Allied Health Clinical Practice Guidelines in South African Primary Healthcare Settings

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The shifting focus in South African primary healthcare (PHC) from communicable disease mortality, to communicable and non-communicable disease morbidity, puts the spotlight firmly on evidence-informed allied health (AH) to ensure that resources are used for best health and cost outcomes for people living with chronic disease. To date, PHC clinical practice guidelines (CPGs) in South Africa have contained almost no guidance for AH or rehabilitation. Investing in evidence-based AH care in PHC settings is critical to optimise a nation’s health.

The Project SAGE investigation into the barriers of evidence uptake among AH practitioners in South Africa showed similar barriers such as lack of time, funding, capacity and peer support as those reported in other developed and developing countries. However, we identified an important difference which should be explored further. It appeared that formal and informal interdisciplinary networks, particularly around shared-care and common grounds for rehabilitation and disability management, are the key enablers to drive AH primary care CPGs forward. This contradicts reports of fragmented efforts regarding CPG uptake. The perceived barriers of lack of support, resources and training are (or could be) mediated through these AH networks, which could produce innovative enablers to capitalise on opportunities for improvement.

These workshops were well attended with logistics arranged by local representatives of the Department of Health.

The AH workshops were designed to upskill participants on CPGs and other forms of guidance being used in South Africa. They were attended by about 200 participants, representing physiotherapy, occupational therapy, dietetics, psychology, speech therapy, radiography, social work and AH managers. The feedback received was very positive. Participants were also asked to provide a range of personal goals which will be used in the design of future workshops. The commonly reported broad goals for participants were about developing skills and knowledge, CPG writing, appraisal of CPG quality (and correctness), evaluation and putting CPGs into practice.

THE WAY FORWARD

In South Africa over the last 20 years, resourcing and promoting evidence-based rehabilitation and disability management has largely taken a back seat, because of the policy, research and healthcare focus on stemming the scourge of communicable diseases. This investment has resulted in a turning tide, with significant recent decreases in mortality from communicable diseases. However, the legacy is non-communicable and lifestyle-related diseases which incur significant disability (stroke, chronic respiratory and cardiac conditions, diabetes etc.), for which the PHC workforce is generally underprepared. PHC requires a flexible, skilled and efficient workforce of well-connected inter-professional teams with efficient access to best-evidence resources. The investment is worth the effort, as PHC provides a cost-effective, person-centred, community-based, efficient way of delivering health promotion, disease prevention and management, as well as rehabilitation and disability management. Evidence-based AH care is critical in delivering high-value activities which effectively prevent and manage disability and other sequelae of chronic disease.
DEVELOPING MENTAL HEALTH PRACTICE GUIDELINES USING GRADE IN THE SOUTH AFRICAN CONTEXT

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Developing a clinical practice guideline is never an easy task. As clinicians we need pragmatic and decisive guidance, yet this comes at the risk of, perhaps at times naively, expecting dogmatically directive guidance which is often based on opinion rather than evidence. Evidence-based practice guidelines can, at best, provide us with information to make informed decisions as clinicians that are based on an assessment of systematic reviews of evidence and the weighing of benefits and harms of interventions compared to alternative management strategies.

Clinicians are often bombarded by a plethora of evidence-rating systems that exist across international professional societies. One often comes across vague statements such as “good evidence exists for…” or “…evidence based on randomised trials demonstrate…”. To confuse end-users even more, professional societies tend to use their own rating systems, often grading evidence according to arbitrary, at times poorly defined, methodologies. Rating categories like ‘level 1a evidence’, ‘category 2b evidence’ often leave readers bewildered. Cochrane’s GRADE (Grading of Recommendations Assessment, Development and Evaluation) is one approach that has been developed to address the wide variation in methods of grading the quality of evidence. In addition to providing guidance on the standardisation of quality assessments, GRADE provides a framework by which the clinical recommendations can be explicitly motivated in a transparent and systematic manner.¹

Recently, I have been involved in the development of guidelines for the management of people with psychiatric disorders and co-morbid substance-use disorders (a phenomenon also known as ‘dual diagnosis’). We used the World Health Organization (WHO) guidelines on the development of clinical practice guidelines (CPGs) and devised a methodology using a PICOT framework from which we systematically searched for existing practice guidelines and systematic reviews in the international literature. Consequently we adapted these guidelines to the local context after a quality appraisal of other guidelines using AGREE-II; and for existing systematic reviews, the AMSTAR tool together with a GRADE assessment of quality across different PICOT domains. We also used the GRADE process to rate and arrive at clinical recommendations. The process of using GRADE was not without its challenges, of which there were a number. A few of the issues are discussed here:

1. Firstly, coming from relatively small specialty like psychiatry, the guideline panel was a small one, consisting of only four people, one methodologist and three content experts. As is often the case in resource-scarce environments, my role, although dominated by wearing a critical appraisal/methodological hat, often was a dual one and I had to strike a balance between being a content expert and advocate, yet at the same time remaining objective and examining the evidence. Generally it is recommended that content and technical experts work independently before synthesising their recommendations together. In our context, due to capacity, we found this a challenge.

2. Timing: Our timelines for the development of the guideline were extremely tight. We received the go-ahead with a four-month horizon for the first draft. This left little time to train my co-panellist in all the intricacies of the GRADE process. Consequently, one major shortcoming is that many of the methodological and technical aspects of the guideline relating to GRADE development were entirely in my hands. Whereas the panel critically discussed and voted on which outcomes are critical, or important but not critical, many of the inputs into aspects such as acceptability, affordability, risk-benefit ratio, equity, and cost and resource requirements were discussed in an informal manner at the various stakeholder workshops. Future versions of the guideline would need to include a more explicit ‘evidence-to-decision framework’ (EtD) as recently devised by the GRADE working group.²

3. One issue that came up in our work is the difference between the aims of systematic reviewers and guideline developers in using GRADE. Some systematic reviews included were

¹ The PICOT framework identifies the patient problem or population (P), intervention (I), comparison (C), outcome(s) (O) and time period (T).
conducted prior to GRADE being a Cochrane requirement; hence we had to GRADE outcomes de novo (a labour-intensive process). For reviews with existing GRADE evidence profiles we therefore decided to reassess and adapt the GRADE profiles, particularly as for our guideline we chose a clinical threshold approach in which we defined a clinically relevant effect size as a predefined minimum of 20% reduction in risk or symptoms. This had implications for the assessment and evidence-quality downgrading in terms of precision of effect estimates in particular. Another challenge was the GRADING of precision for outcomes measured on a continuous numerical scale. Here, more than once, we had to calculate the adequate minimum sample size for an adequately powered study, in order to decide on downgrading on precision.3

4. Moreover, at the stakeholder workshops held across four provinces, among the most common issues was the difficulty with understanding that a system like GRADE is fundamentally a comparative one, and looks at the benefits of treatments as opposed to alternative management strategies (in our case the controversial issue was that many treatments were compared with standard clinical care). Therefore, I often had to remind audiences (mostly from a non-research background) that when we make recommendations for rating interventions, these are always relative to an alternative management strategy.

5. The wording used for the strength of recommendations, in particular the use of the word ‘weak’ caused confusion for many stakeholders and the wording had to be changed to ‘conditional’ in subsequent drafts. Here the GRADE guidance of using wording in the active voice such as ‘we suggest to…’ for weak/conditional recommendations as opposed to ‘we recommend that...’ was particularly helpful.4

6. As the dually diagnosed population is also often a historically marginalised and stigmatised population, even within the discipline of psychiatry, very often we had to place a strong emphasis on equity issues when deriving recommendations, often also in the context of very low-quality evidence for certain interventions.

GRADE is a useful and powerful tool for guideline developers to distil the quality of evidence and can lead to sobering perspectives, where often a traditional reading of the literature may be biased, lacking in detail and analytical focus. Using it in the South African context poses some challenges, namely training, familiarity with evidence-based medicine and GRADE terminology and critical mass around expertise. However, many organisations and institutions in South Africa have embraced the GRADE approach and are dedicated to the education of medical practitioners in its methodologies. This is important as GRADE is certainly here to stay.

REFERENCES

PRE-HOSPITAL CLINICAL PRACTICE GUIDELINES: USING EXISTING CLINICAL GUIDANCE

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The increasing focus on emergency care professionalisation has led to an increasing emphasis on aligning emergency care practice to a strong evidence base, internationally agreed standards and best practices. In South Africa, most emergency care providers are currently basing practice decisions on protocols last updated in 2006. Higher-level emergency care practitioners have had the benefit of protocol amendments made in 2009. The protocols in question are end-user documents focused on resuscitation and pharmacopeia, which are not underpinned by current research evidence. There has consequently been a recent drive spearheaded by the Health Professions Council of South Africa Professional Board of Emergency Care (HPCSA PBEC), academic institutions, professional societies and the profession, to develop evidence-based clinical practice guidelines (CPGs) which will supersede the current protocols and pharmacopeia.

In August 2015, the PBEC awarded a bid to develop the first evidence-based CPG for the emergency care profession in South Africa. This CPG was developed under the direction of the African Federation of Emergency Medicine (AFEM), collaborating with emergency care and medicine training institutions, along with the Centre for Evidence-based Health Care at Stellenbosch University. The final CPG was submitted to the PBEC in June 2016.

WHY RE-INVENT THE WHEEL?
The current standard in guideline development involves producing CPGs from scratch, by conducting various systematic reviews around topic questions, followed by data synthesis and eventual formulation of recommendations by a guideline panel. This is known as de novo guideline development and is an enormous, costly and time-intensive process that can take many years to complete. Clinical guidelines should be informed by the best-available evidence and, as such, systematic reviews followed by randomised trials form

Figure 1: Methods overview of the AFEM guideline project
the top of this hierarchy. However, Kredo, et al argue that there seems little merit in developing de novo guidelines (unless there is a true gap in guidance) when there is a wealth of freely accessible, good-quality, up-to-date CPGs that can be used to inform guideline evidence and recommendations for a local context. The AFEM emergency care guideline team, taking into account restrictions in funding, time and the urgent need for clinical practice guidance sought an alternative to de novo development that is still based on evidence-based medicine – using the current best evidence in making decisions about individual patients. In light of this, a feasible alternative to de novo guideline development was used where the AFEM CPG panel either adopted, adapted or contextualised existing guidelines to local needs.

We used a streamlined version of the CPG adaption process, first reported in the Philippines in conjunction with the International Centre for Allied Health Evidence (iCAHE) (University of South Australia), which was then further refined in South Africa by Project SAGE, a South African Medical Research Council funded Flagship Project. Figure 1 showcases a summary overview of the AFEM CPG writing process which included screening over 5000 potentially relevant CPGs, then critically appraising (using the AGREE II tool) and synthesising more than 270 pre-hospital CPGs. This culminated in a pre-hospital CPG with over a 1000 recommendations for South African emergency care clinical practice aligned to local contextual factors and scopes of practice of providers. Figure 2 provides a brief overview of the approach adopted in using CPGs identified from international sources, and contextualised for local needs.

**NEXT STEPS FOR SOUTH AFRICAN EMERGENCY CARE GUIDELINES**

The project has created the foundational framework for resource-constrained guideline development teams. The emergency care CPGs represent a transition from opinion-based and skills-driven practice to evidence-informed clinical practice. Although these guidelines have filled a void in providing context-appropriate clinical guidance to paramedics, the successful implementation into industry including alignment of the educational framework by the HPCSA will prove to be the biggest challenge yet. Considering this, active involvement and support from the pre-hospital profession has never been as important.

**REFERENCES**


**UPCOMING EVENTS**

**Cochrane Colloquium 2016**  
23 – 27 October 2016  
Seoul, South Korea  
https://colloquium.cochrane.org/

**8th EDCTP Forum**  
6 – 9 November 2016  
Lusaka, Zambia  
http://www.edctpforum.org/2016/

**Joanna Briggs Institute 20th Anniversary**  
9 – 11 November 2016  
Adelaide, Australia  
http://anniversary.joannabriggs.org/

**5th International Society for Evidence-based Health Care Conference**  
Best evidence and healthcare decisions: Connecting the dots  
7 – 9 December 2016  
Kish Island, Iran  

**Global Evidence Summit 2017**  
Using evidence. Improving lives.  
13 – 16 September 2017  
Cape Town, South Africa  
http://www.globalevidencesummit.org/

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

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