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Research report

A pilot study to develop a tool for the assessment of students' clinical record keeping

Keri Moore [a, b, *], Brett Vaughan [a, b, c], Anthony Cox [a]

[a] School of Health & Human Sciences, Southern Cross University, Lismore, Australia
[b] College of Health & Biomedicine, Victoria University, Melbourne, Australia
[c] Institute of Sport, Exercise and Active Living, Victoria University, Melbourne, Australia

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ABSTRACT

Background: The ability to develop and maintain contemporaneous and accurate clinical records is a medicolegal requirement. It follows therefore that preregistration health students' skills to write such ought to be assessed.
Objective: The aim of the present study is to develop an audit tool to evaluate student clinical record keeping in university on-campus clinics.
Methods: The project reported on here included a literature review to identify current practice in measuring accuracy in record keeping and to identify a suitable audit tool for educational purposes. We then adapted the tool to more closely align with Australian Health Practitioner Regulatory Agency requirements. We trialled the usability of the subsequent Tool in one university health clinic – in two disciplines. In each discipline, students' clinical records from ten initial consultations and ten subsequent consultations were evaluated using the Piloted Audit Tool (PAT).
Results: The PAT was difficult to use due to the grading criteria. Notwithstanding, we identified important gaps in new patient consultation notes and subsequent consultation notes in each of the two discipline groups with only a few criteria on the PAT found to be satisfactorily recorded. The most significant gaps identified in case notes taken during students' subsequent consultations with patients in each discipline.
Conclusion: A tool for assessing student's case records emerged from the study. The Record Keeping Audit Tool (RKAT) will be trialled in further research, the next phase of which will be to transform the RKAT to an online tool to allow ease of administration so that larger data samples can be collected. This work will concentrate on developing a validity argument for the RKAT.

* Corresponding author. School of Health and Human Sciences, Southern Cross University, PO Box 157, Lismore, NSW, Australia.
E-mail address: mooreclinicaleducation@hotmail.com (K. Moore).

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Implications for practice

- The formal assessment of record keeping in a pre-professional education program may reduce the number of complaints associated with poor record keeping practices.
- The assessment of clinical records should form part of the suite of assessments employed in the workplace based assessment programme of healthcare students.
- The RKAT is readily adaptable to legislative requirements in other countries.
- The RKAT has the potential to be utilised in the post-professional settings.

Introduction

It is clear health profession educators need to pay attention to students' record keeping practices as they relate to safety in the teaching clinic, and encourage best practice in the clinical communication of record keeping. That said, it is not known if the skills developed in the educational setting persist after graduation [1]. A cursory review of the outcomes of Australian Health Practitioner Regulation Agency, Health Practitioner Tribunal Case Summaries of all disciplines (March 2012–July 2013) showed that of 127 cases, 27 of them mentioned dishonest, false, illegible or incorrect clinical records (CRs). Given this information, at least in the Australian context, it is possible to conclude clinical record keeping practices may become lax over time post-graduation. As educators, our questions are: How effective are our current educational strategies with regard to developing students' skills in CRs? How can we efficiently measure practice? What do we need to do to improve?

Accurate written CRs are a medicolegal requirement and are the most common form of communication regarding the care and treatment provided by a health professional. CRs communicate treatment plans, medical education, medicolegal investigations and reimbursements [2]. CRs support patient safety, interdisciplinary health care, and student education [2–5]. CRs facilitate outcomes research and provide information to support planning and governance in health services [2,6].

Literature about CRs written by professionals is slightly more plentiful than that found in the health and medical education literature. For example, Hanson et al.'s study involving nursing, ancillary staff, patients and administration staff involved in an outpatients clinic identified characteristics of *quality* and *content elements* for case notes [2]. Stetson et al.'s earlier work on the *Physician Documentation Quality Instrument* identified 22 items to measure the *quality* of clinical notes in admission notes and return visits [7]; these studies are informative.

Nevertheless, written communication skills assessment is an area of clinical education research that has to date received comparatively little attention [1]. Research conducted suggests a range of strategies can be used to teach and monitor record keeping practices. For example, Amos et al. [1] identified "… that record-keeping templates, audit-teaching, or a combination of short lecture, student research, peer review, and guidelines on record-keeping expectations…" (p. 1229) are strategies that have evidence to positively influence record keeping practices.

An assessment strategy for review of pre-professional students' CRs has received scant attention in allied health literature and limited attention in medicine. We know that in allied health, current practice in assessment of students CRs in osteopathy and podiatry teaching clinics for example, consists of the student completing the CRs and then a clinical supervisor countersigns the record as a true and accurate reflection of the consultation. In regard to Australian university health clinics, there is no literature describing students' clinical record keeping habits nor is there literature on whether clinical educators provide optimal education in this regard. Clinical record audits can be time – consuming and provide evidence of clinical encounters, not all of which can be corroborated [8]. CRs cannot be expected to capture the student–patient interaction completely, something consistent with professional practice.

That said, CRs are an access point to the students' diagnostic processes, clinical reasoning, and decision-making with regard to patient care. It is the contention of the authors of this paper that assessment of students' CRs ought to be part of a program of assessment for workplace-based learning in the allied health professions. Therefore the aim of the present study was to develop and pilot a tool for use as a workplace-based assessment to assess students' record keeping against current regulatory requirements in the Australian context. We looked to the Osteopathy Board of Australia (OBA) Guidelines on Clinical Records (2012) [9] and Podiatry Board of Australia (PBA) Guidelines on Clinical Records [10] as those requirements can be expected to be similar to those of other allied health disciplines as well as requirements for allied health in other countries with similar regulatory regimes.

Methods

Ethics approval to access and audit the clinical records was obtained for the present study from the Southern Cross University Human Research Ethics Committee (ECN 15-068). The pilot study consisted of the following stages:

A literature review – to explore current discourse in regard to student education and assessment of their CRs.

A search of *Google Scholar*, *Scopus*, *PubMed*, *Wiley Online* and *ScienceDirect* was undertaken using the key words: student* and record keeping, student* and clinic* notes, assess* and student* and record keeping, assess* and student* and clinic* notes. This search resulted in the discovery of a small number of papers including a 2002 study of interns, physicians and paediatricians record keeping [11] and one audit tool, the QNOTE [12], which provided guides on essential characteristics of *quality* and *content elements* consistent with Hanson et al. [2] and Stetson et al. [7] The QNOTE tool was designed for the audit of electronic CRs and evaluated 12 elements:

1. Chief complaint
2. History of presenting illness
3. Problem
4. Past medical history
5. Medications
6. Adverse drug reactions and allergies
7. Social and family history
8. Review of systems
9. Physical findings
10. Assessment
11. Plan of care
12. Follow up information

Burke's validity study of professionals' electronic record keeping which appraised the usability of the QNOTE [12] concluded that future studies ought to focus on changes for handwritten notes and that longitudinal studies of case records be implemented to assess quality over time and as well, that the relationship between note quality and clinical outcomes be explored. These are important professional and educational issues.