



**South Eastern Health
and Social Care Trust**

Lagan Valley Hospital

Emergency Department

Option Appraisal

January 2012

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1.0 INTRODUCTION AND BACKGROUND

This option appraisal considers the future provision of access to emergency care for the population who would traditionally access the Emergency Department (ED) at the Lagan Valley Hospital (LVH). It outlines the options available and evaluates these against non-financial criteria to establish the best way to provide this service.

The Trust's Executive Management Team has been considering the challenges in continuing to provide emergency care services across the Trust and is currently reviewing provision across all its hospitals i.e. the Ulster, Ards, Bangor, Downe and Lagan Valley Hospitals.

Recent difficulties in recruiting junior grade staff for the ED at LVH, and subsequent inability to sustain the current level of service, prompted the Trust to consider interim options for the provision of emergency care at LVH. Following lengthy discussions with the Health and Social Care Board (HSCB), Belfast Health and Social Care Trust (Belfast Trust) and the Northern Ireland Ambulance Service (NIAS), the Trust reduced the opening hours of the ED at LVH from 9am to 8pm, 7 days per week as an interim measure as of 1 August 2011.

This exercise commenced in July 2011. Timescales were extended following discussion with the HSCB and SET Executive Management Team to allow sufficient time to engage with key stakeholders and to take account of the impact of changes as a result of the temporary closure of the ED at Belfast City Hospital and the recommendations of the HSCB's *Transforming Your Care – A Review of Health and Social Care in Northern Ireland*.

2.0 STRATEGIC CONTEXT

As the Trust's key concern is to ensure the delivery of safe, effective and sustainable services, account has been taken of recommendations in a number of strategic documents which impact on the delivery of emergency services. Key extracts are included below.

Transforming Your Care, A Review of Health and Social Care in Northern Ireland, HSCB, December 2011

In June 2011, the Minister for Health, Social Services and Public Safety (DHSSPS) announced a regional review of Health and Social Care in Northern Ireland. The report was published on 14 December 2011.

The review provides a strategic assessment across all aspects of health and social care services, examining the present quality and accessibility of services, and the extent to which the needs of patients, clients, carers and communities are being met. It brings forward recommendations for the future shape of services and provides an implementation plan.

The review identified the following twelve major principles for change, which should underpin the shape of the future model proposed for health and social care.

- Placing the individual at the centre of any model by promoting a better outcome for the service user, carer and their family.
- Using outcomes and quality evidence to shape services.
- Providing the right care in the right place at the right time.
- Population-based planning of services.
- A focus on prevention and tackling inequalities.
- Integrated care . working together.
- Promoting independence and personalisation of care.
- Safeguarding the most vulnerable.
- Ensuring sustainability of service provision.
- Realising value for money.
- Maximising the use of technology.
- Incentivising innovation at a local level.

Key recommendations impacting on the future of emergency care across Northern Ireland and those of particular relevance to the future of LVH are summarised below.

- The Royal Victoria Hospital becomes a regional trauma centre acting as the hub of the NI trauma network.
- There are likely to be 5-7 major hospital networks.
- A changing role for general practice working in 17 Integrated Care Partnerships across Northern Ireland.
- Shifting resource from hospitals to enable investment in community health and social care services.
- Accident and Emergency Departments can and should be supported more locally through an integrated urgent care model. The urgent care model is not a 'one size fits all' approach. It is an approach which looks at the needs of the local people and tailors the provision to meet their urgent care needs.
- GP Out of Hours should work as an integrated model of care with other urgent care services. The Downe Hospital is quoted as an example of good practice.

SET Corporate Plan 2011-15

This Corporate Plan sets out the vision for the services which the Trust provides and outlines its priorities for the next four years. The plan was developed at a critical time for public services and a very challenging time for Health and Social Care.

The SET developed six key themes from which Corporate Objectives and Proposed Priorities were developed. The six themes are:

- Safety, quality and experience;

- Access;
- Health and well-being;
- Efficiency and service reform;
- Our staff;
- Stakeholder engagement.

Within *Safety, Quality and Experience*, the continued provision of safe and sustainable Emergency Care Services through the implementation of new models of Emergency Care in all hospitals within the Trust is highlighted as a priority.

Proposals for a Safe and Sustainable Urgent Care Network in the South Eastern Trust, June 2010

In June 2010, the Trust undertook a twelve week public consultation exercise on *Proposals for a Safe and Sustainable Urgent Care Network in the South Eastern Trust*, including a specific proposal to change the Emergency Department of the Downe Hospital.

Following this exercise, a new enhanced GP out of Hours model was implemented at the Downe Hospital on 4th April 2011. SET has incorporated learning from that review and service change into the appraisal of options for LVH ED.

Developing Better Services, DHSSPS, 2002

Developing Better Services set the strategic direction for the NHS in Northern Ireland. Prior to the recently published Health and Social Care Review, this document provided a steer in terms of the strategic direction for the SET. It stated that, as “...a Local Hospital, Lagan Valley Hospital will have a minor injuries unit linked to one of the Belfast A&E centres”.

Lagan Valley Hospital was identified as a Local Hospital, which would no longer provide a full range of consultant-led inpatient services, but would develop a range of specialist outpatient, day case and rehabilitation services. In addition to providing Local Hospital services, it was proposed that it will become a specialist centre providing state of the art outpatient and diagnostic services.

Northern Ireland Ambulance Service (NIAS), Corporate Plan, 2011-2014

The overall aim of NIAS is *to deliver a safe, high quality ambulance service providing emergency and non-emergency clinical care and transportation which is appropriate, accessible, timely and effective*. One of its key objectives is to work with all stakeholders, in particular regional and local commissioners and providers of services, to establish processes to enable and support full participation of the ambulance service in the development and delivery of responsive integrated health services. This will be crucial in the implementation of any new model of emergency care at LVH.

Royal College of Emergency Medicine (CEM)

CEM confirms that emergency and trauma services can be provided at 3 levels:

- Level 1 . major acute hospital; all major surgical specialties present on-site; 24-hour resuscitation and back . up
- Level 2 . acute general hospital; not all major surgical specialties on site but can provide 24 hour resuscitation and back-up
- Level 3 . acute general hospital; remote location or serving less than 200,000 population.

The Reorganisation of Emergency Services (England), British Association for Emergency Medicine, July 2007

Although this report details the standards for England, the Trust considers that the principles are applicable to Northern Ireland. LVH does not comply with the minimum specialty support services that should be on any hospital site offering an Emergency Department as outlined in *The Reorganisation of Emergency Services (England), British Association for Emergency Medicine, July 2007*.

This document states that *“the absolute minimum support for the ED is 24 hour on site Acute Medicine, a fully staffed Critical Care unit, imaging (including 24 hour CT) and laboratory services (including Blood Bank)”*. LVH does not have critical care, laboratories, an observation ward or on site emergency surgery and therefore has limited ability to cater for emergencies.

The Trust also took account of extracts from Professional Bodies regarding the GP activity in the provision of Emergency Services such as **Guidelines for the Appointment of General Practitioners with Special Interests in the Delivery of Clinical Services: Emergency and Unscheduled Care (Royal College of General Practitioners and DOH: April 2003)**. Although the document is based on the provision of services in England, the principles are relevant to the Trust's proposal.

The document outlines how the general thrust for out of hours and emergency care services is to shift the focus away from the current situation where GP Out of Hours services are separated from the range of services provided in a hospital and elsewhere into one of greater integration.

Primary care organisations are now starting to develop a *whole-systems* approach and reconfigure services to best meet the particular service needs for their health community. The GP with Special Interest should be part of this service redesign being able to provide an important bridge between primary and secondary care.

3.0 CURRENT SERVICE

3.1 Overview of Emergency Care Services IN SET

Emergency care is provided at a number of sites across the Trust:

- Ulster Hospital - the largest ED in SET, deals with approximately 70,000 attendances per year. It caters for a wide spectrum of acute medical illnesses. Approximately 60 per cent of patients present with a triage category 3 (urgent) or above.
- LVH . deals with approximately 35,000 attendances per year. Types of conditions are limited due to absence of on-site critical care, laboratories, observation wards, emergency surgery, Paediatrics, Obstetrics and Gynaecology. Further details are provided in the following sections.
- Downe Hospital . a new model of care (ED from 8am . 10pm and enhanced GP Out of Hours model from 10pm . 8am) was implemented on 4 April 2011. Assuming that the current activity level continues, the service caters for approximately 21,000 attendances per year.
- Ards and Bangor Community Hospitals . Minor Injury Units provide services 5 days per week in Ards and 7 days per week in Bangor. The units cater for approximately 21,000 patients per year.

3.2 Overview of LVH

LVH provides the following services:

- Inpatient Beds
- Stroke Unit
- Rehabilitation Unit
- Adult Psychiatry
- Psychiatry of Old Age
- Day Surgery . Day Procedure Unit
- Outpatients
- Endoscopy
- Diagnostics
- Midwife Led Unit
- Emergency Department

Over the past few years, services in LVH have changed in response to a changing environment and needs. The most significant changes have related to:

- Surgery . Emergency surgery and colorectal surgery ceased to be delivered in October 2008. Elective surgery only was delivered until November 2011. Since then, day surgery only has been delivered.

- Obstetrics and Gynaecology . in February 2011 Maternity Services changed from Consultant-led inpatient and outpatient services to Midwifery-led with Consultant-led outpatients. In April 2011, Gynaecology services changed to day surgery and nurse-led only early pregnancy services.
- Medicine . enhanced diagnostic capabilities, for example, within pulmonary function laboratory; increased outpatient facilities and range of outpatient clinics; expansion of middle grade cover; closer working relationship with the Ulster Hospital as part of the Trust network; range of enhanced specialties such as dermatology and rheumatology. Details of the current bed numbers and specialities are included in Appendix I.

Investment has been made in infrastructure and services at LVH in recent years. For example, two new replacement theatres opened in October 2010, Plastic Surgery has been delivered on-site from September 2010.

The Trust is currently preparing an Outline Business Case for the redevelopment of the LVH site, including a local hospital and health and care centre, for submission to the DHSSPS.

3.3 Overview of LVH ED

Prior to 1 August 2011, the ED operated 24 hours/day, 7 days/week. An ED Consultant was on-site from 8am to 5pm, 5 days per week with variable cover at the weekends. A middle grade doctor was on-site from 8am to 10pm, 5 days per week and to 6pm at weekends and bank holidays. Junior doctors provided cover 24 hours/day. 999 ambulances were received on a 24/7 basis. However, some bypass protocols were in place for major trauma, Obstetrics and Paediatrics.

Since 1 August, the opening of the ED was restricted to 9am to 8pm, 7 days per week. Middle grade and junior doctor cover is provided during opening hours. Staff remain in the department after closing time to ensure that all patients are appropriately assessed and treated.

GP Out of Hours service is located on the LVH site but has no direct linkage with the ED.

3.4 Current ED Service Issues

There are a number of issues and challenges facing the Trust in the delivery of emergency services and these are summarised below:

- **Medical Staff/ European Working Time Directive (EWTD):** There are difficulties in maintaining the service on three hospital sites in terms of availability of senior and junior medical staff and compliance with the requirements of EWTD. Recruitment of sufficient medical staff is a particular problem.

- **Out of Hours Cover (OOH):** There are issues with regard to manpower and efficiencies which are linked to a regional plan
- **Changes in Workplans:** There have been essential changes in the workplans of medical staff and these have impacted on the numbers of staff available. The changes have also compromised work levels and access to teaching, in some instances.
- **Supervision of Junior Doctors:** There has been a growing concern among training agencies regarding circumstances whereby junior doctors are perceived as working unsupervised. SET has taken account of a recent report made to the Belfast Trust.
- **Quality Assurance:** The dependency on short term locums has given rise to quality assurance issues on occasion. There are also issues about quality and ability to comply with recommended standards.

3.5 Overview of Activity at LVH ED

- **Total Attendances**

LVH ED caters for a total of around 35,000 new and review patients per year (excluding fracture clinics). Attendances have continued to increase over the past 3 years as shown below.

Table 1: LVH ED Attendances 2008-11

	08/09	09/10	10/11
New Attendances	29873	29946	30228
Review Attendances	3955	4538	4751
	33828	34484	34979

Since implementation of limited opening as an interim solution as of 1 August 2011, the ED has continued to cater for approximately 70 per cent of attendances.

- **Timing of Attendances**

Prior to implementation of limited opening, just over half of patients (51.7%) presented between 9am and 5pm. Limited opening has impacted upon attendance patterns with 75 per cent of patients now presenting between 9am and 5pm.

Table 2: Timing of Attendances

	24/7 ED	Interim model
	(prior to 1.8.11)	(1.8.11 to date)
9am - 5pm	51.7%	75.6%
5pm - 6pm	6.0%	8.3%
6pm - 8pm	12.4%	15.4%
8pm - 10pm	10.2%	0.1%
10pm - 8am	16.5%	0.1%
8am - 9am	3.2%	0.4%

- **Admissions**

Prior to 1 August, 13-14 patients were admitted on a daily basis, approximately half between 9am and 5pm. Although the total number of attendances has decreased with limited opening, admissions have not reduced to the same extent.

A pilot of direct GP admissions commenced on 21 November 2011. This allows GP within the GPOOH service to assess and admit patients deemed appropriate through direct contact with the in-house medical team. To date, there has been an average of 4 admissions per week.

- **Mode of Arrival**

The majority of patients arrive by private transport. This pattern has not changed since implementation of limited opening.

Table 3: Mode of Arrival

Mode	%
999	0.2%
Ambulance	14.8%
Foot	0.2%
Other	4.8%
Police	0.6%
Private Transport	79.4%
Public Transport	0.1%

- **Triage Category**

The majority of attendances are neither life nor limb threatening ie Category 3: to be seen within 1 hour (39.6%) or Category 4: to be seen within 4 hours (47.6%). There has been no significant change in triage categories since implementation of limited opening.

The hospital does not have critical care, laboratories, an observation ward or on site, Paediatrics, Obstetrics, Gynaecology or emergency surgery and therefore has limited ability to cater for Categories 1 and 2 as shown below.

Table 4: Triage Category

Triage Category	%
1	0.4%
2	6.6%
3	39.6%
4	47.6%
5	4.9%
Blank	0.9%

Triage categories are defined as follows:

Category 1 - Critical - to be seen immediately; Category 2 - Urgent - to be seen within 10 mins; Category 3 - Major - to be seen within an hour; Category 4 - Minor - to be seen within 4 hours; Category 5 - Stitch removal etc

A snapshot survey of patients was undertaken by an Emergency Medicine Consultant and a GP from the GPOOH service to establish the acuity of attendances and any potential impact resulting from a change in emergency care. This exercise compared case notes of patients attending ED within a specified time periods from 4-10 October 2010 and 3-9 October 2011. It concluded that all non-999 ambulance attendances could be initially managed by a GP, although it was noted that a number of these patients would need onward referral to an ED or specialist opinion for continuing care. It was agreed that there could be involvement of the medical in-house team for the management of appropriate medical admissions by GPs.

- **Ambulance**

An average of 375 patients arrived by ambulance per month when the 24/7 model was operational. In line with limited opening from 1 August 2011, the number of patients arriving by ambulance has halved to approximately 186 per month.

There has been some change in the category of arrivals by ambulance. NIAS defines arrivals as follows:

- Category A calls - immediately life threatening and require an 8 minute response.
- Category B calls - not immediately life threatening and require an 18 minute response.
- Category C calls - do not always require an emergency response but may be handled in some other way, for example by giving advice.

- Urgent calls - requests from GPs for patients to be transported to hospital, normally to be completed within a timeframe of between 1 and 3 hours.
- Routine calls - scheduled for outpatients appointments or Hospital transfers/discharges.

Since implementation of the interim model, there has been a decrease in %emergency+ arrivals and an increase in %urgent+ arrivals. From 1 April to 31 July, approximately 72 per cent of arrivals were %emergency+ in line with previous months. From 1 August to 30 November, this decreased to 60 per cent. Details are included in Appendix II.

- **Catchment Area**

Approximately 80 per cent of attendances are from the SET area, particularly Lisburn (BT27 &28) and Dunmurry/Poleglass (BT17).

Table 5: Attendances by Trust

	Prior to 3.8.11	3.8.11 to date
Belfast	5.0%	4.6%
Northern	2.2%	1.7%
South Eastern	80.8%	81.6%
Southern	10.2%	10.4%
Western	0.2%	0.2%
Blank /Out of Area	1.6%	1.5%
Total	100.0%	100.0%

- **GPOOH**

The GPOOH service is located on the LVH site and operates from 6pm to 8am. There are no direct linkages between ED and GPOOH. However, since implementation of limited opening of the ED, activity within the GPOOH service has not changed.

4.0 OBJECTIVES AND CONSTRAINTS

This section outlines the main objectives and constraints relevant to the provision of access to emergency care for the catchment area of LVH.

Objectives

- To provide safe, effective and sustainable emergency care for the population served by LVH;
- To optimise access to emergency care services for the population served by LVH;
- To develop Lagan Valley Hospital's status as a local hospital;
- To support the ability of LVH to continue to treat acute medical cases.

Constraints

- Ability to recruit junior grade doctors;
- Availability of appropriately experienced middle grade and junior doctors;
- Timescales . current model is only an interim solution;
- Affordability;
- Compliance with requirements as outlined by the College of Emergency Medicine and other professional bodies.

5.0 OPTIONS

The Trust considered a number of options as outlined below. The options were identified and expanded with input from key stakeholders.

Option 1: Status Quo

This model was in operation prior to implementation of the interim model on 1 August 2011. In this option an ED Consultant is on-site from 8am to 5pm, Monday to Friday, with variable level of cover at the weekends. On-call arrangements are in place outside of these hours. A middle grade doctor is on-site from 8am to 10pm, Monday to Friday, and until 6pm at weekends and bank holidays. Junior doctors provide 24/7 cover.

The ED receives 999 ambulances 24/7. However, some bypass protocols are in place for major trauma, Obstetrics and Paediatrics. GPs have also been directed to refer Obstetrics, Gynaecology, Surgical and Paediatric patients elsewhere. The Department is open to self-referrals 24/7.

In-patient support is provided by acute medicine, on-site in-patient acute psychiatry, 24 hour liaison adult acute psychiatry, on-call Consultant level anaesthetic and radiology services including CT scans 24/7 and on-call acute physicians. The service is also supported by a network of surgical services

from the Belfast Trust as well as Paediatric Services and Fractures from the Belfast Trust or SET. Obstetrics and Gynaecology support is mainly provided within SET. Intensive care and third level specialties such as neurosurgery are provided regionally.

GPOOH is based on the LVH site but the services are not co-located. Generally there is no transfer of patients between ED and GPOOH with the exception of a small number of direct referrals.

This option is the base case for the purposes of the appraisal process. It assumes that any additional protocols developed with NIAS and other Trusts as a result of implementation of the interim model on 1 August 2011 would not be operational.

Option 2: Increase Middle Grade Staff: 24/7 Middle Grade-led

This option is similar to Option 1 with the exception of the level of medical cover provided. In this option Consultant and junior grade doctors would provide cover as above but middle grade doctors would be on-site at all times.

Option 3: Replace the current ED with a Nurse-led Limited Opening Minor Injuries Unit (MIU)

This option entails closing the ED and providing a nurse led MIU with limited opening hours. No service would be provided at the front door out of hours. The service would be led by Emergency Nurse Practitioners (ENPs) with telephone advice available from on-call Consultants within the Trust. There would be no junior doctor support available. A lead in time would be required to source and train staff.

There would be no ambulance admissions or direct GP admissions within this option. The MIU would deal with minor ailments and injuries including simple fractures, sprains, cuts, and minor burns. A protocol would be in place for the management of acutely ill patients. Appropriately qualified staff would prescribe medication for pain relief under the PGD (Patient Group Directive).

The service would be supported by on-site radiology services. On-call arrangements for radiology services would operate out of hours.

Option 4: Limited opening of ED with various levels of support

Within Option 4, the ED would operate as in Option 1 but with limited opening hours. Thereafter, the ED would close and various levels of support would be provided out of hours as outlined below. These options were identified by the Project Team and expanded through discussion with GPs and physicians. This exercise considers the model in principle only and does not take account of opening times within limited opening.

Services would be provided to patients presenting before a particular closing time. Staff would remain in the department after closing time to ensure that all patients are appropriately assessed and treated. Out of hours patients would be redirected by signage to other facilities/services on the LVH site or to services elsewhere.

Staffing would vary from Option 1 as middle grade and junior doctor cover would be provided during all opening hours. Consultant cover would be provided in the ED or on call as appropriate.

999 ambulances would not present to LVH out of hours in any scenarios contained within Option 4.

4a Limited opening of ED, no additional service OOH

This option entails maintaining the ED service at LVH during limited opening hours. The ED would close outside these hours. GPOOH would continue to operate in its current format and location. LVH patients presenting out of hours would access ED services via UHD, or where clinically appropriate, via Belfast Trust hospitals. Patients would be repatriated after assessment to LVH under the care of the physicians to a medical assessment/observation area in LVH.

4b Limited opening of ED, MIU out of hours

This option entails maintaining the ED service at LVH during limited opening hours. Although the ED would close outside these hours, a nurse-led MIU service, as outlined in Option 3, would be available out of hours.

The service would be provided by Emergency Nurse Practitioners (ENPs) with telephone advice available from on-call Consultants within the Trust. There would be no junior doctor support available.

There would be no ambulance admissions or direct GP admissions within this option. The MIU would deal with minor injuries including simple fractures, sprains, cuts, and minor burns. A protocol would be in place for the management of acutely ill patients.

4c Limited opening of ED plus direct GP admissions only

This model would operate as Option 4a but would facilitate direct GP admissions out of hours. This option was identified during discussions with GPs regarding the temporary model operational from 1 August 2011 and concerns raised by GPs regarding the lack of access to medical beds out of hours.

Patients suitable for admission through this route would be haemodynamically (blood flow) stable, have been seen by the GPOOH team and assessed as requiring admission. This route would be inappropriate for patients requiring 999 ambulance transfer, patients with apparent acute surgical problems (including head injuries), haemodynamically unstable patients, patients with active GI bleeding and patients in acute severe pain. Patients deemed inappropriate for admission would be transferred to the nearest 24 hour ED.

The on-call medical SHO would act as the main point of contact for admission of medical patients to LVH. The on-call medical SHO would take clinical details, discuss the patient with the on-call Consultant if in any doubt and, provided a bed is available, would advise on the ward for direct admission. Access to the hospital would be via the main front doors where portering or security personnel would meet with the patient and direct them to the appropriate admission ward.

There would be no ambulance admissions out of hours.

4d Limited opening of ED plus “enhanced” GPOOH (including direct GP admissions)

In this option the ED would operate during limited opening hours. Outside of opening hours an enhanced+ GPOOH service would be provided whereby the ED and GPOOH would be co-located and the ED nursing staff would support GPOOH with triage, observation, suturing and dressings.

As part of this model, GPs within the GPOOH service could directly admit patients assessed by them as requiring admission through the same process as outlined in Option 4c. There would be no 999 ambulance admissions out of hours.

The GPOOH service would continue to avail of the current range of supporting networks such as Rapid Response Nursing, Mental Health Out of Hours Support Service, Emergency Duty Team and Palliative Care Network.

4e Limited opening of ED, MIU out of hours plus direct GP admissions

This option entails maintaining the ED service at LVH during limited opening hours, closing the Ed outside of these hours and providing a nurse-led MIU service, as outlined in Option 4b. However, it would also facilitate direct GP admissions as outlined in Option 4c.

Option 5: No ED at LVH

This option envisages the closure of the LVH ED service. The ED service for LVH patients would be provided from UHD or the Belfast Trust hospitals with LVH having a medical assessment/observation unit for patients returning from UHD for admission, managed by physicians in the LVH medical team. Admissions would only be made via transfers from other hospital, Consultant or GP requests. Services would not be provided to walk-in emergencies or 999 ambulances.

This option only considers access to emergency care at the front door and does not consider the range of services to remain on the LVH.

6.0 OPTION APPRAISAL

6.1 Overview

A key component of any formal option appraisal is the assessment of the non-financial benefits that are likely to accrue from the options under consideration. The following sections provide a description of the process used to assess the potential benefits of the short-listed options together with the outcomes of the exercise.

The option appraisal was carried out by the Project Team and subsequently approved by the Project Board. Full membership of both groups is included in Appendix III. The Project Team includes representatives from senior management, medical staff, nursing staff, GPs, staff-side as well as corporate functions including Finance, Human Resources, Planning, Performance and Commissioning and Equality. The Project Team members who took part in the scoring exercise are included in Appendix IV.

The group's aim was to:-

- Establish a common understanding and agreed approach to the benefits appraisal process;
- Review and describe the list of options to be evaluated;
- Develop the list of criteria against which each of the options would be evaluated;
- Rank and weight the criteria using established mechanisms;
- Score the options against the agreed criteria using the assigned weightings.

The process was monitored by the Project Board whose role was to ensure that the benefits appraisal was robust and had been conducted rigorously.

The benefits appraisal process has three main stages:

- Identification of the benefits criteria;

- Weighting of the benefits criteria; and
- Scoring of the short-listed options against the benefits criteria.

6.2 Benefits Criteria

A number of non-financial benefits were derived from the project objectives and constraints outlined in Section 4. The following explanations were agreed by the Project Team.

Table 6: Benefits Criteria

Criteria	Explanation
Clinical Quality	<ul style="list-style-type: none"> • Enabling and maximising clinical safety, quality and effectiveness; • Supporting an improved model of care; • Respecting patient privacy and dignity issues; • Enabling use of care pathways; • Improved outcomes for patients.
Accessibility	<ul style="list-style-type: none"> • Physical accessibility to appropriate emergency care for the catchment area of LVH; • Travel time for patients; • Opening times; • Simplicity of access ie single point of entry; • Access to appropriate level of care . either on-site, across SET or from other Trust networks.
Sustainability	<ul style="list-style-type: none"> • Providing services that can be sustained in the medium to long term: <ul style="list-style-type: none"> ○ Retention of acute medicine and Mental Health Services on the LVH; ○ Recruitment and retention of appropriately qualified staff - including location, working environment, better training and development opportunities; ○ Sufficient physical capacity to meet needs of the service.
Integration	<ul style="list-style-type: none"> • Within Trust and linked to other Trusts • Link between primary and secondary care within SET; • Maximise use of services across the Trust area; • Maximising use of clinical networks within the SET; • Support changes elsewhere within emergency care.
Speed of implementation	<ul style="list-style-type: none"> • Minimises time required to implement option including refurbishment of physical space, recruitment, public awareness; • Minimises inconvenience to patients and staff.

Each criterion linked to the project objectives as summarised below.

Table 7: Linkage between Project Objectives and Benefit Criteria

Project Objectives	Benefit Criteria
To provide safe, effective and sustainable emergency care for the residents of the Lisburn area.	Clinical Quality; Sustainability; Speed of Implementation
To optimise access to emergency care services for the population of the Lisburn area.	Accessibility
To develop Lagan Valley Hospital's status as a local hospital	Clinical Quality; Accessibility; Sustainability; Integration
To support the ability of LVH to continue to treat acute medical cases.	Integration; Sustainability
To support other EDs.	Integration

6.3 Weighting of the Benefit Criteria

The level of importance of each of the benefit criteria was considered in relation to the objectives and constraints outlined in Section 4. The weighting allocated to each criterion reflects its relative effect on the success of each option scored.

The weightings agreed by the Project Team were as follows:

Table 8: Weighting

Criteria	Weighting
Clinical Quality	30
Accessibility	25
Sustainability	25
Integration	15
Speed of implementation	5

Clinical Quality: The Team considered the ability of the preferred option to enable and maximise clinical safety and support an improved model of care was the most important criterion. This criterion therefore attracted a weighting of 30.

Accessibility: The Team agreed that ability to access appropriate emergency care services was also a significant factor for the population of Lisburn and the surrounding area and the success of any option would be judged accordingly. This criterion therefore attracted a weighting of 25.

Sustainability: This criterion was deemed to be of equal importance to Accessibility and therefore was allocated a weighting of 25.

Integration: Integration and fit with other services and developments across the Trust was also deemed important and allocated a weighting of 15.

Speed of Implementation: Although the Project Team agreed that speed of implementation of a permanent solution should be considered, they also recognised that issues regarding availability of appropriately qualified staff had been addressed by the interim solution and therefore was not of the key criteria. Therefore they allocated a score of 5.

6.4 Scoring of the Options

Following a review and discussion of the long list of options, the Project Team agreed that all options could meet the objectives to some extent and therefore merited consideration and scoring.

Each option was scored out of 10 against each criterion. A summary of discussions is provided below.

Clinical Quality

Option 1 (Status Quo) scored low (2) in terms of Clinical Quality due to professional concerns associated with the over reliance on locum staff, particularly at middle grade level; over reliance on junior doctor cover at night and presence of Consultants to ensure appropriate senior decision making. This reliance on junior doctors has been highlighted in a recent review by the Deanery and is therefore unlikely to be supported by NIMDTA and relevant Colleges.

Option 2 (Middle Grade) scored 8 out of 10 for Clinical Quality to reflect the presence of middle grade staff on a 24/7 basis and the associated benefits of senior decision-making and better outcomes for patients.

Option 3 (MIU) scored 5 out of 10 with regards to Clinical Quality. This option assumes that there would be no change to the model of care on the LVH site. Therefore, although patients would receive a high quality of care, the service would be nurse led and therefore the scope and case mix would be limited.

Options 4a (Limited opening only), 4b (Limited opening, MIU OOH), 4c (Limited opening, direct GP admissions OOH) and 4e (Limited opening, MIU and direct GP admissions OOH) all scored 6 out of 10 in terms of Clinical Quality to reflect the presence of appropriately qualified medical staff in the ED, albeit during limited opening. The group discussed the risk of acutely ill

patients presenting to ED out of hours. The final scores reflect a balance of the risk associated with potential confusion for the general public and the group's experience of implementing the interim solution whereby the general public can be made aware of and adapt to changes in services.

Option 4d (Limited opening, enhanced GPOOH) scored slightly higher (8) to take account of access to GPs out of hours and access to the in-house medical team and on-call Consultant. This option assumes that patient pathways and protocols are in place.

Option 5 (No ED at LVH) scored 5 out of 10 in terms of Clinical Quality. Although the Trust would continue to provide a high quality of service at LVH, the potential impact of not having a front door on other services on the site is unclear.

Accessibility

Options 1 (Status Quo) and 2 (Middle Grade-led) scored 8 in terms of Accessibility as retention of a 24/7 Emergency Department would mean that the majority of people from the Lisburn area would not have to travel to avail of emergency services. Although these options are likely to be the most acceptable to the general public, they would not provide the appropriate level of care for all patients and travel would still be required for major trauma, Surgery, Obstetrics and Paediatrics.

In Option 3 (MIU), the unit would only be equipped and staffed to deal with minor injuries with all major and intermediate cases having to travel to an alternative ED outside of Lisburn and therefore scored 2 out of 10 in terms of Accessibility.

Option 4a (Limited opening only) scored 5 for Accessibility as patients would be required to travel to alternative EDs outside of opening hours. Option 4b (Limited opening, MIU OOH) also scored 5. Although it would provide services for minor injuries out of hours, some patients would still be required to travel to other EDs. Option 4e (Limited opening, MIU OOH, direct GP admissions) scored slightly higher (6) to take account of GP access to medical beds.

Option 4c (Limited opening plus direct GP admissions) scored 7 out of 10 in terms of Accessibility. Although the ED would have limited opening, and therefore the local population would not have physical access to an ED on a 24/7 basis, the group agreed that GP access to acute medical beds on a 24/7 basis enhanced the overall level of accessibility to an appropriate level of care as per the agreed definition. Option 4d (Limited opening, enhanced GPOOH including direct admissions) scored slightly higher (8) to take account of the GP assessment and ability to admit patients with the agreement of the in-house team.

Option 5 (No ED at LVH) scored 1 out of 10 in terms of Accessibility as it would result in no emergency care services in Lisburn. The local population would have to travel to avail of alternatives services within SET, Belfast Trust or Southern Trust.

Sustainability

Options 1 (Status Quo) and 2 (Middle Grade-led) scored 1 out of 10 in terms of Sustainability. The recent recruitment difficulties, and consequent need to implement an interim model, highlight the unsustainability of Option 1. As highlighted previously, this is partly due to a national shortage of emergency medicine doctors and partly due to difficulties in attracting appropriately qualified and experienced staff to a unit which does not have the minimum specialty support services that should be on any hospital site operating an ED.

The limited availability of middle grade doctors also became apparent in recent recruitment campaigns. The group felt that Option 2 (Middle Grade-led) would present the same recruitment difficulties and therefore was also allocated a score of 1 for Sustainability.

Option 5 (No ED at LVH) also scored 1 for Sustainability to take account of the potential detrimental impact on the future of LVH. As most admissions are made through the ED, this option would undermine acute medicine on the LVH site and stop the arterial flow of patients.

The limited opening within Options 4a (Limited opening only), 4c (Limited opening, direct GP admissions) and 4d (Limited opening, enhanced GPOOH) would alleviate some of the problems associated with the recruitment of appropriately qualified staff, and hence the sustainability of the model. Option 4a scored 6 as, although recruitment difficulties would be reduced, the absence of emergency services out of hours could impact on the sustainability of other services on the LVH site. Option 4c scored slightly higher (7) to take account of the GP access to acute medical beds out of hours. Option 4d scored slightly higher again to take account of the availability of GPs to staff the proposed GPOOH model.

Although Option 4d would involve a model similar to that implemented in the Downe Hospital, there are notable differences including higher activity at LVH ED and busier GPOOH in Lisburn.

Options 4b (Limited opening, MIU OOH) and 4e (Limited opening, MIU OOH plus direct GP admissions) were allocated a score of 3 for Sustainability to reflect potential difficulties in the recruitment of appropriately qualified nursing staff for the MIU, the time required to train Emergency Nurse Practitioners (ENPs) and the absence of any similar models of MIUs operating out of hours within Northern Ireland. Option 3 (MIU limited opening) scored 3 out of 10 to reflect the limited scope of services provided and limited contribution this model would make to the sustainability of acute services on the LVH site.

Integration

Option 5 (No ED at LVH) scored the lowest (1) with regard to Integration as it would result in one Level 1 ED in the South Eastern Trust area based at the Ulster Hospital and no ED for the Lisburn area.

Options 1 (Status Quo), 2 (Middle Grade-led), 3 (MIU, no ED), 4a (Limited opening only) and 4b (Limited opening, MIU OOH) all scored low for Integration. The group concluded that they did not improve links between primary and community care or maximise use of clinical networks across the Trust.

The increased collaboration and partnership between primary and secondary care within Option 4d (Limited opening, enhanced GPOOH) would offer a more integrated model of care, hence a score of 7 out of 10 for Integration. Options 4c (Limited opening, MIU OOH) and 4e (Limited opening, MIU OOH plus direct GP admissions) both scored 5 out of 10 to take account of the linkages between the two models of care but recognising the scope for better integration both within the Trust and with other Trusts.

Speed of Implementation

Options 1 (Status Quo) and 2 (Middle Grade-led) scored low (1) in terms of Speed of Implementation. The group concluded that, based on the Trust's recent recruitment difficulties, the level of staff required for these options is not available in NI or nationally. These options would therefore take a considerable length of time to implement.

Options 4b (Limited opening, MIU OOH) also scored 1 for Speed of Implementation. Although the limited opening of the ED could mean that this part of the option could be staffed and implemented quicker, availability of qualified ENPs could present significant problems. The 2 year period required to train an ENP and the ability to recruit these staff to work out of hours could significantly delay implementation of the option.

Option 3 (MIU) was allocated 3 out of 10 for Speed of Implementation. Although it would be easier to recruit staff to work during the day, the time needed for recruitment of staff and the lengthy training period required could delay implementation of the option. Option 4d (Limited opening, enhanced GPOOH including direct admissions) scored 6 out of 10 to reflect the time required to facilitate co-location of the ED and GP Out of Hours, obtain agreement within the Trust and with external stakeholders regarding protocols and time required for the new model to become established.

Option 5 (No Ed at LVH) scored 5 for Speed of Implementation to take account of the public consultation, Trust approval process and time required to cease a service and the general public aware of alternatives.

Option 4d scored 6 out of 10 to take account of the additional time required to co-locate the ED and GPOOH. However, a potential location has been identified.

Options 4a and 4c scored highest (8) with regards to Speed of Implementation as these options are or have been in operation on an interim basis . Option 4a from 1 August to 31 October and Option 4c from 1 November to date.

Table 9: Non-Financial Benefit Scores

Criteria	Weighting	Op 1		Op 2		Op 3		Op 4a		Op 4b		Op 4c		Op 4d		Op 4e		Op 5	
		S	WxS	S	WxS	S	WxS	S	WxS	S	WxS	S	WxS	S	WxS	S	WxS	S	WxS
Clinical quality	30	2	60	8	240	5	150	6	180	6	180	6	180	8	240	6	180	5	150
Accessibility	25	8	200	8	200	2	50	5	125	5	125	7	175	8	200	6	150	1	25
Sustainability	25	1	25	1	25	4	100	6	150	3	75	7	175	8	200	3	75	1	25
Integration	15	3	45	3	45	2	30	3	45	3	45	5	75	7	105	5	75	1	15
Speed of implementation	5	1	5	1	5	3	15	8	40	1	5	8	40	6	30	1	5	5	25
Total	100		335		515		345		540		430		645		775		485		240

Source: South Eastern Trust

6.5 Analysis of the Results

Overall, Option 4d, Limited opening of ED with enhanced GPOOH, was ranked highest as it delivers the highest level of benefits when measured against the criteria. The scoring and ranking of options is summarised below.

Table 10: Summary of Scoring and Ranking

Option	Description	Total score	Ranking
1	Status quo	335	8
2	Increase middle grade staff	515	4
3	Nurse-led MIU	345	7
4a	Limited opening of ED, no additional OOH service	540	3
4b	Limited opening of ED, MIU OOH	430	6
4c	Limited opening of ED, direct GP admissions	645	2
4d	Limited opening of ED, enhanced GPOOH (including direct GP admissions)	775	1
4e	Limited opening, MIU OOH, direct GP admissions	485	5
5	No ED at LVH	240	9

Sensitivity Analysis

The scoring exercise was approved by the Project Board on 15 December 2012. The Board were unable to identify any factors which had not been considered by the Project Team during the scoring exercise and which warranted a sensitivity analysis.

7.0 FINANCIAL ASSESSMENT

Although finance was not key to the decision-making process, a financial assessment of Options 1 (model prior to 1.8.11), 4a (model in place from 1.8.11 to 21.11.11), 4c (model in place from 21.11.11) and 4d (preferred model) was undertaken for consideration by the Trust's Executive Management Team and the LVH ED Project Board. It confirmed that the preferred option would not incur significant additional costs.

The preferred option requires co-location of ED and GPOOH. The Trust has identified an area adjacent to the ED which is currently vacant. Any costs associated with capital works will be taken forward in a separate capital Business Case.

8.0 CONCLUSION

Limited opening of the ED plus enhanced GP Out of Hours Service, to include direct admissions, is the preferred option. Based on this assessment, it would deliver the highest level of benefits. The Trust believes that this option would provide 24/7 access to services, admissions to LVH and facilitate greater integration between primary and secondary care.

Glossary of Terms

Acute care	Necessary treatment for a short period of time for a brief but serious illness, injury or other health condition
Appraisal	Assessment; evaluation
Capital	Investment
Commissioning	Looking at the needs of the population and plan and secure services to meet that need
ED	Emergency Department; Accident and Emergency
Engagement	Involvement; participation
Evaluate	Assess; consider
GPOOH	GP (General Practitioner) Out of Hours . service provided by GPs outside of usual surgery hours. Service is provided in Lisburn between 6pm and 8am.
Interim	Temporary; short term
MIU	Minor Injuries Unit, an alternative to Emergency Department for injuries which are not serious such as cuts, sprains, minor burns etc
Locum	Stand-in; temporary
Outcome	End result
Partnerships	Individuals and interested groups working together to achieve something
Primary care	First contact of a patient with a healthcare provider, mostly based in the community eg GP
Secondary care	Health care services provided by medical specialists and other health professionals
Stakeholders	Individuals or groups affected by or having an interest in something
Strategic	Planned; in keeping with key priorities or direction of travel
Sustainability	To keep in existence; maintain
Triage	Categories

1. Critical - to be seen immediately
2. Urgent - to be seen within 10 mins
3. Major - to be seen within an hour
4. Minor
5. Usually patients categorised as 5 are attending for stitch removal etc

Appendix I

LVH BED COMPLEMENT as of 30/11/2011

WARD	SPECIALITY	BEDS ALLOCATED
WARD A1	General Medicine	17
WARD B1	General Medicine	18
WARD 3	Diabetic 4 General Medicine 6	10
MEDICAL ASSESSMENT	General Medicine	10
FRACTURE REHABILITATION UNIT	Geriatric Rehabilitation	6
REHABILITATION UNIT	Geriatric Rehabilitation	10
STROKE UNIT	Geriatric Rehabilitation	10
CORONARY CARE UNIT	Coronary Care	8
TOTAL		89

WARD	SPECIALITY	BEDS OPEN DAY ONLY
WARD 9 OPEN DAY ONLY	GYNA	8
DAY PROCEDURE UNIT	Unclassified	18
ELECTIVE SURGERY UNIT	General Surgery	12
TOTAL		38

MATERNITY UNIT

WARD	SPECIALITY	BEDS ALLOCATED
WARD 10 (MATY)	OBST (Obstetric)	0
NURSERY	Obstetric Healthy Babies	0

Please note the Elective Surgery Unit is open 4 days Mon- Thur

Please note Day Procedure Unit is open 5 days no nights and beds are classed as beds/trolleys.

LVH Admissions By Ward By Speciality, April - Nov 2011 (Exclude Daycases)

Ward on Admission	Specialty on Admission	April - July	Aug - Nov
Coronary Care Unit	Coronary Care (C)	106	86
Coronary Care Unit	General Medicine (C)	75	58
		181	144

Day Procedures Ward	General Medicine (C)	3	2
Day Procedures Ward	General Surgery (C)	2	0
Day Procedures Ward	Ophthalmology (C)	2	0
Day Procedures Ward	Urology (C)	1	1
		8	3

Elective Surgical Unit	General Medicine (C)	5	2
Elective Surgical Unit	General Surgery (C)	24	10
Elective Surgical Unit	Urology (C)	2	2
Elective Surgical Unit	Vascular Surgery (C)	8	4
		39	18

Fracture Rehabilitation Unit	Geriatric Acute (C)	6	3
Fracture Rehabilitation Unit	Geriatric Rehabilitation (C)	13	31
		19	34

High Dependency	General Medicine (C)	29	32
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Lvh Maternity Unit	Midwife Episode (M)	77	103
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Medical Assessment Unit Lvh	General Medicine (C)	945	910
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Nursery	Well Babies (Obstetrics) (M)	65	83
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Rehabilitation Unit	General Medicine (C)	0	2
Rehabilitation Unit	Geriatric Acute (C)	26	24
Rehabilitation Unit	Geriatric Rehabilitation (C)	17	18
		43	44

Stroke Unit	Geriatric Acute (C)	6	2
Stroke Unit	Geriatric Rehabilitation (C)	14	18
		20	20

Ward 3	General Medicine (C)	22	25
Ward 9	Gynaecology (C)	1	0
Ward A1	General Medicine (C)	73	71
Ward B1	Diabetic (C)	1	4
Ward B1	General Medicine (C)	73	55
		74	59

TOTAL		1567	1514
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Appendix II
Arrivals to LVH ED by Ambulance, NIAS

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 30th November, 2011**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
466	805	260	1,531	690	28	2,249

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 30th November, 2011, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
April	82	152	55	289	115	4	408
May	96	157	47	300	110	3	413
June	75	133	56	264	105	3	372
July	84	120	30	234	75	3	312
August	42	57	21	120	81	7	208
September	27	56	16	99	73	3	175
October	28	70	23	121	66	1	188
November	32	60	12	104	65	4	173
Total	466	805	260	1,531	690	28	2,249

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 30th November, 2011
between the hours of 8pm and 9am**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
192	308	85	585	158	9	752

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 30th November, 2011
between the hours of 8pm and 9am, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
April	44	80	21	145	43	0	188
May	51	84	19	154	40	1	195
June	39	66	31	136	25	1	162
July	55	74	12	141	26	2	169
August	1	1	1	3	11	2	16
September	0	1	0	1	2	1	4
October	0	0	0	0	7	1	8
November	2	2	1	5	4	1	10
Total	192	308	85	585	158	9	752

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 31st July, 2011**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
337	562	188	1,087	405	13	1,505

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 31st July, 2011, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
April	82	152	55	289	115	4	408
May	96	157	47	300	110	3	413
June	75	133	56	264	105	3	372
July	84	120	30	234	75	3	312
Total	337	562	188	1,087	405	13	1,505

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 31st July, 2011
between the hours of 8pm and 9am**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
189	304	83	576	134	4	714

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st April, 2011 and 31st July, 2011
between the hours of 8pm and 9am, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
April	44	80	21	145	43	0	188
May	51	84	19	154	40	1	195
June	39	66	31	136	25	1	162
July	55	74	12	141	26	2	169
Total	189	304	83	576	134	4	714

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st August, 2011 and 30th November, 2011**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
129	243	72	444	285	15	744

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st August, 2011 and 30th November, 2011, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
August	42	57	21	120	81	7	208
September	27	56	16	99	73	3	175
October	28	70	23	121	66	1	188
November	32	60	12	104	65	4	173
Total	129	243	72	444	285	15	744

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st August, 2011 and 30th November, 2011
between the hours of 8pm and 9am**

Emergency			Emergency Total	Urgent	Routine	Total
A	B	C				
3	4	2	9	24	5	38

**Total number of arrivals at Lagan Valley Hospital A&E
between 1st August, 2011 and 30th November, 2011
between the hours of 8pm and 9am, by month**

	Emergency			Emergency Total	Urgent	Routine	Total
	A	B	C				
August	1	1	1	3	11	2	16
September	0	1	0	1	2	1	4
October	0	0	0	0	7	1	8
November	2	2	1	5	4	1	10
Total	3	4	2	9	24	5	38

Appendix III

LV ED Project Board

Board Member	Job Title
Mark Armstrong	Unscheduled Care Manager
Bob Brown	Assistant Director, Learning & Development, Nursing & Primary Care
Roisin Coulter	Assistant Director, Capital and Strategic Development
Colin Fitzpatrick	Clinical Director, Primary Care
Caroline Fleming	Assistant Director, Finance
Tim Harding	Clinical Lead, Medicine
Jeanie Johnston	Head of Communications
Linda-Jayne Martin	Finance Manager
Charlie Martyn	Clinical Director
Charlotte McArdle	Director of Primary Care, Elderly & Nursing
Hugh McCaughey	Chief Executive
Seamus McGoran	Director, Hospital Services
Sean McGovern	Consultant, Emergency Medicine
Yvonne McHugh	Service Improvement Manager
Karen McLveen	Assistant Director, Medicine
Eamonn Molloy	Director, HR and Corporate Affairs
John Simpson	Director, Planning, Performance and Information
Veronica Spence	HR Business Partner
Colin Spratt	Operations Manager, Medicine
Jill Stafford	Consultant, Emergency Medicine

LV ED Project Team

Team Member	Job Title
Mark Armstrong	Unscheduled Care Manager
Brenda Arthurs	Clinical Manager
Simon Au	Consultant Physician, Medicine
Damien Brannigan	Acute Mental Health Hospitals Manager and Lead Nurse, Mental Health
Bob Brown	Assistant Director, Learning & Development, Nursing & Primary Care
Colin Fitzpatrick	Clinical Director, Primary Care
Caroline Fleming	Assistant Director, Finance
Florence Graham	GPOOH Manager
Tim Harding	Clinical Lead, Medicine
Cathal Killen	Departmental Manager, Emergency Medicine
Ruth Marks	Deputy Sister, Emergency Medicine
Linda-Jayne Martin	Finance Manager
Sean McGovern	Consultant, Emergency Medicine
Yvonne McHugh	Service Improvement Manager
Karen McIlveen	Assistant Director, Medicine
Audrey McKelvey	Consultant, Emergency Medicine
Elaine O'Neill	Recruitment, Medical Staffing & Workforce Information Manager
Martina O'Neill	Operations Manager Primary Care, Primary Care / Community Nursing - ICATS
Peter Quinn	GP, Primary Care Partnership representative
David Ross	GP
Veronica Spence	HR Business Partner
Colin Spratt	Operations Manager, Medicine
Jill Stafford	Consultant, Emergency Medicine
Joanne Stevenson	RCN representative
Stephen Tate	Consultant Physician, Medicine
Ruth Watson	Clinical Manager, Emergency Medicine

Appendix IV

LVH ED

Scoring of Options, 14/12/12

Individuals Present - Project Team members plus key stakeholders

Peter Quinn, GP rep, PCP

Joanne Stevenson, RCN rep, SET

John Wright, Station Officer, Bangor Area, NIAS

Nigel Ruddell, Assistant Medical Director, NIAS

Bob Brown, AD, Primary Care & Older People, SET

Sean McGovern, Clinical Director, Emergency Medicine, SET

Susan Thompson, Equality Manager, SET

Linda Jayne Martin, Finance Manager, SET

Ruth Marks, Nursing, ED

Ruth Watson, Clinical Manager, SET

Cathal Killen, Nursing, ED

Linda Whittaker, Nursing, ED

Karen McIlveen, AD, Medicine, SET

Florence Graham, GPOOH Co-ordinator, SET

Colin Spratt, Operations Manager, SET

Mark Armstrong, Unscheduled Care Manager, SET

Tim Harding, Clinical Director, SET

Colin Fitzpatrick, Clinical Director, Primary & Community Care

Audrey McKelvey, ED Consultant, SET

Brenda Arthurs, Clinical Manager, SET

Yvonne McHugh, Planning & Performance Manger, SET