

# An educational workshop on the early detection of prostate cancer

## *A before-after evaluation*



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**A**ustralian population based screening for prostate cancer with prostate specific antigen (PSA) testing is not recommended because of lack of evidence that it reduces its death rate.<sup>1-4</sup> However, this is controversial,<sup>5</sup> and there is emerging weak evidence for such benefit.<sup>6-8</sup>

Currently, 25-43% of Australian men express interest in PSA testing and many undergo it.<sup>9-12</sup> Men requesting testing should be fully informed of the pros and cons, not least because many want to share in the decision making about it.<sup>3,4,13-17</sup> This leaves the general practitioner the task of responding to consumer demands for information in the face of conflicting viewpoints and uncertain medicolegal requirements,<sup>18,19</sup> something that may increase with the January 2005 launch of a Prostate Cancer Foundation of Australia media campaign 'Be a man, see your doctor about prostate cancer'.

To address this, we developed an education program for GPs to facilitate informed choice about PSA testing.

## Method

### Intervention

Public health practitioners, academics, urologists, consumers, GPs, psychologists, epidemiologists, a medicolegal expert, and educationalists in state and national working groups developed the program, which neither advocates for or against testing. Rather, it aims to support shared decision making and informed choice in primary care for men requesting, or being offered, testing for prostate cancer by: being evidence based; incorporating an understanding of how patients make decisions;<sup>20</sup> supporting outcomes consistent with patients' beliefs and goals;<sup>21</sup> being consistent with medicolegal responsibilities;<sup>18,22</sup> and responsive to the demands of GPs.

Program content was developed from existing material<sup>23</sup> incorporating current Australian recommendations about screening for prostate cancer<sup>3,12-14</sup> and incidence and mortality data.<sup>24</sup> This included: medicolegal and informed consent issues; responsibilities

for opportunistic health screening; how men make health decisions and the role of lay health beliefs; effective risk communication; a patient centred approach for shared decision making and informed choice that elicits patients' values and priorities; the natural history of prostate cancer; potential benefits and harms of screening and treating prostate cancer such as lead time bias, false positives and negatives, side effects of treatment for localised disease, consequences of disease progression; interpretation of PSA tests and age specific ranges; and referral pathways for further investigation.

Three case studies were also included for discussion: a man aged 66 years with LUTS and erectile dysfunction whose wife has sent him for a prostate cancer test; a man aged 76 years who asks for a PSA test on the basis of a media article; and a man aged 48 years who discloses to the GP that he has a brother with prostate cancer. The education program was a 2.5 hour interactive workshop, designed and approved as a group 1 continuing education

**Table 1. Changes in GP understanding, knowledge, confidence and anticipated behaviour following the program**

|   | Mean scores (standard deviation) |                 | <i>p</i> value |
|---|----------------------------------|-----------------|----------------|
|   | Before program                   | After (3 weeks) |                |
| Self evaluated understanding                                      | 3.4 (0.7)                        | 4.3 (0.7)       | <0.001         |
| Knowledge score   | 9 (2.1)                          | 12.1 (3.0)      | <0.001         |
| Confidence in discussing testing                                  | 7.5 (1.2)                        | 8.8 (1.3)       | <0.005         |
| Likelihood of initiating discussion with patients (two scenarios) | 8.5 (1.4)                        | 9.2 (0.9)       | <0.05          |

activity by The Royal Australian College of General Practitioners. Presenters were a urologist, GP, and a communications/decision support specialist.

We also provided a patient show card with an anatomical diagram of the male pelvis, six decision steps, current age based risk estimates for prostate cancer,<sup>24</sup> and a values clarification exercise as well as a brief evidence based summary card and referral guide with age based PSA reference ranges and noncancer causes of elevated PSA readings and references.

### Outcomes

These were a 17 item knowledge scale about screening for prostate cancer, and participants' self rating of their understanding about prostate cancer screening (5 point scale from 1 = poor, to 5 = good). Confidence in discussing testing was assessed with a 2 item scale describing scenarios with asymptomatic men, one with a family history of prostate cancer (5 point scale from 1 = not at all confident, to 5 = very confident; total score range of 2–10), likelihood of initiating a discussion about testing was assessed with scenarios with a man aged 55 years who requests a general health check; and a man aged 45 years who discloses a family history of prostate cancer in a 55 year old first degree relative (5 point scale from 1 = not at all likely, to 5 = very likely; total score range of 2–10). We also assessed participants' satisfaction with the program and suggestions for improvement.

### Sampling and design

This was a pilot program using a convenience

sample with a single arm prepost test design in a regional and major metropolitan centre in Queensland (n=24, 86% response rate). Qualitative telephone interviews were undertaken about 6 weeks later with four randomly selected GPs. A separate 1 hour condensed version of the program was delivered to GPs at a different regional Queensland setting (n=32, 53% response rate), with post-test satisfaction assessment only.

### Results

Before attending the program most participants (81%) self evaluated as having some understanding about the benefits and risks of testing for prostate cancer screening, with mid-range actual knowledge scores (mean 8.96, SD: 2.1 of a possible total score of 17) (*Table 1*). Three weeks after program attendance, participants' knowledge scores significantly improved (mean 12.13, SD: 3.03,  $p<0.001$ ), as did their level of understanding (mean 3.43, SD: 0.68 vs. 4.33, SD: 0.73,  $p<0.001$ ). Participants' confidence in discussing testing with asymptomatic men significantly increased after attendance (mean 7.46, SD: 1.2 vs. 8.75, SD: 1.3,  $p=0.002$ ). Most participants were likely to initiate discussions about testing with patients in the two scenarios presented before attending the workshop, with mean scores increasing at the post-test (mean 8.54, SD: 1.4 vs. 9.21, SD: 0.93,  $p=0.04$ ).

### Satisfaction with the educational program

Most participants reported they would recommend the workshop to other GPs and that most or all of their learning needs

were met. The presentation was described as accessible, balanced, practical, clinically relevant, and effective in explaining a complex problem. Suggestions for improvement included simplifying the risk tables, more discussion and case review, further detail about age specific PSA ranges and free to total PSA and the role of digital rectal examination, providing the practice resource electronically including age based risk tables and causes of mortality, and developing a patient brochure and a flow chart for clinical management. The decision aid and summary reference cards evaluated well.

### Discussion

This study has several limitations: we cannot know if GPs' responses would translate into changes in practice, the lack of a control group means we cannot attribute any change to our intervention, and owing to the small convenience sample any generalisations must be made tentatively. Nonetheless, the program was positively received by the GPs and may have increased their knowledge and confidence in discussing testing. Concerns that this would prove all too time consuming for GPs were not realised. Since completion of this pilot, over 300 GPs in Queensland and others in Victoria have attended the program with further workshops scheduled.

Not all parts of Australia will have the educational resources needed to deliver the program. Accordingly the National Cancer Control Initiative has developed a 'train the trainer' program.

### Implications of this study for general practice

- Patient demands for information about PSA testing may increase.
- GPs want training and resources in this area.
- Educational programs for GPs that focus on shared decision making appear to be effective in improving their knowledge and confidence.
- Practice resources can be downloaded from: [http://ncci.org.au/services/prostate\\_GPresources.htm](http://ncci.org.au/services/prostate_GPresources.htm)

Conflict of interest: none declared.

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