

# A practical guide to drafting your first manuscript for publication

Winnie Chen

*This article is part of a longitudinal series on research.*

**GENERAL PRACTITIONERS** (GPs) are key in generating research evidence and clinical knowledge that is relevant for improving the health of all Australians.<sup>1</sup> Academic publishing in general practice has a long history in Australia since the *Annals of General Practice* was first established in 1956.<sup>2</sup> GPs not in academic registrar posts, or university settings, may have limited access to formal training in academic publishing. This article provides an overview of the process of planning, drafting and submitting a paper for first-time authors (Figure 1). Although this article focuses on research manuscripts, many of the outlined principles apply to preparing opinion pieces and other article types for publication.

## Planning stage: The 5Ws

High-quality research manuscripts can only be produced from high-quality research. Assuming the research is underway, a 5Ws framework (Who, What, When, Where, Why) can be helpful in planning a manuscript (Table 1).

### Who

Establish early who the authors will be. The first author leads the project and the final (senior) author is a supervisor or experienced colleague who oversees the work. Many medical journals refer to

the International Committee of Medical Journal Editors (ICMJE) on who is eligible to be an author.<sup>3</sup> Fair and transparent assignment of authorship is important, with implications for career and financial opportunities.<sup>4</sup> Are there non-author stakeholders that will also be involved?

### What

Consider the article scope and type appropriate for the content. For example, a small-scale research study may be accepted as a brief research letter rather than a full research article.

### When

Establish a timeline with coauthors on first drafts, coauthor reviews and submission dates. When are coauthor meetings? Are there funding deadlines to meet?

### Where

Selecting an appropriate journal can be challenging with the sheer number of journals available, and the proliferation of predatory journals.<sup>5</sup> Is the intended audience clinical or academic? Australian

or international? General or domain-specific? Read the journal scope and comparable articles in the targeted journal to consider whether your content aligns with the focus and readership of the journal.<sup>6,7</sup> Other factors to consider include processing times, impact and the costs of article processing charges. Established journals in each field can be more competitive to publish in, but often also provide the most helpful reviews.

### Why

'Why' is the most important of the 5Ws. Is there a specific goal in writing the manuscript (eg to complete a PhD, address a recent guideline change or highlight a political issue)? Articulating the specific purpose of the article can help answer the other four Ws.

## Drafting stage: Initial and final drafts

Prior to drafting, authors should be familiar with up-to-date literature relevant to their manuscript and

**Table 1. The 5Ws of manuscript planning**

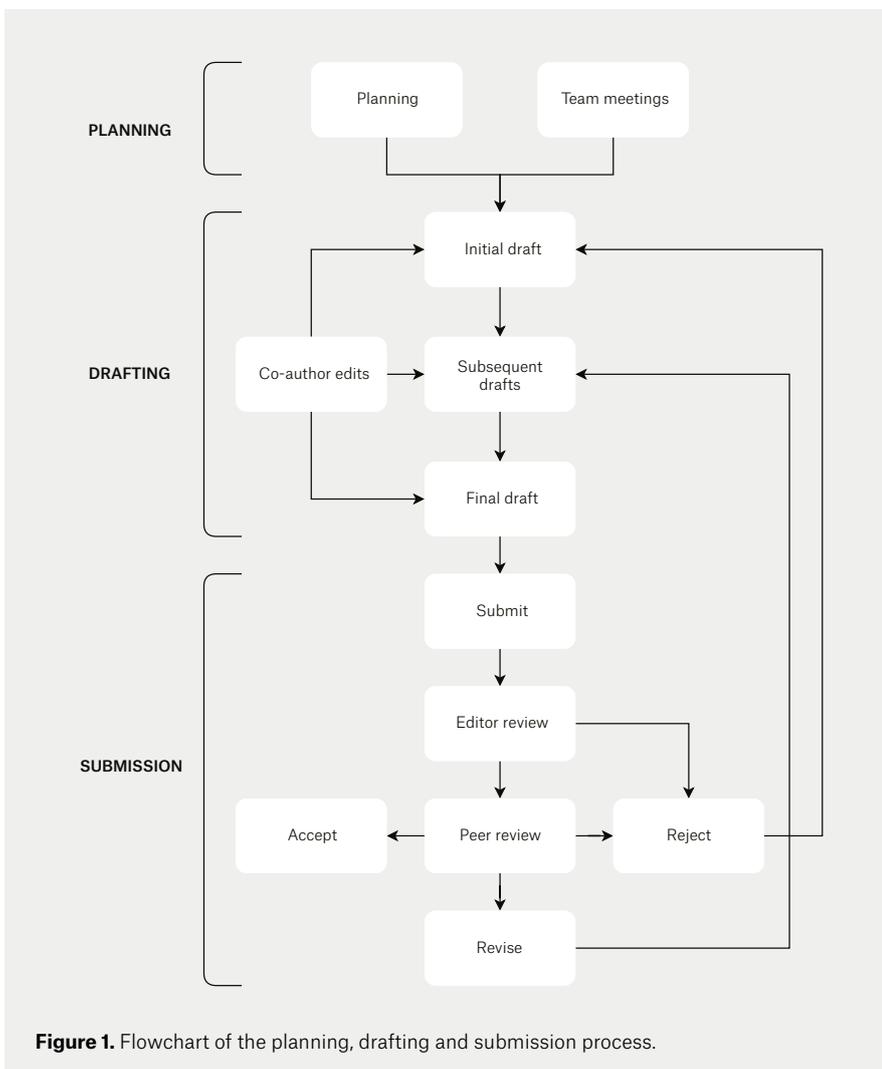
|       |  |
|-------|--|
| Who   | Identify lead author, senior author and coauthors  |
| What  | Determine article scope and type (eg research article, review article, perspective piece)                                |
| When  | Establish a timeline for writing and submitting  |
| Where | Choose an appropriate journal for submission, taking into consideration journal focus, processing times, prestige, costs |
| Why   | Articulate the purpose of the manuscript   |

comparable articles in their target journal. When starting the initial draft, authors should review journal-specific author guidelines (eg article type and word limits). Most journals require research papers to be presented in the IMRAD format (Introduction, Methods, Results and Discussion).<sup>8,9</sup> However, writing does not have to take place in this order; often, methods and results are readily available and can be easier to draft than introduction and discussion sections.<sup>9</sup> Many journals require the use of reporting checklists to ensure transparent and accurate reporting. The EQUATOR (Enhancing the QUALity and Transparency Of health Research) Network provides a centralised website

to access these checklists, such as CONSORT (Consolidated Standards of Reporting Trails) for randomised trials and STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) for observational studies ([www.equator-network.org/](http://www.equator-network.org/)).

One strategy to overcome barriers to writing a first draft is to start by ‘putting new words on the page’, with editing, formatting, and references added in later.<sup>10</sup> Approaches to improving productivity at this stage include using a skeletal structure of IMRAD headings and dot points under these headings;<sup>7,10</sup> editing existing protocols or ethics applications; or even using artificial intelligence (AI)-generated prompts (eg ChatGPT).

Early feedback from an experienced coauthor is valuable, even if the manuscript is incomplete or still in dot-point form. After the initial draft is completed, several rounds of input and revisions from coauthors are usually needed. Poor presentation and structure can lead to rejection. Therefore, the final draft should focus on presentation, such as ensuring a clear title and abstract; checking for arithmetical, spelling (including UK versus US spelling) and grammatical consistency; aligning tables, figures and references to journal specifications; and a cover letter addressing the editors. Using a citation manager (eg EndNote, Mendeley, Zotero) is invaluable for both collating articles prior to drafting and generating fast, journal-compliant referencing for the final draft.



**Figure 1.** Flowchart of the planning, drafting and submission process.

### Submission stage: Peer review and revisions

Manuscripts submitted for publication are reviewed by editors and peer reviewers. With the sheer volume of submissions and limited peer review availability, leading journals reject a high proportion of articles without peer review.<sup>6</sup> Journals use a variety of peer review models (eg peer review may be single-blinded peer review, double-blinded peer review or open [public]).<sup>11</sup> After peer review, articles are returned to authors as ‘accept’, ‘accept with revisions’ (major or minor) or ‘reject’.

Although first-time authors often perceive reviewer comments as critical, it is helpful to remember that the main goal of peer review is to support authors in improving the rigour and clarity of their manuscript. It is important for authors to take time and carefully consider each comment during the revision process. Journals require authors to address reviewer comments through revising the manuscript itself, and providing an accompanying point-by-point response letter. In the response letter to editors and reviewers, the rationale for incorporating suggestions, or not, needs to be clearly explained and justified. Some journals publish peer review reports and author responses alongside articles; reviewing these example responses can be educational for those unfamiliar

with drafting responses. The time to acceptance, including the time for editor decision and the time for peer review, can range widely from weeks to years.<sup>12</sup>

Manuscript rejection is common but nevertheless challenging. Active coping strategies include taking a walk before reading the reviewer reports in detail, reaching out to support people, planning next steps and positive reframing; these steps can help authors manage negative emotions such as shock, disappointment and anger.<sup>13</sup> Experienced researchers routinely plan for resubmission to several journals, ranked in order of preference. Systematically working through this list of

target journals, incorporating constructive feedback from previous rejections at each resubmission, is a useful strategy in managing rejections.<sup>2</sup> Publishing can take months or years, but perseverance is key with many initially rejected articles eventually accepted for publication elsewhere.<sup>14</sup> Finally, when the manuscript is accepted, remember to celebrate the success with your team members!

### Worked example: Planning a research manuscript

Maya is an academic GP registrar conducting a study on the effect of

restricting Pharmaceutical Benefits Scheme (PBS) access for fluticasone in children with asthma<sup>15</sup> on GP prescribing (we note that at the time of publication, the decision to restrict PBS access has been reverted)<sup>16</sup> and referral practices across several general practices across Australia. She and her academic supervisor start planning their research manuscript. We use this hypothetical example to illustrate use of the 5Ws in the planning stages in Table 2.

#### Author

Winnie Chen BMedSci, MBBS, MPH, FRACGP, Menzies School of Health Research, Darwin, NT; Lecturer, Flinders NT, Darwin, NT

Competing interests: None.

Funding: None.

Provenance and peer review: Commissioned, externally peer reviewed.

#### Correspondence to:

winnie.chen@menzies.edu.au

#### Acknowledgements

The author thanks her supervisors (Professor Alan Cass, Associate Professor Gillian Gorham, Professor Kirsten Howard, Associate Professor Asanga Abeyaratne) for their guidance throughout her PhD publications. The author extends special thanks to previous colleagues at the *Medical Journal of Australia* for mentoring her to think like a journal editor.

#### References

- Manski-Nankervis JE, Sturgiss EA, Liaw ST, Spurling GK, Mazza D. General practice research: An investment to improve the health of all Australians. *Med J Aust* 2020;212(9):398-400.e1. doi: 10.5694/mja2.50589.
- Margolis S. How to publish your research – demystifying the process Australia [Webinar]. The Royal Australian College of General Practitioners, 2022. Available at [www.racgp.org.au/racgp-digital-events-calendar/online-event-content/how-to-publish-your-research-demystifying-the-proc](http://www.racgp.org.au/racgp-digital-events-calendar/online-event-content/how-to-publish-your-research-demystifying-the-proc) [Accessed March 2023].
- International Committee of Medical Journal Editors. Defining the role of authors and contributors. *International Committee of Medical Journal Editors*, 2023. Available at [www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html](http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html) [Accessed 12 June 2023].
- Zauner H, Nogoy NA, Edmunds SC, Zhou H, Goodman L. Editorial: We need to talk about authorship. *Gigascience* 2018;7(12):giy122. doi: 10.1093/gigascience/giy122.
- Cobey KD, Lalu MM, Skidmore B, Ahmadzai N, Grudniewicz A, Moher D. What is a predatory journal? A scoping review [version 2; peer review: 3 approved]. *F1000Res* 2018;7:1001. doi: 10.12688/f1000research.15256.2.
- Tullu MS, Karande S. Success in publishing: Selecting an appropriate journal and braving the peer-review process. *J Postgrad Med* 2018;64(1):1-4. doi: 10.4103/jpgm.JPGM\_618\_17.

**Table 2. Using the 5Ws to plan a research manuscript: Hypothetical worked example**

|       |  |
|-------|--|
| Who   | Maya is leading this work and will be the first author. Her academic supervisor will be the senior author. Other team members with substantial involvement, including a lead GP and practice nurse from participating practices, a paediatrician from a partnering health service and a data analyst from the research team, will be invited as co-authors. The order of co-authors is planned for depending on each person's contribution to this project.  |
| What  | Maya's work forms part of her supervisor's larger body of work looking at paediatric asthma management across participating general practices. However, the team decide to focus this manuscript on analyses relating to changes in fluticasone prescribing in children. The manuscript will be submitted as a full research article; for example, in the <i>AJGP</i> , this would have a word limit of 2000 words and be in the IMRAD format. <sup>17</sup>   |
| When  | The team uses a Gantt chart to plan for completion of data analysis, initial drafting and journal submission over the next six months.   |
| Where | Maya reviews publicly available information (eg journal aims, published impact factors, article processing costs) and discusses her list of possible journals for submission with her supervisor. She proposes submitting to the <i>AJGP</i> because her work impacts Australian clinical GPs caring for children with asthma, and policymakers involved in funding PBS medications. This aligns with <i>AJGP</i> aims to 'provide relevant, evidence-based' information to GPs. <sup>17</sup> She also considers a public health journal given the potential impact of her findings on health policy. Respiratory journals and international journals may be less relevant given the primary care and local policy issues highlighted in her work. If submitting to a journal requiring article processing charges, Maya and her supervisor will also need to decide what funding will be used to pay when the article is accepted (eg grant funding, university-based read and publish agreement funding). |
| Why   | The PBS restriction is a recent change, <sup>15</sup> and issue of concern to GPs and health services. The research findings will aid policymakers in making evidence-based decisions on asthma medications and asthma service provision. Publishing this work is also important to Maya, because she is planning for a career in academic general practice.   |

We note that at the time of publication, the decision to restrict PBS access has been reverted.<sup>16</sup>

*AJGP*, *Australian Journal of General Practice*; GP, general practitioner; IMRAD, Introduction, Methods, Results and Discussion; PBS, Pharmaceutical Benefits Scheme.

7. Kool B, Ziersch A, Robinson P, Wolfenden L, Lowe JB. The 'seven deadly sins' of rejected papers. *Aust N Z J Public Health* 2016;40(1):3-4. doi: 10.1111/1753-6405.12521.
8. Liumburno GM, Velati C, Pasqualetti P, Franchini M. How to write a scientific manuscript for publication. *Blood Transfus* 2013;11(2):217-26.
9. Balch CM, McMasters KM, Klimberg VS, et al. Steps to getting your manuscript published in a high-quality medical journal. *Ann Surg Oncol* 2018;25(4):850-55. doi: 10.1245/s10434-017-6320-6.
10. Gardiner M, Kearns H. Turbocharge your writing today. *Nature* 2011;475(7354):129-30. doi: 10.1038/nj7354-129a.
11. Zimba O, Gasparian AY. Peer review guidance: A primer for researchers. *Reumatologia* 2021;59(1):3-8. doi: 10.5114/reum.2021.102709.
12. Sebo P, Fournier JP, Ragot C, Gorioux PH, Herrmann FR, Maisonneuve H. Factors associated with publication speed in general medical journals: A retrospective study of bibliometric data. *Scientometrics* 2019;119(2):1037-58. doi: 10.1007/s11192-019-03061-8.
13. Argan M, Dinç H, Argan MT, Özer A. What does rejection look like? A photovoice study on emotions and coping regarding manuscript rejection. *Curr Psychol*. doi: 10.1007/s12144-023-04253-5.
14. Hall SA, Wilcox AJ. The fate of epidemiologic manuscripts: A study of papers submitted to epidemiology. *Epidemiology* 2007;18(2):262-65. doi: 10.1097/01.ede.0000254668.63378.32.
15. Department of Health and Aged Care. Revised PBS restrictions for fluticasone propionate 50 micrograms per dose inhalers. Australian Government, 2023. Available at [www.pbs.gov.au/info/news/2023/04/revised-pbs-restrictions-for-fluticasone-propionate](http://www.pbs.gov.au/info/news/2023/04/revised-pbs-restrictions-for-fluticasone-propionate) [Accessed 17 April 2023].
16. Department of Health and Aged Care. Recommendations made by the PBAC – May 2023 Intracycle meeting. Australian Government, 2023. Available at [www.pbs.gov.au/info/industry/listing/elements/pbac-meetings/pbac-outcomes/recommendations-made-by-the-pbac-may-2023-intracycle-meeting](http://www.pbs.gov.au/info/industry/listing/elements/pbac-meetings/pbac-outcomes/recommendations-made-by-the-pbac-may-2023-intracycle-meeting) [Accessed 23 May 2023].
17. The Royal Australian College of General Practitioners. *Australian Journal of General Practice* author guidelines. RACGP, 2020. Available at [www1.racgp.org.au/ajgp/reviewers/author-guidelines](http://www1.racgp.org.au/ajgp/reviewers/author-guidelines) [Accessed 11 April 2023].

correspondence [ajgp@racgp.org.au](mailto:ajgp@racgp.org.au)