# The top issues patients mention when family physicians recommend screening mammography

A recent survey of BC doctors indicates that some common patient misunderstandings about screening—including the perception that the procedure is painful—need to be addressed.

## **ABSTRACT:**

Background: We know that family physicians' recommendations for screening mammography increase participation, and that women often mention concerns about screening when the recommendation is made.

Methods: A survey to explore these concerns was mailed to 5140 family physicians in BC in November 2007. Responses were received from 1753 urban and rural physicians and were analyzed using automated forms processing software.

Results: The response rate for the survey was 34.1%. Most respondents (92.0%) reported recommending screening mammography to their patients. Some (21.0%) reported not recommending mammography to women aged 40 to 49 years, thus not following current guidelines. When asked about reasons patients give for not participating, 24% of physicians reported that pain was the issue women mentioned most often. The next most frequently mentioned issues were related to misunderstandings of eligibility (e.g., no family history), frequency (e.g., I already had one), risk (e.g., fear of radiation), and benefits of mammography (e.g., does not find all cancer). Access to screening and wait times were minor issues, reported by less than 5% of patients.

Conclusions: Physicians indicated a willingness to distribute information and give self-referral slips to strengthen their recommendations. Screening programs must increase physician awareness of available resources and develop additional material to address the perception that mammograms are painful.

he Screening Mammography Program (SMP) has offered British Columbia residents free screening mammograms since 1988. The Canadian benchmark for participation in routine screening mammography every 2 years is 70% of women aged 50 to 69. Current participation of women aged 50 to 69 in BC is 49%.1 One of the most effective ways to encourage participation is to

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have family physicians recommend screening to patients, which doubles the odds of a woman participating in screening mammography.<sup>2-9</sup> To learn more about why not all patients comply, the Breast Tumour Group of the BC Cancer Agency surveyed BC family physicians about the barriers their patients mention when discussing mammography, and about the tools the physicians believe would help address patient concerns and encourage screening participation. The study follows a similar one done by the Ontario provincial breast screening program.10

### Methods

In November 2007, surveys were mailed to 5140 family physicians in British Columbia. When responses were received from 1753 physicians in urban and rural communities, survey data were scanned and coded using Teleform automated forms processing software (www.cardiff.com/ products/teleform). Descriptive statistics were produced using SPSS version 11. City size was determined from the postal code of the family physician's office, using Statistics Canada's Postal Code Conversion File software version 4J. City size was then used to classify each practice as rural (city size less than 10000) or urban (city size 10 000 or more). There were 58 missing or invalid values for city size, leaving 1695 surveys for urbanrural subgroup analyses.

## Results

The overall response rate for the survey was 34.1%. The response rate for urban practices was 31.6%, while the response rate for rural practices was higher, 43.2%. Of the 1695 surveys with urban-rural information, 83.6% came from physicians in urban practices, and 16.4% from those in rural practices.

 
 Table 1. Proportion of respondents in a survey of BC family physicians who provide
mammography recommendations to eligible patients.

	Urban		Rural		All respondents	
Recommend mammography	n	%	n	%	n	%
Yes	1293	91.2	264	95.0	1613	92.0
No	16	1.1	3	1.1	20	1.1
Missing	108	7.6	11	4.0	120	6.8
Total	1417	99.9	278	100.1	1753	99.9

Note: Percentages do not add up to 100% due to rounding.

Table 2. Proportion of eligible patients that respondents estimate they provide with a mammography recommendation.

	Urban		Rural		All respondents	
Eligible patients receiving recommendation	n	%	n	%	n	%
>80%	972	68.6	166	59.7	1171	66.8
60-80%	243	17.1	51	18.3	310	17.7
40–60%	59	4.2	24	8.6	87	5.0
20-40%	16	1.1	7	2.5	24	1.4
< 20%	5	0.4	7	2.5	12	0.7
Missing	122	8.6	23	8.3	149	8.5
Total	1417	100.0	278	99.9	1753	100.1

Note: Some percentages do not add up to 100% due to rounding.

Table 3. Age groups chosen by respondents asked to identify mammography recommendation by patient age.

	Urban		Rural		All respondents	
Age group	n	%	n	%	n	%
40-79	1064	75.1	188	67.6	1292	73.7
50-79	237	16.7	70	25.2	318	18.1
50-65	32	2.3	10	3.6	45	2.6
Postmenopausal	14	1.0	3	1.1	17	1.0
Other	9	0.6	4	1.4	14	0.8
Missing	61	4.3	3	1.1	67	3.8
Total	1417	100.0	278	100.0	1753	100.0

A high proportion of respondents (92%) reported that they recommend screening mammography to their eligible patients ( Table 1 ). While more respondents in rural areas (95%) than in urban areas (91.2%) made this recommendation, the difference was not statistically significant. The majority of respondents (68.6% for urban practices and 59.7% for rural practices, P < .001) reported that they recommend screening mammography to

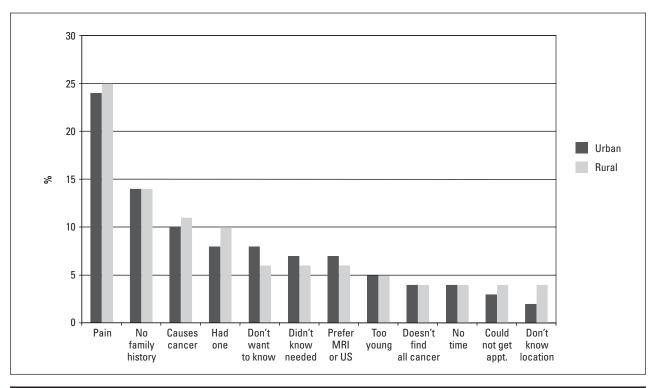


Figure. Issues patients mentioned to physicians surveyed regarding screening mammography (precoded list, multiple answers allowed).

80% or more of their eligible patients (Table 2). When asked to select only one age group of women to whom they recommend mammography, 73.7% of physicians chose the 40 to 79 age group (Table 3). Of the remaining physicians, 18.1% chose the 50 to 79 age group and 2.6% chose the 50 to 65 age group, meaning that 21.7% of respondents chose groups that exclude women in their 40s, and are thus not following current clinical guidelines in British Columbia. This effect was more pronounced in rural practices.

## Issues mentioned by women

The perception that mammography is painful was the issue most often mentioned by patients (24%) in response to a recommendation for mammography (Figure ). After pain, several issues based on patient misunderstandings were mentioned. According to respondents, 14% of their patients think a family history of breast cancer is necessary to have a mammogram, 9% think one mammogram is enough and they do not need to have others, and about 10% fear the radiation used in screening poses a cancer risk. While access is often assumed to be a major issue, this was not reported by family physicians as a barrier; a very low proportion of respondents reported patients mentioning access to a location (3%), or wait time (2%) for appointments as barriers.

## Ways to encourage participation

Family physicians stressed the value of printed information to help them answer women's questions within the limited time available during an office visit. They recommend that this material outline breast cancer risks, benefits of regular screening, the use of compression during mammography,

and evidence that exposure to mammography radiation is safe. Specific suggestions included posters with pictures of the screening process and brochures containing information on the effectiveness and safety of mammography, who is eligible, and how often to have a mammogram. Tear-off pads of self-referral slips that provide information on fixed locations and, where applicable, the mobile screening unit, were mentioned by only 10% of physicians responding to the survey.

## Conclusions

Unlike the Ontario study,10 which found that only 38.9% of physicians were following breast screening guidelines in that province, our study showed that most BC physicians still find time to encourage healthy behaviors such as mammography screening. It is clear, however, that print materials designed to address common concerns would help physicians provide information during an office visit.11 Although mammography in BC requires no referral, tear-off pads of self-referral slips, produced by SMP (along with posters and brochures in several languages) provide a handy written reminder and useful contact information, and also serve as a stronger recommendation than a verbal comment.

In a recent study in the United States, 80% of nonparticipants reported not receiving a recommendation for mammography,2 so either US physicians are not recommending mammography or women do not always hear or recall a verbal recommendation. The authors report that the subgroups most in need of improved doctor-patient communication are older women (65 years and older), foreignborn women, and those with less than a high school education. Our study showed that awareness of the program and other factors such as screening location, hours of operation, and wait times for an appointment are not major barriers.

The study results are strengthened by the fact that the information came directly from a large sample of BC family physicians, who are at the front line of early cancer detection. One limitation of the study was that we did not survey gynecologists or other specialists who may recommend mammography more or less than family physicians. In this study, we were also not able to distinguish issues raised by nonparticipants from issues raised by women who have had at least one mammogram, and these may differ. Finally, self-report of mammography recommendation by physicians may be somewhat overstated, as documented in a recent study using chart reviews.12

Despite these limitations, the study results suggest ways to improve screening mammography participation. Although the Screening Mammography Program has produced and distributed pads, posters, and brochures, a troubling proportion of family physicians are not aware of these resources. A recent survey showed that BC physicians access existing local cancer care print resources infrequently, preferring the Internet and computer-based resources.<sup>13</sup> SMP will therefore work to increase awareness of available resources, as well as to develop additional material that addresses the perception that mammography is a painful procedure.

## **Competing interests**

None declared.

### **Acknowledgments**

We thank Elaine Simpson, Lesley Donaldson, and the SMPBC office staff for help with mailing the surveys.

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