Draft Dissemination and Implementation Plan

Australian Clinical Guidelines for Health Professionals Managing People with Whiplash-Associated Disorders, Fourth Edition

NSW GOVERNMENT

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1. Objectives

Key aims for the development, dissemination, and implementation of the *Australian Clinical Guidelines for Health Professionals Managing People with Whiplash-Associated Disorders* (referred to thereafter as 'guidelines') are to:

1. Improve quality and consistency of care amongst healthcare professionals managing people with whiplash-associated disorders (WAD).
2. Reduce the risk of adverse events.
3. Improve the health and social outcomes of people with WAD.
4. Provide cost effective care.

2. Methods

In order to achieve these aims, the guideline steering committee has followed processes advised by the Australian National Health and Medical Research Council (NHMRC) and have:

- Ensured representatives from key stakeholder groups were included in the guideline development working group (also known as guideline panel). These included policymakers, implementation experts, healthcare professionals (HCPs), and consumers.
- Considered key implementation points whilst developing the guidelines.
- Included the following questions in the public consultation brief:
  Please review the recommended care pathways for managing people with acute and chronic WAD and consider:
  1) What would be the impact on health equity?
  2) Is the recommended care pathway acceptable to key stakeholders?
  3) Is the recommended care pathway feasible to implement?
  4) What would help you apply these recommendations in practice?
- Conducted a half-day workshop with the guideline development working group to identify the key messages and implementation priorities (listed below).

During and following the public consultation period, the steering committee will:

- Conduct focus groups with three key target audiences: consumers, HCP's, and insurance personnel, to fine tune the key messages, ask opinions on the preferred look and feel of materials and prioritise the preferred implementation strategies.
- Conduct a session at the Centre of Research Excellence in Better Health Outcomes for Compensable Injury Conference in Brisbane on 29-30 June to promote public consultation and feedback.
- Conduct meetings with key HCP organisations, e.g., Australian Physiotherapy Association (APA), Royal Australian College of General Practitioners (RACGP); regulatory bodies, e.g., New South Wales (NSW) State Insurance Regulatory Authority (SIRA), Queensland Motor Accident Insurance Commission (MAIC), Victorian Transport Accident Commission (TAC); and other stakeholder organisations following co-design principles[1].

3. Target audiences

The guideline panel have identified the following key target audiences for the guidelines:

- People with acute or chronic WAD
- HCPs who manage people with WAD
  - Primary HCPs - General practitioners (GPs)
  - Primary/secondary HCPs - Allied health
  - Secondary HCPs – Medical, allied health and surgical specialists
- Emergency departments (ED)
- Insurance personnel

- Legal practitioners
- Insurance regulatory authorities

4. Key messages

4.1. Acute whiplash

The guideline panel has identified the following key guideline recommendations for implementation that are most likely to lead to improvements in health outcomes for people with *acute WAD:*

- Conduct an initial assessment to establish whiplash diagnosis and WAD classification (WAD Grade). This comprises:
    - Following the Canadian C-spine rule to screen for fracture (WAD IV)
    - Conducting a clinical and neurological examination to screen for WAD III
    - Assessing cervical range of motion (ROM) to determine WAD I or II
    - Assessing initial pain and disability
- Identify people at risk of poor recovery (Day 7+) by administering a recommended risk assessment tool:
    - WhipPredict, or
    - Short Form Orebro Musculoskeletal Pain Questionnaire
- Provide standard/baseline recommended treatments to all injured people comprising:
    - Appropriate advice/information/ education
    - Neck-specific exercises
    - Dizziness-specific exercises, if applicable
    - Medications (simple analgesics or non-steroidal anti-inflammatory drugs (NSAIDs))
- Review pain and disability at minimum regular points (within 7 days, at 3 weeks, at 6 weeks)
- Match care to risk profile – if low risk:
    - Provide less care to people with a good prognosis (average 3 treatments over 6 weeks) and encourage self-management.
- Match care to risk profile – if medium/high risk and not recovering:
    - Consider assessing the following domains in people at medium/high risk:
        - Pain sensitivity
        - Sensorimotor function
        - Cervical muscle function
        - Psychological factors
    - Consider providing recommended treatments for people at medium/high risk:
        - Psychologically informed exercise
        - Multimodal physical therapy
        - Multidisciplinary care
        - Other medications (e.g., pregabalin, amitriptyline)
        - Limited use of passive therapy (acupuncture, massage)
    - Consider early referral to whiplash specialist[i] (by 3 weeks)
    - Consider early referral to psychologist if above threshold on recommended psychological screening questionnaires
- Use the developed resources (MyWhiplashNavigator)
- De-implement:
    - Unnecessary imaging (e.g., Magnetic Resonance Imaging (MRI) or Computerised Tomography (CT) imaging for WAD II)
    - Prolonged passive care

[i] For the purpose of these guidelines, defined as an allied health or medical HCP with advanced clinical expertise in managing whiplash. May include but not limited to specialist physiotherapists, specialist physicians.

- More care for people with a good prognosis (i.e., low risk)
- Prescription of opioids and injections for pain management

4.2. Chronic whiplash

The guideline panel have identified the following key guideline recommendations for implementation that are most likely to lead to improvements in health outcomes for people with *chronic WAD:*

- Conduct an initial assessment in the chronic phase that considers:
  - Pain, disability and recovery
  - Additional psychological factors (mood and perceived injustice)
  - Functional goals and pain self-efficacy
  - Physical examination to reassess WAD grade (neurological, ROM and palpation)
- Provide recommended treatments following an active biopsychosocial approach that may include:
  - Advice/education
  - Neck specific +/- dizziness specific exercises
  - Multimodal physical therapy
  - Multidisciplinary care
  - Psychological therapy
- Review treatment and/or refer if not recovering:
  - Refer to whiplash specialist or psychologist (WAD I and II)
  - Refer for specialist medical opinion (WAD III)
- Reassess/review at minimal time points of 18 and 24 weeks from injury and:
  - Reassess pain, disability, pain self-efficacy and function
  - Consider additional examination of muscle function, sensorimotor function and pain sensitivity
  - Consider alternate but recommended treatment if not recovering
  - Refer as above if not already referred
  - Consider multidisciplinary care
- Provide care in accordance with the Clinical Framework for Delivery of Health Services which includes negotiation for end of care
- Consider pain self-efficacy and functional outcomes rather than pain reduction
- Ensure coordinated case management approach to care

4.3. Gaps in practice

Gaps in practice were identified by the guideline panel as follows:

1. There is still a large volume of unnecessary advanced imaging, e.g., unnecessary MRI. It was generally agreed that the Canadian C-spine rule is implemented well in both ED and primary care.
2. HCPs do not routinely identify those at risk of poor recovery in the acute phase and do not provide matched treatment to risk (particularly less care to those at low risk).
3. There is a delay in transition to self-management noting that 100% recovery is not required to be functional. Hands on treatment is often prolonged and appropriate exercise may be delayed.
4. There are gaps in most HCPs' skills to assess and manage people at medium/high risk of non-recovery.
5. There is a delay in referral to people with expertise in managing whiplash, with health professionals "hanging on to people" when they are medium-risk or high-risk and not recovering.

6. HCPs do not know where or how to access whiplash specialists[ii].
7. Pain self-efficacy and functional goals are not routinely considered as the outcome in the chronic phase.
8. Coordination and inter-professional communication are lacking when multidisciplinary care is provided.

Consumers on the guideline panel identified that:

- They do not know where to find the right information about the injury, self-management strategies and knowledge about the compulsory third party (CTP) scheme or funding.
- Current information available assumes a high level of health literacy.

4.4. Plan

- Adapt or develop direct, simple, clear and action-oriented key messages from the above list (note some of these have been previously completed, e.g., in MyWhiplashNavigator).
- Messages will be brief to ensure target audiences are able to read, watch or listen to key message in under 2 minutes. These messages will be workshopped in the focus groups.

5. Dissemination/implementation options

5.1. Background

For musculoskeletal disorders including whiplash, proactive and multi-faceted implementation strategies are more effective in changing knowledge and behaviour than passive strategies.[2] When implementing previous iterations of clinical guidelines for whiplash in Australia, strategies that have effectively changed HCP behaviour have included interactive education using opinion leaders[3,4] and integrated online education within professional body continuing education programs (for GPs).[5] Strategies used for insurance personnel have included embedded education then training the trainer.[6] In each of these strategies, key messages for implementation were selected and opinion leaders respected by the target audience were chosen to deliver the education. For like-conditions with similar messages for translation (e.g., low back pain), mass media campaigns[7] have resulted in significant change in public and health professional opinion.

NHMRC also list several options that guideline developers can consider. These include but are not limited to an official launch or event such as press release or web resources release, marketing (mass media, social media, email, reminders), workshops (e.g., seminars, courses, webinars), contacting networks (opinion leaders or champions), registration on guideline databases, and endorsement from related organisations and journal publications. The guideline development working group discussed several of the above options and propose that the following be further workshopped in focus groups.

The proposed implementation and dissemination strategies for key target markets are outlined below (Table 1).

Table 1: Proposed strategies for target audiences

Audience/target market	Proposed strategy
People with WAD	• Develop a standard script for SIRA and/or insurance consultants to explain to injured people where and how to access information (such as MyWhiplashNavigator and infographics, etc.). • Develop a one-page downloadable infographic (current examples are found here).

[ii] For the purpose of these guidelines, defined as an allied health or medical HCP with advanced clinical expertise in managing whiplash. May include but not limited to specialist physiotherapists, specialist physicians.

	• Ensure primary HCPs and ED personnel provide info or links to infographic and website at point of care (current websites are found here).
HCPs - Allied health	• Develop a user-friendly HCP version of the guideline that can be downloaded by HCPs (allied health). Examples of these used previously can be found here, or for other conditions here. • Develop educational modules/webinars that can be viewed online by HCPs ideally as part of continuing professional development (CPD) points. Identify opinion leaders within each profession to deliver these webinars. • Embed modules/workshop into existing under- and post-graduate education (e.g., university units of study and/or professional body courses). Identify key opinion leaders/educators who can deliver these workshops. • Embed above webinars/modules into *MyWhiplashNavigator*. • Seek endorsement by key allied health professional bodies such as the APA, Chiropractic Australia, Exercise and Sports Science Australia (ESSA) and Australian Psychological Society (APS) and seek dissemination through professional body newsletters/ publications. • Publish guideline in allied health journals or high impact multidisciplinary journals. The British Medical Journal (BMJ) Rapid Recommendations are an example of how these can be presented. • Present at key conferences.
Primary HCPs - General practitioners	• Develop a one-page fact sheet/infographic suitable for GPs. • Consider medical media (medical papers), and/or developing a video like the Back Pain Clinical Care Standard. • Ensure information for GPs is 1-2 clicks away (e.g., on *MyWhiplashNavigator*) and on SIRA website. • Embed recommendations within Primary Health Network (PHN) clinical pathways. • Seek endorsement by key GP professional bodies (e.g., RACGP) and seek dissemination through their publications. • Publish guideline in medical journal or high impact multidisciplinary journal.
Secondary (specialist) HCPs	• Adapt strategies suggested for GPs and allied health professionals. • Ensure that there is clear communication that the guidelines apply in secondary as well as primary care.
ED	• Provide the one-page infographic to emergency departments to provide to people upon discharge. Ensure this has a QR code to *MyWhiplashNavigator*.
Insurance personnel	• Develop a CTP insurer bespoke/specific guideline. • Develop a half-day workshop bespoke for insurance personnel. • Develop materials than can then enable “train the trainer” thereafter. • Ensure *MyWhiplashNavigator* has an insurance specific login page with bespoke information for insurance personnel • Promote the above materials with insurance regulators, and relevant insurance companies in all states of Australia.

General	• Register guideline on key guideline databases such as: 1) NHMRC https://www.nhmrc.gov.au/guidelines 2) Guideline International Network https://g-i-n.net • Ensure all versions of guideline (and/or links to *MyWhiplashNavigator* are available to be downloaded on government regulator websites (e.g., SIRA, MAIC, TAC, South Australia (SA)-CTP) • Consider a public launch - +/- coinciding with social media launch.

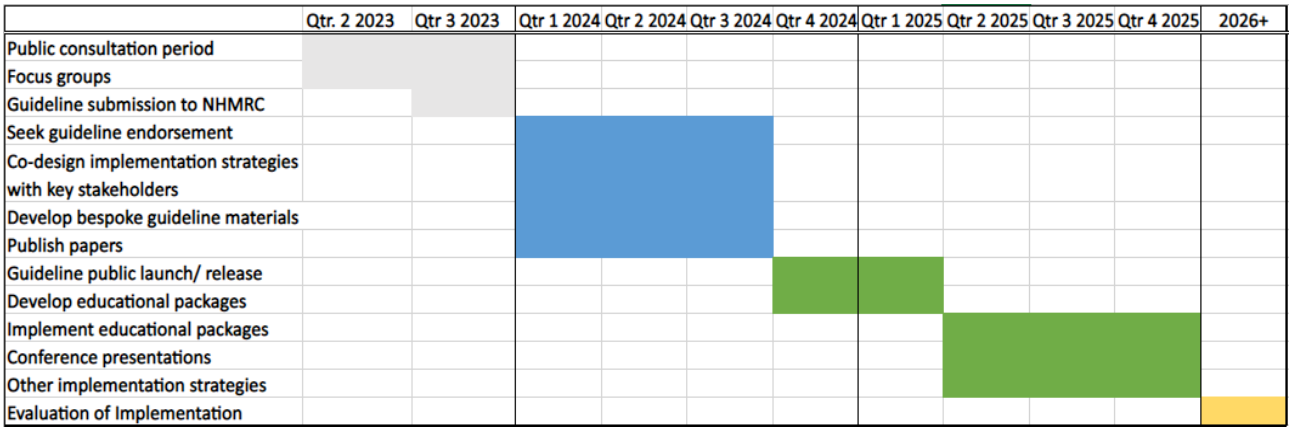
6. Summary of materials to be developed

1. User friendly versions of the guideline and/or infographic for each target audience such as:
    a. One-page infographic suitable for people with WAD
    b. One-page infographic suitable for GPs
    c. HCP version of the guidelines
    d. CTP insurer version of the guidelines
2. Adapt/update the existing website (*MyWhiplashNavigator*) with agreed key messages and/or bespoke pages for the above target markets. Note these exist for consumers and HCPs but may need to be developed for GPs and insurers.
3. Press/media releases.
4. Journal publications.
5. Webinar/education package suitable for allied health professionals.
6. Video for release (e.g., like the Back Pain Clinical Standard)
7. PowerPoint presentation that can be adapted for conference presentations and workshops.
8. 'Self-test' materials with in built feedback (e.g., multiple choice questions).

7. Implementation schedule

A draft implementation schedule is proposed in the figure below (Figure 1).

Figure 1: Draft implementation schedule



8. Evaluation of implementation

A detailed evaluation plan will be developed depending on the implementation strategies prioritised as a result of public consultation and focus group feedback. Evaluation will be based on core principles from the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework.[8] Some implementation strategies will require more detailed proposals based on

research translation frameworks[9] and possibly involving wider scale implementation trials following accepted methods[10].

Examples of evaluation methods for some of the proposed strategies are listed in the table below (Table 2).

Table 2: Evaluation methods for proposed implementation strategies

RE-AIM domain	Target audience	Example of evaluation metric
Reach	People with whiplash	Number of people who register on *MyWhiplashNavigator* vs number of people referred (from ED, insurer or SIRA CTP Assist). Google analytics and data from ED/insurers.
Adoption	HCPs – Allied health	Knowledge gain from education strategy (pre-post questionnaire responses. Case vignette responses on case studies Practice change (e.g., number of people assessed for risk, prevalence of risk-matched recommended care – audit of case notes).
Adoption	HCPs – GPs	Practice change (e.g., number of people assessed for risk +/- referral for physical therapy – audit of case notes).
Effectiveness	People with whiplash	Health outcomes assessed within implementation trials, from *MyWhiplashNavigator* or insurer
Effectiveness	Insurers	Cost of whiplash claims pre- and post-implementation strategy

9. References

1. Bird M, McGillion M, Chambers EM, et al. A generative co-design framework for healthcare innovation: development and application of an end-user engagement framework. Research Involvement and Engagement. 2021;7(1):12.
2. van der Wees PJ, Jamtvedt G, Rebbeck T, de Bie RA, Dekker J, Hendriks EJ. Multifaceted strategies may increase implementation of physiotherapy clinical guidelines: a systematic review. Australian Journal of Physiotherapy. 2008;54(4):233-241.
3. Rebbeck T, Macedo L, Maher C. Compliance with clinical guidelines for whiplash improved with a targeted implementation strategy: a prospective cohort study. BMC Health Services research. 2013;13(213).
4. Rebbeck T, Maher CG, Refshauge KM. Evaluating two implementation strategies for whiplash guidelines in physiotherapy: a cluster-randomised trial. Australian Journal of Physiotherapy. 2006;52(3):165.
5. Rebbeck T, Macedo L, Paul P, Trevena L, Cameron I. General practitioners' knowledge of whiplash guidelines improved with online education. Australian Health review. 2013; in press.
6. Rebbeck T, Refshauge K, Maher C. use of clinical guidelines for whiplash by insurers. Australian Health review. 2006;30(4):442-449.
7. Suman A, Armijo-Olivo S, Deshpande S, et al. A systematic review of the effectiveness of mass media campaigns for the management of low back pain. Disability and Rehabilitation. 2021;43(24):3523-3551.
8. Glasgow RE, Klesges LM, Dzewaltowski DA, Estabrooks PA, Vogt TM. Evaluating the impact of health promotion programs: using the RE-AIM framework to form summary measures for decision making involving complex issues. Health Education Research. 2006;21(5):688-694.
9. Institute S. Translational Research Framework. Testing innovation in policy, programmes and service delivery. In: Heatlh N, ed. www.saxinstitute.org.au.
10. Curran GM, Bauer M, Mittman B, Pyne JM, Stetler C. Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. Med Care. 2012;50(3):217-226.

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Catalogue no. SIRA09190 | ISBN 978-0-7347-4793-8