

# The Impact of Breast Care Nurses: An Evaluation of the McGrath Foundation's Breast Care Nurse Initiative

Jane Mahony<sup>1</sup>, Holly Masters<sup>1</sup>, James Townsend<sup>1</sup>, Fionnuala Hagerty<sup>1</sup>, Lisa Fodero<sup>2</sup>, Joe Scuteri<sup>2</sup>, Darren Doromal<sup>2</sup>

<sup>1</sup>McGrath Foundation, <sup>2</sup>HealthConsult, Sydney, NSW, Australia



**Corresponding author:** James Townsend, BPsychSc

McGrath Foundation, North Sydney, NSW, Australia

Tel: +61 (0) 417 286 637

E-mail: james@mcgrathfoundation.com.au

Received: July 11, 2018, Accepted: August 27, 2018

## ABSTRACT

**Objective:** Over the four years to 30 June, 2017 the McGrath Foundation's Second Federal Government Breast Care Nurse (BCN) Initiative funded 57 McGrath BCNs (MBCNs) to deliver better continuity of care and provide specialized support to those diagnosed with and undergoing treatment for breast cancer. This article summarizes the findings generated through a mixed-method evaluation of the program's appropriateness, effectiveness, and efficiency. **Methods:** The evaluation comprised surveys and semi-structured interviews with patients, multidisciplinary clinicians and MBCNs. The research also drew on secondary materials, including MBCN activity and patient caseload data, a review of existing programs and costing information. **Results:** The evaluation generated evidence that access to an MBCN results in an improved experience for patients and clinicians, and that these impacts are more profound when MBCNs come into contact with their patients at the time of diagnosis. The economic modeling component of the evaluation revealed that there are cost savings to the health system when

breast cancer patients have early access to an MBCN (through reduced health service utilization). The net saving produced by the program was estimated to be worth \$6,323,257 per year, or \$1,527 per new breast cancer patient seen. Stakeholders indicated that the MBCN model of care could be evolved to respond to emerging trends in breast cancer care pathways, such as a greater role in survivorship. **Conclusion:** This research advances the current understanding of the impact of BCNs on different levels of the health system and holds relevance for health-care funders, providers, and policy-makers. The evaluation demonstrates that access to an MBCN results in an improved experience for patients and clinicians, along with savings to the health system (through reduced health service utilization). The evaluation also shows that these impacts are more profound when MBCNs come into contact with their patients at the time of diagnosis.

**Key words:** Breast cancer, breast care nursing, economic evaluation, patient reported outcomes, program evaluation

### Access this article online

#### Quick Response Code:



**Website:** [www.apjon.org](http://www.apjon.org)

**DOI:**  
10.4103/apjon.apjon\_61\_18

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** [reprints@medknow.com](mailto:reprints@medknow.com)

**Cite this article as:** Mahony J, Masters H, Townsend J, Hagerty F, Fodero L, Scuteri J, *et al.* The impact of breast care nurses: An evaluation of the McGrath foundation's breast care nurse initiative. *Asia Pac J Oncol Nurs* 2019;6:28-34.

## Introduction

In 2017, breast cancer was estimated to be the most commonly diagnosed cancer (excluding nonmelanoma skin cancer) in Australia.<sup>[1]</sup> As part of a national commitment to ensuring that breast cancer support is aligned with clinical best practice, breast care nurses (BCNs) were introduced in Australia in the mid-1990s, with the aim of facilitating better continuity of care and providing specialized psychosocial support for those diagnosed and undergoing treatment.<sup>[2]</sup>

The McGrath Foundation was established in 2005 with a goal to ensure every family experiencing breast cancer in Australia has access to a BCN, regardless of their location or financial situation. The organization's main objective is to raise funds to place McGrath BCNs (MBCNs) in communities across the country.

In 2008, the McGrath Foundation signed a funding agreement with the then Department of Health and Ageing (the "Department") to implement the First BCN Initiative (the "First Initiative"). Under this agreement, funding was provided for the recruitment, training, and employment of 44 new specialist MBCNs across Australia. The Second BCN Initiative (the "Second Initiative") began on July 1, 2013 and ceased on June 30, 2017. Under this agreement, funding was granted to continue the work of the existing 44 Government funded MBCNs and to recruit an additional 13 MBCNs, a total of 57 positions or 34.5 full-time equivalent (FTE) positions.

### What this paper adds

Within the Australian context and internationally there is a paucity of quantitative evidence evaluating breast care nursing services across different levels of the health system, and across different geographical regions.<sup>[3,4]</sup> This article builds on the evaluation results of the First Initiative (published in 2013), by presenting the key findings that were generated through a comprehensive outcome and economic evaluation of the Second Initiative.

## Methods

In recognizing that continual monitoring and evaluation of the MBCN model of care can lead to improved outcomes for breast cancer patients, the McGrath Foundation sought an independent evaluator to conduct an evaluation of the Second Initiative over the period from July 1, 2013 to June 30, 2016. In June 2013 HealthConsult was commissioned to undertake this evaluation.

### Evaluation design

HealthConsult undertook a three-phased approach to executing the evaluation.

### Planning

In early 2013, HealthConsult developed a plan to measure the impact of the Second Initiative through the development of an evaluation framework. This framework set out the key lines of inquiry for the evaluation and identified relevant performance indicators and their associated data sources and methods for analysis.

### Ethical Approval

Approval was received from the Australian Government Department of Health Human Research Ethics Committee under project: 41/ 2013 *Comprehensive evaluation of the McGrath Breast Care Nurse Initiative*.

### Data collection

Following the planning phase, data collection occurred at two-time points (baseline and endpoint) and adopted a mixed method approach. As part of establishing the baseline, MBCN patient registration details, MBCN clinical and non-clinical activities, and patient caseload details were captured through the implementation of an online MBCN reporting system (MBCN Database).

As part of the endpoint assessment, the evaluators randomly selected 16 MBCN sites using inclusion criteria that ensured the sites selected would produce a statistically representative sample of both MBCNs and their patients. HealthConsult then administered bespoke surveys to other clinicians working with MBCNs ( $n = 109$ ), MBCN patients ( $n = 153$ ), as well as from MBCNs themselves ( $n = 53$ ). In addition, in-depth interviews were conducted with a selection of MBCNs and other clinicians at these sites. The interviews were conducted in accordance with the provisions of the Department of Health Human Research Ethics Committee. With respect to secondary data, MBCN activity and patient-level data were gathered from the MBCN Database (up to June 30, 2016), and programmatic costing materials were collated. The evaluation data collection was completed by July 31, 2016.

### Data analysis and reporting

Following the data collection phase, a process of data analysis, synthesis, and reporting ensued. Thematic analysis was applied to qualitative information elicited through surveys and semi-structured interviews using a structured process of review, reflection, and refinement.

Concurrently, the analysis was performed on quantitative data obtained from surveys and the MBCN Database. The emergent themes were triangulated and presented in a final evaluation report. The findings outlined in this article are derived from the sections of the evaluation report that addressed:

- Appropriateness of the Second Initiative
- Effectiveness of the Second Initiative
- Efficiency of the Second Initiative.

An abridged version of the key evaluation questions, data sources and analytical techniques used to address these three domains of inquiry as they are referred to in this article are described in Table 1.

## Results

The results of the framework outlined in Table 1 are presented in this section. To contextualize these findings against the scale and scope of the Second Initiative, information relating to patient access to MBCNs is also provided.

Table 1: Evaluation lines of inquiry explored in this article	
Domain	Key research question and analytical approach
Appropriateness	Is the program the most appropriate model for improving the quality of care of women diagnosed with breast cancer? <ul style="list-style-type: none"> <li>• Review of literature on breast care models published since the First Initiative</li> <li>• Analysis of quantitative and qualitative data gathered from patient, MBCN and Other Clinician Surveys</li> <li>• Analysis of qualitative data elicited through semi-structured interviews with clinicians and MBCNs</li> </ul>
Effectiveness	Does access to an MBCN improve information and services for breast cancer patients? <ul style="list-style-type: none"> <li>• Analysis of quantitative data gathered from Patient and Other Clinician Surveys, focussing on examining the relationship between stage of care at first contact with an MBCN and patient outcomes</li> </ul>
Efficiency	Is the program cost beneficial? <ul style="list-style-type: none"> <li>• A cost benefit analysis informed by:                             <ul style="list-style-type: none"> <li>- Operating cost information contained in the McGrath Foundation Financial Database;</li> <li>- Analysis of quantitative data gathered from Patient and Other Clinician Surveys to assess impact on patients' health service utilisation;</li> <li>- Analysis of patient volume in the MBCN Database to assess scale of impact; and</li> <li>- Independent Hospital Pricing Authority publications for price inputs.</li> </ul> </li> </ul>

Source: HealthConsult MBCN Second Initiative Evaluation Framework

## Access

### Patient reach and frequency

The volume of patients who accessed an MBCN over the three years to 2015/2016 is presented in Table 2. In 2015/2016, 3,485 new patients accessed MBCN services, whereas the mean number of new patients per MBCN FTE per year increased from 97 to 111 over the reporting period.

The original Australian specialist breast care nurse model was operationalized in a “5 in 12” clinical pathway. Under this model, five consultations were scheduled across a 12-week period post diagnosis, with flexibility for additional appointments.<sup>[5]</sup> However, as reflected in Table 2, analysis of activity data indicates that the provision of BCN services across the breast cancer care continuum has evolved since the “5 in 12” model was conceptualized, with the data showing that on an average (in 2015/2016), women diagnosed with breast cancer have contact with their MBCN 12 times a year.

Stratification by rurality indicates some variation in the provision of care delivered by MBCNs. The mean number of contacts per patient per year among regional/rural MBCNs is higher (mean of 13 contacts per year) when compared to metropolitan based MBCNs (mean of 10 contacts per year), which may owe to greater support needs among patients residing outside of major cities (due to access barriers), or suggest that large patient caseloads in metropolitan centers creates “work left undone.”

### Stage at first contact

Table 3 shows the patient stage of care when making the first contact with an MBCN, by the primary workplace of the MBCN. Analysis of the data suggests variation in regard to how early MBCNs make the first contact with

Table 2: Volume of McGrath Breast Care Nurse full time equivalent and patients receiving support from an McGrath Breast Care Nurse, by year				
Region	Measure	2013/2014	2014/2015	2015/2016
Metropolitan	<i>FTE</i>	5.6	6.2	6.2
	Total number new patients that have accessed an MBCN	741	1029	1129
	Mean number new patients seen per-FTE	132	166	178
	Mean number contacts (per year) per new patient	12	9	10
	Percentage of contacts that are face-to-face	58	56	60
Regional/rural	<i>FTE</i>	26.1	29.3	29.5
	Total number new patients that have accessed an MBCN	2338	2385	2859
	Mean number new patients seen per-FTE	90	81	97
	Mean number contacts (per year) per new patient	13	13	13
	Percentage of contacts that are face-to-face	39	39	39
All	<i>FTE</i>	31.7	35.5	35.7
	Total number new patients that have accessed an MBCN	3079	3414	3961
	Mean number new patients seen per-FTE	97	96	111
	Mean number contacts (per year) per new patient	13	12	12
	Percentage of contacts that are face-to-face	39	42	42

Source: MBCN Database. Note: Patients identified as “regional” accessed an MBCN in either an “inner regional” or “outer regional” location as defined by the ABS Remoteness Area Classification. Patients identified as “rural” accessed an MBCN from a “remote” or “very remote” location as defined by the ABS Remoteness Area Classification. FTE: Full time equivalent, MBCN: McGrath Breast Care Nurse, ABS: Australian Bureau of Statistics

their patients, which is linked to where they are located. MBCNs located in an “other facility” (i.e., BreastScreen sites) have the highest proportion (61%) of patients seen at diagnosis compared to MCBNs based in public (34%) or private facilities (17%).

### Appropriateness

#### Selected locations

Analysis of the secondary data indicated that a robust criterion was used to identify suitable locations for the new MBCN positions including incidence and prevalence rates; strong representation in regional/rural areas; and a focus on locating MBCNs within a multidisciplinary team and close to a regional cancer center.

#### The model of care

Information extracted from a review of literature published since the evaluation of the First Initiative revealed that the MBCN mode of care (model) is the only model in Australia that enables BCNs to stay with the patient through the continuum of care and across the various health service settings.

Despite this, both the literature and analysis of responses provided by multidisciplinary clinicians working with MBCNs indicated that the model could be further evolved to support the system to respond to emerging trends in breast cancer care pathways, such as a greater role in shared care planning and survivorship. Indeed, in places such as the United Kingdom and Peter MacCallum Cancer Centre (in Victoria, Australia) where survivorship models are already well embedded

within breast cancer care pathways, the BCN has played a prominent role in leading their development.<sup>[6,7]</sup> Moreover, recent publications refer to a preference among Australian breast cancer survivors for BCNs to play an increased role in the delivery of follow up care, if they are sufficiently trained.<sup>[8,9]</sup>

### Effectiveness

The impact of the MBCN role on patients diagnosed with breast cancer was assessed by analyzing the 153 patient survey responses, and 109 other clinician survey responses, received across the 16 MBCN case study sites.

#### Patient reported outcomes

As shown in Table 4, the earlier MBCNs make contact with breast cancer patients, the more likely patients are to rate their care experience in the top bracket. This analysis was replicated by the frequency of contact with an MBCN, and no correlation was observed, indicating that the relationship between the first contact with an MBCN and care experience is not confounded by the fact that patients contacting MBCNs earlier in the care continuum tend to have more (overall) contact with the MBCN. However, to strengthen this evidence, additional research should endeavor to test this relationship using a multiple regression model.

The patient survey asked respondents to reflect on their medical history, and record the number of hospital emergency departments (ED) presentations, related to their breast cancer diagnosis over the past 12 months. Table 5 shows the number of ED visits patients reported, categorized by the time between patients’ diagnosis date and first contact with an MBCN. Consistent with the trend observed in Table 4, the data indicated an association between having early access to an MBCN and the proportion of patients with no visits to the ED.

#### Clinician reported outcomes

Reports by clinicians working with MBCNs indicated that the MBCN role contributes to improved cancer care service delivery; however, the perceived degree of impact varied by clinician type as shown in Table 6. Medical

**Table 3: Stage of care at first contact with an McGrath Breast Care Nurse, by McGrath Breast Care Nurse facility type**

Facility type	At time of diagnosis (%)	Time of surgery (%)	After surgery or not known (%)
Public facility	34	15	52
Private facility	17	45	39
Community facility	39	13	48
Other facility	61	3	36

Source: MBCN database. Rows do not all add up to 100% due to rounding. MBCN: McGrath Breast Care Nurse

**Table 4: Patient reported experience of care, by days since diagnosis at first contact with an McGrath Breast Care Nurse**

Patient reported experience of care	Within a week (n=68)	Within a month (n=54)	Greater than a month (n=19)
Impact of the MBCN on patient experience			
Percentage reporting “significantly improved”	84	76	63
Communication between all of the health professionals involved in treatment was effective and efficient			
Percentage reporting “always”	82	63	37
Received well-coordinated, efficiently managed health care regarding breast cancer			
Percentage reporting “always”	90	76	42

Note: “significantly improved” was the highest ranking option on a 3 point Likert scale, and “always” was the highest ranking option on a five point Likert scale. MBCN: McGrath Breast Care Nurse

**Table 5: Patient reported number of emergency departments visits, by days since diagnosis at first contact with an McGrath Breast Care Nurse**

Hospital admissions	Within a week (%) (n=68)	Within a month (%) (n=54)	Greater than a month (%) (n=19)
Number of emergency departments visits			
No visits	84	63	68
1 visit	10	30	26
2+ visits	6	7	6
Number of unplanned hospital admissions			
No unplanned admissions	90	74	74
1 unplanned admission	9	20	26
2+ unplanned admissions	1	6	0

**Table 6: Perceptions from Other Clinicians on the impact of the MBCN role, by Other Clinician type**

	Other Clinicians		
	Allied health clinicians	Medical clinicians	Other local clinicians
<b>Impact MBCNs have on reducing delays for breast cancer patients</b>			
% reporting 'large positive impact'	4%	31%	28%
<b>Impact MBCNs have on improving patient safety</b>			
% reporting 'large positive impact'	9%	35%	19%
<b>Impact of the MBCN role on reducing number of ED visits</b>			
% reporting 'large positive impact'	13%	14%	21%

Source: HealthConsult Other Clinician Survey 2016. Medical (n=36) including breast surgeons, medical oncologists, radiation oncologists, GPs etc., Allied Health (n=23) includes social workers, physiotherapists, psychologists and other AHPRA registered professionals; and Other (n=29). Note: 'large positive impact' was the highest ranking option on a four point Likert scale

clinicians were the most likely to believe that the MBCN had a “large positive impact” on reducing delays for breast cancer patients (31%), compared to allied health clinicians (4%). Similar variation was observed regarding perceived improvements to patient safety.

## Efficiency

### Economic impact on the health system

The economic impact of the Second Initiative was modeled by subtracting the annual operating costs of the Initiative (costs) from the estimated annual cost savings to the health system when breast cancer patients have early access to an MBCN (benefits).

Savings to the health system were determined using the following inputs derived from 153 patients surveys and 109 other clinician surveys:

- Medical and allied health clinicians' reported a reduction in the amount of consultation time they spend per breast cancer patient as a result of having access to an MBCN;
- Medical and allied health clinicians' reported a reduction in the number of consultations they spend per breast cancer patient as a result of having access to an MBCN;
- Reduction in the average number of ED visits when early contact is made – determined by subtracting the average number of reported ED visits from patients seen by the MBCN at diagnosis versus a later stage of care; and
- Reduction in the average number of unplanned hospital admissions when early contact is made – determined by subtracting the average number of reported ED visits from patients seen by the MBCN at diagnosis versus a later stage of care.

These savings were subsequently monetized using price inputs from the Independent Hospital Pricing Authority.

Programmatic costing materials over the reporting period were used to derive the direct and indirect costs associated with having access to an MBCN.

As shown in Table 7, the net saving attributable to breast cancer patients having early access to an MBCN was estimated to be worth \$6,323,257 per year, or \$1,527 per new breast cancer patient seen. This saving is typically not realized in cash but represents additional capacity for clinical work.

## Discussion

There is a paucity of quantitative evidence in the published literature that evaluates breast care nursing services positioned across different levels in the health system (i.e., within primary, secondary and tertiary care services), and across different geographical regions (i.e., in metro, regional, rural, or remote areas).<sup>[10,11]</sup> Further, the existing research gives limited consideration to system level economic impact measures, particularly the impact of BCNs on health services utilization and costs (savings). The

**Table 7: Annual monetised impact of the MBCN Initiative, from the perspective of the health system**

	Per annum	Per patient
<b>Costs</b>		
Direct and indirect costs	-((\$4,815,000)	-((\$1,216)
<b>Benefits</b>		
Prevention of unplanned hospital admissions	+\$1,714,269	+\$433
Prevention of ED presentations	+\$506,284	+\$128
Reduction in the number of other clinician consultations	+\$3,487,674	+\$881
Reduction in consulting time spent by other clinicians	+\$5,430,030	+\$1,371
<b>Net saving generated</b>	<b>+\$6,323,257</b>	<b>+\$1,527</b>

Source: Reductions in health service utilisation were estimated from HealthConsult patient and Other Clinician Surveys, and scaled using patient volume numbers contained in the MBCN Database. Round 18 National Hospital Costs Data Collection (NHCDC) data was used to obtain: average cost per ED visit=\$956; average cost per hospital admission=\$4,966. Medical cost per minute=\$11.3 (estimated from IHPA price weights 20.42, 20.43 & 20.32); Allied health cost per minute=\$4.41 (estimated from IHPA price weights 40.29 & 40.51); and Nurse cost per minute=\$5.36 (estimate from IHPA price weights 40.13 & 40.51). Cost per Medical consultation=\$340.0 (estimated from IHPA price weights 20.42, 20.43 & 20.32); Cost per Allied Health consultation=\$220.5 (estimated from IHPA price weights 40.29 & 40.51) and Cost per Nurse consultation=\$268.0 (estimate from IHPA price weights 40.13 & 40.51). The costs of implementing the Second Initiative were derived from the McGrath Foundation Financial database

evaluation of the Second Initiative transforms the collected qualitative and quantitative data into findings that advance knowledge relating to the impact of the BCN role on patient outcomes, the health services in which they are placed, and the capacity of the health system. In light of these results, some key themes are worthy of discussion.

### Appropriateness

The evaluation supported the view that the MBCN model is a complementary service that provides a valued role within cancer care teams, and delivers an improved patient experience.

Within international literature, there is a trend toward survivorship models of follow-up care that are based on person-centered approaches and the support and wellbeing needs of patients.<sup>[12]</sup> More recently, this trend has translated into a policy shift within the Australian setting, with the key principles of these models, such as treatment summaries and shared care arrangements, underpinning the follow-up care protocol of Cancer Australia's (2017) Optimal Care Pathway for Women with Breast Cancer Care Guidelines.<sup>[13]</sup> The guidelines note that the protocol could be led by a specialist nurse or a multidisciplinary clinician. To effectively plan for and respond to this trend, the role of the MBCN in survivorship models of care should be explored and clarified, including an assessment of the impact on current workload.

### Effectiveness

Consistent with the findings of the evaluation of the First Initiative and the wider literature, the evaluation of the Second Initiative revealed that access to an MBCN (at any stage of the care continuum), enhances the overall breast cancer experience for patients, and results in improvements to patient safety, clinician communication and coordination, and a reduction in ED presentations. However, by extending

this conclusion and showing that there is a relationship between improved outcomes and early contact with an MBCN, this evaluation provides novel evidence in relation to where in the care continuum BCNs offer the most value.

This finding is pertinent from a quality improvement perspective; as the data showed that the proportion of patients seen within a week of diagnosis is relatively low. To enhance the overall effectiveness of the model, future research should investigate the drivers of early contact.

Furthermore, this analysis is limited in that it relies on univariate analysis. To enhance the rigor of this evidence, future research should employ the use of multivariate analytical techniques to isolate the unique contribution of the time between diagnosis and first contact with an MBCN as a driver of improved outcomes.

### Efficiency

The evaluation generated evidence that there are substantial cost savings to the health system when breast cancer patients have early access to an MBCN, resulting in an estimated net saving of \$6,323,257 per year, or \$1,527 per new breast cancer patient seen. Although these savings are generally not realized in cash, but represent additional capacity for clinical work, it effectively means that for every dollar invested in the Second Initiative, a saving of \$1.31 is realized by the health system (through reduced service utilization) when patients with breast cancer have early access to an MBCN.

The economic impact of the Second Initiative, and the relief it provides to the health system, is a significant finding for policy-makers who are increasingly looking for opportunities to fund value-based integrated care models to address challenges such as: (a) capacity constraints on the acute system, owing to demand pressures driven by changing demographic profiles; and (b) increased rates of breast cancer survival, which presents a growing need for posttreatment medical and psychosocial care.

### Conclusion

One of the principal findings of the evaluation was that early contact with an MBCN results in the biggest impact on patients, health services, and the health system. However, the evaluation also found that a large proportion (i.e., 62% urban and 52% regional/rural) of breast cancer patients come into contact with MBCNs much later in their breast cancer experience. As surgery is often considered the first treatment postdiagnosis, this finding would suggest that either the service model (i.e., where the MBCN is located) or the referrals are not optimized. Further investigation is recommended to determine if this later contact is due to the implemented service models or to location type (e.g., public vs. private, regional vs. metropolitan). Such learnings could

then be used to streamline the MBCNs model to ensure a higher proportion of patients are seen within a week of diagnosis.

In summary, the evaluation illustrated that the role of the MBCN has significant impacts on patient outcomes, the health services in which they are located, and on the health system. Findings indicate that these impacts are more profound when MBCNs come into contact with their patients at the time of diagnosis. The economic modeling component of the evaluation showed that early access to an MBCN produces an annual modeled net saving of \$6,323,257, or \$1,527 per new breast cancer patient seen. In addition, the evaluation indicated that there exists potential for MBCNs to contribute further to breast cancer care in Australia through playing an increased role in shared care planning and survivorship models of care.

### Financial support and sponsorship

This study was supported by the Australian Commonwealth Government and the McGrath Foundation.

### Conflicts of interest

There are no conflicts of interest.

## References

1. Australian Institute of Health and Welfare. Australian Cancer Incidence and Mortality Books. Australian Institute of Health and Welfare; 2017. Available from: <https://www.aihw.gov.au/reports/cancer/acim-books/contents/acim-books>. [Last accessed on 2018 Mar 11].
2. Jones L, Leach L, Chambers S, Occhipinti S. Scope of practice of the breast care nurse: A comparison of health professional perspectives. *Eur J Oncol Nurs* 2010;14:322-7.
3. Ahern T, Gardner A. Literature review: An exploration of the role of the Australian breast care nurse in the provision of information and supportive care. *Collegian* 2015;22:99-108.
4. Paynter H, Fodero L, Scuteri J, Kerin-Ayres K, Tink K. Evaluation of the McGrath foundation's breast care nurse initiative. *Aust J Cancer Nurs* 2013;14:4-9.
5. National Breast Cancer Centre. Specialist Breast Nurses: An Evidence-Based Model for Australian Practice. National Breast Cancer Centre; 2000. Available from: [https://www.canceraustralia.gov.au/system/tdf/publications/sbn-specialist-breast-nurses-an-evidence-based-model-for-australian-practice\\_504af03e56c8a.pdf?file=1&type=node&id=3065](https://www.canceraustralia.gov.au/system/tdf/publications/sbn-specialist-breast-nurses-an-evidence-based-model-for-australian-practice_504af03e56c8a.pdf?file=1&type=node&id=3065). [Last accessed on 2018 Mar 13].
6. Mann B, Bell C, Rio I, Pitcher M, Amos A. Victorian cancer survivorship program: Pilot project. survivorship program for patients completing definitive breast cancer treatment, final report. The Royal Melbourne Hospital, Western Health, The Royal Women's Hospital; 2013. Available from: <https://www.petermac.org/sites/default/files/media-uploads/Breast%20Cancer%20Survivorship%20Project%20Final%20Report.pdf>. [Last accessed on 2018 Mar 13].
7. Price Waterhouse Coopers. Evaluation of the Transforming Cancer Follow-up Programme, Wave 1 Evaluation Report. Macmillan Cancer Support; 2013. Available from: [https://www.macmillan.org.uk/documents/aboutus/research/researchandevaluationreports/ourresearchpartners/macmillantcfuevaluation-finalreport\(260813\).pdf](https://www.macmillan.org.uk/documents/aboutus/research/researchandevaluationreports/ourresearchpartners/macmillantcfuevaluation-finalreport(260813).pdf). [Last accessed on 2018 Mar 13].
8. Bessen T, Chen G, Street J, Elliott J, Karnon J, *et al.* What sort of follow-up services would Australian breast cancer survivors prefer if we could no longer offer long-term specialist-based care? A discrete choice experiment. *Br J Cancer* 2014;110:859-67.
9. Brennan ME, Butow P, Marven M, Spillane AJ, Boyle FM. Survivorship care after breast cancer treatment – Experiences and preferences of Australian women. *Breast* 2011;20:271-7.
10. Jones L, Leach L, Chambers S, Occhipinti S. Scope of practice of the breast care nurse: A comparison of health professional perspectives. *Eur J Oncol Nurs* 2010;14:322-7.
11. Ahern T, Gardner A. Literature review: An exploration of the role of the Australian breast care nurse in the provision of information and supportive care. *Collegian* 2015;22:99-108.
12. Jefford M, Rowland J, Grunfeld E, Richards M, Maher J, Glaser A, *et al.* Implementing improved post-treatment care for cancer survivors in England, with reflections from Australia, Canada and the USA. *Br J Cancer* 2013;108:14-20.
13. Cancer Australia. Optimal Care Pathway for Women with Breast Cancer; 2017. Available from: <https://www.cancer.org.au/content/ocp/health/optimal-care-pathway-for-women-with-breast-cancer-june-2016.pdf>. [Last accessed on 2018 Mar 13].