BUILDING CAPACITY: INTRODUCING THE CLINICAL PRACTICE GUIDELINE MODULE

Michael McCaul, Centre for Evidence-based Health Care, Stellenbosch University and Tamara Kredo, Cochrane SA, SAMRC

Guidelines play a key role as a vehicle for translating best evidence into policy and clinical practice. Therefore capacity development for new and even experienced guideline developers is crucial. Furthermore, health staff are guideline users and need be able to find, appraise and implement guidelines in their daily practice. Some practitioners and health managers also adapt available guidelines for their context. For many, developing guidelines is out of reach, as the experience, skills and learning opportunities applicable to resource-constrained settings is limited. International training is often confined to de novo (new) guideline development methods, a time-consuming and expensive process.1 Within the South African context and other low and middle-income countries, building capacity of individuals to develop clinical practice guidelines (CPGs) by not re-inventing the wheel (i.e. de novo guideline development) through translating existing high-quality evidence efficiently and appropriately is crucial.

The SAGE project, a collaborative project of Cochrane South Africa, the Centre for Evidence-based Health Care and the International Centre for Allied Health Evidence has supported the development of an existing CPG module offered by Stellenbosch University as part of the MSc in Clinical Epidemiology. The module aims to enable participants to understand the different guideline approaches (de novo development and methods for adapting) and the implementation, monitoring and evaluation of CPGs2, with module outcomes presented in Table 1. The semester-long module is offered as a short course and is open to anyone interested or involved in guideline development. Participants can either complete the module through attendance or via competence, in which case all assessments must be completed. Delivered using a blended-learning approach involving both face-to-face and online e-learning sessions, participants take part in various activities for teaching and learning ranging from online forums, authentic tasks and even mock guideline panel discussions. There is a strong focus on methods of translating recommendations from existing up-to-date, high-quality guidelines to a provider’s local setting, a process especially useful for guideline teams in resource-constrained settings.

The module is appropriate for both new and experienced guideline developers as we make content and assessments practical and relevant to your setting, and provide updates on what is emerging in guideline research and practice globally. Furthermore, a significant proportion of content is delivered online enabling participants to engage in their own time and at their own pace, which is especially useful for busy clinicians or policy makers. Engagement is aimed to be fun and pragmatic as participants share their experiences, learn from others, reflect and tackle tasks together.

Over the years the clinical practice guideline module, together with support from project SAGE, has moved from strength to strength and is training existing and future leaders in guideline development both in South African and abroad.
TABLE 1. THE CLINICAL PRACTICE GUIDELINE MODULE OBJECTIVES

1. Outline principles of evidence-based healthcare and study designs.
2. Describe principles and different methods of evidence-based clinical guideline development (de novo and alternative methods).
3. Critically appraise clinical guidelines using rapid and complex tools.
4. Outline principles of grading the quality of evidence to inform clinical guideline development.
5. Discuss approaches in moving from evidence to recommendations.
6. Understand concepts in writing recommendations.
7. Outline principles of implementation of clinical guidelines including consideration of stakeholders, and barriers and facilitators to successful guideline implementation.
8. Develop a plan for implementation of a clinical guideline using appropriate strategies.

REFERENCES


I am a lecturer in Public Health and Community Physiotherapy in the Department of Physiotherapy at the University of the Witwatersrand. I recently presented my research at the Global Evidence Summit held in Cape Town from 13 – 16 September 2017. I am one of the students supported by the South African Guidelines Excellence (SAGE) project and have just completed my Masters of Public Health degree. I presented the qualitative results from my study titled Rehabilitation practitioners’ perceptions of clinical practice guidelines for stroke management when working in rural primary care in South Africa. The study aimed at understanding what rural therapists (physiotherapists, occupational therapists, speech therapists and audiologists) know about stroke clinical practice guidelines, what their attitudes are towards these guidelines and whether they are being implemented in rural primary healthcare.

LACK OF KNOWLEDGE ABOUT GUIDELINES

The study found that most rural therapists surveyed had no knowledge about stroke clinical practice guidelines due to the lack of availability of these guidelines. The therapists expressed willingness to use guidelines if they are available. Some study participants could not differentiate between a clinical practice guideline and a clinical protocol. It is important that clinicians are encouraged to continuously use evidence-based interventions in their patient care and clinical practice guidelines provide the best platform for that. Whereas clinical protocols are also very useful if they provide evidence-based recommendations, the study found that the clinical protocols provided to therapists at the study sites lacked any demonstration of evidence-based best practice and, as a result, the therapists are not utilising them. This highlights the need to develop more contextualised clinical practice guidelines.

The Global Evidence Summit was a great platform to discuss my study findings and learn from delegates from other countries who have an interest in clinical practice guidelines research. I am very grateful to SAGE for sponsoring me to attend the summit. SAGE also provided funds to allow me to present my research findings at the Physical and Rehabilitation Medicine Congress which was hosted by the International Society of Physical and Rehabilitation Medicine (ISPRM) in Buenos Aires, Argentina in May this year. I celebrated my 25th birthday in Buenos Aires while attending the congress. As a young researcher and academic SAGE has contributed greatly to my development and I am looking forward to working more with them. I am interested in commencing with a PhD proposal next year which will look at strengthening healthcare systems and tackling service-delivery issues.
The SAGE project held a workshop in April which looked at different approaches to clinical practice guideline (CPG) development, particularly adaptation, with key examples from the South African setting.

THE OBJECTIVES WERE:

- To share different approaches for adapting CPGs.
- To outline the challenges and lessons learnt.
- To discuss the approaches that South African teams use when developing CPGs.

The workshop included four presenters all of whom have been involved in CPG adaptation in South Africa to share their experiences, the methodologies used, as well as the challenges and lessons learned.

Dr Bev Draper, who consults as a public health specialist for the National Department of Health in the field of guideline development, presented on the development of a health-promotion tool for use in primary healthcare that addresses health risks and existing chronic disease conditions, as well as a training package for its implementation.

Dr Dawn Erntzen, a Senior lecturer in Physiotherapy at Stellenbosch University, presented on the development of a contextualised evidence-based CPG for the primary healthcare of chronic musculoskeletal pain in the Western Cape, South Africa.

Michael McCaul is a registered emergency care practitioner currently working as a researcher at the Biostatistics Unit at Stellenbosch University. He presented on pre-hospital emergency care CPGs for the South African Emergency Medical Services.

Dr Henk Temmingh, who is a consultant psychiatrist in the acute admissions unit at Valkenberg Psychiatric Hospital and lecturer in the Department of Psychiatry and Mental Health at the University of Cape Town, presented on CPGs for the management of severe mental disorders with co-morbid substance misuse in South African psychiatric settings.

THE FOLLOWING POINTS WERE RAISED IN DISCUSSION:

- South Africa needs fit-for-purpose CPGs.
- Existing appropriate, high-quality CPGs must be taken into account.
- The local context (including organisational factors and human resources) must be considered.
- There is a need for transparency and agreement on the values of the panel as this can influence the way evidence is viewed.
- An evidence-decision framework – like GRADE – should be used.
- Guidelines for guidelines are needed to standardise the development process.
- CPGs should have an in-built auditing or monitoring tool.
- Knowledge translation needs to be planned and budgeted for upfront.
- There is a need for a central, respected CPG authority. Its tasks should include deciding which guidelines to prioritise (based on the national burden of disease); establishing rules and standards for the development process; and, promoting implementation and training for CPG use.
- CPG development should be a rigorous, transparent and inclusive process.
- The challenges of and methods for CPG adaptation are not clear globally and South Africa should share its learnings in this field.

A longer version of this article was published in the Cochrane newsletter – see http://www.mrc.ac.za/cochrane/August2017.pdf
SAGE is filling a gap in understanding about guideline work and is engaging with South African guideline producers, implementers and users to build a network of those interested in advancing this field of research and practice. Each of the five goals within SAGE aims to develop new knowledge and disseminate findings through publications, presentations and stakeholder engagement.

**SOME OF THE RESULTS TO DATE INCLUDE:**

**GOAL 1: GUIDELINE STAKEHOLDER AND AGENDA MAPPING**

Interviews have been conducted with national stakeholders to identify key role players, contexts, processes, drivers and barriers involved with primary care guideline development, contextualisation, and implementation.

Themes that have emerged include: lack of clarity in terminology in policy/guidelines; different views on the roles of guidelines; fragmentation/silos of work resulting in duplication and inefficiency; ad hoc methods and systems; human capacity challenges; conflicting personal, financial and political interests and, use and misuse of evidence.

**GOAL 2: PHC GUIDELINE IDENTIFICATION AND APPRAISAL**

We collated international standards of CPG development, and appraised the quality of 16 primary care South African guidelines. We found local guidelines to have poor to moderate methodological quality, and pinpointed the issues that need to be addressed to make them conform to internationally acceptable standards.

Based on these findings, a conceptual framework was developed, which outlined three tiers required to produce a methodologically sound, locally acceptable and implementable guideline.

Goal 2 activities also identified inconsistencies in terminology and in local guideline development processes, which, in turn, highlighted the need for clarity about guideline writing. This work informed the questions asked of key stakeholders in Goal 1. The work highlighted the wealth of international activity on guideline development, and the comparatively smaller amounts of activity on other aspects of guideline activity (updating, adopting and contextualising, or adapting).

The findings identified the need for a 'demystifying paper', which collated and discussed relevant global literature on guideline methods and terminology.

**GOAL 3: CPG STAKEHOLDER REQUIREMENT MAPPING**

- **Interviews with provincial guideline developers and implementers**

Interviews were conducted with 28 provincial players, including provincial and district office holders, involved with primary healthcare, training and clinical services. The data show that these players are the key implementers of guidelines, however, also with some roles on adapting policy to local context. District health managers are often finding innovative ways to overcome challenges with guideline implementation, but lack effective means to share these innovations across different districts and provinces.

- **Interviews with clinicians at primary care facilities**

Seven focus groups in four provinces in South Africa were conducted with clinicians between 2015 and 2016. Clinicians included nurses, dieticians, dentists, doctors
and allied health practitioners from primary care facilities in rural, urban and peri-urban settings. Results indicated that clinicians were receptive to using CPGs, and felt enabled by them. Nurses felt more independent with increased confidence to treat patients where doctors were scarce. Enablers that would likely increase CPG use include enhancements to design features, using local languages, training and physical access to CPGs, including digital CPGs; system-level facilitators include supportive audits to help identify gaps, accessible clinical support and community involvement; strong teamwork; and, involvement of partner non-governmental organisations. Barriers generally mirrored enablers.

GOAL 4: WRITING AND IMPLEMENTATION OF AN ONLINE RESOURCE

We have developed an online resource platform to assist clinicians, managers, academics and policy makers who are interested in knowing how to develop CPGs. It is available at https://guidelinetoolkit.org.za/ (see p. 7). The resource also supports training during the CPG module at Stellenbosch University.

GOAL 5: CAPACITY BUILDING IN GUIDELINE ACTIVITIES

The updated course was offered from February – June 2017 attracting 16 participants. It included innovative panel discussions and practical engagement (see page 1).

The course will now be enhanced for 2018. It is integrated within the MSc Clinical Epidemiology programme at Stellenbosch University to ensure sustainability.

General support for students to attend courses, workshops, summits, research and writing retreats was also provided, together with research guidance. SAGE also mentors or supervises SAGE-linked post-graduate students registered for programmes at the Universities of the Witwatersrand and Stellenbosch.

The project has produced a number of conference presentations and publications – most notably the following editorials in the South African Medical Journal (see below).

**SAGE SAMJ EDITORIAL SERIES**


SAGE GUIDELINE TOOLKIT AVAILABLE

The SAGE Guideline Toolkit (https://guidelinetoolkit.org.za/) is a free, comprehensive, online resource which draws on up-to-date tools and resources on clinical practice guidelines (CPGs). It describes the approach to follow to identify and assess existing CPGs, how to adopt, adapt or implement existing CPGs, and links to resources for CPG de novo (new) development.

The toolkit focuses on low- and middle-income settings where it is often not feasible to develop de novo CPGs which are advised where there are no current guidelines available to answer the required clinical care questions. However, where there are up-to-date, high-quality guidelines available from other countries or settings, researchers should consider adapting, adopting or contextualising these. The toolkit describes the considerations and procedures for deciding when to do what in a stepwise process.

TARGET AUDIENCE

The toolkit is targeted at healthcare professionals who are interested in CPG development or serve on guideline-development panels, as well as methodologists who provide input and leadership in the development of CPGs. The resource can also be used for training about CPGs.

WHAT DOES THE TOOLKIT CONTAIN?

The toolkit contains user-friendly information on:

- What are CPGs?
- How to develop a CPG
- Disseminating and implementing CPGs
- Monitoring and evaluating CPGs

For detailed information on the toolkit contact:
Centre for Evidence-based Health Care, Stellenbosch University.
http://www.sun.ac.za/cebhc
Tel: +27 21 938 9886 and Fax: +27 21 938 9734,
Email: guidelinetoolkit@gmail.com
Find the toolkit at https://guidelinetoolkit.org.za/
**CONFERENCES**

**VACCINES AND IMMUNOLOGY CONFERENCE 2018**

16 – 18 April 2018  
Tokyo, Japan  
vaccines@sasummits.com, http://vaccines.congressseries.com/

**10th BIENNIAL JOANNA BRIGGS INSTITUTE COLLOQUIUM 2018**

**THEME:** Successful implementation of evidence-based practice: Hard work or good luck?  
2 – 4 May 2018  
Antwerp, Belgium  
vaccines@sasummits.com, http://vaccines.congressseries.com/

**5th SOUTH AFRICAN TB CONFERENCE**

**THEME:** Step-Up! Let’s Embrace All to End TB!  
12 – 15 June 2018  
Durban, South Africa  
www.tbconference.co.za, info@tbconference.co.za

**22nd INTERNATIONAL AIDS CONFERENCE (AIDS 2018)**

23 – 27 July 2018  
Amsterdam, The Netherlands  
http://www.aids2018.org/

**G-I-N 2018 CONFERENCE**

**THEME:** Why we do what we do: the purpose and impact of guidelines  
12 – 14 September 2018  
Manchester, United Kingdom  
http://www.ginconference.net

**25th ANNUAL COCHRANE COLLOQUIUM**

**THEME:** ‘Cochrane for all – better evidence for better health decisions’  
15 – 18 September 2018  
Edinburgh International Conference Centre, Scotland  
uk.cochrane.org; @CochraneUK #cochraneforall;  
facebook.com/CochraneUK

**HEALTHCARE INNOVATION SUMMIT AFRICA 2018**

17 – 18 October 2018  
Johannesburg, South Africa  
http://www.healthcareinnovationsummit.co.za/

**INTERNATIONAL CONFERENCE ON EVIDENCE BASED HEALTHCARE**

2 – 5 November 2018  
Ajman, United Arab Emirates  
Contact: Ravi Tipparaju at ravi@gmu.ac.ae, http://www.gmu.ac.ae

**CONTACT US:** Visit the Project SAGE website: www.mrc.ac.za/cochrane/sage  •  Principal Investigator: sage@mrc.ac.za or Call 021 938 0508

**SAGE PROJECT PARTNERS:**