

Title: An online clinical decision tool to support management of back pain - development and mixed methods evaluation

Authors:

*Christopher M Williams, PhD^{1,2},

David Peiris, PhD¹

Rachel Holbrook, PhD⁴

Robyn Lindner, PhD⁴

James Reeve, PhD⁴

Anurina Das, MMedSci¹

Christopher G Maher, PhD¹

¹ The George Institute for Global Health, University of Sydney, Sydney, NSW, 2000, Australia

² Hunter Medical Research Institute, and School of Medicine and Public Health, University of Newcastle, Newcastle, NSW, 2305, Australia

³ NPS MedicineWise, Surry Hills NSW 2010, Australia

Theme: Building capacity for effective implementation

Preferred format: Oral presentation

Abstract:

Background: Many patients do not receive management for low back pain that is consistent with best practice recommendations. There is a paucity of tools available to clinicians that assist with management decisions and patient communication to support best practice care for low back pain.

Methods: We developed, validated and evaluated of a web-based clinical decision support system (CDSS) which aimed to assist primary care clinicians to diagnose and manage back

pain in line with best practice. A mixed methods evaluation was conducted to determine the feasibility, acceptability and utility of the tool. The quantitative component utilised website usage data collected over a 12 month period. The qualitative component included in-depth, semi-structured interviews with the 20 general practitioners (GPs).

Results: The tool had good face validity when reviewed by experts and implemented among GPs. The usage of the tool was considered high with 7,125 website visits, 4,503 (63%) unique users and a moderate rate of repeat use. Qualitative data revealed complexities in managing low back pain and the ‘touch-points’ whereby a CDSS tool may exert its influence.

Interpretation: The results demonstrate that the CDSS tool is acceptable to users and has utility to assist with evidence-based management of low back pain. Further evaluation is required to determine if the tool impacts clinical behaviours and improves patient outcomes.