



MedsScan — GUIDELINES FOR CONTRIBUTIONS

MedsScan (formerly *DrugScan*) is a review and critical analysis of current international therapeutics literature drawing on the expertise of leading members through SHPA’s Specialty Practice. About half of the SHPA Specialty Practice streams are represented in each issue of *MedsScan* (on a rotational basis).

Contributions consist of original summaries of literature published in major peer-reviewed journals and other updates relevant to Australian pharmacy practice. There are several submission formats available to encourage submissions most suited to each Speciality Practice stream. The goal of *MedsScan* is to share updates and information from within the specialty with the entire SHPA membership and actively interested stakeholders.

This document provides a detailed guide of how to source literature and write literature summaries, an extended summary, and alternate summaries for inclusion in *MedsScan*. If you have a query which is not addressed here, please don’t hesitate to contact specialtypractice@shpa.org.au.

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PROCESS AND SUBMISSION REQUIREMENTS

MedsScan is comprised of four issues a year. Twice a year, in alternating issues, each Speciality Practice stream will be given an opportunity to publish three summaries, or one extended summary, in *MedsScan* (six/two annually)* comprising the following:

- Two summaries on major clinical trials, important pharmacoepidemiology studies, or pharmaco-economic research (hereafter referred to as **literature summaries**)
- One additional summary on timely work relating to Australian pharmacy practice, e.g. QI projects, drug profiles and guidelines, and policy or procedure update (hereafter referred to as **alternative summaries**). If a *MedsScan* Editor would prefer to write a *third* literature summary in lieu of an alternative summary, that is acceptable.
- An **extended summary** format, based on the now retired *Practice in Focus*, to facilitate greater reflection on study limitations and implications on practice.

* Each Speciality Practice stream may elect to contribute to more than their assigned two issues of *MedsScan*. For example, two extended summaries and six literature summaries throughout the year for a contribution to all four issues of *MedsScan*.

Submission process

Submitting to *MedsScan* involves first submitting the literature citation/s, and then later, submitting and approving completed summaries. Please see the submission steps below.

Step 1

Submit citations for your chosen literature article/s to Kristy Parker (kparker@shpa.org.au) for approval prior to summaries being undertaken (to ensure duplication across streams does not occur).

Step 2

Ensure the manuscript (consisting of three summaries or one extended summary) is approximately 900 words long in total, before submitting via email to Kristy Parker.

- Include the names of any contributing author/s clearly in your manuscript
- One Figure or Table can also be included if required for an alternative summary
- References are not required but can be included if necessary.

Step 3

Liaise with Leadership Committee Chair to approve the edited manuscript, once received from the *MedsScan* Editorial Team, prior to publication.

MedsScan Editorial Team Responsibilities

- Draft annual submission timetable including deadlines for provision to *MedsScan* Editors
- Liaise with *MedsScan* Editors on article citations to ensure no duplication occurs
- Edit compiled manuscripts to ensure consistency and review by pharmacists where necessary
- Provide final manuscript to *MedsScan* Editors and Leadership Committee Chair for Chair approval
- Prepare final copyedited version for typesetting
- Publish and promote compiled *MedsScan* issues.

TIMELINES AND EXPECTATIONS

The *MedsScan* Editorial Team will contact *MedsScan* Editors one month prior to deadlines, send frequent reminders throughout the process, and provide assistance at all times.

MedsScan Editors should alert their Leadership Committee Chair of any holidays, personal or other reasons which impede their ability to meet deadlines. Where an Editor is unable to undertake the role for any reason, the Leadership Committee should then appoint a substitute liaison for that period and notify the *MedsScan* Editorial Team of this promptly.

Stream Contribution Schedule

Issues 1 and 3	Issues 2 and 4
Cardiology	Clinical trials
Compounding services	Critical care
Dispensing and distribution	Emergency medicine
Education and educational visiting	Geriatric medicine
Electronic medication management	Medicines information
General medicine	Oncology and haematology
Infectious diseases	Palliative care
Leadership and management	Rural and remote health
Mental health	Surgery and perioperative medicine
Nephrology	Transitions of care and primary care
Paediatrics and neonatology	Women's and newborn health
Pain Management	Technicians and Assistants
Research	

Ad hoc contributions

Aboriginal and Torres Strait Islander Health

Timetable

This timetable is indicative only. For more detail, please liaise with the relevant Leadership Committee. *MedsScan* editors may choose to submit to more than their assigned issues (up to four issues per year).

	Citations to <i>MedsScan</i> Editorial team (Step 1)	Summaries to <i>MedsScan</i> Editorial team (Step 2)	Edited summaries to Editor/LC Chair and final approval (Step 3)	Issue Release date
Issue 1	December	February	March	Late March
Issue 2	April	May	June	Late June
Issue 3	June	July	August	Late September
Issue 4	September	October	November	Late December

Please direct all submissions to Kristy Parker at kparker@shpa.org.au.

LITERATURE SUMMARIES

This section provides guidance for writing **literature summaries**, i.e. the most common form of summary in *MedsScan*. (Later, guidance will be provided for sourcing and writing the **alternative summaries**, e.g. QI projects, etc.).

Article Selection

Contributors must source articles from reputable, peer-reviewed, medical and pharmacy journals. It is recommended that articles be **published within the last six months**, however you may choose to include literature published earlier if you believe it to be relevant to your speciality.

Although randomised controlled trials are preferred, observational, experimental, and case studies are also acceptable. Articles must be relevant to SHPA's membership, applicable to current

Australian pharmacy practice, and should reflect the stream that contributors represent (e.g. geriatric medicine).

Contributors are encouraged to scan a variety of journals for suitable articles, such as those with high citation indexes. Summaries should attempt to report on high-impact material from a wide selection of journals and in areas where readers may not have a specific interest. Contributors should try not to rely on the usual sources (e.g. NEJM) to which many readers would already be exposed. Articles should be original research and preferably in the form of randomised controlled trials; meta-analyses and systematic reviews are acceptable occasionally; and Cochrane reviews should generally be avoided. General review articles are discouraged.

Selection of subject matter is the responsibility of the contributor and should be confined to the expert drug treatment areas and medical/clinical conditions/practice areas for which the contributor has been engaged.

When summarising reports from trials, the trials reviewed should be interesting and relevant, and add to the collective knowledge and understanding, answer common questions, or highlight a need for change in practice. Trials selected should be in humans and phase 3 or better. Earlier studies are acceptable but only if they are of clear and high relevance to the readers. Trials must contain either a drug intervention, pharmacy practice intervention or be relevant to pharmacists, e.g. smoking cessation, counselling, pharmacist clinics, prescribing, ADRs, TDM, education.

Clinical trials should feature medicines currently marketed and available in Australia. Exceptions may be eagerly anticipated medicines or those in the process of introduction into Australia. High profile withdrawals may be acceptable (e.g. ximelagatran).

Writing Literature Summaries

Literature summaries will be edited for clarity, length, relevant content, readability, punctuation, spelling, and grammar. Efforts will be made to avoid altering contributor intentions. Where significant uncertainty exists, contributors may be asked to comment, amend the summary, or provide a suitable rewrite. The Editorial Team has the final decision in case of dispute.

There should be a significant difference between the original article and abstract and the resultant *MedsScan* summary to avoid any suggestion of plagiarism. **Original comment and interpretation of the reviewed article is mandatory.**

The summary must be written in prose, not contain lists or dot points, and should avoid excessive punctuation, overly long sentences, or bracketed information. A balance between an engaging and conversational style with scientific and technical content is preferred.

Contributors should aim to write for comprehension by a moderately experienced generalist pharmacist, i.e. 2 to 3 years postgraduate general ward pharmacist however knowledge of actions of common medicines, aetiology and pathogenesis of common disorders, meanings of p values, SDs and CIs, should be assumed. Contributors should not expect readers to have specialist knowledge, therefore, basic theory and justification of the study, interpretation of study results and significance should be explained. Scientific, technical, and statistical content should be based at a similar level.

Format

Each summary will be a single piece of text (followed by the citation for the article being summarised), 200–250 words long. The final manuscript will contain three summaries, approximately 900 words in length. However, to form this piece of text, a general template can be used to ensure each summary is efficient, meaningful, and consistent. In brief, the template to follow (discussed in more detail below) is: title, scene-setting, method, results, and discussion/comment.

Remember, ***MedsScan* summaries are not Abstracts**. This means that you do not need to convey a scaled-down version of the *whole* methodology, nor do you need to include *all* findings. Rather — keeping in mind that *MedsScan* readers are encouraged to visit the original publication for full details of the study — you can convey the crucial findings of the study, comment on its strengths/weaknesses and its potential impact upon Australian pharmacy practice. In short, a brief critical evaluation of the trial.

- **Title:** The title should be short and descriptive and may be edited for length. Titles should attempt to grab attention and be interesting rather than long scientific descriptions and should not suggest a particular outcome or be misleading if a reader absorbs the title without the benefit of the text – e.g. ‘More on venlafaxine and hyponatraemia’ is preferable to ‘Venlafaxine safe to continue in hyponatraemia’.
- **Scene-setting:** Questions to consider include: Why is this study important? What prompted the research? Why should pharmacists take note? What was the study question?
- **Method:** Briefly describe the trial type, the study design and — very briefly — describe the key elements of the method. A brief description of the intervention – as well as inclusion of medicines, doses, frequencies, and duration of treatment — is key. It is not always possible in the space permitted to include a description of cohort characteristics and size, sampling method, randomisation procedure and study arms, data collection, follow-up period, and outcome measures. The aim is to provide only enough information to make the results understandable. This section usually requires the most editing and is subject to unnecessary excessive detail and precision. Remember, *MedsScan* readers are encouraged

to visit the original publication for full details of the methodology and results.

- **Results:** Summarise the most important trial outcomes. Actual frequencies, relative risks, p values and CIs should be included for selected primary results. Cover efficacy and safety. Statistical significance or otherwise of results should be reported, however, a detailed statistical analysis is not required. The main aim is to report on which arm showed superiority and by how much. Significance and CIs should be provided only sparingly, and statistics kept to an overall reasonable minimum. Aim to ensure this section flows, is easily readable and clearly points out the study's results.
- **Discussion/comment:** This is what separates the summary from an Abstract. What did the study authors conclude overall? Questions you might consider include: Is the conclusion valid? What are the limitations? How has it or could it be interpreted? Where to from here? Did the study report real patient outcomes or surrogate markers? Was the study question actually answered? What does it mean for pharmacy? Is it relevant to Australian hospital pharmacists? How should Australian pharmacists incorporate this new information?
- **Referencing:** Provide a full citation for each article reviewed. The in-text citation should follow the format used by the *Journal of Pharmacy Practice and Research*, e.g. *Gadzhanova SV, (include first six authors), et al. Improving cardiovascular disease management in Australia. Med J Aust 2013; 199: 192–5.*

Technical Issues

- **Numbers:** Report to 1 decimal place. Retain consistency with the publication. Include drug doses wherever possible. Use standard conventions for medicine strengths, weights, and measures (e.g. mg). All units must be included.
- **Abbreviations and acronyms:** Abbreviations and acronyms may be used but should be limited to those accepted by convention or used in the paper. Abbreviations make the contributions short in length but rarely add to readability. Abbreviations must be Australianised and stated in full at least once in the text at time of first use.

Literature Summary Examples

The template discussed above (i.e. scene-setting, methods, results, discussion/comment) can be seen in the examples below. Of course, not all *MedsScan* summaries have precisely the same form — the below examples show a variety of approaches that nevertheless have a similar effect. Ideally, the *description* of the study should be efficient and kept to a minimum, while the provision of *interpretation and context* should be a focus.

Overall wordcount: 200–250 words:

- **Scene-setting:** [~30 words]
- **Methods (Trial-type, study design and brief description of intervention):** [~40-60 words]
- **Results:** [~60-80 words]
- **Discussion (Specialist comment and Australian context):** [~80-100 words]
- *Reference*

[example 1 of 4] Medication data: care needed to ensure accuracy

In Canada, each province is required to develop a system which includes the history of all medications dispensed to a patient. This study aimed to describe the information available in Quebec, which currently contains community pharmacy information but excludes hospital dispensing, utilising data from the Health Information Exchange (HIE). The accuracy of the data was assessed by collecting medication information from patients who arrived at the emergency department of one teaching hospital over approximately seven months. This hospital used their normal system of medication reconciliation which was prioritised for patients over the age of 65 taking three or more medicines to compare to the HIE. The HIE had 31 022 distinct users. Most pharmacists (83%) and general practitioners (74%) were active users whilst specialists and nurses were less likely to be active. The top 1% of users were responsible for 19% of overall use. It was identified that 71 patients were taking 1231 medications on admission; of these there were 463 discrepancies. These discrepancies included anti-hypertensives (11.4%) anticoagulants and antiplatelets (6.9%), psychotropics (5.6%) and a range of other high-risk medicines. Of the patients with a discrepancy, 17.1% used more than one community pharmacy. Higher risk factors for discrepancies included male gender and a larger number of medications. Australia is moving to an opt-out system for *My Health Record*. While this will provide useful information especially for medication reconciliation on admission, it will be important to remember that such repositories may contain discrepancies and may not be accurate for all patients, and other sources of information will also need to be checked. Patients particularly at risk are those taking multiple medications.

Motulsky A, Weir DL, Couture I, Sicotte C, Gagnon M-P, Buckeridge DL, et al. Usage and accuracy of medication data from nationwide health information exchange in Quebec, Canada. J Am Med Assoc 2018; 25: 722–9.

[example 2 of 4] Consideration of patient conditions prior to increasing BP medicines in hospital

More than half of adults admitted to hospital have at least four changes to their regular medicines at discharge. There are risks in changing medications, specifically at discharge, including adverse

reactions, medication confusion, and drug interactions. This is particularly relevant for chronic diseases not directly related to the hospital admission such as hypertension. This was a retrospective cohort study of US Veterans Affairs patients aged over 65 years presenting to hospital for pneumonia, urinary tract infection or venous thromboembolism. A total of 14 915 patients were observed, with 96.8% being male with a median age of 76 years. Antihypertensive intensification occurred for 14% of patients ($n = 2074$) at discharge, with 52% (1082/2074 patients) of these having documentation of well-controlled BP before admission (SBP < 140 mmHg). Moderately elevated and severely elevated inpatient BP both had an increased probability of antihypertensive intensification (25%; 95% CI 23–78% and 43%; 95% CI 38–47% respectively). No difference was seen in predicted probability of antihypertensive intensification of those patients who would least benefit from tight control (lower life expectancy ($p = 0.07$), dementia ($p = 0.95$) or metastatic malignancy ($p = 0.95$)). There was also no difference seen in patients with a history of myocardial infarction ($p = 0.53$), cerebrovascular disease ($p = 0.37$) or renal disease ($p = 0.73$) who may benefit from tight BP control. The exception was in patients with congestive heart failure who had a 2% (95% CI 0.4–4%) increased probability of antihypertensive intensification. This publication is a reminder that, when reviewing medicine changes in hospital, to consider the overall context of a patients' health.

Anderson TS, Wray CM, Jing B, Fung K, Ngo S, Xu E, et al. Intensification of older adults' outpatient blood pressure treatment at hospital discharge: national retrospective cohort study. *BMJ* 2018; 362: k3503l.

[example 3 of 4] Rivaroxaban and heart failure

Warfarin has not been shown to improve outcomes in heart failure in patients with reduced ejection fraction who are in sinus rhythm. Lower doses of rivaroxaban, when used with antiplatelets, have been shown to reduce the risk of death from cardiovascular causes, myocardial infarction, and stroke in patients with acute coronary syndrome (ACS) or stable coronary artery disease (CAD). Zannad et al. randomised 5022 patients (mean age 66 yrs +/- 10; 23% female) to receive either rivaroxaban 2.5 mg twice daily, or placebo on a background of antiplatelet therapy who had worsening of heart failure within the previous 21 days, reduced ejection fraction (< 40%), CAD, and no atrial fibrillation to assess cardiovascular events. Patients were followed up for a median period of 21 months. The primary end point occurred in 25% and 26.2% of patients in the rivaroxaban and placebo groups respectively (HR = 0.94 95% CI = 0.84–1.05; $p = 0.27$). There was no significant difference in all-cause mortality between rivaroxaban and placebo: 21.8% vs 22.1%. There was no significant difference ($p = 0.48$) in the principal safety outcome of fatal bleeding or bleeding into a critical space with a potential for causing permanent disability between

rivaroxaban ($n = 18$) and the placebo group ($n = 23$). This trial demonstrated that anticoagulation is not indicated in heart failure with reduced ejection fraction in the absence of atrial fibrillation.

Zannad F, Anker SD, Byra WM, Cleland JGF, Fu M, Gheorghide M, et al; COMMANDER HF Investigators. Rivaroxaban in Patients with Heart Failure, Sinus Rhythm, and Coronary Disease. *N Engl J Med* 2018; 379: 1332–42.

[example 4 of 4] Multi-morbidity among Aboriginal people in NSW contributes to higher mortality

The life expectancy at birth of Aboriginal and Torres Strait Islander People is estimated to be 11.5 years lower for males and 9.7 years lower for females than other Australians. Multi-morbidity is the presence of two or more chronic diseases, and is a challenge to the current health system's focus on single diseases. This observational cohort study analysed NSW hospital and mortality data to compare the prevalence of multi-morbidity and its impact on mortality amongst Aboriginal and non-Aboriginal people. Of the 5 437 018 NSW residents alive on 1 March 2013 and who had been admitted to hospital at least once during the previous 10 years, 2.2% were Aboriginal Australians. The age profile was skewed to younger age groups and a greater proportion lived in the most disadvantaged areas of NSW compared with non-Aboriginal patients. At least one morbidity was recorded for 31.5% of Aboriginal people and two morbidities or more for 16.1%, compared with 25% and 12.1% for non-Aboriginal patients. The prevalence of combined physical and mental comorbidities was more than four times higher in Aboriginal patients when comparing the two groups. After adjusting for age, sex and socio-economic status, the prevalence of multi-morbidity amongst Aboriginal people was 2.6 times that of other Australians. The hazard ratio of mortality within one year was 2.4 times as high and a large proportion of the mortality risk difference was due to the higher prevalence of comorbidities. Implementation of evidence-based integrated care for Aboriginal people should be a high priority and should particularly focus on reducing the prevalence of combined mental and physical health comorbidities.

Randall DA, Lujic S, Havard A, Eades SJ, Jorm L. Multi-morbidity among Aboriginal people in New South Wales contributes significantly to their higher mortality. *Med J Aust* 2018; 209: 19–23.

EXTENDED SUMMARY

Based on the *Practice in Focus* format (now retired), *MedsScan* editors may choose to submit one longer summary and reflection in place of (or in addition to) their regular twice-yearly three summaries of recent research related to their specialty. Focusing on only one piece of research

(rather than up to 3), the **extended summary** provides a greater opportunity to reflect on limitations and impact on practice than the shorter literature summaries.

This new format removes the need for *Practice in Focus*, a publication that many Specialty Practice Leadership Committees have been publishing regularly in addition to their *MedsScan* contributions. In recognition of the similar goals of *Practice in Focus* and *MedsScan*, expanding the *MedsScan* options will provide an opportunity for members to share their deeper reflection of current research. The extended submissions will be accessible by all SHPA members.

Article Selection

Contributors must source an article from reputable, peer-reviewed, medical and pharmacy journals. It is recommended that the article be **published within the last six months**, however you may choose to include literature published earlier if you believe it to be relevant to your speciality.

Format

Approximately 900 words in length, the extended summary format outlines the background, aim, method, results of the study, key limitations, and impact on practice. Contributing authors can use the extended summary template provided below or linked [here](#) to complete their submission.

Title for summary	Short descriptor of study – does not need to be same as article title
Article Details	Citation in full, include DOI
Name of contributor	Contributor’s name and Leadership Committee/Practice Group membership
Background (2–3 sentences)	Why is this research important? What is already known about this topic?
Aim/s (1–2 sentence)	What was the aim of the study?
Method/s (3–4 sentences)	What did the study involve?
Result/s (3–4 sentences)	What were the key findings?
Key Limitation/s (1–2 sentences)	What were the key study limitations?
Impact on Practice	Expert commentary regarding how this evidence would/could be used to change your practice

References	List other references that have been cited
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Publishing Schedule

Leadership Committees that have been publishing both *Practice in Focus* and *MedsScan* can opt to contribute more than their allocated twice-yearly *MedsScan* submissions and can submit one submission (one extended summary or three shorter summaries) for all four issues of *MedsScan* per year. Leadership Committees may choose to submit an extended summary and shorter literature summaries in subsequent issues (i.e. one extended summary in Issue 1, three literature summaries in Issue 2, etc).

ALTERNATIVE SUMMARIES

As explained above, *MedsScan* Editors are expected to submit a manuscript containing three summaries (or one extended summary). At least two of these summaries must be **literature summaries**, but the “third space” can be used for an **alternative summary** — e.g. summary of a QI project, a new drug profile, policy/procedure update etc — a summary of work or developments from within the specialty practice area.


Sourcing Material for Alternative Summaries

It is anticipated that networking within your Leadership Committee/Practice Group — especially using the **Discussion Forums** — will be the primary source of materials for alternative summaries. In past SHPA membership surveys, members have expressed interest in submitting and reading news on such work (i.e. local QI projects, new drug profiles). Thus, *MedsScan* Editors are encouraged to seek ideas for, or contributions of, this kind of content from within your stream. The Editor, through their own engagement in the specialty field, can also be alert to developments in the field that might form the basis for alternative summaries.

Remember though, that if an alternative summary cannot be produced, there is always the option of submitting a third literature summary in lieu of an alternative summary.

Writing Alternative Summaries

MedsScan Editors have significant freedom in how they would like to present these summaries. In general, the tone and focus on *relevance to practice* should be similar to that of literature summaries, as discussed above.



The general idea is to share interesting and important work or developments from within your specialty with the broader SHPA membership.

At 300 words, these summaries can be slightly longer than literature summaries. There is also space to include one brief Table or Figure if desired. (Remember the word count for the overall manuscript should aim to be 900 words).

The *MedsScan* Editorial Team is always on hand to provide support and advice, especially if you are unsure about how to construct an alternative summary. If desired, we can help you devise a specific format for your specific idea for an alternative summary.
