Palliative care education for medical students: differences in course development, organisation, evaluation and funding. A survey of all UK medical schools

<u>Steven Walker</u>^{1,2,3}, Jane Gibbins⁴, Paul Paes⁵, Astrid Adams⁶, Madawa Chandratilake^{2,7}, Faye Gishen^{1,8}, Philip Lodge^{1,8}, Bee Wee⁶, Stephen Barclay⁹

¹Marie Curie Hospice, Hampstead, London, UK; ²Centre for Medical Education, University of Dundee, UK; ³St Gilesmedical, London, UK, ⁴Cornwall Hospice Care, Royal Cornwall Hospital Trust & Peninsula Medical, UK; ⁵Northumbria Healthcare NHS Foundation Trust & Newcastle University, Newcastle, UK, UK; ⁶Sir Michael Sobell House & University of Oxford, Oxford, UK; ⁷Faculty of Medicine, University of Kelaniya, Sri Lanka, ⁸University College London & Royal Free Hospital, London, UK ⁹University of Cambridge, Cambridge, UK;

Correspondence: steven.walker@stgmed.com

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Abstract

Background:

A proportion of newly qualified doctors report feeling unprepared to manage patients with palliative care (PC) and end of life needs. This may be related to institutional issues during undergraduate training. Information is limited regarding the current organisation of PC teaching across UK medical schools.

Aims:

To investigate the organisation of PC teaching at UK medical schools.

Design:

Anonymised, web-based questionnaire.

Settings/participants:

Results were obtained from PC course organisers at all 30 UK medical schools.

Results

The PC course was established through active planning (13/30, 43%), adhoc development (10, 33%) or combination of approaches (7, 23%). The place of PC teaching within the curriculum varied. A student selected PC component was offered by 29/30 (97%). All medical schools sought student feedback. The course was reviewed in 26/30 (87%) but not in 4. Similarly, a course organiser was responsible for the PC programme in 26/30 but not in 4. Twenty-two respondents spent a mean of 3.9h (median 2.5)/week in supporting/delivering PC education (<1–16h). Sixteen of 28 (57%) had attended a teaching course or shared duties with a colleague who had done so. There was no titular recognition for course organisers in 16/30 (53%). An academic department of Palliative Medicine

existed in 12/30 (40%). Funding was not universally transparent. PC teaching was associated with some form of funding in 20/30 (66%).

Conclusion:

Development, organisation, course evaluation and funding for PC teaching at UK medical schools is variable. This may have implications for delivery of effective PC education for medical students.

Word count: 250

Key statements

What is already know about the topic?

- A proportion of newly qualified doctors report feeling unprepared to manage patients with palliative care (PC) and end of life (EOL) needs.
- Medical schools vary in the degree of emphasis they place on delivering effective undergraduate PC teaching.

What this paper adds?

• Development, organisation, course evaluation and funding for student PC teaching at UK medical schools varies widely.

Implications for practice, theory or policy?

- A uniform approach to PC education set against agreed standards will help medical schools
 optimise undergraduate teaching and reduce unpreparedness amongst newly qualified
 doctors when managing patients with PC and EOL needs.
- Academic departments of Palliative Medicine, and opportunity and support provided by medical schools, help to strengthen palliative care teaching and learning in undergraduate medicine.

Introduction

Caring for patients and their families with palliative and end of life care (EOL/C) needs is an essential part of the work of most doctors, although Palliative Medicine (PM) was not acknowledged as a specialty in the UK until 1987.^{1,2} While the UK is still regarded by many as world-leading in providing palliative care (PC) and EOLC, the message that appropriate care should be available for all patients with chronic life-threatening illness, not just those with cancer at the EOL, is yet to be universally accepted.³

In order to ensure optimal patient care, education for healthcare professionals is essential. The need for medical students to receive PC education is widely acknowledged by regulatory bodies including the General Medical Council, clinicians and educators.^{4,5} Early progress in delivering PC education has been documented.⁶ A majority of medical students regard learning how to provide care for dying patients as very important: 61% of UK students and 53% of US students.⁷ More recently, two UK medical students made a plea for greater inclusion of PC teaching in the curriculum.⁸ Previous studies have found that PC training at medical school often failed to equip students for the realities of caring for patients with chronic, progressive life-threatening illnesses.⁹ Similarly many Foundation Year (FY) doctors consider that they had received too little PC education at medical school and feel unprepared to deliver basic PC, a view endorsed by consultants. ¹⁰ Areas causing most difficulty include coping with spiritual distress, social issues and psychological distress: despite such concerns, FY doctors rarely seek support from senior colleagues.¹⁰ Some have suggested that the PC education provided may not always be based on sound educational principles and a needs assessment.¹¹

A parallel paper from the present study found wide variation in teaching time, depth of coverage, degree of meaningful patient contact and assessment of learning, factors which are likely to influence preparedness to care for patients with PC and EOL needs.¹² It is hypothesised that these may in turn be influenced by organisational issues at the institution delivering PC teaching, an area

that has received limited research attention. Previous research found delivery of effective PC teaching to depend on an enthusiastic and experienced lead to champion PC education.¹³

This study investigated the development, organisation, evaluation and funding of PC training for UK medical students by a detailed survey of PC course organisers, seeking to identify factors which support or interfere with the delivery of effective medical student PC education.

Methods

A 40-item web-based questionnaire was developed, based on the previous surveys of Field and Wee, in collaboration with a group of senior PC physicians and educators.⁶ This is described in more detail elsewhere together with inclusion and exclusion criteria. ¹² An invitation letter, information sheet and link to the survey in SurveyMonkey[®] was emailed to PC course organisers at UK medical schools in late 2013, with a supplementary data form.

The PC course organisers were either known to research team members or were identified through emails and phone calls. Where there was no formal course organiser, it was possible to find a senior figure involved in PC education for every UK medical school who agreed to participate.

The data analysis function of SurveyMonkey[®] provided descriptive statistics of responses, refined by a manual search of related questions, free –text responses and the supplementary information form. Data is presented in anonymised form. The study was approved by the University of Dundee Research Ethics Committee (UREC 12073).

Results

Completed surveys were received from all 30 medical schools: a response rate of 100%. All respondents were senior practising PC Consultants: three were Professors.

PC education in the curriculum

Respondents chose several terms to describe the position of PC education within their medical school curriculum (Table 1), most commonly 'fully integrated within a larger course' (n = 15 and 'form a module within a larger course' (n = 17). Three schools covered PC solely by one or two lectures.

PC teaching was commonly linked to courses in General Practice, Oncology, Medicine, Elderly/Community Care, Chronic Diseases, Disability and Rehabilitation. One school reported teaching to occur throughout the course. Respondents raised difficulties with 'Lack of space/flexibility in the curriculum' or 'Pressure on time to deliver in an already full curriculum.'

Development of the PC course

Courses had developed through active planning with input from multiple stakeholders and reference to guidelines and educational theory (n=13), in an adhoc manner (n=10) or through a combination of approaches (n=7).

Student Selected Components

An optional period of special study where students are attached to a PC team or hospice was offered by 27/30 (90%) of schools, was possible but not formally advertised in 2 and was unavailable in 1. Such student-selected components (SSCs) most frequently comprised 3 to 4-week continuous attachments at a hospice (13/29; 45%), usually combined with tutorials, attachment to specialist team members and various visits. Other patterns included periods of attendance over a longer timeframe and/or delivery of a research/audit project. Less than 10% of medical students were reported to undertake a PC SSC, commonly due to insufficient place numbers to meet demand.

Student feedback and course review

All medical schools obtained student feedback on PC teaching: 22 specific to PC teaching, 18 as part of another course, and 7 at the end of the year. The PC course was regularly reviewed by

senior staff in 26/30 (87%) institutions, annually or biannually; four (13%) had no formal review process. No institution conducted any form of external review, though one respondent mentioned an imminent GMC visit. Three course organisers reported having no complete overview of the PC teaching in their school.

Course organisers

A named course organiser coordinated the PC programme in 26/30 (87%) medical schools, with shared responsibilities in 6/26: 4/30 (13%) medical schools had no formal lead. Comments included: 'No clear leader to take forward (I think it is me by default)', 'Lack of individual for overall leadership and management of course', 'Effectively, X has no meaningful lead in PC education and no time is available within specialist's job plans to take on this role, even if the university were willing to recognise this position.'

The 22 respondents who provided figures spent a mean of 3.9 hours per week in supporting and delivering PC education (range <1–16h). Among the other eight respondents, three reported no time allocated in their job plan; two stated that it was highly variable; one each replied 'part of wider role', 'evenings' and 'when I can'.

About half of respondents (16/28, 57%) had attended a teaching course or shared duties with a colleague who had done so. Teaching qualifications included Membership of the Institute for Learning and Teaching, Fellowship of the Higher Education Academy and a range of certificates, diplomas and Masters degrees in education.

There was no titular recognition for PC course organisers in 16/30 (53%) medical schools. Those with titles included: Tutor, Fellow, Teacher, Lecturer/Senior Lecturer, Lead, Director, Sub-Dean, Manager and four Professors. Academic departments of Palliative Medicine existed in 12/30 (40%) medical schools, of which 10/12 (83%) had a formal PC course, compared with 10/18 (56%) with no such department.

Funding

Funding was not universally transparent. PC teaching was reported to be associated with some form of funding or financial recognition in 20/30 (66%) schools. In 10/20 (50%), funding was for received by the course coordinator, in 11/20 (55%) by their employing organisation and in 18/20 (90%) by the hospice or other provider. In five (17%) schools, teaching was reported not to have any funding with missing data from a further five. Comments included: 'Funding not given in most teaching sites, especially non-NHS', 'Lack of job planning and resourced teaching time', 'Lack of transparent funding in non-NHS sector' and 'Lack of funding (e.g. paid admin support).'

Comments around organisation

A number of respondents added insightful comments to their responses:

- 'I work in an ad hoc manner trying to get PC into the curriculum in any way possible. There is
 no formal university palliative medicine lead. Teaching leadership tends not to be organised
 by specialty but rather by learning topic, and there is no such topic specific to palliative
 medicine.'
- '[We have] no academic sessions for palliative care. There has been an expectation that the local NHS and charity sector palliative care teams will develop and deliver the undergraduate teaching alongside the ongoing clinical work and extensive postgraduate teaching and training commitments, with no recognition or remuneration from the medical school.'
- 'I have just noticed that we have been cut from Year 3, now only e-module on symptom control and rehabilitation lecture for care of the dying! These are good examples of how little specialist PC and care of dying patients are viewed by the university. It is not surprising that students reflect this view.'
- 'Hoping to get PC more effectively integrated in new revised curriculum, but it very much depends on motivation of a few key individuals to do so; very little organisational drive.'

Discussion

Information on the structure and organisation of PC teaching of UK medical schools is limited. A 2000 study found PC teaching was offered as a separate course in 13% of medical schools, compared to 20% in a 2013 survey.^{6,14} In 2000, PC was covered in 'only 1 or 2 lectures' in 13% of schools (10% in 2013), as module of a larger course in 25% of schools in 200 (26% in 2013) and 'integrated throughout the curriculum' in 50% in both periods.^{6,14}

Incorporation of PC into the curriculum involves 'a complex process of individual, institutional, clinical, patient and curricular factors'.¹³ This study demonstrates considerable variation in the development and organisation of PC education across UK medical schools, with limited leadership, course review, titular recognition of educators and resource allocation in some institutions, especially those without academic PC departments. These factors are likely to have adversely affected the ability of some medical schools to adequately educate their students.

The 100% response rate obtained in this study is notable, giving a comprehensive view of the current state of UK PC education. While using a structured questionnaire format, additional comments in free text boxes were often highly informative. It is acknowledged that the views of other university staff, medical students and newly qualified junior doctors were not obtained.

Course development

The importance of developing courses based on educational needs assessment, sound educational theory and experiential learning is well recognised.^{15,16} Delivery may be optimised by means of a spiral curriculum building on previous knowledge, encompassing vertical and horizontal integration.^{15,17,18} It is therefore reassuring that in 14/30 schools (47%) the PC course 'had developed as a result of active planning with input from multiple stakeholders and reference to guidelines and educational theory', although cause for concern that course development was ad hoc in 10/30

(33%). At times it appeared that where PC was linked to another course the organisers had responded to an opportunity to "slot in "this 'new' subject somewhere.

Student Selected Components

The GMC expects a proportion of curricular time to be spent in areas selected by students¹⁹, in some schools up to one-third of the course.¹⁷ Nearly all medical schools offer PC SSCs (27/30; 90%), though less than 10% of students undertake such an SSC, often due to limited placements available. While periodic attendance over a longer period may enable students to better realise the importance PC and build on previous knowledge, there are potential gains of deeper experiential immersion as a team member.

Course feedback and review

Medical school curricula are frequently crowded; though many declare their support for PC training, this is not easy to achieve in practice and may require strong leadership and alignment with more powerful specialties.^{13,20} Feedback is increasingly important ²¹ : time for PC education was increased in one institution as a result of positive student comments, at the expense of less highly rated teaching in another specialty.

PC course review was a regular (usually annual) event in nearly all institutions, often involving others in the university, although none conducted any form of voluntary external review. Some have suggested that greater collaboration between course coordinators at different medical schools, including shared teaching tools, assessments/examinations, faculty development and research might result in better outcomes.¹⁸ The Association for Palliative Medicine Special Interest Forum for Undergraduate Medical Education is developing this role in the UK.²²

Responsibilities, academic links and further education

While the majority of medical schools (26/30; 87%) had a designated lead, often shared, four had no one officially in charge although respondents felt able to participate in the survey. Their comments hint at frustration; indeed, how can PC education produce safe and effective doctors if there is no mandated leadership?

Twelve medical schools (40%) have academic departments of PM with half of respondents having teaching titles, though having apparently similar responsibilities. At the time of writing, the UK has 8 professors of PM, 1 reader, 7 senior lecturers, 11 honorary senior lecturers and 2 lecturers (Roland J, Palliative Care Congress, Harrogate, 14 March 2014). This compares well with Europe, where the leading countries are Germany (9 full professors of PM and 1 assistant professor) and Holland (8 and 2, respectively).²³

Course organisers spend limited amounts of time on teaching each week, although the range was wide. This may suggest an unstructured approach to their educational activities along with clinical duties. Some responses suggest a disorganised picture, with eight respondents unable to provide a figure for their time due to no time allocation in their job plan, their organisation considering teaching as part of a wider academic role, the duration too variable to quantify, or duties fitted around other activities. Yet those without dedicated hours were still expected to lead and teach; not ideal for ensuring optimal course delivery and student learning.

While having attended a teaching course or obtained an educational qualification does not necessarily equate with being a better teacher, it may suggest more commitment to this activity. Over half of the course organisers and/or their colleagues had undergone some form of training, often leading to a qualification or membership of an educational body. It is suggested that those with higher degrees in medical education may find themselves empowered to negotiate with greater authority in their university.

Funding

There was considerable ambiguity around payment for PC education. While 20 course organisers reported that funds were paid, most commonly to providers, five medical schools apparently have no dedicated funding, teachers being expected to develop and deliver education 'with no recognition or remuneration from the medical school'.

'Informal' and 'hidden' curriculum

It has been reasoned that any reforms to the curriculum are unlikely to succeed unless there are changes in 'the values, attitudes, beliefs and behaviours that constitutes the culture of medicine'.²⁴ Medical education frequently downplays the importance of psychosocial aspects of care, with some clinicians considering PC to focus on medical failure to cure, to be 'low tech' and of little interest. As one respondent commented 'that competency in this discipline is not expected of our trainees' creates a difficult environment to reverse.^{5,24} The study did not address the contribution of PC teaching outside of timetabled sessions ('informal curriculum') or the more subtle learning arising from cultural and institutional norms ('hidden curriculum'): ad hoc course development, absence of a designated course organisers or academic departments may reflect a low priority given to PC education in some schools.

Conclusion

There are considerable variations in the development and organisation of PC education across UK medical schools: despite the GMC describing caring for patients approaching the end of their lives as a core medical student competency,^{4,19} this is not being adequately addressed in all schools. Some PC courses have limited curricular time and content, and little or no recognised leadership, titular recognition of educators, course review and resource allocation. Academic PC departments are uncommon. Other courses are highly developed, with considerable time in the curriculum and resource allocation, largely due to support and opportunity provided by the medical school, and

strong leadership from highly motivated individuals. It is time to ensure that all medical schools provide PC education of the highest standard: medical students' future patients deserve nothing less than that.

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References

1.Saunders C. The evolution of palliative care. J Roy Soc Med 2001; 94: 430–432.

2.Lutz S. The history of hospice and palliative care. Curr Probl in Cancer 2011; 35: 305–309.

3.Vissers KCP, van der Brand MWM, Jacobs J, et al. Palliative medicine update: a multidisciplinary approach. *Pain Practice* 2013; 13: 576–588.

4.General Medical Council. *Tomorrow's Doctor: Outcomes and Standards for Undergraduate Medical Education*. London, 2009.

5.Horowitz R, Gramling R, Quill T. Palliative care education in US medical schools. *Med Educ* 2014; 48: 59–66.

6..Field D, Wee B. Preparation for palliative care: teaching about death, dying and bereavement in UK medical schools 2000–2001. *Med Educ* 2002; 36: 561–7.

7.Hammel JF, Sullivan AM, Block SD, Twycross R. End-of-life and palliative care education for finalyear medical students: a comparison of Britain and the United States. *J Pall Med* 2007; 10: 356–366. 8. Tossell L, Rusby E. Palliative care in the undergraduate curriculum: a medical student's perspective. *Pall Med* 2010; 24: 839–840.

9. Gibbins J, McCoubrie R, Forbes K. Why are newly qualified doctors unprepared to care for patients at the end of life? *Med Educ* 2011; 45: 389-99

10. Bowden J, Dempsey K, Boyd K, et al. Are newly qualified doctors prepared to provide supportive and end-of-life care? A survey of Foundation Year 1 doctors and consultants. *J Roy Coll Physicians Edinb* 2013; 43: 24–28.

11. Lloyd-Williams M, MacLeod RD. A systematic review of teaching and learning in palliative care within the medical undergraduate curriculum. *Med Teach* 2004; 26: 683–690.

12. Walker SJ, Gibbins J, Barclay S, et al. Progress and divergence in palliative care education for medical students: a comparative survey of UK course structure, content, delivery, contact with patients and assessment of learning. Pall Med in submission

13. Gibbins J, McCoubrie R, Maher J, et al. Incorporating palliative care into undergraduate curricula: lessons for curriculum development. *Med Educ* 2009; 43: 776–83.

14. Dickinson G, Paul E. End-of-life issues in UK medical schools. *Am J Hosp Pall Med* 2014; April 10 [Epub ahead of print].

15. Frank JR, Snell LS, Ten Cate O, et al. Competency-based medical education: theory to practice. *Med Teach* 2010; 32: 638-645.

16. Yardley S, Teunissen PW, Dornan T. Experiential learning: transforming theory onto practice. *Med Teach* 2012; 34: 161-4.

17. Davis MH, Harden RM. Planning and implementing an undergraduate medical curriculum: the lessons learned. *Med Teach* 2003; 6: 596-608.

 Linklater GT, Bowden J, Pope L et al. Developing learning outcomes for medical students and foundation doctors in palliative care: a national consensus-seeking initiative in Scotland. *Med Teach*.
 2014; 36: 441–446.

19. General Medical Council. *Tomorrow's Doctor: Recommendations on Undergraduate Medical Education.* 2nd ed. London; 1993.

20. Quill T, Dannefer E, Markakis K, et al. An integrated biophysical approach to palliative training of medical students. *J Pall Care* 2003; 6: 365–380.

21. Dixon A, Robertson R, Appleby J. et al. Patient choice: how patients choose and how providers respond. <u>http://www.kingsfund.org.uk/sites/files/kf/Patient-choice-final-report-Kings-Fund-</u> June-2010. (accessed 12 September 2014).

22. The Association for Palliative Medicine Special Interest Forum for Undergraduate Medical Education. <u>http://www.apmuesif.phpc.cam.ac.uk/index.php</u> (accessed 3rd August 2015)

23. European Association for Palliative Care (EAPC). EAPC Atlas of Palliative Care in Europe 2013.

file:///C:/Users/steven.walker/Downloads/EAPC%20Atlas%20of%20Palliative%20Care%20in%20Euro

pe%202013%20-%20Full%20Edition.pdf (accessed 4 September 2014).

24. Sullivan AM, Lakoma MD, Bock SD. The status of medical education in end-of-life care: a national report. *J Gen Intern Med.* 2003; 18: 685–695.

Table 1: Delivery of PC education across UK medical schools (N=30)

Module in larger course	6 (20%)
Fully integrated	8 (27%)
Covered in 1 or 2 lectures	3 (10%)
Variety of approaches	13(43%)
- Modules in larger course and fully integrated	3
- Module in larger course and separate course	2
- Module in larger course and 1 or 2 lectures	3
- Modules, integrated and separate course	1
- Module, lectures and separate course	1
- Integrated course and 1 or 2 lectures	2
- Integrated. modules, lectures and separate course	1
Separate course	0