



Research papers submitted to Australian Family Physician

Types and timelines

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BACKGROUND

Articles published in the research section of *Australian Family Physician (AFP)* are subject to an editorial process comprising several stages.

METHOD

Timelines tracking the movement of each research manuscript submitted to *AFP* from 2002–2004 through all stages of the editorial process were constructed. Of 179 papers, 130 had sufficiently progressed to be included in this study. Manuscripts were grouped by subject matter into eight categories.

RESULTS

Waiting for authors' responses to editorial feedback (with reviewers' reports) was the greatest cause of delay to *AFP* editorial processes. Peer reviewers took 43 (SD: 102) days to return their report. Authors took 67 (SD: 76) days to resubmit their paper following initial feedback, and a further 48 (SD: 79) days after it had been edited. Mean accumulated time between receipt of a manuscript by *AFP* and sending it to peer review was 15 days. Once the editorial process was completed, articles were usually published within 3 months. Most research (64%) was on the topic of health services research rather than clinical research (36%). The most common research method was observational (78%) rather than experimental (22%).

DISCUSSION

There is less clinical research submitted to *AFP* than expected for a clinical discipline. Authors and reviewers cause the most delay in manuscripts' passage through the editorial process.

Each manuscript submitted to *Australian Family Physician (AFP)* is reviewed according to specific criteria by two experts in the field. Authors are invited to revise the paper, considering the reviewers' and editor's suggested improvements, and then resubmit the paper. This invitation is issued only where the method or conduct of the research is not fundamentally flawed such that it is impossible to realise the intention of the research. Editorial policy, endorsed by *AFP's* Editorial Advisory Board, is to publish as much research as can be accommodated, even if this means expending considerable editorial effort on substandard papers.

Publication is an important component of the dissemination of research into practice and to inform other researchers.^{1,2} Authors commonly express concern about delays to their manuscript's

progress through editorial processes.³ One-third of authors take into account a journal's speed of publication when choosing where to submit manuscripts.⁴ It typically takes several months for a paper to be finally accepted or rejected. If a paper is rejected by several journals before being published, years may have passed since the research was conducted. Journals and the academic community are interested in minimising delays.^{5–8} However, speeding the process risks sacrificing quality.⁹ Authors are in one sense clients, whose editorial needs should be satisfied by the journal.¹⁰ Authors accept that peer review is an effective means of improving the quality of research papers.^{1,10}

The objective of this study is to examine factors that contribute to delay in the editorial process of *AFP*. Ethics approval for this study was granted by Bond University Human Research Ethics Committee.

Method

Data extraction forms were used to collate data relating to the management of 179 research manuscripts submitted to AFP between 2002–2004. After classification by main subject matter and main research method, papers were divided into eight groups (subject matter, research method):

- health services, experimental
- health services, observational (survey)
- health services, observational (qualitative)
- health services, observational (quantitative)
- clinical, experimental
- clinical, observational (survey)
- clinical, observational (qualitative), and
- clinical, observational (quantitative).

Classifications were based on an earlier study that divided manuscripts into four categories.¹⁰ Papers relating to diseases were categorised as clinical. Papers focusing on the processes of health care were classified under health services. A paper was deemed experimental if an intervention was performed under controlled conditions to provide data from which conclusions were derived. A paper was deemed observational if the author derived their results without any intervention. Qualitative observational articles used words as their primary descriptive tool, where quantitative observational articles used numbers. Papers that collected results by conducting a survey were classified as 'survey'. Papers that employed a combination of methods were classified according to the method predominantly described in the abstract.

For each paper, the research group collected the date each stage of the editorial process was completed. The stages were:

- manuscript received by AFP
- manuscript sent for review
- resent for review (where applicable)
- suggested changes received from each reviewer
- manuscript returned to author
- version two received from author
- editor responds to author's changes
- edited manuscript returned to author for further revision
- version three received from author
- editing completed and manuscript returned to author for approval

- final version received from author
- paper officially accepted for publication, and
- publication.

Results

Of 179 papers submitted, 130 had completed enough editorial stages to be included in this study: 79 (61%) were officially accepted, 30 (23%) were rejected, and 21 (16%) were withdrawn. Twenty-eight (22%) were experimental and 102 (78%) were observational studies. Of the latter, 60 were survey studies, 29 were qualitative, and 13 were quantitative. Observational quantitative papers had the highest rate of acceptance (69%). Thirty (38%) papers were health services observational surveys. Of these, health services observational quantitative papers had the highest rate of acceptance (83%).

The mean time papers spent at each stage is shown in *Figure 1*. Before official acceptance, the greatest delay came from authors (mean 67 and 48 days for resubmitting versions two and three respectively following feedback). The next greatest delay came from peer reviewers (mean 43 days). Total administrative time for each paper was mean 26 days. Delay from official acceptance to publication was mean 78 days.

Discussion

Most papers used observational rather than experimental research. Less clinical research is submitted to AFP than expected for a clinical discipline.

This study's classification system was possibly unreliable (it was not tested), although the classification had face validity. Only six (5%) studies were observational quantitative health service research. Despite the high acceptance rate (83%), the sample is too small to exhibit reliable trends. Overall there was little difference in acceptance rates for different types of papers (*Table 1*). In contrast to other journals, which reject over 70% of papers submitted,^{5,10} almost twice as many research papers were accepted than rejected by AFP.

In view of the effort required to prepare a paper for submission, a surprising proportion of papers (15%) fail to complete the editorial process because authors either withdraw them, or fail to respond to constructive criticism designed to bring papers to optimal standard. This study cannot identify the reasons for this (possible reasons include authors deciding to submit elsewhere, or being too busy to respond). Further research in this area would be valuable.

Peer review is intended to improve the quality of a paper,¹¹ although only half of authors are confident this is the case.¹⁰ Authors

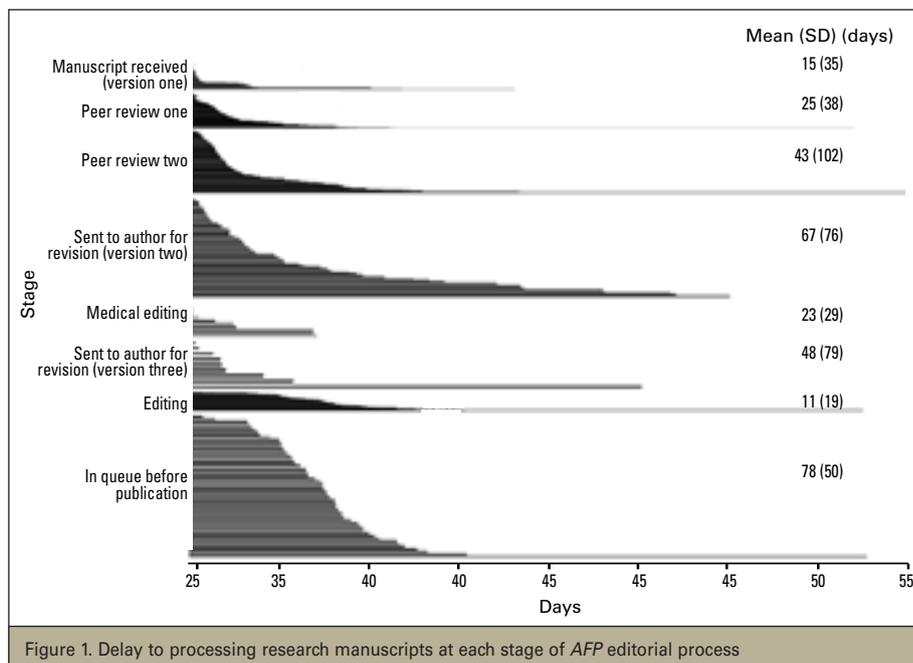


Table 1. Analysis of the types of articles submitted to AFP, 2002–2004

	Research method			Editorial outcome n (%)			
	Experimental	Survey	Observational Qualitative Quantitative	Accepted	Withdrawn	Rejected	Total
Health services research	√			5 (33)	7 (47)	3 (20)	15
		√		30 (68)	4 (9)	10 (23)	44
			√	10 (56)	3 (17)	5 (28)	18
				5 (83)	1 (17)	0 (0)	6
Clinical research	√			8 (62)	1 (8)	4 (31)	13
		√		11 (69)	3 (19)	2 (13)	16
			√	6 (55)	1 (9)	4 (36)	11
				4 (57)	1 (14)	2 (29)	7

should receive prompt, thorough and objective reviews,¹¹ and cost effective alternatives to the current process are hard to imagine. Reviewers often have heavy workloads and conflicting priorities, and receive little reward for this responsibility.⁵

If a journal processes twice as many double reviewed papers as it publishes (61% of submissions to *AFP* are published), in effect four reviews are conducted for each paper published. The journal could request authors to perform four reviews for each paper of their own that is published.

Journals can assist in minimising delays by providing detailed guidelines of essential criteria for publication of research papers, and striving to minimise administrative time taken by the journal itself.

Implications for general practice

What we already know:

- Authors and editors are irked by delay to publication of papers in print journals.

What this study shows:

- Most of the delay was from authors failing to respond promptly to feedback.
- Most papers submitted, and accepted, were surveys.
- Almost twice as many articles were accepted than rejected.

Conflict of interest: Both Rachel Green and Chris Del Mar have undertaken editorial work for *AFP*.

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