Introduction Absence of shelter may adversely affect the health of post-disaster populations. When shelters are inadequate or not provided, overcrowded ad hoc communities may form and encourage the spread of infectious disease. Shelter evaluation is therefore necessary to promote post-disaster population health. Even in cases where evaluations are carried out, standardized evaluation indicators do not exist.

Objectives To determine what indicators are being used and which should be used to evaluate shelter assistance following natural disasters.

Methodology
1. Review: Using systematic review methods, electronic databases and the grey literature were searched for publications that evaluated shelter assistance following natural disasters in developing countries. Indicators used to evaluate shelter assistance were extracted and the most common indicators were identified.
2. Interviews: Based on the indicators extracted, a preliminary evaluation instrument was designed to evaluate shelter assistance. Six shelter experts were interviewed to establish validity of the indicators and evaluation questions. The transcripts from the interviews were analyzed using rigorous qualitative research methodology.

Results
1. Review: A total of 1480 indicators were extracted from 181 publications. Indicators most commonly evaluated in the field were: community involvement in shelter planning (n=108), quality and labour of construction (n=107), and scale of assistance provided (n=99).
2. Interviews: Shelter experts felt that the correct indicators had been extracted; however, they expressed the need for more health related indicators. They also felt that the questions evaluating the indicators measured output and should be rephrased to evaluate outcome and impact.

Conclusions This evaluation instrument, directly based on the most important indicators in the literature and validated by shelter experts, will enable aid agencies to better assess and meet the shelter and health needs of populations impacted by disasters.