Towards national paediatric clinical practice guidelines

Mike Starr[1,2]

1 Royal Children's Hospital, Melbourne, VIC.
2 University of Melbourne, Melbourne, VIC.

mike.starr@rch.org.au

Clinical practice guidelines (CPGs) are intended to improve the quality of clinical care by promoting evidence-based care, reducing inappropriate variation, and producing optimal outcomes for patients.

The Royal Children's Hospital (RCH) in Melbourne, Australia, has a long history of developing and implementing CPGs to ensure the provision of high quality care for children and young people. A CPG committee was established in 1996 with the aim of developing guidelines for management of common and important paediatric conditions.

The original RCH CPG committee comprised senior and junior doctors and nurses from the departments of general medicine and emergency medicine. Development of the CPGs has evolved, but the core processes and principles remain the same. A member of the committee reviews the available evidence related to the condition in question, its diagnosis, the value of investigations, and the role of interventions. This review starts with published systematic reviews and other national and international guidelines, including Australian Therapeutic Guidelines (https://www.tg.org.au/). A draft CPG is prepared and reviewed by a second committee member, before consultation with appropriate subspecialists and other relevant health care professionals. A final draft is then presented at a CPG committee meeting. The aim of meetings is to endorse content that is based on clear evidence and to achieve consensus recommendations where the evidence is poor or lacking. Content and style are reviewed to ensure that recommendations are clear and practicable.

An important principle is that CPGs are generally point-of-care guidelines with emphasis on assessment and management, and as such, they are kept brief and focused. Key points and red flags are highlighted, and advice on disposition, including admission, discharge, escalation and transfer, is provided. Levels of evidence are not provided for individual recommendations; however, references and all those consulted in the development of the CPG are documented. The emphasis is on an appropriate balance between detailed evidence appraisal and pragmatic and timely translation of evidence into CPGs. It is felt by the CPG committee and users of the CPGs that the adoption of a formal GRADE or similar approach to developing guidelines would not add to the utility of the CPGs and would hinder the process. Between 30 and 40 new and updated CPGs are published each year.

Although the CPGs have always been freely available online, they were originally focused on practice at RCH. In 2011, the RCH CPG group partnered with Safer Care Victoria's Paediatric Clinical Network to adapt CPGs for use across the state. Given their free availability and accessibility, the CPGs were being used in many other settings in Australia and even overseas. The CPGs have been widely available via an app since 2015, and a new app was launched in 2022 (https://www.rch.org.au/rch/apps/Clinical_practice_guidelines_app/).

CPGs have historically been produced by each state (and even individual hospitals) in Australia. The production and maintenance of CPGs is a costly and time-consuming process. Moreover, use of and adherence to local guidelines in other states has not been optimal. A study examining use of CPGs in ten emergency departments in rural and regional New South Wales found that only 22% of medical officers reported that they used the CPGs frequently when managing sick children.[1] Major barriers to the use of CPGs were a lack of awareness of their existence, a lack of training in their use, and poor access to the guidelines in printed or electronic format. The CareTrack Kids study measured adherence to CPG recommendations for 17 common childhood conditions and identified barriers that prevent appropriate delivery.[2] Overall adherence was 59.8%, with substantial variation across conditions. Some of the factors leading to poor adherence include redundancy, lack of currency, inconsistent structure and content, voluminous documents, and concerns about the quality of evidence on which CPGs are based. While there is no direct evidence of harm occurring because of poor adherence to CPGs (or lack of national CPGs), it is increasingly clear that reducing variation in care is an important step in improving patient health outcomes through appropriate care.[3]

In an effort to reduce variation in care, avoid duplication of work and reduce cost, a collaborative between RCH, Clinical Excellence Queensland, the NSW Agency for Clinical Innovation, and Safer Care Victoria was formed in 2018. The aim of this Paediatric Improvement Collaborative (PIC) was to adapt the CPGs so that they would be appropriate for use in NSW, Queensland and Victoria. To this end, several part-time CPG fellows, two part-time consultants and a CPG manager were appointed with funding from Clinical Excellence Queensland, the NSW Agency for Clinical Innovation, and Safer Care Victoria. The CPG committee was expanded to include a broad group of clinicians from general paediatrics, emergency medicine and general practice, including doctors (consultants and trainees), nurses, allied health practitioners and pharmacists from health services across the three states. The development of PIC CPGs is guided by a set of principles, including the use of evidence-based recommendations and the involvement of relevant stakeholders. Details are provided on the RCH website.[4] One hundred and thirty PIC CPGs are currently available with a further 170 CPGs which will be revised and adapted into PIC CPGs. PIC CPGs are reviewed every three years.

MJA 220 (8) ▪ 6 May 2024

doi: 10.5694/mja2.52272

A PIC steering committee was formed, comprising representatives from each partner organisation. This group provides governance to ensure that the process for development and revision of PIC CPGs is robust and responsive. It is responsible for setting the strategic direction of the PIC and ensuring that the activities of the collaborative align with the needs and priorities of stakeholders. To this end, state-based information is still provided for a few topics such as escalation and retrieval, child protection, and antimicrobial prescribing.

In 2020, the PIC commissioned the Assessment and Evaluation Research Centre at the University of Melbourne to evaluate PIC processes and development of PIC CPGs. Three main barriers to successful collaboration and stakeholder satisfaction were identified: inadequate time for CPG committee members to review drafts, a sense from some that their feedback was not being sufficiently addressed, and the technology used for dissemination and feedback. As a result, the platform for communication and collaboration was changed to Microsoft Teams, the timelines for review were extended, and minutes are now circulated shortly after each meeting with specific details regarding the way in which feedback has been addressed.

More recently, the PIC has engaged with the Australian Institute of Health Innovation at Macquarie University to undertake evaluation of the impact and use of PIC CPGs. A national survey investigating the views and experiences of the CPGs has recently been conducted; responses are currently being analysed and follow-up qualitative interviews have been completed. The results will be published shortly, and further studies are planned. CPGs are accessed frequently around Australia and internationally; Google Analytics data showed over 5.8 million visitors in the past 12 months, 3.2 million (55%) from Australia, not including app usage.

South Australia and Western Australia have recently joined the PIC, and it is likely that Tasmania, the Northern Territory and the Australian Capital Territory will follow shortly. Plans are underway to rebadge the CPGs as the Australian Paediatric CPGs. It is anticipated that the Royal Australasian College of Physicians and the Australasian College for Emergency Medicine will help advocate for use of these CPGs. Leads in each state have a role in ensuring that they are used in preference to local guidelines. While development of evidence-based national guidelines is a priority, the goal is also to ensure that CPGs are applicable to local contexts. This will require a sustained commitment from key stakeholders, including health care professionals and government, to ensure that the guidelines are developed, implemented and evaluated effectively. A 2021 article entitled "The silent crisis of pediatric clinical practice guidelines" considered the issues facing CPG development in the United States and internationally.[5] Recommendations made by the authors included centralised topic prioritisation and development process, regular review of CPGs, and centralised financial support. A survey of general paediatricians in the US regarding use of paediatric CPGs found that guidelines are most likely to be followed if they are simple, flexible, rigorously tested, not used punitively, and motivated by desires to improve quality and not reduce costs.[6]

The PIC CPGs fulfil most of these criteria. They are now developed by a committee that includes members from five of the eight Australian states and territories. Centralised and reliable financial support is required to sustain the process. Excitingly, we are almost at the point of having truly national paediatric CPGs in Australia.

Acknowledgements: The PIC CPG work is funded in part by Clinical Excellence Queensland, the NSW Agency for Clinical Innovation, Safer Care Victoria, RCH Melbourne, and the RCH Foundation. Kate Harding, Matthew O'Meara and Mike South have had an integral role in the work of the CPG committee and PIC steering committee.

Open access: Open access publishing facilitated by The University of Melbourne, as part of the Wiley - The University of Melbourne agreement via the Council of Australian University Librarians.

Competing interests: No relevant disclosures.

Provenance: Not commissioned; externally peer reviewed. ■

© 2024 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

1 Cohn SL, Gautam B, Preddy JS, et al. Barriers to the use of paediatric clinical practice guidelines in rural and regional New South Wales Australia. *Aust J Rural Health* 2016; 24, 23-28.

2 Braithwaite J, Hibbert PD, Jaffe A, et al. Quality of health care for children in Australia, 2012-2013. *JAMA* 2018; 319: 1113-1124.

3 Duggan A, Koff E, Marshall V. Clinical variation: why it matters. *Med J Aust* 2016; 205: S3-S4. https://www.mja.com.au/journal/2016/205/10/clinical-variation-why-it-matters

4 Royal Children's Hospital Melbourne. Clinical Practice Guidelines: CPG information. https://www.rch.org.au/clinicalguide/about_rch_cpgs/CPG_information/ (viewed July 2023).

5 Rea CJ, Alvarez FJ, Tieder JS. The silent crisis of pediatric clinical practice guidelines. *JAMA Pediatr* 2021; 175: 1201-1202.

6 Flores G, Lee M, Bauchner H. Pediatricians' attitudes, beliefs, and practices regarding clinical practice guidelines: a national survey. *Pediatrics* 2000; 105: 496-501. ■