

Medical Education Training Research Innovation in Clinical care



Core Medical Trainees' impression of the ePortfolio

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Abstract

The NHS ePortfolio is a necessity for educational development and career progression of all postgraduate medical trainees in the UK. Education experts and the online tool developers have claimed that the ePortfolio has many advantages over its paper counterpart. They have argued that use of the ePortfolio enhances deep learning, encourages reflective practice and improves trainees learning. However anecdotal evidence suggests that both educational supervisors and trainees have expressed dissatisfaction with the use of the ePortfolio.

The aim of this qualitative research was to investigate how the ePortfolio could be used more effectively for educational development of medical trainees. Semi-structured face to face interviews of a total of six core medical trainees (CMTs) was performed to discover their views on the usefulness of the ePortfolio.

Findings CMTs did not regard the ePortfolio as useful for their educational development. Issues such as poor understanding, lack of training, lack of time commitment, limited time availability of trainees and supervisors for the ePortfolio and supervisors' poor quality feedback skills were highlighted as barriers to the trainees' perception of usefulness of the ePortfolio.

It was concluded that the full educational potential for the ePortfolio can only be achieved if the educational regulator, the professional establishments and the service provider (management) work collaboratively to come up with consensus policies in order to create an environment where service demand and the support for educational activities are well balanced.

Introduction

Since the Modernising Medical Careers (MMC), was introduced in the UK in 2005⁽¹⁾ the ePortfolio tool has been part of postgraduate medical trainees' educational development and their career advancement. The ePortfolio tool was introduced in stages, initially to foundation trainees, then to core trainees and finally to specialist registrars, and has been updated and modified since it was first introduced⁽²⁾. Engaging in ePortfolio and appraisal meetings has become routine practice for the majority of senior clinicians and trainees working in the National Health Service (NHS) environment. However, both trainees and educational supervisors have periodically identified concerns and weaknesses with the newly introduced tool, in addition to its benefits and helpfulness.

Anecdotal evidence suggests that there is a general sense of 'burden' amongst junior

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doctors related to the completion of their ePortfolios. Difficulties may have been encountered when trying to find an assessor, or to get performance observed or evaluation forms completed in the busy hospital ward or acute situation. There also appear to be issues of perceived credibility of assessors, who may not have had sufficient knowledge or experience to give adequate judgment or feedback, and some trainees believe that the consistency of rating varies greatly and does not accurately reflect their actual performance in practice.

Method and Design

This study was based on the qualitative flexible design⁽³⁾. The research methodology involved face to face semi-structured interviews lasting X minutes. In order for the study to be feasible it was limited to core medical trainees (CMTs) since it was considered that their views would probably be shared by other levels of postgraduate trainees since similar tools and processes are used for their educational development and assessment. An invitation letter was sent out via email by the CMTs' administrator in the postgraduate centre at the Hull Royal Infirmary to all 37 core medical trainees (CMTs) in both Hull hospitals, primarily to help identify participants for subsequent interviews. She also acted as a contact for more information about the study. Additionally trainees were allowed to contact the researcher direct if they wished to do so. A non-randomised, non-probability sampling method and convenient sampling was

employed to recruit the participants which involved selecting the most convenient people to take part as representatives. The process continued until the required sample size was achieved⁽³⁾.

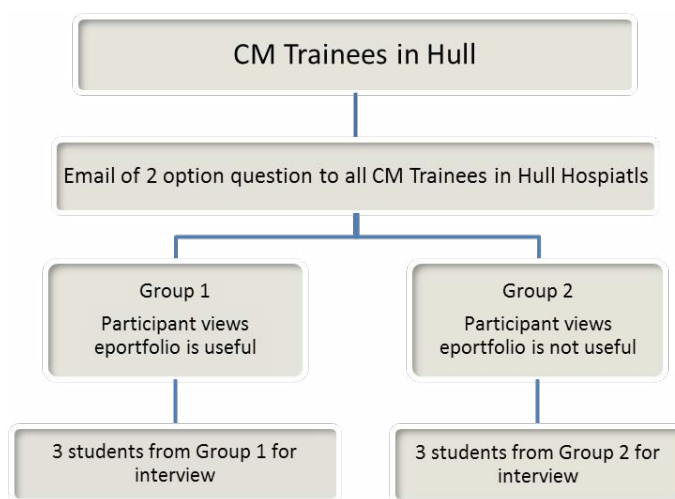


Fig.1: Flow chart of sampling

Gender, specialty and training level of trainees are considered to obtain acceptable representation

A qualitative interview format⁽⁴⁾ was adopted in the project. An individual in-depth semi-structured interview method was employed⁽⁵⁾ which lasted an hour. The research proposal was submitted through the Integrated Research Application System. The ethical application process involved the ethics committee of the local Hospital Trust and the Newcastle University. The confirmation of ethical approval for the study was issued by the Leeds (Central) Research Ethics Committee (Reference No. 10/H1313/55). Six interviews were audio-recorded and transcribed verbatim for analysis. The data obtained was analysed in accordance with the qualitative content thematic analysis

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method⁽⁶⁻⁸⁾. The transcripts from each interview were analysed and relevant memos and comments made during and after the interviews were included in the analysis. Data from the transcripts was coded to identify themes.

Findings

Several themes emerged from the findings of the study:

- Participants' negativity on almost all aspects of their ePortfolio, asserting that the ePortfolio did not help self or deep learning and was of little educational value.
- A lack of understating of the purpose of the ePortfolio.
- Frustrations of the participants with timetabling restraints on using their ePortfolio and also fitting assessment and appraisal meetings into their busy schedules.
- Lack of incentive to carry out self-directed learning.
- Participants felt that assessment feedback was predictable, not specific, not constructive and unhelpful.
- Trainees lack of appreciation or understanding of the value of reflective practice.

Discussion

There was a disparity between participants' views of the ePortfolio and the findings from the studies in the literature. This finding challenges the principles underpinning the justification for implementation of the ePortfolio system as well as the adult

learning principles. In the study, attitudes towards the ePortfolio were not positive and it was considered burdensome and of low educational value. This is compatible with the findings from systemic reviews^(9,10) but differs from other studies⁽¹¹⁻²⁰⁾. It is possible that poor understanding of the purpose and principles underpinning the ePortfolio lead to negative views. Consideration should be given to emphasising the importance of the purposes and principles underpinning the ePortfolio in the induction training session.

Extending similar training sessions to supervisors and assessors could help turn the ePortfolio process into a respectable and educational value generating tool, as it was apparent that these trainees believed that their supervisors and assessors were not familiar with and did not understand how to use the ePortfolio. Participants also expressed concerns on perceived variation in quality of the assessors' feedback. These findings were similar to the findings from other studies^(21,22) where trainees' concerns regarding supervisors with insufficient knowledge or understanding of the portfolio and assessors' reliability were identified.

The participants found that the unavailability of assessors and time needed for completion of the ePortfolio was a major hindrance to them as regards the usefulness of ePortfolio as a tool for educational development. This is comparable with the findings from the systematic review⁽²⁴⁾ in which a significant number of studies demonstrated that learners had difficulty integrating portfolio use into their busy timetables.

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The trainees had mixed feelings about the value of their appraisal meetings and they felt the educational benefit gained from these meetings was largely dependent on the experience and skilfulness of their supervisors. Again, this is contrasted with the highly positive view of trainees in the Johnson study⁽²³⁾ on their appraisal sessions.

All participants considered that workplace based assessments (WPBAs) were not particularly helpful to their learning and did not provide educational value. It is obvious that the implementation of the workplace based assessments system for postgraduate medical trainees has a major impact not only on the trainees and assessors (consultants) but also on the service and patient care. It is important that such an essential and resource demanding system must be fit for purpose and as a point of principle should provide educational value and evidence to justify its implementation. Workplace based assessments, like any other forms of assessment, have several potential threats to reliability. The most obvious ones are inter-observer variation (the propensity for one assessor to mark consistently higher or lower than another), intra-observer variation (the variation in an assessor's judgment for no apparent reason or human factor) and case specificity (the variation in the trainee's performance from one assessment to another, even if the challenges they face are the same)⁽²⁵⁾. In practice, maximising 'consistency and comparability' of the assessors performance, judgment, the environment and procedures can

improve the reliability of workplace based assessments tools and will earn respect from trainees⁽²⁶⁾. This should subsequently change attitudes towards assessments which will then be regarded as real assets to educational development.

The quality of feedback from assessors and supervisors seems to be a significant issue in whether trainees consider the ePortfolio a valuable tool in their educational development. Feedback from the supervisors and assessors should be adapted to the needs of the learners, be timely, specific, constructive and focused on relevant aspects of the performance in the workplace. Enhancing its effectiveness will build a positive view from trainees on their ePortfolio⁽²⁷⁾. It is also important that the trainees should be given support and guidance to address areas for improvement mentioned in their feedback^(23,24). Therefore, the Trust's management and the Deanery as regulator should consider making faculty training mandatory to all supervisors and assessors to improve their feedback skills⁽²⁷⁾.

When the ePortfolio was implemented, there was a great expectation that reflective practice would enhance self-learning and motivate deep learning. However the result from this study has proved disappointing and poses questions regarding the justification of how the reflective component is used locally. Glaze⁽²⁸⁾ clearly explained the different stages of the learners' development of reflective ability and successfully demonstrated these in her study on student nurse practitioners' perception of their reflective

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practice. She also explained that awareness and engagement happens when learners overcome any misconceptions about their reflective ability. She said, in the early stage of using reflective process, that learners' lack of insight acted as an obstacle to reflective development.

Limitations of the Study

The literature was searched for evidence of the ePortfolio as used in the medical education field. Outcomes and perceptions of ePortfolio used outside the medical education domain could differ to the results of this study which would have given it a different direction. The other limitation was the size of the study. As it was a small group study, the findings and recommendations from this project are unlikely to be directly transferable to similar settings. However, this small study could be used as a pilot for a larger study such as a quantitative survey questionnaire study conducted on a larger population or a qualitative study on wider range of trainees and supervisors⁽²⁹⁾. Member checking, triangulation and prolonged involvement of the study group would have improved the validity of the study (3,6,29). A mixed data collection method, for example a combined quantitative survey and qualitative interview method could have been selected to improve the validity of the study. However due to limited time and resource availability the study would not have been completed in time if the mixed method had been used. The reliability of the analysis of the data could have been enhanced by using another researcher to carry out an independent

assessment of the transcripts⁽²⁹⁾. The validity of the findings could also be enhanced by organising combined data collection methods (triangulation)⁽³⁰⁾. Finally, it is possible that the trainees who volunteered to participate in the study were more motivated than those who did not which could have led to potential bias.

Suggestions for Improvement

Caution should be exercised when making recommendations based on this small scale study. However it is recommended that the following ideas should be considered.

- Training and Support for the ePortfolio: An introduction session stressing the purposes and principles underpinning the format, together with the components and educational value of the ePortfolio should be provided to all junior trainees.
- Faculty training: Educational supervisors' technical ability and knowledge significantly affects how they interact with the ePortfolio. Educational supervisors must be adequately equipped to enter appropriate information⁽²⁴⁾. All assessors and supervisors should be offered the opportunity to become more familiar with the use of the ePortfolio.
- Maintaining and improving quality of the faculty's feedback: Regular feedback from trainees on educational supervisors' performance, an educational supervisors reward system and building up a better relationship with trainees could all improve the quality of supervisors' feedback⁽³¹⁾. Educational supervisors should be

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trained or encouraged to discuss and clarify the goal and contents of the feedback, to demonstrate that the ePortfolio work has been examined, to praise the good work of trainees, to stimulate further reflection and to indicate what the omissions are when they give feedback to their trainees.

- Promoting reflection: Educators should encourage trainees to foster reflective development. Consideration should also be given to the suggestions by the trainees that sessions on using reflective practice should also be offered to educators and assessors.
- Time availability: Sufficient time for supervisors, assessors and trainees to use the ePortfolio is crucial for it to function as an effective educational tool. Since trainees are in the work environment where efficiency of service provision is expected all times, finding sufficient time to focus on the ePortfolio is a difficult task. Service management and educational regulators should develop a mutually agreed plan to promote an educational environment where there is a good balance between service and training. A well-defined programme activity for educational supervision for trainees should be clearly stated within the consultants' job plan.

Conclusion

Despite being viewed as a tool to support the trainee's educational development, promote self-learning and improve educational gain, the potential is severely limited if the

ePortfolio is not integrated within the wider educational and service implementations as suggested in the study. The educational potential of the ePortfolio will only be achieved if the system is adequately supported by the main educational processes that motivate the trainers, particularly regarding assessment and feedback. Educational regulators, professional establishments, service providers and management must therefore work together to develop consensus policies and strategies to create an environment where service demand and the support for educational activities are well balanced.

Practice points:

- An induction session emphasising the purpose and principle underpinning the educational value of ePortfolio.
- Mandatory training session for all educational and clinical supervisors.
- Educators to be trained to provide high quality and constructive feedback
- Trainees should be adopting reflective practice
- Time availability for educators in their job plans

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