Better Training Better Care Interim Report

NHS Employers

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Summary

The Better Training Better Care (BTBC) programme aims to improve both the quality of training for junior doctors and the quality of patient care by enabling the delivery of the key recommendations from *Time for Training*, *Foundation for Excellence,* and other related reports[1]. BTBC seeks to deliver improved patient outcomes, safety and experience through better training of medical staff and better systems of care. The programme consists of nine workstreams in total which together aim to deliver on this objective. This evaluation looks at workstream 1 – local implementation and pilots. This workstream relates to the local implementation of pilot initiatives to address recommendations arising from these reports.

Following an assessment of 96 proposals submitted by various NHS Trusts across England, 16 Trust sites were selected to be supported by the BTBC programme in their implementation of pilot education and training initiatives across a variety of topics and departments.

The purpose of the evaluation is to determine if the pilot projects meet their objectives and represent value for money. Phase one of the evaluation aimed to use data collected to measure progress in planning and implementation, evaluating the pilots against various criteria like rationale, governance and stakeholder engagement. The aim of this phase was to learn how such aspects were factored into the project plans and gauge an understanding of the issues, challenges and successes that pilot sites experienced, and how they responded to these issues. This evaluation feeds into the long-term plans for sustainability and adoption of pilot projects by other Trusts. This report is an interim report on initial findings from Phase One of the evaluation.

Initial findings of the evaluation highlighted that the following are critical for the successful implementation of pilots:

- clarity of purpose;
- team working;
- buy-in and commitment from all levels of the organisation;
- an effective communication strategy;
- organisational and project administration support;
- a good relationship and robust communication between education and service structures; and
- an ability to adapt to feedback and changes in the services, staff and pilot are critical for the successful implementation of the pilots.

Rationale and Drivers for Change

Each pilot was set up to respond to the recommendations of the Temple report in an approach tailored to local need. The evaluation found that a common aim for all sites was to improve trainee confidence and skills, with the ultimate objective of improving patient care. Pilot sites used a variety of

[1] Temple, John *Time for Training: A Review of the impact of the European Working Time Directive on the quality of training.* 2010, Donaldson, Liam *Unfinished Business: Proposals for reform of the Senior House Officers Grade.* London: Department of Health, 2002, Department of Health *Modernising Medical Careers: the next steps: The Future Shape of Foundation, Specialist and General Practice Training Programmes* 2002, Collins, John *Foundation for Excellence: An Evaluation of the Foundation Programme,* Medical Education England, 2010, Wilson, Ian *Maintaining Quality of Training in a Reduced Training Opportunity,* MMC Programme Board Task and Finish Group on Quality, 2009.

methods to identify local need that could be addressed by improving the confidence and skills of trainees; this identification process included informal methods as well as formal diagnostic tools.

Lessons for wider adoption and sustainability

While the process of identifying local need may have been clearly understood by the pilot programmes themselves, the process and rationale for selecting a specific initiative over other initiatives for improvement, was not documented by pilot sites. In future roll-out of training initiatives, a key aspect of programme selection and design should be clear and documented criteria for assessing and selecting which local needs are to be addressed. This will enable a better understanding of the drivers for change, how the model is intended to deliver that change, and how that aligns with the overall strategic objectives of each Trust. Documented evidence explaining the rationale for the pilot project will also be a helpful tool in influencing Trust representatives and securing appropriate resources for implementation and sustainability.

Project Governance

Pilot project teams had representation from various multi-disciplinary clinical professionals as well as multi-functional non-clinical professionals at various stages of the pilot project, and as per the needs of the projects. The majority of the pilot sites (13/16) had a trainee representative at their board meetings. Three pilot sites involved patients in the design stage of the project, and two pilot sites requested feedback from patients on their local initiative.

Lessons for wider adoption and sustainability

Patient or lay representation at earlier planning stages and during implementation should be encouraged and improved as patients provide valuable critical insight into service improvements[2].

Stakeholder Engagement

Across all pilots there was a wide range of stakeholder input and representation at formal meetings, and in the planning and implementation of the pilots. Some stakeholders were involved in the earlier phases of design and planning and some at latter phases of planning and implementation.

Some pilots benefitted from involvement of senior Trust management, however there was a feeling that changes to resources and capacity issues were more on a short-term basis rather than a long-term solution. The evaluation did not find sufficient evidence to illustrate how the pilots are being used to inform the Trust's educational and training strategy.

Lessons for wider adoption and sustainability

Early engagement and inclusion of the relevant subject matter experts, academic representatives, senior Trust representatives and patient / lay representation helped sites to facilitate the design and planning process of the pilot and get buy-in and support for the development and implementation

[2] Various literature exists both in UK and abroad outlining the value of patients in service improvements, and health and social care in general (Williamson 2007, Forbat et al 2009, Greenhalgh, 2009, Matthews 2010).

phase of the project. Engaging and communicating with senior Trust representatives at the earlier stages can be valuable in dealing with some of the issues that pilots experience and to plan for the impact of the pilot on other clinical services.

Measurement and Evaluation

A particular area that pilot sites found challenging was defining the link between objectives and outcome measures, and attributing outcomes to the project. This is important for any programme to be able to demonstrate success against stated aims. Having a local academic partner to act as a critical friend to the pilot project team would support outcome development and measure selection. At the time of interviews, and in the early project planning phases 4 pilot projects had formal support from academic partners. Some sites engaged with academic representatives in other less formal ways and at later stages of the implementation.

Lessons for wider adoption and sustainability

Having an academic partner at project board meetings and early planning stages can provide valuable support in developing the evaluation plans for the projects. Engaging with subject matter experts (SMEs) and technical staff at earlier stages of the project design and planning can alleviate some of the challenges in implementation and communication, and reduce timescales to delivery of the project.

Conclusions

To work towards making the pilot sustainable as part of the Trust's education and training strategy, and allow for adoption of pilots by other Trusts, pilot sites will have to:

- identify and document rationale, triggers and drivers for change;
- document resource and finance requirements
- engage with senior Trust representatives to align with clinical services, and plan towards inclusion in broader education and training strategies
- identify constraints and critical success factors
- have a holistic approach to measuring benefits achieved.

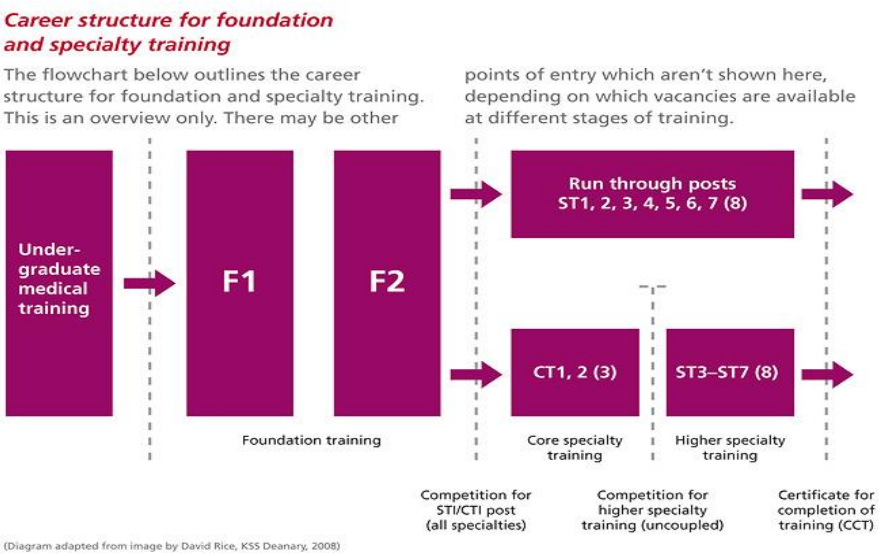
1.0 Introduction

1.1 Background

The training and education of health care professionals is an essential part of the delivery of high quality health care, ensuring efficiencies in health care provision and improving patient outcomes and experiences. The quality and adequacy of training is dependent on a number of factors including the suitability of training mechanisms, resource availability and identification and matching of training needs with training provision. The publication of the Chief Medical Officer's report 'Unfinished Business' in 2002 highlighted the inadequacies of the existing experimentally based and unstructured training and education systems for junior doctors and proposed that a new framework for training be created.[3]

In response, the Modernising Medical Careers (MMC) programme was established in 2003 to provide better care systems for patients by restructuring medical education and career paths and bringing post-graduate medical education and training for doctors in line with the needs of a modern National Health Service (NHS).[4, 5] The MMC programme implemented the Foundation Programme in 2005 – a new structured training programme requiring newly qualified doctors to complete two years of post-medical qualification training for full medical registration to practice followed by up to eight rotations of specialist training to fully qualify as consultants as shown in the diagram below:[6]

Diagram 1.1: Career structure for junior doctors



[3] Donaldson, Liam. Unfinished Business: Proposals for reform of the Senior House Officer Grade. London: Department of Health, 2002.
[4] Department of Health. Modernising Medical Careers: The response of the four UK Health Ministers to the consultation on Unfinished Business: Proposals for reform of the Senior House Officer grade. Department of Health, 2003.
[5] Department of Health. *Modernising medical careers: the next steps: The future shape of Foundation, Specialist and General Practice Training Programmes*. Department of Health, 2004.
[6] Modernising Medical Careers. *NHS Speciality Training*. http://www.mmc.nhs.uk/specialty_training/specialty_training_2010_final/introduction_to_training/training_structure_2010.aspx (Accessed 21 May 2013)

Source: Modernising Medical Careers

In addition to the above changes in the NHS, doctors were also affected by the implementation of the European Working Time Directive from 1 August 2009, which restricted the number of hours that could be legally worked in a year: laying down minimum requirements in relation to working hours, rest periods and annual leave and limiting doctors in training to a maximum of 48 hours a week averaged over a six month period.[7] In terms of training and education this meant that doctors were expected to achieve the same level of training in fewer hours.

In 2009 the Secretary of State commissioned Medical Education England (MEE) to ascertain the impact of the newly imposed European Working Time Directive (EWTD) on postgraduate medical education and training and to evaluate the early years of the new Foundation Programme. Professor Sir John Temple published his review *Time for Training*[8] into the impact of the European Working Time Directive (EWTD) on the quality of training for dentists, doctors, healthcare scientists and pharmacists in 2010.

In his review, Temple concluded that high quality training can be delivered in reduced hours but this is precluded when trainees have a major role in out-of-hours service, are poorly supervised and access to training is limited. He emphasised that high quality training leads to professionals who deliver high standards of safe patient care but recommended that the traditional experiential model of learning had to change. Consultants needed to be more directly responsible for the delivery of care. *Time for Training* called for better use of the expanded consultant workforce, not only to ensure improved training for junior doctors but also in terms of efficiency savings for the service and for enhanced safety and higher quality care for patients.

Professor John Collins was commissioned to formally evaluate the Foundation Programme, and he worked in the context of the needs of patients and trainees, the changing social, health service and education environment as well as the regulatory environment. His 2010 review *'Foundation for Excellence'*[9] echoed and built on Temple's report and identified Trusts that were doing well in the implementation of changed practices to cope with reduced working hours. However, the review also highlighted concerns that in some cases some of the junior trainees are asked to practice beyond their level of competence and without appropriate or adequate supervision.

Temple's and Collin's reports reflect the findings of an earlier report commissioned by the MMC Board on how reduced training opportunities impacted on the maintenance and quality of training. In his 2009 review *'Maintaining Quality of Training'*[10] Dr. Ian Wilson focussed on the need for benchmarking standards and incorporation of training and education into service delivery, funding mechanisms and

[7] NHS Employers. *European Working Time Directive.* http://www.nhsemployers.org/PlanningYourWorkforce/MedicalWorkforce/EWTD/Pages/EWTD.aspx (Accessed 22 May 2013).
[8] Temple, John. Time for Training: A Review of the impact of the European Working Time Directive on the quality of training. 2010
[9] Collins, John. Foundation for Excellence: An Evaluation of the Foundation Programme. Medical Education England, 2010.
[10] Wilson, Ian. *Maintaining Quality of Training in a Reduced Training Opportunity.* MMC Programme Board Task and Finish Group on Quality, 2009.

everyday practice to meet the needs of trainees, trainers and health care, education and commissioning providers.

All three of these reports made clear that a multi-faceted approach to training of junior doctors needed to be taken. This approach needed to be coordinated across a variety of organisations to address the issues raised around the standards, quality and monitoring of training and education for both trainees and trainers. As such, a range of broadly encompassing actions and tools were identified and recommended as part of the regulation, delivery and evaluation of training and education. These include:

- Incorporate training and education into service delivery, funding mechanisms and everyday practice
- Develop planning and monitoring mechanisms
- Review existing practice
- Revise rotas, job contracts and reconfigure services
- Implement a consultant delivered service
- Utilise multi-disciplinary working
- Ensure appropriate mentoring and support mechanisms
- Use technology in a coordinated and integrated manner
- Train, accredit and provide support for trainers
- Involve trainees
- Revise curricula and required placements
- Build flexibility into the Foundation Programme and into rotations
- Revise training duration based on evidence
- Ensure value for money

1.2 The Better Training Better Care programme

The Better Training Better Care (BTBC) programme was created under the auspices of Medical Education England (MEE) and was designed to deliver nationally on the key recommendations from '*Time for Training'* and *'Foundation for Excellence'* with the aim of improving the quality of patient safety and care through the provision of high quality post-graduate medical education, training and learning.[11] The programme transitioned to Health Education England (HEE) - setup in shadow form, in October 2012.[12]

HEE mapped the recommendations into the BTBC programme creating nine workstreams for delivery through two overlapping elements:

1. **Local elements:** The identification, piloting, evaluation and dissemination of good education and training practice, being delivered through :

[11] Health Education England. *Better Training Better Care.* http://hee.nhs.uk/work-programmes/btbc/ (accessed 24 July 2013).
[12] The Health Education England Establishment and Constitution Order 2012. SI 2012 1273. http://www.legislation.gov.uk/uksi/2013/1197/pdfs/uksi_20131197_en.pdf (accessed 24 July 2013).

i. Local implementation and pilot programmes

2. **National elements:** Improvements to curricula and the underpinning education and training frameworks to ensure training is fit for the purpose of providing safe, effective and improved patient care. This is being delivered through eight workstreams focussing on the following areas:
   ii. Role of the trainee
   iii. Role of the trainer
   iv. Workforce planning
   v. Improving careers guidance and availability
   vi. Integrated technology enhanced learning
   vii. Broadening the Foundation programme
   viii. Regulatory approach to supporting Better Training Better Care
   ix. Funding and education quality metrics

A description of these workstreams can be found in Appendix 1.

A major element of the BTBC programme was the local implementation of the pilots – workstream 1. In December 2012 an event was held to inform interested Trusts on the 'Local Implementation and Pilot' phase and invite them to submit proposals that focused on one or more of the three key Temple recommendations outlined below:

- Appropriate supervision, and/or implementing a consultant present service
  - Consultants directly involved in 24/7 care
  - Appropriate supervision using multidisciplinary teams
  - Clarity about role and capabilities of trainees
  - Transfer of information about trainees
  - Addressing concerns about trainees

- Service delivery must explicitly support training
  - Service redesign to deliver high quality patient care and training (e.g. 24/7 care, Hospital at Night)
  - Relationship with commissioning of clinical services
  - Job planning and tailoring clinical sessions to allow for training
  - Multidisciplinary team-working to support training

- Make every moment count
  - Handover
  - Technology enhanced learning
  - Mentoring and support for trainees
  - Trainees involved in planning and innovation
  - Mentoring for newly appointed consultants

- Trainee choice about training

96 proposals were submitted for assessment, of which 16 were chosen following a competitive assessment process where proposals were evaluated for the ability to demonstrate:

- Outcomes and measurables that would improve the quality of training and patient care and safety
- The existence of Trust Board support
- The sustainability and adoptability of projects
- Affordability and appropriate use of funding

Approved initiatives were wide-ranging, covering a number of areas as follows:

- Departments: including A&E, psychiatry, surgery and infectious diseases
- Topics: including clinical handover, communication skills in consultations, prescribing, improving confidence in psychiatric decision making and serious incidents
- Modes of delivery: including the use of new technology, simulation for training, re-structuring and creation of new processes and rotas, quality improvement projects and telemedicine.

The 16 successful pilot sites were supported by one of four regional BTBC Relationship Managers who met regularly with the pilot teams and attended pilot Project Board meetings.

A summary description of the individual pilot sites can be found in Appendix 2.

Evaluation of the local implementation and pilots

HEE commissioned NHS Employers to oversee the evaluation of all the workstreams in the BTBC programme, and Matrix Evidence was subsequently appointed to undertake the evaluation of the NHS Trust pilots (workstream 1). The evaluation of the pilot training programmes runs from April to December 2013. This interim report only focuses on the work undertaken for the evaluation of workstream 1 and is based mainly on evidence collected from the first round of interviews between February 2013 and May 2013[13].

The evaluation aims to assess whether pilots have achieved their stated aims and objectives, whether they collectively meet the recommendations against which they were awarded funding and how they have encouraged the widespread adoption of the pilots across the NHS. Findings from the evaluation will be used to inform the adoption of these pilots elsewhere within the NHS.

Matrix engaged with the pilot sites, using documentation submitted by pilots to the BTBC programme and interviews with the pilot sites to create a conceptual framework to answer the following questions:

[13] Since the first round of qualitative interviews between February - May 2013, pilots have made some changes to certain aspects of their projects for e.g. governance arrangements and processes; drawing on academic support (discussed later on in the report). This report mainly focusses on evidence collected at the time of interview but will also capture some of those areas where changes have taken place, and highlight areas of good practice and shared learning.

- On what basis had pilot sites chosen a local need and designed the means to address it?
- Did the individual pilots achieved the stated aims and objectives of their pilot project?
- Did the pilots collectively meet the recommendations against which they were awarded funding?
- What were the enablers and barriers of progress?
- What were the emerging benefits or disbenefits?
- Were pilot initiatives sustainable?
- Were pilot initiatives or aspects of pilot initiatives adoptable by other NHS sites? If so, what is required for adoption to take place?

These questions were intended to unpack the critical success factors and enablers required to deliver on the recommendations and identify contextual factors that are important for the continued spread of outcomes across the pilot sites and the NHS as a whole.

This interim report covers the evaluation to date from February 2013 – May 2013 and presents the

- Framework adopted for the National Evaluation (i.e. theory of change) and summarises the methods employed to deliver the project scoping phase and the interim evaluation of workstream 1 – local implementation of pilot sites (Chapter 2)
- Key findings from the pilots progress, illustrating these with examples and drawing out key learning points (Chapter 3)
- Critical observations on how to proceed from now until end of September 2013 to ensure the success of the pilots (Chapter 4)
- Next steps required for completing the evaluation of workstream 1 – local implementation of pilot sites (Chapter 5)

2.0 Approach

2.1 Approach to evaluating the pilots

The evaluation adopted a 'theory of change' approach to develop a better understanding of the 16 pilot sites. A theory of change sets out the relationship between the processes and objectives of proposed pilots, interventions and intended outcomes. Six evaluative questions were articulated in this theory of change, underpinning the innovations in the postgraduate medical training:

- ***Should it work?*** What is the rationale behind the pilots?
- ***Can it work?*** What are the resources, inputs and processes – financial, human, and political – that are required to implement the pilots in line with theory?
- ***Does it work?*** What evidence is there that the desired impact and outcomes are being achieved and are correctly attributed to the pilots in isolation of other interventions or changes that are also taking place?
- ***Is it sustainable?*** Are the pilots able to be sustained in light of changes in context, leadership, human and financial resources, local and national policy drivers?
- ***Is it adoptable?*** Ultimately the pilots would want to demonstrate aspects that are adoptable in other areas of medical education across a number of providers and geographical areas.

Matrix was commissioned to address all these areas. In line with the above approach we undertook a systematic analysis and reviewed project initiation documents and project application forms to better understand the aims, objective and processes of the pilots; in order to explore the learning from each pilot and identify opportunities for the sustainability and future adoptability of the initiatives.

2.2 Project activities

This section describes in detail the activities that Matrix undertook to deliver the project. All the activities were agreed with HEE and NHS Employers to ensure that they were fit for purpose in the evaluation of the BTBC programme.

Document review

This involved the review of application forms, project initiation documents and progress reports submitted by pilot sites to gain better understanding of the pilots and to develop their "theory of change" which was translated into a logic model. The logic model summarised information about the pilots in the following areas:

- Aims and objectives of the pilot
- Drivers for change, locally and nationally
- Resources such as the people involved, time spent, financing and equipment required for delivery of the pilot
- Activities undertaken to implement the pilot

- Outcomes (immediate, longer term) that the pilot was expecting to achieve

Telephone and face-to-face interviews

Interviews with the 4 pilot relationship managers and 16 pilot sites were undertaken after the detailed review of the documents produced by the sites. The aim of this exercise was to address any gaps in our understanding of the pilots. Prior to the interviews, pilots were contacted by Matrix and asked to validate the logic models that Matrix had prepared.

Interviews with relationship managers included discussions about the successes, challenges and progress made by pilots against planned milestones and objectives. Relationship managers were also asked to recommend the relevant points of contact for the individual pilot projects.

In order to ensure the right representation of stakeholder views, we asked that as a minimum, a trainer/supervisor; trainee and the project lead would participate in the interview with pilot sites. Participants were asked to discuss in more detail the following topics:

- **Rationale** – local and national drivers; problems that trusts are trying to solve; organisational needs.
- **Governance and project management** – project leadership structure; accountability; number of trainees and trainers involved, academic involvement.
- **Stakeholder engagement** – how trainees, trainers and patients are engaged in the pilot.
- **Measurement** – what data was being collected and what outcomes pilot sites were measuring.
- **Challenges** that pilots experienced at different stages of the project.
- **Achievements** to date, critical success factors.
- **Outcomes** that pilots expect to achieve by the end of the project (qualitative and quantitative).
- **Learning** – advice to other NHS Trusts who would wish to embark on a similar pilot.
- **Sustainability/Adoptability** – discussing the benefits and ways of spreading the pilot initiatives locally, regionally and nationally.

Review of 16 pilots sites

The results of the document review and interviews enabled us to update the logic models and outline emerging findings which were presented to the pilot sites and other BTBC programme stakeholders on 17th April 2013 at an engagement event. Also, during the event, pilot site representatives were asked to work in mixed groups to further develop our understanding of the processes undertaken, challenges faced and lessons learnt in the following areas:

- Rationale and drivers
- Governance and project management
- Stakeholder engagement
- Measurement and outcomes

3.0 Findings

Pilot sites were at different stages of progress in implementation of the project at the time of the interviews and have collectively made significant advances in their work at the time of this report. This chapter presents the qualitative experiences of pilot sites, the success stories, the challenges and the learning derived from these experiences, at the time of the interviews.

To deliver their projects, teams had to overcome a number of challenges including addressing resource and capacity issues, in some cases lack of engagement from within the Trust and delayed start times, often due to technical difficulties. Pilot sites implementing technology-based training interventions in particular, had underestimated the amount of time it would take to develop, trial and update software prior to being able to use the new technology effectively. Once underway however, they had undertaken much of the ground work and expenditure necessary for successful scalability within the Trust.

Initial impressions shared by pilot teams indicated that overall, feedback from trainees was positive with trainees:

- valuing the opportunity to be involved; and
- experiencing improved confidence and skills through taking part in the pilot.

Pilot sites also reported evidence of increased clinical Multi-Disciplinary Team (MDT) engagement indicating improved working relationships between professionals as facilitated by the pilots and improvements in patient care such as more patients seen per shift and reduced waiting times to be seen.

3.1 Rationale and drivers for change

This section describes the rationale that each site had for implementing its initiative, and the process employed for identifying local need.

All 16 pilot sites were motivated to address a local need. These needs were associated with one or more of the BTBC objectives of appropriate supervision and/or implementing a consultant present service; service delivery explicitly supporting training; and making every moment count, formed the basis for local drivers for change.

To address the identified need, pilot teams designed initiatives based on a variety of sources including researching the evidence base; utilising nationally recommended best practice and guidelines; National Patient Safety Alerts (NPSA) and World Health Organisation (WHO) evidence; listening to trainee feedback and gaining inspiration from innovative methods of training and building on existing technology and experiences.

Some pilots also took a formal structured approach to designing their initiative, with a diagnostic process clearly linked to their initiative design. Two such examples are provided in Table 3.1 below, where pilot sites used local surveys as the basis of their diagnostic process and/or matched local drivers with nationally identified areas for improvement to devise a solution to address the identified needs

Table 3.1: Diagnosis to solution

Pilot	Diagnostic Process	Solution
Leeds and York Partnership NHS Foundation Trust	A 12 week survey of core trainee work activity and process mapping indicated that on-call was over-manned and that there was insufficient clinical utilisation of on-call trainees. The Trust also wanted to address a high dropout rate due to exam failure from CT2 to CT3.	The Trust re-organised the job descriptions, rotas, processes and pathways of working to release 5 WTE trainees into day-time working; developed enhanced learning in key competency areas; and reviewed resources available to support training successfully and develop a guide trainer/trainee to focus on development of curriculum competencies.
University Hospitals of South Manchester NHS Foundation Trust	A study into the quality of surgical training for speciality trainees found: • trainees did not have adequate time for training to develop required operative experience • the implementation of the EWTD had reduced time for training • coverage of training was patchy and raised concerns over: • how theatres are run and theatre lists organised • how to manage patient journeys in a way to optimise training and education in surgery. These findings matched a national lack of trainee surgical experience.	Dedicated BTBC 'training lists' were created for different surgical specialities, specifically for trainees, to allow trainees to undertake all stages of operative care under supervision, from pre-operative checks to providing aftercare and undertaking WHO lists. Trainees additionally benefitted from receiving feedback at every stage, from Workplace Based Assessments (WBAs), and from being able to participate in cross-speciality surgical lists.

Though the pilots varied substantially in the model they adopted, areas on which they focussed and in the approach to identifying areas that would benefit from the initiative, in the main they all had the

common aims of improving trainee confidence and skills for the ultimate objective of improving patient care.

In terms of evidence for future decisions of how to address particular issues, providing information on what steps were taken to identify alternative initiatives to address the local needs; and how the different options were evaluated and one option selected would make the pilots stronger and would be good practice for any other changes being introduced in this way.

Greater clarity also would be helpful in the future on how local needs were aligned with BTBC objectives.

Key Findings

- All pilot sites had a local need they were passionate about addressing to improve training and patient care.
- Pilot sites used a wide variety of sources as the basis for their initiative design.

3.2 Project management and governance

This section discusses the arrangements pilot sites have made for ensuring that the project management is adequate to needs, suitably representative of stakeholders and that appropriate governance is in place.

Project management

For the purposes of clarity, we have adopted a broad definition of project management for this report as referring to '*the coming together of a group of people with a specific set of skills, knowledge and techniques*[14] *to produce a time, cost and quality specified, result, product or service.*[15]' In the context of the pilot we are referring to the team responsible for designing, implementing, managing and delivering the project and the manner in which they undertook this task.

At the time of the interviews and to now, all pilots had and continue to have active multi-professional project management teams that meet on a regular basis, generally every 4 – 6 weeks. The projects are additionally supported and guided by a BTBC relationship manager with whom monthly meetings are held and to whom monthly reports are submitted on actions undertaken, risks foreseen and addressed and expenditure to date.

At the time of interviews, pilot teams were focussed on implementing and delivering the project with:

- Main (core) team members: consultants/trainers, trainees, senior Trust management (such as Directors and Deputy Directors of Education and Training and Finance); and

[14] Project Management Institute. *What is project management?* http://www.pmi.org/About-Us/About-Us-What-is-Project-Management.aspx (accessed 24 July 2013).
[15] Association for Project Management. *What is project management?* http://www.apm.org.uk/WhatIsPM (accessed 24 July 2013)

- other required health care professionals: nursing, pharmacist, clinical facilitators, IT, data analysis and service improvement team representatives.

The primary purpose of these teams was to deliver the pilot and manage risks and issues along the way. The roles of the individual team members is discussed in in further detail below in Section 3.3: Stakeholder engagement.

At the time of interviews, 13 out of 16 sites (81%) had trainee representatives on their Board. Engaging with trainees and providing a formal platform to share learning, impact and experiences is a valuable tool and one of the ways to collect feedback on an initiative's progress and understand the issues and challenges that a programme is experiencing.

In some pilots, academic and patient/lay representatives were more involved early on in the process, by way of formal attendance at the board meetings. Four pilots had academic representation at board meetings, and 7 sites were either in communication with academic partners or using academic research fellows to feed into the process[16].

Pilot teams identified the following reasons for finding it challenging to involve patients in either the project group or as a source of feedback for outcome measures:

- A suitable person(s) was unavailable or difficult to identify
- Pilots were about 'behind the scenes' training and work processes of which patients were unaware and therefore they would not necessarily see and be able to comment on the impact
- Ethical considerations: it was judged inappropriate to approach patients who were in a state of 'crisis' for participation and evaluation.

However greater patient involvement was under consideration by some pilots.

The 'other healthcare professionals' group consisted of non-clinical professionals like service administrative and finance staff, project managers, educationalists, data analysts and suppliers; as well as other multi-disciplinary clinical staff.

Differences in project team membership could be attributed to the different nature of the topics, and while overall pilots appeared to have the appropriate membership, more extensive patient engagement will be beneficial to future projects.

Since the interviews, however, pilot teams have developed their membership in accordance with the needs of the programme and the project. Several pilot sites have engaged with academic partners or patient representatives at different stages of the process. It is unclear whether this was part of the initial plan to engage with stakeholders at this point, or whether this came as a result of learning;

[16] Academic support was to offer externality and constructive critique of the project and evaluations, and could be either a student or tutor from a linked University, Academic research fellows, or in the form of recommendations from other academics.

however it is worth noting that project teams have displayed flexibility to adapt to situations and make changes as necessary for the delivery of the project. In planning future projects, pilots should consider community engagement, local community champions, or other lay representation from within the Trust that could act as a critical friend, and offer valuable insight into the project planning whilst protecting the interests of the public and patient.

Governance

In this report we have adopted a wide-ranging definition of governance in the NHS incorporating two broad areas: firstly, the '*systems, processes and behaviours by which strategic aims are set, organisations are led, directed and managed in order to achieve organisational objectives'*; and secondly the '*structures and processes which ensure accountability for actions and outcomes'*. We consider these with respect to safety, quality, clinical governance and the relationship with patients, carers, the wider community and partner organisations.[17,18,19]

In the context of the pilots we are referring to the process by which the pilots' project teams fed into the Trust's senior management structure, received guidance and support from them, and in turn influenced the long term educational and training plans of the Trust to achieve widespread organisational cultural change and improve the quality of care for patients in the long term.

- 14 of the 16 pilot sites either had senior trust management representatives on the project team and/or reported regularly to senior trust management, see Box 3.1 for some governance arrangements. At the time of the interviews it was unclear what the governance arrangements were for the other two pilots.

Box 3.1: Governance reporting in pilots

- **Governance representatives on project teams**: Directors and Deputy Directors of Education, Training, Quality Improvement, Finance and Operations
- **Project teams reporting to:** the Emergency Care Board escalating to the Non-Clinical Board, Electronic Governance Board, Medical Directors, Divisional Directors and the Local Education Board of the Midland, the Better Training Better Care programme

There is reported evidence of the governance mechanism working to support and guide pilots and help them overcome challenges that arose. In some cases it was unclear how and to where the information was being fed back, and then used to inform education and training decision making at a departmental and Trust level. This was particularly evident in the response to capacity and resourcing constraints faced by the pilots.

[17]Financial Reporting Council. *The UK Corporate Governance Code.* Financial Reporting Council, 2012.
[18] Department of Health. Integrated Governance Handbook: A handbook for executives and non-executives in healthcare organisations. 2006
[19] Department of Health. Quality Governance in the NHS – A guide for provider boards. 2011.

- In some cases healthcare professionals found their clinical commitments meant they were unable to engage as effectively and meaningfully with the pilot as they would have liked. However, they were largely able to overcome these difficulties due to the support received from the wider Trust and BTBC funding which provided:
  - Clinical backfill: the recruitment of a person to undertake some of the clinical duties of lead clinicians enabled the leads to devote time to the project
  - Project support staff: it was strongly felt by pilot team members, especially project leads, that the implementation of their initiatives would not have been possible without Trust project support staff to undertake administrative duties.
  - Recruitment of relevant skills from the wider Trust, including IT, Human Resources and Finance, which addressed the skills requirements in the project.

- Additionally, pilot teams found that Trusts faced a constant balancing act between assigning staffing and resources to training and education or to patient care provision. As the example in Box 3.2 indicates, forward planning and active Senior Trust support combined are needed to ensure continued focus on educational and training needs, and to be able to mitigate or plan against some of the challenges.

Box 3.2: Balancing services with education and training needs

Leeds and York Partnership NHS Foundation Trust: protecting the time for education and training

Challenge: Ensuring changes in staffing and services, including the introduction of a new 24 hour clinical service staffing did not detract from the focus on education and training and pull staff away from the pilot initiative into the new service.

Solution: The pilot remained unaffected due to the commitment of participants; the active involvement by Senior Trust management on the project board; their protection of the pilot's aims and objectives; and by planning for the likely impact of the new clinical service on the pilot.

- Pilot sites also found that the solutions were short-term and that existing organisational structures and processes had not changed to facilitate the effective development and implementation of the pilots as part of a longer term strategy. For pilots to be sustainable and adoptable in the future, Trusts need to learn from the issues raised in the pilots on capacity and resource constraints and be able to align clinical service requirements with the long term strategy and goals for education and training.

Key Findings

- Pilot teams were generally multi-disciplinary and matched the needs of the programme. In most cases, they could have benefitted from having more patient representation and broader clinical representation early in the process.
- Robust organisational structures, forward planning and processes need to be in place to facilitate the effective implementation of the pilots and on-going sustainability.
- Governance arrangements demonstrated a degree of senior leadership and commitment; however this could be stronger and better integrated with the Trusts' strategy and goals which would provide better support for pilots.
- Operational support for the pilots could be stronger in some cases, especially in addressing staffing and resource constraints in the Trusts' long term training and education goals.

3.3 Stakeholder engagement

Role of the project team

As discussed earlier in Section 3.2, the composition of project management groups is multi-professional but with varying membership depending on the aims and needs of the pilot, and the various phases from planning to implementation. Project team members also played a variety of roles from contributing to the study design, project implementation and management to the development of outcome measures and evaluation methodology and providing feedback to the project management team for continuous improvement. The roles undertaken by individual members of the teams are shown in table 3.2 below.

The 'Other health care professionals' group is combined with the 'senior management group' in the table below to indicate 'Multi-disciplinary team' involvement in the pilot. The composition of the MDT group therefore includes technical, administrative, financial, senior management and clinical staff such as nurses on the ward on whom the proposed changes in practice would also impact. Where clinical MDT were insufficiently engaged at the beginning, pilots teams found it beneficial to present to and discuss the project benefits with these groups to elicit support once project implementation began.

Table 3.2: Role of project team members

Team member	Role
Consultant / trainer	The project lead was often a medical consultant. As consultants shared responsibility for supervision and training of trainees, the consultant may also have been a trainer. Consultant representatives were engaged in all aspects of project delivery from design to feedback with the greatest involvement across pilots in project implementation, design and feedback.

Team member	Role
Trainees	The pilots were encouraged by the BTBC team to ensure they had trainee involvement. At the time of the interviews trainee involvement was evident in a variety of ways: • Providing feedback (15 pilots, 94%[20]). • Project management (11 pilots, 68%). • Development of evaluation methodology and outcome measures (7 pilots, 44%) • Project design (6 pilots, 38%). • Leading the project (2 pilots, 12.5%).
Multi-disciplinary Team[21]	The MDT members appeared to be mainly involved in the implementation of the pilot programme and in providing feedback to the pilot team. For pilots instituting technological changes, technical staff are likely to also have been involved in the design stage while senior management representatives are likely to have played a governance function. Exploring the roles of people in this group in greater depth would be beneficial for future implementation.
Academic	Six pilots reported varied involvement of academic representatives from inclusion at the design stage to developing outcome measures and evaluation methodology and providing feedback. At the time of the interviews formal academic involvement at board meetings was limited, but some sites were engaging with academic research fellows. Following interviews it has been reported that there has been an increase in academic partnering to the project management team across pilots.
Patient	The BTBC team encourages patient involvement in the pilots though this proved challenging for many. For those pilots that engaged formally with patients, the patient role included consulting representatives at the design stage (3 pilots) and asking for feedback (2 pilots).

Changing organisational culture and implementing change

The engagement and involvement of trainers and trainees was one of the most common and significant challenges experienced by all organisations. Significant efforts were made by project teams to change people's understanding of the purpose of the programme using a range of tools, including:

[20] The sixteenth pilot was in the early stages of implementation at the time of the interview therefore this may now be all 16 pilots.
[21] The group includes technical, administrative, financial, senior management and non-trainee and trainer clinical staff on whom the project also impacts such as nurses on the wards.

- **Engaging senior level buy in**: involvement by senior level staff meant that project teams were able to access the additional technical, financial and administrative support they required to implement the project
- **Appointing local champions**: one-to-one discussions and meetings with consultants created enthusiasm about the project amongst the people who were responsible for implementing the training initiatives and their support
- **Being selective about choice of vocabulary**: sometimes using the words 'pilot' or 'research' or 'project' meant that trainees, trainers and senior Trust management viewed the initiatives as temporary and did not take the education and training aspects seriously
- **Emphasising the benefits of the project** to bring on board clinical MDTs who were impacted by the pilot and were unclear on the purpose of the initiatives
- **Ensuring trainees understood that they were not being judged** and that the purpose was to improve the quality of training generally, and not a reflection on their abilities personally
- **Ensuring the appropriate medical bodies were involved** in discussions requiring changes to job descriptions, rotas and work placements so any changes were legally agreed in concert with the affected staff.

Box 3.4 below provides specific examples of how pilots overcame their engagement challenges.

Box 3.4: Overcoming challenges with stakeholder engagement

Trainer engagement in University Hospitals of South Manchester NHS Foundation Trust:

Challenge: Raising awareness of the pilot and engaging consultants in the project.

Solution: The project lead and administrator added BTBC to the agenda for meetings clinicians had to attend. They held regular steering group meetings with Consultant Champions and followed up with one-to-one meetings with individuals who did not attend. Through this hard work they expanded the consultants involved to all but two of the surgical specialities.

Trainee engagement in Heart of England NHS Foundation Trust

Challenge: Trainees were not engaging with the learning material and were achieving low marks.

Solution: The bottom 10% were identified through the software and individual discussions held with the trainees which revealed that they were not taking it seriously. The importance of participation was emphasised, participation was made more mandatory in nature and individual learning plans were created. Follow-up found that their engagement with the learning material had increased and their results improved.

The effect of language on engagement in North Bristol NHS Trust

Challenge: Using the words 'pilot' or 'research' or 'project' meant that trainees, trainers and senior Trust management did not take the education and training aspects seriously.

Solution: Lots of effort expended on various internal communication activities (newsletters, presentations, journal articles) and emphasising the benefits of the pilot for training. Two language alternatives proposed instead: "development of new type of learning" and "initiatives".

Ensuring the message is clear in Tees, North Bristol, Dudley Group, Pennine EPIC,

Challenge: Ensuring that the participants understand the aims and purpose of the pilot

Solution: Emphasise that it is the carrot not the stick: aim to improve standards of training and patient care, not a judgement on participants' competence

Communication strategy and engagement activities

In addition to day-to-day operational communications required to set up and deliver the projects, teams were required to have a communication strategy which was developed with support from the BTBC programme communications manager. The activities in this strategy played two important roles: increasing engagement and awareness raising.

Project teams undertook a variety of activities prior to the project start and during implementation to communicate with and engage participants, raise awareness of the pilot, inform the wider clinical teams and communicate developments.

Box 3.3 below describes the types of activities undertaken by pilot sites to target specific audiences – both in terms of operational communications and activities as part of their wider communications and engagement strategy.

Box 3.3: Communication activities

Consultant/ Trainers and trainees: informing, training and engagement

- Emails to trainees going to join the department introducing the pilot, its aims and objectives
- One-to-one and group meetings with trainers and trainees to inform and answer questions
- Pilot induction sessions for trainees
- Training sessions for consultants / trainers
- Trainer and trainee project packs
- British Medical Association representative involvement to ensure rota, job description and planning changes are undertaken legally and with approval

Clinical MDTs and audiences within the Trust: engagement and awareness-raising

- Discussions with consultants and nursing groups on the benefits of the pilot and the likely impact to gain support
- Email bulletins on pilot aims, objectives and progress
- Pamphlets about the pilot distributed in the department
- Presentations to staff in other departments
- Articles in the Trusts' newsletters

Patients: engagement

- Presenting the pilot to the patient forum to elicit support
- Consulting an 'expert patient' representative

Wider audiences including others Trusts and the public: awareness-raising

- Articles in newsletters, newspapers and journals
- Presentations and show case events to other Trusts

Key Findings

- Project team membership was widely encompassing, with trainers/consultants generally leading the pilots and trainees mainly contributing to feedback and project management.
- Academic representatives supported evaluation and the development of outcome measures, while patients/lay representation, when involved, consulted at the design stage or contributed by giving feedback. Involving patients / lay representation more can be beneficial in the development of the project.
- Achieving the necessary organisational changes and staff engagement required considerable expenditure of effort in communication and engagement activities. Early stages of project planning should include communication and engagement activities, and identification of champions and wider remit stakeholders.
- Many pilot teams included clinical multi-disciplinary professionals. To ensure project team members are able to be completely involved, planning for the impact of the pilot on other team members, especially the clinical MDT, and engaging them earlier on in the pilot will facilitate implementation.

3.4 Measurement and evaluation

In the initial stages, many pilot sites found it challenging to develop meaningful outcome measures that demonstrated the link between the training initiatives and desired outcomes; particularly for patient experiences and health outcomes. For example: determining whether a reduction in serious untoward incidents could be attributed to the BTBC training initiatives, and not as a result of other initiatives or activities in the Trust, to allow the pilot site to be able to demonstrate an improvement in patient safety.

At the time of the interviews, many pilots were still in the process of demonstrating that their outcome measures were appropriate to show achievement of the pilot objectives. They were also considering how to distinguish between outcomes and impact resulting from specific interventions run by the pilot from other initiatives and changes in the Trust setting.

As part of the BTBC programme, pilots were ideally allocated a local academic partner who would act as a critical friend to the pilot project team on their identified outcomes and chosen measures. At the time of the interviews, 8 of the pilot sites had included academic engagement in some form early on in the project plan, and following interviews it has been reported that other pilot sites have and are engaging in appropriate academic involvement. Having the support of an academic partner could assist and facilitate the process of defining, identifying and developing outcome measures.

Pilot sites were however successfully collecting outcome data on trainees, trainers and patients as shown in table 3.2 below.

Table 3.2: Number of pilots collecting each type of measure

Outcome data collected	Trainee outcomes	Trainer outcomes	Patient outcomes
Number of sites	16	11	4

These measures primarily consisted of the following:

- Trainees: trainee satisfaction and/or knowledge and/or confidence and/or skills with a number collecting additional data such as on trainee well-being and stress
- Trainers: primarily trainer satisfaction with the pilot; four included additional measures on trainer confidence in the trainee's abilities and one pilot included a measure of the trainers' skills.
- Patients: patient experience (waiting times, complaints), satisfaction (feedback on videoed sessions), health outcomes (discharge rates and mortality rates over the weekend) and safety (incident reports and prescribing errors).

Pilot sites aimed to collect control and/or baseline data for comparative analyses on these measures, however they did find this challenging. A detailed description of the data collection tools was not available at the time of the interview; however pilots have used:

- pre-and post- questionnaires,
- assessments
- focus groups
- interviews
- pilot and General Medical Council (GMC) surveys
- process measures (e.g. the number of Workplace Based Assessments (WBAs); the number of referrals; the amount of time spent on the phone explaining a medical case)

Additional measures include independent feedback on videoed simulation training episodes, handover observation and reporting using the World Health Organisation's (WHO) checklist for surgery. Two pilots did use formal evaluation methodology and this should be encouraged in the future with support given for effective methods.

Key Findings

- Pilot sites had successfully defined a variety of outcome measures for trainees, trainers and patients and were collecting the data through a broad range of methods.
- Many sites found it a challenging process to clearly define outcome measures that demonstrated a link between objectives and outcome measures.
- Academic partnering was involved at various stages of the project planning and implementation phases. Early engagement and support could assist in the development of outcome measures and evaluation methodology.

3.5 Establishing a framework for success

Continuous learning

To enable the success of the pilots, the projects had to evolve through a continuous action learning process - one which is responsive and adaptive to local and national changes. Some pilot sites had developed:

- Succession plans: planning for how to continue to deliver when key people move on, in particular trainees who are finishing their rotations and leaving
- Contingency plans: identifying, categorising and assessing risks that could de-rail the project; and
- Mitigating strategies: minimising the impact of risks while maintaining delivery.

By continually learning and evolving, pilots were able to identify processes they would do differently a second time around. For instance, by giving more consideration to the timing of activities, engaging stakeholders earlier and improving communication with stakeholders. Box 3.5 summarises some of the issues raised.

Box 3.5: Learning points identified by the pilots

- **Timing of activities**
  - It is important to plan and build momentum and to tackle the most difficult areas of the pilot.
  - Ensure two major initiatives are not introduced at the same time.
  - New trainee intake should not conflict with the main consultant annual leave times.
- **Encouraging engagement**
  - Involve MDTs from an early stage.
  - Create “champions” to garner support of “the middle”.
  - Ask trainees how they would prefer to be contacted.
- **Communicating with stakeholders**
  - Use a variety of methods to communicate including social media.
  - Ensure communication is upfront.
  - Have a consistent spokesperson.

Critical success factors

During the interviews, pilot teams identified the following characteristics, conditions or variables that had to be in place or addressed in order to ensure the successful delivery of the project:

- **Clarity of purpose**: the aims and objectives of the project need to be clear to all people affected by implementing the project: not just trainers and trainees but to patients, MDTs and the wider Trust as well.
- **Team working**: delivery required collaborative effort between the project team, clinical MDTs, and members of the wider Trust technical, managerial and administrative support structures.
- **Buy-in and commitment from all levels and especially from local champions**: this was essential to ensure appropriate resource allocation, to protect the project at a Trust level and to promote and support it on a project implementation level.
- **Effective communication strategy**: this was crucial to engage stakeholders and ensure appropriate dissemination of developments and results.
- **Organisation and project administration support**: projects required a lot of administrative input which clinicians were struggling to meet without additional support.
- **Good relationship and communication between education and service structures**: integral to ensuring trainees receive the appropriate quality and level of training without sacrificing existing patient care requirements.
- **Ability to adapt to feedback and changes in the services, staff and pilot**: without this ability pilot sites would not be able to identify and address challenges such as a lack of engagement or plan for future changes.

Key Findings

- Successful implementation involved a continuous learning process and the development of succession plans, contingency plans and mitigating strategies.
- Pilots identified seven critical success factors:
  - Clarity of purpose
  - Team-working
  - Buy-in and commitment from all levels
  - Effective communication strategy
  - Organisation and project administration support
  - Good relationship and communication between education and service structures
  - Ability to adapt to feedback and changes in the services, staff and pilot.

Pilot sites also clearly identified that new training methods would have to be incorporated into the national training curriculum for long term sustainability.

3.6 Enabling sustainability and adoptability

At the time of the interviews, the primary focus of most steering groups was on current implementation of the pilots and less about facilitating longer term cultural changes; there was varying emphasis on planning for sustainability, adoptability and long term cultural change. However, sustainability and adoptability were nevertheless proactively being addressed in some ways, for instance by:

- identifying what has and hasn't worked well in the pilot;
- raising awareness of the pilot through presentations to other Trusts or planned journal articles;
- developing business cases to integrate the new training methods into the Trusts' long term education and training strategies.

In general, pilot sites were thinking in terms of how to meet future finance and capacity needs; and giving consideration to:

- Whether their methodology will require modification prior to adoption by different specialities or Trusts
- What format their final products would take (such as induction packs and guidelines)
- How to make available information to promote dissemination and adoption (for example downloadable through websites).

Key Findings

- While the primary focus for most pilots was on current implementation rather than on sustainability and adoptability, some sites were proactively considering requirements for sustainability and adoptability including meeting future finance and capacity needs and producing material for adoption.

4.0 Critical observations

The key findings drawn from the interviews and documentation in Chapter 3 of this report and can be amalgamated to reveal four overarching and fundamental areas that are critical to successfully planning and delivering the pilot programmes. These areas are summarised below.

Thematic Findings

- **Aligning pilot and BTBC objectives:** understanding the rationale and 'diagnostic' process enables the link to be made between the pilot objectives and those of the wider BTBC programme and to the data that needs to be collected to ascertain achievement.
- **Governance:** incorporating a top-down and bottom-up approach to governance into the programme design will facilitate identifying and addressing resource constraints and create a feasible long-term education and training strategy that works in balance with clinical service needs.
- **Communication and engagement:** designing an effective communication and engagement strategy that incorporates all people affected by the pilot, beyond the trainer and trainee enables smoother implementation and a more robust programme.
- **Long term strategy:** achieving long term cultural and organisational change to ensure sustainability requires the development of a long term strategy, translated into clear and easily accessible guidelines and supporting material for adoptability.

At the time of writing the report, a number of pilots have finished and most are planning their on-going sustainability, spread and adoption. Taking into account the overarching themes identified above along with the recommendations in Appendix 3, will help pilots to manage the transition.

Pilot teams and the BTBC programme need to have a plan that clearly defines what 'Better Training Better Care' looks like and how it will be measured; how the critical success factors will be incorporated into planning and delivery mechanisms to deliver long term cultural change and take into account the ultimate audience in producing guidelines and material for sustainability and adoption.

Project teams and senior trust management will also have to work in conjunction with relevant bodies such as the Deaneries, LETBs and the GMC to ensure the learning from the pilots and the new training methods are incorporated into education and training strategies and into the national training curricula.

5.0 Next Steps

For the purposes of the evaluation it is important to look at what pilots have in common overall in the areas they are seeking to address and their central goals. Therefore more work is taking place to address the following:

- Identification of the common thread that links all pilots;
- Understanding what data is being collected, what is being measured and how it links to pilot objectives;
- Understanding how pilots are delivering the Time for Training objectives, specifically:
    - Appropriate supervision, and/or implementing a consultant present service
    - Service delivery must explicitly support training
    - Making every moment count
- Establishing how Trusts are addressing capacity and resources concerns and taking into account learning from the pilots to ensure sustainability of their training and education initiatives; and
- Evaluating evidence to ascertain if pilots are sustainable and adoptable by reviewing data such as outcome and value for money data, as well as gathering information on issues and challenges in the implementation phases and how pilot teams overcame and mitigated against these.

For the next stages of the evaluation Matrix has started to identify the data being collected by the pilot sites with the aid of a data mapping template. Matrix has populated the template with information obtained so far by the evaluation and pilot sites have validated and filled in any gaps. Pilot sites will be expected to submit the analysed data to Matrix for review by 20th September 2013.

Another round of qualitative enquires with pilot sites will be conducted in September 2013. The telephone interviews will:

- Assess whether pilot sites achieved the objectives for which they obtained funding
- Follow-up on issues raised at the last interview and whether they have been resolved and if so, how
- Identify and explore the outcomes and impact achieved by the pilot sites
- Identify the critical enablers for sustainability and adoptability
- Identify the pilot future plans beyond BTBC funding
- Address any knowledge gaps raised in the interim report

A workshop will also be held in September 2013 with trainees to explore their experiences and learning from participation in the pilot and seek to obtain recommendations for further improvement for medical training and supervision of junior doctors.

Thematic analysis of the qualitative enquiries and review of the data submitted by the pilot sites will take place in October - November 2013 with the final evaluation report for the pilot sites being submitted in December 2013.

6.0 Appendices

6.1 Appendix 1: BTBC workstreams

Element	Workstream	Description
Local	1. Local Implementation and Pilots[22]	One of the largest workstreams within BTBC involves funding 16 NHS Trust sites to pilot projects aimed at improving education and training and therefore patient care. The type of pilot projects range from redesigning the working model within the emergency department and long term conditions, implementing a RAT+ (Rapid Assessment and Treatment) model to increase senior decision making in A&E, clinical handover, communication skills in consultations, prescribing, improving confidence in psychiatric decision making, serious incidents, quality improvement projects, surgery and telemedicine.
National	2. Role of the trainee	This workstream is focused on the role of the trainee and the need to ensure that training is planned and focus, every moment counts and that appropriate supervision is in place. The three initiatives that underpin this workstream are: • Inspiring Improvement: funding was awarded for nine trainee led projects to implement a range of training innovations to improve patient care • Learning to make a difference: Embedding quality improvement methodology across Core Medical Trainees • Working with key stakeholder groups to develop a consensus statement on the role of the trainee
	3. Role of trainers	This workstream involves a number of organisations who are seeking to ensure trainers are recognised and rewarded and to raise the profile of training. The main stakeholders involved are the GMC, Academy of Medical Educators (AoME), National Association of Clinical Tutors UK (NACT UK) and the Faculty of Medical Leadership and Management (FMLM). The GMC has set the standards for training, the AoME has developed guidance on how to meet the standards, NACT UK has developed guidance on the role of faculty and the importance of the learning environment and the FMLM's work will focus on the need to change the culture within organisations to ensure the principles of recognising and rewarding training are embedded.
	4. Workforce planning	This workstream is being taken forward within HEE.
	5. Improving careers guidance and availability	The BTBC team is working on developing a careers guidance portal to support trainees with their career choices. This project also seeks to address perceptions of particular careers,

[22] Please see Appendix 2 for a full list and a description of each of the pilots.

Element	Workstream	Description
		encouraging a more even distribution of trainee placements across disciplines.
	6. Integrated technology enhanced learning	Following the publication of the Framework for Technology Enhanced Learning, currently engaging with key partners to compile a casebook of good practice around simulation, e-learning and mobile apps. To be followed up by an event in 2013 to showcase the technologies that support the greatest improvements within the education and training landscape.
	7. Broadening the Foundation Programme	This main aspect of this workstream addresses the recommendation to ensure that all Foundation Programme trainees complete at least one community placement e.g. GP, psychiatry and other community placements). The final report of recommendations for implementation will be published later in the year.
	8. Regulatory approach to supporting Better Training Better Care	The GMC was tasked with meeting specific Collins recommendations. The work is now complete as follows: • A definition of the outcomes required to complete Foundation Year Two (F2) • A review of the 2011-13 GMC Education Strategy • An updated GMC Good Medical Practice Guide • Exploring opportunities to share data among partner organisations in an effective and appropriate way.
	9. Funding and education quality metrics	This workstream is being taken forward by HEE.

6.2 Appendix 2: BTBC pilot sites for workstream 1

	Area	Pilot site	Description
1	Telemedicine	Airedale NHS Foundation Trust and Western Sussex Hospitals NHS Trust	The aim is to show telemedicine can be used over large geographical distances to: 1. Deliver direct patient care in out-of-hours and elective (satellite clinics) settings 2. Deliver training to health care professionals 3. Maximise training opportunities by using a network of hospitals for shared training This is being delivered in three main locations and over 6 sites, with each main site focussing on different aspects of the objectives.
2	A&E	King's College Hospital NHS FT	The Rapid Assessment and Treatment (RAT) system places a senior clinician at the beginning of the patient journey in the 'Majors' area, enabling early decision making and thus improving the quality of care and reducing the length of time spent in the Emergency Department (ED). RAT+ places two consultants in the patient journey. One as part of the initial assessment team and the other working with trainee medical staff in the 'Majors' area supporting their decision making, training and development.
3		Pennine Acute Hospitals NHS Trust (EPIC)	The Emergency Physician In-House Challenge (EPIC) consists of a 'game': trainees receive weighted credits for specific types of clinical work, workplace based assessments (WBAs), procedures and teaching. Trainees can access results to check their own progress and how they are comparing against their colleagues. They are awarded small prizes when they reach certain 'levels'. The aim is to discourage negative practices and motivate trainees working in A&E through competition and instant feedback and encourage them to engage in more formative educational learning from an earlier stage of their placements.
4		East Kent Hospital University NHS FT	This pilot aims to improve training by enhancing supervision out of hours and at weekends. The project involves the creation of a new service model in medicine at the William Harvey Hospital in Ashford, Kent. Learning opportunities are maximised for trainees by rotating them through 'hot' and 'cold' teams – under the former they treat acutely ill patients under supervision without being pulled into wards; and under the latter they are focussed on maximising learning through attending clinics, observing/practicing procedures, undertaking simulated environments and WBAs.

	Area	Pilot site	Description
5	Handover	Pennine Acute Hospitals NHS Trust (Handover)	Optimise training and education by giving doctors in training in the Infectious Diseases Department networked iPads to record a brief summary of any issues, actions planned, tasks already undertaken and any follow up or review required for each patient. The consultant will have direct and detailed access to the progress of the on-call shift and the care of individual patients so they can follow up any serious issues or educational opportunities immediately and identify areas for group training sessions.
6		The Mid Cheshire Hospitals NHS FT	The aim of this project is to improve clinical handover, so that patients benefit from better continuity of care and improved safety. The project delivers enhanced training and education to medical trainees on what makes a good clinical handover, as well as introducing a new electronic handover tool on the acute medical unit. The tool enables staff to schedule and record the completion of clinical tasks electronically, patient lists and ward and admission details. As well as supporting trainees with decision making and effectively recording and prioritising patients, the aim is to reduce the risks associated with paper-based handover. This was piloted on one ward before adoption by other wards.
7	Prescribing	Heart of England NHS FT	The aim of this pilot is to enhance the transition from student to doctor, promoting excellence in safe patient care. To do this the pilot uses an e learning tool called VITAL (Virtual Interactive Teaching and Learning). The STEPS programme provides improved mentoring during the shadowing week and support for trainees in difficulty. The initiative aims to 'make every moment count', using mobile technology enhanced learning, mentoring and support.
8		The Dudley Group NHS FT	The initiative is based upon the ethos of a synergistic relationships fostered by having pharmacists and medics working and learning together, and is likely to be of huge potential benefit to training and patient care. This project focuses on improving prescribing from the point of view of Foundation Doctors and improving the understanding of the clinical context of prescribing from the point of view of young pharmacists. The idea is to get trainee/preregistration pharmacists and foundation doctors learning together and developing closer working relationships on the wards as a result.
9	Psychiatry: Confident	Leeds and York Partnership NHS FT	This Trust has had a radical overhaul of their out of hours care pathway and working patterns to bring more trainees into daytime hours, where they can benefit from

	Area	Pilot site	Description
	decision making		greater supervision and support. For trainees working out of hours workplace based assessments are carried out by the multi-disciplinary team so every last drop of learning can be extracted from the work that they do. The project is also delivering an improved package of training focussed on enhancing key skills such as communication and clinical interviews and for undergraduate teaching.
10		Tees, Esk and Wear Valley NHS FT	Enabling junior doctors new to adult and old age psychiatry services to perform core tasks more quickly, and earlier into post. By reconfiguring posts each doctor has a 'home team' where they carry out the greater part of their clinical work and they then rotate to other teams to ensure they get access to the right mix of clinical experience. Trainees go through a familiarising 'green phase' followed quickly by a 'blue phase' where they complete a core list of psychiatric tasks in key areas (such as information gathering and processing; communications and prescribing). New processes for clinical supervisors mean they carry out WBAs with trainees for every patient encounter.
11	Serious incidents	East London NHS FT	This project aims to enable members of multidisciplinary teams to learn from simulated serious incidents (SIs). The training will be developed in-house using anonymised information from Trust internal serious incident reviews which will inform the learning points included in the clinical simulation scenarios.
12	Quality of service	Royal Berkshire NHS FT	The pilot 'Making Every Moment Count' aims to address the apparent gap between learning opportunities from every day recognised problems (eg. working at the frontline, from incidents or complaints) and how these translate into effective action and improvement change. Trainee doctors across all specialities are encouraged to design and implement a quality improvement project with MDT involvement to address these every day problems.
13	Surgery	University Hospital of South Manchester NHS FT	Increasing learning and training opportunities for core surgical trainees by creating dedicated 'BTBC surgery lists' so trainees can undertake a variety of procedures and all aspects of surgery from pre-checks to post-operative care under direct supervision.
14		Leeds Teaching Hospitals NHS Trust	Advanced training and education in acute general surgery alongside normal surgical training through WBAs targeted to specific areas, a specially designed 'power wall' hosting an array of learning materials and cadaveric dissection to simulate surgical

	Area	Pilot site	Description
			procedures.
15	Communication during consultations	North Bristol NHS Trust	The Video Assisted Consultation Programme pilot uses video-recording of trainee consultations as a training tool in the outpatients department. The pilot aims to improve training in consultation skills and to investigate use of video recorded consultations as a training tool for specialty trainees in secondary care.

6.3 Appendix 3: Findings and recommendations

Theme	Key findings to address	Relevance	Recommendations	Critical area
Rationale and drivers for change (section 3.1)	The process used to identify local needs, to assess these needs and prioritise one to focus upon is unclear. Although BTBC did not task pilot sites to do this, it is necessary for other NHS trusts who want to learn how to take the pilots forward.	People who are not involved in the pilots need to understand what the drivers for change were, what need is being addressed and how the response was articulated in order to compare it to their own situation to inform their own decision making process.	Formulate a clear step-by-step process and development of guidelines that explains the rationale behind: • identifying and selecting a local need to prioritise and address • how the local need matches the national drivers • the model of education and training developed to address that need.	Aligning pilot and BTBC objectives
Project management and governance (section 3.2)	Existing organisational structures and processes do not facilitate the effective development and implementation of the pilots Governance arrangements demonstrated some degree of top-down influence and support for pilots; however there is not the same evidence of a bottom-up influence, especially in addressing staffing and resource constraints in the Trusts' long term training and education goals.	There is evidence of wider Trust, including senior Trust management, involvement and influence in some pilot programmes but not of how the pilots are helping develop the Trusts' educational and training strategy or influencing the organisational changes necessary to address capacity and resource concerns.	To achieve sustainability, a governance process is required that combines and can demonstrate a top-down and bottom-up management and development approach.	Governance

Theme	Key findings to address	Relevance	Recommendations	Critical area
	Various stakeholder groups were included as part of the project development team; some sites demonstrated earlier engagement with academic representatives and patient/lay representatives more than others.	Academic, patient and lay representatives can act as a critical friend to pilot sites, assist in developing project and evaluations and protect the interest of the public and patients	Gaining support and buy-in from a wide range of stakeholders at the early stages of the project planning, will facilitate development and implementation of the project and foster a stronger inclusion of patient safety and care.	Project management Stakeholder engagement
Stakeholder engagement (section 3.3)	Members of the project management team played varied roles within the pilot with trainers/consultants generally leading the pilots, trainees mainly involved in providing feedback and patients and academic representatives with a very limited presence and role Achieving the necessary organisational changes required considerable expenditure of effort in communication and engagement activities	The wide-ranging impact of the pilot on different clinical and administrative staff was not adequately predicted or planned for at the design stage. Similarly, the impact of other clinical initiatives or services on the pilot can be under-estimated or overlooked without engagement and communication with relevant stakeholders.	Clearly define and describe all people who are affected by the pilot and the communication vehicles and routes available in order to understand: • who to engage • What methods of communication are the most successful with each group and to encourage involvement from the beginning	Communication and engagement Long term strategy

Theme	Key findings to address	Relevance	Recommendations	Critical area
	While pilot sites did engage multi-disciplinary professionals, many pilot sites did not foresee and plan for the impact of the pilot on clinical MDTs and therefore had to undertake additional engagement activity after the pilot was initiated to bring them on board.			
Measurement and evaluation (section 3.4)	At the early stages of planning and implementation, half of pilot sites did not have an academic representative to support with planning and evaluation methodology. As a result many pilots found it difficult at the outset to clearly define outcome measures that demonstrated a link between objectives and outcome measures.	It is difficult to demonstrate the effectiveness of the pilot in relation to the objectives and in terms of trainee, trainer, and patient outcomes and value for money. Additionally, in order to know which aspect of the pilot initiatives have added value to education and training, it is necessary to know what improvement in skills, confidence and knowledge has resulted from each aspect.	Improving the patient and academic representation may help pilots develop a logical link and define outcome measures. While meaningful short-term measures may not be practical, longer term measures of the pilot's impact on patient-defined experience or satisfaction; or organisational measures of patient experience and health outcomes can be developed.	Engagement Aligning to objectives
	Most pilots were collecting trainee data, but trainer and patient outcome data varied amongst pilots.			Long-term strategy

Theme	Key findings to address	Relevance	Recommendations	Critical area
Sustainability and adoptability (section 3.6)	The majority of pilots were in the early stages of the project therefore the focus was on current implementation rather than on sustainability and adoptability. But, pilot sites were thinking in general terms of how to meet future finance and capacity needs	Project teams need to have a clear grasp of the project and be able to produce this information in an easily accessible format such as electronic guidelines. To make a business case for the continuation of the new education and training methods, and for ease of replication by wider audiences this description needs to go beyond a description of the project aims, objectives and project activity.	Project teams need to produce easily accessible guidelines that incorporate: • Rationale and diagnostic process • Actual and recurrent resource Requirements • Enablers: what factors promoted project design, delivery, and evaluation • Constraints: what factors hindered project design, delivery, and evaluation • Critical success factors: what factors were crucial for realisation of the project objectives • Benefits achieved: what improvements have been delivered as a result of the project and whether the project demonstrates value for money	Long-term strategy