The TIDieR (Template for Intervention Description and Replication)

BRIEF NAME

Clinician patient specific feedback combined with deprescribing guidance and information on how to assess catastrophising, alongside pain neuroscience education and a cognitive tool for use by patients

WHY

The majority of randomised interventions to reduce opioid use have been undertaken with small samples and not shown positive results (21, 22). A Cochrane review of randomised controlled trials to reduce opioid use in chronic non-cancer pain included five studies and found insufficient evidence for effect.(21) A separate systematic review involving 11 randomised controlled trials, ten of which were patient focused interventions and one of which was a multi-strategic physician intervention found only the physician intervention had a measurable effect on reducing opioid prescribing.(22)

Opioid use is influenced by personal, social, organisational and legislative factors (23). In line with theories of behaviour change(24) and findings from research to improve medicine use and physician prescribing(25, 26), multi-strategic solutions that include strategies that create cognitive engagement for the targeted recipients are most likely to be effective.

Multi-strategic solutions are also required to reduce the experience of pain. Pain is now understood to be an experience arising from a combination of sensory, cognitive and affective factors (27), and interventions to address pain must address each of these influences. Catastrophizing is one cognitive factor which is known to affect both pain itself and risk of opioid misuse (28, 29) and though associated with anxiety, has an effect on risk of opioid misuse independent of anxiety. (28, 29) Pain neuroscience education (30) and cognitive behavioural therapy (31) have also been found to be effective in improving pain management. Pain neuroscience provides specific education which includes explaining the biological processes that underpin pain, with the aim of shifting a person's understanding of their pain from that of a marker of tissue damage or disease, to that of a marker of the perceived need to protect body tissue (32, 33). This approach helps patients to better understand that pain can be decreased when the credible evidence of danger to the body is less than the credible evidence of

safety to the body (34). Results from studies that have used educational approaches to help patients manage pain have shown that this approach can increase physical function, reduce catastrophising and normalize perception of pain (32, 33, 35, 36). However, it is unknown as to whether this approach assists with reducing opioid use.

Based on the collective evidence of successful strategies for improving medicine use and improving pain management, we designed a multi-strategic, precision public health intervention targeting patients on opioids long term and their health providers. Strategies included clinician patient-specific audit and feedback, deprescribing guidance, information on how to assess catastrophising, pain neuroscience education and a cognitive tool for use by patients with their health care providers.

WHAT

Materials:

The intervention comprised the following components for each target group:

For doctors (mailed Sep 2017):

a) Patient level feedback identifying each of the doctor's patients who had been taking opioids for at least three months and the average oral morphine equivalent dose of opioid provided to the patient each month over the last twelve months. The feedback included calls for action that were linked to thresholds of morphine equivalence (e.g. for all patients using more than 40mg of oral morphine equivalents daily, referral to a psychologist for pain management was recommended (see table 1))
b) A deprescribing guideline for opioids
c) The Pain Catastrophizing Scale(37) for use to identify patients at risk of catastrophizing
d) A four-page educational brochure (https://www.veteransmates.net.au/topic-48-therapeutic-brief)

e) A copy of the materials developed for their patients which included the cognitive tool for use with their patients.

For patients (Part 1 mailed Oct 2017, Part 2 mailed Nov 2017): A two-part educational program. Part 1 provided education on the neuroscience of pain. Part 2, sent four weeks later, provided a cognitive behavioural tool for use with their health providers to identify factors that improved or worsened pain based on the tool developed by Butler and Moseley (34).

For pharmacists and psychologists: The same four-page educational brochure sent to doctors, a copy of the cognitive tool and a copy of the materials developed for patients.

One-page reply paid response forms were included for all target groups. All response forms included one "call to action" question. For the doctors, the call to action question focused on asking how many of the listed patients they would review. For patients the call to action question focused on making an appointment with their doctor to review their pain medicines and asking their doctor about whether a psychologist service may help.

Provide information on where the materials can be accessed (e.g. online appendix, URL).

Supplementary material and URL https://www.veteransmates.net.au/topic-48

Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.

To promote system wide organizational support, health professional organizational bodies including the Australian Medical Association, Royal Australian College of General Practice, Royal Australian College of Physicians, Pharmaceutical Society of Australia, Pharmacy Guild of Australia, and veteran organisations including Returned and Services League, War Widows Association, Vietnam Veterans' Association, Vietnam Veterans' Federation among others were also sent a copy of the materials and rationale for the intervention. Appendix 1 provides a copy of clinician patient specific feedback.

A veteran reference group and a practitioner reference group meet twice a year to further support tailoring materials to their needs and adoption of the program.

WHO PROVIDED

For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.

All materials were developed by a medical writer, supported by a clinical reference group comprising of general practitioners, clinical pharmacists, medicine information specialists, and experts in health promotion and consumer education all with more than 10 years' experience. Prior to finalization the materials were peer reviewed by both specialist medical and general practitioners and subsequently endorsed by a national representative editorial committee comprising membership from the major medical professional organisations and veteran organisations.

HOW

Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.

The materials were delivered in print form by postal mail to all targeted participants.

WHERE

Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.

The intervention was posted to participants in primary care for use at home or in their practice.

WHEN and HOW MUCH

Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.

The intervention was provided to health professionals in September 2017. Two consecutive educational mailings were provided to patients in October and November 2017, the first focused on pain neuroscience education and the second focused on use of cognitive tools to improve pain management.

TAILORING

If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.

All clinician feedback was tailored – patient specific messages (as detailed in table 1) differed depending on patient characteristics. All intervention materials are tailored to the veteran community and informed by veteran and practitioner reference groups.

MODIFICATIONS

If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).

Not applicable

HOW WELL

Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.

Fidelity of materials is ensured by peer review by both specialist medical and general practitioners and subsequent endorsement by a national representative editorial committee comprising membership from the major medical professional organisations and veteran organisations.

The fidelity of the final product includes quality assurance processes to review printing and mailing accuracy are in place using a two tiered process, with external review of test files and external review of the final production files. The postal company reports details of the numbers of people who received materials and return to senders. These numbers are matched to the mailout file numbers created by the University to ensure mailouts are expected. Response forms, the call centre and a dedicated email line provide opportunity for participants to indicate fidelity problems.

Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.

All reviews of expected delivery numbers, delivered numbers and accuracy of printed information indicate the intervention was delivered as planned.