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How We Devised and Implemented Foundation Trainee Led Audit Poster Days - an Engaging and Popular Means of Teaching Audit Process

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Abstract
We identified that there were limited opportunities for Foundation Doctors to present audit and quality improvement projects within the trust. An 'audit poster day' was established to encourage participation and teach audit. The entire organisation of the event was transferred to Foundation trainees who organised the selection, logistics and judging criteria for the day. This not only encouraged participation amongst the foundation trainees but helped develop leadership and organisational skills. This was supported by feedback from Visual analogue scale (VAS) scores given by foundation trainees for whom the event constituted a teaching session. The evidence supported this favourable alternative to didactic teaching.

Key Words
Audit; Teaching; Juniors; Poster; Conference

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Introduction

An understanding of the clinical audit process is an essential skill for any Doctor in clinical practice. In the UK it is expected that each Foundation Doctor (those in the first –FY1- or second –FY2- year of training following graduation) 'manages, analyses and presents at least one quality improvement project and uses the results to improve patient care' at least once during this time'[1]. The importance of audit is also acknowledged by the UK regulatory body the General Medical Council[2].

Traditionally in our trust foundation programme the teaching of audit has focussed on lecture based teaching methods. We as authors felt that this was not sufficient and at odds with the programme specification which encourages a more active role.

We aimed to devise a more engaging means of teaching this which would not only encourage Foundation Doctors to undertake a project but help build understanding also. To do this we organised an Audit poster day conference which took part during the FY2 Doctors' weekly teaching afternoon and constituted their teaching session for that week. Through this we created a form of 'Discovery learning' whereby the trainees learnt about audit through participation.

The concept of Discovery learning was developed by the educational psychologists Seymour Papert, Jean Piaget but primarily Jerome Bruner[3,4,5,6] throughout the 1960s. It is often described as a constructivist or inquiry based learning form. Advocates of the technique claim that it creates a deeper understanding of subject matter as learners work through simulations, exercises or scenarios.

Method

In its first year the conference was led by a UK Core Surgical Trainee year one (core trainees are in the first two years of vocational training after foundation year completion) in association with a foundation programme director (FPD) – a Senior Doctor who is responsible for the training of foundation trainees within a Trust. It was held on the afternoon of the 19th November 2013 to intentionally appeal to Foundation trainees who may have been applying to vocational training programmes the following month and were looking to supplement their CV.

Advertisements for the event were displayed in the preceding September 2013 appealing for posters which presented audits or similar quality improvement projects which had in some way aimed to improve patient care quality. Applicants were invited to submit a 200 word abstract before the 18th October 2013.

Advertisements were sent to all foundation trainees within the host trust and neighbouring three trusts

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and distributed around the ELHT hospitals. Additional advertisements were sent to Core trainees in medicine and surgery. In total thirty six abstracts were received and accepted with only two being excluded (one case report and one in an unacceptable format). Five projects which were deemed to be of particular interest were selected by the two FPDs and invited to give an oral presentation also.

Two weeks prior to event the two conference leads spoke to the foundation year one Doctors as a group at the beginning of their weekly teaching sessions. Here we appealed for volunteers to help with the running of the day and made it clear that the volunteers would be expected to run the event again, by themselves the following year.

The poster day itself began at 13:00 with a half hour talk from the FPD to the foundation doctors on the elements of a high quality audit projects and critical appraisal. Registration was undertaken at 13:30. At 14:00 poster viewing and formal judging commenced for one hour. Judging was performed by six Consultants from the four participating trusts (one Radiologist, one Urologist, two Physicians, one Emergency Medicine Physician and one Paediatrician). Each Judge was allocated six posters to mark and given a structured scoring template which had been designed by the trust audit department. This incorporated six scoring categories: Aims, methods, results, conclusions, innovations and overall presentation. The posters which had been allocated the highest individual score by each judge were discussed.

The judges then viewed the six highest scoring posters together and agreed an overall winner. Attendees were then invited to hear five minute presentations from the five invited projects with

one minute of audience questions after each. Judging of the oral presentations was performed by the two FDPs (one from the host trust and one from a neighbouring trust). There was no marking template for this as judges were able to make a direct comparison on the basis of the following criteria:

- Presenting style
- Design of Audit
- How convincing the presenter is that their audit will improve care quality
- Ability of presenter to succinctly explain the design and findings of the audit
- Response to questions from the audience

At the end of the afternoon attendees and participants were thanked and winners of both formats announced. Winners, participants and judges were issued with certificates.

Results

We repeated the event one year later but removed all active input from non-foundation Doctors. One of the FY2 Doctors who had helped with the running of the day in its first year agreed to lead the organisation and recruited two fellow FY2s. It was hoped by doing this we would encourage the development of leadership skills also. The format of the conference was exactly the same except organisation, promotion, venue set-up and compering on the day was all undertaken by the now FY2 Doctors. Participant numbers had increased slightly also with forty posters presented on the day.

Questionnaires were issued to the remaining FY2s for whom the conference had constituted a teaching session. They were asked to rate how much they agreed with a number of statements by marking a Visual analogue scale[7,8] (results displayed below –

Statement	Mean VAS score 0 (Disagree) – 10 (Agree)	Standard Deviation	Number of responses
I enjoyed the poster day	9.39	1.16	23
I feel the poster day is a good idea	9.48	0.898	23
The poster day helped increase my understanding of the audit process	8.61	2.35	23
The day has encouraged me to do an audit in future	8.87	2.22	23
I prefer the day as a means of learning about audit compared to conventional lectures.	8.61	2.44	23
Total =			23

Table 1: Table to show the mean average ratings for various statements regarding the poster day event.

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Table 1).

The trainees responded very positively to all statements regarding the day. The statement 'I feel the poster day is a good idea' with a mean of 9.48 had the highest VAS score of the five. The second highest score was for the statement 'I enjoyed the poster day' which averaged 9.39. The 3 main aims of the day were to encourage participation and understanding of audit and offer an alternative to didactic audit teaching. The trainees responded very positively to the three statements addressing these points. The statement 'The poster day helped increase my understanding of the audit process' averaged 8.61. 'The day has encouraged me to do an audit in future' was generally agreed with and averaged 8.87. 'I prefer the day as a means of learning about audit compared to conventional lectures' also averaged 8.61.

Conclusion

We found that the organisation of an academic audit poster conference could feasibly be organised and run by foundation doctors after establishment in its first year by our trusts foundation department. The number of participants was even improved upon from 36 to 40 posters after the organisation of the event was transferred. The feedback we received suggested that the trainees enjoyed the day preferring it to didactic teaching. Evidence here would also suggest that trainees were encouraged to undertake audit projects.

We felt an important consideration during the process is that trainees receive some qualified guidance and feedback. We chose to give a 1 hour teaching session on how to critically appraise audit presentations immediately prior to the event and Judges gave direct feedback to participants on the individual projects however those looking to reproduce a similar event may wish to offer furthered structured teaching to dissuade poor practice.

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