The St John Ambulance and Rescue Service Review

FINAL REPORT

23 May 2013

By Lightfoot Solutions UK Limited

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1 Executive summary

1.1 Introduction

This report details the findings of a service review of The St John Ambulance and Rescue Service (SJARS), which was carried out by Lightfoot Solutions UK Limited on behalf of the States of Guernsey Health and Social Services Department (HSSD).

The report addresses all the components of the terms of reference for the Review, focusing particularly on the minimum and desired levels of service within acceptable levels of patient safety and care. The full terms of reference for the Review are given in Appendix 1.

The key focus of the Review was to identify service models that would provide acceptable levels of patient safety and care whilst recognising and managing risk, identifying opportunities and ensuring the recommended service models are financially viable.

The report acknowledges that ambulance services for Guernsey, whilst currently provided by SJARS, could be delivered by other organisations. Governance and performance monitoring of whoever provides the service in the future is key to ensuring that the acceptable level of patient safety and care is provided within the resources allocated.

The provision of health and social care in Guernsey is different from that in the UK or any other known international model. This is unsurprising as the geography, funding arrangements and socio-economic status of the Island make it a unique community. It is also important to recognise the difference in scale between SJARS, who respond to around 10 incidents per day, and a typical English ambulance service which responds to well over 1,000. Guernsey therefore needs an ambulance service which is tailored to the needs of the Island, integrated into the local health system, and supporting the Future 2020 Vision of the Health and Social Services System (2020 Vision), and not one simply based on an English ambulance trust model which may not be the most appropriate for Guernsey.

A wide mix of stakeholder interviews were conducted on the Island to support the Review and these revealed that many of the recommendations made can only be implemented as part of a whole healthcare system review and subsequent reconfiguration of services. Although a wider system review was outside the remit of this report, the recommendations made and opportunities identified would support the main aims of delivering integrated care in line with the 2020 Vision.

The report addresses each component of the terms of reference of the Review in separate sections to allow detailed examination of the findings and recommendations.

- Section 2 of the report sets out the background to the Review.
- Section 3 describes the Review Team’s approach.

- Section 4 sets the Review in the strategic context of the Guernsey health system and, particularly, in the context of the 2020 Vision.
- Section 5 considers in detail the minimum and desired levels of service for the ambulance service and identifies improvements in the safety, clinical effectiveness and efficiency of the existing service.
- Section 6 considers the other services provided by SJARS.
- Section 7 reviews governance arrangements and key performance indicators.
- Section 8 covers the people aspects of the service.
- Section 9 deals with the financial implications of the Review.

The remaining sections cover emergency preparedness, links with other emergency and ambulance services and the users' perspective.

The recommendations are many and some complex in nature so, for ease of understanding, the remainder of the executive summary focuses on the main requirement of the Review remit which is to identify the minimum and desired the levels of service within acceptable levels of patient safety and care.

This executive summary also details the costs, risks and benefits associated with each service model. It contains a financial overview and lists potential alternative providers of the service in the future.

There are 49 recommendations in this Review. Some of them are simple and quick to implement but others are not. Some will require further consultation with partners and stakeholders, including SJARS staff and trade unions. The full benefits of some recommendations can only be achieved as part of the wider systems review and the 2020 Vision. Taken together, they represent a programme of transformational change for SJARS.

Evidence from other transformation programmes suggests that it is not realistic to expect a quick realisation of all the potential gains. These programmes require changes in culture and leadership as well as processes and procedures. It is important, therefore, to develop a robust implementation plan and governance process that recognise the scale of the change and the capacity of those involved to deliver.

1.2 Defining the minimum and desired the levels of service within acceptable levels of patient safety and care

Both the minimum and desired levels of service will require staff with clinical skills ranging from basic first aid and lifesaving skills and competencies through to recognised clinical competencies for assessments and treatment. These clinical skills and competencies were discussed at a Review workshop and recognised by the delegates, and were grouped into four clinical levels for the purpose of the Review (see box below).

Terminology: Levels of clinical skills and competencies

For the purpose of this Review, the levels of clinical skills and competencies are defined as follows.

- **Level 1** – First aid and lifesaving / call-handling skills
- **Level 2** – Enhanced recognition of deterioration/escalation, manual handling competencies and record-keeping, blue light driving
- **Level 3** – Assessment and interventional skills including a range of medicine and therapy administration competencies
- **Level 4** (practitioners) – Enhanced clinical decision-making and interventional skills including a range of IV medicine and therapy administration competencies.

1.2.1 Control room

Key to the delivery of any service model is the first contact with the patient, in terms of call answering and initial assessment of clinical needs. Therefore, whichever level of service considered below is chosen, it needs to be underpinned by an effective and efficient control room which takes 999 calls and despatches an ambulance response.

<u>The Review found significant opportunities for improvement in the performance and governance of the control room – for example, inconsistencies in call categorisation and complaint classification (see section 5.1). Urgent action is therefore required to improve the consistency and resilience of the SJARS control room.</u>

In particular, investment is needed in a computerised clinical call-handling programme that can record event times, support call-taker and despatcher decision-making, generate auditable records and link to the local health system. In addition, the staffing needs to be strengthened to provide more resilient cover. This action is required regardless of which road service delivery model is chosen.

Benefits

- Consistency regarding the recording of the information
- Ability to despatch directly via a GPS system
- Consistency in call categorisation
- Consistency in management information (clinical and non-clinical) to aid performance review, planning (2020 Vision) and individual staff development
- Solution bespoke to Guernsey with the ability to adapt and have different standards and responses as 2020 Vision is implemented
- Information can be automatically sent, through the despatch or reporting function, to other services such as community care crisis teams, primary care or the hospital, thus supporting hospital and admission-avoidance cost savings
- Flexibility (as a hosted solution) to be moved or linked into other control room functions in the future
- Ability for remote monitoring of call volumes and responses is available to others (for example, managers, hospitals, etc.)
- Flexibility to allow other services to be added on to the system (with firewalls to any patient records to protect them)
- Provision of up-to-date information to predict and flex rotas depending on demand, and clinical data regarding response-time opportunities

Risks

- Wrong model/system commissioned that has been developed for areas that have different needs e.g. UK ambulance system
- Period of time it will take to commission and implement such a solution
- Perception that it could be provided remotely and off-Island, with risk of loss of local knowledge
- Signal strength and packages available
- Costs and funding arrangements

Costs

- To provide staff for the 24-hour model of cover will require revenue funding of £214,841 per year (including £40,000 for licences).
- This is compared to current control room costs of £106,117.
- In addition, capital investment of £110,000 is required to support a bespoke computerised clinical call-handling system.

1.2.2 Minimum level of road service within acceptable levels of patient safety and care

The Review found that a minimum level of road service would consist of a control room as outlined in section 1.2.1 and a Level 2 and 3 staffed service supported by a Community First Responder scheme.

This is because the geography and size of the Island, linked with the comprehensive services at the hospital, allow for rapid transfer of patients to hospital. The road network on the Island is unlike the UK, Europe and other urban communities as it has no motorways or large roadways or railways which result in multiple major trauma.

Given the close proximity to A&E from all parts of the Island, a basic respond and convey patients to hospital service provided by Level 1 and 2 staff responding and conveying would be appropriate.

However, due to Guernsey's aging population, it is likely that an increasing number of callers will have the need for more complex assessment. Also, the 2020 Vision requires a reduction of conveyance coupled with a reduction of hospital admissions, and requires SJARS to form more links into other services. These requirements can only be met by adding to the model staff with Level 3 competencies regarding assessment and limited interventions (which can be enhanced and developed in the future). Level 3 staff have therefore been included in the minimum level of road service to enable SJARS to deliver these anticipated changes in service demand.

Benefits

- Journey times to A&E for patients with life-threatening conditions will be shortened due to limited diagnostics and interventions taking place pre-hospital
- Staff resources with the required level of competency (Levels 1, 2 and 3) are already in place, and a supportive Community First Responder scheme is operational
- Level 3 clinicians can administer oxygen and pain relief along with other medicines via patient group directions (clinical protocols).
- The population of Guernsey will have an ambulance service that matches the current demand but will have the competencies and experience to match the volume and type of calls predicted in the 2020 Vision and therefore be well placed to link with comprehensive out-of-hospital care services.
- Staff competencies will be maintained through day-to-day practice due to the types of calls and interventions that need to be made by these clinicians. Update training is within the resources of SJARS and is available on-Island, for example at the Institute of Health and Social Care Studies.
- Ability to enhance the skill set of Level 3 staff to deliver advanced assessments and some treatments supporting the 2020 Vision.

- Reduced costs within the ambulance service regarding staff grading, medicines, specialist equipment, and off-Island and specialist training.

Risks

- Level 4 staff leave the service and Island for other opportunities
- Reduced career development opportunities of Level 3 clinicians
- Public perception of a lower grade service provision

Costs

The cost of delivering the minimum level of service is £947,084. This is composed of two parts:

- The control room costs of £214,841 identified above (which includes staff costs and £40,000 for the cost of licences)
- Road costs of £732,243 based on two ambulances during the day and one at night with extended working at weekend, staffed by Level 2 and Level 3 clinicians. An element for an on-call has also been included. (See section 1.2.4 for details of how this has been calculated.)

1.2.3 Desired level of road service within acceptable levels of patient safety and care

The Review found that the desired level of road service would be the minimum level of service as defined in section 1.2.2 above, supplemented by a hybrid model of Level 4 clinicians, who are based in the hospital, work in an integrated way with the hospital staff and are despatched from the hospital when needed by the ambulance service.

The full benefits of this integrated way of working could only be delivered by a review of other services looking at a reconfiguration of the healthcare system on the Island, which was outside the remit of this SJARS Review.

There is recognition that the Level 4 skill set of registered clinicians would be an advantage as part of the ambulance response, particularly where time is of the essence for treatment and where there will be some delay in conveyance to hospital. The extended skill set of these staff includes intravenous administration of drugs for anaphylactic shock (very severe allergic reaction causing breathing difficulties), intravenous fluid replacement, intravenous administration of morphine and other controlled drugs, intravenous antibiotics for meningitis as well as other interventions.

However, many of these skills are more appropriate to trauma and acute emergencies. For these skills to be appropriately maintained, the clinicians would need to undertake more of the interventions than the demand generated by calls for ambulances on the Island would require.

However, there is an opportunity to maintain the skills of these Level 4 clinicians by basing them in Princess Elizabeth Hospital (PEH), where they would supplement the hospital workforce. In the hospital, they can see and treat minor injuries in A&E, support critical care within the resuscitation suite and provide an outreach to the wards, while still retaining the ability to respond to ambulance service patients as required.

This hybrid model, using Level 4 clinicians based in hospital, represents the desired level of service. These staff would have a unique opportunity to work differently, while sharing costs and supporting the 2020 Vision.

Benefits

- Patients requiring the particular and specialist skills of Level 4 clinicians will receive appropriate treatment. Level 4 clinicians will maintain their competency levels by treating patients with these needs in an alternative environment on-Island.
- Level 4 clinicians with local knowledge will be retained on the Island.
- Level 4 clinicians will be available to provide additional resources either as part of a solution for any hospital vacancies or as a contingency at peak demand.
- Opportunity to use these skills within the hospital to address the SJARS treatment room issues (see section 5.2) and provide access to hospital diagnostic services, avoiding patients having to make multiple visits to multiple sites
- Opportunity to develop outreach services integrated with the hospital as part of 2020 Vision
- Integration with hospital services to produce a hybrid clinician unique to Guernsey which could, as a result, invite interest from other health economies

Risks

- Conflicting priorities for the Level 4 clinicians who are working in A&E but have to respond to ambulance calls
- Perceived risk of lower grade of ambulance service
- Employment challenges regarding change of site, management and service
- Shared governance arrangement needed regarding medical / legal cover
- Reduction of clinical supervision within SJARS for Level 3 staff unless formal mechanisms are put in place
- Redundancy costs if staff are not able to transfer
- Time needed to implement fully if awaiting a reconfiguration of the Island's health system
- Perceived career progression opportunities restricted

- Opposition from other professional groups (e.g. nursing, anaesthetics)

Costs

The cost of delivering the desired level of service above is £1,214,744. This is composed of three parts:

- The control room costs of £214,841 identified above
- Road costs of £732,243 as per the minimum level of service identified above
- Additional road costs of £267,660 to pay for the hybrid model of Level 4 clinicians

1.2.4 Aligning resources to patient demand to support the minimum and desired levels of service within acceptable levels of patient safety and care

A fundamental principle of designing the minimum and desired levels of service is ensuring that resources are accurately aligned to patient demand using an evidence-based approach. The Review Team used signalsfromnoise (sfn, the Lightfoot performance management solution) to construct emergency ambulance service rosters, based on the principles of the skill levels required for the minimum and desired levels of road service within acceptable levels of patient safety and care.

This highlighted that existing rosters are not well matched to demand and significant savings are achievable.

Details of this approach and the conclusions are given in section 5.4. The financial savings are detailed in section 1.3.

1.3 Financial overview

1.3.1 Income and expenditure

Over the last few years, SJARS have been in a position where expenditure has exceeded the income generated and, in developing the 2013 budget, produced a deficit forecast (see Table 1).

Table 1 Income and expenditure 2010-2013

	2010	2011	2012	2013*
	£	£	£	£
Income sources				
St John supporter membership	333,378	336,125	354,609	350,500
Treatment and transfer charges	258,538	311,857	312,994	334,000
Grants received	1,966,485	1,995,982	2,211,782	2,261,916
Bank interest	8,498	9,606	13,753	10,000
Total income	**2,566,899**	**2,653,570**	**2,893,138**	**2,956,416**
Staffing	2,558,401	2,539,299	2,736,372	2,706,601
Non-staffing	639,022	651,480	549,403	548,099
Total expenditure	**3,197,423**	**3,190,779**	**3,285,775**	**3,254,700**
Surplus/-Deficit	**-630,524**	**-537,209**	**-392,637**	**-298,284**
**2013 SJARS budget*				

The management of the deficit to a breakeven or surplus can only be achieved through an increase in income or a reduction of expenditure.

The opportunities to increase income from the State as the largest contributor through HSSD, are as limited on Guernsey as they are across the UK, during this period of economic austerity. Because the other sources of income provide a significantly lower proportion of the total, increasing them will have proportionally less effect.

The best opportunity for SJARS to reduce the deficit is to manage the level of expenditure it incurs in delivering the services it provides. Tables 2-4 compare the cost of providing the current, minimum and desired levels of service. The savings shown in Tables 3 and 4 for the minimum and desired levels of service were generated through the review of roster hours carried out by the Review Team and described in section 1.2.4 above.

Table 2 Current budget, 2013

Current budget, 2013		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Emergency (inc HD)		
Paramedics		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**2,575,901**	**76.8**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**778,155**	**23.2**
Total	**3,354,056**	100.0
Recharges	-230,056	

Non-grant income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
	-684,500	
Additional funding requirement	**2,439,500**	

Table 3 Costs of minimum level of service

Minimum level of service		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Road - Levels 2 and 3		
Level 4 clinicians		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**1,396,691**	**65.7**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**727,667**	**34.3**
Total	**2,124,358**	100.0
Control room equipment upgrade	150,000	

Non-grant income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
Total non-grant income	-684,500	
Additional funding requirement	**1,589,858**	

Table 4 Costs of desired level of service

Desired level of service		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Road - Levels 2 and 3		
Level 4 clinicians		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**1,725,239**	**69.6**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**754,624**	**30.4**
Total	**2,479,863**	100.0
Control room equipment upgrade	150,000	

Non-grant Income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
Total non-grant income	-684,500	
Additional funding requirement	**1,945,363**	

Tables 2-4 above show the cost of each model from a pay and non-pay perspective. These costs include employer's on-costs (including in-year pensions) and a 30% relief factor to support training and sickness. No account has been taken of the ongoing pension deficit as part of the development of the service models.

The management and support pay cost for the two proposed service models is based on the highest current UK ambulance baseline percentage cost at about 15% of total expenditure. The closest comparison on the Island is the acute hospitals' management cost, at 7.4% of gross annual budget. (We understand this does not include HR and finance management costs). Once a preferred model is agreed, this may produce further opportunities to review these costs. There has also been the opportunity to revise some of the non-pay costs of the revised service models, but again as the preferred model is developed a review of this cost may produce additional savings.

1.3.2 Capital

The equipment used to deliver the range of services on the Island comprises a range of items. These include land and marine vehicles, medical and non-medical equipment and estate. SJARS' asset register includes all the vehicles and equipment relevant to the service. The Review Team considers that the current asset base and number of vehicles meet the needs of both the minimum and desired levels of service.

There is a capital plan for 2013 with a significant number of items deferred from 2012, many of which would not usually be classed as capital, including medical equipment, furniture and publications. The capital plan also includes additional vehicles (£250k), building maintenance (£78.5k), document management (£20k) and joint emergency control costs (£228.5k) as the main areas of proposed capital expenditure.

1.4 Alternative providers of the service in the future

The terms of reference of the Review required the Review Team to identify potential future ambulance service providers and consider, at a high level, the benefits and risks of each, without making a specific recommendation.

SJARS

Benefits

- Experienced, reliable, well-respected existing provider
- Provider who understands and is well integrated into the existing health system
- Excellent reputation with the public and strong support in the form of membership subscriptions, donations and volunteers
- Experienced staff and established management and Board
- Systems and processes in place which can be built on for improvements
- Part of existing discussions with other emergency services regarding integration of control room
- Training programme in place for Level 1, 2 and 3 skilled staff, and management trained in major incident planning
- Capacity to resource an integrated equipment service and more non-urgent patient transport
- Community First Responder scheme established

Risks

- Financial pressures and historical pension deficit
- Control room improvements needed urgently
- Failure to improve board assurance and governance structures and processes
- Unions may resist change

HSSD

Benefits

- Ability to integrate with other HSSD services and maximise efficiencies
- Link into delivery of the strategic direction of the Island and the 2020 Vision
- Established systems of assurance and governance in place, including clinical leadership, training and supervision
- Possible savings regarding management, back-office functions and procurement
- Integration with equipment service and non-urgent patient transport service
- Possible space on hospital sites to incorporate ambulance station with PEH being central to the Island

Risks

- No experience of running ambulance services
- Potential costs of providing an ambulance station – for example, renting from St John
- Limited facilities, particularly control room and despatching
- Competing priorities between commissioning and providing
- Internal resistance from HSSD and other professional groups
- Increase of management costs
- Potential union reaction
- Reduction in ability to recruit volunteers
- Public backlash
- No benefit from public donations

Fire and Rescue

Benefits

- Existing control room with technical infrastructure
- Experience of managing emergency services
- Possible cost savings from integrating frontline staff
- Development of co-responder schemes to link with existing Community First Responder schemes
- Savings regarding procurement and some back-office functions
- Integration of Fire and Rescue with cliff and in-shore rescue
- Existing station facilities with potential to incorporate ambulances and road staff

Risks

- No experience of running ambulance services
- Potential costs of providing an ambulance station
- Potential reduction in public donations
- No history of clinical supervision or training
- No experience of managing or governing clinical services
- Potential lack of credibility with clinicians and public
- No experience of managing multiple sources of funding
- Potential impact on the future viability of supporter subscription scheme
- Potential union reaction
- Reduction in ability to recruit volunteers

Primary care

Benefits

- Current clinical service provider
- Provision of medical clinical supervision
- Opportunities to integrate with urgent and primary care to reduce hospital attendances and support 2020 Vision

Risks

- No experience of running ambulance services
- Potential costs of providing an ambulance station
- Minimal relevant infrastructure in place
- Potential lack of public support
- Limited opportunities regarding cost reduction relating to procurement or management costs
- Potential union reaction
- Reduction in ability to recruit volunteers
- Public backlash

Other provider through tender

Benefits

- Market testing of service and providers
- Opportunities to develop or revise the current service specification, including quality and performance monitoring
- Requirement to deliver savings and reduce hospital admissions etc.

Risks

- Public backlash
- Reduction in ability to recruit volunteers
- Potential costs of providing an ambulance station
- Cost and resources required for tendering process
- Specification and provider not being flexible enough to address organic changes resulting from 2020 Vision
- Impact on public donations and supporter scheme

1.5 Summary of other key findings

1.5.1 Control room – longer term

With relatively few calls being received into the control room, some form of joint control room partnership would be very helpful in improving safety, resilience and efficiency. Discussions are already under way to develop a joint control room on Guernsey for Police, Fire and Rescue and ambulance services. This will permit greater safety and resilience due to the increased number of calls and better staffing. It will facilitate better integrated working across the emergency services on Guernsey. It will preserve local knowledge in the control room and enable efficiency savings to be made. It therefore represents the best of the available partnership options and the Review Team recommends that SJARS should participate fully in the development plans.

1.5.2 Other services provided by SJARS

There is considerable duplication of effort in Guernsey in the provision of some health-related services. For example, there are multiple providers of equipment services and non-emergency patient transport. SJARS operates in both these markets as the largest player and there is scope to review and rationalise the provision, making efficiency gains and improving services for users.

1.5.3 Governance

There is considerable scope for SJARS to improve its governance processes. For example, SJARS should develop a Strategic Plan that supports the 2020 Vision and has the backing of patients, commissioners, stakeholders and staff. The Strategic Plan should be underpinned by a performance and quality dashboard and performance management processes.

SJARS should also develop a Clinical Strategy and Governance Framework in support of the 2020 Vision and the SJARS Strategic Plan. It should be linked to the HSSD clinical governance processes. The Clinical Strategy needs to be supported by clinical outcome standards that are linked to clinical pathways of care, including stroke, cardiac arrest, heart attack and asthma. An Island review of pathway standards and practice should be undertaken.

1.5.4 Commissioning by HSSD

As commissioner, HSSD should adopt a stronger role in the relationship with SJARS, setting out its commissioning intentions with clear performance indicators and standards in a formal Service Level Agreement. They should also ensure that SJARS are appropriately engaged in the 2020 Vision and run a supportive but challenging performance management process.

1.5.5 Staff engagement

SJARS staff are committed to, and proud of, the organisation. However, there is scope to engage more with them in improving patient care and performance. There is also an opportunity to develop their skills in ways that will motivate them, improve outcomes for patients and support the 2020 Vision.

1.5.6 Emergency preparedness

SJARS has in place the building blocks to enable it to discharge its responsibilities under the Civil Contingencies Act. However, there is scope to improve its Major Incident Plan and Business Continuity Plan. There is also a need for SJARS and the Home Department to agree what equipment SJARS should have for major incidents and how it should be funded.

1.5.7 Relationships with other emergency services

Relationships with the other emergency services on Guernsey are very good and supportive. There is scope for the Fire and Rescue Service to provide further support to SJARS in responding to patients.

1.5.8 Reputation

SJARS and their staff have, for many years, been providing a well-respected ambulance service that has the confidence and support of the Island's population and their local health partners.

The full details of the recommendations are within the main body of this report and they are also listed in section 18.

2 Background

St John Ambulance and Rescue Service (SJARS) is a Guernsey-based charitable company which operates the Island's only ambulance service. It is commissioned to provide the service by the States of Guernsey Health and Social Services Department (HSSD). SJARS is funded to provide the service by a combination of HSSD payment for services, subscriptions, service charges and donations. The commissioned services are specified in a Service Level Agreement (SLA) between HSSD and SJARS, which is in urgent need of updating. The SLA also covers the provision of a number of additional services including responses to non-emergency calls, arranging off-Island patient transfers, the provision of vehicles and equipment, control and communication functions, administration and management and major incident planning. Historically this SLA has never been monitored by HSSD – an arrangement which has been recognised by the current HSSD management. This Review is one of the first actions to ensure monitoring in the future.

In addition to providing the services under the SLA, SJARS also operates a number of other services, which are funded by a combination of service charges, commercial activity and donations. The HSSD payment for services is not expected to contribute to the provision of these services. The additional services are:

- Healthcare equipment shop
- Minor injuries treatment room
- Cliff rescue service
- Marine ambulance service
- In-shore rescue boats
- Hyperbaric recompression chamber

Since 2004, the income SJARS has received has been insufficient to cover the costs of the commissioned services and SJARS has been using reserves to cover operating deficits. Over the years, it has become increasingly apparent that the current ambulance service model is not financially viable without a significant increase in funding or a major review of the service provided. SJARS have approached HSSD on a number of occasions to seek increased funding, without success. In 2012, SJARS' financial position further deteriorated and SJARS implemented an internal recovery plan to reduce expenditure and increase income. However, they would have been unable to cover the cost of the service for the year and as a result, the States of Guernsey, via HSSD, arranged a short-term loan of £0.5m over one and a half years to support the ongoing service provision, pending a sustainable resolution to the funding arrangements for the provision of a safe and cost-effective Island ambulance service. This Review into the service was commissioned in an attempt to resolve the situation and deliver a sustainable solution.

3 Review approach

The Review was commissioned from Lightfoot Solutions by the States of Guernsey, through HSSD. The Review Team's approach was set out in the tender response and agreed with HSSD and SJARS prior to commencement. It comprised the following stages:

1. **Project initiation** – This involved agreeing with HSSD the deliverables and timelines, and the project governance, and establishing what data was available to support the analysis.

2. **Initial data analysis** – This involved an initial analysis of the clinical, operational, patient experience, financial and other performance data, using signalsfromnoise (sfn, the Lightfoot performance management solution) where possible. This enabled the Review Team to make an initial assessment of trends and performance.

3. **On-Island interviews and visits** – A total of 62 people were interviewed face-to-face or via telephone, two operational shift observations (one clinical, one purely operational) were carried out, interviews and discussions took place with 25 frontline and management SJARS staff, and a tour was undertaken of the Accident and Emergency Department at Princess Elizabeth Hospital (PEH). The views of those who contacted the team directly were also taken into account. The list of stakeholder organisations interviewed is given in Appendix 2.

4. **Analysis and review** – of the SJARS data sets, Board papers, risk register and incident logs, governance and steering group papers for SJARS and the HSSD, accounts and finance papers. The sfn analysis was completed. A further trip was made to the Island to validate the data submitted by SJARS and this was followed up with two further conference calls to confirm the accuracy of the roster data.

5. **Workshop** – The analysis and reviews formed the basis for a workshop held on 9 April 2013 on Guernsey. It was well attended by many of the stakeholders who had been interviewed. The workshop was designed to develop a shared understanding of the Review issues, to obtain stakeholders' input into the Review, to enable them to influence the outcomes and to start to build a consensus around possible

solutions. It was focused on the clinical model of service required by the Island, based on minimum and desired levels of service.

6. **Preparation of the final report and recommendations** – The report was written and circulated to a select group for final comment before issue. This was followed up with on-Island presentations to key stakeholders including the HSSD Board.

Lightfoot has extensive experience, both in the UK and internationally, of helping ambulance services to develop their organisation to align with their health communities' strategic and commissioning plans. In this context, Lightfoot advocates a 'whole-system' approach to the delivery of unscheduled out-of-hospital care and has worked extensively with many health care organisations including hospitals, commissioning bodies and ambulance trusts. The approach focuses not only on the delivery of operational targets but also on clinical standards, patient safety and experience, risk and governance.

Lightfoot has a proven approach and methodology to deliver performance improvement in ambulance services, which has been built up over the last seven years. This approach has been implemented at a number of ambulance services both in the UK and internationally. Lightfoot's unique approach combines two main aspects of delivery. Firstly, the use of proprietary analysis software from which the basis of the analysis and modelling capability can be driven. Secondly, Lightfoot provides consulting in the interpretation and use of information to drive change, and specialist coaching in performance improvement techniques. The solution has a predictive element which allows performance processes to be projected forward over time. This allows an organisation to have a true understanding of the relationship between capacity and demand.

4 Strategic context

The population of Guernsey is a healthy and affluent one relative to the UK and other comparative populations. However, there is recognition that there are also pockets of deprivation on the Island, as indicated in the Minister of Health's report.

The Review Team were told that the effects of the international economic challenges had been late in arriving to the Island. However, all parts of the public and independent sectors are now experiencing financial pressures.

The funding arrangements for health and social care on the Island are complex, with a mix of personal, public, donation and subscription funding. This has resulted, in the main, in responsible use of services by the public, but has also resulted in professionals and services developing independently of each other. These developments have complicated the arrangements even further, with a lack of common direction and priorities for the Island. SJARS, in recent months, has started to consider how they can work better with others. However, in common with the other agencies, SJARS has linked with other services only in the handover of care of patients. This has been identified in the 2020 Vision, which seeks to address the clinical, organisational and financial issues created by such a complex system.

The provision and funding of health and social care in Guernsey are different from those of the UK or any other known international model. This is unsurprising as the geography, linked with the socio-economic status of the Island and the funding mechanisms, makes it a unique community as is recognised within the 2020 Vision document.

The costs of health and social care, however funded, are in excess of £300m with the State funding over 60% of these costs. HSSD is the second largest overall spending department after Social Security, with Social Security contributing to care costs through benefits linked to equipment, care transport etc.

Emergency and non-emergency ambulance and transport services are provided by SJARS. HSSD provides health and social care services through hospital, community and prison-based services, specific services relating to child health and other services such as mental health services and public health, etc. These services are provided and discharged through local GP consortium/business and off-Island specialist services. Primary care is provided via three GP practices on the Island and is entirely independent on State funding. (Payments and benefits are to patients not GPs.)

The population of Guernsey is relatively static, which has the benefit of a stable social infrastructure with people knowing each other and a sense of community. However, this is now presenting services with the challenges of an ageing population. It will also present issues regarding the age profile of carers and the workforce.

The States of Guernsey has developed a 2020 Vision for the provision of health and social care to fit with this ageing population (and the changes in care requirements) against a period of fiscal pressures. The themes within the document require all agencies – including SJARS – to deliver a different model of care and support in the future. This 2020 Vision should be the strategic driver for the future development, provision, funding and performance management of all the care services in Guernsey. It should form the basis of all developments and funding (via business cases), with all areas able to demonstrate the improvement in health and wellbeing outcomes for the population against clear measurements and standards.

The focus, within the 2020 Vision, is on moving care and funding from ill health to prevention, and from hospital care to community care (as clinically appropriate), with all to be linked to clear improved outcomes that are measured, recorded and reported to the States and public to provide assurance of value for money.

The delivery of the 2020 Vision will require all services to work differently. For services to be the most clinically effective, cost-effective and safe, providers will need to consider integration and best use of scarce resources. This is particularly important regarding the ageing Guernsey workforce, hospital vacancies, retaining staff with specialist skills (registered within the HSSD Risk Register), keeping these skills up-to-date, and providing as much care on the Island as possible. There could be opportunities to maximise the care provided on-Island with a different approach to how the services are provided and by whom.

SJARS is a critical stakeholder in the current and future pathway of care and the Review Team has taken account of the current needs and aspirations of the population and the stakeholders in Guernsey as well as the future needs and opportunities set out in the 2020 Vision.

There have been reviews of other departments and services on the Island, including the hospital, all of which indicate that the services are well thought of on the Island but each needs adjustment to meet current and future needs.

The 2020 Vision is the strategic document for the future of health and social care and change will be required across all services. This change will need integration across services with a unique model of service provision to maximise the existing and future Island-based workforce, maximising their skills and resources, across organisational boundaries, based on a competency model.

Many of the recommendations contained within this report can only be implemented by a whole health system review and possible re-configuration. This will require a whole services review linked to those already undertaken, with a clear plan of delivery with timescales and outcomes clearly identified.

5 Service delivery

5.1 Clinical model

5.1.1 Levels of service within acceptable levels of patient safety and care

The key to any clinical service delivery is that it recognises levels of service that are available, what standards are appropriate, where the risks are, and the resources available, and that this is all managed and affordable. The affordability is critical to maintaining the service level and includes not only direct staff costs but also the support and enabling costs that ensure sustainability.

The components of an acceptable service are:

- Clinical skills and competencies that are appropriate to the needs of the patients, up-to-date and audited
- Risk is recognised and managed according to recognised standards and circumstances for the individuals and the population as a whole
- Management skills and competencies, to ensure staff are supported, managed and led and the service is delivered in a safe and cost-effective way
- Skills and competencies in assurance and governance, so the service improves, learns and is accountable to users, stakeholders and funders
- Evidence of formal measured mechanisms for keeping the above skills up-to-date, high-quality and relevant
- Equipment appropriate for the needs of the patient, properly serviced (including cleaning), monitored, maintained and used by competent operators
- Processes in place that support the above are recorded, measured, monitored and reported and action is taken for remedial action, future planning and flexibility
- Processes which require end-user, stakeholder and funder input
- Cost-effective, efficient and flexible enough to deal with unusual circumstances
- Development opportunities and changes to be linked with strategic direction and priorities are planned, and risk- and impact-assessed prior to implementation
- No changes or developments without a clear process to measure improvements in outcomes for patients

5.1.2 The current clinical model

The requirement to provide a minimum service within acceptable levels of patient safety and care has been considered across the complete pathway from call to treatment or to handover to next carer.

SJARS' current clinical model of provision has been based largely on an English NHS ambulance service and it has been trying to keep pace with developments that have been sustainable across populations of 3 million plus in areas of thousands of square miles and long distances from hospitals. It has focused on developing or increasing the road/face-to-face service, and call-handling and despatch has been seen as a lower priority although a business case to upgrade the control room systems was submitted in January 2010, unsuccessfully, to HSSD.

The SJARS workforce has developed in line with an English ambulance service, with people with skills ranging from Community First Responders using first aid, and Emergency Medical Technicians through to registered paramedics. The skills of these people are required within the Island's health and social care services and SJARS have used these skills to build confidence in the service.

The control room and road services are provided by staff and volunteers who have the following sets of clinical competency, each including and building on the former.

Terminology: Levels of clinical skills and competencies

For the purpose of this Review, the levels of clinical skills and competencies are defined as follows:

Level 1 – First aid and lifesaving / call-handling skills

Level 2 – Enhanced recognition of deterioration / escalation, manual handling competencies and record-keeping, blue light driving

Level 3 – Assessment and interventional skills including a range of medicine and therapy administration competencies

Level 4 (practitioners) – Enhanced clinical decision-making and interventional skills including a range of IV medicine and therapy administration competencies.

The development of Level 4 clinicians (SJARS registered paramedics) was introduced into the Island with no clear clinical business case of need, and no identified improvements in outcomes for patients, and no formal mechanisms were in place to ensure competencies were kept up-to-date, including frequent exposure to patients outside a training environment. This has included specific individual practice developments – for example, the introduction of IO guns (equipment to pierce the sternum when no vein can be accessed, needed very infrequently) – which were not risk-assessed against non-provision and with no clear process for keeping skills up-to-date. In addition, equipment has been purchased to support skills at the request of staff rather than making a decision based on patient outcome. For example, 12-lead ECG machines which could have enhanced pre-hospital care were not purchased, but IO guns were. HSSD has previously supported some capital developments (e.g. fleet), diverting their own capital resources into SJARS, even though they believe the base funding should have supported these developments, with SJARS prioritising expenditure accordingly. All future SJARS clinical developments, investments, workforce practices and processes should be aligned to 2020 Vision and HSSD Clinical Strategy and signed off by the HSSD Clinical Governance Group.

SJARS has recognised that there are benefits from including other service providers within their meetings where developments are being discussed (minutes of Clinical Steering Group, January 2013). The opportunities to develop key priority skills and link with other providers within the care pathway for patients have yet to be put in place.

The current clinical model is based on a call coming into the 999 SJARS control room, being taken by non-clinical staff during the day (Level 1) and station officer (usually a paramedic – Level 4) overnight. The call-handler will ask some questions and, based on a basic paper-based system, prioritise the call.

Calls are categorised A, B,CE or CI. These are:

- Category A – immediately life-threatening, with a response standard of 8 minutes
- Category B – serious but not life-threatening, with a response standard of 14 minutes
- Category CE – less serious but requiring an emergency response, with a response standard of 30 minutes
- Category CI – less serious and not requiring an emergency response, with a response standard of 30 minutes.

There is scope to review these response standards in the light of the unique opportunities on the Island, its size and infrastructure, and developments internationally regarding response standards. Consideration should be given to setting a standard of 5 minutes for responding to patients with genuine life-threatening conditions where speed of response is critical to survival, e.g. cardiac arrest. On the other hand, a 30-minute response to less serious Category C patients is not clinically necessary and the standard could be relaxed to 60 minutes. This relaxation in Category C standards is not significant enough to impact on the required resource levels but would help the control room staff prioritise calls more appropriately.

The despatchers categorise the calls in an effort to despatch the most appropriate crew. This has resulted in unusually high Category B activity. The Review Team have been told that individuals will upgrade a call as it will enable them to send a two-person vehicle as opposed to a single-person response which may then require backup or transport later.

Category C calls are categorised with two types of non-emergency responses, emergency and immediate. This is out of line with practice elsewhere where a Category CE call would require support or care within a non-emergency time span by the ambulance service or another care service, and where a Category CI call can be discharged with telephone advice.

All recording is paper-based (with the exception of voice recording of the telephone conversations). There is no automation of the assigning or despatching of the clinical resource, and no conveying of any patient details.

The real benefit of the SJARS control room is the local knowledge of the Island, which would not be available if provided off-Island.

SJARS has indicated they see the benefits of an automated and consistent system. However, they have chosen to invest in the road service and there had been no provision for improvements in the control systems. Currently, the call is despatched to the next available crew. The current SJARS road service is provided by staff with skills and competencies ranging from non-clinical call-taking and despatch, through to staff with First Aid and Customer Care (Level 1), First aid plus clinical assessment (Level 2), non-invasive treatment and limited medication and blue light emergency driving (Level 3), and finally Level 4 staff with the above skills and competencies. The competencies at Levels 1-3 are recorded and are updated via formal, time-limited certificated courses, with Level 3 update training covered by annual mandatory training and requiring evidence of 120 hours' relevant practice per year.

Level 4 competencies have been developed following registration with the Healthcare Practitioner Council, in an inconsistent way with no formal mechanisms to ensure updates in key areas of practice and not enough incidents of relevant practice for individual procedures or interventions. It is recognised throughout clinical practice that clinicians need to undertake interventions regularly to maintain practice and competence. Individual staff have used their own resources and networks to do additional training in A&E and other services. There is data regarding call volume and clinical interventions which would indicate that the number of calls that have required Level 4 competencies are low compared to other services. This, linked to the absence of any formal professional clinical standards and audits within the service, indicates a higher risk area clinically and cost-effectively.

Calls are passed to road crew by radio. There is no opportunity for linking of previous calls, caller identification or linking calls to satellite navigation systems in the vehicles, which is unusual compared to English ambulance services. The vehicles are tracked and control staff give assistance over the telephone regarding directions and further clinical information.

The response is provided by single-person car response or double-person ambulance response. The cars are staffed by Level 3 EMTs and Level 4 clinicians (including station officers) and there is a mixture of Level 3 and Level 4 staff on the ambulances. Level 3 staff are able to see, treat and leave patients 'at home' if assessed as acceptable and safe, and are able to contact other services such as GPs, Out-of-Hours GPs, or the HSSD Rapid Response Nursing/Social Care team. (The team witnessed a Level 3 crew safely and appropriately assess and leave a patient at home following contact with the Out-of-Hours GP.)

SJARS road staff are able to contact other services and service providers for assistance, continuity of care and escalation (e.g. alerting A&E of serious conditions, specialist needs etc.) The latter currently has to be undertaken via the SJARS control room (non-clinicians) and A&E reception (non-clinicians) and these are recorded telephone lines.

The Review Team have been told by SJARS and PEH staff that the use of recorded telephone lines is SJARS policy due to litigation risks. This presents other clinical risks with information being delayed, misinterpreted or miscommunicated. There have been occasions where resources have not been available at receipt of the patient in A&E, due to the delay or lack of alert to A&E (e.g. a paediatric emergency and lack of paediatrician).

There are some agreed clinical pathways in place other than conveyance to A&E or treatment within the SJARS minor injuries treatment room. All these pathways are available to all levels of SJARS emergency road crews.

However, there are few pathway clinical standards agreed, monitored, audited and reported to assure individual clinicians, patients, services or HSSD that the clinical practice is good against international and other benchmarking, e.g. cardiac standards, infection control processes (such as hand washing), asthma and stroke. Some items of equipment related to these standards and outcomes have not been accessible to SJARS staff (e.g. 12-lead ECG machines that specifically link to hospital and international MINAP cardiac standards).

The SJARS service is supplemented by a valuable Community First Responder Scheme of Level 1 skilled volunteers.

Station officers within SJARS are Level 4 registered paramedics or Level 3 Emergency Medical Technicians (EMTs) with extended training and are also available to respond using the response car.

Vehicles and equipment are clean and well maintained. However, the Review Team witnessed and was told that some obvious and expected equipment was not available. For example, there had been incident reports regarding stretchers (reported within SJARS and as part of the hospital incident reporting system), lack of modern inflatable splints and 12-lead ECG machines (critical for the measurement and management of cardiac conditions and heart attacks).

5.1.3 Minimum and desired levels of service within acceptable levels of patient safety and care

The clinical workshop held on 9 April 2013 considered the number and type of calls and the competencies required to provide a minimum and desired level of service to the Island.

For any service and clinical model there need to be processes and mechanisms in place to monitor agreed standards.

Both the minimum and desired levels of service would be supported by a resourced Community First Responder scheme, a functioning and efficient control room, and appropriately equipped vehicles.

Control room

Both the minimum and desired levels of service require urgent action within the control room, as the existing processes do not provide assurance of consistency or resilience. For example, 64% of calls analysed could not be identified by complaint type (see Table 5).

In addition, there was a steady movement from Category C calls to Category B that is caused by changing patterns of behaviour in the control room and not by any change in severity of call (see Table 6). There is a need for a consistent call-handling response with call-answering standards (see Appendix 6), adequate staffing, staff trained to First Aid at Work level and a technical solution regarding prioritisation and links to previous calls, despatching and contact with road crews. A key element of a minimum service is that there is a consistent process applied at call-handling stage, with clear performance and quality standards. This requires formal processes and recording to enable monitoring of individual performance linked to outcomes for patients.

To support the delivery of a consistent call-handling response, additional equipment and software licences will be required. The indicative cost is in the region of £110,000 for the hardware (capital) and £40,000 per year for the licences.

Table 5 Analysis of call by complaint type, January 2011 – December 2012

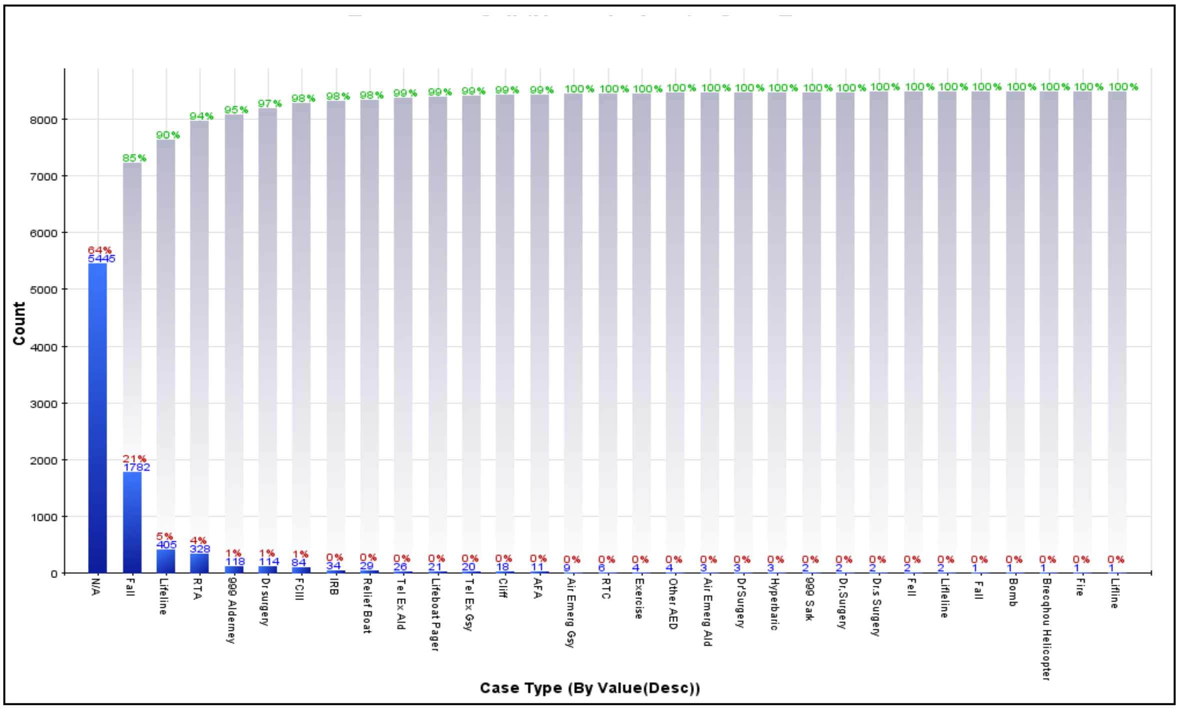
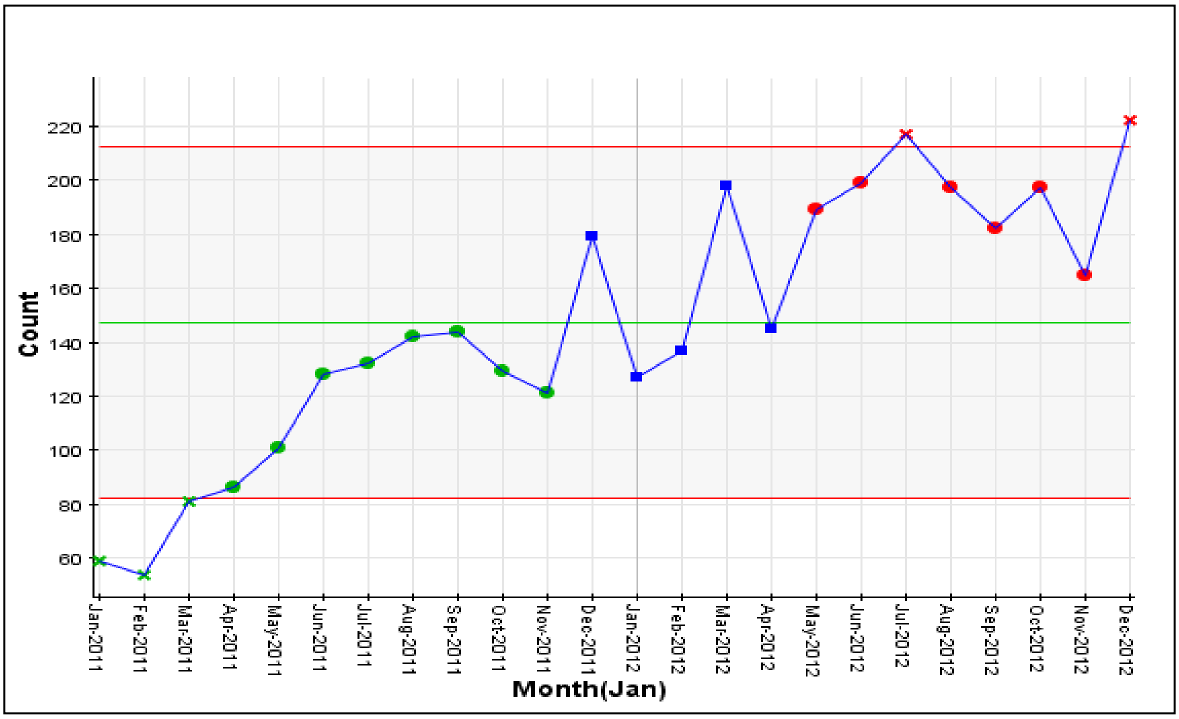


Table 6 Category B calls, January 2011 – December 2012



Recommendations

There is an urgent need to equip the current SJARS control room with an appropriate prioritisation and despatch system. This should be introduced as soon as possible, regardless of any longer-term strategy, as it would be easily transferable to any future solution. It should include:

- A call-handling technology which records the time that calls are received, answered and closed, linked to voice recording of the calls and able to produce performance information by call-handler that is auditable
- A computer-based clinical record which includes caller ID and a decision-making process that is based on the needs and opportunities of the Island's services and geography and future-proofed to provide for changes for 2020
- A clinical record system that is user-friendly and auditable, and provides performance and planning information

- Clinical records that can be despatched to a hand-held community device and linked to other services, to include previous history and special notes that can be sent to vehicles via the Tetra system
- Clinical records that can be linked to GP records within 24 hours
- Dedicated local control staffing at Level 1 with appropriate call-handling and system training, maintaining local knowledge for advice regarding location and directions
- Up-to-date GPS navigation systems and mechanisms for tracking and recording on-scene times.

The staffing levels in the control room need to be reviewed to ensure adequate, appropriate cover.

The emergency response standards should be reviewed in the light of international developments and local opportunities.

Road service

Both the minimum and desired levels of service require the same set of clinical and key performance indicators, with additional clinical practice indicators for the desired level of service which includes the use of Level 4 clinicians.

Minimum level of road service within acceptable levels of patient safety and care

The geography and size of the Island, linked with the comprehensive services at the hospital, allow for rapid transfer of patients to hospital. The road network is unlike the UK, Europe and other urban communities, with no motorways or large roadways or railways which result in multiple major trauma.

The data shows a relatively high rate of conveyance, which is consistent with a community with easy access to A&E services and the type of emergencies experienced. It also provides an acceptably safe service, with patients receiving advanced assessment and treatment with rapid transferral to expert clinicians.

Community First Responders (CFRs) (Levels 1 and 2) are currently in place and their use should be encouraged and developed.

Given the rate of conveyance and proximity to A&E, a basic respond and convey patients to hospital service provided by Level 1 and 2 staff responding and conveying would be safe.

However, due to Guernsey's aging population, an increasing number of callers will have the need for more complex assessment. Also, the 2020 Vision requires a reduction of conveyance, reduction of hospital admissions, and more links into other services. There is therefore a need for Level 3 staff competencies regarding assessment and limited interventions (which can be enhanced and developed in the future) to enable SJARS to deliver these anticipated changes in service demand.

Level 3 staff competencies regarding assessment and limited interventions will provide an acceptable minimum road service and allow for these other requirements to be fulfilled. This model is already in operation within SJARS with evidence of interventions and safe and effective non-conveyance. These clinicians already link very well with primary care clinicians and are able to refer directly into the community services (for example, to the rapid response and falls teams), and these referrals do not need to be undertaken by registered practitioners such as paramedics.

Mechanisms need to be in place to audit performance and clinical practice and need to link with individual performance reviews and clinical appraisals. This will, in turn, link into training, development plans and audit reports which provide a dashboard of assurance.

A minimum level of service would therefore be a control room as outlined above, and a Level 2 and 3 staffed road service supported by a Community First Responder scheme.

Desired level of road service within appropriate levels of patient safety and care

There is recognition that the Level 4 skill set would be an advantage as part of the SJARS response, particularly where time is of the essence for treatment and there will be some delay in conveyance to hospital. The extended skill set of these staff includes intravenous administration of drugs for anaphylactic shock (very severe allergic reaction causing breathing difficulties), intravenous fluid replacement, intravenous administration of morphine and other controlled drugs, and intravenous antibiotics for meningitis, as well as other interventions such as complicated airway management and extended assessment skills. However, many of these skills are more appropriate to trauma and acute emergencies. For this level of service to be acceptably safe, the clinicians would need to undertake more of the required interventions than the demand would require.

In addition, with the changing age profile of the Guernsey population, there will be a greater need for primary care support and pharmaceutical-based skills and competencies (neither of which are within the core skill set of Level 4 practitioners), and a reduced need for skills and competencies related to acute interventions. Any developments would require additional training and skill enhancements including those that are already in place with nurses and community staff and the comprehensive GP service. The Level 4 skill set is more aligned with the hospital A&E, critical care and anaesthetic sector.

There is an indication that there are some vacancies in the hospital setting. There are also opportunities to reduce the costs of recruitment and locum clinical staff by using the SJARS existing Level 4 staff differently within the hospital as cover for vacancies or at times of demand, either within A&E or in theatres and critical care. There is the opportunity to develop clinicians with a generic skill base to support these areas.

More importantly, it will allow these clinicians to maintain their clinical skills on-Island and assist the retention of home-grown clinical staff.

There is an opportunity to explore the feasibility of basing Level 4 clinicians within the hospital setting where they would see and treat minor injuries within A&E, support critical care within the resuscitation suite, provide an outreach to the wards to support cannulation and outreach critical care and as operating theatre technicians, whilst still having the ability to respond from the hospital by car when a Level 4 clinician's skills and expertise will assist.

This would be linked with formal training and competency assessment, joint professional audit with hospital clinicians and clinical developments linked with formal governance and planning.

In summary, Level 4 clinicians could be part of the SJARS service within the desired level of service. However, to be managing clinical risk appropriately, they would need to undertake procedures on a regular basis. A potential solution to this is that a single responder is based at A&E, whilst utilising their skills within A&E as part of the A&E team with a generic skill base.

This model would show benefits in safety and cost-effectiveness across the clinical pathway. Mechanisms need to be in place to audit performance and clinical practice and need to be linked with individual performance reviews and clinical appraisals. This will in turn link into training, development plans and audit reports which provide a dashboard of assurance. The feasibility of this should be explored whilst recognising that a whole health system review would need to be undertaken to deliver this.

Recommendations

If the decision is made to select the desired level of service, it is recommended that the feasibility be explored of a hybrid model of Level 4 clinicians, who are based in the hospital, work in an integrated way with the hospital staff and are despatched when needed by the ambulance service. This would help retain staff with this level of skill on-Island. These staff will have a unique opportunity to work differently, with costs being shared between SJARS and HSSD, whilst updating and maintaining their skills and competencies.

To support both the minimum and the desired levels of service, SJARS should continue to develop and expand their Community First Responder schemes.

5.2 SJARS minor injuries treatment room

SJARS provides a minor injuries treatment room based at the SJARS headquarters. The care is provided by the SJARS technicians and paramedics and the level of intervention depends on the clinical expertise and confidence of the staff on duty at the time. The clinical staff who assist patients who self-present at the treatment room will be staff who are rostered for the 999 calls.

SJARS makes no charge for this service and patients are asked for donations. Whilst the service is valued by the community, it is not well used or funded.

SJARS staff are committed to the service but are often not confident in treating the patients and as a result a high proportion of attendees are referred on to A&E for assessment and treatment.

Staff and interviewees agreed that the service should be either properly resourced or withdrawn.

The Review Team believe the community would be best served clinically if this service were integrated into the hospital service, or A&E, with care provided by Level 4 staff with a generic skill base and with the rights to refer patients to diagnostics and medical professionals. This would ensure an appropriate service and maximise the use of Level 4 resources from within the hospital. It is recognised that HSSD and SJARS would need to review the charge made to patients attending this service within the hospital.

Recommendation

The SJARS minor injuries treatment room should be integrated within the hospital or A&E service with a charge made to patients if appropriate.

5.3 Clinical standards and effectiveness

The SJARS Strategic Plan should provide the direction for the clinical development, outcomes and priorities for the organisation. This is usually reflected in the Clinical Strategy for the organisation, supported by the standards expected, governance processes and links to the workforce and training plans. The Review Team saw no evidence of a Clinical Strategy and would urge SJARS to link with HSSD to develop one.

Minutes and papers of the SJARS Clinical Governance Group (previously the Paramedic / Clinical Steering Group) for the past two years were reviewed along with Board minutes. SJARS have a Clinical Governance Policy which is an audit document and not a recognisable clinical governance policy.

Clinical practice is directed by the Clinical Steering Group and they focus on JRCALC Guidelines from which the Health Care Professional Council (HCPC) base their standards of practice for paramedics. The remit of this Group has now been extended to review all clinical practice.

These guidelines are in place to support pre-hospital care and cover a wide range of conditions and treatments. They also take account of some of the most challenging environments and circumstances that pre-hospital clinicians have to work within, particularly remote environments, or where travel time for medical support may be long or difficult. Many of these skills are trauma management based and are not used often, even on mainland UK.

The guidelines cover interventions and medicines and are applicable to technicians and registered practitioners including paramedics and nurses. They are only guidelines and can be adapted to the environment in which they are being used. An example of this was that doctors on the SJARS Clinical Steering Group agreed that Clopidogrel (a clot treatment drug) would not be needed on the Island as the journey time to hospital was not that long. This was evidence of good practice with the group taking a clinical and cost-effective decision based on risk. Another example was their decision regarding the use of LMAs and i-gels for airway management instead of invasive intubation for keeping airways clear, which would follow the lead set by London Ambulance Service following results of international audits of paramedic intubation outcome rates. (LMAs and i-gels can also be used by non Level 4 clinicians.) Both of these examples secure appropriate care and outcomes for patients, at a lower cost.

Key to using these guidelines are the policies and procedures that are local to Guernsey, particularly the Medicines Management Policy and Procedures, training and update records and non-conveyance protocols. The governance and use of these should be agreed with the commissioner (HSSD) in conjunction with the Professional Guidance Committee.

All of the above should be monitored and reported on and, if undertaken with the hospital, can be jointly audited against cross-provider boundaries and benchmarked with other services.

There is limited evidence of how decisions regarding operational practice and delivery are discussed to ascertain clinical benefits or consequences. For example, there is little evidence of review of control room functions and pressures, linked to clinical practice and outcomes. Had there been, the decisions regarding investment in this area would probably have been different. The same could be said regarding the cancellation of training and changing of rosters; it would have clearly presented the patient benefits/disadvantages of suggested changes with clear evidence to support the management decisions when agreeing changes with staff.

It is recommended that all clinical and operational changes and developments are processed via a business case and are considered for the expected improvements to patient outcomes. These expected outcomes should be added to the key performance indicators and monitored by the Board if the development is agreed.

When medicines and interventions are agreed to be appropriate on the Island, staff must be trained and competent to use them. This includes using the skill frequently enough to maintain that skill.

SJARS data shows an average of 10 incidents per day (compared to well over 1,000 for a typical English control room), with a very limited number of those incidents being trauma or clinical conditions needing invasive procedures or specialist medicines pre-hospital. This lack of activity makes it very difficult for clinicians to maintain their skills outside the classroom.

Training (initial training or updates in specialist skills) has been either off-Island (which is expensive) or informal via the hospital. The training programme that is in place is not linked to a clinical strategy or SJARS workforce plan, and due to financial constraints training has been restricted.

HSSD and the hospital offer some training in specialist skills and the SJARS medical professionals on the Clinical Governance Committee offer individual support and training, e.g. in paediatrics. However, all is rather piecemeal, uncoordinated and not multi-disciplinary or multi-professional.

There are examples of clinical equipment being purchased with no clear evidence of a business case and not linked to clinical or strategic priorities, and examples of clinical developments linked to the desires of particular professional groups. These have been supported by senior clinicians/leads on the Steering Group, with little challenge regarding the need for the development, how competencies will be gained and maintained, or cost versus clinical or business needs. To address this, SJARS needs to be fully linked into the Island's Commissioning and Professional Guidance Committees as well as attending the HSSD Governance meetings as an active member.

There are internationally recognised standards of clinical practice and outcomes. These include the measurement of specific clinical interventions and treatment as well as standards relating to responsiveness, timing and delays, record-keeping and patient experience. There are also recognised standards for infection prevention and control, for hand-washing, cleaning and reporting. However, apart from swabbing of vehicles post deep cleaning (known as A cleaning) involving the stripping of all equipment and consumables within the ambulance and extensive cleaning and disinfecting of ambulances, there is little evidence of any formal clinical standards being recognised or monitored.

There are mentions within SJARS Clinical Steering Group minutes of stroke and cardiac standards but no indication of what these are or how they are being monitored. There is evidence that SJARS have not taken part in MINAP (the Myocardial Ischaemia National Audit Project) and would find it difficult given the lack of some key equipment such as 12-lead ECG machines.

The Clinical Steering Group and management team have recognised the need for some audits and there are some areas that are audited and reported through the Clinical Governance Group. These are not coordinated and there is no process for feeding these back into the SJARS board assurance process, HSSD contract monitoring or the HSSD Clinical Governance Group. They do not link into any strategic document, formal audit programme, training programme or plan. For example, ATP swabbing of vehicles following monthly ‘A cleans’ are undertaken and reported to the Clinical Governance Group with no formal record of improvements, accreditation of the swabbing, or monitoring between ‘A cleans’, and missing the international priority of the ‘5 Moments for Hand Hygiene’ which should be a measured standard.

There appears to have been insufficient account taken of priority, risk, cost and which intervention and standard would have had the most impact on patient safety and outcome within any developments.

The changing of the SJARS Clinical Steering Group into more of a governance group is welcome, and there is some evidence recently of recognition of the need to link more with the HSSD Clinical Governance Group. However, there have been delays due to this Review taking place.

There is evidence of a change in focus within SJARS regarding clinical outcomes and linking with other organisations. However, there is a need for expert support for the organisation to develop a Clinical Strategy and competency framework to link to SJARS’ strategic direction, hospital and other services’ joint outcomes and monitoring mechanisms.

Once this is in place, there is a need to ensure that there is expertise to support audit and performance management linked to governance. These skills are in limited supply within SJARS and would be best shared with another organisation.

There needs to be suite of clinical outcomes linked to the Island's standards and international standards that can be benchmarked.

Recommendations

SJARS should develop a Clinical Strategy, competency framework and Clinical Governance Framework. This needs to be supported by a dashboard of clinical outcome standards that are linked to the clinical pathway of care standards and outcomes required by professionals and regulating bodies and also linked to the standards of other stakeholders providing care in the pathway. These clinical outcome standards need to include stroke, cardiac, asthma and infection prevention and control (hand-washing and vehicle cleaning) along with complaints, incidents and risk. These should be linked to HSSD and other Clinical Governance processes, including joint audits and learning.

All clinical and operational changes and developments should be processed via a business case and be considered for the expected improvements to patient outcomes. These expected outcomes should be added to the key performance indicators (KPIs) and monitored by the Board.

An Island review surrounding standards, practice and joint practice should be encouraged. This should include the consistent and cost-effective provision of equipment for use across SJARS and HSSD services.

5.4 On-road rosters and relief levels

5.4.1 Rosters for the minimum level of road service within acceptable levels of patient safety and care

The Review Team used signalsfromnoise (sfn, the Lightfoot performance management solution) to construct emergency ambulance service rosters, based on the principles of the skill levels required for the minimum level of road service within appropriate levels of patient safety and care, described in section 5.1.

Demand for SJARS' emergency ambulance service was analysed by hour over the two years from January 2010 to December 2012. The nature of an emergency ambulance service requires a degree of caution to avoid matching supply and demand too tightly, so the rosters were constructed on the basis of SJARS' busiest week over the two-year period. In this week, there were 100 incidents, compared to 75 in an average week. This approach gives a degree of contingency and also allows for growth, which has been running at 8% per year.

On the basis of this demand, the sfn analysis showed that two double-crewed ambulances are needed during the day and one overnight, staffed by a mixture of Level 2 and Level 3 skilled staff. In the model (busiest) week, these ambulances would have coped with demand on all but seven occasions. It is, therefore, proposed to supplement this basic resource with a station officer in a car who would be available 24/7 to support the ambulances, if required, but who would not be part of the roster. This would have covered all demand in the model week with the exception of Saturday morning when the service would have failed to reach one Category C call within the target times.

As further contingency, building on their existing practice, SJARS should establish a formal call-back system that allows staff to be brought back to work in the rare event that the basic resource plus contingency cannot cope. Over the past two years, this extra back-up resource would have been required to attend to patients on 34 occasions (out of a total of 8,500 patients attended). None of these 34 patients had a life-threatening condition and the clinical risk would have been very low. Appendix 3 illustrates how these rosters cover demand in the busiest week.

The hours required to operate the rosters described above are 2,468 hours per month, compared to an average of 3,900 hours per month actually deployed by SJARS in 2012. This demonstrates that there is considerable scope for SJARS to match their current rosters more closely with demand. On top of the 2,468 roster hours, it is necessary to add 30% relief to allow for annual leave, bank holidays, training, new employee training, sick absence, maternity leave and other absence (see Appendix 4 for details). This is slightly lower than normal international good practice due to a low sick absence figure of 4% in SJARS. It allows all staff to have five days' training a year, which is in line with good practice. This brings the total gross hours to 3,209, compared to 5,070 used in 2012. See Tables 12-18 in section 9 for details.

In addition to emergency calls, emergency ambulances, along with patient transport services (PTS), are also used for high dependency (HD) work (GP admissions, high dependency discharges and inter-hospital transfers, including to the UK mainland). These HD calls average about two a day but can peak at six. On 36 days a year, the number of HD calls is between four and six.

Two calls a day can be absorbed by the emergency fleet and, therefore, no additional resource will normally be required. However, there will be days where a combination of high emergency call demand, coupled with increased high HD demand will be beyond the capacity of the rostered fleet and escalation contingencies will be required to handle the work. These will include use of:

- extra PTS resources
- managers with appropriate skills, and

- call-back arrangements for bringing crews back to work on overtime as currently happens.

In addition, the Review Team believes that there is scope for some of this work to be appropriately transferred to the PTS fleet and SJARS should undertake a review to determine this in more detail.

The rosters described above will cover the workload but this is dependent on the following conditions being met:

- The rosters only cover emergency work. Alternatives must be put in place to deal with all other non-emergency work. Or, the model week will need to be revised and the resource level adjusted accordingly.
- All other parts of SJARS' workload – cliff rescue, in-shore rescue etc. – need to be covered separately from core activities, using volunteers.
- The control room needs to be fully staffed 24/7 and there has to be a robust triaging system with good governance in place. This will free up the station officer to be able to support the ambulances as required.
- There needs to be full staff engagement in developing the model and rosters so that staff have confidence in the outcome.

5.4.2 Rosters for the desired level of road service within acceptable levels of patient safety and care

In the desired clinical model described in section 5.1, a Level 4 clinician based within A&E becomes available in a car to provide further support, particularly for those jobs where Level 4 skills are required. In the model (busiest) week, this would reduce the number of occasions on which SJARS would need to call in back-up from 34 to 21. This would add a further 720 roster hours and 948 gross hours to the totals, bringing total roster hours to 3,198 and total gross hours to 4,157. Appendix 5 shows how these rosters cover demand in the busiest week. See Tables 12-15 in section 9.1 for details.

5.4.3 Overview of rosters

Table 7

below summarises the monthly roster hours and gross hours proposed by the Review Team for the minimum and the desired levels of service, and compares them with the hours used by SJARS in 2012. This Table shows that, by matching roster hours more closely with demand, significant savings can be made compared to the current rosters.

Table 7 Monthly roster hours required for minimum and desired clinical levels of service, compared to monthly hours used by SJARS in 2012

	Roster hours	**Total gross hours** Includes allowance for annual leave, bank holidays, training, new employee training, sick absence, maternity leave and other absence
SJARS' monthly hours used in 2012	3,900	5,070
Monthly hours required for minimum level of service	2,468	3,209
Monthly hours required for desired level of service	3,198	4,157

[REDACTED (Exception 2.3 Access to Public Information)].

Recommendations

Rosters should be built aligning resources to demand, subject to the following conditions:

- Only emergency work is covered in the model. Either alternatives must be put in place to deal with all other non-emergency work. Or, the model week will need to be revised and the resource level adjusted accordingly.
- All other parts of SJARS' workload, i.e. cliff rescue, in-shore rescue etc, need to be covered separately from core activities, using volunteers.
- The control room needs to be fully staffed 24/7 and there has to be a robust triaging system with good governance in place. This will free up the station officer to be able to support the ambulances as required.
- There needs to be full staff engagement in developing the model and rosters so they have confidence in the outcome.

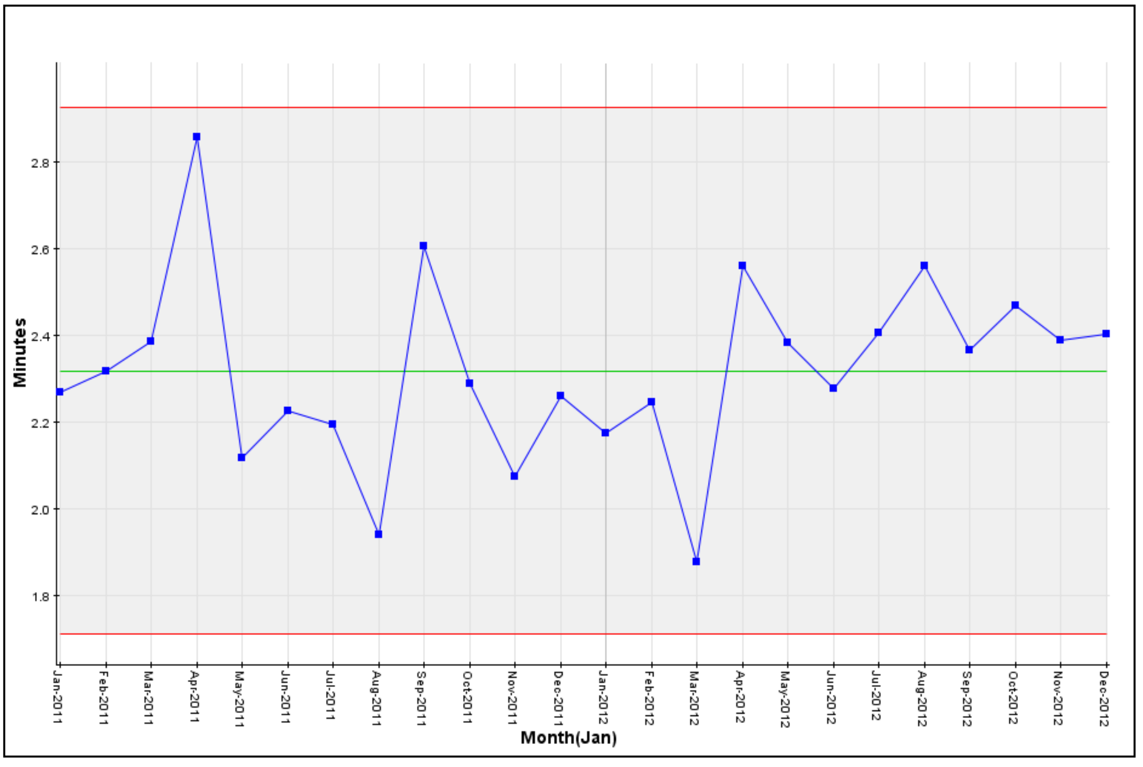
5.5 Operational efficiency

By analysing the data supplied through signalsfromnoise (sfn, the Lightfoot performance management solution) and by observation during two shifts (one clinical and one operational), it was possible to identify a number of areas for improvement.

5.5.1 Time from receipt of call to mobilisation of vehicle

The time taken from receipt of call to mobilisation of vehicle is only recorded to the nearest minute. Analysis suggests that the average time taken is around 200 seconds for all calls, and about 135 seconds for Category A calls (see Table 8). Benchmarking suggests that the target to aim for should be 90 seconds. If this target could be achieved, it would improve patient experience and performance, with the clinical pathway starting earlier and with an expectation that time taken to arrive at scene will be reduced. It is therefore recommended that this target be adopted.

Table 8 Time from call receipt to mobilisation of vehicle for Category A calls, January 2011 – December 2012



5.5.2 Utilisation of resources

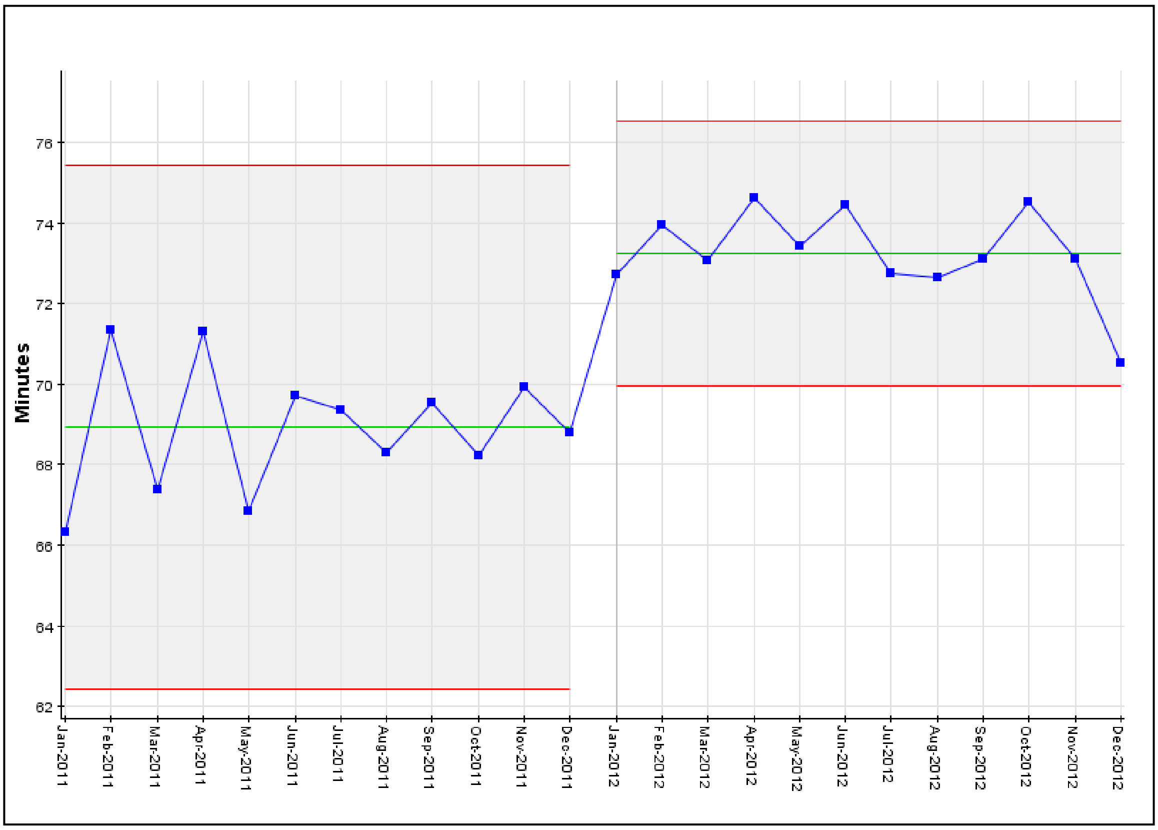
The number of emergency calls made by Guernsey residents is relatively low, at about 10 per day. This generates about 10 emergency despatches of an ambulance or a car a day. This compares to around 1,000 despatches a day in a typical English control room. This low level of demand necessarily means that utilisation (the percentage of total scheduled staff time spent responding to patients) of the SJARS resources, at around 10%, is relatively low. The emergency fleet is also used to move some non-emergency patients, but even including this work, utilisation only rises to about 13%. This situation is partly caused by the fact that the rosters do not accurately reflect demand. If the rosters were more closely aligned to demand, as described in section 5.4, utilisation could be increased to 16%. Given that emergency ambulances need to be available to respond immediately to a fluctuating workload, this level of utilisation would not be unreasonable for a service this size.

Utilisation of SJARS cars is particularly low. Their primary planned role is to respond to Category C calls (the least seriously ill patients) but they are staffed with the most highly skilled staff, many of whose skills are trauma and emergency based and so not needed for this patient group. However, not all staff have confidence in this single-response policy and double-crewed ambulances are frequently sent instead, producing a very low car utilisation. Possibly because of this low usage, the cars are then often used to move non-emergency renal patients. It is recommended that the use of cars is reviewed in the light of the conclusions of this Review and that staff are engaged in that process.

5.5.3 Job cycle time

Current job cycle time (that is, time from call to vehicle clear) increased from 69 minutes in 2011 to 73 minutes in 2012 for incidents requiring transport to hospital (see Table 9). This is on the high side by good international standards for an island Guernsey's size and with no significant hospital delays. It is, therefore, recommended that job cycle time is adopted as a performance indicator and an action plan to reduce it is developed with full staff engagement. Improvements in job cycle time will increase the availability of SJARS vehicles, which will enable them to respond to patients more quickly.

Table 9 Job cycle time (time from receipt of call to vehicle clear), January 2011 – December 2012



5.5.4 Use of standby points

The Review Team found no evidence that the introduction of standby points (locations away from the ambulance station, where ambulances are based, waiting for the next call) had produced any benefits, and it is recommended that their continued use be reviewed in the light of the other changes proposed by this Review.

Recommendations
A target of 90 seconds from call receipt to mobilisation of vehicle should be adopted. The use of cars should be reviewed in the light of the conclusions of this Review and staff should be engaged in the review process. Job cycle time should be adopted as a performance indicator and an action plan to reduce it should be developed, with full staff engagement. The continued use of standby points should be reviewed in the light of the other changes proposed by this Review.

5.6 Control room – longer term

With so few calls per day compared to other control rooms, some form of joint venture/partnership would be very helpful in strengthening resilience in the control room. The following options were examined:

- **Joint emergency services control room with Police and Fire and Rescue** – The Review Team were told that there are already discussions underway to develop a joint control room on Guernsey with Police and Fire and Rescue. The proposal includes a new command and control system that can be adapted for ambulance use. This option will permit greater resilience due to the increased number of calls and improved staffing. It will facilitate better integrated working across the emergency services on Guernsey. It will preserve local knowledge in the control room. It will also enable efficiency savings to be made and reduce potential duplication of costs and infrastructure.

- **Merger with Jersey ambulance service control room** – This option offers very little extra benefit over the joint emergency services option but fails to produce all the benefits. The number of extra calls would still not be enough to support a resilient, efficient control room. There would be no scope for better integration on

Guernsey, and the two island ambulance services are not in a position to offer material support to each other.

- **Partnership with an English ambulance service** – A typical English ambulance service control room receives over 1,000 emergency calls per day. It would be possible, therefore, to handle the Guernsey calls with little extra cost. The English service would have the most up-to-date call answering, triaging, mapping, despatching and management information systems and would have a clinical support desk to offer advice and guidance to the crews. They would be able to provide a high degree of assurance and audit around patient safety. However, this option does not offer the opportunity for the integration of emergency services or the development of a Guernsey-wide control room. It also does not protect local knowledge. It would, however, represent a good fall-back if the joint emergency services option does not proceed.

It is therefore recommended that SJARS participate fully in the plans to develop a joint emergency control room for Guernsey.

Recommendation
SJARS should participate fully in the plans to develop a joint emergency control room with Police and Fire and Rescue on Guernsey.

6 Other services

SJARS, over their existence, have developed or become responsible for a number of services which are not all normally associated with ambulance services. These services are at times distracting to the management and delivery of core services and can inappropriately consume rostered resources. Nevertheless, there are opportunities for both SJARS and the States of Guernsey to develop some of these to deliver financial efficiency and service improvements for the population. The range of services and potential opportunities are:

1 **Non-emergency ambulance services** – SJARS deliver a limited non-emergency ambulance service, providing planned transport services including hospital discharge and outpatient services. The demand for these services has been reducing over time, which has reduced the utilisation of the SJARS fleet. It was also indicated that a range of other non-emergency transport services are provided by both voluntary and non-voluntary providers. The current SJARS provision, with minimal cost, could provide additional capacity across a range of services and support the delivery of the 2020 Vision. The current charging/subscription schemes are a risk and require clarification if the services are developed as a core SJARS function.

2 **Other rescue services (cliff rescue, in-shore rescue, marine ambulance and hyperbaric recompression centre)** – These services are currently in a transition period and will all be provided on a volunteer basis under the SJARS banner. These services are not intended to be provided as a core service, and elsewhere in the UK would be delivered through different statutory and non-statutory providers. There is a clear desire from within the SJARS management that these services should operate discretely and remain funded through charitable donations. The Review Team were told that all the emergency services are content with the current allocation of responsibilities.

3 **Healthcare equipment shop –** The healthcare equipment shop has been in operation for a number of years, and provides a range of products for purchase or hire. There are also a number of other specialised equipment shops on the Island, managed by a range of groups and charities. There are opportunities to further extend the range and scope of the SJARS healthcare equipment shop to provide a more integrated service to support the Island as a whole. At present the shop is predominantly a provider of equipment. As the population changes in line with the 2020 Vision, the needs of the service-users will change, adding significant financial strain. The opportunity for the development of an integrated equipment shop requires further investigation but could provide a consistent delivery of equipment and adaptations, whilst freeing clinical staff and providing savings.

Recommendations

A review of the provision of non-emergency transport across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.

SJARS should ensure clear lines of operational responsibility and finance between core and non-core services.

A review of the provision of equipment services across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.

7 Governance

The governance processes within SJARS were reviewed and, whilst there was a highly motivated SJARS workforce, anxious to provide a safe related to risk and professional service, there is scope to improve assurance and governance in the following areas.

- The Board have access to limited formal mechanisms/processes to assist them in being assured that they are providing a safe service, with the need for the provision of a dashboard to be agreed and developed to support and challenge the organisation.

- SJARS Board agreed a mission statement and strategic objectives to cover the period 2010-2012 but these were largely overtaken by the funding crisis. In addition, SJARS had not succeeded in engaging stakeholders or staff in developing the strategy. A clear, supported strategic plan that contributed to the 2020 Vision would be a major benefit to SJARS both in giving clarity to the management team and the staff and in positioning the service as a key player in the future health of the Island. Any such SJARS document would need to be supported with a clinical strategy underpinned by a robust governance and performance management framework. These would all need to link into the States' 2020 supporting plans, in particular the workforce plan and clinical governance and audit programmes.

- Performance and quality management – Whilst some processes were in place to monitor performance, there is a need to develop some clear standards and methodology to ensure meaningful measurement or recording. This should be in recognition of and link to any strategic or business plans for SJARS or HSSD.

- Minimal formal mechanisms for communication and engagement for users of the service and stakeholders were in place.

- SJARS has in place an Organisational Risk Register dated July 2011. There is opportunity to improve both the content and structure of this document. For example, there is no reference in the Risk Register of the failure to agree on the level of the HSSD grant. When organisational priorities were changing – for example, training being suspended – it was unclear what if any risk assessment was undertaken. Once a new framework has been agreed, developed and implemented, it should ensure a link with clinical and corporate KPIs. This is an area that would clearly benefit from the sharing of resources with other key stakeholders, particularly the HSSD governance team.

- There is an opportunity for SJARS in collaboration with HSSD to develop the governance framework to take the organisation forward in line with the States of Guernsey's strategic plans and sustaining and developing its place within the health economy.

- It was difficult to understand what if any external challenge was made to SJARS, except in relation to the current financial situation. This would be expected to come from HSSD via mechanisms such as contract management or commissioning intentions. There is a real need for HSSD to focus on developments within SJARS, and across the States of Guernsey to ensure the links to the other services and the requirement for the delivery of the 2020 Vision.

Recommendations

SJARS should take the opportunity afforded by this Review to revisit their strategic direction and supporting plans, fully engaging patients, external stakeholders and staff in the process.

SJARS should formulate and implement a comprehensive Governance Framework which links workforce planning and training to competencies, risk and business priorities and the performance and quality dashboard, reporting on key performance indicators to the Board.

HSSD and SJARS should agree key performance indicators and contractual monitoring measures and implement regular reporting as a matter of urgency. (See Appendix 6 for a suggested model.)

SJARS and HSSD should consider the opportunities for a single governance resource with the expertise in HSSD to be available on a day-to-day basis to support SJARS.

SJARS should review and revise the Clinical Steering Group terms of reference to include the provision of business cases to the Board for clinical developments, audit programme and workforce and training.

SJARS should implement Board development to include governance linked to strategy, business planning and developments, and risk.

The SJARS Board should review the Organisational Risk Register in the light of the revised Strategic Plan and adopt a new format which assesses the impact of the mitigating actions more clearly and regularly reviews the organisational risks SJARS face.

7.1 Management structure

A review of the management structure in SJARS was beyond the scope of this Review. Overall, the Review Team were impressed by the commitment and professionalism of the SJARS management team. However, management salaries as a proportion of total salaries seem rather high, although to some extent this is inevitable given the relatively small size of the service. If these costs were compared the a UK ambulance Trust this proportion would be expected to be significantly lower. In the minimum and desired levels of service it is proposed that management and support costs be in the region of 15% of the total cost of the service, which is higher than the UK National Audit Office reported figures. The Review Team would encourage the steps already in hand to look for opportunities to reduce these costs, possibly by collaborating more closely with partner organisations such as the other emergency services, Jersey Ambulance Service, HSSD and The States of Guernsey Hub. Key areas for collaboration are health and safety, risk management, governance, procurement and reporting.

Recommendation
SJARS should continue to pursue opportunities to reduce management costs, including collaborating with partner organisations.

7.2 Relationship with HSSD

The day-to-day working relationship with HSSD staff in the provision of care is excellent on both sides.

However, the relationship has not been as robust from a commercial or service partner perspective. HSSD has not formally signed a revised Service Level Agreement (SLA) and has not been clear with SJARS regarding the service or the funding of it, and has placed no requirement on SJARS to monitor and report back. The revisions to the SLA in 2010 were not agreed or signed by the management team at the time. HSSD used the SLA to require SJARS to undertake a review (SJARS Scoping document) which was completed in 2012. There is a need to formalise a contract for services from SJARS by HSSD.

There is a need for the Boards to work more closely regarding the strategic priorities for both organisations and the 2020 Vision should be the focus for this. It is believed that there should be formal HSSD senior membership on the SJARS Board as the commissioner of the service, and an annual joint SJARS/ HSSD Board meeting should be held.

Recommendations

HSSD should ensure that SJARS is a formal member of any strategic planning groups for 2020 Vision work.

SJARS should include HSSD as a formal member of the Board.

A joint annual Board meeting between HSSD and SJARS should be held to review the common objectives and progress and to agree the plans for the future years.

7.3 Service Level Agreement (SLA)

To underpin the organisational responsibility as either commissioner or provider of services there is usually a level of formal agreement in place. This would generally be expected to be in the form of commissioning intentions, service level agreement or contract (or a combination of all three).

In 2010 there was an aborted attempt to develop and agree a SLA between the organisations. The only previous SLA was developed in 2005 and does not in reality reflect the requirements of the organisations eight years on.

The document produced in 2010, although not agreed or signed, did include the key elements of managing the relationship between the organisations:

- Service description/definition
- Roles/responsibilities
- Information requirements
- Key performance indicators
- Record of variation

The lack of formality between SJARS and HSSD has significantly contributed to the position in which the organisations find themselves today. There is still no clear consensus on how and what is funded through the States of Guernsey and what information is shared.

There is general acceptance that some formality should exist between the organisations, which does present the opportunity to develop and agree a meaningful Service Level Agreement. This opportunity would also allow the development of a range of clinical and quantitative performance indicators and, if accepted, incentives and penalties to encourage innovation and efficiency.

Recommendation

HSSD and SJARS should develop an SLA, including a service description/ definition, roles and responsibilities, information requirements, key performance indicators covering finance, activity, quality and governance and a range of incentives and penalties as appropriate to support the strategic direction of both SJARS and HSSD.

8 People

8.1 Staff engagement

The evidence the Review Team gathered from inspections and interviews demonstrated that staff took great pride in working for SJARS and that they could see that progress had been made over the years in many areas. The staff interviewed by the Review Team felt it had the potential to be the best job in Guernsey. However, there was also evidence that staff felt there was scope to engage them more. They were keen to be able to contribute even more to improving patient care. While they recognised the financial pressures that SJARS was under, they did not support all the steps taken to mitigate those pressures and felt that management did not always listen to all of their concerns. For example, they felt that some frontline training should have been carried on, as with their support the costs could largely have been absorbed. Although staff valued the formal Awards Night as recognition of their efforts and commitment, they felt there was scope for greater contact between staff and senior management on an informal basis.

It is recommended that the SJARS executive management team takes steps to ensure greater engagement of staff. For example, staff should be fully engaged in the development of the new Strategic Plan, discussed in section 7.

8.2 Staff development

SJARS’ road staff have an excellent reputation and are well thought of in every sector. The brand of St John is well loved and there is an excellent opportunity to build on this reputation with supported and trained staff.

SJARS need to be aware of the links to skill gaps and opportunities in other agencies now and in the future, and of the opportunities for developing staff into shared roles.

There is no formal workforce plan with details of numbers, skills and competence and links to the business plan or 2020 Vision. A key to this is to work jointly with other providers to ensure opportunities are maximised and duplication limited, that outcomes for patients are improved and governance processes are in place and appropriate.

The skills of the SJARS workforce are critical to health care on the Island. They will play a pivotal part in the delivery of 2020 Vision. To be part of this, skills will need to be honed and learnt. The skills needed at the ‘front door’ call-handling are important in setting the tone and standard for the rest of the pathways.

While SJARS has been providing a well-respected ambulance service that the Island's population has confidence in, there have been few clinical incidents reported, either internally within the SJARS reporting system, or by external agencies through their reporting processes.

There appear to be limited formal training programmes linked to appraisals, the risk register and incidents, business planning and the key performance indicators.

There needs to be formal clinical supervision in place for all clinical staff, linked to appraisal and personal development plans and portfolios.

Formal training often takes place off-Island and is expensive and limited to a small number of people.

There are many offers of informal training, particularly in areas where SJARS’ clinical knowledge may be limited. (For example, the Review Team were told of the need for SJARS team to be more familiar with mental health and other conditions.) This includes safeguarding, incident reporting, etc. Despite this, little inter-agency training is taking place. Given the size of the community, this is disappointing and the Review Team would encourage formal multi-agency training to be organised and maximised.

The development of new skills must be in line with the patient and service needs, able to be audited and easily updated. Such development should be easily recognisable in the SJARS and HSSD clinical strategies.

The training plan needs to include customer care and involvement, audit and reporting, and communication, in addition to specialist clinical skills and things such as major incident training.

The organisation has a culture of command and some organisational development regarding communication, engagement and management, linked with good governance processes, is strongly suggested.

Recommendations
SJARS' executive management team should take steps to ensure greater engagement of staff, for example, engaging staff fully in the development of the new Strategic Plan.

A formal workforce development plan should be formulated and implemented, linking with the Clinical Strategies of partners. This should incorporate mandatory and other training requirements and methods of delivery, and be fully costed.

Formal mechanisms for clinical supervision should be put in place.

SJARS should use the opportunities afforded by the Review to develop the senior management team, in particular around the areas of strategic planning, governance, organisational development, performance review and staff and stakeholder engagement.

An annual appraisal system for all staff should be implemented, supplemented by regular individual and team performance feedback.

9 Finance

As indicated earlier, SJARS have four areas of funding to support the provision of services:

-
- Treatment and transfer charges
- St John Supporter Membership
- Donations

The proportion of income from each of the main sources over the last few years is shown in Table 10 below.

Table 10 SJARS' income analysis 2010-2012 and budget for 2013

	2010	2011	2012	2013*
	£	£	£	£
Income sources				
St John supporter membership	333,378	336,125	354,609	350,500
Treatment and transfer charges	258,538	311,857	312,994	334,000
Grants received	1,966,485	1,995,982	2,211,782	2,261,916
Bank interest	8,498	9,606	13,753	10,000
Total income	**2,566,899**	**2,653,570**	**2,893,138**	**2,956,416**

** 2013 SJARS budget*

However, the total income generated has not been enough to meet outgoings for any of the last three years and the service is also forecast to be in deficit for the current financial year (2013). In addition to this, there is an underlying pension deficit which, although not within scope of this report, is causing significant concern for the SJARS Board and requires resolution.

Table 11 Income and expenditure 2010-2013

	2010	2011	2012	2013*
	£	£	£	£
Income sources				
St John supporter membership	333,378	336,125	354,609	350,500
Treatment and transfer charges	258,538	311,857	312,994	334,000
Grants received	1,966,485	1,995,982	2,211,782	2,261,916
Bank interest	8,498	9,606	13,753	10,000
Total income	**2,566,899**	**2,653,570**	**2,893,138**	**2,956,416**
Staffing	2,558,401	2,539,299	2,736,372	2,706,601
Non-staffing	639,022	651,480	549,403	548,099
Total expenditure	**3,197,423**	**3,190,779**	**3,285,775**	**3,254,700**
Surplus/-Deficit	**-630,524**	**-537,209**	**-392,637**	**-298,284**
**2013 SJARS budget*				

The figures in Table 11 clearly indicate that the current model of delivery is not financially viable, requiring a reduction in expenditure, an increase in income or a combination of both options.

9.1 Reduction in expenditure

A requirement of the Review was to develop two options for delivering emergency ambulance services on the Island:

- Minimum level of service within acceptable levels of patient safety and care
- Desired level of service within acceptable levels of patient safety and care

Details of both options and a comparison with the current provision are set out below. The basis for the details of the current service is the information provided by SJARS.

The biggest item of expenditure for SJARS is their staffing costs, not unlike any UK ambulance service but at over 77% of total expenditure is slightly higher. However, some of this can be accounted for by having fewer economies of scale and, not unexpectedly, a higher proportion of management costs. As indicated earlier, this Review of the service was required to compare the existing service against both a minimum level of service and a desired level of service. The two levels of service are described in section 5 of this report, and indicate the skills and competencies of the staff required in delivering the services. [REDACTED (Exception 2.3 Access to Public Information)]

[REDACTED (Exception 2.3 Access to Public Information)].

[REDACTED (Exception 2.3 Access to Public Information)]

[REDACTED (Exception 2.3 Access to Public Information)]

Tables 16, 17 and 18 provide an analysis and comparison of the costs for the different levels of service.

Table 16 Current budget, 2013

Current budget, 2013		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Emergency (inc HD)		
Paramedics		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**2,575,901**	**76.8**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**778,155**	**23.2**
Total	**3,354,056**	100.0
Recharges	-230,056	

Non-grant income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
	-684,500	
Additional funding requirement	**2,439,500**	

Table 17 Costs of minimum level of service

Minimum level of service		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Road - Levels 2 and 3		
Level 4 clinicians		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**1,396,691**	**65.7**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**727,667**	**34.3**
Total	**2,124,358**	100.0
Control room equipment upgrade	150,000	

Non-grant income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
Total non-grant income	-684,500	
Additional funding requirement	**1,589,858**	

Table 18 Costs of desired level of service

Desired level of service		
Pay	**£**	**%**
Control	[REDACTED (Exception 2.3 Access to Public Information)]	
Operational support		
Road - Levels 2 and 3		
Level 4 clinicians		
Station officers		
Non-emergency (PTS)		
Management		
Support staff		
Total	**1,725,239**	**69.6**
Non-pay	**£**	**%**
Staff costs	[REDACTED (Exception 2.3 Access to Public Information)]	
Administration		
Estates		
Operational		
Sundry		
Depreciation		
Total	**754,624**	**30.4**
Total	**2,479,863**	100.0
Control room equipment upgrade	150,000	

Non-grant Income		
St John supporter membership	-350,500	
Treatment and transfer charges	-334,000	
Total non-grant income	-684,500	
Additional funding requirement	**1,945,363**	

Tables 16-18 compare the current service budgeted costs with those for the minimum and desired levels of service. Comparing the range of models shows a possible range of clinical costs for emergency road services ranging from £732,243 to £1,262,532. The range in these staff costs has to be tempered against the requirement for some additional staff and resources for the control room, as detailed below.

A review of the management structure in SJARS was beyond the scope of this Review, although management costs appear rather high. In the minimum and desired levels of service the Review Team have proposed that management and support costs be in the region of 15% of the total cost for the services. This is higher that the UK National Audit Office reported figures. The closest comparison on the Island is the acute hospitals' management cost at 7.4% of gross annual budget. (We understand this does not include HR and finance management costs).

There is also a requirement to review control room staffing levels and provide additional staff to ensure a minimum of one call-handler at all times, ensuring the manager is not providing the service. Tables 16-18 above show the costs to provide additional call-handler hours for the peak periods over the day, 365 days a year. The tables compare the current 2013 budgeted cost provided by SJARS against the estimated additional call-handlers required to support the busiest times and ensure that overnight the station officer is not acting as the solo call-handler. The future model will still have periods of a single-handed call-handler, which may require the revision of the lone worker policy. It is also important to note that, in order to provide a bespoke clinical call-handling and despatching system, additional technology will be required, potentially incurring capital cost in the region of £110,000 and revenue costs for licences up to £40,000.

In developing the desired level of service, the role of the paramedic has been included in the roster, as they are part of the 'on-road' service for the purpose of costing. The current model benefits from their dual role as station officer and call responder.

The cost of managers is excluded from the roster but is shown as management costs in the financial summaries.

There are potential difficulties in managing the workforce to fit the minimum or desired levels of service. As part of the Review the following costs have not been included:

- Redundancy
- Staff redeployment
- Staff recruitment
- Training

These issues should be taken into account in relation to any decisions made and will require the appropriate engagement with staff.

The development of service line reporting will, when embedded in the organisation, allow devolved budget management and provide the early warning in relation to financial reporting included in any SLA. The work on this has commenced and has provided information for this report.

There has also been the opportunity to revise some of the non-pay costs of the revised service models, but again as the preferred model is developed a review of this cost may produce additional savings and the opportunity to review the current baseline.

9.2 Increased income

SJARS, as indicated earlier, has four main sources of income, two of which they can directly influence: service charges and subscriptions. The other two are the state grant which may be open to negotiation, and donations which are dependent upon the goodwill of the population.

A review of service charges was undertaken in 2010 and a range of recommendations were made and accepted. It is the Review Team's understanding that an annual inflation increase is added but it is not intended to review the charging scheme again in the near future.

The opportunity to review the membership subscription scheme has been rejected over the last few years in favour of a small annual inflation increase. Throughout the Review, a recurrent theme raised by nearly every interviewee was the relatively low cost of the scheme in relation to the benefits. Whilst accepting the reasons for the SJARS Board's decision on the issue, there is a counter argument for some change in its policy. There is an opportunity to increase the annual fee, or develop a form of usage cap which may discourage the potential for inappropriate usage.

Other opportunities to increase income or disinvest in services are covered in section 6. Particular emphasis should be placed on developing the potential for an integrated community equipment shop and the non-emergency transport service.

The key to the managing of the finance issue for SJARS is how they manage their relationship with HSSD, and the formalisation of the Service Level Agreement (SLA). The development of the SLA should include agreement on the amount of funding. There should also be agreement on how annual inflation and service developments are managed. In addition, there needs to be clarity in the receipt of state funding and on the principles on which it is provided, for example, against agreed performance/quality standards. The funding should be based on the agreed service model for the delivery of services as appropriate. There also needs to be clarity on the management of finances on an ongoing basis, not allowing issues to develop over a number of years without resolution. Any future funding agreement must be based around the provision of an agreed performance-monitoring regime covering financial and non-financial information-sharing including quality indicators.

During the 2012 financial year, there were plans to deliver an in-year cost improvement programme and additional income generation. Whilst the principle for these initiatives is eminently sensible, any such initiative in the future should be generally agreed in advance and be fully appraised with an impact assessment and shared with the HSSD.

Recommendations

See also the recommendation in section 7.3 on Service Level Agreement (SLA).

SJARS should develop a system of service line reporting which provides the Board with assurance that services are provided within agreed parameters and which allows remedial action to be managed, communicated and timely.

SJARS should explore the potential for redesigning the subscription scheme charges.

SJARS should engage with HSSD in understanding the opportunities to support other health provision across both secondary and primary care.

SJARS should ensure a clear separation between the financial arrangements for core and non-core services.

SJARS should introduce a business case system which will clearly identify quality outcomes and financial benefit (or both).

10 Electronic health care records

SJARS' records are all paper-based. This system appears to work reasonably well, but has severe limitations for the organisation with regard to monitoring outcomes and performance. This is causing difficulties and inconsistency, particularly regarding the processes within the control room (see section 5).

There is a need for an electronic clinical decision-making process within the control room function, that is wider in its application than the UK models of APDMS and NHS Pathways due to the range of calls received and opportunities to despatch and refer on to other services.

Whilst other services in the UK have benefited from having electronic patient records completed by road staff in terms of audit of outcomes, they have experienced increases in on-scene and completion times due to particular systems. The Review Team therefore recommends that SJARS adopts a hybrid system which can link with hospital and HSSD services.

The priority is to implement a clinical call-handling function within the SJARS control room to ensure that information is available for better decision-making at call receipt. This will assist in linking with hospital and other services' outcome information.

Recommendation

SJARS should include the benefits of electronic patient records within the Clinical Strategy that is being developed to support the 2020 Vision, to ensure all providers' data can be accessed and used.

11 Alderney

Although Alderney is part of the Bailiwick of Guernsey, the ambulance service is independent and separately funded. It is run by St John Alderney Ambulance Service and operates on a purely voluntary basis, handling around 420 calls a year. SJARS provides call-handling support, help in the event of a Major Incident, and support for joint training. SJARS also provides valuable assistance in helping the transfer of patients, both to PEH and to the mainland. Generally, the support given by SJARS is valued and appreciated by Alderney Ambulance who felt that even closer cooperation would be beneficial for them – for example, joint training and better radio links via Tetra.

Recommendation
A regular liaison meeting should be established to ensure that cooperation with Alderney continues and gets even stronger.

12 Emergency preparedness

SJARS have in place the key building blocks necessary to enable them to cope with major incidents and disruption to their services. They are, therefore, in a position to discharge their responsibilities under the new Civil Contingencies Act. However, there is room for improvement in both the Major Incident Plan and the Business Continuity Plan. In addition, there is scope to strengthen both internal training and joint exercising with the other emergency services. The Review Team also has concerns over the failure to replace some major incident and chemical, biological, radiological and nuclear (CBRN) equipment.

The Major Incident Plan has, rightly, been developed to support and integrate with the Guernsey Emergency Services Liaison Panel's Major Incident Plan. However, the SJARS Plan reads in a rather fragmented way and would benefit from being restructured as an overarching strategic plan with referenced action sections, possibly in the form of action cards. It is recommended that the Major Incident Plan be so restructured.

Conversely, the SJARS Business Continuity Plan has a well-written overarching strategy but lacks the detail necessary for it to be an effective plan. It is recommended that the Business Continuity Plan be populated as envisaged in the strategy.

The Resource Escalation Action Plan is well structured and based on good practice.

SJARS have undertaken some training and exercising to support their emergency preparedness strategies and plans. However, it is recommended that further regular internal training and exercising be carried out to support both the Business Continuity Plan and the Major Incident Plan when the revised versions have been agreed.

Funding for Major Incident equipment is also a concern both for SJARS and the Home Department. The purchase of the original major incident and CBRN equipment was funded by the States of Guernsey, and SJARS paid for staff training and equipment maintenance. Much of that equipment is now due for replacement, and this clearly represents a risk to SJARS' ability to respond to a major incident. However, there is no agreement on who should pay. While the Service Level Agreement requires SJARS to maintain Major Incident plans, the cost of responding to major incidents is explicitly excluded – which suggests that the Home Department should bear the cost of replacing the equipment. It is therefore recommended that SJARS and the Home Department reopen talks to resolve this issue, including a review of what equipment is now required, developed on the basis of a risk assessment based on the Island Risk Register.

Recommendations

The Major Incident Plan should be restructured as an overarching strategic plan with referenced action sections, possibly in the form of action cards.

The SJARS Business Continuity Plan should be populated as envisaged in the strategy with the detail that will make it an effective document.

Further regular internal training and exercising should be carried out to support both the Business Continuity Plan and the Major Incident Plan when the revised versions have been agreed.

SJARS and the Home Department should reopen talks to resolve the issue of who should pay for replacement of Major Incident equipment, including a review of what equipment is now required, developed on the basis of a risk assessment based on the Island Risk Register.

13 Links with other emergency services

SJARS' relationships with the Fire and Rescue and Police services are very good. Both value and appreciate the contribution that SJARS makes.

Collaboration between the services is strong. For example, there has been joint management training, joint exercising and joint educational initiatives for schools. There was a concern that SJARS' financial position had restricted the contribution that SJARS had been able to make to joint incident training and it was hoped that one outcome of the Review would be that SJARS would play a fuller role in future. The Review Team supports this view and recommends that SJARS plays a full part in all future joint emergency services exercises.

All the emergency services are content with the current division of responsibilities between them – for example, that SJARS operate cliff rescue.

Fire and Rescue and SJARS have already begun discussions on the contribution that Fire and Rescue staff could make in supporting SJARS. The Review Team believes there is considerable scope to extend the support that Fire and Rescue provides to SJARS, for example as co-responders (as already done by Police) and as drivers of emergency ambulances in times of severe pressure. It is, therefore, recommended that these discussions be as wide-ranging as possible, to identify all possible areas of mutual aid.

SJARS, Police, and Fire and Rescue are actively exploring the feasibility of a joint control room for Guernsey's emergency services. This is additional evidence of the strong collaboration and relationships that exist between the services. Although still in the early planning stages, confidence is high and the hoped for date of the end of 2014 is realistic. Not only does a joint control room offer scope for greater efficiency and resilience in control room operation, but it also further strengthens integration between the services and offers opportunities for exploring back-office savings.

Recommendations

SJARS should continue to play a full part in all future joint emergency services exercises with the Fire and Rescue and Police services.

Discussions between SJARS and Fire and Rescue should aim to identify all possible areas of mutual aid including, for example, fire staff acting as co-responders and as drivers of emergency ambulances in times of severe pressure.

14 States of Jersey Ambulance Service

The Review Team made contact with the States of Jersey Ambulance Service. This confirmed the view that, at this point, there was little to be gained by seeking to merge the two control rooms. However, it was considered that there is scope for further collaboration between the services in areas such as resilience, mutual aid, procurement, training, benchmarking and good practice sharing, especially around clinical practice.

Recommendation
A formal liaison should be established with the States of Jersey Ambulance Service, starting with a summit to identify scope.

15 Users' perspective

The Review Team were not able to fully explore the users' perspective of the service while on-Island through the more formal methods of questionnaires and interviews. We did have the unique opportunity to engage with each interviewee as a previous, current or potential service-user. There was the normal recording of compliments and complaints, and the biggest source of discontent appeared to centre on the issue of invoicing and charges.

The Review Team also had the opportunity to engage with a range of service-users through the coordination of one of the Island's charitable groups. The main view which emerged from the majority of conversations or written communication is universally a positive response to the perception of the service and all staff.

With minimal formal mechanisms for communication and engagement with users of the service in place, there was unfortunately a generally-held view that, if there were significant issues, the informal process would provide the warnings required. It is important for all organisations to understand the views of their users, and the development of a more formal mechanism may provide the opportunity for the HSSD to support the SJARS team.

16 Benchmarking

A comprehensive search of suitable organisations/services across the UK and worldwide has been undertaken. This has included Australia, New Zealand, North America, the Republic of Ireland, Jersey and a number of UK ambulance trusts. The Review Team has also been in direct communication with the Association of Ambulance Chief Executives (AACE). However, it has not been possible to provide a meaningful set of benchmarking data against which to compare SJARS due to their unique size and health system.

For example, English ambulance services are more than 100 times the size of SJARS and control rooms handle well over 1,000 calls a day, compared to Guernsey's 10. The Review Team examined data from small urban ambulance stations but these did not have control rooms or business headquarters.

Table 19 below demonstrates SJARS' position as an outlier. It also shows how the SJARS numbers would change if the minimum or desired levels of service were implemented.

Table 19 Benchmarking comparison of English ambulance services with SJARS' current service, and proposed minimum and proposed desired levels of service

	Range of English ambulance services	SJARS' current model	SJARS' proposed minimum level of service	SJARS' proposed desired level of service
Cost per incident	£176 - £251	£744	£506	£590
Incidents per ambulance clinician	215	131	160	136

Note: Figures for English ambulance services are from the National Audit Office report *Transforming NHS Ambulance Services* and refer to the years 2009/10.

Looking at benchmarking data that is not comparable could be highly misleading, especially for the lay person. However, the Review Team used their experience and knowledge of international ambulance services to develop a set of performance indicator targets that would be appropriate for Guernsey and these are listed in Appendix 6.

If required, a range of comparators could be developed with Jersey as part of their desire to collaborate on a number of areas, although this information was not currently available for inclusion in the report.

17 Networks

The St John Ambulance and Rescue Service (SJARS) in Guernsey is a subsidiary company of 'The Commandery of the Bailiwick of Guernsey of The Most Venerable Order of the Hospital of St John of Jerusalem'.

The Bailiwick of Guernsey Commandery was formed on 1 July 2012 as a new Commandery of the Order of St John, dependent on the Priory of England and the Islands. The formation of this body emphasises the constitutional distinction between the Bailiwick and England, each with its separate laws and ways, and recognises the evolving separate international identity of Guernsey. It has placed local St John assets in the Bailiwick (previously owned by the Priory) within local control.

SJARS is one of three charitable subsidiary companies of 'The Commandery of the Bailiwick of Guernsey', all of which are limited by guarantee. The other two subsidiaries are St John Ambulance Guernsey (SJAG) and St John Alderney Ambulance Service (SJAAS).

SJARS are members of the NHS Confederation and up until recently the Ambulance Service Network (ASN) (which ceased to exist on 1 April 2013). SJARS are in the process of joining the UK-based Association of Ambulance Chief Executives (AACE), and regularly send delegates to the annual conference of the Ambulance Leadership Forum (ALF) where ambulance leaders and senior managers come together to share best practice and ideas on how to improve the way they manage their local services.

SJARS is the founder member of the Ambulance Services 'Offshore Islands Association' which was affiliated to the ASN. This Association brings together senior managers from the islands of Jersey, Isle of Man, Isle of Wight, Guernsey and Gibraltar to share best practice and provide joint representation on national groups including Operations and Quality, Human Resources and the National Ambulance Resilience Unit.

The Review Team acknowledges that SJARS makes good use of the networks described above. In addition, section 14 of this report recommends that a more formal liaison should be established with the States of Jersey Ambulance Service starting to explore opportunities for further collaboration between the services in areas such as resilience, mutual aid, procurement, training, benchmarking and good practice sharing, especially around clinical practice.

18 Recommendations

The Review Team makes the following recommendations. See Appendix 7 for a prioritised list of recommendations with dependencies.

Service delivery

Clinical model – control room

1 There is an urgent need to equip the current SJARS control room with an appropriate prioritisation and despatch system. This should be introduced as soon as possible, regardless of any longer-term strategy, as it would be easily transferable to any future solution. It should include:

- A call-handling technology which records the time that calls are received, answered and closed, linked to voice recording of the calls and able to produce performance information by call-handler that is auditable
- A computer-based clinical record which includes caller ID and a decision-making process that is based on the needs and opportunities of the Island's services and geography and future proofed to provide for changes for 2020
- A clinical record system that is user-friendly and auditable, and provides performance and planning information
- Clinical records that can be despatched to a hand-held community device and linked to other services to include previous history and special notes that can be sent to vehicles via the Tetra system
- Clinical records that can be linked to GP records within 24 hours
- Dedicated local control staffing at Level 1 with appropriate call-handling and system training, maintaining local knowledge for advice regarding location and directions
- Up-to-date GPS navigation systems and mechanisms for tracking and recording on-scene times

2 The staffing levels in the control room need to be reviewed to ensure adequate, appropriate cover.

3 The emergency response standards should be reviewed in the light of international developments and local opportunities.

Clinical model – road service

4 If the decision is made to select the desired level of service, it is recommended that the feasibility be explored of a hybrid model of Level 4 clinicians, who are based in the hospital, work in an integrated way with the hospital staff and are despatched when needed by the ambulance service. This would help retain staff with this level of skill on-Island. These staff will have a unique opportunity to work differently, with costs being shared between SJARS and HSSD, filling vacant employment slots or providing care in the absence of a medical professional whilst updating and maintaining their skills and competencies.

5 To support both the minimum and the desired levels of service, SJARS should continue to develop and expand their Community First Responder schemes.

SJARS minor injuries treatment room

6 The SJARS minor injuries treatment room should be integrated within the hospital or A&E service with a revised charge made to patients if appropriate.

Clinical standards and effectiveness

7 SJARS should develop a Clinical Strategy, competency framework and Clinical Governance Framework. This needs to be supported by a dashboard of clinical outcome standards that are linked to the clinical pathway of care standards and outcomes required by professionals and regulating bodies and also linked to the standards of other stakeholders providing care in the pathway. These clinical outcome standards need to include stroke, cardiac, asthma and infection prevention and control (hand-washing and vehicle cleaning) along with complaints, incidents and risk. These should be linked to HSSD and other Clinical Governance processes, including joint audits and learning.

8 All clinical and operational changes and developments should be processed via a business case and be considered for the expected improvements to patient outcomes. These expected outcomes should be added to the key performance indicators (KPIs) and monitored by the Board.

9 An Island review surrounding standards, practice and joint practice should be encouraged. This should include the consistent and cost-effective provision of equipment for use across SJARS and HSSD services.

On-road rosters and relief levels

10 Rosters should be built aligning resources to demand, subject to the following conditions:

- Only emergency work is covered in the model. Either alternatives must be put in place to deal with all other non-emergency work. Or, the model week will need to be revised and the resource level adjusted accordingly.
- All other parts of SJARS' workload, i.e. cliff rescue, in-shore rescue etc, need to be covered separately from core activities, using volunteers.
- The control room needs to be fully staffed 24/7 and there has to be a robust triaging system with good governance in place. This will free up the station officer to be able to support the ambulances as required.
- There needs to be full staff engagement in developing the model and rosters so they have confidence in the outcome.

Operational efficiency

11 A target of 90 seconds from call receipt to mobilisation of vehicle should be adopted.

12 The use of cars should be reviewed in the light of the conclusions of this Review and staff should be engaged in the review process.

13 Job cycle time should be adopted as a performance indicator and an action plan to reduce it should be developed, with full staff engagement.

14 The continued use of standby points should be reviewed in the light of the other changes proposed by this Review.

Control room – longer term

15 SJARS should participate fully in the plans to develop a joint emergency control room with Police and Fire and Rescue on Guernsey.

Other services

16 A review of the provision of non-emergency transport across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.

17 SJARS should ensure clear lines of operational responsibility and finance between core and non-core services.

18 A review of the provision of equipment services across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.

Governance

19 SJARS should take the opportunity afforded by this Review to revisit their strategic direction and supporting plans, fully engaging patients, external stakeholders and staff in the process.

20 SJARS should formulate and implement a comprehensive Governance Framework which links workforce planning and training to competencies, risk and business priorities and the performance and quality dashboard reporting on key performance indicators to the Board.

21 HSSD and SJARS should agree key performance indicators and contractual monitoring measures and implement regular reporting as a matter of urgency. (See Appendix 6 for a suggested model.)

22 SJARS and HSSD should consider the opportunities for a single governance resource with the expertise in HSSD to be available on a day-to-day basis to support SJARS.

23 SJARS should review and revise the Clinical Steering Group terms of reference to include the provision of business cases to the Board for clinical developments, audit programme and workforce and training.

24 SJARS should implement Board development to include governance linked to strategy, business planning and developments, and risk.

25 The SJARS Board should review the Organisational Risk Register in the light of the revised Strategic Plan and adopt a new format which assesses the impact of the mitigating actions more clearly and regularly reviews the organisational risks SJARS face.

Management structure

26 SJARS should continue to pursue opportunities to reduce management costs, including collaborating with partner organisations.

Relationship with HSSD

27 HSSD should ensure that SJARS is a formal member of any strategic planning groups for 2020 Vision work.

28 SJARS should include HSSD as a formal member of the Board.

29 A joint annual Board meeting between HSSD and SJARS should be held to review the common objectives and progress and to agree the plans for the future years.

Service Level Agreement (SLA)

30 HSSD and SJARS should develop an SLA, including a service description/ definition, roles and responsibilities, information requirements, key performance indicators covering finance, activity, quality and governance and a range of incentives and penalties as appropriate to support the strategic direction of both SJARS and HSSD.

People

31 SJARS executive management team should take steps to ensure greater engagement of staff, for example, engaging staff fully in the development of the new Strategic Plan.

32 A formal workforce development plan should be formulated and implemented, linking with the Clinical Strategies of partners. This should incorporate mandatory and other training requirements and methods of delivery, and be fully costed.

33 Formal mechanisms for clinical supervision should be put in place.

34 SJARS should use the opportunities afforded by the Review to develop the senior management team, in particular around the areas of strategic planning, governance, organisational development, performance review and staff and stakeholder engagement.

35 An annual appraisal system for all staff should be implemented, supplemented by regular individual and team performance feedback.

Finance

See also recommendation 30 on Service Level Agreement (SLA).

36 SJARS should develop a system of service line reporting which provides the Board with assurance that services are provided within agreed parameters and which allows remedial action to be managed, communicated and timely.

37 SJARS should explore the potential for redesigning the subscription scheme charges.

38 SJARS should engage with HSSD in understanding the opportunities to support other health provision across both secondary and primary care.

39 SJARS should ensure a clear separation between the financial arrangements for core and non-core services.

40 SJARS should introduce a business case system which will clearly identify quality outcomes and financial benefit (or both).

Electronic health care records

41 SJARS should include the benefits for electronic patient records within the Clinical Strategy that is being developed to support the 2020 Vision, to ensure all providers' data can be accessed and used.

Alderney

42 A regular liaison meeting should be established to ensure that cooperation with Alderney continues and gets even stronger.

Emergency preparedness

43 The Major Incident Plan should be restructured as an overarching strategic plan with referenced action sections, possibly in the form of action cards.

44 The SJARS Business Continuity Plan should be populated as envisaged in the strategy with the detail that will make it an effective document.

45 Further regular internal training and exercising should be carried out to support both the Business Continuity Plan and the Major Incident Plan when the revised versions have been agreed.

46 SJARS and the Home Department should reopen talks to resolve the issue of who should pay for replacement of Major Incident equipment including a review of what equipment is now required, developed on the basis of a risk assessment based on the Island Risk Register.

Links with other emergency services

47 SJARS should continue to play a full part in all future joint emergency services exercises with the Fire and Rescue and Police services.

48 Discussions between SJARS and Fire and Rescue should aim to identify all possible areas of mutual aid including, for example, fire staff acting as co-responders and as drivers of emergency ambulances in times of severe pressure.

States of Jersey Ambulance Service

49 A formal liaison should be established with the States of Jersey Ambulance Service, starting with a summit to identify scope.

Appendices

Appendix 1 – Terms of reference for the Review

Service Review Terms of Reference

St John Ambulance & Rescue Service (SJARS)

LEAD HSSD CONTACT: Philip Hugo, Senior Contracts Manager, HSSD

REASON FOR REVIEW (TRIGGER)

(B) Value for Money / Efficiency Review	External / Independent Service Review
(E) Periodic review of Services (≤ 10yrs)	External

1. REMIT

1.1 Consider recent reports identifying that the current model is not financially viable.

1.2 Identify the minimum level of service that should be provided within acceptable levels of patient safety and care, how and by which organisation each element could be provided in the most efficient, effective and economic manner and how much that would cost the States of Guernsey

1.3 Identify the desired level of service to be provided, how and by which organisation each element could be provided in the most efficient, effective and economic manner and how much that would cost the States of Guernsey

1.4 Recommend an order of priority for the various elements that make up the difference between paragraphs 1.2 and 1.3 above, whilst detailing the benefits and risks of each

1.5 To review the quality, adequacy, efficiency, and potential of the ambulance and rescue services currently being provided by HSSD and SJARS, but note that the rescue service is out of scope for the review's report

1.6 Identify possible improvements in the performance, organisational and working interface and integration of ambulance services with other elements of HSSD and primary care to benefit health service users and reduce hospital admissions. To include organisations detailed on the document "Clarification of Organisations" previously supplied

1.7 Examine the effectiveness and efficiency of the provision of ambulance services in Guernsey by the SJARS.

1.8 Examine the effectiveness of current clinical standards and recommend performance indicators for Guernsey's ambulance services in the future.

1.9 Identify a breakdown of funding requirements upon which the States of Guernsey can decide on the most appropriate level of States funding for the provision of ambulance services in Guernsey

1.10 Provide options, with supporting evidence and contra arguments, to assist the Health & Social Services Department (HSSD) and SJARS to satisfy the remit through addressing the items set out below (Items for review) noting the constraints, both financial and resource, that exist at this time and to allocate a priority for any requirement for additional resources

1.11 Recognise the significant pension liability which will be subject to a simultaneous review

1.12 Solutions suggested may be outside of the financial and/or resource constraints below but where this is the case options must also be given taking account of risks, benefits, and priorities of other solutions within those limits.

1.13 The Review Panel are to adhere to this remit and ensure that all "Items for Review" are covered and reported as specified.

1.14 Should the Review Panel feel it appropriate to extend the review beyond this remit and the specified "Items for Review", they should notify the Lead HSSD Contact as soon as is convenient.

2. STRUCTURE

2.1 Timetable

i) The reviewer is to recommend the number of days required for the **on-Island** part of the review, commencing on the XX of XXX 2013

ii) **XX interviews** held on-island that vary in length from 30 minutes to two hours with individuals and small groups of up to five people.

iii) HSSD team to conduct a "Speed Consultation" session prior to review visit to obtain wider input

iv) A draft report should be prepared by XXX XXX 2013 which will then be circulated to all parties for any comments, these to be received back and forwarded to the reviewers by the XXX XXX 2013. The completed final report should be submitted by XXX XXX 2013 to the HSSD Lead Contact.

2.2 Review Panel

The reviewer is to propose a suitable review panel and to consider the following options:

i) XXXXXX (Expert in Service Provision)

ii) XXXXXX (Expert in Service Provision)

iii) XXXXXX (Nurse/Modern Matron)

iv) XXXXXX (Social Worker)

v) XXXXXX (Senior Administrator/Manager from a Health Trust)

vi) XXXXXX (Lay Reviewer)

vii) MDT Style Panel

viii) Pan-Island Panel

ix) Internal Panel

2.4 Interviewees

i) Review Project Team

ii) Current consultants/clinicians/professionals/service providers

iii) Other doctors

iv) Allied healthcare professionals

v) Managers from HSSD

vi) Representative(s) of the SJARS Board and Managers from SJARS

vii) Representative from the St John Commandery of Guernsey, Trust Board

viii) Alderney senior nurse manager at Mignot Memorial Hospital & chair of the Island Medical Centre via a planned conference call

ix) User Groups (random sample from subscribers/non-subscribers/subscribing users and non-users/Users in A&E)

x) Review the pathway and possible telephone input of some randomly selected patients/users

xi) Social Security Chief Officer and Head of Finance

xii) Home Department senior representative

xiii) Other parties suggested by the reviewers (e.g. Fire & Police Services)

2.5 Locations (to be recommended by reviewers)

i) All interviews to be held either at HSSD Corp HQ or Ambulance Headquarters depending upon convenience for the majority of interviewees

ii) A **tour** of the SJARS offices and premises

iii) A tour of the A&E department at PEH.

iv) Visit other facilities at the Princess Elizabeth Hospital (PEH)

v) Attend call outs

3. PREPARATION

3.1 An internal pre-review by SJARS & HSSD will be conducted prior to any external review to check the data being submitted, agree the expected outcomes & decide on what will be done with the review's findings

3.2 All interviewees will be briefed on the trigger for the review, the terms of reference, what the report will be used for

3.3 All interviewees will be made aware that their role, within the service being reviewed, may be reported upon

3.4 Selected documentation submitted to Review Panel for consideration will be made available to all interviewees

3.5 The Review Panel will be briefed adequately on the structures of SJARS and the States of Guernsey (e.g. Fire & Police services), and be provided with a copy of the States Ordinance Billet 2001 XXII (Nov 2001)

4. ITEMS FOR REVIEW

Working Relationships/Interface

4.1 Working relationships with community health and social care professionals including, Health Visitors, and Social Workers.

4.2 Advise on the potential for developing networks with Jersey and UK services

4.3 Identify any potential benefits of extending the electronic health and social care record (EHSCR) for use in the delivery of the ambulance service. Identify any current negative impact the EHSCR system has on the provision of the Ambulance Service

4.4 Identify and make recommendations for what other services could be provided by SJARS (e.g. community work, house visits, etc) and the potential for combining services (e.g. patient transport, equipment management, & discharge transport). This is to address aspects that either impact on or are impacted by the Ambulance service.

This will also be in scope where the integration of these services into the Ambulance service would provide further efficiencies. A full and detailed review of these other individual services is not in scope

Working Practices

4.5 Consider adequacy of policies, written clinical pathways and shared care arrangements but only as and when identified as an issue by interviewees or documents during the review

4.6 Consider the related operations and overlap with the other emergency services but note that this is NOT a cross-service review and recommendations for the other services is out of scope

4.7 Consider the activity and usage of the A&E facilities, including those used by the Out-of-hours GP service, where use could be optimised through changes to the services provided by the Ambulance Service

4.8 Upon the completion of the review visit, a summary assessment of the current preparedness for current and future major emergencies is to be made and incorporated into the report based on the legal requirement for the SJARS to provide under the new Civil Contingencies Law., Recommendations for addressing any concerns should also be included

4.9 To consider the current and future provision of cover to support staff leave/absence

4.10 Only <u>observe</u> the existing service provided in Alderney, and assess whether HSSD and/or the States of Alderney require a different level of provision. Note: no visit to Alderney is required

4.11 Consider the activity of the minor injuries service which is sited in SJARS premises and make recommendations of ways improve efficiency of resources of the type of work undertaken and the clinical appropriateness.

Workload

4.12 Examine the workload (patient demand) of the current SJARS team including the workload split and cross-subsidisation between the various divisions, and make recommendations regarding possible alternative methods of practice to achieve a balance of capacity & demand in the future.

4.13 Examine the workload of the paramedic service and make recommendations regarding the appropriateness of interventions made, possible alternative methods of practice and likely future demands benchmarked against similar services in the Republic of Ireland, Northern Island, Isle of Man or Isle of Wight, or in other comparable jurisdictions

4.14 Examine the provision and waiting times for ambulance services currently provided on-island.

Skills Mix

4.15 Examine the skills and qualifications required and possessed by, ambulance care assistants, emergency medical technicians and paramedics to meet the needs of the population

4.16 Put forward proposals in relation to the future direction of ambulance services in relation to the number of vehicles, ambulance care assistants, emergency medical technicians, paramedics and support staff required

4.17 Identify any potential and make recommendations for optimising the use of SJARS skills (e.g. social care & Admissions into the PEH not via A&E).

Governance and value for money

4.18 Consider clinical audit data and suggested improvements

4.19 Review Clinical governance and appraisal arrangements for the service

4.20 Review Quality assurance reporting for the service

4.21 Review outcomes of service compared to recognised benchmarks such as similar services in the Republic of Ireland, Northern Ireland, Jersey, Isle of Man or Isle of Wight, or in other comparable jurisdictions

4.22 Consider service users' perspective.

4.23 Identify any services or activities that may be reduced or removed without significant implications to the community and outline those implications

4.24 Evaluate the appropriateness of existing KPIs, and performance and reporting against those KPIs compared with other centres whilst recommending alternative options.

4.25 Undertake a realistic (not assumed) evaluation of what income could be generated or cost savings made by the service which could contribute towards covering any shortfall in funding

4.26 Define and identify what value and outputs HSSD are getting per unit being paid for and compare that value for money with other jurisdictions

5. OUTCOMES OF THE REVIEW

5.1 The principal outcome of the review is to provide a written report which comprehensively satisfies all of elements of the Remit (Section 1) and addresses all of the Items for Review (Section 4). The report is to assess the current model and operation, identify a range of alternatives and to make recommendations supported by evidenced cases.

5.2 The report is to include a summary of the key areas of risk (clinical and operational) for both the existing model and any proposed options, a priority assigned to each in descending order of importance together with recommendations for managing that risk

5.3 Throughout the report, the reviewers' findings and recommendations are to incorporate benchmarking and comparisons with other ambulance services (for both clinical practices and resource utilisation and efficiency) in other comparable jurisdictions organisations/centres such as, the Republic of Ireland, Northern Ireland, Jersey, Isle of Man or Isle of Wight.

5.4 Whilst the primary remit of this review is not for quality assurance, the report is to provide a quality assurance for the existing service and structure

6. BACKGROUND

The St John Ambulance & Rescue Service (SJARS) has been operating for 75 years providing the Island of Guernsey with an ambulance service, three rescue service functions, a hyperbaric treatment facility, a marine ambulance and a retail health equipment centre.

The SJARS is a wholly owned subsidiary charitable company of the Commandery of the Bailiwick of Guernsey of The Most Venerable Order of the Hospital of St John of Jerusalem. The company is Limited by Guarantee (LBG), registered in Guernsey.

The strategic direction of the organisation is provided by a Board of Directors with a clear mission statement which reflects what the organisation provides and sets out its key values.

Arrangements for the provision of ambulance services in Guernsey are through a Service Level Agreement (SLA) with the States of Guernsey's (SOG) Health and Social Services Department (HSSD). It is recognised by both the SJARS and HSSD that this agreement is due for review.

As its main stakeholder, the HSSD is the political driver to the ambulance services mandate, reporting lines and governance.

The work of ambulance services provided by the SJARS can be divided into two broad roles: emergency medical intervention; and scheduled medical transfers. Volunteers play a major role in providing support to these front-line services. SJARS paramedics are required to be registered with the UK Health Professions Council and are funded by public donations.

Unlike most developed countries, arrangements for the provision of ambulance services in the Bailiwick of Guernsey have no specific legislation on how they are delivered or governed against established standards.

There are 3 main sources of revenue for ambulance services in Guernsey currently being provided by the SJARS, they are:-

1. a Grant from the SOG
2. an ambulance subscription scheme
3. charges rendered to service users.

Appendix 2 – List of stakeholders interviewed

Alderney Hospital

Alderney Primary Care

Fire and Rescue Service

Representatives of Guernsey Primary Care GPs and Practices

Health and Social Services Department (HSSD)

Le Bourg Hospice

Police service

Clinical and Managerial Staff from the Princess Elizabeth Hospital (HSSD)

RNLI Representative / Harbourmaster

St John Alderney Ambulance Service

St John Ambulance and Rescue Service (SJARS)

States of Guernsey Home Department

States of Guernsey Policy Council

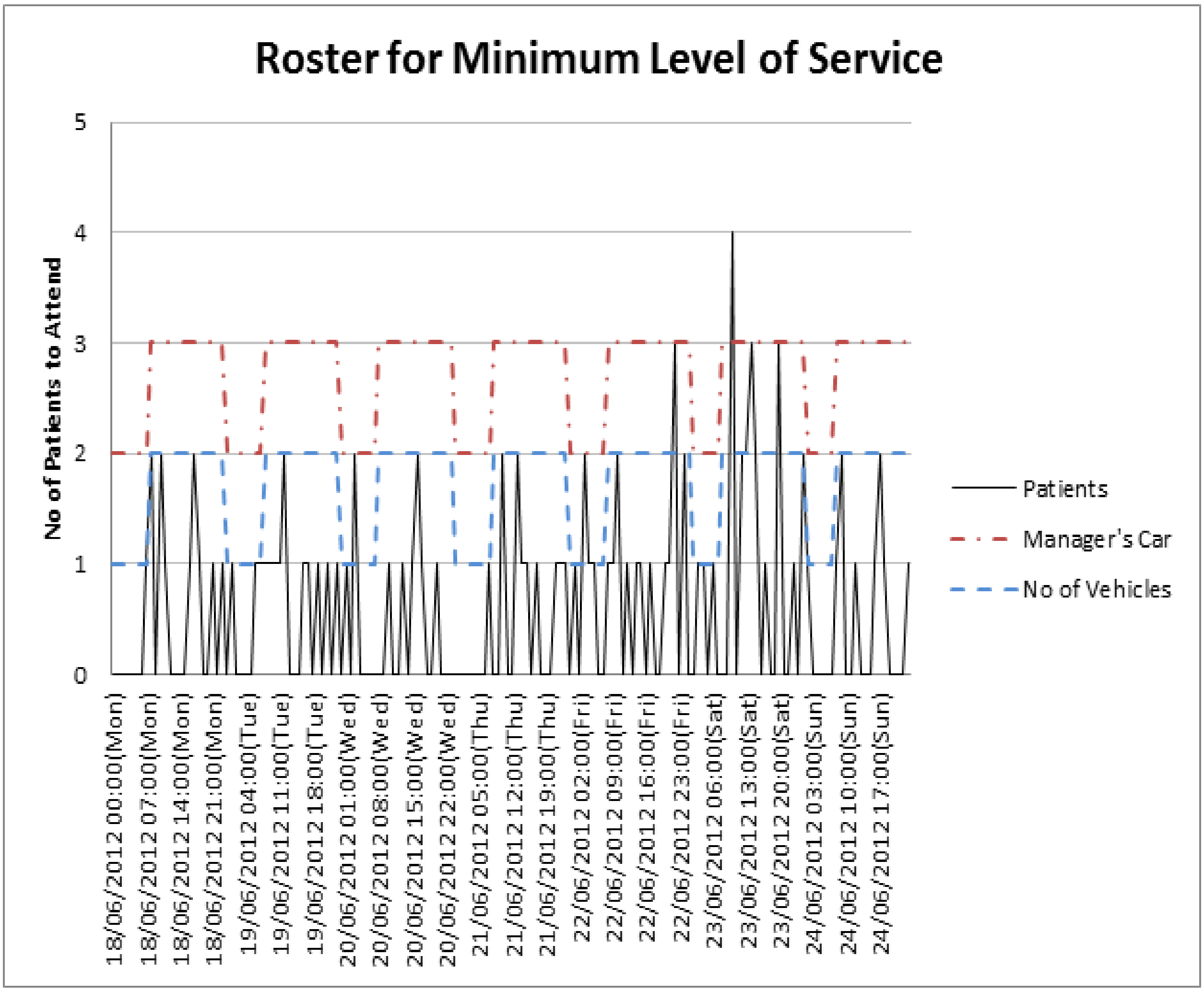
States of Guernsey Treasury and Resources

States of Jersey Ambulance Service

Members of the public who contacted the Review Team directly

Patients who contacted the Review Team directly

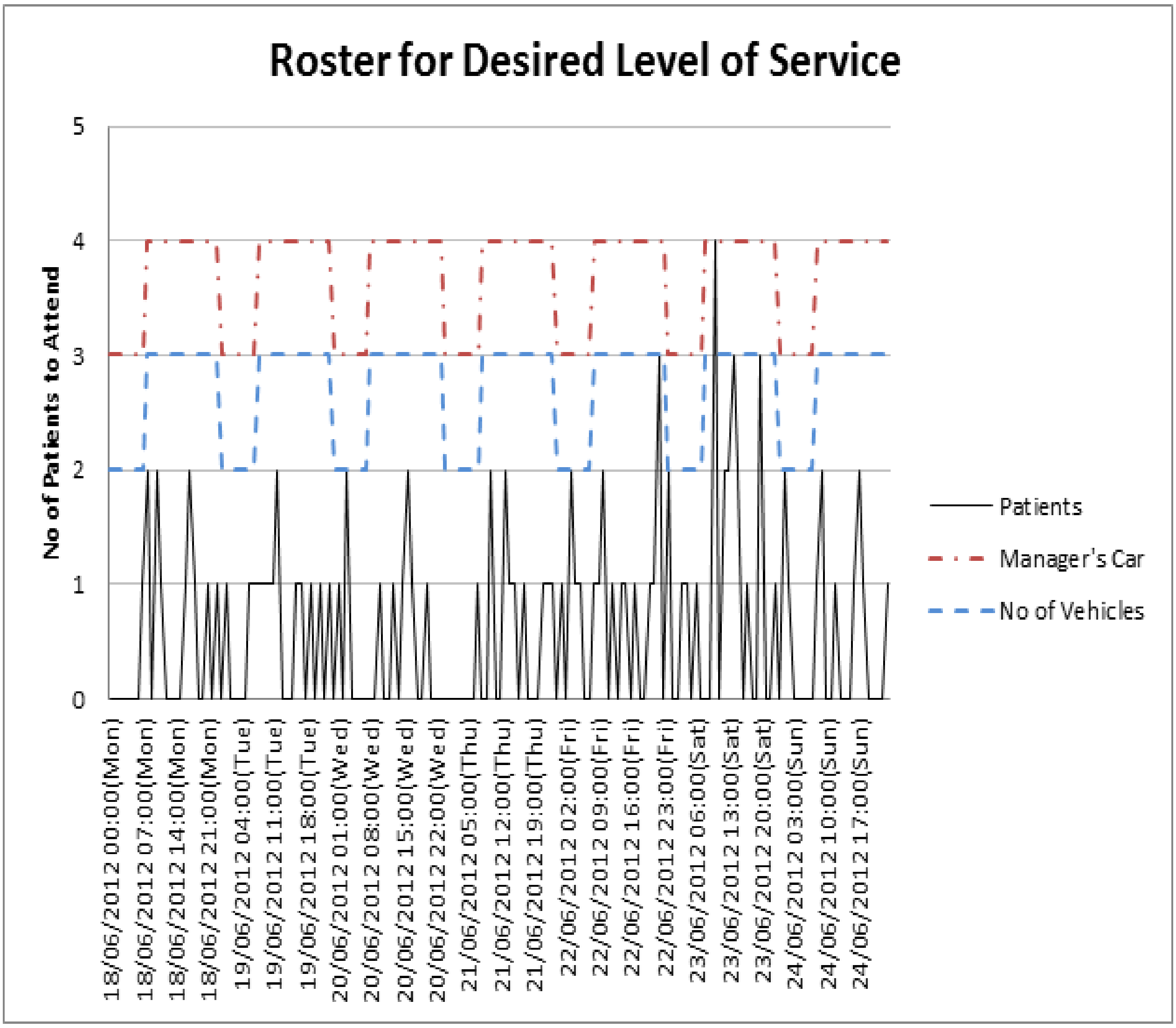
Appendix 3 – How the roster for the minimum level of service covers the workload (busiest week)



Appendix 4 – Relief hours' calculation

			Current Calculation		
Paid Hours per Week				38	
Assumptions based on hours per week:					
Hours per Day	Based on 5 days per week	5		7.6	
Lost Shift Hours:			**Factors**	**Hours per Annum**	
Paid hours per Year	Based on 52.1429 weeks per year	52.1429		1981.43	
Annual Leave Excluding Bank Holidays	Based on Days		25	190.00	**12.48%**
Bank Holidays/ Special Days	Based on Days		10	76.00	**4.99%**
Sickness	Based as % of Total paid hours		4.00%	79.26	**5.21%**
Training	Based on Days	Yearly Training	5.0	38.00	**2.50%**
		New Entrant	4.0	30.40	**2.00%**
Maternity	Based as % of A&E Staff		2.00%	39.63	**2.60%**
Other	Special leave,union duties etc		0.5%	6.00	**0.39%**
Shift Hours Available				**1522.14**	
Total Lost Hours				**459.29**	
Relief Required					**30.2%**

Appendix 5 – How the roster for the desired level of service covers the workload (busiest week)



Appendix 6 – Proposed key performance indicators and standards

The Review Team proposes the following key performance indicators and standards.

* =   A priority if a phased approach is needed
** =   HSSD Priority area
pcrs = Patient care record system

Indicator area	Indicator	Standard	Mechanism of measurement
Clinical indicators			
Stroke and TIA	FAST recorded *	100% appropriate patients	Audit 10% pcrs quarterly
	Patients followed pre hospital stroke pathway	98%	Audit 10% pcrs quarterly
	Blood glucose recorded *	98%	Audit 10% pcrs quarterly
	B/P recorded x 2 *	100%	Audit 10% pcrs quarterly
Chest pain and heart attack **	Pain score recorded	Pre-analgesia 100% Post-analgesia 100% appropriate patients	Audit 10% pcrs quarterly
	Oxygen administered as per guidelines	100%	Audit 10% pcrs quarterly
	Pain relief administered as per guidelines	100%	Audit 10% pcrs quarterly
Return of spontaneous circulation (ROSC) **	Use of AED	100%	Audit 10% pcrs quarterly
	% of successful ROSC	20%	Audit 10% pcrs quarterly
	% cardiac arrest patients discharged	As agreed with hospital services	Hospital discharge information/MINAP
Asthma	Recording of respiratory rate *	Pre-treatment 100% Post-treatment 100%	Audit 10% pcrs quarterly
	Peak flow recorded *	Pre-treatment 100% Post-treatment 100%	Audit 10% pcrs quarterly
	Administration of oxygen as per guidelines *	100%	Audit 10% pcrs quarterly

Indicator area	Indicator	Standard	Mechanism of measurement
	Administration of beta 2 agonists (by appropriate clinicians)	98% appropriate patients	Audit 10% pcrs quarterly
Hypoglycaemia/ diabetes	Blood sugar readings *	Pre-treatment 100% Post-treatment 100%	Audit 10% pcrs quarterly
	Referral to diabetic service if first episode of hypoglycaemia *	100%	Audit pcrs / diabetic service performance reports
Infection prevention and control	Compliance with hand-washing standards *	90%	Observational audits with hospital
	Cleaning of vehicles and equipment *	90%	Daily checksheet audit Observational inspections monthly ATP test results following A cleans
	Premises cleaning against the occupational standards	85%	Monthly audits
	Cleaning materials and colour-coding in place and operational *	100%	Monthly audits
	Aseptic technique for appropriate staff	Trained 98%	Training records
		No infection following cannulations	Hospital root cause analysis (RCAs) and incidents
	Reduction of risk regarding needlestick injury	Inoculation policy and process in place Immunisation programme in place Numbers of inoculation injuries	Incident reporting
Safeguarding children and vulnerable adults	Staff knowledgeable to Level 2/3 *	Trained 90%	Training records
		Number of referrals per month increasing appropriately	Reports from Social Services
Clinical record-keeping **	Records are legible and in black ink	100%	Random audit of pcrs 10% quarterly

Indicator area	Indicator	Standard	Mechanism of measurement
	Call times recorded	100%	Random audit of pcrs 10% quarterly
	Mandatory sections completed	100%	Random audit of pcrs 10% quarterly
	Handover section completed	100%	Random audit of pcrs 10% quarterly
	Signed and dated	100%	Random audit of pcrs 10% quarterly
Patient experience	Complaints *	Numbers, trends, types and action	Monthly reporting
	Compliments	Numbers, trends, types and action	Monthly reporting
Call-handling	Answered in 5 seconds *	95%	System report
	Calls answered in more than 60 seconds *	Report generated	System report
	Abandoned calls *	<1%	System report
	Handoffs to another call-handler *	<1%	System report
	Vehicles mobile within 90 seconds of call receipt *	90%	System report
Category A, B and C performance (call to arrival on scene)	Life-threatening Category A – 5 minutes *	75%	System report
	Category A – 8 minutes *	75%	System report
	Category B – 14 minutes *	95%	System report
	Category C – 60 minutes *	95%	System report
Conveyance to A&E	Reduce conveyance *	70% at 1 April 2014	Audit of pcrs
Appropriate patients referred to other services	Patients identified as alternative pathway available	75% appropriately referred to rapid response team or mental health teams	Audit of pcrs
	Patients referred	75% by September 2013 90% by 1 April 2014	Reports from HSSD providers
Long waits from call to arrival on scene	Category A	<15mins	System report/audit pcrs

Indicator area	Indicator	Standard	Mechanism of measurement
	Category B	<30 minutes	System report/audit pcrs
Patient surveys	Improving experience	6-monthly surveys and action plan monitoring	Analysis and report
Finance and efficiency			
Job cycle	Reduction of time from call receipt to clear *	<65 minutes by 1 April 2014	System report/audit pcrs
Demand	Demand against commissioned plan by category *	On plan	System report
Budget **	Expenditure vs budget	On plan	Board reports
	Cash flow	Positive cash flow	Monthly cash flow report
People			
Organisational development and competencies	Appraisals	On plan with 98% of all staff appraised by 1 April 2014	Progress report against trajectory
	Training *	Training plan in place and achieved by 1 April 2014	Progress report against trajectory
Absence management	Total absence against target	<30%	HR Board report
	Sickness absence	<4%	HR Board report
Rosters	Rostered hours against target	Minimum level – 2,468 per month Desired level – 3,163 per month	Operational report
Recruitment and retention	Turnover	<8%	HR Board report
	Recruitment matches requirements of workforce plan	<2% of workforce is vacant	HR Board report
Governance **	Incident-reporting process is in place and action taken *	Numbers, trends, types and action	Board report
	Audit plan in place and implemented *	80% of audits completed to plan and timescale	Clinical Governance Group reports
	Risk register in place *	Quarterly reviews 100%	Risk assessments and assurance framework review

Indicator area	Indicator	Standard	Mechanism of measurement
Reporting mechanisms	Reports on the above to SJARS Board monthly *	100%	Dashboard reports
	Reports on the above to HSSD Clinical Governance Group quarterly *	100%	Dashboard reports
	HSSD/SJARS contract review meetings monthly *	90%	Dashboard reports

Appendix 7 – Prioritisation of recommendations

Recommendation number	Recommendation	Priority
		HIGH
20	SJARS should formulate and implement a comprehensive Governance Framework which links workforce planning and training to competencies, risk and business priorities and the performance and quality dashboard reporting on key performance indicators to the Board.	Highest priority
1	There is an urgent need to equip the current SJARS control room with an appropriate prioritisation and despatch system. This should be introduced as soon as possible, regardless of any longer-term strategy, as it would be easily transferable to any future solution.	High
2	The staffing levels in the control room need to be reviewed to ensure adequate, appropriate cover.	High
4	If the decision is made to select the desired level of service, it is recommended that the feasibility be explored of a hybrid model of Level 4 clinicians, who are based in the hospital, work in an integrated way with the hospital staff and are despatched when needed by the ambulance service. This would help retain staff with this level of skill on-Island. These staff will have a unique opportunity to work differently, with costs being shared between SJARS and HSSD, filling vacant employment slots or providing care in the absence of a medical professional whilst updating and maintaining their skills and competencies.	High

Recommendation number	Recommendation	Priority
7	SJARS should develop a Clinical Strategy, competency framework and Clinical Governance Framework. This needs to be supported by a dashboard of clinical outcome standards that are linked to the clinical pathway of care standards and outcomes required by professionals and regulating bodies and also linked to the standards of other stakeholders providing care in the pathway. These clinical outcome standards need to include stroke, cardiac, asthma and infection prevention and control (hand-washing and vehicle cleaning) along with complaints, incidents and risk. These should be linked to HSSD and other Clinical Governance processes, including joint audits and learning.	High
9	An Island review surrounding standards, practice and joint practice should be encouraged. This should include the consistent and cost-effective provision of equipment for use across SJARS and HSSD services.	High
10	Rosters should be built aligning resources to demand.	High linked to decision on clinical model
12	The use of cars should be reviewed in the light of the conclusions of this Review and staff should be engaged in the review process.	High linked to decision on clinical model
21	HSSD and SJARS should agree key performance indicators and contractual monitoring measures and implement regular reporting as a matter of urgency. (See Appendix 6 for a suggested model.)	High linked to Governance Framework
26	SJARS should continue to pursue opportunities to reduce management costs, including collaborating with partner organisations.	High linked with St John Ambulance business costs
28	SJARS should include HSSD as a formal member of the Board.	High – easy to achieve
30	HSSD and SJARS should develop an SLA, including a service description/ definition, roles and responsibilities, information requirements, key performance indicators covering finance, activity, quality and governance and a range of incentives and penalties as appropriate to support the strategic direction of both SJARS and HSSD.	High

Recommendation number	Recommendation	Priority
31	SJARS executive management team should take steps to ensure greater engagement of staff, for example, engaging staff fully in the development of the new Strategic Plan.	High linked with service redesign
		MEDIUM
6	The SJARS minor injuries treatment room should be integrated within the hospital or A&E service with a revised charge made to patients if appropriate.	Medium - linked with decision regarding clinical model
8	All clinical and operational changes and developments should be processed via a business case and be considered for the expected improvements to patient outcomes. These expected outcomes should be added to the key performance indicators (KPIs) and monitored by the Board.	Medium
16	A review of the provision of non-emergency transport across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.	Medium – linked to a wider Healthcare review
17	SJARS should ensure clear lines of operational responsibility and finance between core and non-core services.	Medium
18	A review of the provision of equipment services across the Island should be undertaken, with a view to integrating the different providers either under SJARS or an alternative provider, improving efficiency and service provision.	Medium – linked to a wider Healthcare review
19	SJARS should take the opportunity afforded by this Review to revisit their strategic direction and supporting plans, fully engaging patients, external stakeholders and staff in the process.	Medium – linked to a wider Healthcare review
22	SJARS and HSSD should consider the opportunities for a single governance resource with the expertise in HSSD to be available on a day-to-day basis to support SJARS.	Medium – linked to Governance Framework
23	SJARS should review and revise the Clinical Steering Group terms of reference to include the provision of business cases to the Board for clinical developments, audit programme and workforce and training.	Medium

Recommendation number	Recommendation	Priority
25	The SJARS Board should review the Organisational Risk Register in the light of the revised Strategic Plan and adopt a new format which assesses the impact of the mitigating actions more clearly and regularly reviews the organisational risks SJARS face.	Medium – linked with an agreed Strategic Plan
27	HSSD should ensure that SJARS is a formal member of any strategic planning groups for 2020 Vision work.	Medium
32	A formal workforce development plan should be formulated and implemented, linking with the Clinical Strategies of partners. This should incorporate mandatory and other training requirements and methods of delivery, and be fully costed.	Medium
33	Formal mechanisms for clinical supervision should be put in place.	Medium
34	SJARS should use the opportunities afforded by the Review to develop the senior management team, in particular around the areas of strategic planning, governance, organisational development, performance review and staff and stakeholder engagement.	Medium – linked to change programme and implementation of clinical model
36	SJARS should develop a system of service line reporting which provides the Board with assurance that services are provided within agreed parameters and which allows remedial action to be managed, communicated and timely.	Medium – already in hand
39	SJARS should ensure a clear separation between the financial arrangements for core and non-core services.	Medium
40	SJARS should introduce a business case system which will clearly identify quality outcomes and financial benefit (or both).	Medium
46	SJARS and the Home Department should reopen talks to resolve the issue of who should pay for replacement of Major Incident equipment including a review of what equipment is now required, developed on the basis of a risk assessment based on the Island Risk Register.	Medium
47	SJARS should continue to play a full part in all future joint emergency services exercises with the Fire and Rescue and Police services.	Medium

Recommendation number	Recommendation	Priority
49	A formal liaison should be established with the States of Jersey Ambulance Service, starting with a summit to identify scope.	Medium
		LOW
3	The emergency response standards should be reviewed in the light of international developments and local opportunities.	Low
5	To support both the minimum and the desired levels of service, SJARS should continue to develop and expand their Community First Responder schemes.	Low
11	A target of 90 seconds from call receipt to mobilisation of vehicle should be adopted.	Low – needing management to drive improvement
13	Job cycle time should be adopted as a performance indicator and an action plan to reduce it should be developed, with full staff engagement.	Low – needing management to drive improvement
14	The continued use of standby points should be reviewed in the light of the other changes proposed by this Review.	Low – easy to achieve
15	SJARS should participate fully in the plans to develop a joint emergency control room with Police and Fire and Rescue on Guernsey.	Low – long-term
24	SJARS should implement Board development to include governance linked to strategy, business planning and developments, and risk.	Low
29	A joint annual Board meeting between HSSD and SJARS should be held to review the common objectives and progress and to agree the plans for the future years.	Low
35	An annual appraisal system for all staff should be implemented, supplemented by regular individual and team performance feedback.	Low
37	SJARS should explore the potential for redesigning the subscription scheme charges.	Low
38	SJARS should engage with HSSD in understanding the opportunities to support other health provision across both secondary and primary care.	Low – linked with 2020 Vision

Recommendation number	Recommendation	Priority
41	SJARS should include the benefits for electronic patient records within the Clinical Strategy that is being developed to support the 2020 Vision, to ensure all providers' data can be accessed and used.	Low
42	A regular liaison meeting should be established to ensure that cooperation with Alderney continues and gets even stronger.	Low
43	The Major Incident Plan should be restructured as an overarching strategic plan with referenced action sections, possibly in the form of action cards.	Low
44	The SJARS Business Continuity Plan should be populated as envisaged in the strategy with the detail that will make it an effective document.	Low
45	Further regular internal training and exercising should be carried out to support both the Business Continuity Plan and the Major Incident Plan when the revised versions have been agreed.	Low
48	Discussions between SJARS and Fire and Rescue should aim to identify all possible areas of mutual aid including, for example, fire staff acting as co-responders and as drivers of emergency ambulances in times of severe pressure.	Low

Appendix 8 – Glossary of clinical terms

12-lead ECG machines – ECG stands for electrocardiography or electrocardiogram. A 12-lead ECG machine is one in which 12 different electrical signals are recorded at approximately the same time and which is often used as a one-off recording of an ECG and is traditionally printed out as a paper copy. Three- and 5-lead ECGs tend to be monitored continuously and viewed only on the screen of an appropriate monitoring device – for example, during an operation or while a patient is being transported in an ambulance. There may or may not be a permanent record of a 3- or 5-lead ECG, depending on the equipment used.

AED – Automated external defibrillator.

Clopidogrel – An oral, thienopyridine-class antiplatelet agent used to inhibit blood clots in coronary artery disease, peripheral vascular disease, and cerebrovascular disease.

Competency – A set of technical skills and behaviours which are observable, measurable (sometimes regulated), and critical to the circumstance they are being used in.

Competency levels (within ambulance service)

Level 1 – First aid and lifesaving / call-handling skills. In the ambulance service usually known as **Community First Responders** (CFRs) who are volunteers with a first aid certificate.

Level 2 – Enhanced recognition of deterioration/escalation, manual handling competencies and record-keeping, blue light driving. In the ambulance service usually **CFRs and non-emergency transport staff** with further manual handling and other skills.

Level 3 – Assessment and interventional skills including a range of medicine and therapy administration competencies. In an ambulance service usually an **Emergency Medical Technician (EMT)** having completed IHCD technician course and 120 clinical hours of supervised practice. Able to administer a set of drugs and equipment without direct supervision and prescription and drive on blue lights. Must have evidence of a minimum number of hours and types of treatments given to be seen as remaining competent.

Level 4 – Enhanced clinical decision-making and interventional skills including a range of IV medicine and therapy administration competencies. Within the ambulance service usually known as **paramedics** having completed a paramedic science degree or equivalent, registered autonomous practitioner with Health Care Professionals Council, must re-register every three years showing evidence of ongoing clinical competence and practice through portfolio.

FAST – A diagnostic test to confirm symptoms related to stroke.

i-gel – A supraglottic airway widely used in anaesthesia and resuscitation in preference to intubation.

IO gun – IO stands for intraosseous infusion. IO is the process of injecting directly into the marrow of a bone to provide a non-collapsible entry point into the systemic venous system. This technique is used in emergency situations to provide fluids and medication when intravenous access is not available or not feasible. An IO gun is a device for performing this procedure.

LMA – LMA stands for laryngeal mask airway. It enables anaesthetists and other clinicians to channel oxygen or anaesthesia gas to a patient's lungs.

ROSC – Return of spontaneous circulation.

TIA – Transient ischaemic attack.