Tools for planning rural and remote maternity services in Australia

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Aims: To identify tools that could be used for planning rural and remote maternity services, in line with recommendations from the Australian National Maternity Services Plan 2010 (ANMSP). To critique those variables used in the tools, for their potential use in planning maternity services in Australian rural and remote communities.

Methods: A review of the literature using electronic databases OVID SP and GEOBASE was undertaken to identify tools, indices or mathematical models that could be used in planning rural and remote health services, and variables used in those tools were critiqued.

Relevance: Policy and planning that supports the delivery of rural and remote maternity services is relevant and important for the outcomes of the 30 per cent of Australian women and their babies who live outside the major cities. Rural and remote women, many of whom are Indigenous, have worse perinatal outcomes than other Australian women and babies. Currently regionalisation and closures of rural and remote maternity services have impacted on the ability of women to access services close to where they live.

Results: The literature search identified four relevant indices, two in the health literature (Canadian) and two from geography (Australian). Only one composite index was associated with maternity services—The Canadian Rural Birth Index (RBI). These indices identified access to a level of health service using a range of aggregated scores of geographic and socioeconomic variables. The RBI used a combination of variables, including measures of socioeconomic vulnerability; isolation from or distance to a caesarean section service, and the number of births in a catchment. The aggregated score was used to identify the optimal level of maternity service required by rural communities in British Columbia.

Conclusions: Evidence on which to base health services planning is scant. There are currently no tools in use that identify the optimal level of maternity service for rural and remote communities in Australia. The variables used in the Canadian RBI have some relevance to the Australian context. However, the
application of the RBI in Australia may require additional measures and adjustments. An index could also be adapted for planning other rural and remote services with the addition of service specific variables.

Important points:

- no current index or tools that can identify the optimal level of maternity service for rural and remote communities
- recommendations from the ANMSP
- principles used in an index could be adapted for other services.