

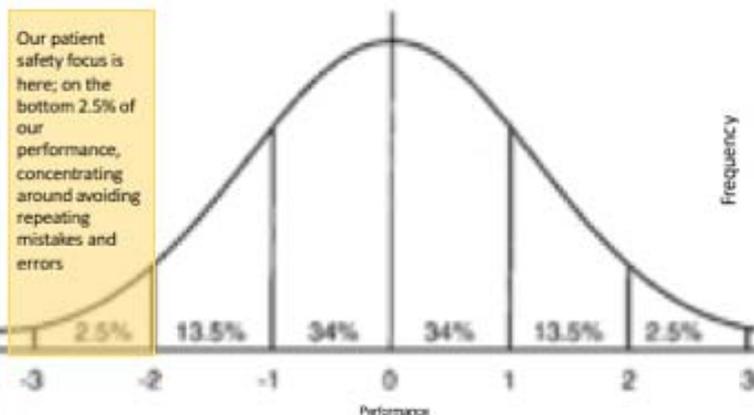
Learning from Excellence

CHANGING WORKPLACE CULTURE

If we can learn so much from the very worst of our performance, what could we stand to learn from the very best?

What is Learning from Excellence?

Our patient safety focus is here; on the bottom 2.5% of our performance, concentrating around avoiding repeating mistakes and errors



Negativity bias is pre-programmed into our brains, as an instinctive way to detect and avoid predators and risk in our earliest evolutionary times. Negativity bias is so much a part of our survival that it happens without thinking. It has permeated into all of our daily activities, even our work.

Healthcare has developed an ingrained negativity bias. We focus a huge amount of resource into learning from those times where things go wrong: Critical Incident Forms, Significant Event Analysis, Incident Reporting Forms, etc. Our professional norms (exams, appraisal, ARCP are designed to assess for minimal competence.) We spend all our time focussing on the worst part of our performance. These are valid, robust and reliable ways to make sure we achieve what we must, and to examine our errors so we don't make the same mistakes twice. But how does this concentration on the poorest part of our performance impact on our confidence, resilience and morale at work?

What we did in NHS Fife



EDUCATE

To get started, we shared the concept of Learning from Excellence with our team. Our successful initiative started with building an enthusiastic base in our ICU. We made a huge effort to include the whole MDT, to teach them about:

The negativity bias in the NHS and how it can make us feel demoralised, pessimistic and unmotivated about our work. Highlighting how our patient safety systems are all concentrated around the worst 2% of our practice. How we could stand to learn amazing things from the excellent practices of our colleagues.



NOMINATE

We then provided a simple system for colleagues to nominate each other. Our paper based system worked brilliantly. We bought a lockable post-box (for privacy) and then painted it bright gold with glitter! We put the box prominently in the centre of our ICU and provided forms for people to complete at work or at home. We kept our data collection to a minimum, so it was easy and quick for busy staff to complete. We asked: Who was excellent, What did they do, and Why was it excellent. We put posters up around our area to remind people to look for excellence during their day at work and nominate their colleagues.



FEEDBACK

We collected the nomination forms every week, and sent them, via email, verbally, to the individual nominated. They were told what they did that was recognised, and why their behaviours made it excellent. We found it was really important that the nominated individuals received their feedback quickly. However, not everyone checks their emails regularly, and unfortunately some of our MDIT colleagues don't have trust email addresses, in which case paper certificates were posted via internal mail. We kept the nomination feedback private for the recipient. Some individuals may feel uncomfortable with a public celebration of their performance, so we hoped this would avoid unintended embarrassment.



LEARN

The learning cycle is simple: Individual practitioners learn what their colleagues perceive to be excellent within their work. They continue consciously in their excellence, and apply these behaviours to other areas of their practice. After 3 months, we reviewed all of our received nominations together. We identified common themes of excellence in compassion, palliative care and team working. Others can learn from these anonymous examples of each others excellence, spreading excellent behaviours and practices between individuals. There is the added benefit of a huge improvement in moral of the unit in which excellence nominations have been introduced.



GROW

Our experience has been shared with NHS Lothian, and resulted in Learning from Excellence systems being set up across NHS Lothian. We have also registered with www.healthcareexcellence.com and are part of their community of practice network, providing support, assistance and advice to colleagues across the country.

We have also joined forces with our safety teams and QI team. LE is potentially an incredibly powerful resource for improvement projects and we plan to use this system and our experience as part of a Joy in Work programme in NHS Lothian.

“The excellence nominations have made me totally reconsider how I think about work. Six months ago I was going to hand in my notice and leave nursing forever. Now, I look forward to achieving excellence for my patients everyday.”

Are medical students going to sea at all?

The current state of clinical teaching at a university hospital

Kevin Gervin, Jennifer MacFie, Coralie Turner, Sarah McCusker
NHS Greater Glasgow & Clyde; University of Glasgow

Background

Clinical teaching (CT) involving real patient encounters may occur within in-patient or ambulatory settings and is vital to medical education. However, its usage is apparently diminishing, with various reasons being hypothesised.

Aim

In this study, we seek to describe and evaluate medical students' current experiences of CT, at a tertiary, university hospital.

Methods

30 final phase medical students on 10-week senior general internal medicine rotation were surveyed on their experiences of CT. Questionnaires included five-point Likert-type and free-response questions. Details included approximate number of encounters, setting, grade of tutor, organisation and quality indicators including enjoyment, relevance, improvement to practice. Free-response questions enquired about most/ least useful elements and suggestions for improvement

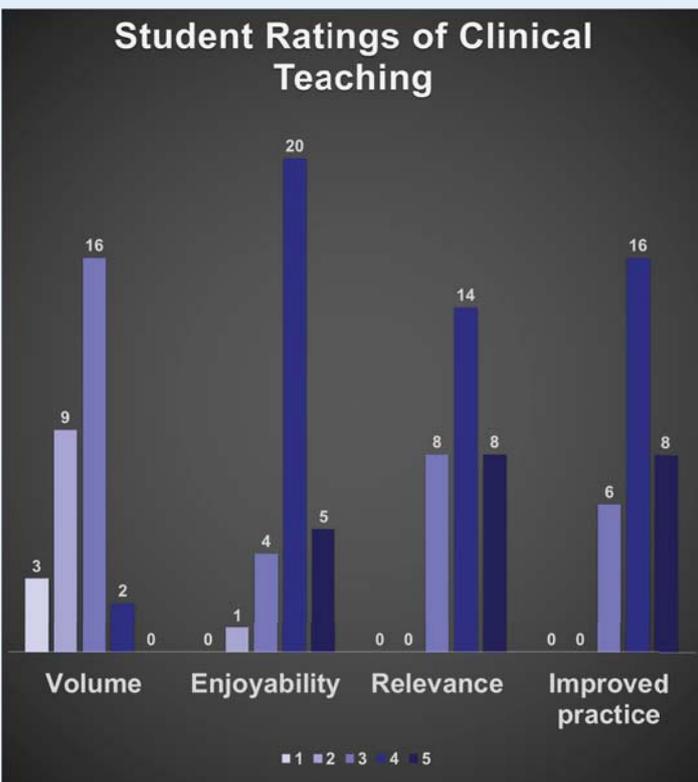
Results

Number of sessions per student in 10 weeks:

- Mean= 20.759
- Mode= 20
- Range= 8-40

Graph 1 displays students' ratings of clinical teaching overall.

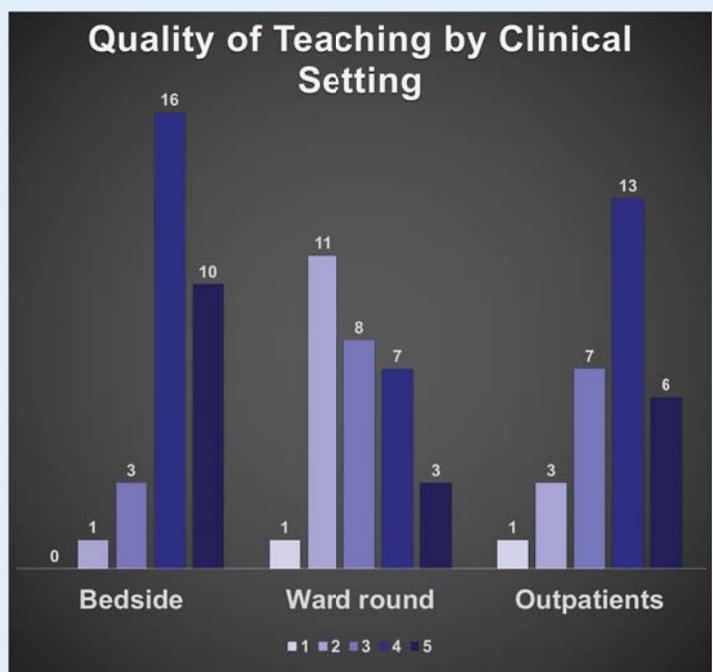
Volume is considered less than adequate (mean: 2.567; range: 1-4), but students find it enjoyable (mean: 3.967; range 2-5), relevant (mean: 4.000; range: 3-5) and believe it has improved their practice (mean:4.067; range: 3-5).



Teaching is provided by all grades from FY1 to consultant, and the number of session provided by different grades is fairly equal, (range= 22-27) only 17 students received teaching from all grades.

Graph 2 displays overall opinion of teaching by clinical setting.

Student rate teaching at the patient bedside highest (mean: 4.138; range 3-5), followed by outpatients clinic(mean: 3.667; range: 1-5). Ward round teaching is rated poorly (mean: 2.567; range: 1-5)



Free Text Common Themes

Exposure to real patients

Too many students

Opportunity for feedback

Ward round teaching poor

Link teaching to ILOs

More clinical teaching

Conclusions

The volume of teaching in particular is concerning, with students reporting an average of only two clinical teaching sessions per week. These students are on their final general internal medicine placement. Students particularly value experience and feedback gained from CT. At our institution the quality of CT is good, without being stellar. However, students have a desire for more, better organised CT. Ward rounds in particular appear to be a missed CT opportunity.

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An evaluation of home-based laparoscopic simulation programmes for core surgical trainees in the UK and Ireland



Blackhall, V^{1,2}, Cleland J¹, Moug S⁴, Wilson P³, Walker K²

On behalf of the Scottish Surgical Simulation Collaborative (RCSEd, RCPsG, NES)

1) Centre for Health Research and Innovation, University of Aberdeen; 2) Highland Academic Surgical Unit, Centre for Health Science, Inverness; 3) Centre for Rural Health, University of Aberdeen; 4) Department of General Surgery, Royal Alexandra Hospital, Paisley.

INTRODUCTION

Deliberate practice using portable laparoscopic box simulators is associated with the successful acquisition of laparoscopic skills, which are transferrable to the operating theatre (1-3). However, trainees tend not engage with practice (4-7).

This was our experience in our own attempt to incentivise frequent practice on take home simulators by trainees in the two Scottish core surgical training programmes (The Incentivised Laparoscopy Practice Study (ILPS)) (8).

The aim of ILPS was to quantify gains in laparoscopic motor skills of core surgical trainees using take home simulators. Trainees were given metric feedback on their performance (e.g. time to complete task).

The incentive was an eCertificate which was awarded on attainment of certain metric performance standards. The eCertificate was designed to cue trainers to allow the trainee access to first operator tasks in live theatre.

Similar programmes have been run with varying success elsewhere in the British Isles, including Ireland, Wessex and Bristol.



Figure 1: The eoSim take home laparoscopic simulator.

METHODS

This was a qualitative study utilising focus groups. Views were gathered from stakeholders at each of the three regions (Scotland, Ireland, Wessex, Bristol). Participants included:

- Core surgical trainees (CSTs) enrolled in home-based laparoscopic simulation programmes
- Naïve CSTs, not previously enrolled but familiar with the simulation equipment
- Consultant trainers involved in training CSTs
- The CST training programme directors
- Faculty from the original programmes

The focus groups were audio recorded, transcribed and coded. A thematic analysis was performed (9).

RESULTS

Twelve focus groups involving 63 participants were conducted (42 trainees, 21 trainers). Four main themes were identified from the data. These are discussed in turn.

Trainee motivation

Trainees are motivated to engage with activities explicitly associated with career progression, rather than tasks which they find interesting, or are associated with personal development.

They prioritise tasks which score points at national selection interviews, rather than developing their technical skills.

The structure of the surgical training scheme perpetuates this problem, supporting 'point scoring' rather than rewarding trainees for 'being good operators'.



Trainee: "I'll look at a list of courses that gets scored on your CV, and tick those off, rather than go to a conference that I'm interested in"

Trainee: "having good dexterity becomes less of a priority, because you spend time doing things that get you points"

Trainee: "the system promotes tick boxes, rather than being a better surgeon, you have to play the game"

Some regions mandated their simulation programme. Although this improved engagement initially, trainees disengaged once they had done the bare minimum. Mandating simulation seems to reinforce the 'tick box' culture rather than challenging it.

Trainee: "once I'd completed it and got my certificate, I haven't gone back to it"

Feedback

Trainees and faculty members had concerns regarding the validity of the metric feedback.

Faculty: "they're inaccurate. And proving that they are competent? I don't think so"



Instead of metric data, most trainees wanted individualised performance feedback from their trainers, delivered at scheduled training sessions.



Trainee: "I like the idea that when I am doing it, someone could actually watch me and give feedback"

Trainer involvement

Trainees highlighted a lack of realisation of an operative reward. This was partly due to a lack of trainer engagement. Trainers were apparently unaware or disinterested in the programme and described lack of confidence in delivering the necessary training.

Trainee: "My consultant didn't care that I was doing this, it didn't translate in terms of doing more operating"

In addition, training behaviours of the trainers may be difficult to challenge. Trainers tend to work at the pace of their own training model, gradually increasing the level of the trainee's operative responsibility over time.



Trainee: "no matter how much training people did outside of theatre, when they got into theatre, every trainer just wanted to, go back to basics."

Clinical systems

Clinical systems within the surgical department limited operative opportunities in general, also challenging realisation of an operative reward.

As the most junior member of the surgical team, core surgical trainees were often drafted away from theatre to undertake ward duties.



Trainer: "in [City x] the trainees don't get to operate because all they do is clerking in patients."

DISCUSSION

Scheduled simulation sessions which provide trainees with the opportunity for consultant feedback may improve engagement. Promoting a shift away from a 'tick-box' culture is more challenging. This may, in part, be facilitated by the imminent introduction of the Improving Surgical Training Pilot. This will see the introduction of modified assessment structures (entrustable professional activities) which focus on the behaviour and values required for a professional activity rather than specific knowledge and skills associated with current workplace based assessments, as well as greater recognition and accountability for trainers, and recognition and funding of simulation strategies including in-house skills sessions.

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Turning the tables on student timetables: a pilot project



Mulligan L, Shields DW, Reidford E, Munro R
Department of Medical Education, University Hospital Wishaw
laura.mulligan@nhs.net



Introduction

The use of smart phones has dramatically increased over the last decade within healthcare organisations and medical schools. Doctors are able to access textbooks, guidelines, medical calculators and drug formularies using their handheld device, with 85% of resident doctors reporting they used their smartphone during ward rounds for patient care¹. Furthermore, 22% of medical students on clinical attachments use medical related apps several times a day². Google Calendar is an easy-to-use, free and secure online calendar³ accessible with free Google account.⁴

Methods

Use of a live Google Calendar was introduced for 4th year undergraduate medical students during their medicine and surgery clinical placements at University Hospital Wishaw.

The undergraduate administrator creates and maintains the calendar and grants students and educators access to view the calendar (Figure 1). Users can access the calendar on smart phones and web browsers, with e-mail alerts sent automatically with changes to the timetable.

An electronic, anonymised questionnaire was distributed by e-mail at the end of the students' placement to investigate perceived utility. This consisted of demographic details, 5 yes/no questions and a free-text comment.

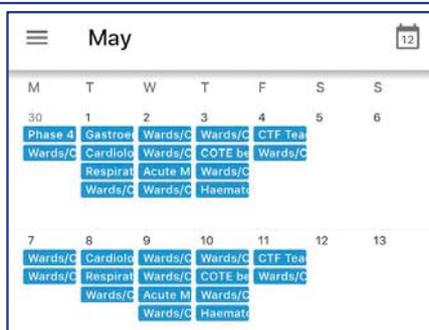


Figure 1: Google Calendar

Results

With a response rate of 80%, 67% of respondents had used a Google calendar prior to their clinical placement at University Hospital Wishaw.

83% of students preferred the live Google Calendar to a paper timetable (Figure 2) and 83% of students said they would like to have a Google Calendar for all clinical placements (Figure 3).

Did you find the Google calendar more useful than a paper timetable?

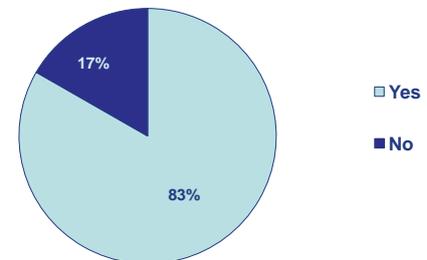


Figure 2

Would you like to have a Google calendar for all clinical placements?

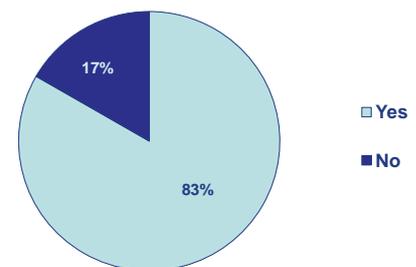


Figure 3

Anecdotally, administrative staff found that the initial investment in setup time has resulted in a more efficient and effective communication tool.

Conclusions

- The positive feedback via this study and feedback from administrative staff has resulted in the introduction of the system across all 3 hospital sites in our trust.
- 88% of students across the 3 sites preferred the Google calendar to a paper timetable.
- Further assimilation of student opinion will be complemented by input from administrative staff and estimation of time/cost saving.

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iViewExpert : explicating practitioner expertise in complex medical procedures, for transfer to trainees.

Amin A¹, Blackhall VI^{1,2}, Whiteley I³, Wilson P⁴, Walker KG¹

on behalf of the Scottish Surgical Simulation Collaborative (RCSEd, RCPSG, NES)

¹ Highland Academic Surgical Unit, Centre for Health Science, Inverness

² Centre for Health Research and Innovation, University of Aberdeen

³ Centre for Space Medicine, University College London

⁴ Centre for Rural Health, University of Aberdeen in Inverness



INTRODUCTION

As doctors become expert in a complex procedure, they develop automatic nuances of performance that are often difficult to explain to a peer or a trainee (so called 'unconscious competence'¹). In addition, traditional methods which attempt to establish a shared understanding of decision making are associated with limitations. Whilst concurrent reporting alters the flow of the task at hand, retrospective reporting is subject to bias and often incomplete².

iViewExpert is a technique (validated in the aerospace domain) which externalises an expert's cognitive processes, without disrupting task flow. Similar methods have been used to study clinical reasoning of expert occupational therapists and emergency physicians. The aim of this novel project is to assess the feasibility of adapting the technique to training technical skills in medicine.

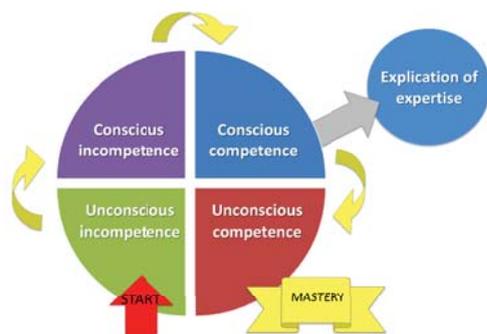


Figure 1: Peyton's learning cycle¹. When learning a new skill, individuals are initially unaware how to perform a task. With time, they develop awareness of how to, but are unable to execute the task. With practice, they are able to complete the task but have to think about it. Eventually, they can complete the task automatically, having achieved a state of mastery. Transfer of expertise does not occur in this final phase and 'cued recall debrief' relies on shifting the trainer to a state of conscious competence in order to explicate their cognitive processes.

METHODS

This was an observational pilot study in which expert medical practitioners wore a head mounted camera to capture complex procedures (colonoscopy, epidural insertion and laparoscopic cholecystectomy). Footage captured was reviewed along with a facilitated debrief in order to externalise cognitive processes. The debriefs were structured upon a validated narrative and undertaken by a psychologist, trained in the technique. The debriefs were recorded and formed an audio commentary. The videos and accompanying audio commentaries were edited and formed learning packages, which were watched by a group of learners. The learner group comprised junior doctors, who ranged from foundation to specialty trainees, and nurse endoscopists (endoscopy video only).



Figure 2: The iView expert team fitting and adjusting the head mounted camera pre-procedure

The technique differs from standard procedural videos in that it theoretically provides a more detailed insight into thought processes of the expert. This is facilitated through the video debrief which encourages reflection upon kinaesthetic (head movement) as well as auditory and visual cues, resulting in a higher level of experiential immersion⁴.

Questionnaires examined educational value of the technique using Likert scales and free text answers. Quantitative data were presented in terms of agreement with statements. Qualitative data from free text responses were coded in order to identify key themes.



Figure 2: The debrief process. The debrief should be conducted within 24 hours of the event by a trained facilitator. Non-directive probes can be used to expand upon recall generated by auditory, visual and kinaesthetic cues.

RESULTS

A total of 15 learners watched the videos. The majority of learners (13/15; 87%) agreed that the process was a useful learning tool. The majority (13/15; 87%) also felt that the process gave useful insight into the operator's thoughts and actions.

Qualitative analysis of the free text learner responses demonstrated that the technique revealed useful and unique nuances of the procedure at study. The learners felt it provided "better understanding of the difficult steps."

DISCUSSION

The intervention could represent a powerful adjunct to training. Rather than generating a procedural description, it appears to elicit important subtleties of a procedure, more relevant to experienced practitioners rather than novices or beginners. Therefore, we are currently undertaking a larger study focusing on a cohort of experienced practitioners as learners.

We also wish to evaluate whether the experts who participated in the 'cued recall debrief' process found it valuable and whether there are particular environments, procedures or individuals for which this technique works best. Preliminary results show that experts found the process highly immersive and that they were able to gain insights into their own practice of which they were not previously aware. In addition, the technique appears to be best suited to non-routine, especially challenging procedures.

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Jennifer Macfie^{1,3}, Sarah McCusker^{1,3}, Eilidh MacDonald^{2,3}, Kevin Gervin^{1,3}, James Boyle^{2,3}.

1 Department of Medical Education, Queen Elizabeth University Hospital; 2 Department of Medical Education, Glasgow Royal Infirmary; 3 Undergraduate Medical School, University of Glasgow

Introduction

Clinical reasoning is the ability to think critically in order to formulate differential diagnoses and management plans¹, and is a vital component of clinical competence. Clinical reasoning in medical students can be developed through targeted teaching sessions.

Durning et al developed and validated post clinical encounter forms (PEF) to assess clinical reasoning ability in the Objective Structured Clinical Examination (OSCE) setting².

We introduced the PEF across 2 Glasgow teaching hospitals as a means to assess clinical reasoning in undergraduate medical students. We hypothesised that our structured teaching format would improve clinical reasoning abilities, evaluated using Durning's PEF.

Aim

We aimed to demonstrate that clinical reasoning skills can be improved in third year medical students through participation in our structured teaching days. We hypothesise that our design for teaching will confer improvement in mean PEF score, suggesting overall improvement in clinical reasoning ability.

Method

271 pre-clinical third year medical students attended for 3 full-day clinical reasoning sessions across 2 hospital sites. Each session focused on 2 body systems (Fig 1).

Fig 1	System taught
Session 1	Respiratory & rheumatology
Session 2	Cardiology & neurology
Session 3	Endocrinology & gastroenterology

Teaching for each system teaching included:

- Introductory examination video and discussion
- 2 hours bedside teaching
- Discussion of findings facilitated by the SNAPPS method³
- Class brainstorm of differential diagnoses, illness script formulation and investigation and management plan generation

Assessment of clinical reasoning

Clinical reasoning abilities were assessed by students completing a PEF based on the same system-relevant clinical case, pre and post-teaching.

Forms were marked by faculty based on pre-determined correct answers, and mean scores calculated. Scores were documented for each student, facilitated using student ID number, for each system. Data was also collected regarding gender and previous degree status.

Effectiveness was evaluated by comparing pre- and post-session analysis, and calculation of mean improvement in score for each system.

Results

271 students were included, having attended minimum of one teaching session. In total we have 139 female students and 94 males.

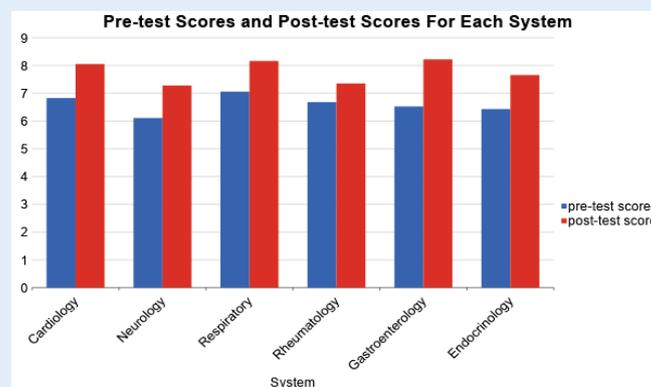
Students without both pre- and post- scores were discounted from analysis.

Analysis using a paired students' t test showed $p < 0.0001$ for the pre and post testing of each body system.

Fig 2: pre-test and post-test scores and standard deviations for each system

System	Pre-test Mean Score	Pre-test Standard Deviation	Post-test Mean Score	Post-test Standard Deviation
Cardiology	6.83	1.87	8.05	1.23
Neurology	6.11	1.56	7.82	1.55
Respiratory	7.06	1.97	8.16	1.46
Rheumatology	6.68	2.35	7.35	1.96
Gastroenterology	6.52	2.20	8.22	1.25
Endocrinology	6.43	2.24	7.66	1.46

Fig 3: graph showing improvement between pre-test and post-test scores



Conclusions

Using PEF we demonstrated an improvement in clinical reasoning following our structured teaching sessions.

This demonstrates that students' clinical reasoning skills can be developed by using a structured teaching program aimed at development of such skills.

Teaching techniques used could be easily integrated into a variety of undergraduate teaching to improve clinical reasoning for future teaching sessions.

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GOing PROfessional

Using point-of-view filming to facilitate preparation for practice in final year medical students



UNIVERSITY
OF ABERDEEN



Dr Fiona Thomson, Dr Ian Morrison, Dr Wendy A Watson

The School of Medicine, Medical Sciences and Nutrition, University of Aberdeen AB25 2ZD

Introduction

First person, or point-of-view (POV), filming is well established in the social sciences, however, few reports exist regarding POV video applications in medical education. We describe how POV filming was used to deliver an *en masse* ward simulation exercise for final year medical students as a means of preparation for practice.



Methods

We designed scenarios around the traditional ward round where a member of staff, assuming the role of a Foundation doctor, wore a GoPro camera. Faculty portrayed patients and other members of the clinical team. We devised a workbook and accompanying PowerPoint presentation in conjunction with the scenarios, and students were encouraged to perform tasks in real-time in relation to the videos.

Topics included:



Examples of model answers were incorporated with pauses for discussion of important issues and reinforcement of salient learning points.

The interactive lecture lasted two hours and was delivered to all final year students at the University of Aberdeen.



Discussion

The session received overwhelmingly positive feedback in terms of **enjoyment**, **interactivity** and **utility**. Students felt it was a good introduction to subsequent in-situ ward simulation exercises and prepared them for the transition to student assistantships.

Many commented that it gave them newfound insight into the responsibility and pressures experienced by foundation doctors.



Conclusions

- POV filming can facilitate immersive and reproducible educational experiences for large cohorts of students.
- Requires less time and resource than traditional small group simulation.
- Guarantees equity of educational experience.
- We propose that this concept could be applied to many areas of medical education to achieve:
 - close-up, purposeful observation of practical procedures e.g. surgical or endoscopic techniques
 - team-briefing and debriefing
 - critical incident drills

Student feedback identified appetite for a similar POV session observing the assessment and management of an acutely unwell patient. The development of an online learning package for this is currently in progress.

Publication:

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Full article available at: <http://stel.bmj.com/content/early/2017/06/30/bmjstel-2017-000224>



COME HERE. GO ANYWHERE

Sharing learning from adverse incidents and excellence in the neonatal intensive care unit.

Dr Stacy Wightman, Dr Andrew T. MacLaren, Dr Laura McGlone, Dr Morag E. Campbell
Department of Neonatal Medicine, Royal Hospital for Children
Glasgow

Introduction

Care within the NHS must be safe, effective and patient focussed. Robust governance process requires that adverse incidents are identified, reported and reviewed through significant clinical incident (SCI) reviews. SCI reviews should identify learning outcomes to help reduce the risk of such incidents recurring. It has been recognised that learning outcomes from neonatal SCI reviews are not consistently shared with staff. Furthermore, there is often inadequate evidence of lessons learned or effective change implemented following incidents (1).

The concept of "Learning from Excellence" is becoming more recognised in healthcare, providing new opportunities for learning and also improving staff morale and resilience (2). Indeed, research suggests that learning is improved through positive reinforcement (i.e. through emphasising good outcomes) when compared with negative reinforcement (i.e. focussing on failures) (3).

We developed bulletins for staff members outlining the learning points from SCI reviews. We hypothesised that these would improve knowledge of lessons learned from clinical incidents. We, in addition, developed bulletins highlighting areas of excellent clinical care. We hypothesised that staff members would gain educational benefits from these as well as improving staff morale.

Aims

1. To address the challenges of effectively disseminating learning outcomes from neonatal significant clinical incidents (SCIs) through "Lessons Learned" bulletins, while avoiding possible detrimental effects on staff morale.
2. To use examples of excellent clinical care through "Learning From Excellence" bulletins as an aid to learning within our unit

Methods

"Lessons Learned" incident feedback bulletins and "Learning from Excellence" bulletins were developed each time learning points emerged from SCI reports or from good neonatal practice. The bulletins were disseminated electronically to all neonatal medical and nursing staff and were displayed on the unit on a dedicated neonatal governance board.

We carried out a survey of neonatal staff to assess the impact of the bulletins. Bulletins were rated on a scale of 1-5 (with 1=very unhelpful, 5=very helpful.) We assessed the effectiveness of the bulletins on clinical practice and staff morale.

Results

To date, 11 'Lessons Learned' incident feedback bulletins and 5 'Learning from Excellence' bulletins have been produced and disseminated. 8 neonatal staff (medical and nursing) responded to our survey as follows:

1. On a scale of 1-5 (1 = very unhelpful, 3 = neutral, 5 = very helpful) how helpful to you find the 'Learning Together' bulletins?

100% of responders rated this as 4 (helpful) or 5 (very helpful).

2. On a scale of 1-5 (1 = very unhelpful, 3 = neutral, 5 = very helpful) how helpful to you find the 'Learning from Excellence' bulletins?

100% of responders rated this as 5 (very helpful).

3. Have you been made adequately aware of these bulletins?

83% stated 'Yes'

Results (continued)

4. Are the bulletins are likely to improve your clinical practice?

100% stated 'Yes'.

5. Do you feel the bulletins have a positive, neutral or negative effect on staff morale?

75% stated 'positive', 25% stated 'neutral'.

Figure 1: An example of a "Learning From Excellence" bulletin.



Figure 2: An example of a "Lessons Learned" bulletin.



Conclusion

Succinct electronic feedback bulletins are an effective way of highlighting important learning outcomes from neonatal SCIs. Combining these with learning bulletins from good clinical practice may help to convey learning points while improving staff morale. These bulletins have been well received by staff members within our neonatal unit.

References

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2. Kelly N, Blake S, Plunkett A. Learning from excellence in healthcare: a new approach to incident reporting. *Archives of disease in childhood*. 2016 Sep 1;101(9):788-91.
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Collaborative-cooperative Learning: Improving Medical Student Satisfaction and Learning

Sarah McCusker^{1,2}, Coralie Turner^{1,2}, Kevin Gervin^{1,2}, Jennifer Macfie^{1,2}

¹ Department of Medical Education, Queen Elizabeth university Hospital, Glasgow;

² Undergraduate medical school, University of Glasgow

Introduction

Collaborative and cooperative learning techniques independently demonstrate active learning benefits. These include self-directed learning, improved knowledge acquisition and retention, with enhancement of learners' problem-solving and professional skills¹.

Although ubiquitous and popular, lectures have limitations, with attention decreasing precipitously beyond 20-minutes².

Glomerulonephritides and haematological malignancies are topics medical students frequently cite difficult to comprehend³.

Aim

We sought to evaluate if combined collaborative-cooperative (CC) format is superior to lecture format for teaching these topics to medical students, evaluated by acceptability and effectiveness.

Methods

Randomised, crossover-control quasi-experimental design was applied to convenience sampled final-phase medical students (n=48), on general medicine placement. On two consecutive weeks, students attended an initial parent specialty principles lecture. Post-lecture, students separated into pre-randomised groups experiencing a single format. In the second week, groups crossed-over formats (Fig 1).

Fig. 1	Week 1: Haematological malignancies	Week 2: Glomerulonephritides
Lecture	Group A	Group B
Collaborative-cooperative	Group B	Group A

Intended learning outcomes were identical and explained simultaneously between formats.

CC students were allowed one-hour presentation creation time in groups of 3-4, on one predetermined disease, using standardised templates. The groups returned to share presentations with their cohort. Faculty attended CC presentations to trouble-shoot.

Acceptability of CC was evaluated via anonymised questionnaires consisting of:

- Likert scale
- Multiple selection
- Free-text

Effectiveness was evaluated via extended matching question (EMQ) performance in a mock exam. Results were analysed using descriptive statistics.

References

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2. Verner C, Dickinson G. The lecture, an analysis and review of research. Adult Education. 1967 Jan;17(2):85-100.
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Results

Student Feedback

31 (65%) students provided feedback on CC format
→ Group A (n= 17) Group B (n= 14)

- CC was largely viewed as acceptable (21 agreed/strongly agreed)
- 77% found CC more intellectually stimulating (24 agreed/strongly agreed)
- 77% (24) trust faculty lectures more
- 48% wish CC for other topics (endocrinology/autoimmunology most cited)
- Most commonly selected words are shown in figure 2

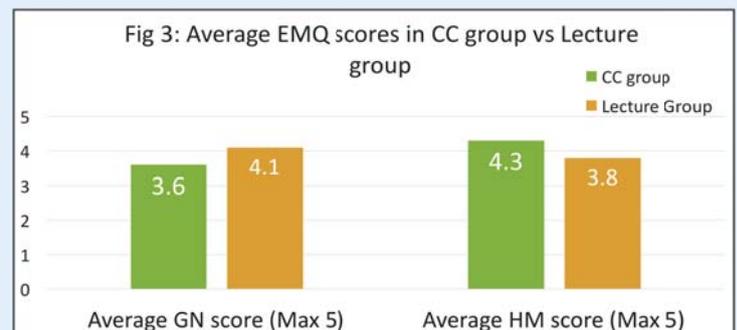
Fig. 2: Commonly selected words



EMQ results

36 (75%) students completed EMQs

→ There was no consistent improved EMQ scoring for CC compared to lecture format (Fig 3).



Conclusions

Responses indicate that collaborative-cooperative learning is:

- viewed as an acceptable learning method
- more intellectually stimulating than lectures

However, CC is not necessarily advantageous to knowledge retention for these topics; possibly due to distrust in CC format and peer exactitude. We demonstrated no consistent improved EMQ performance for CC students, compared to lecture format. Although students recognise the potential benefits of CC, familiarity and trust in this format needs development.

Getting the most out of clinical placements

Enabling self-directed learning to medical students in Trauma and Orthopaedics

Authors: Jamie A Nicholson, Avinesh Chelliah and Gavin Brown

Aim:

- Recent updates to the undergraduate Trauma and Orthopaedic module has improved student feedback through interactive tutorials whilst on placement and revised learning outcomes
- Students are assigned a consultant tutor to encourage a team based approach and continuity, however, the clinical attachment still receives mixed feedback
- Given the specialisation of most consultant Orthopaedic surgeons, students occasionally report a lack of varied exposure to Orthopaedic practice and some repetition in their placement as a common criticism

Methods:

New solutions were considered in order to build flexibility, variation and autonomy to the clinical placement which included the following;

- A co-tutor consultant ensuring pairing of teams with a complementary mix of specialist interests
- A student led sign up system (NHS Lothian 'TUBS') offering additional opportunities to a range of clinics, theatres, on call emergency sessions and multi-disciplinary team involvement
- A clinical work book based on learning objectives for the block based on the different clinical environments whilst on placement

Student views were gathered before and after the above interventions

Results:

Baseline pre-intervention - First rotation of students in academic year n=30

Did your orthopaedic placement give you sufficient exposure to Orthopaedic practice?

- 10% thought they had good exposure to a wide range of Orthopaedic practice
- 47% neutral and 43% thought the exposure was poor

Do you think a clinical work book would add value to your clinical placement?

- 94% of students thought a clinical work book would be of use.

Post intervention - Two consecutive rotations of students n=60

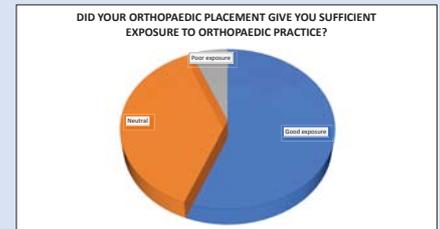
- 56% thought they had good exposure to a wide range of orthopaedic specialities
- 38% were neutral and 6 % thought the exposure was poor

Use of Orthopaedic co-tutor and additional sign up sessions

- Overall 63% of the students used their co-tutor more than 5 days out of the placement
- 40% of students used the optional sign up sessions.

Clinical work book

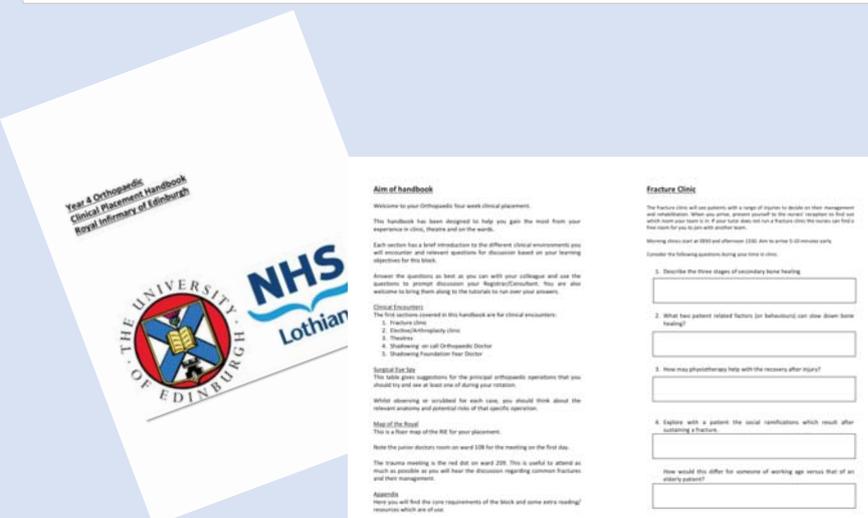
- 85% of students thought the clinical work book complemented their clinical placement
- 100% thought that it helped to guide the expected depth of knowledge.



Discussion and Conclusions:

- We have moved away from didactic teaching with a flipped classroom approach to the formal clinical teaching delivered whilst on placement
- Providing students with more autonomy and extra self-directed learning opportunities for their clinical placement improved student satisfaction
- Such strategies maybe employed in other surgical specialties to allow for the increasing specialisation of tutors and to optimise time spent on placement

This study was carried out by NHS Lothian Clinical Teaching Fellows



Clinical Work Book provided to students

E-mail for Rapid Prescribing Error Feedback

Authors: Mr Anthony Carson, Mrs Sarah Connelly, Dr Fiona Farquhar, Dr Ilona Shiliday (NHS Lanarkshire)



Background

- Prescribing errors in hospital are common and contribute to patient harm
- Previously published work has demonstrated that e-mails are an acceptable method of providing timely feedback and that visual aids can enhance safety behaviours

Aim

- Utilise feedback e-mails with images of note extracts as a learning opportunity for prescribers in medical receiving

Methods

1. In the event of an error sufficient details were collected and images of relevant extracts taken from the patient's notes
2. A standardised e-mail was dispatched to the prescriber and their educational supervisor. This described the nature of the error, highlighted relevant extracts and suggested how such errors could be avoided
3. The prescriber was asked to provide a reflection and an action plan to prevent future errors

Outcomes/results

- Datix reports regarding medication errors had a modest reduction (12.3/month to 10.5/month, P=0.2)
- 66 e-mails have been dispatched in the last year with a 41% response rate
- Insulin errors were most common
- Most occurred in the ST grade followed by FY1s then GP trainees

Conclusions

- A small reduction in error rates was noted
- Engagement with the process could be improved
- Troublingly, insulin was the most common medicine involved which is a significant patient safety concern designated a 'never event'
- A range of training grades were involved suggesting this is not simply an issue of experience.
- Further work is required to continue to reduce the rate of errors, improve engagement and gather data for project evaluation

Dear Prescriber

As part of the clinical governance of prescribing medicines in Monklands hospital it is important for us to highlight potential prescribing incidents. Below is a description of an incident you appear to have been involved in. It is provided to allow you the opportunity to reflect on it. We would suggest that you complete the 'Reflection and Action' sections below and return this to both pharmacy and your educational supervisor within four weeks. We are particularly interested in any ideas you may have which may help prevent a similar error from occurring in the future.

It is important to note the purpose of this e-mail is for reflection and learning only, not to assign blame.

If you wish to discuss this further please feel free to speak to your ward pharmacist or anyone else you would be comfortable discussing it with.

If you have received this email in error, or have any feedback on this process please let me know.

Situation – What was the incident?

- Patient admitted with lower respiratory tract infection and prescribed amoxicillin
- Allergy status was not documented in their admission paperwork or medicines chart
- The patient's Emergency Care Summary indicated a penicillin allergy which the patient confirmed
- The patient received one dose of amoxicillin and suffered a widespread rash

Comments
Phenoxymethylpenicillin 125mg/5ml oral solution
Atenolol 5mg/10ml solution for injection ampoules

Reflection – Staff self reflection on situation

This patient was admitted on a busy weekend nightshift and, unfortunately, I appear not to have noted their penicillin allergy. This could have been a more significant reaction and should not have occurred. I have reviewed the process for taking a medication history as described and will ensure I take the time to do this in future.

Action – What can be done to help prevent this in the future?

Such incidents could be summarised and shared with other trainee prescribers to allow for everyone to learn from an individual's mistakes – particularly if this occurs in a supportive culture.

Suggestions

- Accurate medicines reconciliation is an important step in the clerking in of a patient to ensure a safe admission to hospital. Please use two sources when confirm a patient's medicines and allergy status. We would suggest use of the printable Emergency Care Summary:

Allergy Description	Date Recorded	Comments
H1O drug allergy	25-Jun-2015	Proxicam 0.5% gel
H1O drug allergy	24-Feb-2015	Nitrofurantoin 50mg capsules
Beta blocker contraindicated	28-Feb-2007	CONVERTED DRUG
Anticoagulation contraindicated	05-Feb-2008	CONVERTED DRUG
Beta blocker contraindicated	12-Dec-2005	CONVERTED DRUG

These should be recorded in detail in the allergy box i.e:

Known drug allergies? Enter details below:	Yes/No
Piroxicam (unknown reaction), nitrofurantoin (rash), beta-blocker (collapse), anticoagulation (previous ICH)	Yes/No
Known non-drug allergies?	Yes/No

These should be recorded in the allergy tab on the patient's Kx:

Clinical years student perceptions of the use of Durning's "post encounter form" as a formative assessment during inpatient clinical reasoning days

Elizabeth Cosgrove^{1,2}, Coralie Turner^{2,3}, Colin Hall^{2,3}, Eilidh MacDonald^{1,2}, James Boyle^{1,2}.

1 Department of Medical Education; Glasgow Royal Infirmary; 2 Undergraduate Medical School, University of Glasgow; 3 Department of Medical Education, Queen Elizabeth University Hospital



Aim

Durning et al (2012) developed and validated the post encounter form (PEF) as a tool to evaluate the clinical reasoning skills of pre-clinical students in the diagnosis of diabetes mellitus in the outpatient setting.

The PEF was introduced at two Glasgow teaching hospitals to assess any improvement in clinical reasoning skills in undergraduate medical students in their clinical years after 3 inpatient clinical reasoning days. This included a structured debrief of a targeted patient encounter using the SNAPPS framework, brainstorming the presentation with guided concept maps with a high degree of directness, illness script generation and completion of compare and contrast grids. This work aimed to assess student response to the use of the PEF.

Methods

- Students attended 3 inpatient clinical reasoning days, each focusing on two different body systems, over twelve weeks.
- They completed four PEFs at the beginning and end of each day based on fictitious clinical cases related to the day's themes.
- We assessed student response to the use of the PEFs as a means of formative assessment by means of an electronic student evaluation form using YACRS software and a five-item Likert scale two months after the end of teaching.

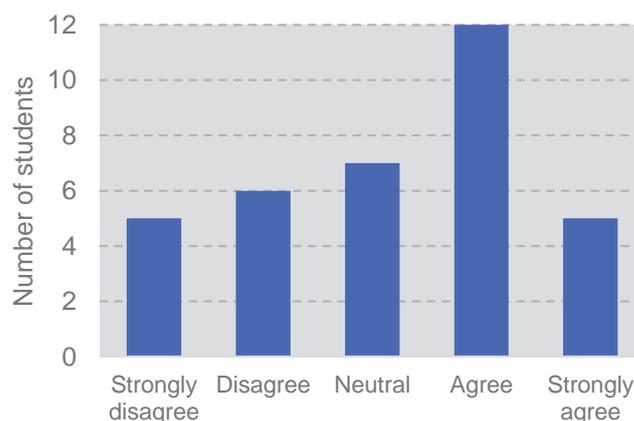
References

Durning, S., Artino, A., Boulet, J., La Rochelle, J., Van Der Vleuten, C., Arze, B. and Schuwirth, L. (2012) The feasibility and validity of a post-encounter form for evaluating clinical reasoning. *Medical Teacher* 34(1), pp30-37.

Results

While the PEF has been validated to evaluate clinical reasoning skills, we aimed to ascertain whether undergraduate medical students find it to be a useful and acceptable method of formative assessment. With the use of YACRS software we asked the students 12 separate questions relating to their perceptions of the usefulness and acceptability of the PEF. We received between 31-38 student evaluations per question on a Likert scale as per the chart below. This feedback was largely positive and suggested an acceptability of the form. Gaining the student evaluations in this way proved challenging, perhaps given that there was a period of two months between the last clinical reasoning day and the day that feedback was collected.

"I thought the forms were a useful teaching tool"



Conclusion

- It is important to use methods of teaching and assessment that are acceptable to students.
- Our work shows that this form is acceptable to clinical students as a form of formative assessment on hospital placement.
- Further work is required to assess the role of the PEF in other teaching settings.

Promoting resilience skills in remote and rural medical students



Dr Jennifer McGowan¹, Dr Alicia Garland²
University of Aberdeen¹, NHS Highland²

Introduction

The GMC recommends medical schools introduce regular resilience training for medical students¹. Resilience is described as the ability to adapt to change and respond in a positive way to stressful situations.

By enabling medical students to cope with stress in medical school, they will be better equipped to cope with the working environment, particularly with the challenges facing rural medical practitioners².

Aims

Our aim was to provide an opportunity to build skills in resilience during a weekend of social activities for a group of rural medical students.

Methods

15 students and 5 faculty members (figure 1) from the University of Aberdeen Remote and Rural programme participated in a weekend of activities in Findhorn on the Moray coast (figure 2).

Figure 1. Staff and students of the remote and rural programme 2018



Figure 2. Findhorn, Moray



These students are based in the Highlands for one year and have several placements in remote and rural areas. The students opted to attend the 2.5 day residential retreat. Over a weekend various activities were planned to encourage the group of students and staff to bond and to promote skills in resilience, as seen in Fig. 3.

By incorporating resilience skills as part of social and clinical activities in a relaxed environment, students were able to actively participate in enjoyable events while being exposed to techniques which may be beneficial in their future careers to prevent professional burnout.

Conclusion

Resilience training is essential for medical students to enable them to develop coping skills for their future medical careers. This is particularly important with the challenges faced by practitioners in the remote and rural setting. This weekend fieldtrip is an example of promoting skills in resilience in an enjoyable and social setting.

References:

GMC Supporting vulnerable doctors action plan http://www.gmc-uk.org/Supporting_vulnerable_doctors_action_plan_FINAL.pdf 66514193.pdf
Longenecker, R, Zink, T and Florence, J. 2012. Teaching and Learning Resilience: Building Adaptive Capacity for Rural Practice. A report and subsequent analysis of a workshop conducted at the rural medical educators conference. *The Journal of Rural Health*. 28 pp122-127.

Fig. 3. Resilience activities



“School sports day”:

To promote healthy activities for personal wellbeing



Small group sessions:

To encourage reflection
To build relationships with faculty



Pre-hospital care scenarios:

To apply clinical skills and knowledge
Teamwork



Problem solving activities:

Peer communication
Peer support



Hot Debriefs Following Cardiac Arrests

Dr S McCarthy & Dr F Burton
Emergency Department, Hairmyres University Hospital

AIM:

Does 'hot debriefing' following cardiac arrests provide a valuable learning opportunity for staff members, improve staff morale, and is patient care improved as a result?

Background:

Debriefing is a discussion of actions and thought processes after an event to promote reflective learning and improve clinical performance¹, and has been shown to provide a multitude of benefits including higher staff satisfaction, reduced stress and improved clinical performance² when conducted in a medical setting.

Although intermittent informal debriefs were occurring throughout Hairmyres Emergency Department there were no formal debriefs or guidance on how and when to perform these. It was therefore decided to introduce formal debriefing following cardiac arrests and evaluate the benefit that the debriefing process would bring to the department.

Methods:

To gain further understanding of debriefing in a medical setting, its benefits and challenges, online literature was reviewed and other Scottish Emergency Departments were contacted for an insight into their use of debriefing.

Following this a 'Debriefing Tool' was made (Figure 1) and introduced to the department via email, teaching sessions, weekly team brief and discussed at team handovers.



Figure 2: Selection of positive comments from debriefing tool

Results:

- Over the 3 month monitoring period 10 hot debriefs were conducted (59% completion rate)
- 94% of staff surveyed agree/strongly agree that hot debriefs allowed the team to highlight things that were being done well
- 95% of staff felt that 'hot debriefing' drew attention to area of practice that required improvement
- 89% of surveyed staff thought 'hot debriefing' improved patient care
- 79% agreed that staff moral was improved as a result of debriefing
- 95% felt 'hot debriefs' provided a valuable learning opportunity
- 100% of staff surveyed felt that 'hot debriefs' in the emergency department should continue
- The Likert scale to review the debriefing tool itself was only completed on 4 occasions, with leaders either agreeing or strongly agreeing that the tool was useful for leading the debrief, and 89% of participating staff feeling the tool helped to facilitate discussion

Figure 1: Cardiac Arrest Debriefing Tool. The form includes the following sections:

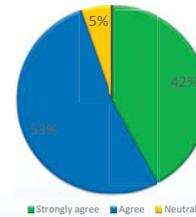
- CARDIAC ARREST DEBRIEFING TOOL**
- PLEASE READ TO TEAM:** The purpose of this debrief is for education and processing of events. It is not designed to point blame. Please feel free to participate in the discussion. However if you have any urgent clinical matters to attend to you are welcome to leave at any time. I will not discuss the patient's summary and then as a team could we please address what went well and what could have been improved.
- PATIENT STICKER:** Date: _____, Time: _____, Location: _____, Patient Outcome (Please tick): Resuscitation successful, Resuscitation unsuccessful.
- Staff Members Present (Please tick):** Consultant, Charge Nurse, Mobile Clinician, Nursing Staff, GP/EM/PE, CRN, PA, Other.
- WHAT WENT WELL:** _____
- WHAT COULD BE IMPROVED:** _____
- AGREED ACTION (POINTS):** _____
- Name of Participant:** _____

Figure 1: Cardiac Arrest Debriefing Tool

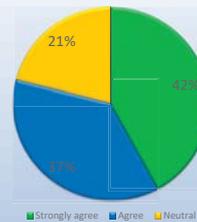
Adapted from DISCERN Tool²
Mullan, P.C., Wuestner, E., and Kerr

- 3 month evaluation period, aiming to complete hot debriefs for every cardiac arrest within Hairmyres Emergency Department during this period
- Debriefing tools were reviewed on a weekly basis to assess for any points requiring immediate action
- Staff received a 'Staff Satisfaction Survey' following participation in a debrief to ensure all staff members felt comfortable participating and to ascertain whether hot debriefing was being found to be helpful
- 'Spot Awareness Survey' was conducted mid way through the evaluation period to ensure staff understanding of ongoing debriefing, and re-advertisement following this
- Following the conclusion of the 3 month study period staff were invited to participate in an online survey to express their opinions on 'hot debriefing'
- Assessment of the debriefing tool itself was also attempted by putting a rating scale on the back of the debriefing tool for the debrief leader to complete

Debriefing following cardiac arrests has provided a learning opportunity for staff members?



Debriefing following cardiac arrests has improved staff moral?



Debriefing following cardiac arrests had improved patient care?

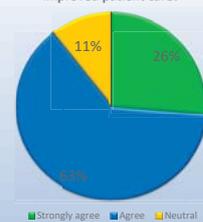


Figure 3: Selection of results from final online survey

Conclusions:

Conducting debriefs following cardiac arrests in our department has allowed for identification of areas of practice that could be improved, but also importantly recognition and reinforcement of positive staff behaviors (Figure 2).

Overall staff members felt that 'hot debriefing' improved patient care and 100% of staff surveyed wanted post cardiac arrest debriefing to continue, although difficulty consistently performing debriefs due to departmental pressures were highlighted.

We hope to continue 'hot debriefing' following cardiac arrests within our department, considering other scenarios as triggers, and are looking to extend debriefing following cardiac arrests to other departments.

Acknowledgements:

May I please express my gratitude to all staff members at other Scottish Emergency Departments who were contacted and kindly gave insight to their departments use of debriefs.

References:

- Kessler, D.O., Cheng, A., and Mullan, P.C. 2014. Debriefing in the Emergency Department after Clinical events: A practical Guide. *Annals of Emergency Medicine*. [Online]. 65(6), pp. 690-698. Available from: https://www.researchgate.net/publication/268692862_Debriefing_in_the_Emergency_Department_After_Clinical_Events_A_Practical_Guide
- Mullan, P.C., Wuestner, E., and Kerr, T.D. 2012. Implementation of an In Situ Qualitative Debriefing Tool for Resuscitations. *Resuscitation*. [Online]84(7), pp. 946-951. Available from: https://www.researchgate.net/publication/233983872_Implementation_of_an_In_Situ_Qualitative_Debriefing_Tool_for_Resuscitations

For further information please contact Dr S McCarthy – sineadmccarthy1@nhs.net

Aim & Summary

- Near peer education is an increasingly popular teaching adjunct - we aimed to see if a modified mock OSCE with novel teaching methodology could provide a resource light method of developing clinical skills in undergraduate students
- We designed a randomised control trial to look at both quantitative and qualitative impact to assess our model
- Our model, the Focused Skill Walkthrough (FSW) had significantly greater efficacy than the practice mock OSCEs many Universities currently offer
- The FSW model was well received by students and clinical tutors, having unique benefits to both

Method

- We conducted an initial pilot study – 22 students were recruited from year 2 of the medical school
- Students were randomly allocated to either the FSW test group (described below) or the control: mock OSCE with no additional teaching
- Tutors were senior medical students trained by junior doctors in using the FSW model
- We utilised external markers in line with the University’s formal OSCE to assess quantitative impact and asked students to complete questionnaires.
- Students returned to their first station and were re-assessed at the end of the mock OSCE to identify if their teaching had an improvement

Focused Skill Walkthrough

3 minute clinical skills teaching

Mock OSCE

Tutor assesses student using adapted marking scheme, separated into identified focused skills (4 per station) – 1 focused skill is selected for tuition

Part A – 1 minute

Tutor performs the focused skill only describing all required steps

Part B – 1 minute

Student performs the focused skill as the tutor talks them through each step

Part C – 1 minute

Student repeats focused skill until the end of station with coaching as required

Results

Figure 1 highlights the quantitative improvement between both cohorts.

- No significant increase in mean in the mock OSCE control group.
- There is a significant increase of >15% in the FSW group

Figure 2 highlights student impact and satisfaction from the trial

- There is a significant increase in mean satisfaction and perceived value in the FSW group in comparison to the control.
- Both groups had a significant increase in mean confidence from baseline after the trial.

Figure 1

Results Table

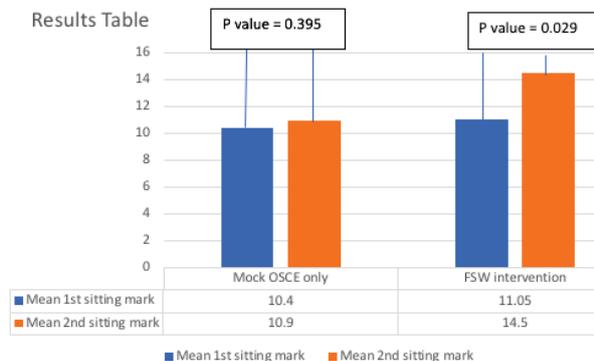
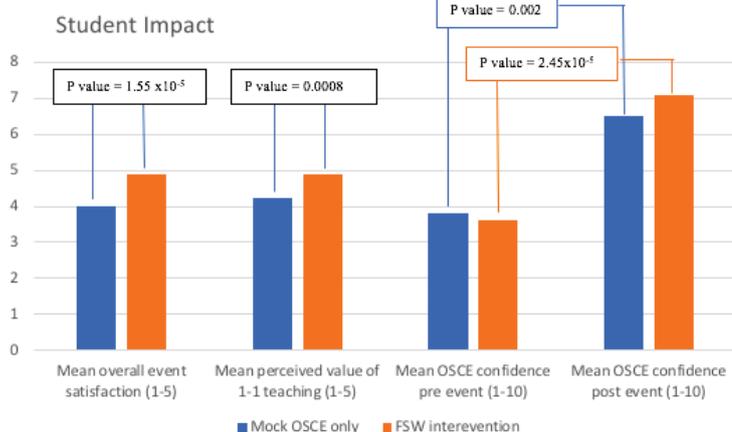


Figure 2



Conclusion

- In line with current literature, we suggest a mock OSCE does not correlate with increased quantitative marks in an OSCE despite student impact
- We report an FSW model is more effective than a mock OSCE alone with improved quantitative marks
- This model was well received by students and tutors, favored over the existing mock OSCE only model adopted by the University and our control
- We are conducting a larger scale RCT this May to look at medium/long term outcomes to assess how they affect marks in the formative OSCE

Justin Chiu, Dr Alasdair Taylor, Ms Audrey Gregory, Dr Daniel Taylor-Sweet, Dr Neil Ramsay, Dr Paul Fettes

University Of Dundee

Introduction

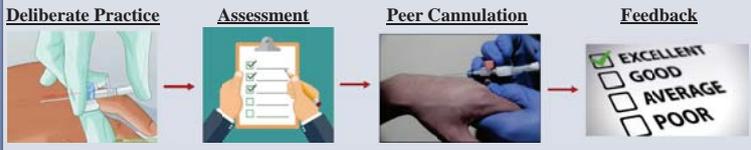
- Peripheral intravenous catheter insertion is an essential skill for medical students
- Students often report low self-confidence in cannulating patients and find the transition between practicing on models and real patients difficult
- A need to update our current practice of teaching cannulation¹ was identified
- We have designed a 2h session using Peer Cannulation as part of a Mastery Learning programme² to help aid the transition

Outcomes

- To assess the efficacy of the sessions
- To assess the logistics involved and the feasibility of incorporating the sessions within the school curriculum

Methods

- 35 Year 4 students were recruited from the University of Dundee Medical School and gave informed consent to participate
- Participants were issued pre-reading material and a video demonstration
- Participants attended a 2h Mastery Learning session
- The first hour consisted of supervised deliberate practice on simulation arms
- Once students felt adequately prepared, their performance was assessed according to a checklist
- This was followed by 1h of supervised peer cannulation
- Participants were surveyed before and after the sessions on their confidence at performing cannulation as well as their feedback on the sessions



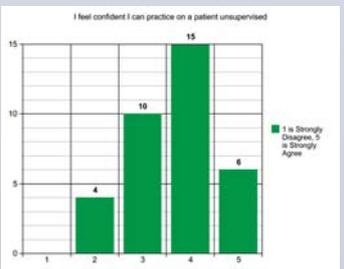
Results

Efficacy of sessions

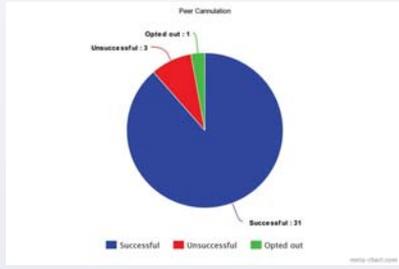
- Participants reported increased confidence post-intervention

Legend

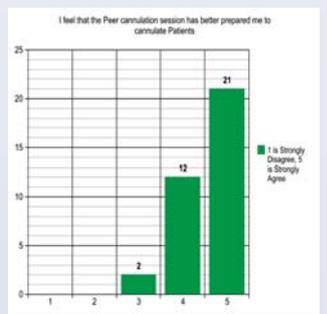
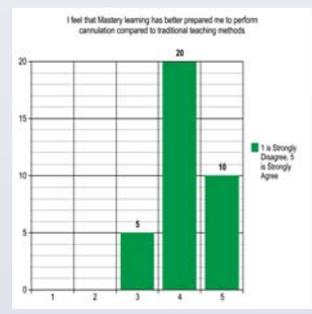
- = Pre-intervention
- = Post-intervention



- 89% of participants managed to successfully cannulate a peer indicating a high level of mastery at the end of the session



- Participants were strongly in favour of incorporating the sessions into the school curriculum with key reasons being increased personal feedback, higher fidelity and an increased ability to empathise with patients



Logistics

- A high tutor to student ratio of 1:5 was required to run the sessions effectively
- A ratio of 2 students to 1 model arm was required to enable sufficient deliberate practice
- Common problems faced by participants include vein identification and applying proper countertraction, techniques difficult to demonstrate on simulation arms

Conclusion

- Mastery learning and peer cannulation improves the transition between simulation and clinical practice, but requires a high number of tutors and equipment
- We intend to incorporate the sessions within the 4th Year Anaesthetic block in August 2018 and further observe its downstream effects

References

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2. Kulik C, Kulik J, Bangert-Drowns R. Effectiveness of Mastery Learning Programs: A Meta-Analysis. *Review of Educational Research*. 1990;60(2):265-299.

Contact Email: paulfettes@nhs.net

THE ART OF HEALING

Design of Hospital Based Complex Clinical Care (HBCCC) Units for Dementia Patients

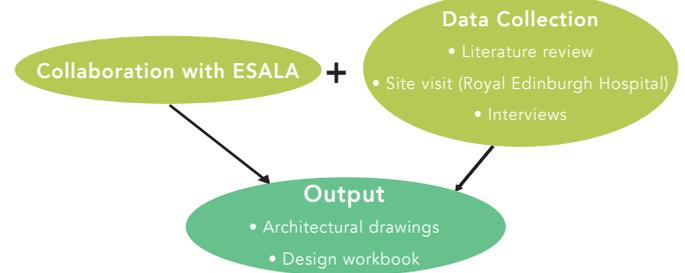
Rajanran A, Fong R, Kok J, George R, Lau N, McClure R, Rae R, Edinburgh Medical School | Dr Clafferty R, NHS Lothian

AIMS

Thinking beyond medical intervention has become increasingly important in the management of patients with dementia, particularly those cared for in HBCCC facilities as there have been no significant pharmacological breakthroughs in the last 18 years (1). This is reflected in the emphasis of a holistic approach towards patient management in our medical training as future clinicians need to be able to recognise factors and disciplines beyond medicine that could contribute towards optimal patient care.

Our project is an experiment into this multidisciplinary approach to healthcare at an undergraduate level, carried out as a Student Selected Component (SSC) project. We complemented research on the design of existing HBCCC units for patients with dementia and worked with two undergraduates and a tutor from the Edinburgh School of Architecture (ESALA) to design an optimal ward environment for these patients.

METHODOLOGY



RESULTS

NEW PERSPECTIVES GAINED IN MEDICAL EDUCATION

4 VENTURING OUT

Going beyond our comfort zones is an integral part of one's university experience. When the SSC module presented an opportunity to undertake a project beyond the medical curriculum, we did not shy away from venturing into a field in which we had no prior experience or skills, which was truly a rewarding experience.

3 TEAMWORK

Learning how to work together as a team not just within the medical field, but also with professionals outwith medicine was a crucial aspect of this project. We had to learn how to communicate effectively and to be open and respectful of ideas and opinions especially from differing fields.

2 BEYOND MEDICINE

Medical pharmacology often finds itself hitting a brick wall in managing dementia. So, we explored a different perspective of 'healing', expanding our horizons to include environmental & design aspects, in search for other ways to support the growing population of individuals with dementia in the future.

1 EXPERIENTIAL LEARNING

We approached the design aspects of this project as an architecture student would - by creating a portfolio showing the progression of our ideas before coming up with the final drawings.



5 FLEXIBILITY

As we delved into a different world of architectural jargons and conventions, we learnt to communicate our ideas with professionals outwith of medicine, through mediums such as sketches, plans and colour schemes. We drew parallels to a standard architectural project by preparing briefs and thinking thematically, thereby adapting our thought processes into an architectural framework.

6 REFLECTION

This project was carried out in the context of an SSC module that promoted reflection and the spirit of enquiry in medical practice, requiring maintenance of a reflective blog as well as production of 2 reflective reports. This enabled us to think about the limitations in our knowledge and skills, and to seek timely help from our tutors and peers.

7 LIFELONG LEARNING

Developing a mindset of lifelong learning not only involves exploring new frontiers but reinforcing one's existing knowledge. Having learnt about the manifestations of dementia from a biomedical viewpoint, we consolidated this knowledge by revisiting it from a different angle, e.g. exploring environmental influences on these manifestations.

PROGRESSION OF IDEAS: FROM SKETCHES TO ARCHITECTURAL DRAWINGS

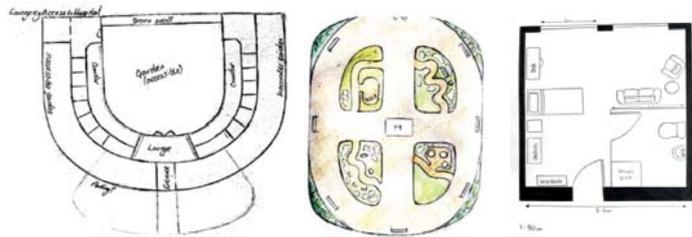


Figure 1: Sketches from our portfolio

5 themes (Autonomy, Safety, Familiarity, Sensory Stimulation, Social Interaction) that encompassed the needs of patients, staff and relatives were identified from data analysis. Design improvements to dementia wards were considered under each theme and integrated to produce drawings of our envisioned HBCCC unit. The pictures in figure 1 show some of our sketches from our portfolio which shows our progression of ideas throughout this project. Figure 2 shows the final architectural drawings which consists of a plan drawing of the unit and 3D drawings of a personal space (bedroom) public spaces (lounge and garden).

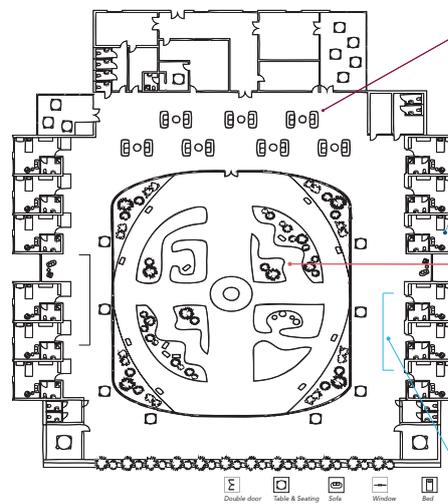


Figure 2: Final building plan and 3D drawings



CONCLUSION

The design of patient environments has great potential in improving the provision of care for patients with dementia and should be approached as a multidisciplinary effort integrating the input of clinicians, carers, staff and architects. Encouraging this approach early in medical training would be useful in bringing about new perspectives on existing issues in healthcare.

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4. Mr De Rui Lee – who produced the section and elevation drawings

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CONTACT

Anusha Rajanran
Year 4 MBChB
University of Edinburgh
s1508576@ed.ac.uk

Dr Robert Clafferty
Consultant Psychiatrist
Robert.Clafferty@nhslothian.scot.nhs.uk

Evaluation of Inter-professional Education (IPE) through “Evening On-Call”

Claire Coey¹, Sheelagh Peacock², Catherine Paton², Sharon Donaghy², Caroline Martin², Julie McQuade², Peter Hamilton¹, Peter Buckner², Dr Leon Zlotos¹, Gail Craig¹, Fiona Stewart¹, Dr Ailsa Power¹.

1. NHS Education for Scotland, 2. NHS Lanarkshire Medical Education

AIMS

This study aimed to evaluate participants perceptions of “Evening On-Call” to ensure it was meeting the learning needs of students and to allow improvements to be made for future events.

“Evening On-call” incorporates manikin and actor patients in a multi-ward simulation. Medical and nursing final years students and Pre-registration pharmacists test their clinical, prioritisation and communication skills under observation from their seniors.



METHODS

Upon completion of the session participants completed a questionnaire to capture their views regarding event organisation, the feedback they received and relevance of the session. There were also free text sections for additional thoughts. A follow-up questionnaire was then sent out for completion six months later.

RESULTS



It would be great to have the opportunity to attend a session like this in 1st, 2nd and 3rd year - appropriate to the level of training. This would have helped me to become more confident communicating with members of the MDT earlier in my training.

Longer time OR more sessions available.

Another session, for a chance to improve.

CONCLUSIONS

- Evening on-call was positively received by all professions, before and at 6 months after the event.
- Initial questionnaire feedback was overwhelmingly positive for each group.
- The follow up questionnaire supported the initial questionnaire findings with the majority of respondents stating it had helped them in practice once qualified.
- All groups requested more time and more scenarios.

Acknowledgments

We would like to acknowledge and thank Catriona Matheson for the processing of the data collected.

Paired Learning

Improving Collaboration Between Clinicians and Managers

Authors:

1) Dr James FB Houston, Health Education England working across Yorkshire and the Humber, UK 2) Dr Jessica E Morgan, Centre for Reviews and Dissemination, University of York, York, UK
Correspondence to: Dr James FB Houston, Email: jfbhouston@doctors.org.uk

What is Paired Learning?

Paired learning is a peer-peer buddying programme involving semi-structured one-to-one and group meetings.

“never going to build a relationship with someone you never see”

Aim

Close collaboration between NHS clinicians and managers is essential in providing effective healthcare, but relationships between the two groups are often poor.

The purpose of this study was to assess whether a paired learning programme (PLP) can improve knowledge and attitudes between NHS clinicians and managers.

Table 1 – Template Structure for Paired Learning Meetings

Meeting	Content
First meeting	Introductions / Background Training/qualifications Career path Set learning goals
Second meeting (manager to lead)	Explain job role Team structure Decision-making process Current work issues/problems Explanation of your relevant directorate/work stream (eg. finance/safety/quality)
Third meeting (clinicians to lead)	As above plus: Describe place of work and daily routine Shift patterns Patient flow
Fourth meeting	Flexible and self-directed. Options include: Shadowing Informal self-directed discussion Quality Improvement project ideas/planning

Methods

A PLP pairing clinicians and managers over a four-month period to participate in four buddy meetings and three group meetings was delivered.

Participants were recruited from a body of Clinical Leadership Fellows, HEE managers and NHS Graduate Management Trainees in Yorkshire and the Humber

A mixed methods study was completed which collected quantitative and qualitative data in the form of pre and post course questionnaires and focus group discussions.

“I feel that clinicians are much more accessible”

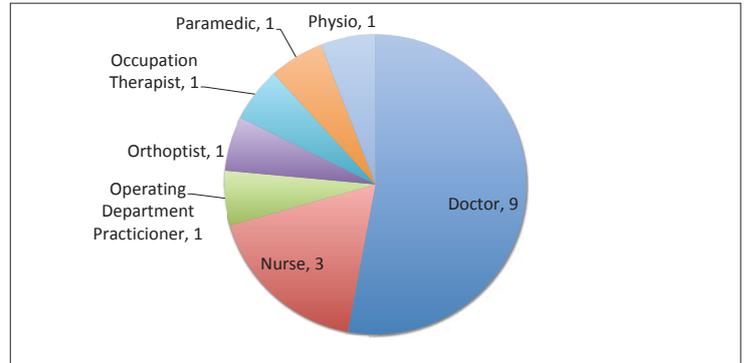
Table 2 – Contents of Each Group Meeting

Group Session	Content
Introduction	Overview of programme Learning outcomes Introduction to buddy Focus group 1
Mid-point “systems leadership lab”	Practical workshop to encourage systems thinking Opportunity to work together, network and ask for help with PLP
Celebration	Participant pair presentations of reflections and learning Group feedback Networking Focus group 2

Acknowledgements

Funding for the venue, catering and ‘systems leadership lab’ was provided by Health Education England working across Yorkshire and the Humber. The authors’ would also like to thank Health Education England and the NHS Leadership Academy for their support for the PLP and allowing staff to participate.

Figure 1 – Breakdown of Clinical Leadership Fellows by Role



Results

17 pairs of participants took part in the programme. They reported increased understanding, changed attitudes and better communication between clinicians and managers following the PLP. Direction quotations from participants are shown around this poster.

Self-rated knowledge increased across all domains but was only statistically significant for ability to engage, ability to establish shared goals and knowledge of decision-making processes.

“Stepping out of the day job and reflecting on what I do, why and my place in the wider NHS.”

Table 3 – Summary of Quantitative Data

Question	Pre-Course Mean (95% Confidence Interval) N=33	Post-Course Mean (95% Confidence Interval) N=21	P-value
I am aware of the role of clinicians/managers	3.9 (3.66-4.13)	4.2 (3.94-4.54)	0.08
I am able to engage with clinicians/managers	3.6 (3.28-3.94)	4.2 (3.92-4.41)	0.03
I am able to establish shared goals with clinicians/managers	3.2 (2.91-3.57)	3.9 (3.61-4.20)	0.04
I am aware of the clinical/managerial decision-making process	2.8 (2.46-3.14)	3.7 (3.38-4.05)	0.03
I adapt my communication style when interacting with different groups	4.2 (3.88-4.42)	4.4 (4.17-4.59)	0.31
I have developed a ‘professional network’ to support my clinical and non-clinical activities	3.3 (2.89-3.68)	3.9 (3.42-4.28)	0.05

“Hugely influenced my view of managers... Encouraged me to think of them as a resource”

Conclusions

This study shows that Paired learning has the following potential outcomes between different staff groups:

- Break down barriers
- Increase knowledge and understanding
- Change attitudes
- Facilitate communication

The Future

Would **you** consider Paired Learning as a viable tool in your organisation?

“Widen the scope... advertise the benefits. So it becomes part of everyday working practices”