Reviewer's report

Title: Diffusion of good practices of care and decline of the association with case volume: the example of breast conserving surgery

Version: 1 Date: 3 July 2007

Reviewer: Scott Tyldesley

Reviewer's report:

General
The paper is relevant to the diffusion of practice in a defined population base in Italy, and does provide some useful findings on the rate of diffusion of breast conservation according to hospital volumes. However, there are some limitations that need revision before publications.

-------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1) There are innumerable language and syntax issues that suggest that the authors have some difficult writing in English. There are several unintelligible sections of the text that would benefit from an English speaking reviewer editing before re-submission.

-------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1) If possible the authors should attempt to include data that dates back to the date of the first publications of randomized trials of breast conservation therapy (BCT) in Italy, to get a baseline for the rate of breast conservation. The article would be strengthened if the authors were able to demonstrate the time trend for the rise in BCT at large volume centres. It is not clear why the only the period from 200 to 2004 was included.

2) The authors should reference their rates of breast conservation to published estimate of the appropriate rate of breast conservation, and to other institutions BCT outside of Veneto.

3) Why was age treated as a categorical variable rather than a continuous variable.

4) The authors should reference some of the literature on who patient preferences for BCT have been shown to vary by age, regions, distance of travel etc.

5) The authors should address whether there were any changes in hospital amalgamations, or affiliations over the years of study. Several institutions had rather dramatic changes in volumes, which may suggest that administrative and
referral changes may have taken place over the years of study.

6) A map, or table of the geographic distribution of the hospitals would be useful, particularly in their relationship to centres with radiotherapy capability. Or at least a statement, or grouping of hospitals with attachments to radiotherapy facilities. It may be that those centres with low hospital volumes are also remote from cancer clinics, and the patients they service may be less willing to travel for radiotherapy (ie a geographic rather than volume effect).

7) More data on the case mix (age, disease severity and patient comorbidity) according to the hospital volumes.

8) Figure 1: it would be nice to know why some hospitals dropped to zero women treated in 2004.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests