

Improving local services for women with breast cancer: Interviews with general practitioners in Central Sydney

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Abstract

We conducted interviews with 85 randomly selected general practitioners (GPs) in Central Sydney to examine patterns of referral of women with breast cancer, satisfaction with local services, awareness of evidence-based guidelines and suggestions for local support.

Previous experience was the most frequently cited factor influencing choice of specialist (n=80, 94%) followed by personal knowledge of the consultant's expertise (n=72, 85%). Only one third of respondents agreed women wanted to be more involved in choosing the specialist (n=28, 33%). Of 79 women recently diagnosed with breast cancer, the majority (96%) had been referred to a male surgeon (n=71, 96%).

While only 35% of the GPs rated the care received by women with breast cancer in local facilities as 'excellent', significantly fewer rated communication between GPs and specialists as 'excellent' (35% v 19%, $p<0.01$). Younger GPs were less likely to rate communication as 'excellent' compared with GPs aged 55 years or older ($p=0.01$). Only 18% of GPs considered their patients as having been 'very well informed' about their treatment choices. Younger GPs were more likely than older GPs to recall all available breast cancer guidelines ($p=0.02$). Significantly more GPs (68%) requested seminars with experts than any other types of educational support ($p<0.001$).

To improve outcomes for women with breast cancer, mechanisms to support communication between GPs and specialists are recommended. Seminars for GPs with experts who emphasize evidence-based guidelines should be funded and evaluated, especially for impact in meeting the needs of older GPs.

Origins of the survey

In 1996, breast cancer was the most common cause of death from cancer of any single type for Australian women before the age of 75 years (ABS 1996). In New South Wales, 21 063 potential years of life were lost in 1994 from breast cancer alone (Public Health Division 1997). With the introduction of mammographic screening, it is anticipated that mortality from breast cancer for women 50 years and over will eventually decrease. However, the incidence of breast cancer will rise and demands on local health services for treatment of early breast cancer will increase. Consistent treatment based on the best available evidence has been recommended (House of Representatives Standing Committee on Community Affairs 1995).

NHMRC clinical practice guidelines for the management of early breast cancer (NHMRC 1995a) as well as *A consumer's guide: early breast cancer* (NHMRC 1995b) were published in 1995 as part of a larger program 'to promote best practice linked to outcomes and effective cost management' (Smallwood & Lapsley 1997). Responsibility for dissemination, implementation, evaluation and updating of these guidelines was directed to the National Breast Cancer Centre (NBCC) (Carrick & Redman 1997). Additional resources subsequently developed by the NBCC included an alternative consumer resource and audiocassette entitled *All about early breast cancer*; a set of five audiocassettes entitled *Women and breast cancer* and three sets of guidelines for general practitioners (GPs), namely *Current best advice about familial aspects of breast cancer* (launched in June 1996), *Guidelines for the management of early breast cancer for GPs* (launched in October 1997) and *The investigation of a new breast symptom – A guide for General Practitioners* (launched in October 1997) (NBCC Annual Report 1996/1997). These guidelines were disseminated nationally to GPs via mailing houses and through newsletters. A review of the costs of full implementation of the *Early breast cancer* guidelines is forthcoming (Carrick & Redman 1997).

As one of seventeen local health authorities in New South Wales, the Central Sydney Area Health Service (herein referred to as 'Central Sydney') has a legislated responsibility to improve outcomes for its population. On average, 274 cases of breast cancer are diagnosed in Central Sydney each year (Supramaniam *et al* 1998). In the financial year 1996/97, all women resident in Central Sydney who received primary treatment for breast cancer did so at one of four hospitals located within the Area's boundaries (namely, Royal Prince Alfred Hospital, Repatriation General Hospital – Concord, Strathfield Private Hospital or Rachel Foster Hospital) (Health Services Planning Unit, unpublished data). To inform future efforts to optimise outcomes for women with breast cancer, we conducted this systematic consultation with randomly selected GPs by combining interviewer-administered and self-administered questions during a visit to their surgeries.

Method

GP selection and recruitment

We randomly selected 210 names from a complete list of GPs in Central Sydney. Each selected GP received a brief phone call advising them about the study which was followed by a one-page letter with further details. Interviewers made appointments with each consenting GP to conduct a 20-minute interview. GPs were considered ineligible if they were deceased, retired, uncontactable after six attempts, absent from their practice for more than one month, no longer in general practice or had moved.

Face-to-face interview

Our consultations with individual GPs commenced with interviewer-administered questions about their use of facilities within Central Sydney; what their patients had said about these facilities; whether they used facilities outside Central Sydney and whether they perceived that quality of care had been influenced by non-clinical issues such as the patient's insurance, where she lived and her educational level (Grady *et al* 1996; Scott *et al* 1996; Mort *et al* 1996). To assess unmet needs of women with early breast cancer from their perspective (Grunfeld *et al* 1995), GPs were asked by interviewers to indicate what they thought was needed to ensure better outcomes for women with breast cancer.

The next section was self-administered. Using a five point scale ('excellent', 'good', 'adequate', 'poor', 'very poor'), respondents first rated the care that women with early breast cancer received from specialists and, second, the level of communication between GPs and specialists about such patients. Then they were asked how well informed they thought their patients were about their treatment choices after seeing a consultant for a suspicious breast symptom ('very well', 'well', 'not well', or 'not at all'). We asked which technique was, in their view, preferable to reinforce information provided to patients (letter, audiotape of the consultation or other) (Stockler *et al* 1993; Tattersal *et al* 1994).

GPs were asked to provide details about the clinical presentation of the female patient whom either they had personally most recently diagnosed with breast cancer or whom they had referred because of suspicious symptoms or signs and had subsequently been diagnosed with breast cancer. GPs then rated how each of eleven items influenced their choice of specialist for such a presentation using a four point scale ('a lot', 'somewhat', 'a little' or 'not at all'). These items included patient factors such as age, access to treatment and personal preferences (n=3); system factors such as waiting lists (n=2), hospital reputation (n=1); consultant issues such as sex (n=1), reputation (n=1), how well they communicate with the GP (n=1) and finally issues involving the GP directly such as their personal knowledge or experience with the system (n=2) (Newton *et al* 1991; Evans 1993; Kennedy & McConnell 1993; King *et al* 1994). GPs also were asked whether the current medicolegal climate had affected their referral behaviour.

We asked respondents whether they had participated in any continuing medical education (CME) seminars or Practice Assessment Activities (PAA) which included aspects of breast cancer care and, if so, the year of participation. As implementation throughout NSW of evidence-based guidelines for the management of women with early breast cancer has been identified as a key strategy to improve survival (Public Health Division 1997), we assessed familiarity with evidence-based GP guidelines by showing GPs a copy of the three NBCC Guidelines for GPs. We asked which had they seen; whether they could access these if needed and which organisation should be responsible for disseminating such guidelines. To identify ways to support GPs more effectively, we used another self-administered questionnaire. GPs were asked to rate the usefulness of each of eight potential resources, using on a four point scale ('very', 'somewhat' or 'not' 'useful', 'unsure') (Lane & Burg 1989; Irvine 1993). The interview concluded with ten questions about demographic and professional characteristics.

Seven interviewers were trained and debriefed regularly during data collection to enhance standardised interviewing. Copies of the interview schedule and self-administered questionnaire are available upon request.

Data analysis

Descriptive statistics were performed using Epi Info. Using SPSSX, logistic regression models were undertaken for the following outcome variables: how GPs rated the care that women with early breast cancer received from consultants; how GPs rated the communication between GPs and specialists; whether GPs had participated in any CME or PAAs which included aspects of breast cancer care, whether GPs recalled seeing “Guidelines for the management of early breast cancer for GPs”, “The investigation of a new breast symptom – a guide for General Practitioners” and “Current best advice about familial aspects of breast cancer” and whether GPs could find these guidelines if they needed to. Predictor variables included sex of GP, age of GP (dichotomised into <55 years of age and ≥55 years), graduation from an Australian or overseas university, the number of years in general practice (dichotomised into <20 and ≥20 years), the type of general practice, full-time or not, solo practice or not and finally whether the GP was a member of any of the following professional associations, their local GP division, the RACGP, the AMA and the RACGP Training Program. All predictor variables were included in the original logistic regression model to account for negative confounding of univariate relationships and then a manual backwards elimination procedure was used. The least significant explanatory variable was removed in succeeding models until only significant variables (5% significance level) remained.

Results

GP sample

Of 158 eligible general practitioners, 85 (54%) agreed to participate in face-to-face interviews. Fifty-six (66%) were aged less than 55 years; 46 (54%) were male and 60 (71%) had graduated from an Australian university. The majority (n=63, 74%) were in full-time practice and only 34 (40%) were in solo practice. Professional affiliations were common: 72 (85%) were members of their respective GP Division; 39 (46%) were Members or Fellows of the Royal Australian College of General Practitioners (RACGP) and 28 (33%) were members of the Australian Medical Association (AMA). Other than a high proportion of female participants, there was no evidence of bias in our sample compared with available data for the NSW reference population (CDH&FS1996; CDH&FS 1997).

GPs' views of local facilities

Fifty GPs (59%) reported cases receiving primary breast cancer treatment at the most established tertiary hospital facility in Central Sydney (RPAH). Very few (n=5, 6%) could not recall at least one patient receiving treatment for breast cancer in one of the four local hospitals, suggesting GPs were familiar with local facilities. However, 57 GPs (67%) also reported a preference by women with breast cancer for facilities outside of Central Sydney, the majority (n=23, 27%) citing accessibility as a primary concern. Most but not all respondents (n=44, 52%) reported that women with breast cancer were satisfied with the treatment that they had received in Central Sydney facilities. Nearly half of the GPs surveyed (n=40, 47%) agreed that quality of care could be influenced by non-clinical issues. These included; whether the patient had private health insurance (n=27, 32%), her level of education (n=24, 28%) and when her place of residence compromised access to facilities (n=19, 22%).

Clinical presentation and referral of female patient most recently diagnosed with breast cancer

Only 79 (93%) of GPs had seen a female patient diagnosed with breast cancer sufficiently recently to recall presentation and management details. Of the resulting 79 clinical cases, women were aged between 24 – 84 years at the time of diagnosis (median 55 years; mode 60 years). While half of these cases had presented with Stage I (localised) disease (n=43, 54%), nearly one in five (n=16)(20%) had presented in Stage III (metastatic). The majority (n=48, 61%) had presented with a breast lump rather than by mammographic screening. Almost all of the 79 women had been referred to a male surgeon for management (n=71, 96%). One local male surgeon was referred 14 (18%) of the cases alone; another, 13 (16%) cases while eighteen other specialists were referred five or fewer cases. A quarter (n=18, 25%) of GPs indicated that the referral specialist would not see 'Medicare only' patients. More than half (n=46, 62%) did not know if the specialist charged more than the Commonwealth rebate.

Factors influencing referral choice and predictors of GP satisfaction

Table 1 lists GPs' ratings of factors influencing their choice of specialist (n=85). 'Previous experience' of referral to that consultant/breast clinic was the most popular response (n=80, 94%) followed by 'personal knowledge of the consultant's expertise' (n=72, 85%)(Table 1). Only one third of all respondents agreed women wanted to be more involved in choosing the specialist (n=28, 33%).

Table 1: Factors influencing GP choice of specialist for a woman with breast cancer (n=85)

	Responses (%)			
	A lot	Somewhat	A little	Not at all
Previous experience of referral to that consultant / breast clinic	94	6	0	0
Personal knowledge of consultant's expertise	85	11	3	1
Good communication between GP and specialist	64	24	7	0
Consultant's reputation	67	28	5	0
Easy for patient to access	47	46	5	2
Patient's choice	35	38	22	5
Hospital's reputation	32	45	16	6
Shorter waiting list for a consultation	32	37	19	12
Shorter waiting list for surgery	31	35	21	13
Patient's age	5	20	18	56
Specialists' sex	2	13	19	62

Where responses are missing, rows do not add to 100%

In response to a question assessing the overall rating of care women with early breast cancer received from specialists, thirty (35%) of the respondents rated this as 'excellent'. In contrast, significantly fewer (n=16, 19%) so rated the communication between GPs and specialists about women with early breast cancer (19% v 35%)(McNemars $\chi^2=10.6$, df=1, $p<0.01$). Younger GPs were significantly less likely to rate communication as excellent compared with GPs aged 55 years or older (11% v 34%)(AOR=0.23, 95% CI: 0.07–0.71, Wald $\chi^2=6.44$, df=1, $p=0.01$). Further, only fifteen (18%) GPs rated their patients as having been 'very well informed' about their treatment choices after seeing a consultant for a suspicious breast symptom. This perception did not differ by GP gender or age.

More than two-thirds (n=59, 69%) considered that a letter to the patient was the best way for the specialist to reinforce information provided during the consultation. However, a sizable minority (n=16, 19%) considered that an audiotape was best. To ensure better outcomes for women with breast cancer in the future, GPs most commonly expressed the need for better cohesion of health services, specifically through improved health service co-ordination (n=45, 53%) and better communication between patients, GPs and specialists (n=29, 34%). Fewer (n=13, 15%) suggested a centralised facility to deal with breast cancer patients.

Continuing medical education (CME)

Fifty five respondents (65%) reported that they had participated in CME or PAA which had included aspects about breast cancer. GPs who were not members of their GP division were significantly less likely than members to have attended any such courses or seminars (38% v 65%, AOR= 0.52, 95% CI:0.28–0.97, Wald $\chi^2=4.27$, df=1, $p=0.04$). Of the 55 GPs who had participated in CME or PAA involving aspects of breast cancer, the majority (n=37, 67%) responded that this was within twelve months prior to the current interview.

More than one third (n=33, 39%) agreed they were now more likely to refer any patient with suspicious clinical breast symptoms as a result of the current medicolegal climate. Similarly 31 (36%) indicated that they were now more cautious than in the past in their clinical management of women with suspicious breast symptoms.

Guidelines for breast cancer management

Only 49 (58%) GPs reported having seen *Guidelines for the management of early breast cancer for GPs*, which had been released six months before our survey commenced. Using logistic regression for other variables, younger GPs (<55 years) were more likely to recall these guidelines than GPs aged 55 years or older (70% v 34%)(AOR=4.98, 95% CI:1.84–13.51, Wald $\chi^2=9.95$, df=1, $p=0.002$). GPs who were not members of their local GP division were less likely than members to recall having seen these guidelines (31% v 63%) (AOR=0.46, 95% CI:0.23–0.90, Wald $\chi^2=5.09$, df=1, $p=0.02$).

Only 41 (48%) respondents had seen *The investigation of a new breast symptom – A guide for General Practitioners*, released two months before our survey. Again, younger GPs were significantly more likely than older GPs to recall having seen this set of Guidelines (57% versus 31%, AOR=2.96, 95% CI:1.15–7.64, Wald $\chi^2=5.04$, df=1, $p=0.02$).

Significantly fewer respondents had seen *Current best advice about familial aspects of breast cancer* than the *Guidelines for the management of early breast cancer for GPs* (41% v 58%)(McNemars $\chi^2=5.92$, df=1, $p<0.025$). Younger GPs were significantly more likely than GPs aged 55 years or

older to recall having seen *Current best advice about familial aspects of breast cancer* (55% v 14%, AOR=7.74, 95% CI:2.38–25.19, Wald $\chi^2=11.57$, df=1, p=0.0007). Only 26 (31%) of GPs had seen all three NBCC guidelines. Younger GPs were significantly more likely to recall having seen all three guidelines than GPs aged 55 years or over (39% v 14%)(AOR=4.04, 95% CI:1.24–13.20, Wald $\chi^2=5.35$, df=1, p=0.02). Few GPs could find the guidelines if they needed them (n=34, 40%). Those in group practice were significantly more likely to agree they could find these guidelines compared with GPs in solo practice (49% v 26%)(AOR=1.63, 95% CI:1.02–2.61, Wald $\chi^2=4.20$, df=1, p=0.04). The NBCC outranked all others as the organisation that GPs considered should be responsible for disseminating the guidelines (n=37, 43%).

Resources to support GPs in the future in breast cancer management

Table 2 summarises respondents' ratings of eight potential resources to help GPs in breast cancer management. A majority (n=58, 68%) rated seminars with experts on breast cancer as 'very useful'. Significantly fewer, but never-the-less over one third of GPs (n=32, n=33, 39%)(McNemars $\chi^2=14.77$, df=1, p<0.001) also rated practical training in skills to take a history, investigate and manage women with breast cancer as 'very useful'. All but one of the potential resources were rated this highly by at least one in five GPs (Table 2).

Table 2: Usefulness of eight potential resources to help GPs with breast cancer management (n=85)

	Responses (%)			
	Very	Somewhat	Not at all	Unsure
Seminars with experts on breast cancer	68	28	4	0
Practical training in skills to take history, investigate and manage women with breast cancer	39	37	19	5
Opportunities to learn how to communicate about screening, not just management of disease	33	45	15	5
Clinical attachments of one or two half-day duration at the local hospital breast clinic	32	39	25	3
Distance learning or 'self-study' module on breast cancer which attracts CME* points	32	45	17	6
Proceedings of a national breast cancer conference	27	55	12	6
PAA* which involves assessment and feedback on breast cancer care	24	58	14	3
Local network of GPs to whom I could address my GP-type problems	11	46	35	8

Where responses are missing, rows do not add to 100%

* During 1996/8, GPs were required to accumulate a minimum number of points from accredited continuing medical education (CME) and participate in at least one Practice Assessment Activity (PAA) to maintain vocational registration

Discussion

We present our approach and results as a practical example of how to obtain systematic feedback from local GPs about services for women with breast cancer. While recognising the possibility that our sample may not have been representative as a result of the modest response rate (54%), we balance this methodological caveat against the benefits of acquiring previously unknown information about GPs' satisfaction with facilities in Central Sydney, their referral patterns, their familiarity with evidence-based guidelines and advice on how best in future to support them in breast cancer management. Further, their recall of patient's age and stage at diagnosis of breast cancer was consistent with epidemiological data, increasing our confidence in the generalisability of our findings (Taylor *et al* 1994).

Facilities in Central Sydney are generally well-regarded by local GPs and their self-reported referral to local services is high. Non-clinical factors such as patient health insurance status did not appear to be influential in the referral process. While many other Area health services in Sydney are seeking to discourage referral outside their facilities (Wall & Harney 1997), internal referral for treatment of women with breast cancer is high. However, results from these interviews are a reminder that breast cancer is a rare event in general practice. Not all GPs interviewed had seen a woman sufficiently recently to be able to recall presentation and management details. Of those cases of breast cancer recalled by respondents, most women had presented symptomatically (61%) and nearly all (96%) had been referred to a male surgeon. Previous experience and familiarity were key factors influencing choice of specialist, although younger GPs were significantly more likely than older GPs to be dissatisfied with the quality of communication between themselves and specialists. The finding that local referrals are influenced by previous experience and familiarity with the consultant provides unique local evidence in support of research conducted with British GPs (Kennedy & McConnell 1993). Our interviews also provide a stark reminder of the realities of contemporary general practice. More than a third of the responding GPs (39%) were more likely to refer as a result of the current medicolegal climate.

Just over a third of respondents (35%) considered the care provided to women with breast cancer as 'excellent' and only half this number again agreed that women were 'very well informed' about their treatment choices. Over a third of GPs (34%) expressed that better communication between patients, GPs and specialists, was needed to improve outcomes for women with breast cancer. Nearly double this number (69%) considered that a letter was the preferable way to ensure information provided during consultations was adequately communicated to patients, a preference reported previously by Australian medical practitioners (Stockler *et al* 1993). This is in direct contrast to reported patients' views. Patients are twice as likely to prefer a tape of a consultation rather than a letter (Tattersal *et al* 1994). New cancer facilities in CSAHS will include technology to audiotape clinical consultations (Tattersal, personal communication). However the cost effectiveness of audiotaping may need to be ascertained in view of the uncertainty of whether tapes enhance patient recall of information (Tattersal *et al* 1994) and the high costs associated with audiotaping (Wilson and McDonald 1994) before local GPs may be willing to change their views and their practices.

Our study is the first, to our knowledge, to examine the local uptake in general practice of nationally developed guidelines about breast cancer. The first set of the NHMRC's Guidelines was prompted by concerns that knowledge of treatment options was not well disseminated among health professionals and that not all women with early breast cancer were being presented with the range of appropriate treatment choices (NHMRC 1995a). It has been claimed that '... the success of the guidelines produced by the National Breast Cancer Centre has much to do with the sensitivity to the needs of those who will be applying the guidelines' (Leeder 1999). Rather than assume adequate distribution however, our study demonstrates a disturbing proportion of 'grass-roots' GPs were not aware of the NBCC guidelines and even fewer would be able to locate them when needed. Specifically, older GPs (>55 years of age) were significantly less likely to recall having seen NBCC guidelines and the few respondents (n=34, 40%) who could locate these, if needed, were more likely to be in a group practice. Local initiatives appear to be crucial therefore if nationally developed guidelines are to change clinical practice. In New South Wales, regional health services increasingly will be expected to address the implementation of evidence-based guidelines.

Our survey has identified characteristics of GPs at risk of professional isolation. Those who were not members of the Division were significantly less likely to have participated recently in CME about breast cancer issues and to recall seeing Guidelines for the management of early breast cancer for GPs. Younger GPs were significantly more likely to be aware of guidelines. Those in group practice were significantly more likely to be able to find guidelines when they needed them. Seminars with breast cancer experts significantly outranked all other resources as a way of assisting GPs in their role in breast cancer management. Hospitals and Area health authorities can respond to these preferences but this should involve collaboration with dedicated educational resources such as the NBCC. The development and distribution of teaching kits such as those developed in Canada to support local activities of this kind would ensure consistent evidence-based messages are promulgated (Young, Chart, Franssen *et al* 1998).

Lectures represent conventional fare in guidelines implementation. A consumer version of the guidelines, a video for women and 'self-study' module are examples of innovative educational options. As there is international interest in the use of 'self-study' approaches to continuing education about breast cancer (Young, Chart, Franssen *et al* 1998), our finding that 32% valued distance learning modules augurs well. However, as found elsewhere (Puech *et al* 1998), implementation strategies likely to be effective received only low ratings. Specifically, only one quarter of respondents rated a PAA involving assessment and feedback as 'very useful'. Similarly, a local network of 'expert GPs' to whom GPs could address GP-type problems and academic detailing were both lowly ranked. In addition, there was a low level of interest in Internet access consistent with low rates of computer uptake in Australian general practice (Young & Ward 1999). These low-ranking strategies should be introduced only cautiously.

Finally, we recommend this survey method to others interested in improving outcomes for women with breast cancer. Our interview method could be adopted and adapted by other regional health authorities. In NSW, this would enable Area Health services to modify referral patterns and better integrate acute care facilities with general practice. Our methods also permit monitoring of guidelines implementation at the local level.

Acknowledgment

We thank the general practitioners who gave generously of their time to participate in the face-to-face interview. We also thank Nancy Harding for organisational support; Thilo Kober, Leonie Cabbage, Margaret Lesjak, Emma Slaytor and Libby Proude for interviews; Janet McDonald, Frances Randall, Lyn Trumbull, Harriett Harrison and Liz Story for consumer input; Irenie Smoker for utilisation data and Neil Donnelly for statistical support. The study was funded by AMP, and the protocol was approved by the RPAH Ethics Committee.

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