39 | 21 | 1 |

Table 3.9: Are there any vacancies for advanced practitioners?

| Vacancies | No | Yes |
|---|---|---|
| **No. of Units** | 58 | 3 |

## SECTION G: RADIOGRAPHERS SECTION

Table 4.1: Number of radiographers

| No. Radiographers | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 20 | 23 | 24 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 3 | 3 | 4 | 3 | 8 | 6 | 8 | 6 | 5 | 1 | 5 | 3 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |

Total = 698

Table 4.2: WTE for Radiographers

| WTE | 1 | 1.5 | 1.7 | 1.8 | 2 | 2.27 | 2.4 | 3 | 3.12 | 3.22 | 3.4 | 3.65 | 3.8 | 4 | 4.1 | 4.3 | 4.5 | 4.6 | 4.75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |

| WTE | 4.78 | 5 | 5.08 | 5.2 | 5.4 | 5.6 | 5.7 | 5.8 | 6 | 6.1 | 6.2 | 6.5 | 6.8 | 7 | 7.1 | 7.2 | 7.64 | 7.7 | 7.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| WTE | 8 | 8.2 | 8.4 | 8.5 | 9.8 | 10 | 10.1 | 10.3 | 10.6 | 11 | 11.6 | 12 | 12.2 | 12.5 | 13 | 13.4 | 13.7 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| WTE | 15.3 | 15.4 | 19.3 |
|---|---|---|---|
| No. | 1 | 2 | 1 |

Total WTE = 519.21

Table 4.3: Number of superintendent radiographers

| No. Superintendents | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| No. of Units | 1 | 43 | 18 | 7 | 2 |

Total = 108

Table 4.4 WTE for superintendent radiographers

| WTE | 0 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 1 | 1.5 | 1.7 | 1.8 | 2 | 2.2 | 2.5 | 3 | 3.8 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 2 | 1 | 2 | 1 | 2 | 3 | 34 | 2 | 1 | 4 | 12 | 1 | 1 | 3 | 1 | 1 |

Total WTE = 97.2

Table 4.5 Age of superintendent radiographers

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. of Supt Rads | 2 | 7 | 17 | 32 | 22 | 22 | 2 | 4 |

Table 4.6: Age of radiographers

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. of Rads | 23 | 120 | 122 | 137 | 152 | 80 | 16 | 48 |

Table 4.7: Do you have any vacancies for radiographers?

| Vacancies | NO | YES |
|---|---|---|
| No. of Units | 35 | 36 |

Table 4.8: Number of vacancies for radiographers

| Vacancies | 0.5 | 1 | 2 | 3 | 4 | 5 | 6 | Not stated |
|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 13 | 14 | 3 | 2 | 1 | 1 | 1 |

Total = 69.5

Table 4.9: Number of vacancies for radiographers WTE

| Vacancy WTE | 0.4 | 0.5 | 0.6 | 0.8 | 1 | 1.2 | 1.3 | 1.4 | 1.6 | 2 | 2.1 | 3.8 | 5 | 6 | Not stated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 2 | 2 | 2 | 3 | 5 | 1 | 1 | 1 | 3 | 10 | 1 | 2 | 1 | 1 | 1 |

Total = 69.8

Table 4.10a: Why do you think there are vacancies?

| Why? | 1 | 2 | 3 | 6 | 1,2 | 2,3,4,5 | 2,6 | 3,4,5 | Process of advertising / interviewing/ short listing | Post frozen/ funding | Shortage of Rads |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 3 | 1 | 8 | 1 | 1 | 1 | 1 | 5 | 4 | 10 |

**Key** 1) Work load 2) limitations of specialist field 3) Pay 4) Grade 5) Career progression 6) Other

Table 4.10b: Why do you think there are vacancies: *Reduced table*

| Why | 1 | 2 | 3 | 4 | 5 | 6 | Process of advertising / interviewing/ short listing | Post frozen/ funding | Shortage of Rads |
|---|---|---|---|---|---|---|---|---|---|
| No. | 2 | 6 | 3 | 2 | 2 | 9 | 5 | 4 | 10 |

Table 4.11: What are you do about the vacancies?

| Why? | 1 | 3 | 5 | 2,3 | 2,3, 4 | 2,4 | 4,5 | Advertising, recruiting, short listing | Introduce 4 tier system | Not stated | Nothing |
|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 2 | 1 | 3 | 1 | 2 | 1 | 3 | 14 | 4 | 3 | 2 |

**Key** 1) Pay incentives 2) Provide accommodation 3) Provide childcare facilities
4) Offer return to practice schemes 5) Other

Table 4.12: Number of units considering advanced practice

| Considering Advanced Practice? | No | Yes |
|---|---|---|
| No. of Units | 19 | 52 |

Table 4.13: Number of radiographers considering advanced practice

| No Rad/ Unit | 1 | 2 | 3 | 4 | 6 |
|---|---|---|---|---|---|
| No. of Rads | 18 | 17 | 14 | 1 | 2 |

Total = 110

Table 4.14: What is stopping them from doing advanced practice?

| 1 | 2 | 3 | 4 | 5 | 6 | 1,2 | 1,3 | 2,4 | 3,4,6 | 3,5 | Alt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 22 |

**Key** 1) Nothing, taking part soon 2) Educational support 3) Access to training
4) Funding for training 5) Pay 6) Other Alt) Alternative answer

Of the 22 that gave an alternative answer:

12 - no post available at present / unit does not need
3 - not receiving support from radiologists and / or department
3 - due to funding
1 - need for screening radiographers
1 - Not possible to release them from mammography work
1 - Service work pressure
1 - time restraints and stress

Table 4.15: What would encourage them to do advanced practice?

| 1 | 2 | 3 | 1,2 | 1,2,3 | Alt | Not stated |
|---|---|---|---|---|---|---|
| 4 | 26 | 4 | 6 | 1 | 9 | 2 |

**Key** 1) Provide easier access to training 2) Pay incentives 3) Other Alt) Alternative answer

Of the 9 that gave an alternative answer:

1 - Career progression
1 - Funding
1 - More options for what they can do
1 - More staff
2 - Opportunity to use qualifications have post backfilled to allow for advanced practice.
3 - support (from radiologists) and time

## SECTION H: ASSISTANT PRACTITIONERS SECTION

Table 5.1: Do you have assistant practitioners?

| Do you have assistants | Yes | No |
|---|---|---|
| No. of Units | 32 | 39 |

Table 5.2: Reasons for not having assistant practitioners?

| Reason | Recruiting / retention issues | Not required (no shortage of Rads) | Limited expansion planned | Lack of support staff/ space | Funding | Employing soon | Not stated |
|---|---|---|---|---|---|---|---|
| No. of Units | 4 | 12 | 1 | 2 | 6 | 1 | 13 |

Table 5.3: Number of assistant practitioners in post

| Number of assistants | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| No. of Units | 6 | 16 | 2 | 4 | 1 | 2 | 1 |

Total = 84

Table 5.4: Number of assistant practitioners in post WTE

| WTE | 6.8 | 6 | 5.6 | 4.39 | 4 | 3.8 | 3 | 2.8 | 2.5 | 2 | 1.8 | 1.5 | 1 | 0.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 14 | 1 | 1 | 3 | 3 |

Total = 79.39

Table 5.5: Age of assistant practitioners

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. AssP | 9 | 26 | 14 | 13 | 10 | 1 | 0 | 11 |

Table 5.6: Competency level of assistant practitioners

| Competency | Induction | Mid way | Novice | Competent |
|---|---|---|---|---|
| No. of Assistants | 13 | 27 | 15 | 29 |

Table 5.7: Training route taken by assistant practitioners

| Route | NVQ | NVQ + CHE | BTEC |
|---|---|---|---|
| No. of Assistants | 29 | 1 | 2 |

Table 5.8 Score given to training received

| Rating | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| No. of Units | 2 | 2 | 17 | 10 | 1 |

| Key | 1 = Poor | 5 = excellent |
|---|---|---|

Comments:

4, NVQ had to be accessed through a different centre as not available in units location
3, local problems finding correct NVQ course
2, very repetitive, long winded and in some cases beneath them!
2, to basic and non-specific
1, poor books back from verifier, who verifies M2.3
1 NVQ training very poor support

Table 5.9: Are any assistants interested in becoming a radiographer?

| Interested? | No | Yes |
|---|---|---|
| No. of Units | 19 | 13 |

Table 5.10: Does your unit have formally appointed trainers?

| Formally appointed trainers? | Yes | No |
|---|---|---|
| No. of Units | 25 | 7 |

Table 5.11: Qualifications of your trainers

| Qualifications | Declined | NVQ Assessor | FAETC 730, BSC DCR | D32, D33 | D32, D33, D34 | CT Cert | Clinical instructor | Cert in mammo | Assessing / supervising p. grad module & NVQ assessor |
|---|---|---|---|---|---|---|---|---|---|
| No. of Trainers | 1 | 7 | 1 | 6 | 1 | 1 | 2 | 1 | 5 |

Table 5.12: Are the trainers from your radiographic team?

| Trainers from Radiographic Team? | Yes | No |
|---|---|---|
| No. of Units | 25 | 7 |

Table 5.13: Do you have any vacancies for assistant practitioners?

| Do You Have Vacancies? | Yes | No |
|---|---|---|
| No. of Units | 4 | 28 |

Table 5.14: Number of vacancies for assistant practitioners

| Number of Vacancies | 1 | 2 |
|---|---|---|
| No. of Units | 2 | 2 |

Total = 6

Table 5.15: Number of vacancies for assistant practitioners WTE

| Number of Vacancies | 0.5 | 0.6 | 2 |
|---|---|---|---|
| No. of Units | 1 | 1 | 2 |

Total = 5.1

Table 5.16: Why do you think you have vacancies for assistants?

| Reasons for Vacancy | Pay | Other (not stated) | Awaiting HR Recruitment |
|---|---|---|---|
| No. of Units | 2 | 1 | 1 |

Table 5.17: What are you doing about the vacancies?

| Reasons for Vacancy | Other (not stated) | Recruitment and training |
|---|---|---|
| No. of Units | 3 | 1 |

## SECTION I: PROFESSIONAL / TECHNICAL HELPERS SECTION

Table 6.1: Do you have any professional / technical helpers

| Do you have Prof/ Techs | Yes | No |
|---|---|---|
| No. of Units | 64 | 7 |

Of the 'No's' three units commented as to why:

No support from A+C
Fully staffed, small unit
Not considered necessary at present

Table 6.2: Number of professional / technical helpers per unit

| No. Prof/Tech | 6 | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| No. of Units | 1 | 3 | 7 | 17 | 24 | 12 |

Total = 160

Table 6.3: Number of professional / technical helpers per unit WTE

| WTE | 0.5 | 0.6 | 0.7 | 0.8 | 1 | 1.23 | 1.28 | 1.4 | 1.5 | 1.6 | 1.8 | 2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.7 | 2.9 | 2.91 | 3.1 | 3.4 | 3.5 | 4 | 5.4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 2 | 1 | 2 | 2 | 12 | 1 | 1 | 2 | 5 | 3 | 3 | 13 | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |

Total = 116.12

Table 6.4: Age of professional / technical helpers

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. Prof/Tech | 16 | 36 | 36 | 23 | 19 | 17 | 7 | 6 |

Table 6.5: Previous employment of professional / technical helpers

| Job | A+C | Carer/Care assistant | Declined | H/W | Hairdresser | Lab Tech / Assistant / Helper | NHS | Nurse | Shop Assistant / Keeper / Worker | Other |
|---|---|---|---|---|---|---|---|---|---|---|
| No. | 45 | 15 | 25 | 3 | 3 | 28 | 3 | 4 | 13 | 21 |

Others:

Bank Worker
Catering
Civil servant
CSSD
Domestic
Dressmaking teacher
Factory
Phlebotomist
S.E.W
School leaver
Social Care
Sowing machinist
Student
Unknown
Graduate
Leisure centre worker
Mid day supervisor
Vending machine operator
Vet nurse
Ward manager
Florist

Table 6.6: Number of vacancies for professional / technical helpers

| Vacancies | No | Yes |
|---|---|---|
| No. of Units | 51 | 13 |

Table 6.7: Number of professional / technical helpers that plan on becoming assistant practitioners

| Interested in Becoming Assistants? | Yes | No |
|---|---|---|
| No. of Units | 21 | 43 |

## SECTION J: PROGRAMME MANAGERS SECTION

Table 6.8: Programme manager background

| Background | A+C | Declined | Don't Have | Medical | Nurse | Radiography | Other |
|---|---|---|---|---|---|---|---|
| Number | 10 | 2 | 7 | 7 | 2 | 37 | 6 |

Others:

| | | |
|---|---|---|
| Doctor | Law | Paramedic |
| Finance | NHS | IT |

Table 6.9: Is your programme manger full time / part time?

| Full/ Part Time | Declined | Full | Part |
|---|---|---|---|
| No. of Units | 1 | 44 | 19 |

Table 6.10: Age of programme manager

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. Managers | 2 | 5 | 12 | 18 | 15 | 11 | 1 | 1 |

## SECTION K: ADMINISTRATION / CLERICAL SECTION

Table 6.11: Number of administration / clerical staff

| No. Admin | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 20 | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 5 | 7 | 10 | 12 | 7 | 4 | 2 | 1 | 5 | 6 | 2 | 3 | 1 | 2 | 1 | 2 |

Total = 537

Table 6.12: Number of administration / clerical staff WTE

| WTE | 0.5 | 1 | 1.2 | 2 | 2.1 | 2.48 | 2.5 | 2.6 | 2.8 | 3.1 | 3.16 | 3.5 | 3.53 | 3.6 | 3.7 | 3.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 1 | 2 |

| WTE | 3.82 | 4 | 4.03 | 4.1 | 4.2 | 4.3 | 4.5 | 4.9 | 5 | 5.13 | 5.15 | 5.2 | 5.39 | 5.4 | 5.5 | 5.75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 2 |

| WTE | 6 | 6.32 | 6.6 | 6.8 | 7.14 | 7.6 | 8.1 | 9 | 9.3 | 9.6 | 9.67 | 10 | 11 | 12 | 13 | 13.3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 |

| WTE | 14 | 16 | D |
|---|---|---|---|
| No. | 1 | 1 | 2 |

Total = 939.72

Table 6.13: Age of administration / clerical staff

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. Admin | 51 | 85 | 80 | 80 | 98 | 66 | 22 | 57 |

Table 6.14: Vacancies for administration / clerical staff

| Vacancy | Declined | No | Yes |
|---|---|---|---|
| No. of Units | 2 | 49 | 20 |

Table 6.15: Why do you have vacancies for administration / clerical staff

| Reason for vacancy | Pay | Grade | Other (not stated) | Alternative |
|---|---|---|---|---|
| No. of Units | 1 | 2 | 14 | 2 |

Alternative answer given:
Post frozen
No space to accommodate new staff

## SECTION L: BREAST CARE NURSES SECTION

Table 6.16: Number of breast care nurses in post

| No. Nurses | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | D |
|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 5 | 12 | 12 | 22 | 11 | 4 | 2 | 2 | 1 |

Total = 192

Table 6.17: Number of breast care nurses in post WTE

| WTE | 0 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 1 | 1.2 | 1.25 | 1.5 | 1.6 | 1.65 | 1.7 | 1.8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 5 | 5 | 5 | 3 | 3 | 1 | 2 | 8 | 1 | 2 | 2 | 1 | 1 | 2 | 1 |

| WTE | 2 | 2.1 | 2.18 | 2.4 | 2.5 | 2.6 | 2.8 | 3 | 3.6 | 3.8 | 4 | 4.7 | 4.83 | 5 | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 1 | 2 | 2 | 1 | 1 | 4 | 1 |

Total = 123.86

Table 6.18: Age of breast care nurses in post

| Age Band | ≥ 30 | 31-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60+ | Declined |
|---|---|---|---|---|---|---|---|---|
| No. Nurses | 7 | 47 | 39 | 35 | 32 | 21 | 2 | 9 |

## SECTION M: SURGEONS SECTION

Table 7.1: Number of surgeons in post

| No. Surgeons | 1 | 2 | 3 | 4 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| No. of Units | 9 | 29 | 13 | 9 | 2 | 2 | 2 |

Total = 184

Table 7.2: Number of sessions carried out by the surgeons

| No. Sessions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| No. of Units | 7 | 25 | 13 | 9 | 2 | 4 | 3 | 3 |

Total = 211

## SECTION N: PATHOLOGISTS SECTION

Table 7.3: Number of pathologists

| No. Pathologists | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 9 |
|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 7 | 22 | 11 | 14 | 6 | 4 | 1 |

Total = 203

Table 7.4: Number of sessions carried out by the pathologists

| No. Sessions | 0 | 1 | 1.5 | 2 | 3 | 4 | 5 | 6 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| No. of Units | 1 | 3 | 1 | 28 | 9 | 10 | 8 | 4 | 1 | 1 |

Total = 210.5

## SECTION O: OTHER MEDICAL POSTS SECTION

Table 7.5: Number of other medical posts

| No. Other Posts | 3 | 2 | 1 |
|---|---|---|---|
| No. of Units | 1 | 7 | 19 |

Total = 36

Table 7.6: Number of other medical posts sessions

| No. Sessions | 1 | 2 | 3 | 4 | 5 | 6 | Not stated |
|---|---|---|---|---|---|---|---|
| No. of Units | 11 | 7 | 4 | 5 | 3 | 4 | 2 |

Total = 96

Table 7.7: Names of other medical posts

| Post title | Associate specialist | Breast clinician | Breast physician | Clinical assistant | Oncologist | Surgeon staff grade | Other |
|---|---|---|---|---|---|---|---|
| Number | 4 | 11 | 2 | 2 | 2 | 2 | 13 |

Others:

BMS/ Lab tech
Breast Clinician surgeon
Clinic Nurse
Clinical coordinator
Clinician
Cytologists
Hospital practitioner
Medical Physics
Registrar (radiology)
Coordinator radiologist
Trust grade registrar
Specialist registrar
Staff grade

## SECTION P: LONG TERM SICK LEAVE SECTION

Table 7.8: Do you have any staff on long term sick leave?

| Staff Off Sick? | No | Yes |
|---|---|---|
| No. of Units | 46 | 25 |

Table 7.9: number of staff on long term sick leave

| Number of staff | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| No. of Units | 14 | 7 | 3 | 1 |

Total = 41

Table 7.10: Profession with the most off on long term sick leave

| Profession | Consultant | AdvP | AssP | Admin | BCN | Radiologists | Radiographers | Prof/ Tech | Surgeon | Other |
|---|---|---|---|---|---|---|---|---|---|---|
| Number | 0 | 1 | 4 | 8 | 5 | 2 | 18 | 1 | 1 | 1 |

## SECTION Q: MULTIDISCIPLINARY CLINICAL MEETINGS SECTION

Table 7.11: Who attends the multidisciplinary clinical meeting?

| Profession | Number |
|---|---|
| Consultant | 1 |
| Advanced Practitioners | 60 |
| Assistant Practitioners | 14 |
| Administration | 36 |
| Breast Care Nurses | 70 |
| Radiologists | 69 |
| Radiographers | 69 |
| Professional / Technical Helpers | 16 |
| Surgeons | 66 |
| Breast Clinician GP | 10 |
| Breast Clinician Surgeon | 20 |
| Breast Clinician Other | 21 |
| Biomedical Scientist/ Lab technician | 12 |
| Programme Manager | 26 |
| Other Professions not listed on questionnaire: | |
| Histopathologist | 2 |
| MDT Coordinator | 2 |
| Medical students/ juniors | 4 |
| Nurses (Consultant, Macmillan, Oncology, Research × 2, Ward, Trials) | 7 |
| Oncologists* | 20 |
| Pathologists | 29 |
| Plastic surgeons | 2 |
| Radiotherapists* | 2 |
| Clinical Audit | 1 |
| Clinical coordinators; | 1 |
| Cytopathologist | 1 |
| Duty organiser | 1 |
| Housemen; | 1 |
| Trails recruitment officer | 1 |
| MLSO | 1 |
| Orthopaedic representatives; | 1 |
| Physiotherapist; | 1 |
| Registrar | 1 |
| Surgeons (staff grade) | 1 |

* including one consultant

Table 7.12: Who chairs the multidisciplinary clinical meeting?

| Chair | Radiologists | Surgeon | BC Surgeon | BC Other |
|---|---|---|---|---|
| Number | 8 | 5 | 1 | 1 |

## SECTION R: DIAGNOSTIC SERVICES SECTION

Table 7.13: Number of units involved in diagnostic / symptomatic services?

| Involved in diagnostic / Symptomatic | No | Yes |
|---|---|---|
| No. of Units | 10 | 61 |

**REFERENCES**


1 Forrest, P. (1986) *Breast Cancer Screening: Report to the Health Ministers Working Group.* HMSO. London.

2 J. Castledine (1998). *Survey of Assessment Clinics in the NHS Breast Screening Programme in England.* NHS Cancer Screening Programmes. Unpublished report

3 *Breast Cancer Screening* (1996). Report to the Chief Officer of England, Wales, Scotland and Northern Ireland. London, Department of Health.

4 Murray-Sykes, K. (1989). *Organising Assessment.* Oxford, NHS Breast Screening Programme.

5 Wilson, R., Asbury, D., Cooke, J., Michell, M., Patnick, J. (2001). *Clinical Guidelines for Breast Cancer Screening Assessment.* (NHSBSP Publication No. 49) NHS Cancer Screening Programmes.

6 J. Castledine (2002). *New Ways of working in the NHS Breast Screening Programme: First Report on Implementation.* NHS Cancer Screening Programmes. Unpublished report

7 *The NHS Cancer Plan.* (2000). A plan for investment, a plan for reform. NHS. UK including pages 32 – 34

8 *The NHS Cancer Plan.* (2003). Three year progress report maintaining the momentum. NHS. UK. Including pages 22 – 23.

9 *Radiography Skill Mix.* (2003). A report on the four tier service delivery model. London. Department of Health.

10 *A strategy for the education and professional development of radiographers.* (2002).The College of Radiographers. UK

11 Modernisation Agency (2003) *Agenda For Change.*
www.modern.nhs.uk/agendaforchange/Afcplain.pdf
www.doh.gov.uk/agendaforchange

12 Lovegrove, M. (2003). South Bank Career Framework
www.doh.gov.uk/thenhsksf/kssummary.pdf

13 Clinical Guidelines for: The Classification and Care of Women at Risk of Familial Breast Cancer, ScHARR, *in press.*

14 Thomas, S. (2004). *Costing Clinical Guidelines: Familial Breast Cancer.* Secta. Controlled Document.

15 J. Castledine (2002). *Background Paper: Estimated Training Requirements for the Expansion of the NHS Breast Screening Programme in England*. NHS Cancer Screening Programmes. Unpublished report

16 *Guidance on Screening and Symptomatic Breast Imaging* (1999). Board and Faculty of Clinical Radiology The Royal College of Radiologists.

17 Department of Health (2003) *Sickness Absence Survey*
http://www.publications.doh.gov.uk/public/sicknessabsence2003.htm