

Business Case – Hot and Cold Teams

This business case provides information on the drivers and potential benefits for implementing the East Kent Foundation Trust pilot project on hot and cold teams.

It is a guide that can be tailored to your needs and organisational requirements.

Project Name:	Establishing hot ‘emergency-based’ and cold ‘ward-based’ teams to enhance the trainee experience, improving patient care at weekends.		
Date:		Release:	Draft/Final
Project Manager:			
Senior Responsible Owner (SRO):	<p>The SRO’s main responsibilities include:</p> <ul style="list-style-type: none"> • being personally accountable for the outcome of the project • providing direction and leadership for the delivery and implementation • managing the interface with key stakeholders <p>The SRO does not have to be at Board level. It can be somebody senior in your department</p>		

1. Document Version Control

Filepath/Filename					
Version No	Issue Date	Author	Quality Review/ Change Date	Reviewed By	Brief Description of Action/Changes

2. Project Definition (Purpose)

This section gives a short description of the purpose of the project. Here we have outlined the purpose of the *'Hot and Cold Teams'* pilot project.

There is a need to redesign the current service model to provide the highest quality training and patient care. This is in light of recent changes to the hours of 'doctors-in-training' (European Time Working Regulation), working patterns and models of patient care.

The aim of the project is to create a new medical rota to improve patient care and safety and training for doctors, particularly at weekends by enhancing supervision out of hours and at weekends.

3. Case for Change

Don Berwick's 2013 report *'Improving the Safety of Patients in England'* highlighted that the capability to measure and continually improve the quality of patient care needs to be taught and learned or it will not exist. The NHS needs a considered, resourced and driven agenda of capability-building in order to generate the capacity for continuous improvement.

This project has been successfully implemented at East Kent (William Harvey Hospital) and has been rolled out at the Trust's other acute hospitals – the Queen Elizabeth the Queen Mother Hospital in Margate and the Kent and Canterbury Hospital in Canterbury. This project makes improvements to:

- patient safety
- patient care
- multidisciplinary working
- weekend discharges
- handover process
- training and supervision
- handover

Senior pilot project Trust members are confident that the model could be taken on by other departments. The Trust committed to maintaining and rolling out the pilot project within medicine.

4. Strategic Drivers and Objectives

In this section you can define the reasons for undertaking the project - who requested it and how it fits with the strategic objectives and drivers of your organisation, and the NHS as a whole. This section demonstrates why this project should be invested in.

SMART ((**S**pecific, **M**easurable, **A**ssignable, **R**ealistic, **T**ime-measurable) descriptors are a helpful way of ensuring that these objectives can be measured

Below are the objectives from this pilot project

This project aims to provide:

- Enhanced support/training for training doctors, especially at weekends:

- Improved Friday handover: improved handover sheet, improved handover attendance, better justification for bloods required over weekends, better identification of potential handover patients
 - Provision of focused blocks of training i.e. hot – with focus on the acutely ill patient and cold – with focus on the stabilised patient. New rota is based on hot and cold blocks.
 - Provision of an enhanced weekend cold team with increased senior supervision for junior doctors
 - Provision of dedicated learning time at the weekends due to enhanced numbers, support and supervision at weekends
- To improve the care and safety of patients by reducing the length of stay and increased number of weekend discharges:
 - Ensuring they are seen by the right person, in the right setting first time. The provision of a multi-disciplinary team at weekends has ensured that patients are seen appropriately and in quicker time
 - Maximising the learning opportunities for doctors-in-training as they have been able to attend clinics more frequently, attend teaching/training more regularly and that learning opportunities (carrying out procedures) are maximised
 - Speedier discharges for the well, fit-to-go-home patient at weekends
 - Focused review of deteriorating patients at the weekends – improved handover identifies those patients who are, or are at risk of deteriorating over the weekends. The cold team are able to focus their review of these patients.

6. Project Deliverables

The section below highlights the deliverables for this pilot project.

- a) Rota products:
 - New customised, electronic rostering system for all doctors in medicine
 - Creation of a new rota based on a revised service model for all doctors in medicine
 - Creation of an enhanced cold team at weekends
 - Revised and improved handover sheet for Friday handovers
 - Rota compiled by nurse managers on nurses who were rostered on to run the additional weekend rota
- b) Communication products:
 - Launch poster
 - Article for the Trust newsletter
 - Roadshows
 - Web pages for public and for Trust employees
 - Press release
 - Minutes from Project Board Meetings
 - Notes from Stakeholder Meetings
 - Monthly progress reports
 - Standard Operating Procedure flowchart
 - Ward posters
 - Education half day
 - You Tube video
 - A handbook with operational guidelines and a detailed chart explaining how the revised rotas work in practice, along with the benefits of the pilot project and full contact details
- c) Evaluation products:
 - Training doctor questionnaires

- GMC Survey
- Administrators' assessment capture
- Data analysis reports
- Feedback meeting notes
- Interviews with training doctors and users
- End of stage evaluation
- Post-project evaluation and summary report outlining sustainability and adoptability

d) Project Management products:

- Project Initiation Document
- Risk and Communication Plans
- End of project report
- Risk and Issue Register (taken from Prince2 method)

7. Expected Benefits and Dis-Benefits

Consider what the primary benefits or dis-benefits of achieving this project are. One of the lessons learnt from the pilot projects was that the benefits have to be measurable. Link in with your academic partner to discuss and establish these.

The table below lists the benefits this pilot project achieved.

Benefit (or Dis-benefit) Description	Measurement	Measurement Indicator	Responsibility/ Owner	When Realised
Improvement to the handover process	Increased attendance of staff	Baseline data obtained and measured on a weekly basis		
	Better identification of potential discharge patients			
	New/improved handover sheet	Handover sheet is introduced		
	Better justification of bloods required at weekends			
Improved patient care through the creation of hot and cold teams	Hot teams Focus on acutely ill or cold team on stabilised patients			
Improvement of multi-disciplinary team (MDT) working	Nurses are involved in the hot and cold teams.			
	Involvement of nurses, HCA's learners and consultants in the handover process			
Increased productivity	Doctors are not pulled away to deal with acutely ill patients, as the ones on the hot team deal with the acute patients and the			

	ones on the cold team on the stable patients.			
	More blood tests carried out at weekends			
Enhanced numbers and support at weekends has freed up dedicated learning time	An improvement in trainees' ability to complete workplace-based assessments (WBAs)	The number of people that complete WBAs is increased		
Enhanced numbers and support at weekends has freed up dedicated learning time	Increase in the number of trainees who are satisfied with their ability to attend training sessions			
Increased trainee supervision and contact with the wider team	Trainees indicating that this is the case	Trainee qualitative feedback		
More time for Trainers to supervise trainees, especially at weekends, and the ability to provide more feedback to support the development of trainees	Trainers indicating that this is the case	Trainer qualitative feedback		
Trainee opportunities at weekends to develop their leadership skills		Trainee qualitative feedback		
Reduced average patient length of stay	Increased number of patients are discharged at the weekends			
Improvement to patient centred care at weekends	More staff being on the wards at weekends			

8. Project Governance

The governance of the 'Hot and Cold Teams' project is illustrated below. This governance structure helped to ensure that the project achieved its objectives to a high standard, on time and within budget.

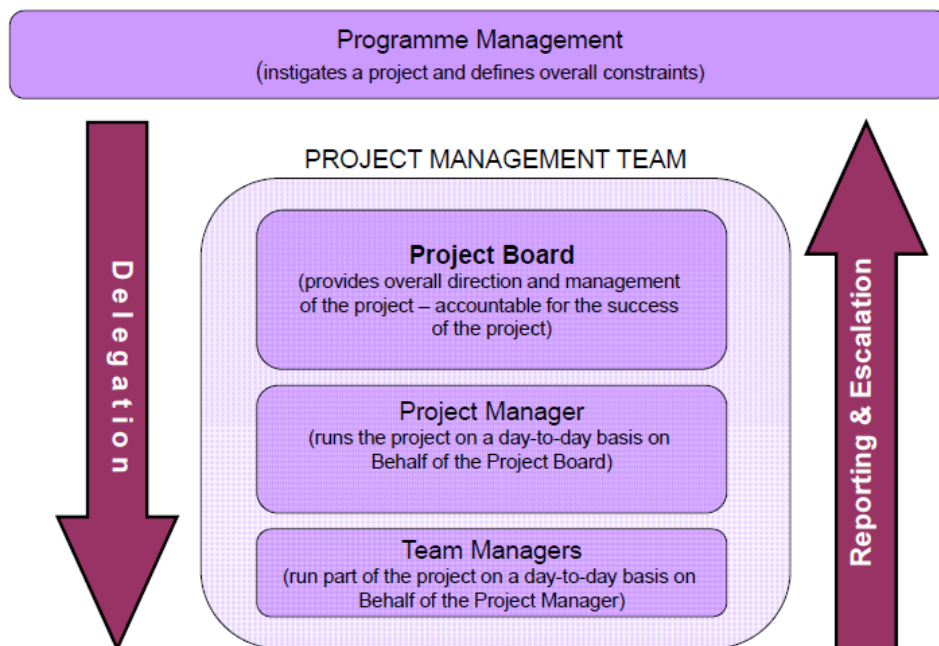


Diagram taken from the project final closedown report (Appendix 5)

9. Project Roles and Team Structure

There are many groups of people involved in managing the project. The Project Team is the group responsible for planning and executing the project. It consists of a Project Manager and a variable number of Project Team members, who are brought in to deliver their tasks according to the project schedule.

The below table lists members of staff who had a role to play, or were involved on the project team. Majority of these roles were not full time and were shared roles, and not necessarily new established roles.

Project Role	Working Role	Name	Division/ Directorate	WTE (whole time equivalent)
Project Executives (SROs)	The Director of Medical Education Consultant Physician			
Project Manager	Medical Education Directorate's Education Adviser and Project Manager			
Project Support	Band 4 Medical Education Administrator			
Senior User Representative	higher medical specialty trainee (HST)			

Senior Supplier	Medical Education Manager			
Department Support Assistant	Medical Rota Administrator			
Communications Manager	Medical Education Manager			
Nursing representative				
Finance representative	Finance Officer			
Human Resources Business Partner				
Data Analyst	Data Analyst			
External Academic Partners	Medical Education Directorate's Education Adviser Representative from the University of Kent			
Lay representative				

10. Delivery Timescales

This section should cover the period over which the project will run. The key project milestones should be included where known at this stage. It is useful to have a separate more detailed project plan including specific tasks you want to achieve for each milestone.

You can use the table below to list your key milestones for the Business Case.

Some of the milestones of the '*Establishing hot and cold teams*' project are listed below.

Please note that the length of the delivery of the milestones is not linear, but the tasks can overlap. The table below will give you an indication how long it took.

No.	Milestone – Decision/Delivery Point	Preparation Time	Target Date
1	Launch Event	April to June	June
2	New partial rota in place for new doctors starting	April to August	1 August
3	New full rota (including registrars) in place	September to October	3 October
4	Revised and improved handover sheet for Friday handovers	April to October	1 October
5	Post Evaluation Report	June to August	
6	Transition to every day practice (<i>business as usual</i>)		

11. Project Dependencies and Critical Success Factors

Project dependencies are any events or work that are either dependent on the outcome of the project, or the project will depend on. These can be internal and/or external dependencies.

Critical Success Factors are factors identified as essential to achieving successful projects. These factors interface with the project and influence the autonomy of the project to deliver.

Some of the critical success factors identified by the pilot of this project are outlined below for you to consider.

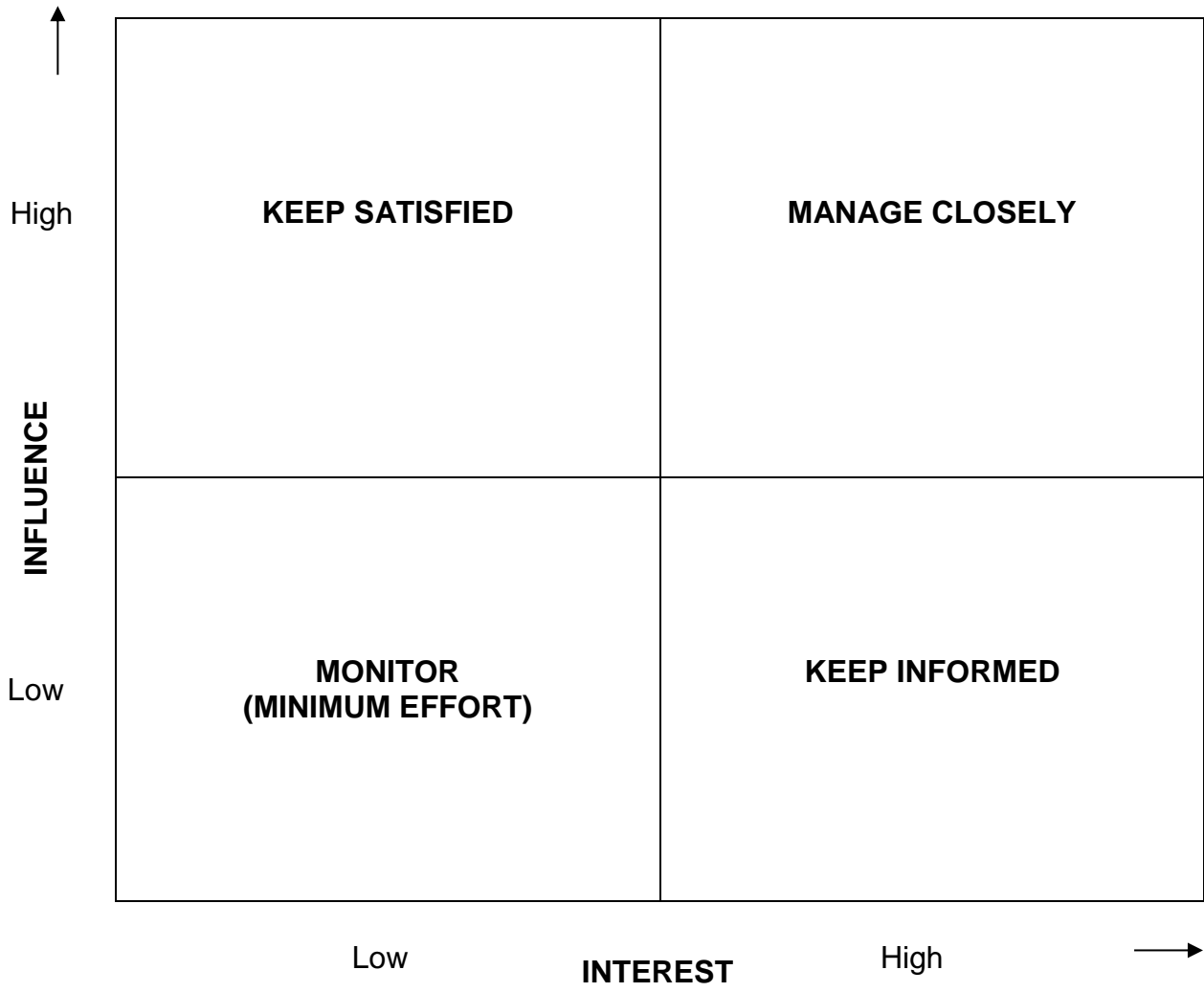
- Leadership at Project Executive level – project lead was a Consultant Physician and Director of Medical Education – a merger of clinical and educational roles
- Active and enthusiastic engagement of all project board members, especially training doctors and nursing staff
- Use of efficient project management processes
- The services of Trust data analyst throughout the project
- Effective communications and engagement strategy to ensure people were informed, enthused, advised, listened to and kept on board with the project
- Willingness/enthusiasm of nursing staff to volunteer for weekend overtime work
- Leadership from training doctors and nursing staff in implementing and leading change

12. Key Stakeholders

Your key stakeholders are people and/or organisations who have a vested interest or are directly affected by delivery of the project. It could include suppliers, end users, sponsors, related organisations or internal staff.

Further suggested stakeholders would be trainees, consultants, nurses, allied health professionals, corporate staff, clinical tutors and others, who will need to be all engaged at the beginning and throughout the project and at key milestones. A lay and patient representation at the project board from the outset is to be considered. Having an academic partner involved is also a key to a successful project.

A detailed communication and engagement plan should be developed in addition to the business case and you will find the templates for those documents in the BTBC toolkit. It is helpful to map your stakeholders on the grid below. It will prompt you to taking into account their influence and interest in the project.



13. Risk Assessment

This section gives a summary of the key risks associated with the project together with the likely impact and mitigating plans should they occur. Your organisation may have their own methods of reporting project risks you may want to consider instead. It is important to have risk management incorporated into your project governance so that you are able to escalate risks if necessary.

Risk Description	Category	Likelihood	Impact	RAG Rating	Impact Date	Mitigating Action	Risk Owner

Categories	(including but not limited to) – strategic, political, financial, legal/legislative, external/internal dependency, organisational/operational, reputational, stakeholder, service delivery, technical, delivery implementation
Likelihood	1 rare, 2 unlikely, 3 possible, 4 likely, 5 almost certain
Impact	1 negligible, 2 minor, 3 moderate, 4 major, 5 catastrophic
RAG Rating	Using the chart calculate the risk score for the risk

Likelihood	RAG RATING MATRIX				
5. Almost Certain	5	10	15	20	25
4. Likely	4	8	12	16	20
3. Possible	3	6	9	12	15
2. Unlikely	2	4	6	8	10
1. Rare	1	2	3	4	5
Impact	1. Negligible	2. Minor	3. Moderate	4. Major	5. Catastrophic

14. Cost Breakdown (including VAT, where applicable)

This section will outline your cost requirements for the project. The East Kent pilot project cost savings were estimated at £663,912, for an outlay of £163,282, giving a net monetary benefit in one year of over £0.5 million.

Because the materials have already been developed, the project should now cost significantly less to implement. However, there will be costs to employ an additional nurse on weekends, to purchase an iPad and some administrative support.

Cost Requirements	Total Cost
Total Project Budget Requirements	£

15. Equality Impact Assessment (EIA)

This section will allow you to evaluate your project in terms of equality. Your organisation may have a template for the EIA you may wish to use. Otherwise you can consider the main points below.

Ensure your project is developed in consideration of the requirements of the [Equality Act 2010](#), the [NHS Constitution](#) and relevant organisational policies.

The general equality duty that is set out in the Equality Act 2010 requires public authorities, in the exercise of their functions, to have due regard to the need to:

- Eliminate unlawful discrimination, harassment, victimisation and other conduct prohibited by the Act.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
- Foster good relations between people who share a protected characteristic and those who do not.

It may specifically benefit and reduce barriers for different equality characteristic groups including but not restricted to those included in the Equality Act 2010:

- age
- disability
- gender reassignment
- pregnancy and maternity
- race – this includes ethnic or national origins, colour or nationality
- religion or belief – this includes lack of belief
- sex
- sexual orientation.

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

Additionally other relevant specific groups should be considered when developing policy or changes to services, including but not limited to; children and young people, travellers, asylum seekers, students, homeless.