

Towards improved language assessment of written health professional communication: the case of the Occupational English Test

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Background

Writing is used by healthcare professionals to communicate about patient care with other health professionals between departments, specialties and primary care. Written documentation provides a record of information for monitoring patient progress, for tracking a patient's journey through the healthcare system, and for other administrative, medico-legal and accounting purposes. Effective written documentation is crucial for safe and high quality patient care. Incomplete or inaccurate written handover documentation in medical records, such as discharge summaries or referral letters, can lead to disrupted continuity of care and increased risk of adverse events (Manias, Jorm, & White, 2008).

Overseas trained health professionals play a crucial role in meeting Australia's health workforce shortages (Australian Government Department of Health, 2008; Barton, Hawthorne, Singh, & Little, 2003) and international Medical Graduates (IMGs) will remain essential to primary, rural and subacute health care delivery for the foreseeable future (Garling, 2008; Hawthorne, 2012). For example, in rural and remote Queensland, 46% of doctors are IMGs and in Victoria 36% of GPs are overseas trained (Hawthorne, 2012). Between 2001 and 2006, nearly 7000 internationally educated nurses (IENs) migrated to Australia, with the Philippines, India, Japan/South Korea and China making up four of the top five regions of origin (Hawthorne, 2012). Many IMGs and IENs are from non-English speaking

backgrounds and from developing countries (Mullan, 2005), where clinical communication skills training tends not to be a foundational component of the medical curriculum (Dorgan, Lang, Floyd, & Kemp, 2009). While there are local language and communication skills' interventions to enhance the quality and safety of IMGs' and IENs' communication (Konno, 2006; Woodward-Kron, Stevens, & Flynn, 2011), very few interventions address the written communication skills required of health professionals. Concerns about some IMGs' language and clinical communication skills have been a consistent theme in the national and international medical literature (Dahm, 2011; Hall, Keely, Dojeiji, Byszewski, & Marks, 2004; Pilotto, Duncan, & Anderson-Wurf, 2007; Zulla, Baerlocher, & Verma, 2008), with similar concerns evident in nursing (Brunero, Smith, & Bates, 2008; Deegan & Simkin, 2010).

These concerns about the clinical communication skills of overseas trained health professionals were mirrored by findings from a 2012 Australian parliamentary inquiry into the assessment and registration processes for IMGs (House of Representatives Standing Committee on Health and Ageing, 2012), adding urgency to the need for defensible language standards for assessing overseas trained doctors' and nurses' readiness to participate in the Australian health workforce. They also raise the question of whether current language tests used for screening overseas-trained health professionals are sufficiently aligned with the writing demands of the workforce, in particular whether the criteria sufficiently mirror those that would be applied by health professionals and whether the passing standards set are appropriate.

An Australian Research Council Linkage study (LP130100171), co-funded by Cambridge Boxhill Language Assessment (CBLA, owner of OET), explores these issues in more detail in relation to the Occupational English Test (OET), an English for specific purpose screening test. This test was designed to establish the adequacy of the workplace related language and communication skills of overseas-trained non-native English speaking health professionals (McNamara, 1996). Cambridge Boxhill Language Assessment administers the OET in major cities across Australia and overseas. Twelve different health profession disciplines use the test as evidence of sufficient English proficiency to practise in an English-speaking country. Doctors and nurses are currently the largest group of test takers.

The OET is a specific-purpose language test in that it attempts to model the communicative domain of healthcare settings through the test tasks. For the writing sub-test, which is the focus of the study reported in this paper, candidates are required to write a letter of referral; this task is currently assessed by language-trained raters using four linguistic criteria – namely APPROPRIATENESS OF LANGUAGE, COMPREHENSION OF STIMULUS, LINGUISTIC FEATURES

(grammar & cohesion), and PRESENTATION FEATURES (spelling, punctuation and layout). To what extent these criteria resonate with the types of criteria that health professionals apply when reviewing written handover documentation (i.e. the indigenous criteria of health professionals), of which referral letters are one example, has not yet been investigated. A further more holistic criterion, OVERALL TASK FULFILMENT, is used as a fifth criterion by the language-trained raters in the OET writing assessment, but this is defined very generally and does not seem to draw on healthcare specific judgements of communicative quality.

The current study

This study brings together a multi-disciplinary team of language testers, medical and nursing clinician educators, an applied linguist with expertise in healthcare communication, Cambridge Boxhill Language Assessment (the partner organisation, owner of OET) and staff from two Australian teaching hospitals, one in a regional setting and the other metropolitan. The study design is mixed methods with both qualitative and quantitative approaches. There are four project phases: investigating the writing practices and processes involved in generating patient records; identifying the indigenous criteria (Jacoby, 1998; Jacoby & McNamara, 1999) doctors and nurses use in establishing effective medical records, applying these indigenous criteria to candidate performances on the OET writing task; and developing new stakeholder informed passing standards against these criteria.

In the first phase, the aim was to gain a detailed understanding from a range of stakeholders about how medical records, and in particular, written handover documents (such as referral letters or discharge summaries) are created and communicated. For example, the interviews investigated who reads which components of the records, how the information within these records is used and by whom, what aspects of written communication stakeholders value in these documents and what written communication problems participants identify in relation to medical records. Interviews were conducted with a range of stakeholders, including senior doctors and nurses working in a range of contexts within and outside of hospitals (e.g. nursing unit managers, medical registrars, consultants, GPs), medical and nursing educators, and health information service managers who have a key role in managing the written data. In relation to referral letters, which are directly relevant to the OET writing task, participants stated in interviews that they valued conciseness, legibility (if handwritten), and correctly addressed and signed documents. They also mentioned key components they expected to find in such documents, including patient background, details about the current condition, relevant results and clinical investigations, how the patient has been managed, what reports are pending and what follow up the of the letter is requesting of the reader.

A number of the participants also mentioned issues relating to written handover documentation such as incomplete or missing discharge summaries and inaccurate details. The participants were aware of a lack of training for recent graduates and IMGs in how to write these documents.

In the second phase (currently underway), we aim to identify health professionals' indigenous criteria (Jacoby, 1998; Jacoby & McNamara, 1999), i.e. the aspects of written medical handover documents² valued by health professionals, by asking health professionals to comment on actual handover documents. These aspects are being investigated in workshops by presenting health professionals with written handover documents selected from a sample of 200 randomly extracted and de-identified medical records from our two partner hospitals. During these workshops, the participating doctors and nurses are asked to comment on the strengths and weaknesses of each of these documents. The commentaries will be analysed qualitatively for recurring themes. As was the case in a previous study on the OET speaking task (Elder et al., 2013), we anticipate that these themes will inform a set of revised, more professionally relevant descriptors for the OET writing task.

In the third phase, the existing criteria used to judge the OET writing sub-test will be revised to reflect the professionally relevant criteria identified in Phase 2. Experienced language assessors will be trained to apply these revised criteria to a series of writing performances from the OET and a statistical analysis (using many-facet Rasch measurement) as well as qualitative interviews and verbal protocols will show whether the language-trained OET raters are able to reliably apply the descriptors to arrive at judgements of candidate performance.

The final phase of the project will focus on setting appropriate passing standards for professional registration on the OET writing test. Health professionals from both medicine and nursing from a range of representative work contexts will take part in standard-setting workshops where they will be asked to review OET writing samples and classify them according to their perception of each writer's readiness to participate in an English-speaking healthcare context. The cognitive processes used by standard-setting participants to arrive at these judgements will also be collected through concurrent think-aloud protocols. These think-aloud protocols will provide insights into the cognitive processes of standard-setting participants and clarify the decision-making processes in which participants engage. The aggregated judgements of the health professionals will be analysed statistically and new cut-scores will be calculated based on the results. It is anticipated that the cut-scores for

² While the OET writing task requires test takers to write a referral letter, this study focusses more broadly on written handover documents (in particular, referral letters and discharge summaries).

the two professions may differ following the standard-setting procedures, as this was found in a previous study on spoken communication (Elder et al, 2013).

Implications

The study has practical and theoretical implications. For the OET, more professionally-relevant criteria for the writing sub-test as well as empirically-derived language standards as a pre-requisite for the registration of overseas-trained healthcare professionals will be important. Nevertheless, further studies are needed to demonstrate whether these criteria and standards can be extrapolated to the other ten professions relevant to the OET. Data from the first phase will inform future medical and nursing education in relation to medical records and written handover documentation. Furthermore, findings will also inform the design of electronic medical records and programs used for simplifying the process of writing referral letters and discharge summaries in hospitals and GP clinics.

Theoretically, the study will inform language for specific purpose testing design and practices as well as advance our understandings of involving subject matter specialists in the elicitation of indigenous criteria. How the information collected from subject matter specialists is then turned into criteria to be used by language specialist raters is an interesting challenge, and one which has not been given much emphasis in the assessing language for specific purposes literature (but see O'Hagan, Pill, & Zhang, forthcoming where this process is documented in relation to the speaking component of the OET; Pill, forthcoming). Finally, the process of standard-setting for healthcare-specific language tests with the involvement of health professionals, while not new, has not been examined adequately in the literature. A detailed qualitative analysis of the thought-processes of the standard-setting participants will help our understanding of the type of criteria the participants draw on when making decisions about a writer's readiness, an area which has thus far received scant attention.

Setting empirically-based passing standards and developing more professionally-relevant criteria for health professionals seeking registration in English-speaking countries, such as Australia, should have positive consequences for test takers. Ultimately, this work can contribute to better transition of overseas trained health professionals into healthcare settings in English-speaking countries.

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