# Improving doctors’ letters – towards rivers of living water

With World Patient Safety day having come and gone in 2020(1), we reflected on the role that written communication between doctors plays in safe healthcare. The Australian Commission on Safety and Quality in Health Care has a Communicating for Safety Standard that “aims to ensure timely, purpose-driven and effective communication and documentation”(2) and in 2002, Tattersall, et al. called for improved standards in doctors’ letters(3). Yet almost two decades later, we feel that many doctors’ letters still fail the Communicating for Safety Standard’s aim. Why are doctors’ letters still an issue? Can we learn ways of improving them from the human-factors literature? Are there other barriers which prevent our letters meeting the standard?

## Dual purpose

Doctors’ letters are often poorly written because they are trying to serve a dual purpose – as communication to the referring doctor, and a record of the consultation(3,4). If letters are the rivers of communication between the specialist and the general practitioner, then long and unfocussed dual-purpose letters are rivers littered with unfiltered data (much of it already known to the referring doctor) that turn the water into a murky mess. Instead, these letters should be distilled by the crystal-clear purpose of informing the reader (the referring doctor) of the salient issues relevant to the consultation.

## Humans factors – cognitive load and reading speed

Cognitive load theory informs us that the mind has limited ability to process large amounts of disorganised information(5). Therefore it is not surprising that the literature points to the need for clarity and structure in the letter to foster readability(4,6,7). From a safety perspective, Hannawa’s research outlines five core communication competencies – sufficiency, accuracy, clarity, contextualization, and interpersonal adaptation – as essential for high-quality patient care(8). In addition to cognitive overload, psychologists have shown that we overestimate our reading speed. In particular, non-fiction writing, extremes-of-age, and English-as-a-second-language may reduce reading speed(9) and adversely impact comprehension. We therefore advocate for a “less-is-more approach” and encourage spending the time to write shorter letters. In our opinion, reading a doctor’s letter should not take more than three minutes (20% of a 15-minute consultation). This is consistent with Rash, et al.’s conclusion that the letter should be no longer than 350 words or two pages(4). Effective letters control the flow; ineffective ones are like tropical thunderstorms that flood the reader’s mind with unwanted and unnecessary information, and potentially break the dams of patient safety.

## Timeliness

Quality of the communication also relates to the timeliness of the letter’s reception(2,6,10). A high-quality letter is readable in a short amount of time ***and*** arrives in time. Some factors affecting the arrival time are beyond our control (e.g. Australia Post, efficiency and skill of the typist, and fears around privacy that keep the fax machine industry afloat by precluding emails), but some are. Imagine that your letter is the water your colleague needs while they’re wandering the desert of community practice – then do what you can to ensure that the water gets to them as quickly as possible.

## Templates

Many authors have called for the use of standardised templates(3,4,7), as have some colleges in Australia through association with Medicare item numbers(11,12). Based on (i) our experience (as a specialist pain medicine physician [AYH] and general practitioner [FTA]); (ii) our reading of the evidence(4); (iii) existing guidelines(11,12); (iv) safe communication principles(8); and (v) Engel’s biopsychosocial model(13) we propose that the doctors’ letter should be broadly structured into three sections (see Box). Templates are the filtration and plumbing system that can help make the water drinkable.

## The formulation

We believe that of the three sections outlined, the formulation requires the greatest skill and deserves the most attention because it is often non-existent or poorly executed. We therefore offer a formulation template (utilising numbered lists summarising pertinent information and grouping information according to topic) to assist writers in synthesising a formulation.

The role of the formulation is to synthesise and summarise why a patient presents to the clinic(14). The first issue in the formulation should summarise the history, examination, investigations, and previous treatments relating to the “presenting complaint” in a maximum of *three to five sentences*. In the pain clinic, it should be the pain diagnosis; in endocrinology, it might be diabetes mellitus; in colorectal surgery it might be sigmoid carcinoma. A summary of all other biomedical comorbidities (including previous major surgery) such as hypertension, ischaemic heart disease, osteoporosis, etc. should then follow for completeness. This summary of medical conditions can help to paint a picture of how frail or complex the patient is. For example, a patient with a history of only hypertension is far less complex than the patient with congestive cardiac failure, chronic kidney disease and hypertension.

The above constitutes the bare minimum we expect in a clinical letter, but to meet the definition of a “comprehensive synthesis”(14), we have identified four other considerations that warrant inclusion. According to the Fifth National Mental Health and Suicide Prevention Plan, almost half of adult Australians will experience mental illness in their lifetime(15). Mental health issues therefore deserve prominence as a distinct category. We thus propose that the third issue should summarise any formal mental health diagnoses (e.g. depression, personality disorders, or post-traumatic stress disorder) or absence of such diagnoses.

In our experience obesity and inappropriate polypharmacy are common but infrequently mentioned in the letter despite posing significant population health burdens(16,17). We therefore propose that a statement on polypharmacy (allowing the writer to summarise the current medication list and previous medication trials) and metabolic health be included as a cognitive aid for these issues to be addressed in the management plan. And on the subject of metabolic health, we prefer the “waist to height ratio” nomenclature over body mass index(18), and use it to avoid the term “obesity” because of obesity’s pejorative connotations(19).

“Social determinants of health” is defined as “the conditions in which people are born, grow, live, work and age”(20). We believe that a short summary of these conditions is in keeping with Engel’s biopsychosocial model(13) and helps the reader better understand the patient’s context. In our formulation template, this final issue should summarise developmental and social factors that may contribute to the presentation. Both precipitating and maintaining negative factors (e.g. adverse childhood experiences(21), long-term unemployment, financial stress, social isolation) and positive protective factors (e.g. family supports, high levels of education) should be described.

## Medical education

Some might see letter writing as akin to turning on a hose; we see its complexity closer to building an irrigation system. We therefore believe that a lack of prominence in medical curricula is partly to blame for suboptimal doctors’ letters. Few doctors receive formal training in formulation and writing letters(4), and letter-writing education interventions can be expensive(3). However, in the context of competency-based medical education and patient safety(1,2), formulation and letter writing should be seen as essential skills(6) – “entrustable professional activities”. We propose evaluative judgement as a framework for improving the quality of doctors’ letters. This involves the use of self-assessment, peer assessment, feedback, rubrics, and exemplars(22) and we have outlined above some suggestions that might contribute to these rubrics and exemplars. We also note that letter writing, by its nature, lends itself to teaching in an electronic environment such as a massive open online course (MOOC) or within a learning management system. Despite the role of MOOCs being unclear in medical education at this point(23), we believe that well-designed, educationally-sound, online learning activities could support evaluative judgement and improve letter writing practices by providing formative feedback.

## Culture of Autonomy

We also note that education may prove futile if culture does not change. Medicine has a culture of autonomy(24,25), and this culture may explain why some of us persist writing long dual-purpose letters that lack structure. We believe that patients and colleagues alike are the ones to suffer from this culture of autonomy – patients may experience harm because information might be missed leading to clinical errors or misjudgement; colleagues may feel disrespected by being forced to drink large volumes of tainted water that fails to make points precisely and accurately. In an era of increasing patient complexity, a team-based approach, not autonomy, is required. This approach, to paraphrase Gawande, requires fewer “cowboys” writing long, poorly-structured, dual-purpose letters that serve the cowboys’ needs, and more pit crew members writing short, well-structured, single-purpose letters serving the patient and teams’ needs(25).

## The future

In summary, the format, content, and length of doctors’ letters should be evidence-based and tailored to a time-pressured audience. Good letter writing is an underappreciated skill that deserves greater prominence in the medical curricula. We believe that the introduction of electronic medical records might facilitate audit, big data research, and the use of artificial intelligence to provide feedback to the writer. Furthermore, investment in e-learning, medical education and translational research will play a role in developing methods for improving the standard of doctors’ letter writing in a cost-effective manner so that the next generation of writers, readers, and patients might benefit from rivers of living water that bring health and vitality.

## Acknowledgements

We wish to thank Dr Penny Gaskell, General Practice Liaison Officer, Eastern Health, for reviewing the manuscript. We also wish to thank Michele Gaca, Chief Librarian, Austin Health for reviewing the manuscript and suggesting it be submitted to MJA Insight.

**Dr Andrew Yanqi Huang is an Anaesthetist and Specialist Pain Medicine Physician working at Austin Health and Eastern Health, and is a PhD candidate in the Department of Medical Education at the University of Melbourne.**

**Dr Ferghal Timothy Armstrong is an Addiction Medicine Specialist and General Practitioner who is about to commence Pain Medicine training.**

**Peter Mellow is a former University academic of 30 years, who is now Director of Learning and Teaching at Eastern Health.**

|  |
| --- |
| Box – Letter templateFormulation (“a comprehensive synthesis of the multiple elements that led to a patient presenting at clinic or hospital with a problem”(14)):1. A short summary of relevant history, examination, investigations, and previous treatments relating to the presenting complaint.
2. A summary of other medical comorbidities (including previous major surgery).
3. A summary of mental health diagnoses or absence of such diagnoses.
4. A statement on polypharmacy (if present) and/or a list of medications.
5. A statement on metabolic health with preference to use of the terminology waist-to-height ratio.
6. A summary of psychosocial factors that might contribute to the presentation or be protective.

Expectation:* A short summary of the patient’s goals or expectations to emphasise a patient-centred approach and to give the patient a “voice” in the letter.

Management plan:* A numbered and unambiguous summarised list of recommendations that specify who is responsible for follow-up of each recommendation, and that outline contingency plans in the event of deterioration.
 |

## References

1. World Health Organisation. World Patient Safety Day [Internet]. WHO. World Health Organization; 2020 [cited 2020 Oct 8]. Available from: http://www.who.int/patientsafety/world-patient-safety-day/en/

2. Australian Commission on Safety and Quality in Health Care. Communicating for Safety Standard [Internet]. [cited 2020 Oct 8]. Available from: https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard

3. Tattersall MHN, Butow PN, Brown JE, Thompson JF. Improving doctors’ letters. Med J Aust. 2002;177:5.

4. Rash AH, Sheldon R, Donald M, Eronmwon C, Kuriachan VP. Valued Components of a Consultant Letter from Referring Physicians’ Perspective: a Systematic Literature Synthesis. J Gen Intern Med. 2018 Jun 1;33(6):948–54.

5. Sweller J. Cognitive Load Theory. In: Mestre JP, Ross BH, editors. Psychology of Learning and Motivation [Internet]. Academic Press; 2011 [cited 2020 Jun 18]. p. 37–76. Available from: http://www.sciencedirect.com/science/article/pii/B9780123876911000028

6. Vermeir P, Vandijck D, Degroote S, Peleman R, Verhaeghe R, Mortier E, et al. Communication in healthcare: a narrative review of the literature and practical recommendations. Int J Clin Pract. 2015;69(11):1257–67.

7. Russell C, Sandu V, Moroz I, Tran C, Keely E, Liddy C. Key Components of Traditional Consultation Letters and Their Relevance to Electronic Consultation Replies: A Systematic Review. Telemed E-Health. 2019 Oct 9;tmj.2019.0161.

8. Hannawa AF. “SACCIA Safe Communication”: Five core competencies for safe and high-quality care. J Patient Saf Risk Manag. 2018 Jun 1;23(3):99–107.

9. Brysbaert M. How many words do we read per minute? A review and meta-analysis of reading rate. J Mem Lang. 2019 Dec 1;109:104047.

10. Rodger A. Improving doctors’ letters. Med J Aust. 2003;178(3):144–144.

11. Medicare Australia. Item 143 | Medicare Benefits Schedule [Internet]. 2019 [cited 2020 May 12]. Available from: http://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=143&qt=item&criteria=143

12. The Royal Australian and New Zealand College of Psychiatrists. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) Referred Patient Assessment and Management Plan Guidelines [Internet]. 2009 [cited 2020 May 19]. Available from: https://www.ranzcp.org/files/resources/college\_statements/practice\_guidelines/referred\_patient\_assessment\_and\_management\_guideli.aspx

13. Engel GL. The clinical application of the biopsychosocial model. Am J Psychiatry. 1980 May 1;137(5):535–44.

14. Tsang KK, Fernandes SA, Ibeziako P. Principles of Biopsychosocial Formulation and Interventions in the Pediatric Medical Setting. In: Guerrero APS, Lee PC, Skokauskas N, editors. Pediatric Consultation-Liaison Psychiatry : A Global, Healthcare Systems-Focused, and Problem-Based Approach [Internet]. Cham: Springer International Publishing; 2018 [cited 2020 Jun 12]. p. 181–92. Available from: https://doi.org/10.1007/978-3-319-89488-1\_10

15. Australian Government Department of Health. The Fifth National Mental Health and Suicide Prevention Plan. Canberra: Department of Health Canberra; 2017.

16. World Health Organization. WHO | Controlling the global obesity epidemic [Internet]. WHO. World Health Organization; 2013 [cited 2020 May 19]. Available from: https://www.who.int/nutrition/topics/obesity/en/

17. Guillot J, Maumus-Robert S, Bezin J. Polypharmacy: A general review of definitions, descriptions and determinants. Therapies [Internet]. 2019 Oct 28 [cited 2020 Jun 12]; Available from: http://www.sciencedirect.com/science/article/pii/S0040595719301507

18. Ashwell M, Gibson S. Waist-to-height ratio as an indicator of ‘early health risk’: simpler and more predictive than using a ‘matrix’ based on BMI and waist circumference. BMJ Open. 2016 Mar 1;6(3):e010159.

19. Wharton S, Lau DCW, Vallis M, Sharma AM, Biertho L, Campbell-Scherer D, et al. Obesity in adults: a clinical practice guideline. CMAJ. 2020 Aug 4;192(31):E875–91.

20. World Health Organization. WHO | About social determinants of health [Internet]. WHO. World Health Organization; 2017 [cited 2020 Jun 12]. Available from: http://www.who.int/social\_determinants/sdh\_definition/en/

21. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. Am J Prev Med. 1998 May 1;14(4):245–58.

22. Tai J, Ajjawi R, Boud D, Dawson P, Panadero E. Developing evaluative judgement: enabling students to make decisions about the quality of work. High Educ. 2018 Sep 1;76(3):467–81.

23. Pickering JD, Henningsohn L, DeRuiter MC, Jong PGM de, Reinders MEJ. Twelve tips for developing and delivering a massive open online course in medical education. Med Teach. 2017 Jul 3;39(7):691–6.

24. Freidson E. Profession of medicine : a study of the sociology of applied knowledge [Internet]. New York : Dodd, Mead; 1970 [cited 2020 May 15]. 442 p. Available from: http://archive.org/details/professionofmedi0000frei

25. Gawande A. How do we heal medicine? [Internet]. 2012 [cited 2020 May 15]. Available from: https://www.ted.com/talks/atul\_gawande\_how\_do\_we\_heal\_medicine