East Midlands Ambulance Service NHS
NHS Trust

Time Required	1 hour 45 mins	Paper No.	PB/12/109

Report to: **PUBLIC BOARD OF DIRECTORS MEETING**

Date: 23 July 2012

Subject:	Being There for Patients – Our Programme to Improve Response Times
Report by:	Phil Milligan, Chief Executive

Purpose of Report

Following discussions at the Board meeting in March, the Trust has discussed the initial proposals for improving performance with staff and other stakeholders and developed the ideas further. The attached paper sets out those proposals including an Estates Strategy and a new Service Model. The Board is asked to support the proposals, such that formal consultation can commence and plans can be finalised.

In addition EMAS and its commissioners have arranged for an independent review of the funding levels to be undertaken. This review is aimed at identifying whether EMAS can achieve the current performance standards within the existing funding structure.

Implications:

Quality (including Patient Safety, Staff Safety, Dignity and Patient Experience)
- These plans will allow the Trust to meet national performance standards.

Human Resources including Equality
- These plans will provide the future skills mix and staff numbers required by the Trust.

Legal
- None

Policy
- None

Financial (including any funding requirements)
- The proposals confirm that the Trust can achieve the national performance targets and make a contribution to efficiency. The Estates Plan will be merged into the Trust's Capital Plan.

Media/Communications
- None

Details of any identified risk(s):	**Risk Assessment**		
Details are contained within the paper.	**Consequence** (A)	**Likelihood** (B)	**Score** (A x B)
Details of mitigation of identified risk(s):	Not applicable		
This paper links to the following Trust Strategies:	Not applicable		
This paper links to the following Strategic Objectives:	Not applicable		

East Midlands Ambulance Service NHS Trust

Recommendation(s)

That the Trust Board:

- Approves the New Service Model
- Agrees the Estate Strategy prior to consultation on the document
- Notes that the independent review is likely to advise that additional funds and/or further change is needed to meet future performance standards.

Management of Item *delete tick boxes as appropriate)*	PMO: Level 1 Level 2	Function ☑

East Midlands Ambulance Service NHS
NHS Trust

Being there for patients –
Our programme to improve response times

1 INTRODUCTION

1.1 At its Board meeting in March, the Trust Board received an outline of the proposals to improve performance. These included the Service Model, the Estates Strategy and the Management Structure. The approach was called 'Being the Best', because we had been able to look at what other ambulance services have been doing and to pull together the learning into a single coherent programme.

1.2 The Board agreed that we should start sharing the possibilities with staff and the public whilst formal proposals were drawn up.

1.3 Over the past three months, we have shared the proposals, gained some feedback and now make recommendations for the future. The sharing has been in the form of media presentations (radio, television and printed), internal bulletins and presentations to Commissioning Groups and Overview and Scrutiny Committees.

1.4 The planning has continued and the Board is now asked to consider the proposals, with the expectation that there will be formal consultation on some aspects prior to implementation. There will need to be formal consultation with the public and other stakeholders with regards to the Estates Strategy. There will need to be formal consultation with staff with regards to the impact of the service model.

1.5 The Board is asked to support the proposals, such that formal consultation can commence and plans can be finalised.

2 BACKGROUND

2.1 East Midlands Ambulance Service has not been achieving its response time targets, these are:

- A8, to provide an emergency response to 75% of patients with life threatening emergency conditions within 8 minutes of the call
- A19, to provide an ambulance to 95% of patients with the most life threatening conditions within 19 minutes of the call

2.2 It has been proposed that the 'Red 1 target' be increased to 80% in April 2013

2.3 EMAS has not achieved its current performance goals for 3 years, although the A8 standard was achieved in 2011/12 (table below):

	2009/10	2010/11	2011/12	2012/13 Q1
A8	73.72%	72.38%	75.15%	75.03%
A19	96.53%	93.54%	92.32%	94.84%

2.4 The performance standards are set at regional level, yet many local authorities and clinical commissioning groups are keen to ensure that response times are the same in rural areas as town and city centres.

2.5 Our response at county level is very varied, with some counties being able to achieve the national standards and others that have not (see table below):

		2009/10	2010/11	2011/12	2012/13 Q1
Leicesteshire/ Rutland	A8	74.97%	74.13%	77.41%	79.33%
	A19	97.19%	94.75%	93.39%	97.02%
Nottinghamshire	A8	72.37%	71.64%	75.25%	73.19%
	A19	97.48%	95.32%	95.71%	96.52%
Derbyshire	A8	70.43%	70.51%	75.48%	73.94%
	A19	95.68%	93.68%	93.71%	95.78%
Northamptonshire	A8	77.04%	73.26%	71.13%	73.57%
	A19	97.60%	95.43%	93.54%	94.78%
Lincolnshire	A8	75.39%	72.70%	74.79%	75.06%
	A19	95.10%	89.45%	86.35%	90.68%

2.6 The local and national media coverage of EMAS performance has been poor, with coverage citing very long waits for some patients, including:

- Mrs R (Leicestershire) had fallen at home; her ambulance arrived after 90 minutes. All vehicles were otherwise occupied on other calls.
- Mrs P (83 years old, Northamptonshire) had fallen in the town centre; she had an obvious fracture of the arm. The first available ambulance arrived within 2 hours and 10 minutes. During this time, Mrs P was outdoors and it was raining intermittently.

2.7 Despite the response times, the Trust has been able to demonstrate appropriate clinical care - evidenced by the number of compliments received, reasonable performance against its peers using the Clinical Quality Indicators (see the Trust Integrated Performance Report), the patient survey results and the 'Net Promoter Score (see Integrated Performance Report).

2.8 In order to improve performance, EMAS has been reviewing its response approach. It has already made some improvements – as shown in the Q1 2012/13 performance position (sections 2.2 and 2.3). The actions include:

- Investment in the Clinical Assessment Team (to increase the number of calls resolved by telephone)
- Removing the 'ring fence' on Emergency Care Practitioners.
- Piloting urgent care vehicles, Police/Ambulance cars and hospital liaison officers

2.9 However, these have been possible only with additional non-recurrent funds and transformational support. These include:

- 'Winter monies' during Q4 2011/12 (trialling urgent care vehicles, GP 'ring back' schemes, Hospital Ambulance Liaison Officers)
- Transformational funds in Leicestershire, Nottinghamshire, Northamptonshire and Derbyshire in 2012/13

3 AIMS AND OBJECTIVES

3.1 The EMAS Vision is to be: a leading provider of high quality and value for money clinical assessment and mobile healthcare.

3.2 The Trust has a Quality Strategy that sets out how we will continue to develop the quality of clinical care, improve the patient experience and ensure appropriate clinical outcomes. Our Quality Strategy can be found on the Trust's web site.

3.3 This vision will be achieved by a strategy based on: "Being there when patients need us and thereby strengthening our position in integrated healthcare and regional resilience", that is, 'Right Care, Right Time, Right Place'.

3.4 On the basis of the performance set out in section 2, it is clear that the Trust is not achieving its ambition and therefore a programme to address this is necessary.

3.5 The Trust, in addition to delivering a high quality clinical service and meeting the performance standards is also required to work within the funds available. For the next few years, the Cost Improvement Programme requires efficiencies of £29.6m to be achieved.

3.6 A review has been undertaken to see how the Trust can not only meet the challenge of national targets but also achieve local targets and improve the support provided to its staff. The programme has included:
- A review of our Estate and how we use it
- A review of the 'Service Model', i.e. the nature of the response that we give when we receive a 999 call
- An independent review, jointly commissioned with the PCT Clusters that provide NHS funding to EMAS.

3.7 Each of these reviews have been supported by an expert modelling company (Process Evolution) using EMAS activity data.

4 OUR ESTATE

4.1 The Estate Plan (**Paper 1** attached) describes the current estate, identifies a £13m backlog maintenance deficit and confirms that the estate undermines our ability to respond quickly to calls.

4.2 The strategy proposes the establishment of 'hubs', which would be larger stations, which are strategically placed to support crews based at Tactical Deployment Points ('standby points') when they are not with patients.

4.3 This arrangement will not only lead to improved performance (by up to 5% A8 target), but also give the opportunity for the Trust to give better support to our clinical staff. Hubs will have the staff and facilities for clinicians to be provided with serviced, clean and stocked vehicles at the beginning of each shift. They will also provide more opportunity for clinicians to meet with their team leaders, improving communications and early resolution of any issues.

5 OUR SERVICE MODEL

5.1 Our service model (**Paper 2** attached) sets out how we will ensure that we provide patients with the right response when a 999 call is made.

5.2 Some patients will be offered advice over the telephone, by our expanded Clinical Assessment team, based in the call centres. The Trust aims to increase the number of calls resolved in this way, in doing so it ensures that our ambulance crews are reserved for those patients that need that service.

5.3 When we send an ambulance crew, we will respond at one of three levels:

- A Paramedic response, where there is an emergency needing a fast response
- An Emergency Care Practitioner, where our nurses or paramedics with extra skills can help a patient to access other services and/or to stay at home
- An urgent care response, where there is not a life threatening emergency, the patient has been assessed by a healthcare professional and a journey to a hospital or other healthcare facility by ambulance is needed.

5.4 The model allows the Trust to identify how many staff of each skill level are needed, the hours of work that need to be covered (shift patterns) and what type of vehicle should be used (e.g. double crew ambulance, fast response vehicle or urgent care vehicle).

6 INDEPENDENT REVIEW

6.1 EMAS and its Commissioners have commissioned an independent review of the funding levels. This review is aimed at identifying whether EMAS can achieve the current performance standards within the existing funding structure.

6.2 The report is due to be published in September.

6.3 However, the Process Evolution work supporting the service model and estate strategy has identified that the Trust is not able to achieve current or future performance standards unless it changes the way it works and/or has additional funds.

6.4 The review shows that the Trust can achieve the national performance targets, at Trust level, with current resources but with limited ability to implement the efficiency programme.

6.5 The review also shows that the Trust could, if it implemented the optimisation programme (including the shift changes, estates strategy and service model) achieve the national targets and make a contribution to the efficiency requirements.

6.6 However, the review also shows that achieving consistent performance across all divisions would not be possible

6.7 The review summary is set out in the table below:

	Current resources without optimisation programme	Current resources with optimisation programme	Additional investment and/or innovation
A8 75	✓	✓	X
A8 80	X	X	✓
A19	✓	✓	✓
G1	X	X	✓
G2	X	X	✓
Efficiency	X	✓	✓
Lincolnshire	X	X	✓

6.8 Should these findings be confirmed in the independent review, then the Trust will need to negotiate additional funds and/or identify further innovations to address the performance gaps.

6.9 A number of new approaches are currently being trialled, using non-recurrent funds. These will be discussed with commissioners in readiness for the 2013/14 commissioning round.

- The Police/Ambulance pilots (POLAMB) in town and city centres – ensuring the ability to provide a fast response in areas where crime, violence or aggression is probable.
- Cycle Response Unit, in Leicester City Centre, allowing faster response where heavy traffic is often a hindrance to four wheeled vehicles.
- Mobile treatment centres, providing support where crowds gather (e.g. night time city centres) and where 'drying out' facilities will help to prevent the need for a journey to hospital.
- Community First Responders and Fire Service Co-responders, where volunteers can help to provide immediate assistance whilst the ambulance is dispatched.

7 SUMMARY AND CONCLUSION

7.1 To continue to implement our quality strategy and to meet current and future performance standards, EMAS has to change.

7.2 If we choose not to implement change, we will (quite simply) not be able to meet patients' needs - as defined by response times - nor the financial challenges.

7.3 The Estates Plan and Service Model show how we can achieve current performance standards, using the resources that we currently have. The independent review will tell us whether the Trust can achieve even more within its current resources or whether further change and/or funding is needed to meet the new national standards and performance at county level.

7.4 It is likely that any funding gap will require the Trust to find further innovations to help performance to improve.

8 RECOMMENDATIONS

8.1 The Board is asked to approve the New Service Model and agree the Estate Strategy prior to consultation on the document and to note that the independent review is likely to advise that additional funds and/or further change is needed to meet future performance standards.

East Midlands Ambulance Service NHS
NHS Trust

Supporting Paper 1

Estates Plan

Supporting faster responses

Contents

1. EXECUTIVE SUMMARY

1.1 East Midlands Ambulance NHS Trust has an extensive estate that supports the provision of emergency, urgent care and patient transport services to a population of 4.8 million in the six counties of Derbyshire, Leicestershire, Rutland, Lincolnshire (including North and North East Lincolnshire), Northamptonshire and Nottinghamshire.

1.2 Many of the Trust's existing premises are very dated and in poor physical condition with substantial backlog maintenance requirements. We have too many stations relative to need and in many cases, they are larger than required.

1.3 In sustainability terms, they are inefficient and have a significant impact on the environment. To bring the Trust's existing estate fully up to NHS standards would require a financial investment of circa £12.5m.

1.4 Over recent years we have seen a significant increase in the number of emergency calls we receive and this has resulted in most being responded to by ambulance crews already out on the road. For the majority of the day our stations are empty. As the pattern of emergency calls has changed over the last few decades our stations are no longer in the best locations and there is an opportunity to improve our services to patients by operating from optimal locations.

1.5 In the Trust's Estates Strategy presented in April 2012, a focus on improving the following areas was prioritised.

a) Service Performance;
b) Quality of Estate
c) Staff Welfare
d) Equality
e) Health & Safety;
f) Environmental
g) Value for Money

1.6 Our proposed solution offers the opportunity to provide improvement against each of these.

1.7 Combining the best of external advice and internal knowledge we have reviewed our estates configuration and propose, subject to consultation, to move from a model of 66 ambulance stations and 153 "standby points" (the vast majority of which are not facilitated) to a model consisting of 13 large hubs and 131 tactical deployment points of which most will be facilitated either with a modular unit or with a partner organisation. Providing our frontline staff with a hot drink and toilet facilities when they are at deployment points, we believe, will materially improve staff morale and overall performance to the benefit of patients.

1.8 Our proposed estates reconfiguration model will improve patient care by enabling a considerable performance improvement in comparison to our current configuration. This performance improvement will be seen not only in our most urgent responses (Red 8 and Red 9) but also for green responses.

1.9 Our proposed configuration will support our ambitions for providing better support to our clinical staff. Our proposed thirteen hubs will provide an environment where:

- Staff and team leaders will have the opportunity to meet regularly at the beginning and end of shifts, gaining access to support from colleagues and better communication more generally.

- We will be able to considerably improve the way in which we clean, service and re-stock vehicles ready for staff to use at the beginning of each shift.

1.10 We will provide training facilities to enable local provision of training, education and development reducing the need for our staff to travel long distances to our three existing training sites.

We have carefully considered the economics of modifying our estates configuration and outline how over a five year programme the proposed model can be funded through capital receipts, will provide lower running cost and a considerable reduction of backlog maintenance.

1.11 Importantly we will maintain a presence in all of the towns where we currently have stations.

1.12 The proposals will require consultation with staff, patients and other stakeholders.

2. BACKGROUND

2.1 East Midlands Ambulance Service faces significant challenges including difficulties achieving its response time targets, which are:

- A8, to provide an emergency response to 75% of patients with life threatening emergency conditions within 8 minutes of the call
- A19, to provide an ambulance to 95% of patients with the most life threatening conditions within 19 minutes of the call

2.2 This paper sets out the approach to reviewing our estate and how the proposed new configuration will:

- provide the basis for enhanced performance and patient care
- reduce unnecessary costs and contribute to CIP challenges
- provide better facilities for our frontline staff

2.3 As well as providing frontline staff with a suitable environment to be based at, we believe it to be important for clinical personnel to have the opportunity to meet with their team leader either at the beginning or end of their shift so their support and development needs can be met. This happens very infrequently at present.

2.4 We also want our clinical staff to spend less time checking and preparing their vehicles because we believe their skills are better deployed treating patients. To achieve this, an integral part of our Estates plan is for the provision of “make ready” facilities at the main hub stations we propose to develop. This means a dedicated team would be engaged to clean vehicles to a high standard, replenish stocks of medical equipment and check the vehicles’ roadworthiness so that when clinical staff report for duty, they can immediately respond to 999 calls. This model already operates in some of our premises and has proven to be very beneficial.

2.5 We are a mobile healthcare organisation and our crews work in the community delivering emergency care and transport where it is most needed. We don’t treat patients in ambulance stations and whilst many may have fulfilled an important role in years gone by (when call volumes were significantly lower) frontline staff now spend the vast majority of their working day ‘on-the-road.’ As a result, stations only serve as garages. Furthermore, every pound spent on maintaining stations is one pound less available to be spent on frontline services.

2.6 This paper sets out the results from that Estates review and recommends a new configuration for the Trust’s Estate.

2.7 Over the 5 year period which the proposals will be introduced, we will be able to:

- significantly improve performance and patient care
- materially improve the conditions for staff
- reduce revenue expenditure on estates
- reduce the £12.5m backlog maintenance costs to zero
- reduce EMAS’ carbon emissions

2.8 Our modelling work also suggests that we can accomplish this programme without additional investment i.e. receipts from sale of premises and land will be broadly equal to investment in new hub premises and facilitated deployment points.

An outline indicative sequence for delivery of the programme has been developed which will only be finalised after full public consultation.

3. OUR APPROACH

3.1 The Trust has taken an evidence based approach to reviewing our estate and engaged external support where key skills were not available in-house.

3.2 We have engaged specialist external consultants – Process Evolution - who have used sophisticated modelling software to identify the optimal locations for crews to be positioned at and this has informed the new proposed Estates model. The factors taken into account included;

- An analysis of actual activity over the last 12 months, i.e. the number of calls received and responses made
- An analysis of planned and actual resource outputs, i.e. when a vehicle makes a journey to a patient
- Modelling optimal theoretical locations from which to respond.
- An analysis of the potential impacts on staff travel to work.
- Reviewing the theoretical outputs with operational teams in our divisions who have local knowledge, experience and expertise.

3.3 In addition, we engaged external consultants (qualified chartered surveyors) to visit each of our sites and prepare a portfolio (containing rich data and photographs) providing a clear insight into the condition of our premises linked to the proposed solution above. This allowed us to develop an economic model for the overall plan taking into account likely disposal values for potentially surplus estate (and cessation of lease payments where the estate is leased) and likely investment costs for new estate.

3.4 We have sought to identify hub formations with sufficient scale to allow frontline staff to have access to a team leader, to be able to provide staff training, vehicle servicing and make ready activities on site. We estimate approximately 120 staff at a site provides this critical mass.

3.5 An overview of Process Evolution's methodology is provided at annex 1.

4. CURRENT ESTATE

4.1 Our current estates configuration is shown at annex 2 and was described in further detail in the Estates Strategy including details of investment necessary to reduce the backlog maintenance highlighted through the most recent 6 facet review.

4.2 The majority of our estate is owned, and mostly built in the 40 year period between 1955 and 1994 although some is older still. Located to suit operational and boundary conditions then in force, our estate is no longer ideally suited to current operational requirements or boundaries now in place.

5. PROPOSED ESTATE PLAN

5.1 Our proposed solution sees our existing operational infrastructure which currently consists of 66 ambulance stations and 153 standby points (the vast majority of which are not facilitated, that is our staff do not have easy access to a hot drink or a toilet facilities) to a model consisting of 13 large hubs (annex 3) and 131 Tactical Deployment Points where most will be facilitated either with a modular unit (see annex 4) or co-located with a partner organization, such as other emergency services.

5. 2 The Trust has in recent months been talking to a number of partner organisations and believe there is a willingness to work together to share real estate for mutual benefit. These include police services, fire services and community health organizations.

5.3 The optimised estates configuration is shown in a map provided at annex 3, together with a list of proposed Tactical Deployment Points.

5.4 In essence there is a considerable potential improvement to performance that could be achieved by moving the locations from which we respond to calls. Many of the suggested movements of tactical deployment points to optimised locations appear to be small movements but in aggregate these changes produce a significant potential uplift to performance.

5.5 The locations of the hubs have relatively little impact on performance compared to the location of tactical deployment points but the hubs provide the basis for a range of other improvements.

5.6 It is recognized that hubs will have an impact on staff travel, this has been modeled and shows an average increase of 3 minutes. During the consultation process, we will look at the impact on individuals further

5.7 13 new build hubs housing several hundred staff on average will afford the opportunity to design fit for purpose buildings with low maintenance costs. Indicative staff numbers by hub are as set out in table 1, below:

Hub	**Indicative staff Numbers**
Derby	213
Chesterfield	217
Nottingham	245
Kings Mill	147
Leicester	253
Loughborough	133
Northampton	129
Kettering	132
Lincoln	101
Algarkirk	102
Elsham	146
Skegness	103
Sleaford	69

Table 1, proposed hubs

5.8 The indicative improvement in performance is shown in table 2, below :

Derbyshire/Notts.	Red 8	Red 19	Green 1	Green 2
Current Estate	75.3%	95.4%	85.3%	83.7%
Move Staff to 13 Hubs (PTL Locations)	80.6%	96.7%	89.5%	88.7%

Leics./Northants	Red 8	Red 19	Green 1	Green 2
Current Estate	75.0%	94.4%	82.0%	80.7%
Move Staff to 13 Hubs (PTL Locations)	79.3%	96.0%	88.9%	89.1%

Lincolnshire	Red 8	Red 19	Green 1	Green 2
Current Estate	74.0%	88.5%	73.8%	81.7%
Move Staff to 13 Hubs (PTL Locations)	75.1%	89.8%	75.2%	82.7%

Table 2, expected performance

6. ECONOMIC ANALYSIS

6.1 Reducing the number of stations has a number of economic implications and these are summarised in table 3, below, with a full table provided as annex 5:

Indicative Capital Receipts	Indicative Capital Investment	Indicative Project Management Costs	Avoided backlog maintenance investment.
£29.8m	£28.7m	£1.5m	£9m

Table 3, Summary of Indicative Capital Receipts and Capital Expenditure.

6.2 By year 5 of the programme the Trust estimates running costs will be reduced on a recurrent basis by approximately £548k per annum reflecting a smaller more modern estate. It is anticipated that there will be fuel savings due to a smaller number of miles travelled by Trust vehicles as a result of the optimised estates configuration although firm figures have not at this stage been calculated.

6.3 The Trust has a number of buildings which are leased and the life of the programme these can be exited and annual savings of approximately £172k could be made.

6.4 It is also believed there are opportunities to reduce drugs wastage, improve the efficiency of the distribution of medical consumables, medical gases and the servicing of medical equipment although these benefits have not been quantified at this stage. Additionally there will be an opportunity for the Trust to locate large fuel bunkers at each Hub and benefit from volume purchases of diesel as well as support operational resilience.

6.5 With training facilities designed in to each hub there will be a reduced requirement for central training educational facilities. The Trust currently operates from three sites but would potentially only require one when all hubs are in place. It is proposed divisional management will be located in operational hubs.

6.6 Annex 5 outlines in more detail the economic impact of the programme including an indicative sequence of activity to match capital receipt and investment in each financial whilst prioritising estate changes that most enhance performance.

7. IMPLEMENTATION

7.1 Implementing an estates reconfiguration of this scale will require a well resourced, multi-disciplinary team and it proposed that this is formed on approval of the proposed estates plan. It is further proposed that the team will co-ordinate the consultation process and develop a full business case to the timescales indicated below. The proposed timetable is set out below (table 4), it can be seen that it could take up to 5 years to fully implement.

Activity	**Commence**	**Complete**
Prepare for Consultation	1 August	31st August
Consultation (13 weeks).	1st September	3oth[t] November
Review feedback from Consultation and re-run model as necessary.	1st December	15th December
Develop detailed full business case and implementation plan.	1st December	31st December
Present to Trust Board	January 2013	-
Implement	January 2013	December 2017

Table 4, Indicative Timetable

7.2 Both the consultation process and the development of a full business case will require investment and some external support. It estimated that £180k will be needed to facilitate these activities and may be drawn from the capital programme.

8. RISKS

8.1 There are a number of risks inherent with an estates reconfiguration of this scale and these will be addressed and mitigated further during the preparation of the full business case following consultation. The initial list is shown in table 5, below:

Risk	Impact	Potential Mitigation
Surplus property proceeds are insufficient to fund replacement estate or receipts are delayed.	An inability to complete programme or material delay to plan.	Intelligent disposal programme. Careful sequencing of disposal and development programme. Secure maximum economies of scale when procuring new estate.
Significant stakeholder opposition to overall estates reconfiguration.	Delay to programme and benefits.	Production of carefully prepared consultation plan so that patient and staff benefits are clearly articulated. Feedback carefully considered and incorporated into revised plan as appropriate.
Whilst performance improvement across all divisions is forecast, all operational change has the potential to produce unequal improvement and potentially deterioration at a more local level.	Patients could be adversely affected in some areas even though overall performance sees an improvement.	Detailed analysis and rigorous local planning to ensure as many patients as possible derive a benefit from the reconfiguration.
Staff travel time from home to Hub and from Hub to tactical deployment point is excessive despite the average increase being c.4mins in home to station(Hub) . Travel to 32 Tactical Deployment is in excess of 20 minutes.	Additional costs through need to make protected payments and negative impact on staff morale.	Rigorous analysis, careful planning and detailed change management together with thorough consultation
Drop in performance during transition.	Patients adversely affected	Careful planning, fully resourced change team with a key focus on effective communications.

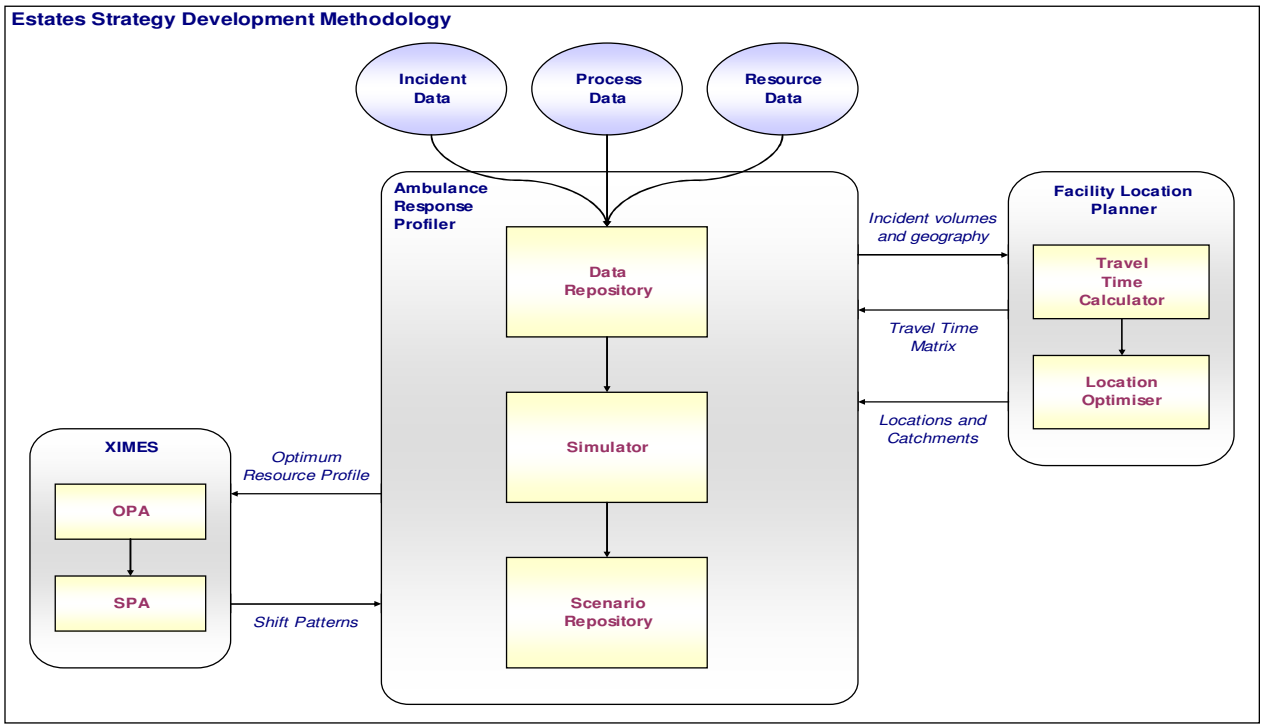
Table 5, Key risks

9. RECOMMENDATION

9.1 The Board is asked to note the compelling case for an estates reconfiguration, to approve the Estate Plan, including expenditure of £175k to undertake consultation and to prepare a full business case to return to the Board for approval in November 2012, with the results of consultation having been taken into account.

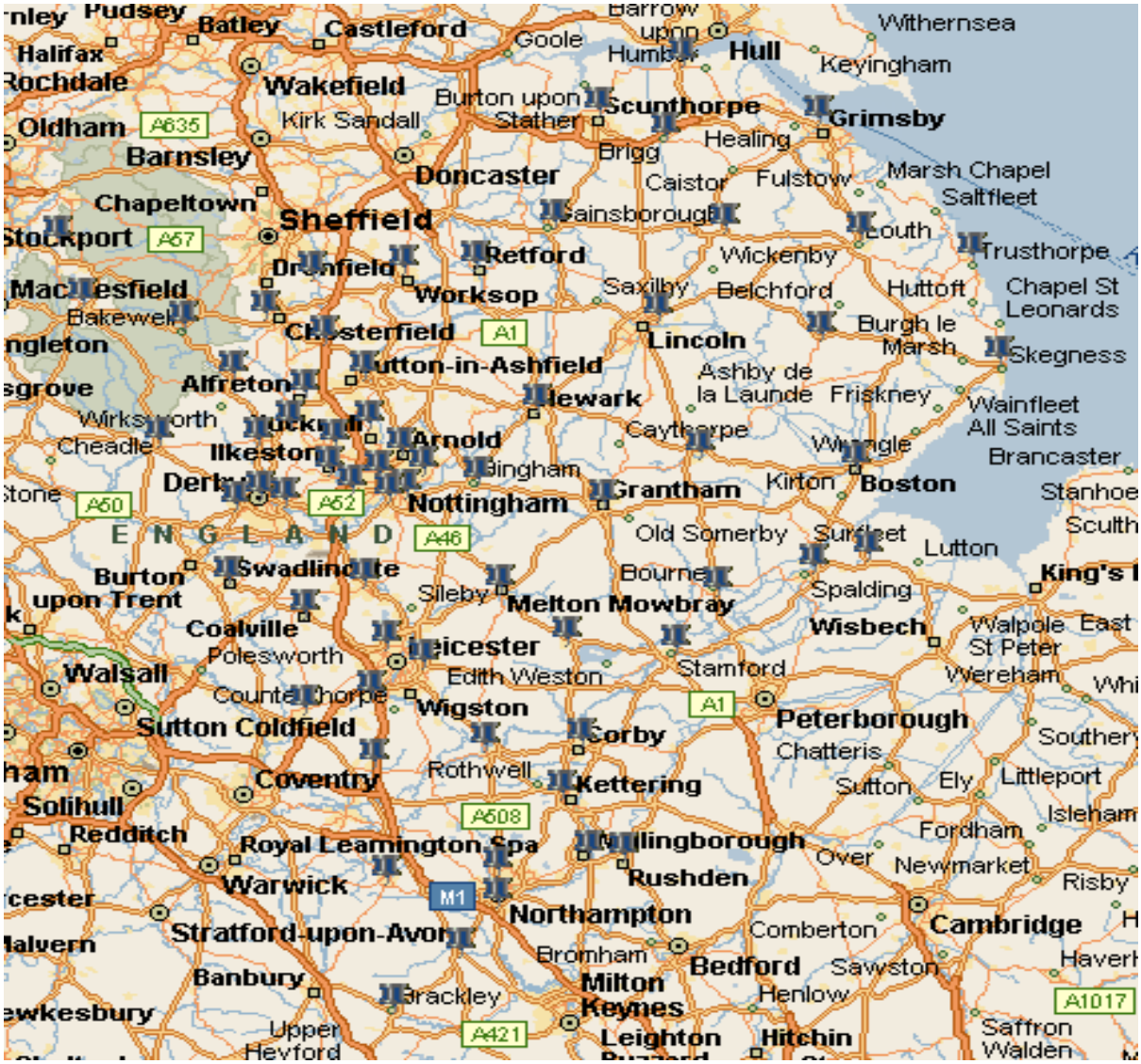
Annex 1:

Process Evolution Technology and Methodology.



At the heart of this toolset is computer simulation modeling – the ability to run many 'what-if' scenarios which predict the impact of proposed changes to location of the estate on performance.

Map of Current East Midlands Ambulance NHS Trust Estates Configuration.



Stations are currently found at the following locations.

Derbyshire

Stations
Alfreton
Ashbourne
Bakewell
Belper (Babington Hosp)
Buxton
Chesterfield
Eckington
Heath
Ilkeston
Long Eaton (Stapleford)
Matlock
Mickleover
New Mills
Raynesway
Ripley
Swadlincote
Willow Row

Nottinghamshire

Stations
Arnold
Beechdale
Carlton
Eastwood
Hucknall
Kings Mill
Newark
Retford
Stapleford
West Bridgford
Wilford
Worksop

Leicestershire and Rutland

Stations
Coalville
Goodwood
Gorse Hill
Hinckley
Loughborough
Lutterworth
Market Harborough
Melton
Narborough
Oakham

Northamptonshire

Stations
Brackley
Corby
Daventry
Kettering
Mereway
Northampton North
Rushden
Towcaster
Wellingborough

Lincolnshire

Stations
Lincoln
Barton
Scunthorpe
Brigg
Grimsby
Gainsborough
Market Rasen
Louth
Mablethorpe
Horncastle
Skegness
Sleaford

Lincolnshire (cont)

Boston
Grantham
Holbeach
Spalding
Bourne
Stamford

Annex 3.

Recommended Estates Configuration

Proposed Hubs

Area	Hubs
Derbyshire/Notts.	Chesterfield
Derbyshire/Notts.	Derby
Derbyshire/Notts.	Kings Mill
Derbyshire/Notts.	Nottingham
Leics./Northants	Kettering
Leics./Northants	Leicester
Leics./Northants	Loughborough
Leics./Northants	Northampton
Lincolnshire	Algarkirk
Lincolnshire	Elsham
Lincolnshire	Lincoln
Lincolnshire	Skegness
Lincolnshire	Sleaford

LEICESTERSHIRE/RUTLAND/NORTHANTS	DERBYSHIRE/NOTTS
Tactical Deployment Points	Tactical Deployment Points
Swadlincote (E01019876)	Stapleford (E01028090)
Coalville (E01025936)	Eastwood (E01028116)
Leicester West (E01013632)	Nottingham Central (E01013920)
Loughborough (E01025715)	Underwood (E01027993)
Ratcliffe (E01025769)	Arnold (E01028165)
Hinkley (E01025858)	Nottingham North (E01013879)
Ashby (E01025917)	West Bridgford (E01028401)
Gorse Hill (E01025623)	Mansfield (E01028275)
Melton (E01025894)	Newark (E01028294)
Leicester Centre (E01013646)	Clifton (E01013906)
Wigston (E01025992)	Warsop (E01028223)
Blaby (E01025646)	Carlton (E01028171)
Shepshed (E01025740)	Bingham (E01028360)
Goodwood (E01013767)	Sutton-in-Ashfield (E01027968)
Oakham (E01013798)	New Ollerton (E01028339)
Market Harborough (E01025794)	Retford (E01028011)
Leicester NE (E01013734)	Worksop (E01028042)
Wellingborough (E01027344)	Kings Mill (E01027973)
Oundle (E01027047)	Basford (E01013830)
Great Billing (E01027174)	Normanton (E01013570)
Hardingstone (E01027201)	Allestree (E01013461)
Barton Seagrave (E01027086)	Brimington (E01019552)
Rushden (E01027064)	New Mills (E01019744)
Towcester (E01027297)	Derby South (E01013497)
Stanwick (E01027074)	Matlock (E01019623)
Daventry (E01026992)	Chaddesden (E01013511)
Brackley (E01027264)	Ripley (E01019454)
Kettering (E01027117)	Derby West (E01013543)
Northampton SW (E01027252)	Creswell (E01019497)
New Duston (E01027208)	Long Eaton (E01019708)
Northampton North (E01027147)	Heath (E01019800)
Desborough (E01027093)	Alfreton (E01019404)
Northampton NW (E01027172)	Renishaw (E01019815)
Corby (E01026949)	Ashbourne (E01019598)
Northampton City Centre	Buxton (E01019716)
Loughborough Hub	Belper (E01019408)
	Heanor (E01019433)
	Clay Cross (E01019775)
	Dronfield (E01019785)
	Chesterfield South (E01019575)
	Ilkeston (E01019673)
	Langwith (E01019506)
	Whittington (E01019542)
	Derby City Centre
	Nottingham City Centre
	Newark North

LINCOLNSHIRE

Tactical Deployment Points
Waddington (E01026185)
Cleethorpes (E01013163)
Consingsby (E01026054)
Horncastle (E01026066)
Grimsby (E01013211)
Sutton Crosses (E01026254)
Immingham (E01013177)
Barton (E01013255)
Scawby (E01013325)
Chapel St Leonards (E01026048)
Crosby (E01013301)
Sleaford (E01026229)
Stamford (E01026289)
Lincoln SW (E01026172)
Morton (E01026341)
Gainsborough (E01026383)
Brumby (E01013318)
Grantham (E01026320)
Boston S (E01026040)
Spalding (E01026269)
Lincoln NE (E01026394)
Trusthorpe (E01026109)
Louth (E01026089)
Skegness (E01026084)
Holbeach (E01026252)
Market Deeping (E01026334)
Algarkirk
Elsham

Example Modular Facilitated Tactical Deployment Point

Courtesy of West Midlands Ambulance Service NHS Trust

Indicative Economic impact of the Estates re-configuration

EAST MIDLANDS AMBULANCE SERVICE

Proposed Investment & receipts Programme: New Hubs and TDP's

					Proposed Investment Programme						
Area	Hub Reference	locations requiring investment - 13 Hub model	£ existing location - refurb/redevelop	£ new location - land and building	2012/13	2013/14	2014/15	2015/16	2016/17		
Derby/Notts	1	1 New		£2,513,836			£2,513,836				
Derby/Notts	2	1 New		£2,301,208			£2,301,208				
Derby/Notts	3	1 New		£2,035,800			£2,035,800				
Derby/Notts	4	1 New		£2,295,176			£2,295,176				
Derby/Notts		34 New modular		£1,360,800		£1,360,800					
Leic/Northants	5	1 Retained	£1,945,084					£1,945,084			
Leic/Northants	6	1 Retained	£1,583,400					£1,583,400			
Leic/Northants	7	1 New		£2,020,720				£2,020,720			
Leic/Northants	8	1 New		£1,808,092				£1,808,092			
Leic/Northants	Facilitated TDPs	30 new modular		£1,197,200			£1,197,200				
Lincs	9	1 New		£2,130,804					£2,130,804		
Lincs	10	1 New		£1,872,936					£1,872,936		
Lincs	11	1 New		£1,610,544					£1,610,544		
Lincs	12	1 Retained	£1,300,650					£1,300,650			
Lincs	13	1 New		£1,726,660					£1,726,660		
Lincs	Facilitated TDPs	26 new modular		£1,051,200					£1,051,200		
TOTAL			**£4,829,134**	**£23,924,976**		**£1,360,800**	**£10,343,220**	**£8,657,946**	**£8,392,144**	Total Investment	**£28,754,110**
Capital Receipts						**£2,172,836**	**£10,625,231**	**£8,677,359**	**£8,373,707**	Total Capital Receipts	**£29,849,133**
Variance						812,036	282,011	19,413	-18,437	Variance	**£1,095,023**

Reccuring Savings from current Leaseholds	**£171,678**
Estimated recurring costs for TDP groundleases	**£171,437**
Estimated backlog Maintainance Costs avoided	**£9,000,000**
Recurrent estates running costs saving	**£547,500**

East Midlands Ambulance Service NHS
NHS Trust

Paper 2

Operations Service Delivery Model

The right response

Pete Ripley – Director of Operations
Richard Henderson – Assistant Director of Operations

12th July 2012

1 EXECUTIVE SUMMARY

1.1 The EMAS core service is emergency and urgent (unscheduled) care, which encompasses 999 calls from members of the public and urgent transfer requests from healthcare professionals. The Trust also provides a range of specialist services such as;-

- Patient Transport Services
- Specialist transfers
- Bariatric transfers
- Emergency Preparedness and Business Continuity
- Hazardous Area Response Team (HART)

1.2 Over the last five years, the Trust has experienced a 5% year on year increase in 999 calls (requests for assistance), with approximately 771,000 in 2011/12 and d 587,000 deployments.

1.3 The service has struggled to meet response standards for the past 3 years and even though there are improvements (with the A8 standard having been achieved in 2011/12 and Q1 2012/13) it is still not meeting the A19 standard.

1.4 In addition to the national standards, there are local standards for less urgent calls (green calls), these are also not being met and some patients are waiting far too long for a response.

1.5 This paper proposes a new service model, building on the pilots trialled during Q4 and some changes to shift patterns that will ensure that staff availability matches the demand patterns.

1.6 The paper is supported by analysis from Process Evolution, an expert modelling company. The results shown presume that the changes proposed in the Estates Strategy are adopted – i.e. a hub model, supported by tactical deployment points.

1.7 The results of the modelling show that considerable performance gains can be achieved with the existing resources.

1.8 However, it will be difficult to achieve future, more demanding and/or local standards without further change and/or investment.

2 BACKGROUND AND CONTEXT

2.1 <u>National Standards</u>

2.1.1 National standards have been set that require ambulance services to provide responses within time standards, these are:

- A8, to provide an emergency response to 75% of patients with life threatening emergency conditions within 8 minutes of the call
- A19, to provide an ambulance to 95% of patients with the most life threatening conditions within 19 minutes of the call

2.1.2 There are also local standards, requiring responses to less urgent (green) calls within 30 minutes.

2.1.3 EMAS has not achieved its current performance goals for 3 years, although the A8 standard was achieved in 2011/12 (table below):

	2009/10	2010/11	2011/12	2012/13 Q1
A8	73.72%	72.38%	75.15%	75.03%
A19	96.53%	93.54%	92.32%	94.84%

2.1.4 The performance standards are set at regional level, yet many local authorities and clinical commissioning groups are keen to ensure that response times are the same in rural areas as town and city centres.

2.1.5 Our response at county level is very varied, with some counties being able to achieve the national standards and others that have not (see table below):

		2009/10	2010/11	2011/12	2012/13 Q1
Leicesteshire/Rutland	A8	74.97%	74.13%	77.41%	79.33%
	A19	97.19%	94.75%	93.39%	97.02%
Nottinghamshire	A8	72.37%	71.64%	75.25%	73.19%
	A19	97.48%	95.32%	95.71%	96.52%
Derbyshire	A8	70.43%	70.51%	75.48%	73.94%
	A19	95.68%	93.68%	93.71%	95.78%
Northamptonshire	A8	77.04%	73.26%	71.13%	73.57%
	A19	97.60%	95.43%	93.54%	94.78%
Lincolnshire	A8	75.39%	72.70%	74.79%	75.06%
	A19	95.10%	89.45%	86.35%	90.68%

2.1.6 In April 2013, it has been proposed that the 'Red 1 target' be increased to 80%

2.1.7 Some of the achievements in improvement have been due to additional 'winter funds' and transformation support from the PCTs. The cessation of winter funds, at the end of March, in part explains why performance in Q1 2012/13 is matched by overspends in operational budgets.

2.2 Clinical roles

2.2.1 EMAS currently employs the following staff on its 'frontline':

- Emergency Care Practitioners (ECPs), paramedics or nurses with additional training and a wider range of skills than the paramedic role
- Paramedics, who have a nationally recognised qualification and are professionally registered. Paramedics provide the 'standard' ambulance service response. Paramedics are autonomous practitioners.
- Technicians, who are trained to a consistent national standard to support paramedics and to undertake a range of assessments and clinical interventions.
- Emergency Care Assistants, who are trained to support paramedics and ECPs.
- Accident and Emergency Clinical Students, who are able to support paramedics and ECPs whilst undertaking formal paramedic training within the Trust.

2.3 Commissioning Landscape

2.3.1 The commissioning landscape is changing, following the passing of the NHS Act 2012. This establishes Clinical Commissioning Groups (CCGs), where clinicians provide leadership to the commissioning processes. These groups are already established in shadow form, although there may be further changes.

2.3.2 EMAS has had many discussions with CCG leads over the past few months, exploring how changes in the ambulance service provision can support more community based care.

2.3.3 CCG leads have shown enthusiasm for the ECP role, recognising that they can contribute to helping patients to stay at home and be supported by local community services, rather than be taken to hospital.

2.3.4 In March 2012, EMAS contractual structure changed to a 'tariff based' approach – similar to the acute sector, where the Trust is funded for specific types of responses. These are:

- Calls, which covers the cost of answering the 999 call
- 'Hear and Treat; where we provide advice over the telephone and do not deploy an ambulance
- 'See and Treat', when a paramedic or ECP is deployed to a patient and they provide advice and treatment at the scene, without conveyance to hospital
- 'See and Convey', where the patient received initial treatment but is then conveyed to hospital.

2.3.5 To ensure that community based care is encouraged, the 'See and Treat' tariff is set at a level to ensure that cost of the longer 'on scene' times is covered.

2.4 Increasing demand

2.4.1 Demand on ambulance services continues to grow, with 5% more calls year on year.

2.4.2 However, EMAS has been able to reduce the number of deployments through greater use of the 'hear and treat' approach, such that the number of deployments in 2011/12 was similar to that in 2010/11.

2.5 Efficiency requirements

2.5.1 The NHS faces a considerable efficiency requirement, to ensure that sufficient funds can be made available to cover increasing demand and better technology.

2.5.2 EMAS will have an efficiency requirement of £29.6m over the next 5 years

3 THE CURRENT SERVICE MODEL

3.1 When a patient calls 999, s/he receives an initial assessment and will either be:

- allocated an ambulance response (paramedic or ECP)
- passed to the Clinical Assessment Team, where a more in-depth assessment can be carried out and advice given. Some of these patients will still receive a deployment.
- provided with immediate advice and the call terminated

3.2 The service also deploys vehicles to non urgent calls, such as inter-hospital transfers and GP (or other healthcare professional) initiated transfers to hospital

3.3 Until the past few months, all deployments (i.e. when a paramedic or ECP is dispatched) were categorised as a paramedic deployment. i.e. we did not differentiate between the skill levels, regardless of clinical need. Highly skilled clinical staff were required to deal with routine work which could be more appropriately dealt with by an alternative role, freeing Paramedics and ECPs to attend only clinically appropriate calls - ultimately ensuring that those in need receive the highest level of clinical care.

3.4 The response includes:

- Ambulance that is crewed by a Paramedic and an Ambulance Technician or an Emergency Care Assistant (ECA).
- Fast Response Vehicles crewed by a Paramedic
- Fast Response Vehicles crewed by an Emergency Care Practitioner

4 AIMS AND OBJECTIVES

4.1 The EMAS Vision is to be: a leading provider of high quality and value for money clinical assessment and mobile healthcare.

4.2 This vision will be achieved by a strategy based on: “Being there when patients need us and thereby strengthening our position in integrated healthcare and regional resilience”, that is, ‘Right Care, Right Time, Right Place’.

4.3 This paper will provide detail around a proposed service model which is evidence based and will ensure that service users within the EMAS geographical area receive a level of service which consistently provides the most appropriate level of care for their need.

4.4 This paper supports the Trusts strategic aims;-

- Delivering high quality, patient focused services
- Through a highly skilled, motivated and engaged workforce within an organisation that is innovative and responsive
- Ensuring clinical and financial viability and providing value for money.

4.5 The benefits to be gained will include;-

- Increasing productivity through reduced call cycle times
- Reducing sickness absence levels
- Ensuring shift patterns match the demand on our services
- Changing the types and numbers of Trust response vehicles including where appropriate, vehicles which can carry multiple patients.
- Delivery against performance and quality targets

4.6 Delivery of these benefits and the benefits realisation approach is set out in section 11, below.

5 SERVICE MODEL PROPOSALS

5.1 The Trust is proposing a new service delivery model that will be based on three levels of response, to be implemented by 2014, with continued development over the lifetime of the Trusts integrated business plan.

5.2 It is proposed that the new service model will:

- Ensure that the right level of skill is deployed according to patient need
- Use the skills of our staff appropriately
- Ensure that the right type of vehicle is deployed

5.3 The ambulance deployment will be directly managed through the Urgent Care Hub (UCH) within the Ambulance Emergency Operations Centre (EOC)

5.4 The primary purpose of the UCH will be to ensure that all calls (with the exception of those that are immediately life threatening and result in an immediate deployment) to be clinically assessed to determine the most appropriate care pathway or response using Nurses, Paramedics and Emergency Care Practitioners.

5.5 Only one in ten calls received in the EOC relates to somebody who is in a life-threatening condition, these patients require immediate face-to-face assessment and treatment. The challenge and opportunity is to provide appropriate care to the remaining patients, care which is more closely tailored to their particular need rather than the traditional one-size-fits-all approach.

5.6 In addition the UCH will provide advice for ambulance clinicians looking for additional diagnosis for their patients.

5.7 The proposed deployment model has 3 tiers:

Response Level	Deployment Type	Skill Level
Level 1 Response	Urgent Care Ambulance	Double Emergency Care Assistant
Level 2 Response	Paramedic Fast Response Vehicle Paramedic Ambulance	Paramedic Paramedic and Emergency Care Assistant/Technician
Level 3 Response	Emergency Care Practitioner	Emergency Care Practitioner

5.8 The UCA (level 1) will provide transport for patients who do not require paramedic care but do need transporting to hospital or other healthcare facility, within timescales agreed by a healthcare practitioner (Doctor, ECP, Nurse or Paramedic).

5.9 The urgent care ambulance (UCA) will be staffed by Emergency Care Assistants and possibly technicians. They will be equipped with Automated Defibrillators and other basic medical supplies, providing transport for those patients clinically assessed as safe to do so. This will free paramedics to allow them to attend the most seriously ill or injured.

5.10 The Trust is currently exploring and will trial the use of multi person ambulances for this group of patients, where it is clinically appropriate to do so.

5.11 All UCA's will have a bariatric capability and be able to transport retrieval teams and their equipment. In doing so, they will be able to support paramedics and ECPs.

5.12 The Paramedic (Level 2) response has two elements to it, first the Paramedic Fast Response Vehicle (FRV), which is crewed by a solo Paramedic providing an immediate response to life threatening calls and second, the Paramedic Ambulance, crewed by a paramedic and ECA/Technician, and is designed to respond to 999 calls which require paramedic care.

5.13 The FRV Paramedic will assess patients and determine the most appropriate care pathway, which includes See and Treat (SAT), See and Refer (SAR) and referral to an ECP and treat and leave at home. It is anticipated that FRVs will primarily respond to the most life threatening calls (Red). The emphasis of the FRV is to attend the high acuity patients ensuring patients with the greatest need receive a rapid response.

5.14 The Paramedic ambulances will provide the core response to the majority of 999 calls that are assessed as requiring an immediate response. Paramedics will assess patients and determine the most appropriate care pathway which includes SAT, SAR, and treat and leave at home.

5.15 The ECP response (Level 3) provides a response to calls that have been assessed through the urgent care hub as requiring a response where further clinical assessment is likely, with the intention that patients will be treated at home or appropriately referred to another healthcare professional. ECP's will still be able to respond to the full range of calls although their primary focus will support community based care. It is expected that total call cycle for ECP responses will reduce, because there will be a reduction in the amount of time travelling to hospital and waiting for handover.

5.16 The diagram below, summarises the proposed response model.

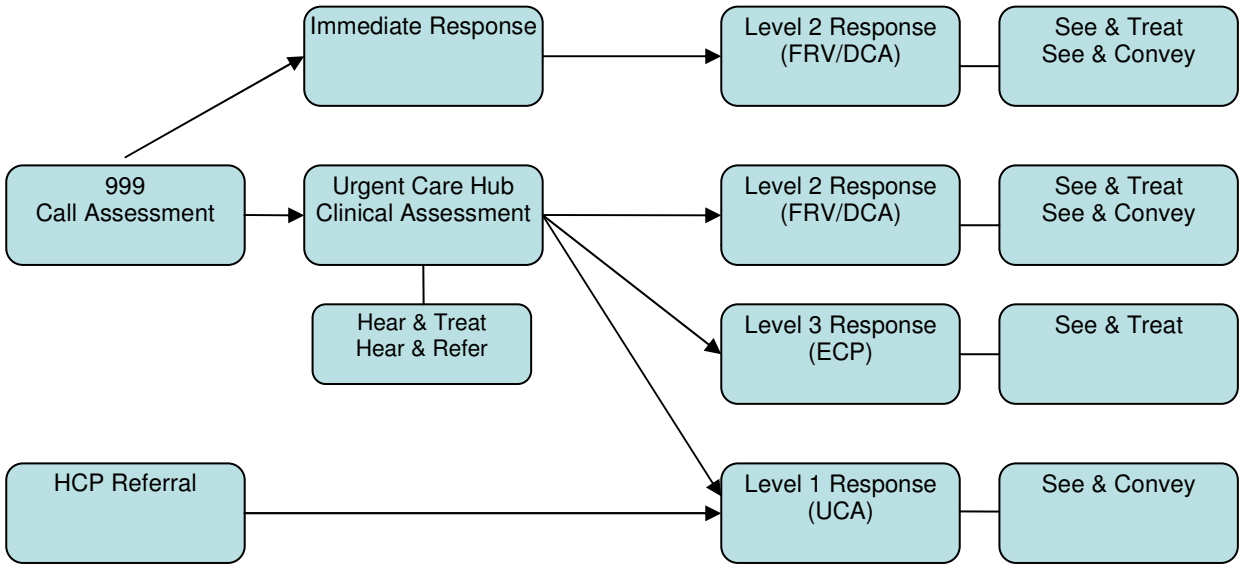


Diagram 1, future deployment model

5.17 his new approach, building on the skills already existing in the Trust, allows us to predict the skill mix required.

6 MODELLING

6.1 The modelling approach

6.1.1 Process Evolution Ltd is an expert modelling company, supporting the development of operational plans for many emergency services (including police and fire).

6.1.2 The approach used to support the EMAS service model evaluation has been used in a number of ambulance services, including: Great Western, South Western, West Midlands, North Eastern and Scottish

6.1.3 The company use a computer simulation model that looked at the total activity that EMAS undertook in to11/12, including:

- Calls
- Hear and treat
- Ambulance deployments
- Inter-hospital transfers
- GP urgents

6.1.4 The main deliverables from the modelling are:

- the mix of resources between UCA's, DCA's, FRV's and ECP's in order to meet response standards
- an optimal profile (by hour of week) for each resource type supported by shift patterns
- the opportunities to meet response standards within funds – taking into account future projected demand
- to determine the optimal level of resources required to efficiently achieve the response standards types.

6.1.5 The results are displayed as:

- The number of staff required
- The projected performance that can be achieved

6.1.6 It is then used to determine:

- The skill mix of staff required
- The number of vehicles

6.1.7 It should be noted that the model output is as whole time equivalents (wte) and that the 'total used' column equates to the total resource used in 2011/12. This is greater than the funded level because:

- Some funds were non-recurrent (eg winter funds)
- End of shift overtime is funded separately and this includes the time element (call cycle time is used as the basis for modelling) as well as the enhanced rate. It is estimated that the £2.3m end of shift overtime budget would provide approximately 47 wte at enhanced rates.

6.1.8 The work will also be aligned with the outcomes of the Estates Plan.

6.2 Modelling Results

6.2.1 The model was first applied to the ability to deliver the current national and local standards, if we did not implement the service model, optimised shifts nor delivered the

estates plan. Table 1shows: That 2043 wte would be required to achieve the national standards, if no changes were made, including the Estates Plan, shift optimisation or the service model. This would mean an additional 66 wte. It can be seen that the local standards would not be achieved and that delivery of a balanced budget would be risky.

	WTE need	Red 8	Red 19	Green 1	Green 2	Funded WTE	Total WTE used	Variance from funded WTE	Variance from used WTE
Derby/Notts	863	79.2%	96.2%	87.1%	85.2%	850	851	1	12
Leics/Northants	636	77.8%	95.5%	84.1%	84.0%	572	616	34	20
Lincs	544	78.4%	92.1%	80.4%	87.4%	495	510	49	34
Trust	2043	78.7%	95.1%	84.7%	85.3%	1917	1977	84	66

Table 1, current performance standards, no change implemented

6.2.2 The model was then used to look at the ability to achieve current standards if we implemented the change programme. This shows that 1925 wte would be required (table 2), this equates to 52 fewer posts. Again, local targets could not be achieved.

	WTE need	Red 8	Red 19	Green 1	Green 2	Funded WTE	Total WTE used	Variance from funded WTE	Variance from used WTE
Derby /Notts	775	80.9%	96.7%	87.0%	89.5%	820	821	-45	-46
Leics/ Rutland/ Northants	640	79.9%	95.8%	84.7%	87.9%	602	646	38	-6
Lincs	510	77.5%	90.3%	78.5%	81.4%	495	510	15	0
Trust	1925	79.9%	95.0%	84.2%	87.0%	1917	1977	8	-52

Table 2, current performance standards, change implemented

6.2.3 The model was then used to predict the number of staff and skill mix required to achieve the new service model, using 1925 WTE (table 3)

Staff per vehicle		Derby Notts	Leics/Rutland/ Northants	Lincs	Total
1	FRV	99	100	90	289
2	DCA	566	460	398	1424
1	ECP	42	40	16	99
2	Urgent	69	41	6	115
	Total	775	640	510	1925

Table 3, staff number predictions

6.2.4 The model, also shows the number of vehicles needed (table 4) , this will be used to inform the fleet strategy, due to be brought to the Board in September. The Trust currently has 416 front line vehicles.

	Derby Notts	Leics/Rutland/ Northants	Lincs	Total
FRV	18	20	18	56
DCA	62	48	44	154
ECP	8	8	6	22
Urgent	11	7	2	20
Total	99	83	70	252

Table 4, fleet numbers

6.2.5 Finally, the model was used to look at the WTE to deliver future performance (including A8 80% and local performance standards), presuming no further changes to the service model were made (table 6). This shows that 2084 WTE are needed.

	WTE need	Red 8	Red 19	Green 1	Green 2	Funded WTE	Total WTE used	Variance from funded WTE	Variance from used WTE
Derby/ Notts	806	82.3%	97.3%	89.9%	90.9%	820	821	-14	-15
Leics/Rutland/ Northants	669	81.5%	96.5%	90.0%	89.9%	602	646	67	23
Lincs	609	82.4%	95.0%	91.5%	93.3%	495	510	114	99
Trust	2084	82.1%	96.5%	90.3%	91.2%	1917	1977	167	107

Table 6, future performance standards

6.3 Summary of modelling

6.3.1 The above outputs have been summarised in table 7, below. This shows the ability to deliver performance standards and efficiency requirements for each of the options modelled.

	Current resources without optimisation programme	Current resources with optimisation programme	Additional investment and/or innovation
A8 75	□	□	X
A8 80	X	X	□
A19	□	□	□
G1	X	X	□
G2	X	X	□
Efficiency	X	□	□
Lincolnshire	X	X	□

Table 7, summary results

7 WORKFORCE

7.1 Workforce numbers

7.1.1 The modelling has identified a total of 1925 WTE required to achieve current national standards. It has identified an optimum number of ECPs and UCAs to support delivery.

7.1.2 The model provides WTE requirement by Agenda for Change band and role title. The following assumptions are made:

- The Trust will continue the technician role for the foreseeable future, but the policy of no further appointments to this role will continue.
- The Trust will continue in-house training for the paramedic role
- Training for ECPs will be supported through workforce funds (Local Education and Training Boards).
- No impact of turnover on skill mix

7.1.3 Table 8, shows:

- Current WTE (1917)
- WTE required in the model (1925)
- WTE required presuming team leader role is 100% clinical
- WTE required presuming team leader roles are 75% clinical

Role	2012/13 BUDGET WTEs	Model WTEs	Model WTE 100% TL	Model WTE 75% PTL
ECA Band 3	277	372	372	372
Technician Band 4	315	315	315	315
AECS 4	140	140	140	140
Paramedic Band 5	968	857	887	916
ECP Band 6	73	99	99	99
SUB TOTAL	**1,773**	**1,781**	**1,812**	**1,841**
TL Band 6	144	144	114	85
Totals	**1,917**	**1,925**	**1,925**	**1,925**

Table 8, WTE requirements

7.1.4 It can be seen that the model shows

- an increase in ECPs
- an increase in ECAs
- No change to student numbers or technician posts

7.1.5 Whilst the model has been able to predict the numbers of staff needed to achieve future performance standards, further work on the requirements will be required before proposals are brought forwards. This work will link to the independent funding review and the potential for further innovation to reduce WTE requirement.

7.2 Shift Patterns

7.2.1 The modelling has also looked at the optimum shift patterns. The Trust currently uses a mixture of shifts between 8 and 12 hours in length. The proportion of the shifts currently used is show below, by division (diagram 3)

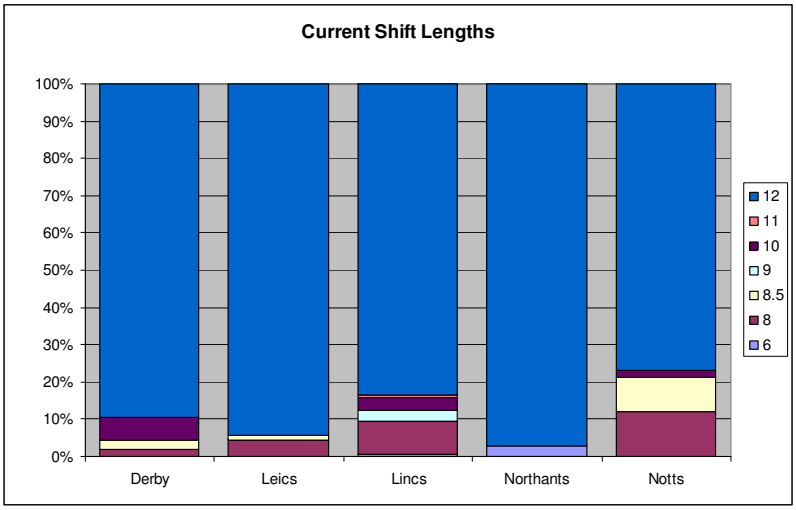


Diagram 3, proportion of shifts length by division'

7.2.2 In order to match the availability of staff to demand patterns, the modelling proposes a greater mix of shift lengths be used, but retaining 12 hours as the dominant approach. The model uses current activity patterns (by hour of day) and matches the beginning and end of shifts to align the availability of staff to the demand pattern. Diagram 4 shows the proposed mix.

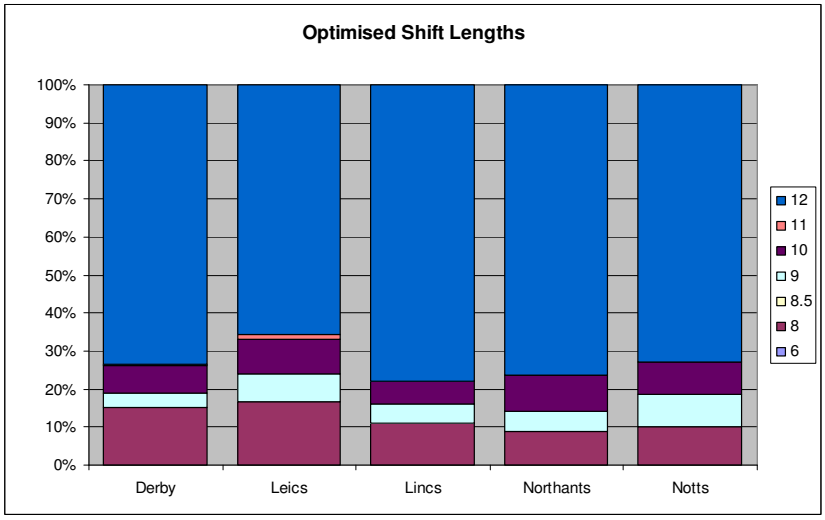


Diagram 4, proposed mix of shift lengths, by division

7.2.3 A working group has been established to examine shift patterns, with the expectation that the recommended mix of shift lengths will be adopted. The group will also look at how we can reduce end of shift overtime, given that 12 hour shifts can run into 14-15 hours on occasion

8 FINANCE

8.1 The comparison of costs is shown in table 9, below. This shows that the costs:

- Presuming team leaders contribute 100 % of their time clinically would be £68.6m
- Presuming that team leaders use 75% of their time clinically and 25% in the management structure, the cost would be £68.3m

8.2 The cost of the managerial proportion of team leaders time is contained in the operational management structure, which is provided in a separate report to the Board

Role	2012/13 BUDGET (£k)	Model BUDGET 100% TL (£k)	Model BUDGET 75% PTL (£k)
ECA Band 3	7,317	9,809	9,809
Technician Band 4	9,914	9,914	9,914
AECS 4	4,341	4,341	4,341
Paramedic Band 5	37,182	34,071	35,185
ECP Band 6	3,572	4,871	4,871
SUB TOTAL	**62,326**	**63,006**	**64,120**
TL Band 6	7,183	5,667	4,220
Totals	**69,509**	**68,673**	**68,340**

Table 9, costs of the model.

8.3 In addition to the WTE cost, there is an end of shift overtime budget of £2.26m. This comprises the cost of the time spent on overtime and the enhanced payment rate. It is estimated that two thirds of this sum would be the time element, i.e.£1.5m. The time involved in end of shift overtime is built into the base model, i.e. this £1.5m represents a contribution to efficiency.

8.4 The total costs of achieving current performance standards, after the change programme has been completed, is set out in table 10:

	Before change programme	Post change programme
WTE budget	69,509	68,340
End of shift overtime	2,260	800
Total	71,769	69,140

Table 10, total costs of the model

8.5 The costs of achieving future performance standards could be modelled, however further work in this area will be concluded alongside the independent funding review, which should be completed in September. There are a number of innovations that will be explored to address the presumed gap, including:

- Reductions in on scene time
- Further reductions in conveyances
- Reductions in abstractions

9 SUMMARY AND CONCLUSION

9.1 This paper has shown that the new 3-tier service model can assist the achievement of current national standards, if the change programme involving the Estates Plan, the skill mix changes and shift pattern optimisation are all implemented.

9.2 The proposals address some long standing challenges, including:

- The uncertainty of the future role of the ECP
- The rate of reduction in technician numbers
- The lengths of shifts required to provide best performance.

9.3 It is possible to achieve performance and make a contribution to efficiency.

10 IMPLEMENTATION

10.1 An indicative implementation plan is set out below, a more detailed plan will be agreed with Staff Side and a timeline brought to the Board.

Activity	Due date
Finalised business case and recommendations to Board-	23 July 2012
Meet with Staff Side leads meet to discuss Proposal Document and timescales.	Week Commencing 24 July 2012
Example changes to rota's to be created in light of Process Evolution work and changes to the Estate	From August 2012
Identification of ECP vacancies and training timescales	From August 2012
Staff consultation on changes to rotas	From September 2012
Feedback from	1 December 2012
Close of staff consultation over rotas	31 January 2013
Redeployments of staff to new rota lines and stations-	From 1 February 2013

10.2 The timings are based on minimum time required but may be reduced by mutual consent, notice periods may affect some transitional changes

11 BENEFITS REALISATION

11.1 The benefits to be realised through the proposed changes can be identified in three main areas:

- To the Trust
- To the wider NHS and other stakeholders
- To the public and patient

11.2 A summary of benefits is shown in table 11, below;-

Trust Wide	NHS & Other Stakeholders	Public & Patient
• Flexible and demand responsive • It is clinically focussed • It is affordable • It will deliver performance standards • More effective use of ECP's • Part of an integrated operations model • Staff development and motivation	• Delivering on performance targets • Delivering on quality standards • More flexible service delivery model • Increased cost efficiency • Increased non conveyance to A&E departments	• It will deliver the highest quality of care • Improved patient outcomes • More timely response • More appropriate response • Care closer to home • More coordinated patient service

11.3 To ensure that these benefits can be achieved, it is proposed that a formal project be established, to report to the Trust Board via the Transformation and Innovation report.

12 Risks

12.1 The changes proposed within this document present a number of potential risks, these are summarised in table 12, below, along with some of the mitigating actions.:

Ability to recruit.	ECA posts are currently advertised, with considerable interest from ex PTS staff ECP training will be required to fill ECP role
Resistance to change from affected staff	Follow structured consultation processes Involve staff side and other staff in designing shift solutions Increase communications throughout the programme
Impact of operational management structure changes	Phased implementation of management structure
Opposition from staff-side to support the change	Follow structured consultation processes Involve staff side in designing shift solutions Increase communications throughout the programme
The capacity to direct and facilitate the plan of transition	Establish project support office Regular board reports
Ability to deliver performance before the change programme is completed	Negotiate transformation support Pursue existing action plans to address performance Ensure benefits of RMC are delivered

Table 12, risk

13 RECOMMENDATIONS

13.1 The Trust Board is asked to support the implementation of the new service model, the optimisation of shift patterns and the workforce plan (skill mix and WTE).