EVALUATION OF THE IMPLEMENTATION OF THE PROSTATE CANCER SPECIALIST NURSE ROLE

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Abstract

A national prostate cancer specialist nursing pilot program, supported by Prostate Cancer Foundation of Australia, was launched in May 2012 with funding support from The Movember Foundation. The pilot program aimed to trial a best practice model for providing specialist nursing care to those affected by prostate cancer. Prostate cancer specialist nurses were allocated to 12 hospitals across all Australian states and territories to work in the context of multidisciplinary care. The Prostate Cancer Foundation provided professional development support for nurses through a structured program. This article presents key outcomes from the research commissioned by the Prostate Cancer Foundation to evaluate the prostate cancer specialist nurse role. Specifically, the paper reports evaluation data relating to the roles and functions of the prostate cancer specialist nurse to explore the influence of the role on outcomes for patients, carers and services.

The importance of the nurse’s role providing specialist supportive and clinical care is widely recognised in published literature. For many years, the Australian health care system has made provision for specialist nurses for a range of diseases, including breast cancer and chronic illness.1-4 In response to the potential benefits specialist nursing roles may have for people affected by prostate cancer, Prostate Cancer Foundation of Australia (PCFA) implemented a program to introduce a structured prostate cancer specialist nursing service into Australia.

PCFA launched its prostate cancer specialist nursing program in May 2012. The program involved PCFA working in partnership with health care providers to recruit, train and support a number of prostate cancer specialist nurses (PCSNs) in various locations in metropolitan and regional Australia. The program aimed to trial a best practice model for providing specialist nursing care using a structured format to those affected by prostate cancer, with a view to creating a sustainable model as part of routine cancer care delivery.5

The primary objective for the prostate cancer specialist nursing service is to provide direct patient care aimed at improving the patient’s cancer experience. The PCSN is an expert point of contact for the man and his family, providing support and care to those affected by prostate cancer. The nurses work alongside other health care providers involved in prostate cancer care and care for men at any point in their cancer journey. They assist men to make optimal use of resources available in their immediate community and streamline service delivery when referral to another centre is required.

PCSNs assist by:
• providing those affected by prostate cancer with an ongoing point of contact and support
• assisting men to access services both in their hospital and in their community during and after treatment
• providing men with reliable information about their diagnosis and treatment plan
• providing men with information about dealing with the effects of treatment and how to get further help to deal with specific problems they may be having
• coordinating care wherever a man is in his cancer journey
• enabling men and families access to support groups
• providing education and training to other health care workers
• participating in projects and service development activities to improve care for those affected by prostate cancer

Health services were selected for the program by PCFA through a competitive application process. Sites were selected from both the public and private sector, assessed against criteria including having a significant prostate cancer incidence rate in the region, providing existing clinical services for men with prostate cancer, and demonstrating engagement of the prostate cancer multidisciplinary team in their application to host a nurse. Rural and regional areas were prioritised to host a PCSN, as were sites with no specialist nursing services or limited supportive care services.

This paper reports selected data from this evaluation to describe the processes involved in implementation of program and the way in which these processes
influenced program outcomes. Additional data reporting the comparison of pre-post program data and other key outcomes will be presented in future publications.

**Program evaluation**

PCFA commissioned a team led by researchers from Queensland University of Technology to undertake program evaluation. The comprehensive evaluation was undertaken between June 2012 and June 2014, and used a pre-post intervention trial performed within the 12 health services selected for participation in the program. The study protocol was approved by 12 relevant ethics committees at all participating sites and by the university.

This paper reports selected data from surveys, interviews and nurse activity reports to describe the nature and extent of services provided by the PCSNs, and to examine how the roles evolved during the evaluation period. Data from other sources will be reported in future publications.

In addition to completing detailed activity reports, all PCSNs (n=12) were invited to respond to surveys and interviews at the beginning, mid-point and end-point of evaluation. Nurses were informed that their individual responses would remain confidential.

An adapted version of the nurses’ work roles and practices, based on the EverCare Nurse Practitioner Role and Activity Scale, was used to assess the extent to which the PCSNs engaged in various role functions in their practice. Additional questions were added to assess beliefs and expectations regarding the role, and perceptions of its effectiveness. The PCSN activity reports were recorded on a daily basis to document clinical and strategic activity undertaken by the nurses throughout the data collection period. These reports were recorded on iPad and submitted on a monthly basis.

**Outcome from evaluation**

**Role related activities**

To understand the role of the PCSN, data were collected on the frequency with which the nurses undertook a range of activities relevant to their roles. A summary of the frequency with which various roles were implemented is presented in table 1.

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**Table 1: Prostate cancer specialist nurses’ self-reporting of role related activities.**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Role-related activities performed daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct nursing care</td>
<td>Read and consider results from diagnostic tests performed. Conduct a psychosocial assessment.</td>
</tr>
<tr>
<td>Team communications</td>
<td>Document and manage clinical caseload activity data relevant to the role.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain</th>
<th>Role-related activities performed weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct nursing care</td>
<td>Educate men and/or families about the appropriate health care professional to contact if issues/concerns arise.</td>
</tr>
<tr>
<td>Clinical care management</td>
<td>Discuss queries or health status changes with patient and family and support them as they deal with changes.</td>
</tr>
<tr>
<td></td>
<td>Monitor and follow up men with ongoing complex needs.</td>
</tr>
<tr>
<td>Patient education in the clinical context</td>
<td>Educate patient and family about the disease state and/or progression.</td>
</tr>
<tr>
<td>Care management plan</td>
<td>Collaborate with patient to ensure care management plan is patient-focused and incorporates individual needs.</td>
</tr>
<tr>
<td>Patient advocacy in the clinical context</td>
<td>Provide men and families with strategies to ask questions or raise issues during consultation with a health care professional.</td>
</tr>
<tr>
<td>Multidisciplinary clinical care</td>
<td>Provide input to the care management team who provide care. Communicate with senior nursing staff regarding patient’s treatment or care.</td>
</tr>
<tr>
<td></td>
<td>Participate in multidisciplinary team meetings.</td>
</tr>
<tr>
<td></td>
<td>Communicate with multidisciplinary team regarding patient health status changes and care issues.</td>
</tr>
</tbody>
</table>
**Table 2: Proportion of time spent on specific activities by the prostate cancer specialist nurses.**

<table>
<thead>
<tr>
<th>Paid working activities</th>
<th>Proportion of time (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical consultations</td>
<td>56.8 46.1 52.5</td>
</tr>
<tr>
<td>Strategic/non-clinical activities</td>
<td>16.8 25.7 25.8</td>
</tr>
<tr>
<td>Administrative activities</td>
<td>26.4 28.2 21.7</td>
</tr>
</tbody>
</table>

Table 2 shows the proportion of time spent on each of the work-related activities by the PCSN. The nurses spent around 50% of time on clinical consultation at each point in the evaluation period. Compared to the beginning of the evaluation, PCSNs spent less time on administrative activities and clinical consultations, but more time on strategic and non-clinical activities at the end of the evaluation.

These data confirm the broad role functions of the PCSN across various clinical and strategic activities. As the PCSNs developed their practice, their involvement in more strategic activities increased. This highlighted the important role PCSNs play in achieving broader system level and local service improvements.

During the reporting period, PCSNs made patient-related contacts and provided a range of nursing services. The types of intervention are shown in further detail below in figure 1.

**Figure 1: Types of intervention delivered by the PCSNs during the evaluation period.**
Across all sites, the most frequently delivered interventions were psychosocial assessments and support for men (75%), followed by provision of information (68%), communication with treating teams (57%) and care coordination (56%). Rural men were more likely to receive the following interventions than those not living in a rural area: psychosocial assessment and support to carer; provision of information; continence and sexual function assessment/advice. However, rural men were less likely than men in metropolitan settings to receive interventions related to psychosocial assessment and support for the patient, and communication with the treating team.

The following exemplars demonstrate the role function as seen as useful by users of the service:

- “The answering of questions not able to be raised with the doctor.”
- “Providing an important link between different health services.”
- “Providing information on what was going to exactly happen with the surgery and information on side-effect management.”

These data confirm the importance of the role that PCSNs play in psychosocial care and information provision. Differences between rural and metropolitan areas emphasise the need for flexibility in service provision to ensure population needs are addressed.

**Patient-related contacts**

Overall, around 21% of contacts were with men who were newly diagnosed or within one month of diagnosis with prostate cancer, 37% were with men diagnosed for one to six months and 30% with those diagnosed for more than one year. There were differences between sites in terms of length of time since diagnosis when PCSNs made patient-related contacts. This pattern also shifted over time. During the second half of the reporting period, more contacts were made with men who had been diagnosed for a longer duration. Men from a rural area were more likely than those in a non-rural area to receive the PCSN service when they were newly diagnosed or diagnosed for six months to two years.

The PCSN provided consultations by men affected by prostate cancer for various reasons. Across all contacts, the most common reason for PCSN contact was: planned review assessments (35%); conducting new patient assessments (23%); and patient initiated contacts (22%). There was variation across sites in the primary reasons for patient contact.

Across all sites, most interventions (63%) were delivered in less than 30 minutes and very few were delivered in longer than two hours. However, there was variation between sites. Over the reporting period, nearly all sites showed statistically significant changes in the length of intervention performed by the PCSN. The length of intervention per episode was longer during the second half of the reporting period than in the first half. This change may be due to a greater focus on provision of services to men with more complex needs as the nurse developed his/her skills.

The length of intervention was significantly different by whether or not contacts were made with men from a rural area. Men from a rural area were more likely to receive interventions longer than 30 minutes per episode than those not from a rural area.

These data highlight that the service reached men across all stages of their cancer journey, and that over time, nurses were more likely to reach men earlier in their disease trajectory. Differences between rural and metropolitan settings indicate that access issues can be addressed by using flexible approaches to service delivery.

During the reporting period, the outcome of the majority of patient-related contacts was follow-up appointments (78%). About 22% of all contacts were discharged with open referral. Other outcomes of patient-related contacts include admitting men to hospital, following up with telephone reviews, or men no longer needing or wanting any intervention.

The PCSNs perceived their level of influence on key outcomes to be greatest in the following areas:

- Every patient is aware of their pathway of care (66.7%).
- The patient is satisfied with their cancer care (66.7%).
- The family/carer is satisfied with their cancer care (75%).
- There is an effective multidisciplinary team relevant for each cancer (66.7%).
- Men’s knowledge of and access to services, especially primary care, is improved (83.3%).
- Men receive adequate information to make treatment decisions (75%).
- Men receive appropriate supportive care (83.3%).

Consistent with the expected aims of the program, these data demonstrate that nurses perceived their role had impacted on many key outcomes for men and their carers.

**Conclusion**

Program evaluation has demonstrated the PCSN played an important role in providing key services to meet the needs of men with prostate cancer. These services
are integral to improving the cancer pathway of those affected by prostate cancer across different stages of the disease. The findings also indicate that PCSNs became well integrated into the multidisciplinary team within their service over time.

PCSNs have broad role functions including engagement in a range of clinical and strategic activities. Differences between rural and metropolitan areas emphasise the need for flexibility in service provision to ensure population needs are addressed. As the nurses developed their practice, their involvement in more strategic activities increased, suggesting that establishment of PCSNs services are likely to play an important role in achieving broader system level and local service improvements.

Consistent with the expected aims of the program, PCSNs perceived their role impacted on many key outcomes for men and their carers. The benefits of using a structured model to ensure consistency in care delivery and to ensure a nationally collaborative approach is likely to be critical to the success of such programs.

Implications for practice

A number of recommendations emerge from the evaluation that have the potential to improve the services for those affected by prostate cancer. Specifically, the data indicate that having a defined service model enabled the prostate cancer specialist nursing service to facilitate a common practice model that was implemented with a degree of flexibility to ensure the service met the needs of the local prostate cancer population. Such models are important to guide service providers to ensure appropriate standards of care are delivered, and unexplained variation in practice is reduced. The findings also suggest great potential for the PCSN role. Consideration should therefore be given to ways to optimise the scope of the PCSN’s practice through new models of practice including nurse led clinics. Moreover, given the broad range of functions that PCSNs have within the context of multidisciplinary care, it is important that emphasis be placed on expert nursing consultation functions, with administrative functions being limited to enabling that function only. As more men and families become aware of the role of the PCSN and request access to this service, strategies need to be implemented to ensure growth and sustainability of the service through appropriate funding models.

References