Business Case Summary

Title: Expansion and Development of Acute Medical Unit (AMU) and Ambulatory Care Unit (ACU)

Prepared By:
Name:
Job Title: Project Manager - Operations
Date: 17.10.13

Links to Strategic Objectives / Core Value Pledges

Supports the Divisional Objectives No 1 and 2 and delivery of recommendations from the Keogh action plan. Also supports the Trust's Strategic Objectives as follows:

- Constantly deliver high quality care in a safe environment
- Enhance patient experience by providing local care tailored to individual needs of the patient
- Develop partnership arrangements to promote and deliver a comprehensive range of value for money integrated service to protect and improve the health of the local community

Relationship Considerations

Internal: Pharmacy, Therapies and diagnostics
External: GP Interface

Risks of not proceeding

Lost opportunity:

- To impact and improve upon mortality indices;
- To meet the Trust's Strategic Objectives and Core Values;
- To reduce length of stay;
- To develop the Trust's acute services and the potential to experience further issues with capacity and flow due to the growing elderly population

Inability to:

- Meet Commissioner expectations for delivery of care in line with commissioning Intentions;
- To react to the increase in demand for Ambulatory Care;
- Respond to recommendations from the Keogh review, resulting in potential for damage to Trust reputation as a result.

Summary

The development and extension of the current 18 bedded Emergency Medical Unit (EMU) and Ambulatory Care Unit, via a reconfiguration of the existing 'Bob' and 'Dolly' wards, to a 41 bedded purpose built AMU and 8 space ACU.
To be operated as a 12 hours per day, 7-days per week, consultant led service, to ensure effective consultant input following admission.

Key Benefits

- Admission avoidance through both direct access to Ambulatory Care and rapid diagnosis, assessment and treatment in the AMU.
- Significant reduction in length of stay.
- Reduction in bed moves, as patients transferred to 'right bed, first time'.
- Patient access to senior clinicians.
- Reduction in bed shortages assisting achievement of key performance targets and reducing cancellations for elective surgery.

Associated Costs& Funding

	£
Direct Income	1,912,498
Direct Costs	(5,203,538)
Contribution	(3,291,040)

The total budget increase for the development is estimated at £3.3 million. However, the Trust is currently incurring additional expenditure in respect of the existing units at around £148k. Therefore the additional cost of the project is estimated at £3.1 million.

Important Note:

The estimated increase does NOT reflect any potential 'run rate' adjustments in respect of any current nursing staff acuity overspends nor any adjustments in respect of the reduction of beds for Bob and Dolly from 28 beds to 18 beds per ward.

Consultation

Consultation has been undertaken with all key stakeholders due to the wide membership of the Emergency Transformation Programme Task and Finish group

Costs /Savings Type

(a) Revenue and Capital
(b) £3.1m Full year cost pressure , (£1.3m 2013 /14 in addition to the £7.9m planned deficit)

Business Case: Part A

Business Case Title:	Expansion and Development of Acute Medical Unit (AMU) and Ambulatory Care Unit (ACU).

Background

1. Introduction and Background

1.1 The Professor Sir Bruce Keogh Review

A review of the Trust was recently undertaken by Professor Sir Bruce Keogh to examine the quality of care and treatment provided by the Trust as an outlier on mortality indices. The report, published in July 2013, highlighted several areas of concern around clinical and operational effectiveness, including:

- Wards appeared to contain patients with a wide range of illnesses whilst consultants were ward based and patient moves were not uncommon;
- Patient admissions;
- Discharges did not appear to be working effectively;
- Low Level of medical cover particularly out of hours; and
- Lack of evidence of effective multidisciplinary working.

Following the review it was agreed that the immediate focus for the Trust should be to achieve continuity of safe sustainable patient care 7 days per week. Therefore the development of services, which reduce patient moves and improve patient experience across the whole care pathway, is a key priority.

1.2 Emergency Care Transformational Programme Board

An Emergency Care Transformational Programme Board has been established to oversee the delivery of improvement, expansion and culture change in the areas highlighted in the Keogh report and three task and finish groups have subsequently been formed to focus on those areas that were deemed as requiring immediate and urgent attention, namely:

- Acute Medical Unit & Ambulatory Care
- Efficient Standardised Discharge Process
- Consultant Present Service Across 7 Days

The purpose of this business case is to set out the requirements highlighted by the work undertaken by the task and finish group in relation to the expansion of the Acute Medical Unit and Ambulatory Care Unit.

1.3 Review of Winter Plan and Resilience 2012 / 13

It should be noted that this work also links to the Board paper '*Review of Winter Plan and Resilience 2012 /13'*, which was presented to the Board on 26th June 2013 and subsequently approved.

The management of beds and in particular the patient pathway from admission through to discharge is a critical area for focus and whilst the winter review focussed on the Trust's internal systems, it also emphasised the need for a whole system approach to resolve the current issues both in the short and longer term to provide a fundamental re-design and review of all pathways including access in primary care, out of hours, community and social care services.

The paper included a review of acute beds and proposed a bed re-configuration to provide an active 'pull through' model from an extended Acute Medical Unit (AMU) to the appropriate specialty wards.

1.4 Acute Medical Unit (AMU) - What is an AMU?

Acute Medical Units provide assessment, care and treatment for designated period (usually 48 hours, with a maximum of 72 hours), prior to transfer to a medical ward or discharge home, as appropriate.

Following unplanned hospital admission there is often an initial period of uncertainty while a diagnosis is being made. During this period the patient may be physiologically unstable, requiring close monitoring, repeated assessment and appropriate intervention. The importance of consultant involvement during this period has been highlighted in a number of reports, and guidelines have been produced recommending early consultant review for all patients in this setting, seven days a week.

The AMU provides a focal point of delivery where unplanned medical patients can be seen without delay by a senior medical doctor who determines the clinical investigations and management they require and the most appropriate setting for their ongoing care.

The Royal College of Physicians (RCP) and Society for Acute Medicine (SAM) recommend that a consultant presence should be maintained on the AMU for a minimum of 12 hours per day, seven days per week.

Professor Shane O'Neill(1), Clinical Director, Beaumont Hospital, Dublin, reported that internationally Acute Medical Units have been shown to improve the efficiency of acute medical care, by increasing the proportion of patients discharged within 24 hours and by decreasing length of stay and overall medical bed day usage. He advised that a number of studies have demonstrated that the introduction of an Acute Medical Unit (AMU), combining assessment and short-stay function, is associated with a decrease in hospital mortality for medical patients and no increase in re-admission rates.

Whilst the role of specialist physicians within the AMU is vital, co management by the whole multidisciplinary team is essential for the unit to function successfully. This includes active contribution by senior nursing staff such as the Nurse Practitioner and Clinical Nurse Consultant as well as increased input from other key team members.

In addition, the acute care toolkit published by the Royal College of Physicians advises that the quality of care provided in the first 48-72 hours is a critical determinant of clinical outcomes. The AMU is the focal point of delivery of this care although urgent care is delivered in a wide variety of settings and that the staffing resources and specialist support services involved in the provision of care to medical and surgical emergencies should be organised on the basis of 7 day working.The role of the AMU in the patient pathway can be demonstrated by figure 1 below (2):

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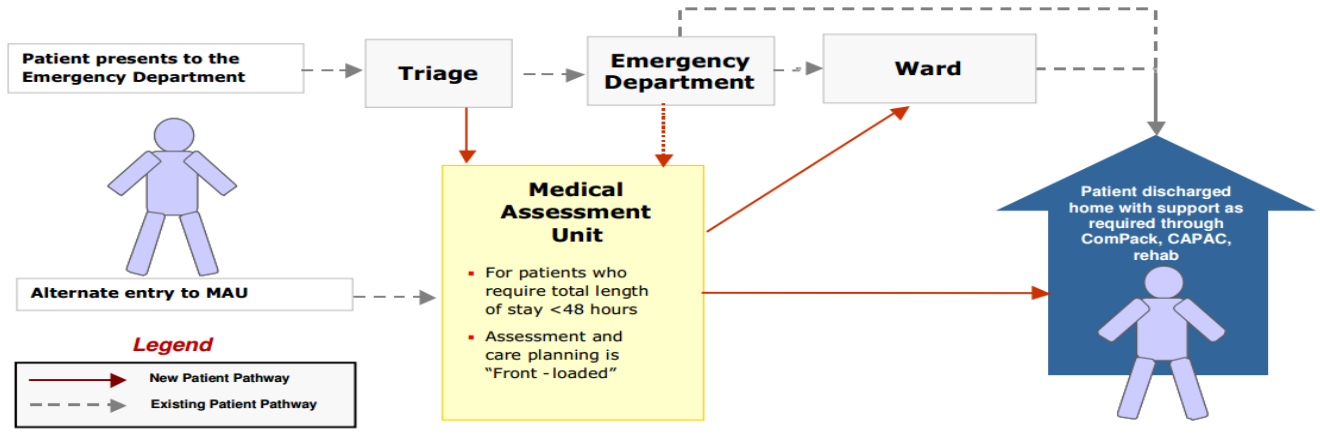
(1) Extract from Professor Shane O'Neill's speech at the Health Management Institute of Ireland forum on "Leadership Challenges in a changing environment", Ardee, Co Louth.

Figure 1: The role of the AMU in the patient pathway



1.5 Ambulatory Care

Many conditions can be effectively managed out of hospital, with greater patient satisfaction and fewer hospital admissions.

The NHS Institute for Innovation and Improvement (2007)(3)defines Ambulatory Emergency Care (AEC) as follows:

"The treatment of a condition that the patient or referrer deems urgent, which is not provided within the traditional bed base or outpatient services. It requires prompt clinical assessment, undertaken by a competent decision-maker and will very often require prompt access to diagnostic support."

Therefore, effective Ambulatory Care provision is about providing same day emergency care and avoiding admitting patients to hospital, which requires a streamlined service to provide rapid assessment, diagnosis and treatment for sick patients on the same day.

There are four main groups of patients for whom Ambulatory Care can be developed:

- **Diagnostic exclusion**: Patients who need a specific diagnosis to be excluded (for example, a patient with chest pain needs a possible myocardial infarction to be ruled out);
- **Low-risk stratification:** Patients for whom an early senior review with risk stratification will promote early discharge;
- **Specific procedure:** Patients who need a specific procedure or treatment, such as a blood transfusion; and
- **Infrastructure required:** Patients who have historically been admitted but can be managed safely as outpatients (for example, a patient with a DVT).

(2) The role of the Medical Assessment Unit (MAU) from the MAU, New South Wales Health Redesign operations guide, 2008.
(3)NHS Institute for Innovation and Improvement (2007) Directory of Ambulatory Emergency care for Adults

2. What resources are currently in place?

2.1 Emergency Medical Unit (EMU)

The Trust's current EMU ward, which consists of 18 beds, is managed by an acute physician. However, without the availability of the appropriate numbers of acute consultants the ward tends to be used as an extension to the medical bed base, rather than an effective Acute Medical Unit (AMU).

The Trust currently operates within a 'push' model of care, whereby patients who need to be admitted are transferred from the Emergency Department directly to the wards as beds become available. Management of this model of care places reliance on the 'Capacity Team' to source beds within the Trust, rather than being a ward management system. It is believed that this has contributed significantly to the failings highlighted in the review undertaken by Professor Sir Bruce Keogh, namely: *"….. Wards appeared to contain patients with a wide range of illnesses whilst consultants were ward based and patient moves were not uncommon……."*

2.2 Current Ambulatory Care pathways in place at GEH

The Trust established a dedicated Ambulatory Care Unit (ACU) in 2012 based in a small area within the Emergency Medical Assessment Unit (EMU) operating 5 days per week, 8am – 6pm and ambulatory care pathways are now in place for:

- DVT;
- Pleural effusions;
- Cellulitis;
- Abdominal Pain;
- Community acquired pneumonia;
- Bronchiectasis;
- COPD;
- LRTI; IV Therapy (Ecoli); and
- UTI.

Clinic staff are also currently providing weekend cover via a 'zero hours' contract base, on a Saturday and Sunday, for 2 hours from 11am to 1pm to maintain service provision for clients in respect of IV antibiotics and DVT Claxane.

In addition, a timetable of 'hot clinics' has also been produced with clinics operating on a Monday and Tuesday since April 2013, providing 5 slots per clinic.

2.3 Support Services : Therapies

The Physio Therapists and Occupational Therapists who support stroke services also currently provide a limited adhoc service for patients in EMU. However, the stroke service therapy provision is currently under review to increase the current stroke resource in line with the NHS Midlands and East stroke specification. Therefore, a dedicated proactive separate therapy support is required for the new AMU.

2.4 Support Services : Pharmacy

The Trust pharmacists currently provide the following services for the 18 patients in EMU:

- **Medicines Reconciliation:** Each patient is seen on admission to review any current medicines and ensure continuing medication where appropriate;

- **New Treatment Review:** A review of all new treatments prescribed to ensure no prescribing errors or contraindications with existing medications;
- **Discharge Support:** Checking and preparing TTO's for patients prior to discharge.

Current Establishment for EMU and Ambulatory Care

EMERGENCY MEDICAL UNIT (EMU)		
Acc Code Name	Current FY Budget	WTE Bud
MEDICAL STAFF		
	£.p	
Med-Consultant	105,946	1.00
SPR 'Med-St3,St4	142,209	2.00
Med - Fy1	39,600	1.00
PA	44,565	1.00
	(a)	
Totals for medical staff	**332,320**	**5.00**
Acc Code Name	FY Budget	WTE Bud
NURSING STAFF		
	£.p	
AMU Flow Co-ordinator (Nurse-Band 7	46,500	1.00
Nurse-Band 6	122,000	2.60
Nurse-Band 5 Registered	554,600	16.43
Nurse-Band 2	237,700	9.50
	(b)	
Totals for nursing staff	**960,800**	**29.53**
Acc Code Name	FY Budget	WTE Bud
SUPPORT FUNCTIONS		
	£.p	
Secretarial Support- Band 3	22,000	1.00
Pharmacy - Band 7	21,374	0.48
Pharmacy - Band 5	9,844	0.32
	(c)	
Totals for support staff	**53,218**	**1.80**
TOTAL STAFF BUDGET	1,346,338	36.33
AMBULATORY CARE UNIT		
Acc Code Name	FY Budget	WTE Bud
	£.p	
Nurse-Band 7	50,800	1.00
Nurse (Qual) Rech To Other Org	(20,300)	(0.40)
Nurse-Band 6	38,900	1.00
	(d)	
Totals	**69,400**	**1.60**
COMBINED TOTALS	1,415,738	39.73

Summary of Current Budgets		£	£	
EMU:				
Medical Staff	(a)	332,320		
Nursing Staff	(b)	960,800		
Support Functions	(c)	53,218		
			1,346,338	
Ambulatory Care Unit	(d)		69,400	
Combined Total			**1,415,738**	

The Trust is currently incurring an overspend in respect of both EMU and the Ambulatory Care Unit, forecast at around £148k for the 12 months to 31st March 2013. This, in part, reflects an underfunding of the Ambulatory Care Unit.

3. What resources are required?

3 The New GEH Combined Acute Medical Unit (AMU) and Ambulatory Care Unit (ACU)

The current 18 bedded EMU is to be extended and developed, via a reconfiguration of the existing 'Bob' and 'Dolly' wards, to a 41 bedded purpose built AMU and 8 space Ambulatory Care Unit, which will be operated as a 12 hours per day, 7-days per week, consultant led service to ensure effective consultant input following admission. The primary function will be the immediate and early specialist management of adult patients, who present with a wide range of medical conditions.

3.1 The Acute Medical Unit

The AMU will admit patients for a short period for acute treatment and/or observation, where the estimated length of stay is less than 48 hours (to a maximum of 72 hours). Patients who require admission for longer than 72 hours will be moved from the AMU to a dedicated in-patient bed on a specialist ward.

Patients presenting to the AMU will be seen by a senior doctor, either a consultant, a senior registrar or a specialist registrar, who will have access to diagnostic and other treatment facilities, for example ambulatory care pathways and who will decide is admission is necessary. *(Figure 2 below relates.)*

Along with referrals from the emergency department, patients may also be referred from primary care via a GP/ community interface.

Out of Hours, medical patients will be managed by the on-call Medical Team in the 24 hour Emergency Department.

The unit will employ 'best practice' pathways for emergency care which are aligned to RCP toolkits and national principles.

Figure 2: AMU Assessment & Admission

Consultant Led Service

A revised model of care is proposed which will focus on a 'pull' model of care based on a ward management system, whereby patients will be admitted to the AMU prior to assessment and subsequently transferred to the appropriate specialist ward in line with their medical requirements.

The proposed speciality wards are as follows:

- Stroke
- Frail elderly;
- Respiratory;
- Cardiology
- Gastroenterology; and
- Haematology, Diabetes and Oncology

The speciality wards, which will operate under a process of flow and continuity, will 'pull' appropriate patients, requiring longer stays, to the ward as beds become available, to ensure compliance with the 'Right patient, Right Bed' philosophy and continuity of care will be provided through a named consultant lead.

3.2 The Ambulatory Care Unit

The success of the Ambulatory Care service at the Trust and the subsequent increase in demand has resulted in a requirement for a larger unit and the requirement to extend the service to include further care pathways.

The recent review undertaken by Sir Bruce Keogh reported that the "*Ambulatory care area is very small and appeared to the panelists observing to be chaotic.* …". The team recommended the development of ambulatory care following successful implementation into a managed and properly located area.

During 2013 /2014 the following further Ambulatory Care pathways are to be developed:

- Ascites;
- Atrial Fibrillation;
- Heart Failure; and
- Anaemia.

Plans to expand the service also include:

- Extend the opening times from 5 days to 7 days, Monday to Friday 8am -9 pm and Saturday and Sunday 8am -8pm.

- Further development of the current Tele Medicine initiative, providing advice and support to GP's provided via email and direct phone line.

4. Specify the difference between the current & required resource, together with the suggested solution / preferred option for securing the required resource.

4.1 Two Options

It was proposed that a ward reconfiguration should be undertaken to co-locate the new Acute Medical Unit with an expanded Ambulatory Care unit in a purpose built unit and two options for the reconfiguration of existing wards to accommodate the new unit were proposed to the Emergency Care Transformational Programme Board at the meeting held Tuesday September 3rd 2013.

Option 1 involved the reconfiguration of the existing Felix stroke ward and the current Emergency Medical Unit (EMU) to accommodate the new AMU and ACU. Whilst ***Option 2*** involved the reconfiguration of the existing 'Bob' and 'Dolly' wards.

Option 2 was agreed by the Board and as detailed at 3 above, the current 18 bedded EMU is to be extended and developed, via a reconfiguration of the existing 'Bob' and 'Dolly' wards, to a 41 bedded purpose built AMU and 8 space Ambulatory Care Unit, which will be open 24/7 and operated as a 12 hours per day, 7-days per week, consultant led service to ensure effective consultant input following admission.

Note: The reasons for the choice of option are discussed in further detail at 5.b below.

4.2 Additional Resources Required

The development of the new purpose built AMU and ACU requires both additional capital and revenue funding.

Capital:

The capital costs in respect of the redesign and adaptation of the existing Bob and Dolly wards to accommodate the new AMU and ACU are estimated at £360k plus vat and although equipment from the existing wards will be utilised where possible, some additional equipment will also be required, which is estimated at approx. £50k.

Work on the development commenced on the Monday 7th October 2013 and is due for completion on Monday 16th December 2013.

Revenue:

The development requires additional acute physicians, nursing staff, a nurse practitioner role and clinical nurse consultant role, as well as increased input from other key team members. For example Pharmacy, physiotherapy and Occupational Therapy.

The increased staffing establishment and associated budget costs are detailed in the table below and include anticipated premium costs for agency Consultants and some junior doctor posts until the vacancies are filled.

Existing budgets, together with budgets associated with transferred posts, will be transferred to the new development.

Financial Summary of additional requirements:

Financial Summary			
New Combined AMU and Ambulatory Care Unit			
Required Staffing Budget			
	£	£	£
AMU Medical Staff		2,224,046	
AMU Nursing Staff		2,226,908	
Support Functions		323,579	
Ambulatory Care Unit		255,005	
Total Staffing Budget Requirement			5,029,538
Budget Currently Available			
EMU Medical Staff	332,320		
EMU Nursing Staff	960,800		
EMU Support Functions	53,218		
		1,346,338	
Ambulatory Care Unit		69,400	
Budgets transferred re substantive posts		496,760	
			1,912,498
Staffing Budget Increase Required			3,117,040
plus			
Non Pay budget adjustment			174,000
Total Budget Increase			**3,291,040**

Notes:

- The total budget increase for the development is estimated at £3.3 million as summarised above. (Full details of the required staffing budget can be found in the table below);

- The existing EMU and Ambulatory Care units are currently overspending, which is forecast at around £148k for the period to 31st March 2013. This in part, reflects an underfunding of the existing Ambulatory Care unit;

- Although the reconfiguration of the two medical wards, Bob and Dolly, reduced the bed base by 20 beds,

this did not release any savings due to amendments to nursing acuity.

Requirements for New combined Acute Medical Unit and Ambulatory Care Unit

ACUTE MEDICAL UNIT		
Acc Code Name	New Unit WTE (Inc Relief)	New Unit Forecast Budget
MEDICAL STAFF		
		£.p
Med-Consultant	6.02	1,271,362
SPR 'Med-St3,St4	3.78	343,903
SHO - FY2	5.05	309,542
Med - Fy1	3.78	191,529
PA	2.41	107,710
Totals for medical staff	**21.04**	**2,224,046**
Acc Code Name	New Unit WTE (Inc Relief)	New Unit Forecast Budget
NURSING STAFF		
		£.p
AMU Nurse Consultant - 8b	1.20	63,226
AMU Flow Co-ordinator (Nurse-Band 7)	1.20	45,415
Nurse-Band 6	6.36	270,177
Nurse-Band 5 Registered	36.31	1,314,494
Nurse-Band 2	20.52	533,596
Totals for nursing staff	**65.59**	**2,226,908**
Acc Code Name	New Unit WTE (Inc Relief)	New Unit Forecast Budget
SUPPORT FUNCTIONS		
		£.p
A&C Support - Band 3	2.01	50,404
Secretarial Support- Band 3	2.41	44,538
Physiotherapist - Band 6	1.20	45,791
Occupational Therapist - Band 5	1.20	36,660
Pharmacy - Band 7	1.69	87,370
Pharmacy - Band 5	1.65	58,816
Totals for support functions	**10.16**	**323,579**
Totals AMU	**96.80**	**4,774,533**
AMBULATORY CARE UNIT		
Acc Code Name	New Unit WTE (Inc Relief)	New Unit Forecast Budget
		£.p
Nurse-Band 7	1.00	45,415
Nurse-Band 6	1.44	61,404
Nurse-Band 5	4.09	148,186
Totals for Ambulatory Care	**6.53**	**255,005**
COMBINED TOTALS	**103.33**	**5,029,538**

5. (a) Advise of the steps taken to examine the possibility of providing the required resource from within

the current provision by utilising the current resource more effectively.

(b) Advise of any other options that have been considered and why they have been dismissed.

(a)

- Currently there is a lack of capacity within the consultant body and over stretching the resource would only compromise other specialities;
- The current Ambulatory Care budget is not sufficiently resourced to accommodate the required service developments;
- There is a lack of physical space within the current Ambulatory Care Unit, as identified by the Keogh review and a lack of space within the current Emergency Care Unit to accommodate the required expansion.

(b)

- Do nothing e.g. maintain the current service is not an option. It is felt that the Trust will only improve its current mortality indices by undertaking this development and providing a combined AMU and ACU;
- A further ward reconfiguration option, (option 1) was considered on the site of the existing Felix and EMU wards. However, this was dismissed in favour of option 2 (on the site of the existing Bob and Dolly wards)for the following reasons:

  - With option 1 the AMU would be spread over two separate areas. Whilst, with option 2, the AMU and ACT operate as one complete unit, acting as a hub for all acute medical care within the hospital and improving patient flow;
  - Option 1 provides for a smaller unit for ambulatory care and is therefore not appropriate;
  - As one unit, option 2 provides for easier management of staff;
  - The layout of option 1 required transit through ambulatory care to access the Acute Medical Unit and therefore raised implications for infection control;
  - Option 2 includes the availability of more side rooms for patient isolation and the ability to segregate areas of the combined unit, if required, for infection control; as opposed to option 1 where segregation was not possible and an infection would therefore close the whole unit.

6. What are the anticipated benefits (both financial and non-financial) of implementing this business case?

The combined Acute Medical units and Ambulatory Care unit offers many benefits, including:

- Significant reduction in length of stay as many patients who would have traditionally been admitted to a medical ward for greater than 5 days will be fully assessed , treated and sent home safely within 48 hours from the AMU;

- Patients avoid extended waiting times as the emergency department stay is drastically reduced, or eliminated , in this model of care and they also benefit from having access to a senior clinician;

- Improves the efficiency of the admission process for unplanned patients and provides for a significant reduction in patient admissions;

- Enhancing Partnership relationships e.g. by developing the GP interface and encouraging direct referrals to the Ambulatory Care Unit and also for the patient by therefore avoiding attendance at A&E;

- The Multi-Disciplinary Team 'patient-centred care' approach within the unit offers an improved patient care pathway with better coordination to discharge by providing a rapid diagnosis and management plan;

- Provides an opportunity to change the model of care currently provided within the Trust and significantly reduce the number of patient moves.
  Note: The Trust currently operates within a 'push' model of care, whereby patients who need to be admitted are transferred from the Emergency Department directly to the wards as beds become available. Management of this model of care places reliance on the 'Capacity Team' to source beds within the Trust, rather than being a ward management system. It is believed that this has contributed significantly to the failings highlighted in the review undertaken by Professor Sir Bruce Keogh, namely: "….. *Wards appeared to contain patients with a wide range of illnesses whilst consultants were ward based and patient moves were not uncommon……."*

- The purpose built unit includes the separation of areas to contain the spread of infection and minimise the risk of whole ward closure as infected areas can be isolated.

- The reduction in admissions and enhanced discharges will reduce bed shortages and assist with achieving performance targets for both 4 hours and Stroke whilst also contributing to reducing cancellations in elective activity due to bed shortages;

- The extension of Ambulatory Care also provides for a reduction in patient admissions and length of stay; and

- The enhancement of the Tele Medicine service assists with delivery of one of the Trust's High Impact Innovation CQUINs, whilst also attracting 'best practice' payments.

7. How will these benefits be measured (KPI's)?

By audit of activity and outcome to determine:

- The numbers of patients coded to Ambulatory Care increases on a pre-determined trajectory;
- Reduced occupied bed days;
- No of admission avoidances;
- Reduction in patient bed moves;
- Positive qualitative feedback from patients;
- Reduction in number of complaints;
- Impact on Mortality statistics;
- Increase in discharge rate;
- Early discharges;
- Initiation of early assessment and treatment to enhance clinical outcome, including sepsis bundle, falls and pressure sores;
- Impact on number of acute bed closures due to infection;
- Improvement in friends and family test.

8. What are the risks, if any, from NOT proceeding with this business case?

- Lost opportunity to develop the Trust's acute services and the potential to experience further issues with capacity and flow due to the growing elderly population;
- Inability to meet the Trust's strategic objectives by failing to provide local high quality care, failing to

enhance the patient experience, and by not reaching all agreed targets;

- Lost opportunity to significantly impact and reduce the Trust's mortality indices.
- Potential for damage to Trust reputation as a result of not responding to recommendations from the Keogh review;
- Inability to meet Commissioner expectations for delivery of care in line with Commissioning Intentions;
- Inability to react to the increase in demand for Ambulatory Care;
- Lost opportunity to reducing length of stay;
- Lost opportunity to reduce bed moves and ensure that patients are transferred to the 'right bed, first time'; and
- Increased potential for the occurrence of avoidable hospital admissions.

9. What are the risks, if any, from proceeding with this business case and how is it proposed that these risks will be mitigated?

- Failure to secure capital funding for building works and additional equipment:
  - This risk has been mitigated by the early identification of capital funding via the Capital Management Group.
- Delay in Estates refurbishment:
  - Work has already commenced on the new unit, with effect from Monday 13th October 2013.

- Failure to recruit additional acute physicians:
  - The recruitment process has already commenced and the business case includes a provision for the initial costs incurred via premium agency consultant rates.

- Delay in recruiting additional nursing staff:
  - Early submission of SAF Forms and recruitment of staff.

- Failure to gain support from the Commissioners:
  - The Commissioners are members of the Emergency Care Transformation Board and the development is aligned to the Commissioner's intentions and health priorities.

Strategy, Governance & Compliance

10. How does this case link to the Trust's Strategic Objectives, the Core Values or Departmental Objectives?

Strategic Objectives:

(a) Constantly deliver safe high quality care and

(b) Enhance Patient Experience by providing local care tailored to the individual needs of the patient.

The proposed business case will:

- *Enhance patient experience by providing local care tailored to individual patient needs;*
- *Ensure that patients receive best quality local care, which is based on best practice and national benchmarks;*
- *Improve patient choice;*
- *Have a positive effect on reducing mortality rates within the patient group;*

- *Reduce the number of steps in the patient care pathway;*
- *Enable patients to avoid hospital admission where possible and also reduce length of stay by the provision of specialist Consultant support, together with the expansion of the Ambulatory care unit; and*
- *Reduce bed moves.*

(c)Develop Partnership Arrangements.

The proposed business case will:

- *Develop partnership arrangements and promote links with GP' primary care and secondary care.*

(d) Empower, develop and Support Staff to provide high quality services.

The proposed business case will:

- Enhance the skills and knowledge of all staff; and
- Help to improve staff motivation to deliver high quality services.

Core Value Pledges:

The business case supports the following core value pledges:

- eXcellence in all that we do;
- Expect respect and dignity; and
- Local healthcare that inspires confidence.

Divisional Objectives:

The business case is aligned to General Divisional Objectives No 1 and 2, applicable for both division A and B, to improve the provision of safe emergency care.

11. If the business case relates to a medical / clinical provision, what assurance can be provided that we have the skills required to provide the additional provision safely and within any applicable national guidelines?

The business case is based on the development and extension of the existing Emergency Care Unit and Ambulatory Care unit which requires the skills of specialist Acute Physicians.

The business case also includes the provision of additional consultants, together with a nurse Practitioner and Clinical Nurse Consultant as well as increased input from other key team members.

The unit will employ 'best practice' pathways for emergency care which are aligned to RCP toolkits and national principles.

12. Does the proposal involve a partnership working with an external body?	**No** : X

N/A

If Yes :-

(a) **Please provide details of the external body concerned.**

(b) **Please confirm that confirmation of 'Agreement in Principle' has been obtained in writing (by letter or email).**

(c) **Advise how costs, risks & benefits will be shared.**

13. Does the business case require Commissioner Support?	Yes : X

(a) Provide details of any discussions held with the Commissioners?

Representatives from Warwickshire North CCG and the Arden Commissioning Support Unit form part of the membership of the Emergency Care Transformational Programme Board which has been established to oversee the delivery of improvement, expansion and culture change in the areas highlighted in the Keogh report. The extension and development of the Acute Medical Unit and Ambulatory Care Unit is one of the key associated work streams subsequently formed, to focus on those areas that were deemed as requiring immediate and urgent attention.

(b) Does the business case fit with Commissioner Intentions?

The business case aligns with the Commissioners intentions as detailed in thins Warwickshire North Clinical Commissioning Group , Commissioning Intentions 2013 / 2014, (September 2013), in particular:

- Section 2 of the Commissioning Intentions guide advises: - '……*A key requirement of providers this year will be for all providers to evidence the right quality of service ……We want patients and carers to experience seamless care….';*

- Section 3 of the guide, describes '….*To Deliver best practice in acute hospital care, focussing on optimising 24/7 care for the very sick and acutely ill as a first priority….'* As one of the Commissioners 5 key priorities;

- Section 4.2 of the guide refers specifically to the diagnosis and treatment of COPD which links directly with one of the Trust's Ambulatory Care pathways;

- Section 6, Commissioning principles includes:
    - *Support improvements in health outcomes;*
    - *Be clinically effective;*
    - *Be responsive to individual and population needs;*
    - *Be aiming to move more provision of care into the community or ambulatory care models to replace traditional inpatient care;* and

- Section 7.5 advised that '***WNCCG*** *would like to commission new pathways for ambulatory patients requiring urgent assessment or treatment and expand the number of conditions which are managed under an ambulatory pathway in order to avoid admissions '.*

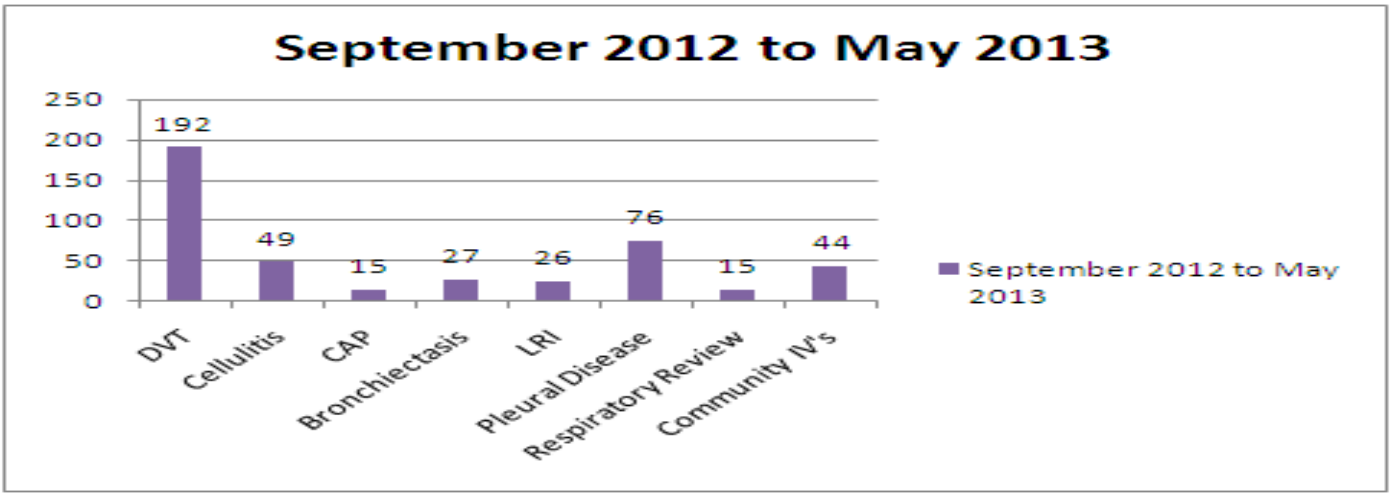
(c) Is funding required from the Commissioner? Yes

14. Is there a clearly identified population need? - How has it been established that the activity / demand exists to justify this Business Case?

The Trust established a dedicated Ambulatory Care Unit (ACU) in September 2012 based in a small area within the Emergency Medical Unit (EMU), initially offering DVT and Pleural Effusion care pathways and introducing new pathways in Cellulitis, Abdominal pain , Community Acquired Pneumonia (CAP), Lower Respiratory Tract Infection (LRTI), Bronchiectasis and IV therapy, throughout the year.

The service quickly became popular, receiving referrals from local GP's and other Trust colleagues, as demonstrated by Figure 3 below, which indicates the number of patients seen each month, per Ambulatory Care pathway:

Figure 3: Number of patients seen each month, per Ambulatory Care pathway.



Data in respect of the Ambulatory Care unit for the 9 month period from September 2012 to May 2013 indicates that the Ambulatory Care service:

- Helped to 148 patients benefit from early discharge;
- Helped 228 patients avoid discharge;
- Provided 878 episodes of care for patients; and
- Saved an estimated 1,341 bed days;

Further Ambulatory Care pathways are planned for 2013 /14, as detailed at 3.2 above as part of the NWCCG and GEH 2013/14 CQUIN and QIPP programme and demand for the existing service is growing due to further engagement with GP's, who hold the service in high regard.

A friends and family survey undertaken with the initial 100 patients and their families resulted in 100% advising that they would recommend the service. Other comments included:

- *"A very efficient service, staff very friendly and helpful";*
- *"Considerate, kind and thoughtful";*
- *"Very pleasant and helpful";*
- *"Daily life can continue";*
- *"The staff are very obliging, kind and ready to talk things through with you in 'lay man's terms'. They're very knowledgeable in what they do".*

As the service data is only available from September 2012, it is difficult to estimate future demand with accuracy. However, using the initial DVT care pathway as a guide, there is a potential that demand the service could increase significantly, over the next twelve months, following the physical expansion of the unit and additional staffing resource, which would provide additional capacity.

15. What are the implications, if any, on the Local Health Economy? - E.g. Primary Care / Social Services/other providers.

The new unit will require a Multi-disciplinary team approach with Trust staff liaising closely with colleagues from community and social care.

The new combined AMU and ACU will also enhance partnership relationships by both developing the current

GP interface, including further development of the Tele Medicine initiative which provides advice and support to GP's via email and direct phone line, whilst also encouraging direct referrals to the Ambulatory Care Unit;thereby ensuring that patients are seen quickly and treated appropriately.

The current Ambulatory Care unit is already assisting community nurses by the provision of the outreach service for IV antibiotics, as it would be un-economical for the community nurses to provide a dedicated IV service, due to the ad hoc nature of requests.

In addition, it is anticipated that the development and extension of the services provided by the Acute Medical Unit and the Ambulatory Care Unit will assist with admission avoidance, enhanced discharges and reduced length of stay which. This will subsequently reduce bed shortages and assist with achieving performance targets for both 4 hours and ambulance turnaround, thereby assisting both the Trust and colleagues in the ambulance service.

16. Please detail any other stakeholders that have been consulted and the outcome of the consultation. (E.g. staff side, Patient groups, MAPS, members of the public, SHA etc.)

The membership of the Emergency Care Transformational Programme Board, established to oversee the delivery of improvement, expansion and culture change in the areas highlighted in the Keogh report, include colleagues from Social Services, Warwickshire North CCG and the Arden Commissioning Support Unit.

In addition, the membership of the task and finish group formed to focus on the development and extension of the Acute Medical Unit and Ambulatory Care Unit includes a member of the Patient Advice and Liaison Service (PALS).

17. Please advise if the Governance team have confirmed that the proposal is covered by the Trust's CQC registration / Insurance cover.

The development and extension of the Acute Medical Unit and Ambulatory Care Unit is covered by the Trust's CQC registration / insurance cover.

Capacity, Constraints & Dependencies

18. Does the business case impact on any other 'Internal' departments/ Support Services?	Yes : X No : ☐

If Yes :-

(a) Please detail the departments / Support Services involved;

Direct additional support is required from :

- Pharmacy ;
- Physiotherapy; and
- Occupational Therapy

Also a business case in respect of endoscopy services has recently been approved to ensure the availability of the required diagnostic tests; and in addition, services provided by the radiology and pathology departments, are to be enhanced as part of the review on enhancing

the Trust's current 7-day service provision.

(b) Please advise of the anticipated impact from the implementation of the business case;

Speciality	Implications	Potential Solution
Pharmacy	Additional staff required	Included within the business case
Physiotherapy	Additional staff required	Included within the business case
Occupational Therapy	Additional staff required	Included within the business case
Radiology Department	Additional staff required	Linked to enhancing Trust's current 7-day service provision
Pathology Department	Additional staff required	Linked to enhancing Trust's current 7-day service provision. Note: Planned move to 24/7 shift system due for implementation shortly.

(c) Please advise of comments / confirm agreement by the relevant departments;

Staff representatives from pharmacy, radiology, occupational therapy and physiotherapy are included in the membership of the task and finish groups.

19. Does the Trust have the capacity (staffing /accommodation/ bed spaces) to deliver the proposed development?

Accommodation: The new combined Acute Medical Unit and Ambulatory Care Unit is to be accommodated on the site of the previous Bob and Dolly wards.

Staffing: Rota models have been completed which have informed the business case costings. The Trust's recruitment procedures have been implemented for positions where vacancies have been identified.

Training: Staff competencies are to be assessed and appropriate training plans produced.

20. Please detail any additional resources that will be required as a result of implementing the business case, such as training requirements, I.T. (hardware & software implications) etc.

N/A

21. What are the constraints / dependencies, if any, associated with the business case and how can these be resolved?

Constraints:

- There are current constraints, based on the capacity of the Ambulatory Care Unit, which are addressed by the business case. However, it is anticipated that demand will be also be increased as the service becomes more successful.

Dependencies:

- The availability of capital to fund the conversion of the existing Bob and Dolly wards. However, the

development was approved at the Emergency Care Transformational Programme Board meeting held 3rd September 2013 and at the subsequent Capital Management Group Meeting. Work on Work on the development commenced on the Monday 7th October 2013 and is due for completion on Monday 16th December 2013;

- The availability of revenue funding to support the development. The business case requires Commissioner Support to fund the development. However, the Commissioners are included in the membership of the Emergency Care Transformational Programme Board and along with providing for safe sustainable quality care with reduced bed moves, it is felt that the new combined unit should also be viewed as an investment with future savings anticipated from the significant reductions in patient admissions and length of stay.

Financial Details

Please complete and attach Appendix 'A' before completing the summary finance table below.

Business Case Costs	**Current SLR**	**Recurrent Revenue Changes Per Business Case (Full Year)**	**Post Business Case SLR**
	£	£	£
REVENUE RELATED			
Income		1,912,498	
(less) Total Direct Costs		(5,203,538)	
Contribution		(3,291,040) *Please see note 27 below*	

Notes:

(**) Obtain assistance from the Finance department to obtain this figure.

If the business case involves the generation of new business for the Trust then please obtain assistance from the finance department to ensure that the Business case provides a minimum EBITDA margin of 5% and return on assets of 3%. (*This is required in order to maintain a minimum FRR of 3.)*

EBITDA = Earnings before Interest, Tax and Depreciation are applied

FRR = Financial Risk Rating used by Monitor to assess the financial performance of a Trust

22. If the business case provides for a cost neutral or negative contribution please advise reasons why it should be pursued.

Following the Keogh review it was agreed that the immediate focus for the Trust should be to achieve continuity of safe sustainable patient care 7 days per week. The business case seeks to address several of the key issues raised in the report, including reducing bed moves by ensuring that patients are transferred to the 'Right bed, first time' and expanding and developing the Ambulatory Care Unit.

Although the new combined AMU and ACU unit provide for a negative contribution the development should be viewed as an investment with savings anticipated from the significant reductions in patient admissions and length of stay. For example, Figures in respect of the Ambulatory Care unit for the 9 month

period from September 2012 to May 2013 indicate:

- 148 patients benefited from early discharge
- Helped 228 patients avoid discharge
- Saved an estimated 1,341 bed days

23. Does the proposed business case have any impact on the Trust's Cost Improvement Programme (C.I.P)? – If yes, please provide details.

The development offers potential long term benefits from reductions in patient admissions and reduced length of stay which could potentially inform future staffing requirements.

24. Please detail any income generation potential.

N/A

25. Have any financial timing issues been identified? (E.g. delay to income being received / costs being incurred or double running costs due to pilot etc.)

The business case includes agency costs and associated premiums in respect of the consultant posts, which should be significantly reduced following the recruitment to substantive posts.

26. Please detail any anticipated 'one off' / start up Income or Expenditure

Capital costs in respect of the redesign and adaptation of the existing Bob and Dolly wards to accommodate the new AMU and ACU are estimated at £360k plus vat.

Equipment from the existing wards will be utilised where possible. However, some additional equipment will be required for the new unit , which is estimated at approx. £50k

27. Funding:
Please advise:
(a) Potential Sources of funding (e.g. Contract, Tariff Income, Virement from existing Budget)
(b) How certain is the funding believed to be?

Outline Funding Sources (Further details included in financial section):

(a) Transfer of budgets from the current EMU and Ambulatory Care budgets £1,362,520

(b) Transfer of current support budgets £53,218

(c) Transfer of budget from posts transferring to the new unit from other areas (e.g. diabetes) £496,760

Note: The total budget increase in respect of the new development is estimated at £3,291,040. However, the Trust is currently incurring additional expenditure in respect of the existing units at around £148k. Therefore the additional cost of the project is estimated at £3,143,040 per annum, £1.3m for the period to 31st March 2014

Important Note: The estimated increase does NOT reflect any potential 'run rate' adjustments in respect of any current nursing staff acuity overspends nor any adjustments in respect of the reduction of beds for Bob and Dolly from 28 beds to 18 beds per ward.

Business Case prepared and Proposed by:

	Name	Position	Signature	Date
Prepared By:	Pol Clark	Project Manager - Operations		
Proposed By	Dr Palanichamy Chellamuthu	Acute Consultant		

Approval & Authorisation

Step 1- Approval: The Business Case should be fully supported by both the Clinical Director (where Appropriate) and Operational General Manager of the Division producing the Business Case. An appropriate Finance lead should also sign to confirm that the financial elements of the business case have been reviewed.

Name	Position	Signature	Date
Dr Christine O'Brien	Clinical Director		
Kay Farmer	Divisional General Manager		
Sarah Oakley	Finance Lead		

Step 2- Approval / Authorisation: Once approved by the heads of Division, the Business Case should be presented at the Appropriate Departmental Group meeting for approval and 'signed off' by the Director of service. Business Cases to a value of £50k can be authorised at this point, with the exception of capital business cases requiring external funding, which should be forwarded to the Investment Committee for Authorisation.)

Name	Position	Signature	Date
Kath Kelly	Director of Operations		

Step 3 – Authorisation: The Business Case exceeding £50k should then be forwarded for Authorisation to the Healthcare Operating Board (H.O.B.). Business cases to a value of £250k can be authorised at this point.

Name	Position	Signature	Date
Kevin McGee	Chief Executive		
Chris Bradshaw	Finance Director		

Note:

Business cases in excess of £250k require further authorisation by the Trust Board.

Further information may be required at this time, if so, an additional Business Case section should be prepared entitled 'Business Case Part B', the contents of which will be determined by the nature of the further information requested following review at H.O.B. and may include option appraisal & scoring, plus a Project Management Plan (any required project resource should be included in the costs).

Each Business Case forwarded for approval to HOB will be allocated a unique Business Case number. Business Cases which are presented for approval to the Trust Board, must quote this number to demonstrate that they have been through due process, or they will be rejected.

Step 4 – Authorisation over £250k: Confirmation that the Business Case was approved at Trust Board

Name	Position	Signature	Date
	Trust Board Secretary		
Trust Board Date:		Trust Board Minute Ref:	

Next Steps- Once the Business Case has been approved:

Purchasing	Refer to 'Guideline to Effective Purchasing' - to ensure compliance with EC Directives
H.R	Job Specification & Description where appropriate- Liaise regarding recruitment
Project delivery	Plan of Action – including Benefits Realisation plan