

Guidelines for the diagnosis and management of methylmalonic acidaemia and propionic acidaemia: First revision

Forny et al., JIMD 2021; 44:566 – 592

Summary of conclusions using the Appraisal of Guidelines for REsearch & Evaluation (AGREE) Instrument (AGREE II) tool: The AGREE II tool is intended for guideline developers to conduct an internal assessment to ensure that their guidelines are sound or to evaluate guidelines from other groups for potential adaptation to their own context.

Number of Appraisers: 2

Endorsed by the Garrod Guideline Committee on April, 13 2023.

Summary:

Overall, this guideline is well written and scored highly in many of the domains. The recommendations are general but this seems more a limitation due to the available evidence.

Please find our evaluation based on the following domains:

1. **Scope and purpose:** The overall objective, intended health questions and population to whom the guideline is meant to apply are all specifically described.
2. **Stakeholders' involvement:** The membership is clearly stated, mostly pediatric metabolic physicians but other specialists were also a part of the membership, including 2 patient representatives. However, there was not a clear description of each member's role in the development of the guideline. They also acknowledged that most of their membership was from Europe, with only one physician located in the US, and there were also no representatives from a surgical speciality.
3. **Rigour of Development:** The guideline is clear in regards to their search methods, their criteria for selecting evidence, their methods of formulating recommendations and there was good discussion of the strength of the evidence. There was very little discussion regarding the limitations of the evidence and reporting of balance of risk vs benefits was not clearly discussed. A variety of external reviewers were used and are listed in the acknowledgments section but their work and how their input was used for this guidelines is not clearly stated. Although there is a vague statement of the guidelines being updated in the future, the specifics of who, how and when are not stated.
4. **Clarity of Presentation:** The recommendations are general. Acute management has some tables and algorithms presented but long term management is only generally described. Specific, measurable targets are not given.

5. **Applicability:** Very limited discussion about the practical application of the guidelines. Facilitators and barriers, resource implications are not discussed. Monitoring recommendations are general and do not provide a rationale about why those particular timelines are chosen. There are some summary tables and algorithms presented, mainly for acute management.
6. **Editorial Independence:** Funding body and competing interests were clearly stated. How they may have influenced the guideline process was not discussed.

Summary of the AGREE II domain scores given by the appraisers:

| Domain | score |
|-------------------------|--------------|
| Scope and purpose | 21/21 |
| Stakeholder involvement | 19/21 |
| Rigour of development | 45/56 |
| Clarity of presentation | 15/21 |
| Applicability | 10/28 |
| Editorial independence | 12/14 |