Can a training hub deliver undergraduate medical education with patient educators?

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Word count: 2224

Abstract word count: 234

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<u>Abstract</u>

Background: In England, localised training hubs have been developed to plan and upskill the primary care and community health workforce. We evaluated whether a medical school could work with a training hub to deliver an undergraduate medical education course, co-facilitated by patient educators. No published research has evaluated this model before.

Methods: We explored the feasibility and value of training hub delivery using before and after surveys (617 students), interviews (28) and focus groups (20 people) with undergraduate medical students, patient educators and training hub and medical school team members.

Findings: It was feasible for a training hub to develop and co-deliver a workshop with patient educators. The hub was able to recruit and retain patient educators more effectively than the medical school alone. Patient educators said they felt valued and developed new skills. 61% of Year 4 undergraduate students (first clinical year) took part, a high attendance rate during the COVID-19 pandemic. 80% of students said they learnt a lot about managing conditions in primary care and the community. They particularly valued engaging with patient educators and seeing interprofessional working between GPs and pharmacists.

Conclusions: Medical schools can find it difficult to manage primary care education due to the geographical spread of learning across multiple sites and professionals. Working with training hubs may be a way to mitigate this. This small evaluation suggests that this is a model that could be tested further.

Keywords: general practitioners; undergraduate education; primary health care; pre-registration; United Kingdom

Can a training hub deliver undergraduate medical education with patient educators?

Introduction

England's national healthcare leadership organisation for education and workforce development (Health Education England) has fostered localised 'training hubs' to plan and educate the primary care and community workforce. A training hub is now funded in every integrated care system in England to bring together education and training resources from NHS organisations, community providers and local authorities. Much of the hubs' work focuses on placements for those training as health professionals and continuing professional development of fully qualified workers.[1]

Up until now, most hubs have not been commissioned to teach undergraduate medical education.[2] We tested whether it would be feasible for a training hub to develop and deliver primary care training as part of undergraduate medical education.

A London training hub collaborated with a medical school to develop a workshop for Year 4 undergraduate medical students (i.e. the first clinical year). The workshop aimed to show learners how common conditions are managed in primary care.

The medical school academic and administrative team supported course design and delivery. The training hub recruited clinicians to plan and deliver sessions and recruited and trained patient educators. Each session was co-facilitated by patient educators, GPs and pharmacists. The hub's involvement was funded from the educational tariff.

During the workshops student role-played clinical roles with patient educators. Patient educators were involved in co-producing the content and delivering it using their experience as service users. This is equivalent to level 2 out of 6 of Towle's taxonomy of patient and public involvement in medical education.[3]. In the past, the medical school had arranged placements via individual practices and had run workshops with patients present, but had not commissioned a training hub to teach content, recruited a pool of patient educators from primary care or co-developed content with local service users.

The hub recruited patient educators by visiting Patient and Public Involvement Groups at local general practices and community organisations and advertising on practice notice boards and in their newsletters. Patients did not need any previous teaching experience, just a willingness to speak to undergraduate medical students at set times during the year.

The hub trained each patient educator to role-play simulated scenarios with groups of 6-10 medical students in person or online. Patient educators attended half-day training to gain context, review role-play scenarios and develop basic facilitation skills. The hub provided email updates and meetings to keep in touch with patient educators between workshops with students.

The hub tested different formats and durations for the workshop, including online (live and pre-recorded sessions) and in-person delivery spanning from two-hours to a full day. Every Year 4 student had an opportunity to take part. The hub ran the workshop multiple times during the year, to account for students completing different rotations.

The medical school had hundreds of Year 4 students each year so the hub devised a strategy to ensure the training provided consistency of experience. Each workshop used role-play scenarios based on real-life examples, co-created with patients. Using simulated scenarios meant that students attending the workshop at different times of the year covered consistent content. This also meant that patients did not need to disclose personal details, but they were able to add their own experiences as users if they wished.

Evaluation methods

We used a mixed methods design to test whether it was feasible for a training hub and medical school to work together, and what value students gained from this model. We used anonymous online surveys with students and telephone/online interviews and focus groups with students, patient educators, clinical educators and medical school stakeholders.

We compiled feedback during the 2019/20 and 2020/2021 academic years from:

- 28 interviews with students (14), patient educators (8), clinical educators (3) and medical school and other stakeholders (3)
- 236 (83%) students responding to an anonymous online survey at the beginning of the academic year
- 181 (64%) students responding to the same survey at the end of the academic year to track change over time
- 200 students surveyed after completing a workshop (61% of participants)
- participant observation at 3 workshops and 4 planning and review meetings / focus groups (20 people)

This represents 665 pieces of data, though some were repeated measures with the same people at different times.

We collected data as part of existing course evaluation processes. The chair of the University College London ethics committee indicated our approach did not require formal ethics approval. We followed the principles of the Declaration of Helsinki. Data were collected and analysed by a team independent from the training hub and medical school.

Findings

Feasibility

It was feasible for a training hub to develop and deliver a component of the undergraduate medical curriculum. Stakeholders reported that all sessions were planned and delivered on time and to a high quality. Student evaluations were as good or better than sessions organised 'in-house'.

388 students took part in workshops over a two year period, a 61% attendance rate. This was in line with or higher than the medical school's other sessions.

It was feasible to recruit local people as patient educators. The hub recruited and retained 10 patient educators over the two year evaluation period. In interviews and focus groups, stakeholders said that a welcoming atmosphere, good preparation and regular communication were important for retention.

Using standardised scenarios for role-play enabled consistent provision of content about particular diseases. However, it was also feasible for the patient educators to apply their experience as users, helping students gain a richer understanding of the patient's experience of healthcare.

The main challenges for the hub were the time needed to recruit and train patient educators and working within the education tariff. A key challenge for the medical school was balancing the ideas of those delivering the course versus medical school priorities and regulations. Both the medical school and hub needed to be flexible and communicate well to adapt to changing medical school policy, particularly during the COVID-19 pandemic when the workshops changed from one full day in person to an online environment. Stakeholders said that it was feasible to deliver the workshops, which included consultations skills practice, in this way.

Patient educators preferred in-person sessions but adapted to working online when helped with technology. Online sessions allowed a more diverse range of patient educators to take part regularly, including those who had difficulty travelling to a workshop venue due to age, ill health or lack of transport.

Impacts

Interview and survey feedback suggested that students, patient educators and representatives from the training hub and medical school all believed it was worthwhile for a training hub to deliver some undergraduate medical education. Members of the training hub and medical school reported that collaborating in this way strengthened relationships between the two organisations.

Students surveyed said that they valued the opportunity to role play with patients to build their confidence and consultation skills . Eight out of ten students said they learnt a lot about managing conditions in primary care and the community (80%). Six out of ten said they learnt a substantial amount about how primary care supports people (60%). Students valued the practical, interactive nature of the sessions (59%) (see Figure 1).

Role playing with a real patient was good because she brought in her own experiences... things about her family and also consultations she went to and what was not so good. It was that real life stuff that affected me. (Student)

I think we should have more of this type of learning. It was a little outside what we normally do so I will remember it. The GPs looked at things in a different way from some of the other lecturers. (Student)

At the end of the academic year, students who said they had attended a workshop were more likely to say they knew how patient consultations worked in primary care compared to those who did not attend a workshop. At the start of the academic year 7 out of 10 students said they knew how consultations worked outside hospital. By the end of the year this had increased to 9 out of 10 amongst those who attended a workshop. There was no change in those who had not attended a workshop. In interviews, patient educators said they enjoyed being part of the team and felt like they were contributing to their community. They reported increased knowledge, confidence and skills and reduced feelings of isolation.

Working with the students is fun. They seem interested in what I had to say and listened when I pointed out things they missed. They seemed to like hearing real life. I learnt things too about my health. I changed what I ate a bit after hearing them talking. So I have got a lot out of it. I am meeting new people. I can't go out at the moment and this has been a godsend so I am not just alone in the house. I feel useful and happy and I want to do more of this. (Patient educator)

Discussion

It can be difficult for medical schools to manage primary care education due to the geographical spread of learning across multiple sites and professionals. This may contribute to primary care based teaching being marginalised in UK medical schools.[4] Working with training hubs may be a way to mitigate this, supplementing close relationships with individual primary care practices.

Whilst qualitative studies and opinion pieces have suggested that hubs have the potential to develop educational faculty and support undergraduate training [5], we identified limited empirical research about this. Our evaluation is one of the first ever published evaluations of joint work between a medical school and training hub. It suggests that there may be opportunities to further test and refine collaborative working.

Undergraduate and postgraduate medical education and GP speciality training is being updated to prioritise generalist skills, improve support for learners and focus more on population health, mental health, cancer and technology.[6][7] Policies such as the national Medical Licensing Assessment and postgraduate generalism programme may support further development of undergraduate primary care education.[8] In line with this, commissioning a training hub to deliver undergraduate medical education emphasised co-production with local patients and clinicians, and interprofessional working. Patients have long contributed to educating health professionals,[9] [10] However, the hub's links with general practices and community organisations meant that it could recruit patient educators more effectively than the medical school. Students commented that role-play with patient educators was a unique element of the workshop that improved their confidence and enthusiasm for medicine.

Educators with lived experience can be highly formative in building compassion and empathy amongst medical students and GP specialist trainees,[11] but at present the patient voice is underrepresented in primary care education.[12] [13] Training hubs may be a conduit for medical schools and postgraduate medical training to access broader primary care experience and connect to local patients and populations.

However, there were also challenges navigating the culture, ways of working and requirements of the different stakeholders. Others considering a similar educational model should pay close attention to communication processes, especially since curriculum requirements, regulations, assessments and quality assurance processes are complex, differ across medical schools and student year groups, and are regularly updated in relation to national and institutional policy changes.

Our evaluation is limited to one medical school and training hub,. The delivery process altered dramatically due to COVID-19. This made it difficult to compare before and after measures robustly and limited the number of students providing feedback about the approach. We cannot generalise our findings to other regions, schools and hubs, but we can suggest that these models may be worth exploring further.

Acknowledgements and funding statement: Health Education England funded evaluation analysis.

Disclosure of interests: JY, SP, MJ and RR conceptualised the training. JY's organisation was funded through educational tariff to deliver the training. DdS's organisation was funded to evaluate feasibility.

Figure captions:

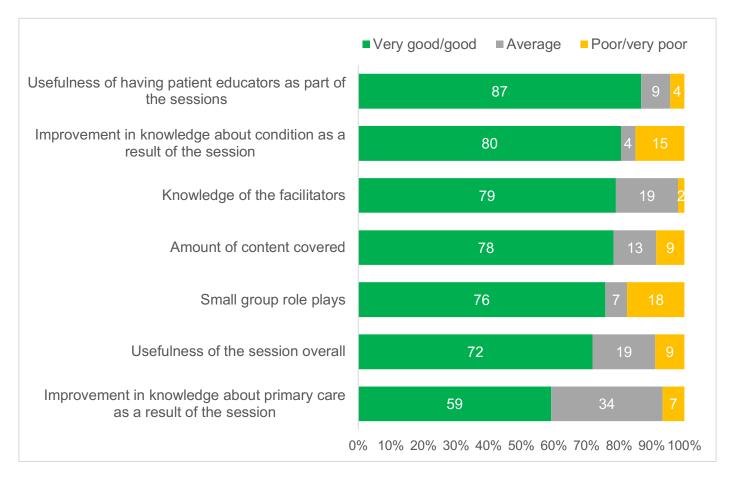


Figure 1: Feedback from students who took part in a workshop

Note: Based on feedback from 86 out of 163 students who took part in a workshop during one academic year (61%

invited provide feedback)

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