

BTBC news

Better Training Better Care

From Patrick Mitchell, Director of National Programmes

Welcome to the final edition of BTBC News! The Better Training Better Care programme formally began in 2011 and has provided a range of success stories which demonstrate how we are taking steps to change the way training and education of our junior medical workforce is delivered. Encouragingly, I believe we are developing mechanisms to achieve all of the 66 Temple and Collins recommendations following the development of these reports in 2010.



It is important to recognise the enormity of what has been delivered over the last three years and the achievements which have been accomplished. This includes the work on the Broadening the Foundation Programme and report, published in February of this year, the 16 pilot sites, which have initiated material improvements to service, training and patient care (pages 3-7), our 'Inspire Improvement' project which has given trainees the ability to take a lead role in creating change in service themselves and the new major initiatives arising from the Technology Enhanced Learning programme.

What must also be recognised, is how the delivery of this work could not have been achieved without the key relationships and input we have had along the way from our stakeholders, both those that have provided strategic oversight and direction as part of the BTBC National Taskforce and others that we have partnered with along the way. This alignment has been integral to ensuring that the programme has succeeded in its aim to deliver on the Temple and Collins recommendations, but to also move along with the changes we face in the NHS.

I am heartened with what has been achieved and offer a huge personal thanks to everyone who has made an effort to participate and bring about change in what has been a turbulent time for the NHS operationally. You will be able to read more about this and the transition of the programme into business as usual within HEE in this newsletter. I believe that much of what we have done and learnt can support many of the key national agendas including Francis, Berwick and the shape of clinical services fit for purpose.

Continue to stay up to date with our work through HEE's newsletter #HEElife at www.hee.nhs.uk, the @NHS_HealthEdEng twitter feed and our HEE facebook page at www.facebook.com/nhshee.

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BTBC – the success story

The Better Training Better Care programme formally closed at the end of March 2014, however, not all of the work has come to an end.

Those workstreams that are still underway or are entering their next phase have been transitioned as business as usual into the National Programmes Team within HEE. This particularly relates to the national spread and adoption phase of the 16 BTBC pilot projects which we hope to launch in Summer 2014, so keep an eye out in future editions of #HEElife!

The work to deliver the Technology Enhanced Learning (TEL) agenda is already being delivered by its own dedicated team in conjunction with our partners in the Higher Education Academy and its remit seems to grow every day. In addition, the work on the Role of the Trainer has moved across to national programmes and is likely to take off as a multi-professional project, using the important learnings of the work that has been done in medicine.

In May 2014, the last ever meeting of the BTBC National Taskforce will take place which will include a celebration of the work achieved since the first meeting in July 2011. The main focus of the meeting will be to accept the final evaluation report of the 16 pilots and also the evaluation of the other eight workstreams. These two pieces of work are key to really acknowledging the formal close down of the programme. Following this, a report will be submitted to our Minister for Health, Dr Dan Poulter, to highlight the achievements since the Temple and Collins reviews were published in 2010.

Technology Enhanced Learning (TEL)
HEE and the Higher Education Academy (HEA) have come together to plan the build and launch of a TEL hub in the Autumn.

The aim is that hub will include information and resources on simulation, e-Learning and m-Learning.

Find out more on our website.

Broadening the Foundation Programme
The programme addresses the need for our newly qualified doctors to be able to respond to the evolving needs of the 'whole patient' and to be able to develop their capabilities across a range of settings.

The report was published in February 2014 and can be found on our [website](#).

Making a difference – a review of our pilot sites

Our 16 pilot projects have delivered fantastic results. We've published a snapshot of each project below.

Airedale NHS Foundation Trust and Western Sussex Hospitals NHS Foundation Trust
Using telemedicine to enhance training and improve supervision and support.

The Airedale and Western Sussex telemedicine pilot provided an innovative way of using telemedicine to enable remote supervision and handover across disparate locations. This helped maximise resources as well as delivering a service with increased senior input into medical education and patient care. Qualitative data from trainees showed that they felt more supported as well as more engaged in the hospital night team. Trainers also felt that although technical issues did provide some challenges, once resolved, the system would allow better use of time by sharing resources for training and education, and thereby freeing up clinician time elsewhere. 73% of consultants and doctors in training fed back that they felt remote consultant input would improve the quality of care to patients. In addition, the pilot highlighted the importance of putting more standardised procedures in place to further improve the handover process across the Trusts.



East Kent Hospital University NHS Foundation Trust

Establishing hot 'emergency-based' and cold 'ward-based' teams to enhance the trainee experience, improving patient care at weekends.

East Kent has had great success in demonstrating a reduction in the overall length of stay across long term conditions and urgent care representing savings of up to £663k annually and an increase in Saturday and Sunday discharges by 20% and 6% respectively. There has been a significant impact on trainees who recorded experiencing better supervision and support in both the hot and cold blocks of working. In addition, the introduction of the enhanced multidisciplinary cold team has enabled nurses to provide much needed and valued support to trainees and to make a significant difference to the patient experience. The success of this pilot has seen the roll out of this model across all three hospital sites.

East London NHS Foundation Trust

Reducing the severity, frequency and impact of serious incidents (SIs) through simulation training.



East London's pilot provided an opportunity through simulation training to promote the importance of learning from serious incidents, for trainees and nurses – they had 89% attendance rate at these sessions. Outcome measures indicate an overall increase in knowledge and awareness of serious incidents. 98% of delegates said that the course will change their practice for the better and that they will be applying the knowledge and skills learned during the session in their future work. This training is now continuing as business as usual within the organisation.

Heart of England NHS Foundation Trust

Enhancing the transition from student to doctor through the e-learning virtual interactive teaching and learning (VITAL) project.

Heart of England undertook an early identification through the web-based learning programme and found that the bottom 10% of their foundation year one (FY1) doctors required professional support. These trainees scores improved following their educational support meetings. The pilot also highlighted the ability to reach trainees with different learning styles due to the multi-format educational materials and after using these materials a 4.5% improvement was found in their VITAL assessment scores. Overall, three assessments were delivered for 90 FY1 doctors and two assessments were delivered for 90 foundation year two (FY2) doctors.

Guy's and St Thomas' NHS Foundation Trust

Balancing excellent service provision to deliver first class training through a planned modular training project.

This pilot project tested the feasibility of creating a modular training rota, which in this case was in the gynae-oncology module. Trainees involved reported a greater appreciation for the experience of their patients, with outcomes demonstrating more than 50% increase in trainee confidence and 100% clinical competency in their logbook requirements. After eight weeks of the pilot, the ST3 trainees involved achieved similar improvements in knowledge as a control group of ST5 trainees who had spent six months in the unit. Another key success of this project is that the trainers involved reported an increased interest to teach and see the progress of their trainees.



King's College Hospital NHS Foundation Trust

Reducing the length of time patients spent in the Emergency Department, using the Rapid Assessment & Treatment (RAT+) model.

Qualitative data for Kings shows:

- 66.6% of medical and 60% of nursing staff reported that RAT+ improves the quality of care
- medical and nursing staff reported an improvement in the patient experience with RAT+
- 78.3% of clinical staff agreed that RAT+ improved patient safety.

King's College and their RAT+ project demonstrated statistically significant improvements in:

- 'time to treatment': consistently achieving the 60 minute quality indication (QI) for majors patients
- 'time to referral': considerably reducing the median 'time to referral' to in-patient teams from arrival (approx 105 minutes vs. 180 minutes)
- 'total time': a reduction in the mean 'total time' in the emergency department, when compared to the non-RAT+ control group, by 23.7 minutes (equivalent to 10%)

The majority of medical and nursing staff also reported that RAT+ improves the quality of care.

Leeds and York Partnership NHS Foundation Trust

Maximising and enhancing training opportunities and clinical time with patients by changing working patterns.

"The Trust's project team have worked very hard to ensure that by changing patterns of working, they are able to maximise the training opportunities available in daytime hours to deliver better quality training packages, thus providing better patient care."

-Sir Keith Pearson, Chairman HEE

100% of the trainees at Leeds and York have reported more confidence in their work since the pilot and 83% agree or strongly agree that they have benefitted from the change in rota. The pilot saw an increase in productivity with weekday activity increasing by 37.7%, weekend activity rising by 29.1% and night shift activity by 22.1%. Patients also experienced benefits from this pilot as trainees were able to spend more time with each patient. Furthermore 54% of staff agreed that the initiatives and changes implemented had a positive impact on patient care and satisfaction.

Leeds Teaching Hospitals NHS Trust

Advanced training and education in acute general surgery through novel interventions.

Leeds provided four very well received teaching sessions on trauma skills using sub-specialty colleagues as trainers and using wet-lab cadavers. These sessions were all filmed, and are currently being edited into a format which will act as a teaching resource for training surgeons in key trauma skills. 40% of trainees reported feeling higher levels of skill and confidence after these training sessions.

The Mid Cheshire Hospitals NHS Foundation Trust

Enhancing training and education in handover and a supporting electronic solution.

Mid Cheshire's results demonstrated an 82.6% improvement in 'out of hours' tasks being handed



over and completed after the interventions. There also was a statistically significant increase in staff satisfaction as measured by validated Teamwork and Safety Climate questionnaires. In addition, they found a statistically significant 10% increase in 'out of hours' discharge rates, without any negative effects on length of stay. Results from their video observations revealed that 60% of handovers adhered to the 'Think FIRST' technique with 45% using elements of the situation, background, assessment and recommendation (SBAR) technique. Clear leadership in the handover process was present in 100% of meetings.

North Bristol NHS Trust

Improving training in consultation skills and investigating the use of video-recorded consultations as a training tool in the outpatients department.

North Bristol have successfully embedded a process for training in outpatient consultation skills in the medical department. They have done this by developing a robust method for recording and playback of outpatient consultations which is acceptable to clinicians and patients, reliable and compatible with the storage and transfer of sensitive material. This pilot enabled participating trainees to develop and improve their consultation skills with 85% of feedback sessions actively helping the trainee to identify something they would do differently in future consultations. There was also a 28% increase in the number of trainees who believe that feedback on their video recordings is an effective way to improve their consultation skills. In addition, 100% of feedback sessions have helped consultant trainers to suggest changes to their registrars consultation style or strategy.

Pennine Acute Hospitals NHS Trust (EPIC)

Rewarding trainees who take part in a right mix of educational and clinical activities using the Emergency Physician In-House Challenge (EPIC).

Anonymous post-pilot questionnaire responses

"Really fun, good team atmosphere created by friendly competition and a good initiative to do WPBAs/procedures. CONTINUE!"

"Really enjoyed ... EPIC, it definitely made me work significantly harder than I would have."

Pennine have seen an increase in clinical productivity during their pilot, which was aimed at foundation year two (FY2) doctors, GP vocational training scheme (GPVTS) and specialty training year one (ST1) grades. For FY2s, there was an average increase of two patients seen per trainee per shift. With an average of 12 shifts per day, this equates to an additional 24 patients seen per day, which is equivalent to two extra doctors' workload, for which three to four full time FY2s would need to be employed at a gross cost of roughly £120,000 per year.

The number of workplace based assessments (WPBAs) undertaken per FY2 trainee has increased

by 25% compared to the year prior to the pilot. They have also found improved trainee satisfaction with educational input, the amount and quality of consultant supervision, opportunities to complete WPBAs, and the overall experience in the A&E department.

Pennine Acute Hospitals NHS Trust (Handheld)

Optimise training and education using handheld devices for handover in the infectious diseases department.

Pennine have developed a usable electronic handover system which captures both relevant handover information and education opportunities. This is open-source software which can be distributed freely. Trainees have expressed enthusiasm for the potential of the pilot, the device and also the concept of being able to inform their training in this way.

Royal Berkshire NHS Foundation Trust

Addressing the apparent gap between learning opportunities from every day recognised problems by 'making every moment count'.

Royal Berkshire sought to 'make every moment count' by embedding quality improvement (QI) as normal practice, utilising every learning opportunity to enhance quality of care for patients. There was huge enthusiasm from trainees with 27 projects being delivered, involving 45 trainees across different grades and specialities. This pilot has seen the creation of resources such as; a training DVD, patient information DVD and the development of e-learning packages on QI. This project is now continuing successfully within the organisation under the new Quality, Innovation, Productivity and Prevention (QIPP) programme.



Tees, Esk and Wear Valley NHS Foundation Trust

Improving basic psychiatric training through revised early supervision and support arrangements.

The most significant achievement for Tees, Esk and Wear Valley was the increase in the amount of direct supervision that new psychiatry doctors received in their first four weeks in post. The piloting of changes in IT and electronic records training resulted in new arrangements for this to be rolled out across the Trust. At the end of the pilot, electronic records training also improved as the time trainees spent on this element was halved – yet competency levels improved.

University Hospital of South Manchester NHS Foundation Trust

Increasing learning and training opportunities for core surgical trainees by creating dedicated 'better training better care lists'.



South Manchester found a significant improvement of 12.7% in the amount of supervised operative training for core surgical trainees. The use of cadavers enabled them to gain confidence by getting experience in certain areas much earlier than they would have without the pilot. 76% of trainees felt the theatre sessions were enough to gain the appropriate experience and 84% felt that the theatre lists had the right mix to suit their training needs. Other evidence from the surgical theatre educational environment measure (STEEM) test suggests that trainees considered the training a highly positive experience.

The Dudley Group NHS Foundation Trust

Bringing together pre-registration pharmacists and foundation trainees for improved training, education and prescribing.

The pilot project at Dudley Group demonstrated an improved relationship between the pharmacy department, trainees and consultants who were a part of the programme. They also saw increased confidence in trainees, less anxiety when prescribing medicine on their own and a decrease in the trend amongst FY1 trainees who frequently asked for advice before prescribing. The percentage of trainees adhering to the national prescription guidelines has increased, with a further increase found in FY1 and FY2 doctors frequently considering the impact of the medication before prescribing any to the patient. Throughout the programme consultants who had been involved became more aware of the risks around prescribing and would contact the facilitator to ask if more areas could be brought into the teaching, or if particular areas of concern could be built into the sessions for the following year.

Anonymous post-pilot questionnaire responses

- *Did your confidence improve after attending the sessions?*

"Yes – I feel I am more aware of the potential pitfalls of prescribing and therefore am more aware to double check something before prescribing."

"Yes – clinical exposure forces you to as well."

Changing with the times, technology driven innovation in 'confusion'

This month we caught up with Selina Sangha, FY2 doctor from North Cumbria University Hospitals NHS Trust to talk about her winning Inspire Improvement project, 'Confusion app'. Selina developed a smartphone app to assist in assessing and managing cognitive impairment at the bedside.

What is your project about?

The project is a smartphone app around the topic of confusion, i.e. delirium and dementia. It is a bedside reference guide that can be used by junior doctors when assessing confused patients. It contains general information on the topic, nationally recommended assessment scales such as abbreviated mental test (AMT), and tips on management including a formulary for guidance in reviewing patient medications. Upon completion, junior doctors are provided with a certificate for their e-portfolio.

Why this idea, this project?

We chose this topic because we know that knowledge around the topic is very important for junior doctors but is poorly taught. We know it can be quite challenging when faced with a confused patient in the middle of the night and wanted to provide a framework for assessing these patients.

Is the information in the app easily applied to individual patients?

The general information on delirium and dementia in the app is generic, with certain sections designed to be used for individual patients. The assessment scales have tick boxes so the app can be used when in front of the patient, and the management section asks questions, which you can fill in based on the patient you are with and gives relevant guidance.

How you do believe the app could change the way care is delivered for patients with delirium and dementia in the future, if the project was adopted UK wide?

We know that technology is advancing and we can hope that apps such as these will be available either on doctor's personal phones or on hospital software for them to use. We hope that it will improve recognition of cognitively impaired patients which we know improves morbidity and mortality.

What impact do you expect this project will have on the training and education within your trust?

This project is already having a positive impact on training and education. Our junior doctors are engaging well with it and we have already seen improvements in the number of cognitive assessments that are carried out on the patients.

Is the project economically viable?

The app is free to download thanks to the Inspire Improvement project! We know that identifying cognitively impaired patients early in their hospital stay improves morbidity, mortality and length of stay; this could save the NHS considerable amounts of money.

