Reviewer's report

Title: The DUNDRUM-1 structured professional judgment for triage to appropriate levels of therapeutic security: retrospective-prospective validation study.

Version: 1 Date: 12 September 2010

Reviewer: Stuart Thomas

Reviewer's report:

1. The task the authors propose setting out to do is potentially interesting and could have some practical and clinical utility. The authors have clearly spent a great deal of time developing the detail around the DUNDRUM-1 and its other iterations; this is certainly to be applauded as a service initiative. However, the way in which the conceptual framework for the study, and the methods and procedures undertaken, are set out and described are all limited and/or confusing to the reader. My main concerns are listed by section below. I would consider all of the points below 'major compulsory revisions' according to the journal guidelines.

2. The abstract was very vague and lacked detail. Specifically, the methods were confusing and the conclusions weak.

3. The background section is comprised of a series of statements and summaries but lacks any synthesis or critique and does not give any kind of rationale for this study or the development of the DUNDRUM-1.

4. What is a retrospective prospective study? Presumably this relates to the two different samples used here? This is by no means clear and needs to be revised and set out in detail.

5. How was the HCR-20 used for "cross validation" and why? Was it the same two clinicians who completed the DUNDRUM-1? Why do you think it was not correlated with DUNDRUM-1 scores?

6. There is no discussion about ethics, i.e., accessing people’s case file information without their express consent. This clearly needs to be addressed.

7. The purpose of the statistical methods used is unclear and inconsistent with the aims/hypotheses, apart from perhaps predictive accuracy using AUCs. While the statistical methods reported are on the whole appropriate to the tasks reported (eg kappa, EFA, ANOVA, sensitivity and specificity and AUCs), the results reflect a lack of direction, statement and purpose. Altogether this suggests that the authors are trying to do far too much in one paper, as perhaps best exemplified by the lack of any study aims and a hypothesis that could not actually be tested.

8. It is not clear how the authors came up with the 11 items or what the particular clinical utility of the DUNDRUM-1 actually is. Indeed, the authors seem to do a good job of negating any practical use of the tool in their discussion which talks
about the wider service based practicalities of placement and how these kind of things work in the real world.

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

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.