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# **General practitioners** referral letters

## Do they meet the expectations of gastroenterologists and rheumatologists?

## **OBJECTIVE**

To solicit the views of gastroenterologists and rheumatologists on the importance of various aspects of general practitioners' referral letters, and to assess GPs' letters based on these views.

Questionnaires were sent to 175 gastroenterologists and 88 rheumatologists in New South Wales to seek their views on the importance of nine items in GPs' letters. Four hundred referral letters from GPs were audited based on these items.

Gastroenterologists and rheumatologists held very similar views on the importance of various aspects of GPs' letters. Most GPs' letters were legible and contained reason for referral, past medical history and current medications. Only a minority of letters contained family history, social history, physical findings, and prereferral investigation results.

## DISCUSSION

General practitioners' referral letters measured up well to some expectations of gastroenterologists and rheumatologists, but often failed to include some important information. The use of structured form letters is recommended.

## Referral letters are the usual means of communication

from general practitioners to specialist consultants. While letters with adequate and clearly communicated information can facilitate the further diagnosis and management of patients by consultants, poorly composed letters may result in unnecessary repetition of diagnostic procedures and delays in treatment. Previous studies have examined the quality and content of referral letters to hospital outpatient or emergency departments and to consultants in various specialties. 1-11 To our knowledge, no collaborative study has yet been done on the opinion of both gastroenterologists and rheumatologists regarding the optimal content of referral letters, nor has any study jointly assessed the quality of referral letters written by GPs to these two medical specialties in Australia.

## Methods

Questionnaires were mailed to all 175 gastroenterologists and 88 rheumatologists in New South Wales, requesting their opinion on the importance or otherwise of nine relevant items in referral letters from GPs. The nine items were: legibility, reason for referral, past medical history, current medications, drug allergy, family history, social history, examination findings, and prereferral investigations and results.

Two hundred new referral letters from 200 GPs were collected from private consulting rooms of gastroenterologists in northwest Sydney. Another 200 new referral letters, also from 200 GPs, were extracted from a public rheumatology outpatient clinic in Sydney's west. These letters were audited to determine how many were legible and how many contained each of the other eight items.

## Results

Replies were received from 133 (76%) of the 175 gastroenterologists and 83 (94%) of the 88 rheumatologists. The numbers (percentages) of specialists who viewed each item as important are shown in Table 1,

and from this is derived their relative ranking of importance. The results of the audit of GPs' referral letters are shown in Table 2.

## Discussion

The contents of GPs' referral letters to hospital outpatient and emergency departments and to consultants of various specialties have been audited in many studies.1-11 Our study is the first to jointly examine the views of gastroenterologists and rheumatologists on the desirable quality of GPs' referral letters and to jointly audit the contents of GPs' letters to the two medical specialties using the same auditing format.

As can be seen from Table 1, all gastroenterologists and rheumatologists who responded to our questionnaire agreed on the importance of reason for referral, while the majority (93-99%) also considered legibility, current medications and prereferral investigations and results as important. Past medical history and drug allergy were deemed significant by 60-82% of specialists. There was a large difference in the proportions of the two specialist groups regarding the importance of family history (68% of gastroenterologists versus 34% of rheumatologists) and regarding the importance of examination findings (50% of gastroenterologists, 34% of rheumatologists). Social history was viewed as necessary by about half of the specialists in each group (47% of gastroenterologists, 51% of rheumatologists). The ranking of importance for the nine items derived from the responses of the gastroenterologists and rheumatologists is almost identical.

Our audit revealed that 99-100% were legible (mostly due to computer use) and 97-99% contained reason for referral (Table 2). The large percentage of letters containing reason for referral very likely reflected the fact that referrals were made with clear objectives in the minds of the GPs. However, this did not in any way imply that GPs' reasons for referral were always the right ones or that referrals had always been made to consultants of the appropriate specialty. Inappropriate referrals have been widely reported elsewhere. 1-3

The percentage of letters containing past medical history and current medications ranged 60-71; higher in letters to rheumatologists than to gastroenterologists. These percentages are much higher than those given by Sorenson et al4 who studied 108 referrals from GPs to a department of gastroenterology and reported insufficient medical history in about half the cases and absence of information about medication in about three-quarters of cases. The high levels of reported past medical history and current medications found in our audit is encouraging, because 'planning of management may hinge on what has already failed'. However, it should be noted that 'current medications' downloaded by GPs from the computer may not really be current, as computer lists are often found to contain medications which patients stopped taking some time ago. A recent audit of 50 letters written by GPs for patients attending nephrology and hypertension outpatient clinics in NSW found that one in 3 letters gave an incomplete list of patients' medications and more than 40% did not state the correct drug names and the right dosages. The same study also found that only one in 4 referral letters mentioned over-the-counter medications or complementary medicines the patients had been taking.6 In our study, drug allergy appeared in about half of referral letters, while Sorenson et al<sup>4</sup> found only a few of their 108 cases contained information about drug allergy.

Patient family history and social history were included in only a small proportion of GPs' letters of referral (3-20%). There was a vast difference in the proportion of letters containing family history addressed to the gastroenterologists and the rheumatologists, 20% and 5% respectively. This might be due to the large number of patients referred to gastroenterologists for colonoscopic screening because of a family history of bowel cancer.

Examination findings were recorded in less than 10% of referral letters to both gastroenterologists and rheumatologists. This may reflect a lack of confidence in GPs regarding their physical examination techniques. It may also reflect some GPs' beliefs that specialists are going to examine the patients in detail and will find what they are supposed to find anyway. Interestingly, both our gastroenterologists and rheumatologists did not regard examination findings an important item in GPs' letters. In other studies, examination findings were reported in much higher percentages of GPs' referral letters. For example, Campbell et al<sup>7</sup> found examination findings in 38-58% of referral letters from GPs, while Bekkelund and

Item	Number (%) of gastroenterologists	Ranking (gastroenterologists)	Number (%) of rheumatologists	Ranking (rheumatologists)
Reason for referral	133 (100)	1	83 (100)	1
Investigations and results	132 (99)	2	80 (96)	2
Current medications	128 (96)	3	78 (94)	3
Legibility	127 (95)	4	77 (93)	4
Past medical history	109 (82)	5	62 (75)	5
Drug allergy	95 (71)	6	50 (60)	6
Family history	90 (68)	7	28 (34)	8 (equal)
Examination findings	66 (50)	8	28 (34)	8 (equal)
Social history	62 (47)	9	42 (51)	7

Table 2. Audit of GPs' referral letters to gastroenterologists and rheumatologists
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Item (in descending order of perceived importance)	Number (%) of letters to gastroenterologists ontaining the item (n=200)		Number (%) of letters to rheumatologists containing the item (n=200)	
Reason for referral	197	(99)	194	(97)
Investigations and results	58	(29)	41	(21)
Current medications	120	(60)	130	(65)
Legibility	197	(99)	200	(100)
Past medical history	122	(61)	141	(71)
Drug allergy	94	(47)	100	(50)
Family history	39	(20)	10	(5)
Examination findings	15	(8)	9	(5)
Social history	6	(3)	11	(6)

Albretsen<sup>8</sup> found examination findings in 49% of

referrals to their neurology department.

n = total number of referral letters received by each specialty

Prereferral investigations and results appeared in only 29% of letters to gastroenterologists and 21% of letters to rheumatologists (Table 2), very much below the expectation of the specialists (Table 1). This may be due to inadvertent failure of GPs to include investigation findings in their letters, or to the fact that prereferral investigations may not have been performed. Failure to include or enclose available prereferral investigation findings is undesirable, as it may result in unnecessary repeat investigations that may be costly or harmful to the patient (eg. increased exposure to radiation from radiological investigations). This can also potentially delay the initiation of appropriate treatment.

Although GPs' letters addressed to gastroenterologists were collected from private consulting rooms while those addressed to rheumatologists came from the outpatient clinic of a public hospital, it was never our intention to compare the quality of letters received by private versus public consultants. We believe that a conscientious GP would provide in his/her letter all information available and necessary, irrespective of whether the letter is meant for a private or public specialist.

It is clear from our collaborative study that GPs' referral letters to gastroenterologists and rheumatologists in NSW are adequate and informative in some respects, such as legibility, reason for referral, past medical history and current medications; while deficient in other respects, especially with regard to the inclusion of prereferral investigations and results. As good referral letters are important in the management of patients, further studies should focus on the ways of improving the quality of this means of communication. Jenkins et al<sup>9</sup> have suggested the use of form letters which they believe 'are generally shorter but contain more information than nonform letters'. Similarly, Tattersall et al<sup>10</sup> have recommended the use of headings in structured form letters to facilitate the identification of the desired information. For referral to hospital emergency departments, a telephone call from the GP may further improve the quality of information.<sup>11</sup>

Whether good referral letters matter at all in the further management of patients can only be decided by an assessment of patient outcomes. Unfortunately, it is difficult to relate patient outcomes to the quality of referral letters, as the outcomes depend on a large number of factors such as the type and severity of illness, skill and commitment of the specialists, the nurses and the paramedical staff, and the quality of management facilities available.

## Implications for general practice

- Good referral letters from GPs are important for further patient management by specialists.
- · Gastroenterologists and rheumatologists, like other specialists, have certain

- expectations regarding the quality of GPs' referral letters.
- General practitioners should ensure that their referral letters are legible and contain sufficient relevant information about their patients.
- Of importance are reason for referral, accurate and complete patient medication lists, as well as prereferral investigation results.

Conflict of interest: none declared.

## References

- Jenkins RM. Quality of general practitioner referrals to outpatient departments: assessment by specialists and a general practitioner. Br J Gen Pract 1993;43:111-3.
- Mollov E. O'Hare JA. Unravelling referrals to medical outpatients. Ir Med J 2003:96:145-6.
- Watson E, Austoker J, Lucassen A. A study of GP referrals to a family cancer clinic for breast/ovarian cancer. Fam Pract 2001;18:131-4.
- Sorensen HT, Rasmussen HH, Mortensen FV, Freund KS. Referral to a department of medical gastroenterology. A study of the content of the referral letter and the reason for referral. [Danish]. Ugeskrift for Laeger 1990;152:322-3.
- Dupont C. Quality of referral letters. Lancet 2002;359:1701.
- Carney SL. Medication accuracy and general practitioner referral letters. Intern Med J 2006;36:132-4.
- Campbell B, Vanslembroek K, Whitehead E, et al. Views of doctors on clinical correspondence: questionnaire survey and audit of content of letters. BMJ 2004:328:1060-1.
- Bekkelund SI, Albretsen C. Evaluation of referrals from general practice to a neurological department. Fam Pract 2002;19:297-9.
- Jenkins S, Arroll B, Hawken S, Nicholson R. Referral letters: are form letters better? Br J Gen Pract 1997:47:107-8.
- 10. Tattersall MHN, Butow PN, Brown JE, Thompson JF. Improving doctors' letters. Med J Aust 2002;177:516-20.
- 11. Montalto M, Harris P, Rosengarten P. Survey of Australian emergency physicians' expectations of general practitioner referrals. Br J Gen Pract 1993;43:277-80.

