Reviewer's report

Title: Defining frequent attendance in an average general practice: a validation study

Version: 3 Date: 13 November 2007

Reviewer: Thomas O'Dowd

Reviewer's report:

General
In this paper the authors have used the second national survey of general practice in Holland to compare different methods of defining frequent attenders in general practice. They have been influenced in their thinking by a BJGP paper from Howe et al who are critical of studies that do not correct for age and sex variations in research on frequent attenders. Howe's work is based in 2 practices in Sheffield and focuses on mean attendance rate for males and females. Howe et al also calculate mean attendance for the top 3% of attenders along the age bands and show a lag in male attendances with catch up occurring in the 46 – 55 year age bands onwards.

The analysis by Smits et al is more detailed than Howe's work and uses a much larger database.

Their graph on mean attendance broken down by age and gender is divided into 3 categories. The 'all attendances' category shows a small lag between males and females with a narrowing in the older age categories. The top 10% again shows a larger consistent lag between males and females but again a narrowing in the older age group. In the top 3% there is approximately a 30% lag between males and females until the 55 - 64 age group onwards where it begins to narrow. I think this analysis would be helpful to other researchers in deciding where to place their definition of frequent attenders. Vedsted considers the top 10% as a good rule of thumb in defining frequent attenders. It seems from this paper that Vedsted’s rule would need to be modified to include the top 10% of males and 10% of females or the top 3% of males and 3% of females.

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

The authors constructed 4 x 4 tables in order to calculate sensitivities, specificities and predictive values concerning these rules. It is really not clear as to why they have done this and they have produced tables on foot of this that are difficult to understand and add very little to their paper. I would like to see them discuss the implications of their graphically presented data in more detail for both clinicians, researchers and service planners.

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

The authors make a very interesting observation in their introduction stating that exceptional attendance can be considered as an indicator of inadequate use of healthcare. Intuitively this seems to make sense but it is unreferenced and I think they should add a reference here if one is available.

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:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests