PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Economic evaluation of Australian acute care accreditation (ACCREDIT-CBA [Acute]): study protocol for a mixed-method research project
AUTHORS	Mumford, Virginia; Greenfield, David; Hinchcliff, Reece; Moldovan, Max; Forde, Kevin; Westbrook, Johanna; Braithwaite, Jeffrey

VERSION 1 - REVIEW

REVIEWER	Carsten Engel Deputy Chief Executive IKAS (Danish Institute for Quality and Accreditation in Healthcare) Denmark
REVIEW RETURNED	06-Dec-2012

THE STUDY	No specific statistical methods described, eg for assessment of evidence of improvement over accreditation cycles (SIQNS activity 2, page 13-14). Note that this is a high level description of the protocol
REPORTING & ETHICS	No relevant reporting statement or checklist indicated.
GENERAL COMMENTS	The protocol gives a clear picture of how benefits in terms of avoided harm will be monetised (eg ACSAHC's Costs of Hospital Acquired Diagnoses activity base costing codes). It will be as important to monetise benefits in terms of more appropriate/effective treatment.

REVIEWER	Stuart Whittaker
	The Council for Health Service Accreditation of Southern Africa
REVIEW RETURNED	11-Dec-2012

THE STUDY	Q1: The research question appears to relate to whether acute care accreditation is of benefit to populations and is cost effective. The manuscript refers to a potential research project yet to be carried out and since this still appears to be in a developmental phase, the research question may become clearer in the future.
	Q2: The study design at this stage is questionnable for the following reasons: 1) accreditation has been operational in Australia for more than a decade and the majority of hospitals have received accreditation. Consequently, the full benefits of accreditation will be difficult to measure at this stage. 2) It would be better if the study were conducted in a country where facilities are not yet accredited. 3) In reality the project seeks to be determine the benefit of

maintaining accreditation in facilities already accredited. 4) The methodology suggested relies heavily on the ACHS evaluation and quality improvement programme, EQuIP. A policy decision has been taken in Australia to use other accreditation bodies with different accreditation programmes and methodologies. Consequently, it would be better if a generic tool were developed that did not require the use of EQuIP indicators.

Q3-12: Refer to above comments.

VERSION 1 – AUTHOR RESPONSE

Reviewer: Carsten Engel
Deputy Chief Executive
IKAS (Danish Institute for Quality and Accreditation in Healthcare)
Denmark

- 1) No specific statistical methods described, eg for assessment of evidence of improvement over accreditation cycles (SIQNS activity 2, page 13-14). Note that this is a high level description of the protocol
- **We plan to use a range of established economic evaluation techniques depending on the type of indicators selected by our expert panel. Many of these techniques are designed to deal with the issue of a lack of suitable control group but the exact techniques will depend on the type of data available. We have clarified this in the methods and analysis section (SIQNS Activity 2), and thank the reviewer for their help in improving the manuscript.

The reviewer makes a good suggestion that we should make explicit that this is a high level description of the protocol and we have noted this in the Methods and Analysis section (SIQNS Activity 2) of the paper. **

- 2)The protocol gives a clear picture of how benefits in terms of avoided harm will be monetised (eg ACSAHC's Costs of Hospital Acquired Diagnoses activity base costing codes). It will be as important to monetise benefits in terms of more appropriate/effective treatment.
- **We agree with the reviewer on the importance of looking at a widespread range of relevant indicators. As the reviewer points out, this is a high level review and we will be looking for a range of suitable indicators across the new national standards, and not just related to avoided harm. We used the hospital acquired infection example in the protocol to illustrate the logic behind the development of the indicator assessment tool.**

Reviewer: Stuart Whittaker

The Council for Health Service Accreditation of Southern Africa

Q1: The research question appears to relate to whether acute care accreditation is of benefit to populations and is cost effective. The manuscript refers to a potential research project yet to be carried out and since this still appears to be in a developmental phase, the research question may become clearer in the future.

We thank the second reviewer for his comments. We have made changes to the Introduction and Conclusion sections of the manuscript to clarify the focus of our main research guestions.

Q2: The study design at this stage is questionnable for the following reasons:

1) accreditation has been operational in Australia for more than a decade and the majority of hospitals

have received accreditation. Consequently, the full benefits of accreditation will be difficult to measure at this stage.

- **The reviewer makes a good point that accreditation is well established in Australia. Although this makes it less easy to determine the benefits of accreditation directly, we believe policy evaluation is always important in order to determine whether the purported benefits are being realised and are cost-effective.**
- 2) It would be better if the study were conducted in a country where facilities are not yet accredited.
- **We certainly agree with the reviewer that conducting this research in a country where accreditation is just being introduced would be extremely interesting. However, our initial literature review suggests that accreditation has not yet been critically evaluated. We therefore believe it is helpful to design a working evaluation framework and test it within an established market before trialling the protocol in other countries. We would welcome the chance to conduct this additional research if funding or circumstance allowed.**
- 3) In reality the project seeks to be determine the benefit of maintaining accreditation in facilities already accredited.
- **The reviewer is correct in that we trying to determine the benefits of accreditation, but we are also assessing the costs of accreditation. We feel that the main benefit from this type of evaluation lies in systematically making explicit the implied assumptions around costs and benefits of accreditation.**
- 4) The methodology suggested relies heavily on the ACHS evaluation and quality improvement programme, EQuIP. A policy decision has been taken in Australia to use other accreditation
- ** Although the discussion and results rely heavily on the ACHS programme (the dominant programme in Australia) the indicator assessment tool is based on the new ten mandatory national accreditation standards and uses the ACHS standards as a reference point. We have made this clearer in the manuscript (SIQNS Activity 3) and thank the reviewer for his input. We also feel that the new standards encompass a wide reach of patient safety and quality of care initiatives that are generic across health care systems and can be modified for use on a global basis. Our aim is make the final model available to industry partners, health regulators and policy makers, accreditation agencies, and acute care providers.**