Practical applications of rapid review methods in the development of Australian health policy

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Abstract. Rapid reviews (RRs) are a method of evidence synthesis that can provide robust evidence to support policy decisions in a timely manner. Herein we describe the methods used to conduct RRs and present an illustrative case study to describe how RRs can be used to inform contemporary Australian health policy. The aim of the present study was to explore several important aspects of how RRs can inform decision makers. RRs are conducted within limited time frames of as little as 4 weeks. Policy questions may focus on issues of efficacy, service delivery and service organisation rather than reimbursement of new services, which is better answered by a more comprehensive assessment. RRs use flexible and pragmatic methods, which aim to balance the objectivity and rigour required of the reviews within limited time frames. This flexibility allows for great variation across products with regard to length, depth of analysis and methods used. As a result, RRs can be specifically tailored to address targeted policy questions and are a useful tool in the development of Australian health policy.

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Introduction

Policy makers are increasingly faced with complex issues in healthcare that require decisions to be made within limited time frames. To meet this growing need, health technology assessment (HTA) producers have developed methods for expediting evidence synthesis. One such product is a rapid review (RR). RRs are produced relatively quickly compared with traditional HTA products, include recent information and are targeted to specific policy questions. ^{1,2} This is achieved by limiting the comprehensiveness of one or more domains of systematic review methods, such as search strategies and inclusion criteria. ^{3,4}

The diversity in RR methods and products can make it challenging for policy makers to determine how to use RRs effectively to inform specific policy decisions. The aim of the present case study is to illustrate how RR methods can be applied to address a range of complex policy issues, including appropriate referral pathways, clinical effectiveness of interventions and the availability of services within a particular jurisdiction. Herein we describe the fundamental components of RR methodology and present a case study of a recent RR completed

by our research group to illustrate how these methods can be applied in practice to inform evidence-based decision making. We also explore the importance of engaging clinical experts and policy makers in the review process.

Methods

The RR process can be completed in as little as 4 weeks, from start to finish, depending on the method used and expertise of staff involved. Determining the appropriate method for conducting a RR involves setting clearly defined research questions in consultation with the end user. Because the method for each review is tailored to the research questions and the time frame available, it is not possible to describe a single RR method. Therefore, we provide an overview of methods that can be used to conduct RRs and report the results of a recent example to illustrate.

Types of questions addressed by RR methods

Research questions that are appropriate to RR methods can relate to: (1) safety and effectiveness of interventions; (2) service

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provision; (3) service concordance (e.g. does current practice align with local and international best practice?); and (4) cost and financial considerations. Most RRs address multiple questions and therefore require a battery of methods. Crucial to answering all these questions is an understanding of the end user's context and needs. ^{5,6}

Setting the scope and methods for review

The scope, research questions and intended audience for the review are defined in consultation with the end user, and often involve input from clinical experts in the field of interest to ensure that the RR results will be contextually appropriate to Australian clinical practice. Importantly, the research questions and inclusion criteria are developed *a priori* and are approved by the end user before beginning the review.

Literature review and evidence synthesis

Literature review is the core method used to conduct RRs. The review is conducted over four stages, with most steps conducted by one reviewer (see below) and checked by a second reviewer.

- 1. A comprehensive literature search that includes at least four biomedical databases (Medline, Embase, Cochrane Library, York Centre for Reviews and Dissemination [CRD]) in addition to clinical practice guideline (CPG) registries and targeted searches of HTA agency websites and relevant professional societies. Searches are based around the agreed inclusion criteria, and limits to language, date and level of evidence may be applied. This is an established RR technique and limits are always explicitly stated so that end users and other stakeholders understand the limitations of the RR.¹
- 2. Study selection is performed according to the predefined inclusion criteria. A stepwise method of including studies is used, as appropriate, whereby systematic review or randomised controlled trial (RCT) evidence is selected preferentially, with lower levels of evidence considered in their absence. To increase the generalisability of results, studies may be limited to countries with similar economic development status.
- 3. Critical appraisal is performed by one reviewer using validated tools. A numeric quality appraisal score is not calculated; however, the methodological strengths and weaknesses are described for each study. This is key to ensuring policy makers can adequately understand the shortcomings of available evidence.
- 4. Evidence synthesis that includes both narrative and tabular synthesis of included studies and data. Pooling of data may be performed where appropriate. Demographic data may be sourced from publicly available sources (e.g. Medicare Benefits Schedule (MBS) or the Australian Institute of Health and Welfare (AIHW)). In addition, the requester may provide specific data. The extent of data analysis performed varies according to review topic and is tailored to end user needs. End users of RRs are generally interested in specific outcomes; they do not require a complete picture of all evidence or all outcomes.

Although the above steps represent the core methods of RRs, additional analyses may be conducted where required.

CPG concordance

CPG concordance compares current practice with existing evidence-based guidelines. End users are often interested in this analysis because it shows what specific craft groups feel is the gold standard approach to certain conditions. Selection and critical appraisal are performed by one reviewer, and guidelines are included if they are relevant and of sufficient quality. Guideline quality is appraised with a validated instrument and described narratively.

Economic analysis

A formal economic analysis is not typically performed; however, economic literature can be summarised when identified. There are well-known shortcomings with translating economic literature from other jurisdictions to the local setting and the time and resources required to undertake *de novo* economic analyses is often beyond the scope of RRs.

Stakeholder engagement

Once preliminary results of the RR are available, at least two clinical experts are invited to comment on the applicability and clinical relevance of the identified evidence to the Australian context. The final report is then produced in consideration of stakeholder feedback and incorporating relevant policy input.

Dissemination and publication

Many RRs are commissioned for internal use and may or may not become publicly available. RR products are published and disseminated at the discretion of the requester.

Case study of a RR of spinal surgery for chronic low back pain

In 2014, we undertook a RR of spinal surgery for chronic low back pain (CLBP) for the Victorian Department of Health and Human Services (DHHS).⁸ This case study was chosen to illustrate the application of the RR method because it covered a diverse range of research questions and highlighted important issues to consider when using RRs to inform future policy decisions.

CLBP review: background

CLBP is a highly prevalent condition that has deleterious consequences for patients and is associated with significant health-care costs. Despite the promotion of evidence-based guidelines for managing CLBP, compliance with guideline recommendations is poor and there is evidence of inappropriate or unnecessary referrals for surgery in Victoria. ^{8,9} In response, the DHHS commissioned a RR to facilitate the appropriate management of CLBP in Victoria by addressing three important questions:

- 1. Does the evidence show a clinical threshold of pathology for CLBP below which referral for surgical opinion is not required?
- 2. Is there evidence of a comparison between the clinical effectiveness of alternative treatments and surgery for CLBP?

3. Are effective alternative therapies for CLBP accessible throughout Victoria?

Table 1 illustrates the methods used to address these research questions in the RR, describes the general implications of the methodological choices on the final product and provides a summary of key issues that policy makers should consider when commissioning RRs. The implications of methodological choices on RR outcomes draw on our experience conducting the CLBP and other RRs, as well as literature on RR methodology. ^{1,10–19} The main results and policy implications of the CLBP review, as well as follow-up information on the outcomes of the review, are provided below.

Key findings of the CLBP review

Does the evidence show a clinical threshold of pathology for CLBP below which referral for surgical opinion is not required?

This question was addressed by a literature review that identified one CPG and a synthesis of six evidence-based guidelines. The findings were contextualised to the Victorian setting by clinical experts. The review found that once a pathological cause for CLBP has been excluded, a patient can be managed in primary care indefinitely. Although no definitive threshold of pathology for surgical referral could be determined, evidence suggested that referral should only occur when: (1) pain causes functional limitations that affect a patient's activities of daily living; (2) the condition is amenable to surgery; and (3) all non-surgical treatment options have been trialled without success.

Is there evidence of a comparison between the clinical effectiveness of alternative treatments and surgery for CLBP?

This question was addressed through literature review, which identified and synthesised the results of nine systematic reviews. The review found no difference in effectiveness of lumbar fusion versus conservative management for discogenic CLBP, improved effectiveness of interspinous spacers compared with conservative management for spinal stenosis, and improved effectiveness of decompression surgery versus land-based exercise for lumbar spinal stenosis. A trial of conservative management could be undertaken before considering surgery.

Are effective alternative therapies for CLBP accessible throughout Victoria?

This question was informed primarily through the input of two spinal surgeons. The main evidence-based non-surgical interventions available to CLBP patients in Victoria include: (1) analgesics, non-steroidal anti-inflammatory drugs and prescription pain medications; (2) physiotherapy, chiropractic, osteopathic, acupuncture and other needling techniques; (3) facet joint injection; (4) exercise programs; and (5) pain management programs in combination with psychological support.

Policy implications

Part of the impetus for the review was concern regarding inappropriate referral of patients with back pain to surgeons.

The review identified that inappropriate referral of patients to surgeons occurs because of both patient and general practitioner (GP) factors. In particular, GPs may need education regarding both the range of management options available to CLBP patients and the types of back pain that are amenable to surgery. The review noted that mechanisms that could increase adherence to recommendations on referral include structured referral forms, involving consultants in educational activities, specialised clinics and financial incentives. However, the results of the review would have been made more robust by expanding the engagement process beyond spinal surgeons, which may have identified more nuanced causes of inappropriate referrals for spinal surgery.

Feedback from policy makers

Following delivery of the RR, we surveyed policy makers about their views and satisfaction regarding the process. Feedback indicated that the review was well received by policy makers and had a major influence on the discussions around policy issues. However, although policy makers thought the RR was informative and useful, they indicated that some of the evidence identified was not contextually appropriate and therefore was not relevant to some of the policy issues.

Discussion

RR methods, and consequent limitations, are defined to suit the questions asked and the time frames imposed. This flexibility is a major reason for the variation seen between completed RRs, and is key to the ability of RRs to answer questions within limited time frames. When deciding how to best balance the rigour of methods against timelines and budgetary restraints, it is important to consider the main strengths and limitations of these methodological decisions.

Strengths of rapid review methods

The involvement of policy makers during the review allows feasible policy recommendations to be developed from the review findings. Contextualisation of evidence through clinical input facilitates the development of appropriate policy recommendations. This is particularly important when the evidence base around a technology, procedure or service is not established, or the searches are not exhaustive. Clinical input provided valuable context to our reviews, validated the findings of the literature analysis and ultimately gave policy makers confidence in the RR recommendations. From our experience, and that reported by others, the RR approach to HTA is well received by health decision makers. ^{3,6,20,21}

In full systematic reviews there is a comprehensive focus on safety, effectiveness and cost-effectiveness that requires extensive time and resources. In RRs, the intervention under review is generally well established, but there may be specific areas of uncertainty regarding utilisation. For example, questions of safety and efficacy may be restricted to specific patient populations in a RR, rather than the service as a whole in a comprehensive systematic review. Other examples include determining the association between surgical volume and cost or patient outcomes, assessing workforce sustainability or determining patient access to services. Thus, RRs often address discrete

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Table 1. Methods of the chronic low back pain rapid review and their implications for policy makers

AGREE, appraisal of guidelines for research and evaluation; AMSTAR, assessment of multiple systematic reviews; CLBP, chronic low back pain; CPG, clinical practice guideline; CRD, Centre for Reviews and Dissemination; HTA, health technology assessment, SR, systematic review, MA, meta-analysis, RCT, randomised controlled trial; RR, rapid review

Methods used in CLBP review	Implications of chosen method	Issues to consider in future RRs
Study inclusion criteria Patients: adults with persistent or recurrent low back pain Interventions: spinal surgery Comparators: non-surgical interventions Outcomes: long-term clinical benefits and harms Study design: HTA, SR, MA, RCT, non-randomised comparative study, CPG Language: English language studies conducted in Australia, Canada, Japan, New Zealand, US and European countries (except transitional economies)	Excluding non-English literature can affect estimates of treatment effects; however, the nature of this impact is not clear ^{1,14,15} Limiting studies by design and country of origin may exclude relevant evidence or reduce the generalisability of the results	RR producers should be explicit about limits to maintain transparency Limiting by study design and country of origin can help identify evidence that is contextually relevant and methodologically rigorous; it is unlikely to affect the RR's utility
Literature search methods Four biomedical literature databases (Medline, Embase, The Cochrane Library, CRD database), six HTA agency websites and eight CPG repositories were searched from January 2005 to March 2014	Searching additional databases increases the overall number of relevant results, but the additional studies form a small percentage of the overall evidence ^{1,16} More comprehensive searches increase the completion time and cost of the RR	Combined searches of EMBASE and MEDLINE should be incorporated ^{1,17} Pearling reference lists of key studies and consulting experts about omitted studies can help identify key information that may be missed if databases are limited. ^{1,18}
Study selection and data extraction One reviewer conducted study selection and data extraction	Using one reviewer is a common RR practice ¹ because it reduces the time frame and cost; however, it may increase the likelihood of data transcription errors and/ or other errors ¹³	Duplicate data extraction may not be possible because of time constraints Other methods of cross-checking, such as random spot checking of data by a second reviewer, can lend validity to the results without increasing time significantly
Critical appraisal One reviewer conducted critical appraisal using the AMSTAR checklist ³¹ for systematic reviews and the AGREE II ³² tool for CPGs	Limiting the extent of critical appraisal saves time, but trial quality can affect the size of clinical effects reported and failure to conduct quality appraisal of primary data can result in misrepresentation of results ^{1,11,12} RRs often synthesise results of secondary research (e.g. SRs and HTAs); an SR included in an RR may be of high quality, but may include poor-quality primary data	RRs should always include critical appraisal of the literature ^{1,19} and a full description of the method used Critically appraising secondary research may miss important deficiencies in the primary literature; this should be made explicit in the reporting of RRs RRs may exclude poorer-quality evidence to minimise transferring the risk bias from primary studies to the RR results
Data analysis Study characteristics, quality assessment and results were summarised narratively	Overall, conclusions do not vary greatly between rapid and full systematic reviews; ¹⁰ however, full systematic reviews provide greater detail and depth of information in the data analysis than RRs	RRs should focus on the questions important to the end user and provide as rich a description of relevant outcomes and studies as possible within the time frame
Stakeholder engagement Two Victorian spine surgeons identified by the Victorian Department of Health were asked about the following (with responses de-identified and reported narratively): 1. Non-surgical CLBP treatments available in Victoria 2. Potential causes of incorrect CLBP referrals for surgery 3. Treatment pathways for CLBP patients in primary care 4. Effect of current primary care on surgical CLBP referrals 5. Appropriate indications for CLBP surgery 6. Potential changes to referral pathways for	Contextual information and expert input is extremely important for RRs, but to maintain timeliness it may be necessary to limit the scope of the process, limiting engagement to a particular speciality or geographic location; this can provide highly relevant contextual data, but can also increase the likelihood of introducing biased views or missing the input of important stakeholders	End users should discuss the potential impact of limited stakeholder engagement with RR producers to understand how this may affect the RR results The final RR should explicitly report the stakeholder engagement method so that it is clear whose views are represented A range of stakeholders should be included wherever possible, not only the speciality of interest

patients with CLBP

policy issues, which makes them valuable to decision makers facing specific policy decisions rather than broad system-level issues that are better addressed by systematic reviews.

Limitations of rapid review methods

The main limitations of RRs, compared with a comprehensive systematic review, relate to the involvement of fewer reviewers and the narrower scope of searches and inclusion criteria. 1,5 However, despite these limitations, the key findings of RRs do not differ extensively from comprehensive systematic reviews. 10 The main difference is in the level of bias or uncertainty in the results. Bias can be introduced into RR findings in several wavs:1,22 (1) limiting the literature search, study selection and quality appraisal to a single reviewer increases the chance of bias through missed studies and data extraction errors; and (2) limiting search results by date, language and study design may exclude relevant studies, biasing the review findings. Stakeholder engagement is a common feature of Australian health policy²³ and can help mitigate the limitations in RR processes. However, the input of selected individuals can also introduce bias or inadvertently exclude important views. Being explicit in the reporting of stakeholder engagement is an important feature of RRs that assists end users in determining how much weight should be given to RR findings.

The variation in methods across different RRs means they are less standardised than full HTAs. Therefore, it is difficult to establish benchmarks for RR quality and appraisal. In addition, RRs require stakeholder input to ensure their relevance and appropriateness; however, this can create difficulties in coordinating input from multiple stakeholders in a timely manner. If this engagement process is not initiated early on, or is not robust, the utility of the RR may be reduced. Several authors note the importance of transparency in reporting RRs1,24,25 and the development of reporting standards. ^{24,26} Standardising RR methods would be of limited value in terms of the goal of developing targeted, user-focused, flexible research products. However, increasing the detail in reporting of methodology and potential limitations and biases within RR products will greatly assist end users and other readers to interpret the findings and apply them appropriately.

Recommendations for future reviews

To ensure that RRs produce information that is useful for informing specific policy decisions, we suggest the following key issues be considered when commissioning RRs in future.

- RRs need to be based on clear policy issues. Agree on research questions before starting the review to prevent scope creep and ensure that policy recommendations can be developed within the time frames allowed.
- 2. Producing RRs is a collaborative process. Ensure a sufficient breadth of stakeholders is engaged throughout the process, including those that may be indirectly affected by a policy decision. Similarly, engagement with the RR producer should occur at multiple stages of review, including the scoping phase, data collection, data analysis and reporting. This will ensure that recommendations produced by a review are realistic, actionable and contextually relevant. ^{29,30}

- Consider the outcomes most relevant to the policy decision.
 Not every outcome associated with the service may be of interest. Consider limiting the included outcomes appropriately.
- 4. Consider using only secondary sources, such as existing HTAs or systematic reviews, when high volumes of evidence exist. This can lead to efficiencies; however, quality appraisal of these resources should always be conducted.⁵
- 5. RR methods can be adapted to meet short time frames, acknowledging that compromising methodological rigour increases uncertainty in the results. Policy makers need to decide how to best balance these issues by deciding on an acceptable threshold for uncertainty that will allow RRs to be completed within acceptable time frames while also generating evidence that is robust enough to inform a policy decision.

Conclusion

Effective policy decisions consider a complex range of factors, including the best available evidence, stakeholder perspectives and contextual issues. RRs are a tool that can be used to inform policy development within limited time frames; they incorporate both a pragmatic evidence synthesis and engagement with external stakeholders. Stakeholder input is vital for policy recommendations generated by the review to be realistic, achievable and contextually appropriate. When these factors are adhered to, our experience suggests that RRs are useful tools for informing health policy development.

Competing interests

All authors are employees of the Australian Safety and Efficacy Register of New Interventional Procedures – Surgical (ASER-NIP-S) and have undertaken rapid reviews for various clients throughout their employment. TV, AS, LM and DT have worked on rapid reviews for the Victorian Department of Health, an example of which is cited in the paper. The authors have no other conflicts to declare.

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References

- Ganann R, Ciliska D, Thomas H. Expediting systematic reviews: methods and implications of rapid reviews. *Implement Sci* 2010; 5: 56. doi:10.1186/1748-5908-5-56
- Polisena J, Garritty C, Kamel C, Stevens A, Abou-Setta M. Rapid review programs to support health care and policy decision making: a descriptive analysis of processes and methods. *Syst Rev* 2015; 4: 26. doi:10.1186/s13643-015-0022-6
- 3 Khangura S, Polisena J, Clifford TJ, Farrah K, Kamel C. Rapid review: an emerging approach to evidence synthesis in health technology assessment. Int J Technol Assess Health Care 2014; 30: 20–7. doi:10.1017/ S0266462313000664
- 4 Merlin T, Weston A, Tooher R. Extending an evidence hierarchy to include topics other than treatment: revising the Australian 'levels of evidence'. BMC Med Res Methodol 2009; 9: 34. doi:10.1186/1471-2288-9-34

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5 Hartling L, Guise JM, Kato E, Anderson J, Belinson S, Berliner E, Dryden DM, Featherstone R, Mitchell MD, Motu'apuaka M, Noorani H, Paynter R, Robinson KA, Schoelles K, Umscheid CA, Whitlock E. A taxonomy of rapid reviews links report types and methods to specific decision-making contexts. *J Clin Epidemiol* 2015; 68: 1451–62e3. doi:10.1016/j.jclinepi.2015.05.036

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- 6 Hayden JA, Killian L, Zygmunt A, Babineau J, Martin-Misener R, Jensen JL, Carter AJ. Methods of a multi-faceted rapid knowledge synthesis project to inform the implementation of a new health service model: collaborative emergency centres. Syst Rev 2015; 4: 7. doi:10.1186/20 46-4053-4-7
- 7 Eddama O, Coast J. A systematic review of the use of economic evaluation in local decision-making. *Health Policy* 2008; 86: 129–41. doi:10.1016/j.healthpol.2007.11.010
- 8 Australian Safety & Efficacy Register of New Interventional Procedures— Surgical (ASERNIP-S). Spinal surgery for chronic low back pain: review of clinical evidence and guidelines. Victorian Department of Health and Human Services. 2014. Available at: https://www2.health.vic.gov.au/ getfile/?sc_itemid=%7B6AF50D02-72FE-45D0-869C-82873207264D %7D&title=Spinal%20Surgery%20for%20Chronic%20Low%20Back %20Pain [verified 15 April 2016].
- 9 Atkinson L, Zacest A. Surgical management of low back pain. Med J Aust 2016; 204: 299–300. doi:10.5694/mja16.00038
- 10 Watt A, Cameron A, Sturm L, Lathlean T, Babidge W, Blamey S, Facey K, Hailey D, Norderhaug I, Maddern G. Rapid versus full systematic reviews: validity in clinical practice? ANZ J Surg 2008; 78: 1037–40. doi:10.1111/j.1445-2197.2008.04730.x
- 11 Juni P, Altman DG, Egger M. Systematic reviews in health care: assessing the quality of controlled clinical trials. *BMJ* 2001; 323: 42–6. doi:10.1136/bmj.323.7303.42
- Moher D, Pham B, Jones A, Cook DJ, Jadad AR, Moher M, Tugwell P, Klassen TP. Does quality of reports of randomised trials affect estimates of intervention efficacy reported in meta-analyses? *Lancet* 1998; 352: 609–13. doi:10.1016/S0140-6736(98)01085-X
- 13 Buscemi N, Hartling L, Vandermeer B, Tjosvold L, Klassen TP. Single data extraction generated more errors than double data extraction in systematic reviews. *J Clin Epidemiol* 2006; 59: 697–703. doi:10.1016/ j.jclinepi.2005.11.010
- 14 Moher D, Pham B, Klassen TP, Schulz KF, Berlin JA, Jadad AR, Liberati A. What contributions do languages other than English make on the results of meta-analyses?. *J Clin Epidemiol* 2000; 53: 964–72. doi:10. 1016/S0895-4356(00)00188-8
- Moher D, Pham B, Lawson ML, Klassen TP. The inclusion of reports of randomised trials published in languages other than English in systematic reviews. *Health Technol Assess* 2003; 7: 1–90. doi:10.33 10/hta7410
- 16 Royle P, Milne R. Literature searching for randomized controlled trials used in Cochrane reviews: rapid versus exhaustive searches. *Int J Technol Assess Health Care* 2003; 19: 591–603. doi:10.1017/S0266 462303000552
- 17 Topfer LA, Parada A, Menon D, Noorani H, Perras C, Serra-Prat M. Comparison of literature searches on quality and costs for health technology assessment using the MEDLINE and EMBASE databases. *Int J Technol Assess Health Care* 1999; 15: 297–303.
- 18 McManus RJ, Wilson S, Delaney BC, Fitzmaurice DA, Hyde CJ, Tobias RS, Jowett S, Hobbs FD. Review of the usefulness of contacting

- other experts when conducting a literature search for systematic reviews. *BMJ* 1998; 317: 1562–3. doi:10.1136/bmj.317.7172.1562
- 19 Oxman AD, Schünemann HJ, Fretheim A. Improving the use of research evidence in guideline development: 14. Reporting guidelines. *Health Res Policy Syst* 2006; 4: 26. doi:10.1186/1478-4505-4-26
- 20 Khangura S, Konnyu K, Cushman R, Grimshaw J, Moher D. Evidence summaries: the evolution of a rapid review approach. Syst Rev 2012; 1: 10. doi:10.1186/2046-4053-1-10
- 21 Saul JE, Willis CD, Bitz J, Best A. A time-responsive tool for informing policy making: rapid realist review. *Implement Sci* 2013; 8: 103. doi:10.1186/1748-5908-8-103
- 22 Harker J, Kleijnen J. What is a rapid review? A methodological exploration of rapid reviews in health technology assessments. *Int J Evid-Based Healthc* 2012; 10: 397–410. doi:10.1111/j.1744-1609.2012. 00290 x
- 23 Baghbanian A, Hughes I, Kebriaei A, Khavarpour FA. Adaptive decision-making: how Australian healthcare managers decide. *Aust Health Rev* 2012; 36: 49–56. doi:10.1071/AH10971
- 24 Featherstone RM, Dryden DM, Foisy M, Guise JM, Mitchell MD, Paynter RA, Robinson KA, Umscheid CA, Hartling L. Advancing knowledge of rapid reviews: an analysis of results, conclusions and recommendations from published review articles examining rapid reviews. Syst Rev 2015; 4: 50. doi:10.1186/s13643-015-0040-4
- 25 Humphreys JS, Kuipers P, Wakerman J, Wells R, Jones JA, Kinsman LD. How far can systematic reviews inform policy development for 'wicked' rural health service problems? *Aust Health Rev* 2009; 33: 592–600. doi:10.1071/AH090592
- 26 Merlin T, Tamblyn D, Ellery B. What's in a name? Developing definitions for common health technology assessment product types of the international network of agencies for health technology assessment (INAHTA). Int J Technol Assess Health Care 2014; 30: 430–37.
- 27 Lopes E, Street J, Carter D, Merlin T. Involving patients in health technology funding decisions: stakeholder perspectives on processes used in Australia. *Health Expect* 2016; 19: 331–44. doi:10.1111/ hex.12356
- 28 Whitty JA. An international survey of the public engagement practices of health technology assessment organizations. *Value Health* 2013; 16: 155–63. doi:10.1016/j.jval.2012.09.011
- 29 Bonias D, Leggat SG, Bartram T. Encouraging participation in health system reform: is clinical engagement a useful concept for policy and management? Aust Health Rev 2012; 36: 378–83. doi:10.1071/AH11095
- 30 Whitty JA, Littlejohns P. Social values and health priority setting in Australia: an analysis applied to the context of health technology assessment. *Health Policy* 2015; 119: 127–36. doi:10.1016/j.health pol.2014.09.003
- 31 Shea BJ, Grimshaw JM, Wells GA, Boers M, Andersson N, Hamel C, Porter AC, Tugwell P, Moher D, Bouter LM. Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. BMC Med Res Methodol 2007; 7: 10.
- 32 The AGREE Collaboration. Development and validation of an international appraisal instrument for assessing the quality of clinical practice guidelines: the AGREE project. *Qual Saf Health Care* 2003; 12: 18–23. doi:10.1136/qhc.12.1.18