CHAPTER 5

OPERATIONAL EFFECTIVENESS OF THE PROGRAM

This chapter will examine the operational effectiveness of the Program in terms of the quality of staff and staff training; and the quality of service provision with special emphasis on the role of GPs in the Program and the use of non-radiologist readers.

Training

5.1 Staff employed in screening and assessment centres need to be suitably qualified professionals with a high level of competence in their respective fields of expertise. The Accreditation Guidelines state that medical personnel must have the accreditation status or appropriate qualifications as defined by their respective Colleges; radiographers are required to be fully trained in screening mammography through training courses accredited by AIR. Personnel involved in a counselling role need to be specifically trained in breast cancer screening, in particular dealing with anxiety, and discussing with women the outcomes of screening. They should also refer patients to expert counselling where this is appropriate. Support staff (that is, receptionists and other administrative staff) need to have participated in specific in-service training courses on breast cancer screening, that include skills training in dealing with women under stress.[245]

5.2 Training is primarily a State/Territory responsibility and $1.54 million has been allocated by the Commonwealth for this purpose over the period 1991-92 to 1993-94.[246] Much of the training is conducted within the services, with specialist radiographer training courses developed in Queensland, Victoria and South Australia. Victoria and New South Wales have conducted multi-disciplinary training courses which have been attended by personnel from interstate. These were followed by single speciality courses, which have also been conducted in Western Australia.

5.3 In an effort to promote consistent national training standards the Commonwealth has sponsored the development of a national training package which will be available to all States/Territories. The training package involves the development of single-disciplinary and multi-disciplinary training programs. The purpose of multi-disciplinary training is to provide training in the theoretical aspects of population screening and to provide a forum for an understanding of the significance of a team approach and the various elements of the screening process. The single-disciplinary courses will focus on more specific theory and practice. These courses will be available to all groups within the Screening and Assessment Services team including radiologists, radiographers, pathologists, surgeons, program

---

245. Accreditation Guidelines, *op. cit.*, pp.18-19.

246. DHS&H, Progress Report, *op. cit.*, p.8.

managers and clerical staff.[247] All States and the ACT have accepted unmatched Commonwealth funds to develop and implement State training strategies consistent with the national approach. This will involve continuing education as well as multi-disciplinary and single-disciplinary theoretical programs using the national training packages.

1. Radiographers

5.4 At present there is a standard three-year degree course for the training of radiographers; there is one training institute for radiographers in each State.[248]

5.5 The Committee received some evidence that the training needs of radiographers in the Program need to be more adequately addressed. A representative of the Australian Institute of Radiography, for instance, argued that 'burnout' and high staff turnover among radiographers is a continuing problem in the Program. The Institute proposed that a structured, consistent training program Australia-wide in dedicated centres in each State needed to be introduced. The Institute also argued that continuous training programs as part of post-graduate studies are needed.[249] As noted in Paragraph 2.25, the Charles Sturt University (Wagga Wagga Campus) will begin a post-graduate course in breast imaging in July 1994.

5.6 The Committee was told that the current state of mammographic radiography training is *ad hoc*. One witness noted that:

> There is plenty of theory component offered, either in a multi-disciplinary aspect, or in each State with specialist visitors coming from overseas. But the actual, practical hands-on training for radiographers is very ad hoc, still. It is mostly done in each State in the pressurised screening clinic environment.[250]

5.7 The Institute explained that radiographers need to be trained in a non-pressurised dedicated environment ideally involving at least a three week induction training period to enable them to fulfil their role in a screening clinic environment.[251]

---

247. Submission No.114, pp.6.16-6.17 (DHS&H).

248. *Transcript of Evidence*, pp.1239-40 (AIR).

249. *Transcript of Evidence*, p.1228 (AIR).

250. *ibid.*, p.1229.

251. *ibid.*, p.1228.

2. Radiologists

5.8 Radiologists complete a five year specialist training program in radiology, upon completion of their medical degree course and two-year residency training. The RACR noted that many Australian radiologists have visited overseas screening centres to increase their knowledge of mammography screening and several overseas experts have visited Australia in the last several years and their courses have been attended by many radiologists. The College currently has an extensive training curriculum in mammography in its registrar course, and many training registrars are exposed to screening mammography during their training.[252]

5.9 The Committee, however, received evidence that radiologists are not necessarily adequately qualified to perform screening mammography work. One submission stated that the skills involved in reading mammographic films, particularly screening films, are very dependent on experience. For most radiologists this is only a very small part of their total practice and so the extent of their experience and competence may be 'significantly limited'.[253] A witness representing the RACR acknowledged that 'we feel that special training is required even for a radiologist in screening mammography. We train our trainees in mammography now but the technique of screening mammography requires some further training'.[254] The RACR envisaged that a short training course, perhaps over two days, would be beneficial. The course would, in particular, provide an introduction to the processes and philosophy involved in a mass screening program.

3. Breast Physicians

5.10 As noted in Chapter 2, the Australian Society of Breast Physicians defines a breast physician as a qualified medical practitioner who has worked for three years full-time in a dedicated breast clinic which is recognised by the Society as a training centre. The Member or Fellow of the Society is required to have documented evidence of the attainment of the required degree of experience and expertise in certain nominated skills and to have satisfied the requirements of the Examining Council of the Society.[255] There are nine fully trained foundation members of the Association and some 65 additional member practitioners in training.

---

252. *Transcript of Evidence*, p.1528 (RACR). The registrar course refers to the five-year training course for radiologists. A training registrar refers to a training position at a public hospital in specialist radiology.

253. Submission No. 90, p.2 (Dr Warren).

254. *Transcript of Evidence*, p.1571 (RACR).

255. A Member of the Society is required to have demonstrated competency in 3 of the 5 following skills: clinical expertise, imaging, counselling, interventional procedures and management. A Fellow of the Society is required to possess competency in at least 4 of the 5 above skills.

5.11 The Australian Society of Breast Physicians offers a three year full-time training course at the Sydney Square Breast Clinic and the Wesley Breast Clinic in Brisbane. The training involves clinical expertise in breast examination; counselling skills to deal with the everyday concerns and anxieties of clients; expertise in the reading of screening mammograms and breast ultrasound images; and expertise in the sampling of screen-detected abnormalities by fine needle aspiration and core biopsy under ultrasonic and mammographic control.[256]

5.12 Breast physicians are eligible for membership of the Society of Breast Physicians. There are three categories of membership - Associate Member (member in training), Member (where mammographic skills are not essential) and Fellow (where mammographic skills are essential). The nine foundation members of the Society all qualify as Fellows and all have the necessary mammographic skills. There are five prospective members coming up for examination in June 1994. They have acquired the necessary mammographic skills to be classified as Fellows should they satisfy the Examining Council of the Society.[257]

5.13 To be eligible for membership of the Society, Members and Fellows must have experience with a minimum of 2000 physical breast examinations, a minimum of 2000 mammograms per year over a two year period and experience in the interpretation of 500 breast ultrasound examinations over a two year period. They must also have undertaken a minimum of 200 fine needle aspirations of breast tissue and have competence in counselling skills and experience in a management role within the health care system. Associate Members, as members in training, may have fewer than the number of clinical examinations and interventional procedures specified for Members or Fellows of the Society.[258]

5.14 Some evidence to the Committee suggested that breast physicians were not sufficiently trained to fulfil their role as film readers. The RACR argued that the five year specialised training program in radiology uniquely equips radiologists for this task. The College also suggested that for trained radiologists already qualified in mammography, any additional training required in screening mammography, will necessarily be easier for them compared with a non-radiologist, lacking background knowledge in the area of radiology.[259]

5.15 Other evidence to the Committee, however, argued that breast physicians are sufficiently qualified to undertake film reading. In a submission from a radiologist, it was noted that 'in all situations where I currently work, the second reader is a highly trained and competent breast physician'. It was also noted that the skills

---

256. *Transcript of Evidence*, pp.527-28 (Australian Society of Breast Physicians).

257. Letter from the Australian Society of Breast Physicians to the Committee, dated 13 May 1994, p.1.

258. Australian Society of Breast Physicians, *Memorandum of Membership Criteria*, December 1993, pp.3-6.

259. *Transcript of Evidence*, p.1529 (RACR).

involved in reading films are very dependent on experience - breast physicians who devote their time entirely to this practice may be more suitable than a radiologist, for whom film reading is only a small part of their work.[260] This issue is discussed further at Paragraphs 5.30-5.44.

Role of General Practitioners

5.16 GPs have an important role in the overall effectiveness of the Program, especially in terms of providing women with information about the screening program, encouraging them to attend the Program, providing support and counselling (where this is appropriate) to women recalled to an assessment centre for further investigations and discussing management options with women found to have breast cancer. Family doctors also play an important role in the follow-up of patients being treated for breast cancer.

5.17 The Program recognises the important part GPs can play in the Program, especially in relation to encouraging women to attend for screening. A representative of DHS&H emphasised that the Program 'appreciates that general practitioners are an integral and very important part of the Program'.[261] Another representative of the Department noted that:

> In the program women are asked at several stages to nominate their GP, if they wish. ... When services begin, as a matter of practice, they get in touch and make contact with the local GPs to ensure that there is a relationship commenced. ...The College... is an important part of the national advisory committee. All of that means that we accept that GPs are a vital part of the process and we encourage the services to include them in the ways I have described.[262]

5.18 While a doctor's referral is not a prerequisite for attendance at a screening clinic, the National Accreditation Guidelines require that a woman's nominated GP be kept informed of the results of screening unless a woman directs otherwise. Where a woman does not have a GP, and a cancer is detected, she will be encouraged to nominate a GP or an alternative provider before proceeding to treatment.

5.19 The importance of GP involvement to the overall success of the Program, especially in the recruitment phase of the Program, was highlighted by several witnesses. One witness, noted:

> I think it is important that general practitioners are aware of the issues and the principles of screening and that they are very involved

---

260. Submission No. 90, p.3 (Dr Warren).

261. *Transcript of Evidence*, p.1429 (DHS&H).

262. *ibid.*

> in recruitment of women to screening programs. There is data that show quite conclusively that the GP's influence on women who attend general practitioners is very important in their attending a screening program, so I would like the general practitioners to be better informed about screening and its differentiation from diagnostic mammography. I would like them to be involved very strongly in recruitment and I would like them to feel as if they were part of the program.[263]

5.20 Some witnesses, suggested that referral by GPs to the screening program should be introduced as a means of increasing GP involvement with patients from their initial contact with the Program.[264]

5.21 This proposal may, however, be less than effective as it was pointed out to the Committee that some women do not have GPs. From evidence presented to the Committee it is not clear what proportion of women do not have a GP. One witness suggested it was up to 20 per cent,[265] although other evidence suggested the number was low. The Committee, however, does not support the concept of exclusive GP referral as it believes it may act as a disincentive for many women to attend the screening program and would add to general medical costs.

5.22 Several witnesses also emphasised the role GPs play in the counselling and management of women with cancer. One submission noted that GPs 'have a pivotal role in providing continuity of care for women who have been found to have cancer'.[266] Many women may wish to discuss the results of their mammogram with their GP and, in particular, may wish to seek further advice should an abnormality be detected. The GP is often an important source of information, support and counselling for women and their families in these situations. GPs also play an important role in the referral of women to surgeons and other health professionals.[267]

5.23 The Committee, however, received some evidence to suggest that the level of knowledge of GPs about the Program was deficient and that it was an area that needed to be addressed so that GPs could play a more effective role under the Program. The Committee also received some anecdotal evidence to suggest that some GPs do not fully support the Program nor understand fully the benefits that can flow from such a Program.

5.24 Several witnesses argued that more should be done in the area of general GP

---

263. *Transcript of Evidence*, p.856 (Wesley Breast Clinic, Brisbane).

264. *Transcript of Evidence*, p.893 (Queensland Medical Women's Society).

265. *ibid.*, p.892.

266. *Transcript of Evidence*, p.382 (New South Wales Health Department).

267. *ibid.*

education.[268] One witness noted that 'I think GPs are undergoing a very steep learning curve about screening programs. I think many of them started ... with a very low base'.[269]

5.25 Several witnesses commented that the difference between screening mammography and diagnostic mammography was poorly understood by many GPs. One witness, drawing on her personal experience, noted that:

> On our referral form we have diagnostic clinic and in brackets 'symptomatic women'; screening program, 'asymptomatic women' in brackets – and every day of the week we get a number of inappropriate referrals [from GPs].[270]

5.26 Another witness stated that 'enormous numbers of the medical and nursing profession do not understand the scientific principles of screening ... Clearly, there is a problem if they do not understand in trying to actually get that message through them to the community'.[271]

5.27 Other witnesses noted that many GPs are not adequately trained to provide counselling and support for breast cancer patients. A representative of DHS&H told the Committee that 'not all GPs' have adequate training or experience in the vital area of counselling and support.[272]

5.28 The need for further education of GPs was again illustrated in evidence from a witness representing the Health Department of Western Australia. He noted:

> Our concern is that we have a fair bit of evidence of quite inappropriate ongoing referral from GPs who seem not to understand what the issues are in terms of further management of breast cancer; women having quite inappropriate operations by all judgments, that have been fed back to us after that time.[273]

5.29 The Committee believes that more should be done in the area of GP education. Program administrators should ensure that information about the Program is widely disseminated to GPs and that efforts are made to actively involve GPs, especially in the recruitment aspects of the Program. The Committee also

---

268. *Transcript of Evidence*, p.763 (Divisional Group of Rural Surgeons); p.856 (Wesley Breast Clinic, Brisbane).

269. *Transcript of Evidence*, p.1733 (Pathology Reference Group).

270. *Transcript of Evidence*, p.863 (Wesley Breast Clinic, Brisbane).

271. *Transcript of Evidence*, p.430 (New South Wales Health Department).

272. *Transcript of Evidence*, p.1428 (DHS&H).

273. *Transcript of Evidence*, p.273 (Health Department of Western Australia).

believes that GPs need to be provided with sufficient information to assist them in their clinical decision-making and in further advising their patients. The Committee also believes that the Royal Australian College of General Practitioners and the AMA have a role in educating GPs and should be actively involved in disseminating information to GPs about the Program and ensuring that the nature and principles of the Program are clearly understood by all GPs. The Committee understands that the AMA has recently launched a program to disseminate information about the Program to GPs.

Recommendations

The Committee RECOMMENDS:

13. That information about the screening Program be more widely disseminated to the medical profession, and in particular to GPs; and that the further education of GPs in relation to all aspects of the Program be given priority.

14. That the role of GPs in their recruitment and support roles be recognised and encouraged under the Program.

Use of Non-Radiologist Readers

5.30 The desirability and practicability of using non-radiologists as film readers was raised during the inquiry. The Accreditation Guidelines require that all films be read twice and that at least one of the readers must be a radiologist. Both readers must be specially trained in screening mammography and both must meet the same performance standards.[274] This policy is in line with the recommendations in the SECU Report.[275] Whilst in all States except Queensland the film reading is done by radiologists alone, the option exists for States to employ non-radiologists as one of the two readers; these second readers are medical practitioners with special training.

5.31 RACR opposes the use of non-radiologist readers in the Program. The College argued that there are sufficient numbers of radiologists to staff the Program throughout the country. The College also argued that the Program should use the considerable body of expertise currently present in the radiological community. They noted that the diagnostic radiologist is the best qualified person to assess which technique can most effectively provide a definitive diagnosis and through radiological training and experience in these techniques is the best person to conduct the interventional procedures chosen.[276]

---

274. Accreditation Guidelines, *op. cit.*, p.9.

275. SECU Report, *op. cit.*, pp.74-75.

276. *Transcript of Evidence*, pp.1528-29 (RACR).

5.32 However, other evidence received by the Committee suggested that there is no reason why non-radiologists cannot be trained to read mammograms as effectively as radiologists, especially if they are medical practitioners. Indeed, as noted previously, not all radiologists have special training in screening mammography. In addition, many radiologists are employed by the Program to read films after their normal working hours and this may be less than an ideal situation from a quality control point of view.

5.33 The SECU report noted that non-radiologist film readers have worked successfully in trials in the United Kingdom and the Netherlands. Non-radiologists have also been successfully trained to interpret mammograms in hospital radiology departments in the United States.[277]

5.34 The RACR, however, noted that there are important medico-legal considerations involved in employing non-radiologist readers. The College added:

> One must realise that the inherent and inescapable false negative rate of screening mammography is likely to result in medico-legal actions against the Programme and against the readers of screening films. A radiologist reading screening films where the second reader is a non-radiologist would be concerned that any action would more likely be directed to him as either the only medical practitioner or the only specialist radiologist reading the films rather than equally to both readers. The Programme should also be concerned that the use of a non-radiologist reader may indicate to a plaintiff that the screening exercise is not being undertaken with appropriate care assuming that the plaintiff could demonstrate that two readers were appropriate.[278]

5.35 The Committee notes the above concerns expressed by the RACR in relation to possible legal action against the Program in situations where non-radiologists are employed as second readers. The Committee notes, however, that suitably trained non-radiologist readers have been accepted in the United States, a country where litigation in the medical area is often a major concern.[279] The Committee believes that the issue of indemnity needs to be clarified and appropriate protection afforded to the Program. The Committee understands that the legal situation rests largely with the States and Territories as the personnel employed under the Program are employees of the various State and Territory screening centres.

5.36 The Committee received evidence from several witnesses that the skills of non-radiologist readers should be used in the Program. The Australian Society of Breast Physicians argued that there are a number of advantages in using breast physicians as readers. They stated that the use of trained non-radiologist film

---

277. SECU Report, *op. cit.*, p.74.

278. *Transcript of Evidence*, p.1529 (RACR).

279. SECU Report, *op. cit.*, p.74.

readers augments the pool of skilled specialist readers available to screening services and provides flexibility of service provision.[280] The Committee notes, however, that the training program for breast physicians has only recently been introduced and the categorisation of 'breast physician' does not exist in overseas countries nor do any breast physicians work as second readers outside the capital cities in Australia.

5.37 In Queensland, where breast physicians are used as readers, the Department of Health indicated that their employment had proved 'highly desirable'. The Department noted that the inclusion of mammographic reading as part of the clinical skills of some medical officers enables them to cover all aspects of the screening program from point of entry at initial screen through to recommendation for open biopsy or reassurance that all is well. The Department also noted that given the current shortage of radiologists in regions outside the South-East corner of the State it is unlikely that film reading requirements for the Program can be fully met by radiologists in these regions or outside these areas.[281]

5.38 Another submission commenting on the work of breast physicians at the Wesley Breast Clinic noted their commitment and 'special ability in reading mammograms'. The submission also noted that it would be a 'travesty of justice if Cherrell [Hirst] and her highly skilled staff and other breast physicians throughout the nation were excluded from the Program and more importantly the women of this nation were denied access to their special talents'.[282]

5.39 The Committee raised a number of issues with the Society of Breast Physicians, including the training available to breast physicians and the level of proficiency in reading films.

5.40 As noted in Paragraph 5.11, there is a training program in place for breast physicians.[283] Breast physicians must also be specially trained in screening mammography and meet the same performance standards as radiologist readers.[284] As the DHS&H stated, from the point of view of Program outcomes, the important fact is that both readers are 'expert in screening mammography'. The Committee also believes that if breast physicians can demonstrate a competence equal to that of radiologists in film reading they should have the opportunity to participate as second film readers under the Program, especially in areas where there is a shortage of radiologists.

5.41 Regarding the reading of films, the Society noted that a study funded by the

---

280. *Transcript of Evidence*, p.529 (Australian Society of Breast Physicians).

281. Letter from the Queensland Department of Health to the Committee, dated 25 February 1994, p.5.

282. *Transcript of Evidence*, p.490 (North Coast Breast Screening Program, Lismore).

283. See also *Transcript of Evidence*, p.531 (Australian Society of Breast Physicians).

284. See Accreditation Guidelines, *op. cit.*, p.9.

Commonwealth showed that non-radiologist readers, with training, are able to read mammograms as proficiently as radiologists.[285] The study conducted at the Wesley Breast Clinic used two groups of readers – four radiologists and five non-radiologists. They read 2041 screening films under comparable 'blind conditions' and the results were compared. The study concluded that trained non-radiologist readers are able to achieve results comparable to those of radiologists in the interpretation of screening films within the context of a mammographic screening program.[286]

5.42 The Committee believes that it would be desirable to undertake further studies in Australia that compared radiologists and non-radiologists in their respective proficiency in film reading. Such studies would provide useful empirical evidence as to the relative abilities of both sets of film readers.

5.43 The Society also noted that non-radiologist film readers have been used in a number of screening services for some years. One witness noted that breast physicians are working quite successfully with radiologists in these centres.[287] Another submission from a radiologist stated that:

> In the State of Queensland ..... there are a large number, relatively speaking, of very highly experienced non-radiological mammographic film readers. These doctors have, by virtue of long years of experience dedicated entirely to breast disease, acquired enormous experience at both mammographic interpretation and clinical assessment of breast disease. I regard them as absolutely essential participants in the successful implementation of a National breast screening program.[288]

The Committee's View

5.44 The Committee believes that trained breast physicians may be included as film readers in the Program, especially where there is a shortage of radiologists. The Committee is disappointed at the attitude of the RACR which has advised its members not to participate in the Program where screens are being read by non-radiologists. DHS&H told the Committee that this directive from the College has resulted in some difficulty for radiologists who otherwise might wish to work within the Program.[289]

5.45 The Committee considers that permitting breast physicians as film readers will allow for greater flexibility in the implementation of the Program. The policy

---

285. *Transcript of Evidence*, p.533 (Australian Society of Breast Physicians).

286. Wesley Breast Clinic, *Mammographic Interpretation Study*, October 1991, pp. 2,12.

287. *Transcript of Evidence*, p.532 (Australian Society of Breast Physicians).

288. Supplementary Submission No.90, p.3 (Dr Warren).

289. Submission No.114, p.5.11 (DHS&H).

will allow those areas where there is a shortage of radiologists to employ breast physicians as the second reader.

Recommendation

The Committee RECOMMENDS:

15. That Fellows of the Australian Society of Breast Physicians may be employed as second film readers under the Program, on condition that indemnity is provided by the employing authority.