Improving doctors' letters

Martin H N Tattersall, Phyllis N Butow, Judith E Brown and John F Thompson

"I have made this letter longer than usual because I lack the time to make it short."

Blaise Pascal (1623–1662)

PATIENT CARE hinges in part on adequate and timely information exchange between treating doctors. Referral and reply letters are common means by which doctors exchange information pertinent to patient care. Ensuring that letters meet the needs of letter recipients saves time for clinicians and patients, reduces unnecessary repetition of diagnostic investigations, and helps to avoid patient dissatisfaction and loss of confidence in medical practitioners. Much clinician time is spent writing or dictating letters to other doctors, but the extent to which these letters contain the information needed by letter recipients is uncertain. Pringle[1] described the referral letter as "the most underexploited method to influence consultant attitudes" and the reply letter "the most neglected route of GP education". Few studies have investigated the information content of doctors' letters, and/or the information preferences of doctors receiving letters.

Theodore Dalrymple, in his *Spectator* column "If symptoms persist", reported a letter interchange between a general practitioner and an emergency department as follows:

GP to emergency department:

Dear Dr,
Re John Smith.
? Heart.
Yours sincerely,
... .

Emergency department reply to GP:

Dear Dr,
Re John Smith.
Not heart, lungs.
Yours sincerely,
... .

While this exchange may not be typical, it highlights the opportunity for enhancing doctors' diagnostic and letter-writing skills.

Discharge letters after hospital admission have been reported to be deficient in several content areas and in their timeliness and legibility.[2-5] It has been observed that letters from specialists to referring doctors are commonly written as much for the dictating doctor's records as for the benefit of the letter recipient's.[6] In some institutions, a typed letter to the referring doctor is the only hard-copy record of the consultation. This duality of purpose compromises optimal communication between specialists and referring doctors.

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ABSTRACT

- Information contained in letters of referral and reply often does not meet the information needs of letter recipients.
- Missing reports of previous investigations and insufficient detail in the referral letter to specialists are the most serious and common problems.
- General practitioners prefer structured, computer-generated letters to unstructured, dictated letters.
- Referring surgeons and GPs identify delay in receiving the reply letter and insufficient detail as relatively common problems after a new patient consultation. They want the reply letter to describe the proposed treatment, expected outcomes and any psychosocial concerns, yet these items are often omitted.
- A letter content and format prompt card has the potential to enhance the quality of correspondence between medical specialists and referring doctors.
- Specialist medical bodies should consider preparing prompt cards (setting out preferred information content and format for letters) to distribute to their members.

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Referral letters

Studies of referral letters have consistently reported that specialists are dissatisfied with their quality and content. The concerns most often expressed are the frequent absence of an explanation for referral, medical history, clinical findings, test results and details of prior treatment. A summary of studies that have carried out information audits of referral letters or investigated specialists' information preferences is presented in Box 1.

One of these studies investigated the quality of referral letters in the cancer care setting, which is our particular area of interest. A limited audit was made of 103 consecutive new patients seen by one radiation oncologist in Sydney.[9] Of the 80 referral letters available, 95% reported the diagnosis, but only 56% provided a history of the current illness. Less than half the letters described the clinical findings or included information on medical history, social history, current medications or allergies. The author concluded that

1: Summary of studies of content of referral letters and information that specialists want in referral letters (*n* = number of letters analysed)

Item of information	Hansen et al[7] (*n* = 141)*	Newton et al[8] (*n* = 39)*	Graham[9] (*n* = 80)*	Long and Atkins[4] (*n* = 80)†	Newton et al[10] (*n* = 159)†
Reason for referral	86%	95%	NR	NR	92%
History of problem	90%	95%	56%	63%	94%
Medical history	29%	62%	31%	64%	87%
Clinical findings	66%	36%	46%	NR	79%
Findings on investigation/tests	45%	15%	20%	NR	73%
Current medication	NR	56%	14%	NR	92%
Sociopsychological matters	NR	18%	NR	NR	52%
Known allergies	NR	8%	9%	NR	61%
Whether patient was involved in referral decision	NR	10%	NR	NR	37%
What patient/ relative has been told	NR	0	NR	NR	54%
What patient/ relative expects from referral	NR	0	NR	NR	55%
What referring doctor expects from referral	NR	5%	NR	NR	80%
Whether new referral or re-referral	NR	15%	NR	NR	76%
Previous therapy/ interventions	51%	NR	NR	74%	NR
Provisional diagnosis	66%	NR	95%	61%	NR
Request for copy of consultation report	38%	NR	NR	NR	NR
Statement about expectation for return of patient	23%	NR	NR	NR	NR

* Figures represent % of referral letters that include this item. † Figures represent % of specialists who want this item included in referral letters. NR = not reported in the study.

relevant and important information was not communicated in referral letters.

Several authors have reported the use of form letters to enhance information content and communication in referrals from GPs to hospital and medical specialists.[11-15] Form letters are generally shorter but contain more information than non-form letters.[13] Couper and Henbest reported an improvement in the quality of referral letters after the introduction of a form letter, but the quality of reply letters did not improve.[14] Dupont reviewed the information content of 600 referral letters to a dermatology outpatient clinic and proposed that a preferred form letter should be sent to GPs by the hospital department with the kind of information required.[15]

Letters from medical specialists to referring doctors

A summary of reports of the information content of specialists' letters to referring doctors is shown in Box 2. Attempts to improve the quality of correspondence from medical specialists to referring doctors have included the promotion of problem lists in letters[11] and the use of a structured letter containing both a problem list and a list of management proposals.[12] In a study of letters relating to patients attending an open-access chest-pain clinic, GPs preferred structured, computer-generated letters to unstructured, dictated letters.[17] Computer-generated discharge documents for patients after surgical admissions are also preferred by GPs.[18]

There have been few studies of specialists' letters in the cancer care setting. Bado and Williams[5] noted that GPs preferred letters from hospital specialists to include technical topics (eg, diagnosis, results of investigation, treatment details) more than social topics. More than 80% of GPs wanted information on prognosis and what the patient had been told, yet less than 20% of letters contained this information. Tattersall et al[16] identified eight items rated as essential information by a majority of letter recipients: diagnosis, clinical findings, test results, further tests, treatment options and recommendations, prognosis, likely benefits of treatment, and possible side effects. On the other hand, fewer than half of doctors receiving letters regarded details of medical history, drug or social history as essential, yet many letters contained these details.

McConnell et al[19] reported a staged investigation of letters from oncologists to referring doctors. In semi-structured interviews with seven oncologists, 10 surgeons and 11 GPs, they sought views on what information was needed in reply letters after an oncologist consultation. They identified 32 discrete categories of preferred information and compiled a list of common problems encountered in doctor-to-doctor communication. Based on these data, the investigators developed questionnaires for referring specialists and GPs and conducted a survey of a large group of referring GPs and specialists. Factor analysis of the resulting data resolved the 32 items into five categories of information: history/background, psychosocial concerns, examination and investigation findings, future management/expected outcomes, and treatment/management plan. Letters gathered from a large group of oncologists were then studied for their information content and compared with the preferences of the referring doctors. Letters commonly contained details on results of examination and investigations (items most often wanted by surgeons) but "rarely mentioned" details desired by referring doctors concerning the treatment plan, future management/expected outcomes, and any psychosocial concerns. A content template for letters from oncologists was proposed.

2: Summary of studies of content of reply letters from specialists and information that referring doctors want in reply letters (*n* = number of letters analysed)

Item of information	Hansen et al[7] (*n* = 83)*	Newton et al[8] (*n* = 39)*	Bado and Williams[5] (*n* = 68)*	Tattersall et al[16] (*n* = 94)*	Newton et al[10] (*n* = 115)†	Bado and Williams[5] (*n* = 73)†	Tattersall et al[16] (*n* = 88)†
Presenting history	65%	74%	NR	76%	98%	NR	80%
Medical history	NR	74%	NR	93%	69%	NR	71%
Drug history	NR	NR	NR	47%	NR	NR	63%
Social history	NR	NR	NR	63%	NR	NR	56%
Prognosis	NR	NR	10%	39%	NR	81%	97%
Side effects of proposed treatment	NR	NR	5%	14%	NR	41%	95%
Diagnosis/staging of cancer	94%	87%	100%	94%	98%	97%	99%
Clinical findings	80%	74%	NR	72%	89%	NR	97%
Explanation of side effects	NR	NR	NR	4%	NR	NR	86%
Further tests done or recommended	NR	NR	NR	30%	NR	NR	98%
Test results	66%	56%	NR	77%	91%	NR	99%
Treatment/therapy recommended	78%	90%	100%	84%	99%	82%	99%
Follow-up	88%	62%	NR	53%	91%	NR	98%
Whether patient expected to return to specialist	19%	NR	NR	NR	NR	NR	NR
Reason for referral addressed	95%	NR	NR	NR	NR	NR	NR
Who saw the patient	NR	92%	NR	NR	85%	NR	NR
What the patient or relative has been told	NR	23%	18%	0	91%	85%	96%
Family problems relevant to management	NR	NR	0	NR	NR	42%	NR
Advice given about when to contact hospital	NR	NR	10%	NR	NR	43%	NR
Benefits of treatment	NR	NR	NR	0	NR	NR	98%
Role of referring doctor and specialist	NR	NR	NR	0	NR	NR	89%

* Figures represent % of reply letters that include this item. † Figures represent % of referring doctors who want this item included in reply letters. NR = not reported in the study.

3: Reply letter prompt sheet used in our letter-writing training program for oncologists

Reply letter prompt sheet

Header
- Diagnosis
- Reason for referral
- Problem list
- Current drugs

Paragraphs and Headings
- → History
- → Physical findings and review of results
- → Proposed treatment
  - Treatment aim
  - Reference to options considered and not supported
  - Recommended treatment
  - Likely short- and long-term side effects
  - Do not assume major knowledge
- → Likely results and prognosis
- → Management plan
  - Outline proposed treatment schedule
- → What the patient has been told
- → Psychosocial aspect
  - eg, Patient understanding, psychiatric/social problems
- → Follow up arrangements
  - Include when to contact the oncologist
- → What is the role of the specialist or GP

Copies: Who are the copies being sent to and what is their status (eg, GP, specialist, social worker)

Our training program in letter writing for oncologists

We used the results of McConnell et al[19] to develop a training course for oncologists in communicating with referring doctors after a new patient consultation. We also sought the views of the Royal Australian College of General Practitioners concerning the preferred content and format of letters from medical specialists, and prepared a letter prompt sheet (Box 3) that was presented during the training program. For a summary of our program and results, see Box 4.

Our study demonstrates that attending a letter-writing training course significantly improved the content of oncologists' letters after subsequent new patient consultations and increased the satisfaction of letter recipients in several areas.

A role for specialist medical bodies

Several years ago, Prasher[21] suggested that the specialist medical Colleges explore the possibility of developing a standard letter for all specialists replying to GPs. The Royal Australasian College of Physicians recently encouraged contributions to its newsletter, *Fellowship Affairs*, concerning medical record keeping and the format of correspondence, but no template has been recommended.[22] Specialist medical societies, the Colleges and/or hospital departments could usefully provide guidance to referring doctors on the preferred information and format of referral letters.

Conclusion

There are clear advantages of having a structured format for referral and reply letters, including the use of headings to allow the reader to easily identify the information desired.

4: Training program and results

In 2000, we sent a copy of the McConnell publication[19] to medical, radiation and surgical oncologists in New South Wales and invited them to participate in a training course. Participants (n = 31) provided de-identified copies of the next 20 letters they sent to referring doctors after a new patient consultation, and the names of the referring doctors. We wrote to these referring doctors (n = 348) and requested that they complete a questionnaire asking about their satisfaction with the letter, the information, its format and timeliness. Based on our previous work, we coded the presence or absence in each letter of three "format" and 10 "content" categories.

Participating oncologists then attended a training session in which we outlined the recommended information content of letters after a new cancer patient referral and presented an analysis of the pre-training letters in the study. Participants were given a prompt card and a floppy disc containing the preferred letter format. Participants were also given a folder containing confidential, individualised data on the content of their letters and views of the doctors to whom they had written before the training session, as compared with average results for the whole group. One of these letters, redrafted according to the recommended format, was included. Participants subsequently provided copies of the next 20 letters they sent after a new patient consultation, and the contact details of the doctors to whom they had written.

Statistical analysis

Given the clustered nature of the data, multilevel modelling techniques were used, with letter content and satisfaction (level 1) being nested within the oncologists (level 2). Logistic regression was used to model change resulting from the training intervention in both the content of letters and recipients' satisfaction with the letters. Linear regression was used to model changes in the degree of satisfaction with the format and timeliness of the letters. All analyses were conducted using MLnWin.[20]

Results

Forty-four of 96 oncologists agreed to participate, but nine withdrew before training, and four dropped out after attending the training course. The final sample of 31 comprised 13 medical, 11 radiation and seven surgical oncologists. Three hundred and forty eight questionnaires were returned by letter recipients in the pre-training period (33%), and 274 after the training session (37%). Forty-eight per cent of letter recipients' questionnaires were received from general practitioners.

Format and content of letters

Letter format and content before and after training and parameter estimates for changes in letter content are presented below. There were significant increases in the presence of the following information items: what the patient had been told, psychosocial concerns, patient wishes and expectations, and how/when to contact the oncologist.

Before training, oncologists' letters rarely stated the diagnosis or included a problem list at the start of the letter, nor did the letters use headings. Significant improvement in all these areas was noted after training.

Satisfaction with letters

Recipients' satisfaction with the oncologists' reply letters is shown below. Change in satisfaction with letter content was greatest with regard to coverage of psychosocial concerns. The satisfaction of the letter recipients with regard to the format or timeliness of letters did not change after oncologists had attended their training program.

Content of oncologists' reply letters before and after training

Item of information	Before training*	After training*	Odds ratio (95%CI)
Format items			
Diagnosis at top of page	7.1%	55.1%	11.7 (3.3–41.8)†
Problem list	1.0%	12.9%	14.3 (3.4–59.7)†
Headings	0.6%	36.3%	91.3 (20.4–408.1)†
Content items			
History and background	94.2%	93.8%	0.5 (0.1–1.7)
Examination and investigative findings	92.5%	90.2%	0.5 (0.3–1.1)
Management plan	96.2%	96.6%	1.3 (0.6–3.0)
Treatment options	56.8%	63.9%	1.3 (0.8–2.3)
What patient was told	42.4%	62.0%	2.1 (1.2–3.7)
Treatment side effects	36.7%	44.2%	1.2 (0.6–2.1)
Prognosis	29.0%	40.8%	1.3 (0.7–2.4)
Psychosocial concerns	25.7%	36.1%	2.2 (1.3–4.0)
Patient wishes and expectations	13.4%	23.6%	1.9 (1.2–3.1)
How/when to contact oncologist	2.1%	9.8%	4.5 (1.5–13.3)

* Figures represent % of reply letters that include this item. †$P < 0.001$.

Referring doctors' satisfaction with oncologists' reply letters before and after training*

Item of information	Before training†	After training†	Odds ratio (95% CI)
History and background	47.9%	41.0%	1.01 (0.99–1.03)
Results of examination and investigative findings	46.4%	48.2%	1.03 (0.62–1.71)
Management plan	51.2%	56.4%	1.15 (0.75–1.77)
Treatment options	55.3%	55.5%	1.05 (0.69–1.62)
What patient was told	38.7%	50.6%	1.63 (1.02–2.58)
Treatment side effects	29.2%	32.4%	1.84 (1.11–3.04)
Prognosis	42.9%	38.5%	1.07 (0.67–1.71)
Psychosocial concerns	21.2%	43.0%	1.89 (1.08–3.33)
Patient wishes and expectations	23.6%	31.4%	1.69 (1.06–2.68)
How/when to contact oncologist	28.1%	34.4%	1.62 (1.04–2.53)

* Satisfaction of letter recipients with regard to format or timeliness of letters was not influenced by the oncologist having attended the training program. † Figures represent % of referring doctors who regarded coverage of this content item in reply letter as "excellent".

Conducting a letter-writing training program is an expensive intervention. It is yet to be established whether use of a letter content and format prompt card with no accompanying training will promote improved written communication between doctors.

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Competing interests

None identified.

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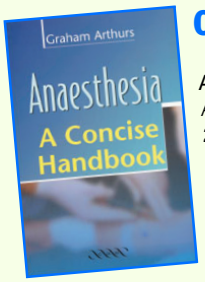
book review



Overview of anaesthetics

Anaesthesia: a concise handbook. Graham Arthurs. London: Greenwich Medical Media, 2001 ($69.30, ix + 159 pp). ISBN 1 84110 080 3.

THIS POCKET-SIZE BOOK aims to bring together helpful information for safe and effective everyday anaesthetic practice. It is based upon the personal notes of the author and is made up of a series of topics organised in alphabetical order. Many pages are devoted to key areas such as airway management, cardiac resuscitation protocols, emergency scenarios and nerve blocks. The range of topics covered is broad. It includes such things as fluid resuscitation through a rectal tube (in the absence of IV access), how to set up tubing for one-lung lavage through a double-lumen endotracheal tube, and even how to manage the situation when penile turgescence limits the ability to pass the cystoscope! It also includes sections on CXR interpretation and management of asthma in the emergency department that would be better suited to a medical handbook. As a result of this breadth, there is often a lack of sufficient detail to make the book seriously worthwhile.

Although some of the content relates more to the United Kingdom style of anaesthetic practice (which includes more intensive care), the book does contain some interesting case reports and anecdotes (which are well referenced) and does attempt to emphasise the physiological principles upon which many of our interventions are based.

I have several criticisms. The book often fails to emphasise the key points of a topic. For example, the section on the treatment of hyponatraemia recommends the use of hypertonic saline without warning of the dangers of rapid over-correction, and the section on ventilating the asthmatic patient does not consider the issue of dynamic hyperinflation, which can be lethal in these patients. Also, some of the recommended treatments do not reflect contemporary practice (eg, intermittent CO_2 inhalation as a treatment for postdural puncture headache).

The book is not particularly well organised and is repetitive in places. Some important areas, such as postoperative nausea and vomiting, are given scant attention. Added to this, the "point form" style in which it is written makes it difficult to read.

Although good in concept, I would find the book difficult to recommend to anaesthetic trainees or anaesthetists. It lacks sufficient detail to be of real use, has many gaps and describes many procedures or ideas more suited to Third World anaesthesia than current Australian practice.

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