LETTERS

Impact of Australian celebrity diagnoses on prostate cancer screening
David P Smith, Mark S Clements, Melanie A Wakefield and Simon Chapman

To the Editor: In 2008, considerable publicity was given to the diagnosis and treatment of prostate cancer in two Australian celebrities: retired Australian Football League player Sam Newman and radio announcer Alan Jones. Newman’s cancer
was reported on 5–9 March 2008, culminating in a 12-minute item on the high-rating Australian television program 60 Minutes, when Newman said, “Be tested and enjoy life”. Jones’s announcement of his forthcoming surgery was reported on 3–4 July 2008, and his recovery on 16–27 July. We investigated whether this publicity was associated with changes in the rate of prostate specific antigen (PSA) testing.

We used Medicare Australia data on claims for Medicare Benefits Schedule item 66655 (which allows “one annual PSA test for an individual without prior prostate disease”) to determine the mean number of PSA tests and age-standardised testing rate between January 2002 and March 2009. We fitted a linear regression model to the log of the age-standardised rates,\(^1\) modelling secular trends using natural splines with two degrees of freedom (splines were piecewise cubic within the data range and otherwise linear), with indicators set for the average effect of the second, third and fourth quarters and an indicator for the second quarter of 2008. We calculated predicted values and prediction intervals (which take into account both uncertainty in the predicted mean and individual variation), excluding observed data for the second quarter of 2008 (Box).

The mean monthly number of PSA tests was 72 064 in the 12 months before April 2008, increasing to 107 633 in April 2008, and 90 813 in July 2008. The seasonally adjusted age-standardised rate of PSA tests rose 17\% above the secular trend in the second quarter of 2008 (95\% CI, 8\%–27\%), with the observed data point falling outside the prediction interval (Box). This represented an additional 39 000 PSA tests during the second quarter of 2008.

These data show that prostate cancer screening increased significantly in the quarter after media coverage of Newman’s prostate cancer diagnosis. Screening seemed to have returned to the expected seasonal rate by the time of Jones’s diagnosis, in the third quarter of 2008.

The impact of celebrity cancer diagnoses on population screening has been demonstrated previously, most recently by an increase in breast cancer screening following news of pop singer Kylie Minogue’s breast cancer diagnosis in 2005.\(^2\) In a survey of US men, almost a third stated they would be more likely to have a PSA test after hearing celebrities endorse prostate cancer screening.\(^3\) In addition, coverage of melanoma by 60 Minutes in 1987 was followed by a 167\% increase in melanoma detection in the subsequent 3 months.\(^4\)

Whether the additional 39 000 PSA tests performed in the second quarter of 2008 result in a surge in diagnoses of prostate cancer remains to be seen. Despite continuing uncertainty about the benefits of PSA testing, but unequivocal evidence of harms,\(^5,6\) Australian men’s willingness to be screened for prostate cancer appears to have been boosted by this celebrity endorsement.

David P Smith, Research Coordinator\(^1\)
Mark S Clements, Research Fellow\(^2\)
Melanie A Wakefield, Director\(^3\)
Simon Chapman, Professor of Public Health\(^4\)
\(^1\) Cancer Epidemiology Research Unit, Cancer Council NSW, Sydney, NSW.
\(^2\) Australian National University, Canberra ACT.
\(^3\) Centre for Behavioural Research in Cancer, Cancer Council Victoria, Melbourne VIC.
\(^4\) University of Sydney, Sydney NSW.
dsmith@nswcc.org.au