CHAPTER 2

OPERATION OF THE PROGRAM

2.1 The Program's effectiveness depends, in large measure on the nature of the physical and human resources devoted to it. This chapter examines aspects of the operation of the Program including the physical aspects of the Program – dedicated centres/mobile units; mammographic equipment; and aspects of staffing, including supply and demand factors relating to the number and distribution of radiographers, radiologists and breast physicians. This chapter also discusses the adequacy of counselling and support services.

Dedicated Screening and Assessment Services

2.2 A network of dedicated Screening and Assessment Services has been established in all States and the Australian Capital Territory. The Screening and Assessment Services consist of screening units, which may either be fixed or mobile units, and assessment centres. Both screening and assessment may be provided at the one fixed location. The units are located in health centres, shopping centres, specific purpose buildings and private radiology premises. The Services maintain a computerised data base of client records.[85] This information is used for the recall of women at appropriate intervals and for the monitoring of the Services' performance.[86]

2.3 In the more highly populated States there are between 8 and 11 Screening and Assessment Services, whereas in South Australia, Western Australia and the Australian Capital Territory there is only one Service. Services are delivered in a mix of public and/or private sector institutions.[87] All services, however, are required to be accredited and to meet the same standards and to provide the same data returns to the relevant State Co-ordination Units.[88]

1. Screening

2.4 The Committee visited screening and assessment centres in Adelaide and Brisbane in November 1993 to observe first-hand the screening process. The Committee was impressed by the standard of the facilities available and the

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85. See Chapter 1.

86. Submission No.114, p.5.5 (DHS&H).

87. Services are located in both the public and private sectors in New South Wales, Victoria, Queensland, Western Australia and Tasmania and are located in the public sector in South Australia and the Australian Capital Territory. See Chapter 6 for further details.

88. Submission No.114, p.5.3 (DHS&H).

dedication and commitment of the staff. In informal discussions with the personnel at the centres it was able to gain a fuller appreciation of the nature of the screening services available. Individual members of the Committee have also taken the opportunity to visit screening and assessment centres in several States recently.

2.5 As noted in Chapter 1, the screening program specifically targets asymptomatic women aged 50-69 years (although women aged 40 years and over are eligible for screening). Under the Program women are invited to attend for screening every two years. This may be by personal invitation or more generalised recruitment methods. Many women attend on the advice of their GP, although a formal referral is not required. A woman's GP is notified of the results of the screening mammograph (subject to her consent). This is to assist the GP to make an informed response to any questions or concerns a woman may have, especially when further assessment is required. Screening units are required to provide women with easily understood information about the screening process. Written consent is obtained for the procedures and for the collection of information for recall, monitoring and evaluation. All women are screened by two-view mammography (that is, a mammogram taken from two different angles) by specially trained radiographers. The films are read, usually, at the assessment centre, by two or more readers. (This issue is discussed further in Chapter 5.) Both readers are trained in screening mammography and are expected to meet the same performance standards. In over 90 per cent of women screened no evidence of cancer is detected. Between 5-10 per cent of women are recalled for assessment.

2. Assessment

2.6 The assessment service is usually located in or near hospital facilities. However, where practicable, the services may be located in areas in close geographical proximity to their clients. Assessment is undertaken by a multidisciplinary team consisting of at least a radiologist, surgeon and pathologist (with special skills in the detection of small cancers), and often a breast physician. A written report of the results of the assessment is notified to a woman's nominated GP. Trained counsellors are also available to provide counselling and support for women. The multidisciplinary team has primary responsibility for quality control and management of screening and assessment procedures.

2.7 The multidisciplinary approach is considered critical to ensure high quality and to minimise the number of invasive procedures for women. In most cases the multidisciplinary team will either make a definitive diagnosis or be able to reassure the women during the assessment visit that no cancers have been detected. In a small number of cases an open (surgical) biopsy (that is, the surgical removal of a sample of breast tissue) will be necessary to reach a definitive diagnosis. (A discussion of the issues relating to open biopsy is given in Chapter 7.)

2.8 In those States which do not include open biopsy as part of the Program, the woman will be referred to the public sector breast clinic if appropriate, or to her general practitioner for referral for histological investigation. If cancer is diagnosed,

the women will be referred to her general practitioner, or (in consultation with her nominated general practitioner), to a surgeon specialising in breast cancer.[89]

3. *Appropriate Use of Mobile Vans*

2.9 Some concerns were expressed during the inquiry in relation to the placement of mobile units in urban settings. Particular concerns were expressed about the use of mobile vans in the Brisbane metropolitan area. Several witnesses stated that it was an inappropriate use of this facility.[90]

2.10 One witness noted that women in most metropolitan areas can access fixed screening units without much difficulty. The witness also noted that it was a better use of resources to concentrate the mobile units in rural areas where access to screening services is more difficult for women.[91] Another witness also raised the issue of the lack of privacy, and the possible lack of dignity - from a woman's point of view - that goes with using mobile units in metropolitan areas.[92]

2.11 The Committee believes that mobile units play an important role in facilitating access to screening for women in rural areas (see Chapter 3), but it may be inappropriate to use mobile units in certain metropolitan areas where there are already fixed screening units available. However, in some metropolitan areas, especially where there is a lack of public transport, the availability of mobile units can play an important role in ensuring access to screening services. The Queensland Department of Health noted that many older women, and especially those in socio-economically disadvantaged situations, such as widows and pensioners, would not travel considerable distances by public transport to be screened without access to mobile units.[93] One witness also noted that when mobile units were used in urban settings the service was able to achieve 'extremely high levels of participation'.[94]

Mammographic Equipment

2.12 It is important that high quality mammographic equipment be available for screening purposes and that this equipment be maintained in good working condition. Poor quality films from poorly maintained equipment result in poor image quality and an increased likelihood of inaccurate assessment, multiple films being required and a high recall rate.

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5. *ibid.*, pp.5.4-5.5 (DHS&H). See also Chapter 5.

90. *Transcript of Evidence*, p.826 (Professor McCaffrey); p.858 (Wesley Breast Clinic, Brisbane).

91. *Transcript of Evidence*, p.826 (Professor McCaffrey).

92. *Transcript of Evidence*, p.858 (Wesley Breast Clinic, Brisbane).

93. *Transcript of Evidence*, p.982 (Queensland Department of Health).

94. *ibid.*

2.13 Evidence presented to the inquiry suggested that the standard of equipment was generally good.[95] The Committee was told that radiology equipment is checked regularly by radiographers with the chief radiographer having an overseer role.[96]

1. *Distribution of Equipment*

2.14 The Australian Radiation Laboratory (ARL) undertook a survey of mammography units in Australia; the survey identified 267 mammography units. The response to the survey was incomplete, with the ARL estimating that the response represented about 90 per cent of the total number of units. The distribution by State and Territory of the units identified in the survey was: New South Wales (89); Victoria (80); Queensland (48); South Australia (19); Western Australia (13); Tasmania (8); Australian Capital Territory (6); Northern Territory (4).[97]

2.15 A more recent study published by the ARL of the geographical distribution of mammography equipment throughout Australia shows that there is a concentration of X-ray units around the major capital cities and coastal areas, with few units located in rural areas.[98] A breakdown of the number of units on a State-by-State basis is given in Table 1. The table shows that there is a fairly even number of X-ray units on a per capita basis with the exception of Western Australia, which has about half the number of machines per capita of the other States.[99] The urban/rural imbalance in the number of mammographic units was illustrated by information provided to the Committee by the Victorian Department of Health and Community Services. The Department noted that of the 122 mammography units registered in that State, 92 units were located in the metropolitan area whilst only 30 units were located in rural areas.[100]

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95. *Transcript of Evidence*, p.250 (Dr Frayne).

96. *Transcript of Evidence*, p.1236 (AIR).

97. The total number of units was 267. The ARL survey did not provide information on the number of units available for screening purposes solely - the units may be used for diagnostic or other uses. For details of the ARL survey see AIH, *Screening Mammography Technology*, AIH, Canberra, 1990, p.11.

98. ARL, *Radiation Doses from Mammography in Australia*, May 1991, pp.18-19.

99. *ibid.*, pp.18-19, 41.

100. Additional information from the Victorian Department of Health & Community Services, dated 8 April 1994, p.3.

TABLE 1
GEOGRAPHIC DISTRIBUTION OF MAMMOGRAPHIC UNITS, 1989-1990

State	Population '000s	Number of Mammography Units	No. of Units per 100,000
NSW	5,612	85	1.52
VIC	4,208	77	1.83
QLD	2,676	49	1.84
WA	1,500	13	0.86
SA	1,394	18	1.29
TAS	447	7	1.46
ACT	266	5	1.87
NT	156	4	2.56
AUST	16,259	258	1.59

Source: ARL, *Radiation Doses from Mammography in Australia*, May 1991, Table 3, p.41.

2. Role of the Commonwealth and the States

2.16 DHS&H advised the Committee that the States and Territories are responsible for the distribution and quality of mammography equipment. The various State and Territory radiological licensing boards exercise control on quality and safety through requirements concerning standards, safe installation and use by qualified personnel.[101] In Victoria, the Radiation Safety Section of the Department of Health and Community Services keeps a register of all radiography equipment in the State. The register includes details of the manufacturer, model, type and location of the unit.[102]

2.17 As to the Commonwealth's role, the Department noted that it is limited to special purpose funding to each State and Territory for the screening Program. The Department noted that as part of the evaluation of the Program it hopes to conduct an audit of all equipment used in the Screening and Assessment Services during the next two years.[103]

101. Additional information provided by DHS&H, dated 18 February 1994, p.3.

102. Additional information provided by the Victorian Department of Health and Community Services, dated 8 April 1994, p.3.

103. Additional information provided by DHS&H, dated 18 February 1994, p.4.

Staffing

2.18 An adequate supply of qualified staff is essential to the effective operation of the screening Program. Issues relating to the numbers and distribution of radiographers, radiologists and breast physicians are discussed in the following section.

1. *Radiographers*

Numbers

2.19 The Committee received a range of diverse, and often conflicting, evidence on the availability of radiographers in Australia. For example, some evidence suggested that there was a shortage of radiographers on a State-wide basis in New South Wales[104] and Victoria.[105] A shortage of radiographers was also noted in rural areas of Western Australia,[106] New South Wales[107] and Queensland.[108] Problems in recruiting sufficient numbers of radiographers were also noted in the Northern Territory[109] and the Australian Capital Territory. However, a witness representing the Australian Institute of Radiography, suggested that the numbers of radiographers are sufficient to meet demand, although there are some difficulties in staffing country areas.[110]

2.20 The Committee sought the advice of DHS&H, the Minister for Employment, Education and Training and the Minister for Immigration and Ethnic Affairs concerning the availability of radiographers. A representative of DHS&H noted the situation regarding radiographers was 'unclear':

> There is no adequate central collection of data which would give us a very clear picture. I think the experience of the program has been that there have been localised difficulties ... In overall terms, it is not easy to get a very clear picture.[111]

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104. *Transcript of Evidence*, p.436 (New South Wales Health Department).

105. *Transcript of Evidence*, p.1134 (BreastScreen).

106. *Transcript of Evidence*, p.169 (Health Department of Western Australia).

107. *Transcript of Evidence*, p.361 (North West Health Service, Tamworth).

108. *Transcript of Evidence*, p.812 (Professor McCaffrey).

109. *Transcript of Evidence*, p.1802 (Northern Territory Department of Health and Community Services).

110. *Transcript of Evidence*, pp.1234,1240 (AIR).

111. *Transcript of Evidence*, p.1449 (DHS&H).

2.21 The Minister for Employment, Education and Training advised the Committee that, regarding therapeutic radiographers, there is in general shortage both in metropolitan and regional areas in Queensland and South Australia only. However, there are regional supply difficulties in this occupation elsewhere, including north-west Tasmania (common across most health professions) and country areas of Western Australia.[112]

2.22 Given the perceived shortage of radiographers (at least in certain areas), demand can be met through either training locally or by overseas recruitment.

Training

2.23 The training of more local radiographers is one possible solution to the shortage of radiographers. Currently training for radiographers involves a standard three-year degree course. There is a training institution in each State in Australia.[113]

2.24 A witness told the Committee that there was no difficulty in recruiting students to undertake the degree course. The Institute noted, however, that 'burnout' and high staff turnover amongst radiographers are common.[114] In advice from the Minister for Employment, Education and Training it was also noted that there is a 'high wastage' rate for radiographers. This was attributed to the work stress, and in part to the structure of the courses in the past which did not prepare students adequately for the emotional demands of the job.[115]

2.25 The Institute of Radiography argued that a structured, consistent, training program Australia-wide, in dedicated centres in each State, should be introduced.[116] At present two States, Queensland and South Australia, run accredited training programs.[117] A one-year post-graduate course in breast imaging will commence at the Charles Sturt University (Wagga Wagga campus) in July 1994. The Committee understands that this is the first course of its kind in Australia. Training issues are dealt with more generally in Chapter 5.

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112. Letter from the Minister for Employment, Education and Training to the Committee, dated 8 March 1994, p.1.

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

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

115. Letter from the Minister for Employment, Education and Training to the Committee, dated 8 March 1994, p.1.

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

117. *ibid.*, p.1237.

Overseas Recruitment

2.26 In addition to training more local radiographers, it is also possible to recruit radiographers from overseas when there is a shortage.

2.27 The Minister for Employment, Education and Training advised the Committee that the skills of overseas qualified radiographers resident overseas applying for work permits are assessed by migration officers against guidelines contained in the Department's Procedures Advice Manual. Applications that are not able to be assessed by migration officers are referred to the AIR in accordance with a formal agreement between that professional body and the Commonwealth. Overseas qualified radiographers already resident in Australia are all assessed by the AIR.[118]

2.28 AIR has established procedures for assessing overseas qualified radiographers which include detailed consideration of their educational qualifications and post-graduate clinical experience. In addition, for applicants resident in Australia, or able to visit, a clinical skills appraisal is included as a part of the assessment process. Resident applicants may also be required to undertake an accredited bridging course. One witness told the Committee that based on her personal experience, many overseas-trained radiographers applying to work in Australia are not as well trained as radiographers in Australia.[119] The Minister for Immigration and Ethnic Affairs advised the Committee that there are no conditions placed on visas with regard to where visa holders may live and work, although certain temporary resident visas require their holders to seek permission to change employment or employer. In the case of radiography and other medical occupations, State government registration requirements may in fact apply conditions with regard to where the person from overseas is able to practise.[120]

2.29 The Minister for Employment, Education and Training advised the Committee that in the twelve months from 1 January 1993 a total of 110 overseas qualified radiographers have applied to AIR for skills assessment and 56 have been assessed as acceptable.[121]

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118. Letter from the Minister for Employment, Education and Training to the Committee, dated 8 March 1994, p.2.

119. *Transcript of Evidence*, p.1234 (AIR).

120. Letter from the Minsiter for Immigration and Ethnic Affairs to the Committee, dated 28 March 1994, p.2.

121. Letter from the Minister for Employment, Education and Training to the Committee, dated 8 March 1994, p.2.

Rural Access

2.30 As noted above, evidence suggests that there is a shortage of radiographers in rural areas. The extent of the problem is difficult to determine as little data are available. It also appears that there are difficulties in attracting and retaining overseas radiographers to work in rural areas. The Minsiter for Immigration and Ethnic Affairs, however, advised the Committee that no data are available with respect to the numbers of overseas radiographers working in rural or remote areas.[122]

2.31 DHS&H advised the Committee that generally the attraction and retention of health personnel to rural and remote areas poses a problem. In this regard the Department noted that the Commonwealth has responded with the introduction of the Rural Health Support, Education and Training Program which aims to improve the health of rural and remote communities by improving the recruitment and retention of the health workforce through increased education, training and support opportunities.[123]

2.32 The Committee notes that inadequate data are available to assess, with any degree of accuracy, the current availability of radiographers in Australia. It appears, however, that there is a shortage of radiographers in several States and almost certainly in many rural and remote areas across the country. Given the importance of an adequate supply of appropriately qualified radiographers for the success of the Program, the Committee considers that close attention needs to be given to monitoring the supply of, and demand for, radiographers on a State-wide and national basis.

Recommendation

The Committee RECOMMENDS:

4. That the supply of radiographers be regularly monitored by Commonwealth and State and Territory Governments.

2. Radiologists

2.33 Evidence presented to the Committee from several sources suggests that there is not an overall shortage of radiologists in Australia, but rather an uneven distribution in their numbers throughout the country.[124]

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122. Letter from the Minister for Immigration and Ethnic Affairs to the Committee, dated 28 March 1994, p.2.

123. Additional information from DHS&H to the Committee, dated 18 February 1994, p.5. See also Chapter 3.

124. *Transcript of Evidence*, p.1433 (DHS&H); p.1579 (RACR).

2.34 The Royal Australasian College of Radiologists (RACR) noted there are some 1,400 actively practising radiologists in Australia.[125] One witness representing the College said that the radiologist workforce is adequate although it experienced the 'same maldistribution that all medical practitioners suffer'.[126]

2.35 The problems this maldistribution is causing the Program is illustrated in the case of Queensland. One witness noted that because radiologists are concentrated in certain areas of the State it has been difficult procuring sufficient radiology support in services outside the South-East corner of the State. According to the Medical Board Register of Queensland, of the 176 radiologists in the State, 149 (85 per cent) are located in the South-East corner, where under 50 per cent of the women eligible for the Program reside. The remaining 34 (15 per cent) are located through the rest of Queensland, and of those, most are located in provincial cities on the coast.[127] This suggests a noticeable shortage in the availability of radiologists to provide services especially in rural areas.

2.36 The difficulty in attracting radiologists to work in the Program has a number of causes. One cause is the lack of radiologists in certain areas, especially rural areas, as the situation in Queensland illustrates. The Queensland Department of Health noted that other key factors in terms of participation in the Program in Queensland are the interest and capacity of radiologists to be involved because of the heavy workload of other radiology services in both the public and private sectors.[128] Quality control considerations also need to be considered with radiologists working overtime for the screening program, that is, outside their normal 9 to 5 jobs.

2.37 The supply of an adequate number of suitably qualified radiologists is essential to the success of the Program. The Committee believes that the supply of, and demand for, radiologists needs to be closely monitored and assessed.

Recommendation

The Committee RECOMMENDS:

5. That the supply of radiologists be regularly monitored by Commonwealth and State and Territory Governments.

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125. *Transcript of Evidence*, p.1579 (RACR).

126. *ibid.*

127. Additional information from the Queensland Department of Health to the Committee, dated 25 February 1994, p.4.

128. *ibid.*

3. Breast Physicians

2.38 Given the shortage of appropriately qualified radiologists in certain areas and the likelihood that some of those employed by the Program are working excessively long hours, it has been argued by several witnesses that breast physicians could be usefully employed as readers of films. Breast physicians, as defined by the Australian Society of Breast Physicians, are qualified medical practitioners who have worked for three years full-time in a dedicated breast clinic which is recognised by the Society.[129] (For a further discussion of the role of breast physicians see Chapter 5.)

2.39 A submission noted that in the Queensland situation, 'given the current shortage of radiologists in regions outside the South East corner and the growing populations, it is unlikely that film reading requirements for the program can be fully met by private and/or public sector radiologists in the regions'. In these situations it may be necessary to employ breast physicians.[130]

2.40 However, other witnesses argued that breast physicians should not be employed as film readers as they lack adequate training and the experience of qualified radiologists.[131] One witness noted that there are 'sufficiently experienced radiologists in Queensland who have a commitment to mammography and mammographic analysis whose skills have not been utilised'.[132] The Committee believes that in areas where there is a shortage of radiologists, alternative means of ensuring the reading of films need to be sought, either through the use of experienced non-radiologist second readers or through the use of new technologies, such as teleradiology, whereby an X-ray is taken and the image is transmitted via a phone connection to a hospital or other facility in a major centre.

Counselling and Support Services

2.41 The provision of effective counselling and support services is an important element in addressing the emotional and other needs of women attending a screening Program and during any subsequent treatment that she may receive. It is important that all women who attend for screening and assessment have access to counselling to reduce the level of anxiety and to assist those who are diagnosed with breast cancer to better cope with their diagnosis.

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

130. Additional information from the Queensland Department of Health to the Committee, dated 25 February 1994, p.5.

131. *Transcript of Evidence*, p.1485 (RACR, Queensland Branch).

132. *Transcript of Evidence*, p.1496 (RACR, Queensland Branch).

1. Counselling

2.42 The National Accreditation Guidelines provide that professional counselling be an integral component of a dedicated breast screening and assessment service. Counselling should be accessible to all women who attend a screening centre and all counselling should be provided by trained counsellors. The Guidelines stress that emotional support at all stages of the screening process should be provided, but especially during assessment or if there is a diagnosis of breast cancer. Women with a diagnosis of breast cancer should be given comprehensive and easily understood information on treatment options and encouraged to be actively involved in decisions about these options.[133]

2.43 The issue of the adequacy of the counselling available at the time of screening was raised during the inquiry. It was pointed out that the counselling support available was generally adequate. One witness noted that 'the protocols that have been developed nationally and at State level are really very sensitive to that issue'.[134]

2.44 During the inquiry some witnesses identified a deficiency in the provision of counselling and psychosocial support after a woman has been diagnosed with breast cancer. (Treatment issues are covered more generally in Chapter 7.) A Senior Staff Specialist at the Royal Hospital for Women, Paddington, speaking from personal experience, noted that the psychosocial support offered at present is often fragmented and superficial. He added:

> I think that there needs to be a lot of work done on continuing in-depth support of women with breast cancer and their families.[135]

2.45 Another witness noted that what is needed is a dedicated psychologist to work with women diagnosed with breast cancer and with their families and this contact should begin when the cancer is diagnosed.[136]

2.46 The importance of providing adequate psychosocial support was noted by many witnesses and in several submissions, many of which drew on their personal experiences of confronting a diagnosis of breast cancer.[137] One submission noted that a woman confronted with breast cancer is understandably shocked and distressed. She is faced with many mental adjustments at a time when she is also confronted with a number of decisions regarding treatment or surgery. At various

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133. Accreditation Guidelines, *op. cit.*, pp.21-22.

134. *Transcript of Evidence*, p.480 (RHW).

135. *ibid.*, p.481.

136. *ibid.*, p.480.

137. See Submission No.127 (Mrs McKimm); Submission No.22 (Dubbo Breast Cancer Support Group).

stages, she will have feelings of denial, rage, guilt and hopelessness. It is during this period that counselling and other support is vital.[138]

2. *Breast Cancer Support Services*

2.47 Breast cancer support services operate in all State and Territories under the auspices of local cancer societies. The services provide practical and emotional support to women with a diagnosis of breast cancer, and support for the families and carers of breast cancer sufferers. The services provide information about breast cancer, including current treatment options and prosthesis information and education to community groups and organisations.[139] Some groups, such as the Cancer Support Association of Western Australia, also provide information and advice on health therapies complementary to traditional treatment, such as meditation, nutrition, exercise and positive thinking.[140]

2.48 A representative from the Australian Capital Territory Breast Cancer Support Services, told the Committee how the Service operates in the Australian Capital Territory. The Service has a breast cancer support group that meets regularly and provides an opportunity for women to talk with other women in a similar situation about their experiences of breast cancer. At these sessions information is provided to the women on such topics as relaxation, diet, nutrition and treatment. The other support service is provided by trained women volunteers who themselves have been treated for breast cancer. The aim of this service is to provide hope and encouragement and an example of successfully coping with the disease.[141]

2.49 The important role the support groups play was underlined by the Cancer Support Association of Western Australia which cited a United States study that showed that women who attended support services had a significantly better quality of life and survived on average twice as long as other women who did not attend such groups.[142]

2.50 The Committee believes that it is important that adequate counselling and support services be available to women, their families and carers from the initial point of contact with the screening centre through to treatment and beyond. The Committee considers that counselling and support is especially required for women diagnosed with breast cancer and receiving treatment for the disease. For those women, emotional, social and psychological support is essential in coping with this life-threatening disease.

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138. *Transcript of Evidence*, pp.456-57 (RHW).

139. *Transcript of Evidence*, pp.1692,1697-8 (Australian Capital Territory Breast Cancer Support Services).

140. Submission No.130, pp.2-3 (Cancer Support Association of Western Australia).

141. *Transcript of Evidence*, p.1693 (Australian Capital Territory Breast Cancer Support Services).

142. Submission No.130, p.3 (Cancer Support Association of Western Australia).

Recommendation

The Committee RECOMMENDS:

6. That breast cancer support and counselling services be encouraged and expanded.