South Western Ambulance Service NHS
NHS Foundation Trust

Joint Enhanced and Critical Care Strategy

A Shared Vision for the South West

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Foreword

The care provided by Paramedics within the South Western Ambulance Service has increased beyond recognition over the past decade. At one end of the spectrum, much focus has been placed on ensuring that Paramedics can manage patients safely and appropriately within their own homes, without the need for conveyance to an Emergency Department. At the other, a wealth of additional clinical skills have been introduced including intra-osseous access devices, major haemorrhage control and tranexamic acid. Following the launch of the major trauma networks in 2012, ambulance clinicians received additional education to enable patients to be conveyed directly to Major Trauma Centres, in a similar manner to bypass arrangements for stroke and angioplasty.

It is now time to take the response to patients who are in the most life-threatening condition to the next level. The care of critically ill or injured patients often requires a coordinated response from a number of organisations including the ambulance service, air ambulances and the British Association for Immediate Care (South West). It is only by working together that we can ensure that patients who require enhanced or critical care across the South West receive it, wherever and whenever the need arises.

This strategy represents six months of joint work between the ambulance service, air ambulances and BASICS, to develop a joint model for the South West. A model which our patient's deserve, and one which we can all be proud to ultimately deliver.

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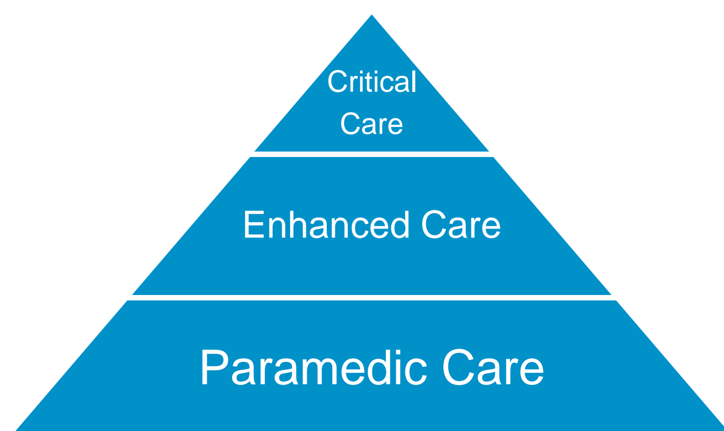
Joint Enhanced and Critical Care Strategy:
A Shared Vision for the South West

1 Introduction

1.1 South Western Ambulance Service NHS Foundation Trust (the Trust) is committed to providing the highest quality care to all of its patients; care that is safe, clinically effective, cost effective, evidence based and accessible to all. The Paramedic profession has moved to a degree level role, with a significant widening of their scope of practice. The career structure includes Specialist Paramedics with an enhanced skill set in specific areas such as urgent or critical care.

1.2 The vast majority (estimated at 95.5%) of patients managed by SWAST as a whole, can be managed safely and effectively within the Paramedic skill set. A further smaller group (estimated 4%) require the enhanced skills of specialist clinicians such as Critical Care Paramedics or Doctors trained in pre-hospital care. The final small group (estimated <0.5%) with the highest level of clinical need require pre-hospital anesthesia/rapid sequence induction which can only safely be provided by a critical care team. It is accepted that this distribution may be more focused at the enhanced care level for air ambulances. It is recognised that further work is required to develop the estimates stated, using robust audit of actual incidents; this work is already scheduled during early 2015-16. The three levels of care are detailed in Figure 1.

1.3 *Figure 1 - Models of Care*



1.4 At any incident, the Trust aims to provide the appropriate level of clinician to deliver the care that the patient requires. It is important to work towards a system that ensures that enhanced levels of care are dispatched and provided in a consistent, robust and accessible (both geographical and 24/7) manner.

1.5 For the purposes of this paper, the term ‘Enhanced Care’ will be used to refer to a level of care which exceeds that of a Paramedic, but does not include RSI. The term ‘Critical Care’ will be used to refer to care which includes pre-hospital emergency anaesthesia e.g. RSI.

1.6 BASICS

1.6.1 The Trust has always worked closely with Doctors to manage the minority of patients who require enhanced care. The Trust is currently served by a cadre of 29 Doctors who respond as volunteers under the auspices of the British Association for Immediate Care (BASICS). BASICS South West (SW) has an agreed Memorandum of Understanding for its working relationship with the Trust. Between January - November 2014, BASICS Doctors (excluding Gloucestershire) arrived on-scene at 811 calls.

1.6.2 In 2010 the BASICS Doctors providing services in the region joined to form an umbrella group known as BASICS South West (BASICS SW). The schemes maintained their autonomy for charitable purposes and local continuing professional development and support, with BASICS SW taking on the role of overseeing and developing clinical governance arrangements and providing a common focus of liaison with the Trust. With the acquisition of the Great Western Ambulance Service in 2013, this left two schemes (SWIFT Medics and BASICS Gloucestershire) with Responders working with the Trust, but outside the umbrella of BASICS SW. SWIFT Medics joined BASICS South West in 2013 and BASIS Gloucestershire in January 2015.

1.7 Air Ambulances and Critical Care Teams

1.7.1 Within England, with the exception of the part funding arrangement of London HEMS, air ambulance services are provided by charitable organisations. All aspects of the service are provided through donations from the local community, as funding is not provided by the NHS. The only exceptions being the salaries of the HEMs Technical Crew members/Paramedics and Specialist Paramedics (Critical Care), medical consumables and some equipment, which are covered by the Trust. In Devon the charity also currently covers 3WTE Paramedics, with the Wiltshire charity also funding 0.5WTE.

1.7.2 The Trust is fortunate to be supported by five air ambulance charities; the largest number of charities of any UK ambulance service. We work closely with the charities to provide the management of clinical staff, the clinical governance required and the deployment and control function of the service. The Trust is keen to ensure that the relationship with all charities is supported by a consistent SLA during 2015-16.

1.7.3 Prior to the acquisition of the Great Western Ambulance Service NHS Trust (GWAST) in February 2013, the Trust worked with three air ambulance charities. With the exception of Dorset and Somerset where a Specialist Paramedics (Critical Care) development programme had commenced, the provision of care by HEMS Paramedics was based on that of a frontline Paramedic with a narrow range of additional skills such as surgical airway. The operational management and clinical support provided to the staff reflected this level of clinical practice. The acquisition of GWAST brought the greater opportunities of supporting a service delivering critical care through Doctors and Specialist Paramedics (Critical Care).

1.7.4 Hyde et al (2011) conducted a survey of the UK to determine the consistency and availability of critical care in 2009. The ability of the service and/or individual doctors to provide pre-hospital emergency anaesthesia was used as a surrogate marker of 'critical care' capability, which is defined by the Department of Health as the provision of organ support and intensive monitoring.

1.7.5 Since the publication of the study, the provision of critical care has improved across the South West. The Great Western Air Ambulance provides a Doctor staffed air ambulance with 85% daytime critical care physician cover, the Dorset and Somerset Air Ambulance provides 45% daytime critical care physician cover and the Wiltshire Air Ambulance provides approximately one day per week of physician cover, along with support from SWIFT Medics. It should be noted that neighbouring services have also developed, with all now providing fully-funded physician-staffed services through NHS and charitable organisations. These include the West Midlands MERIT service, Wales EMRTS, Thames Valley and Chiltern Air Ambulance and Hampshire and the Isle of Wight Air Ambulance.

1.7.6 The rapid development of critical care, increasing skill level of the air ambulance clinicians, together with the future aspiration of the charities such as night flying, means that the Trust needs to review the provision of enhanced and critical care, and the way in which it operationally manages and clinically supports the air ambulance model.

2. Aims

2.1 The aim of the strategy is to provide a vision for the delivery of enhanced and critical care across the South West, through key organisations working closely together.

2.2 In order to improve the availability and quality of enhanced and critical care, the strategy has the following objectives:

- Deliver a single model for enhanced and critical care, with the ambition to become the highest performing enhanced and critical care provider in the UK within the next five years;
- Optimise the provision of enhanced and critical care;
- Develop the vital function of the HEMS desk;
- Optimise staffing structures across all air bases;
- Standardise the operational management of all air bases;
- Review the provision of educational support and standards;
- Optimise the level of clinical oversight and support provided;
- Aspire towards the provision of consistent 24/7 enhanced and critical care;
- Develop the research and audit evidence base to support the development of enhanced and critical care;
- Develop opportunities to better provide delayed primary retrievals and inter-hospital transfers;
- Develop opportunities to better utilise the expertise of HART.

3. Scope and Context

3.1 The scope of this strategy includes all care delivered by clinicians working either directly for, or on behalf of the Trust, to deliver enhanced care to patients across the South West. This includes clinicians working with air ambulance charities and on behalf of BASICS. The strategy currently excludes MERIT in a major incident capacity and mass casualty planning.

3.2 Air Ambulance

3.2.1 The Trust is supported by five air ambulance charities, operating from six bases across the South west. A basic overview is provided in Table 1.

3.2.1 Table 1 - Air Ambulance Overview:

Charity	Base	Helicopter
Cornwall Air Ambulance	Newquay	MD902
Devon Air Ambulance	Eaglescott	Eurocopter EC135
Devon Air Ambulance	Exeter	Eurocopter EC135
Dorset and Somerset Air Ambulance	Henstridge	Eurocopter EC135
Great Western Air Ambulance	Filton	Eurocopter EC135
Wiltshire Air Ambulance	Devizes	Bell 429

3.2.2 The air ambulance charities through air and road assets may provide valuable support to enable the Trust to:

- Respond to the needs of the most critically ill and injured patients;
- Deliver an enhanced scope of practice;
- Convey patients directly to specialist centres;
- Convey time critical patients more rapidly to hospital;
- Respond to isolated incidents;
- Undertake specialist inter-hospital transfers;
- Deliver critical care by critical care teams;
- Develop increasing opportunities to deliver delayed primary retrievals and inter-hospital transfers.

3.2.4 Across the UK, a number of air ambulance charities have moved away from close partnership working with their local NHS ambulance service. The charities have become CQC registered providers of healthcare services, directly employed the Paramedics and assumed responsibility for all aspects of clinical practice and governance. Given the close alignment between the aims of the charities and the Trust, all parties continue to be committed to fostering a close working relationship to enable the delivery of joined up patient focused care. The Trust is keen to avoid a situation where any charity in the South West feels the need to become a more distant organisation. This strategy is indeed testament to the excellent working relationship between organisations.

3.2.5 With the growing trend towards the specialisation of hospital services, the role of air ambulances in enabling patients to be conveyed directly to specialist centres is likely to further increase over the next 5 years.

3.3 BASICS

3.3.1 The Trust is currently supported by 29 volunteers working as BASICS Doctors. The number of Doctors in each area is detailed in Table 2.

3.3.2 Table 2 - BASICS Doctors by Area

Scheme	Number
BASICS Cornwall	6 doctors
BASICS Devon	9 doctors
SAVES (Somerset)	4 doctors
SWIFT Medics (Wiltshire)	5 doctors
BASICS Gloucestershire	5 doctors

3.3.3 BASICS Doctors respond to a variety of incidents in their local areas and further afield. They respond to both medical and trauma emergencies where enhanced care may be of clinical benefit. Many BASICS Doctors also volunteer as First Responders and support their local communities by responding to incidents ahead of an ambulance.

3.3.4 Operational Management of BASICS sits with the Responder Department along with all other volunteers within the Trust. The Responder Department provides the following support:

- The initial set up and HR process;
- Act as a point of contact;
- Day to day operational issues;
- Equipment issues and restock of equipment and consumables;
- The Responder Manager attends all BASICS SW Committee meetings.

3.3.5 The final responsibility for approval of a new BASICS Doctor's appointment rests with the Executive Medical Director. In order to support this process BASICS SW has developed a common process for all Doctors who wish to be considered to respond.

3.3.6 The current minimum requirements for approval as a BASICS South West Responder are detailed in the BASICS South West policy document: Approval and Accreditation Procedure for New Medical Responders.

3.3.7 New Responders are expected to engage with a local scheme's Continuing Professional Development programme for a period, prior to consideration for active responding. They will also be expected to gain experience visiting the Clinical Hub and some joint responding with an experienced BASICS Responder.

3.3.8 The scheme's representative may then propose the Doctor as a potential Responder and the application including reference is reviewed by the BASICS SW Committee. The committee will either make further recommendations to the potential Responder, or approve the proposal and recommend to the Trust's Executive Medical Director that the Responder is allowed to respond.

4 SWOT Analysis

4.1 The Table 3 outlines the SWOT analysis for the delivery of enhanced and critical care. Strengths and weaknesses have been outlined as those internal to the Trust, with external threats and opportunities then being considered.

4.2 Table 3 - SWOT Analysis:

Strengths	Weaknesses
1. Established, well run air ambulance charities providing a platform for Trust clinicians to reach incidents using an air ambulance and in some cases RRV. 2. Established BASICS schemes with dedicated active volunteer Doctors delivering enhanced care. 3. Significant commitment to further develop clinical services. 4. Motivated, clinically credible workforce. 5. Close collaboration between air ambulance Charities and with the Trust, resulting in a regional united service. 6. Monthly clinically focused Air Ambulance Clinical Group provides a forum for driving developments. 7. Good engagement with clinical networks. 8. Doctors already supporting bases to develop enhanced and critical care provision. 9. HEMS Dispatch Team delivering a high standard of dispatch.	1. Variable operational management of air ambulance clinicians. 2. Variable clinical support of air ambulance clinicians. 3. Variable provision of medical supervision for Doctors. 4. Need to develop greater alignment between the clinical scope and oversight of all Doctors responding on behalf of the Trust, irrespective of organisation. 5. Large geographical area. 6. Multiple organisations involved. 7. Challenging commissioning and network arrangements. 8. Variable education and training standards. 9. Variable scope of practice of paramedic clinicians. 10. Inconsistencies 11. Variable availability of voluntary BASICS Doctors across the South West.
Opportunities	**Threats**
1. Delivery of gold standard enhanced and critical care across the South West. 2. Delivery of consistent 24/7 enhanced and critical care. 3. Fostering a closer working relationship between SWAST, air ambulances and BASICS. 4. Harmonisation of operational management to support a consistent level of delivery. 5. Further enhancing the Paramedic scope of practice. 6. Provision of Doctors as an integral part of the enhanced/critical care team. 7. Develop the role of the HEMS desk.	1. Lack of a coordinated approach. 2. Fragmentation of charities into separate CQC registered organisations. 3. Finance

5 Enhanced/Critical Care Models of Delivery

5.1 Enhanced/Critical Care Capability

5.1.1 Providing the right care to the patient is the overarching clinical priority. The provision of enhanced and critical care across the South West is largely based on the voluntary provision provided by air ambulance charities and BASICS. This means that the receipt of enhanced/critical care is often based more on the location, time of day and availability of volunteers than it is on the patient need. The Trusts aspiration is to achieve a position where all patients requiring enhanced and critical care skills receive them based on clinical need. In order to achieve this aspiration, a significant change is required in the way in which enhanced and critical care are delivered.

5.1.2 The delivery of RSI is a skill which cannot be delivered by an individual in isolation, and requires the presence of a critical care team consisting of one clinician able to deliver the procedure and another as a trained assistant. There is expert consensus that the optimal configuration of a pre-hospital critical care team is a Specialist Paramedic (Critical Care) and a Critical Care Doctor. The combination of both team members adds value greater than the sum of its constituent parts. For the purposes of this paper, the term 'Critical Care Doctor' is used to include any Doctor with the required skills in critical care such as RSI, including those employed directly by the Trust, by Air Ambulance Charities and through BASICS.

5.1.3 A Critical Care Doctor brings many years of dealing with critically ill and injured patients, they are senior decision makers with an understanding of which hospitals deliver which care; essential for appropriate triage. In addition, they frequently have clinical and managerial links within these hospitals. These skills are underpinned by documented training and attainment of relevant post-graduate examinations. A prolonged supervised period in pre-hospital care supports this prior to independent practice. Further details are contained within the Trust's agreed Critical Care Doctor job description.

5.1.4 A Specialist Paramedic (Critical Care) brings many years of experience working in the pre-hospital environment, a complete understanding of equipment used and skills offered by the ambulance service, and the skills and leadership essential to working alongside other emergency services. This is supplemented by specific training and assessment in a range of pre-hospital critical care skills and an academic underpinning of the anatomy, pathophysiology and clinical reasoning required to utilise these skills.

5.1.5 Together, these clinicians act synergistically, with the majority of procedures being undertaken interchangeably by either member of the team. This improves clinical care and reduces on-scene time by allowing specialist skills to occur in parallel, not in series. It allows excellent relationships to exist with SWAST and with the Acute NHS Trusts. This teamwork also applies to training and governance with SPs(CC) involved in the training and assessment of doctors and vice versa.

5.2 Daytime Provision

5.2.1 During the daytime period, it is the Trust's current five year aspiration that at least one SP(CC) will be included within the air ambulance response at each airbase. It is proposed that an additional five year aspiration is for the provision of 100% daytime Critical Care Doctor cover at three airbases at any one time. Whether the Doctor cover would consistently be at the same three bases, or rotate between the bases requires further discussion. The SP(CC)/Critical Care Doctor would respond together as a Critical Care Team, utilising the air ambulance where possible, with an RRV as a back-up. The provision of a team at each base will ensure robust provision.

5.2.1 This provision would be supported through the dispatch of the nearest BASICS Doctor to provide enhanced care, where available. BASICS Doctors currently provide valuable additional support to ambulance clinicians, and the Trust is keen to continue to foster this close working relationship. The concept would also provide a back-up during daytime hours, where a Critical Care Doctor was not part of the crew, as detailed within the nighttime section.

5.2.2 There would be no additional cost to the Trust for daytime provision, as it would utilise existing air ambulance SPs(CC) and Doctors. A cost would however be applicable should a move be made towards the provision of paid medical cover.

5.2.3 Further audit work is required to map out the location and time of all incidents potentially benefiting from enhanced or critical care, in order to influence the development of this strategy.

5.3 Nighttime Provision

5.3.1 The BASICS organisation already provide a wide range of Doctors who deliver enhanced pre-hospital care across the South West. This valuable resource will continue to be utilised to send the nearest available BASICS Doctor to patients who require enhanced pre-hospital care. In the isolated cases where pre-hospital anesthesia is required and the components of a Critical Care team are available, the BASICS Doctors would provide enhanced care skills in the interim.

5.3.2 During this period it is unlikely that a 24/7 night flying response will be available across the South West, due to the limitations of night flying. Whilst many charities will be working to develop this capability, with Wiltshire already flying 19 hours a day, it is proposed that this be considered as an additional as opposed to core response. It is accepted that the demand for enhanced care decreases significantly during the period 01:00-06:00. Given the rural geography and long travel times, the challenge is to provide a financially viable enhanced and critical care response on par with that provided during the daytime period.

5.3.3 The medium term aspiration is that three Specialist Paramedics (Critical Care) will provide coverage for the South West, working towards an increase to six, one in each airbase area, as part of the five year aspiration. They would be based with air ambulances where night time flying was provided, and operate using an RRV at other times, and where this was not locally available. The support provided to SPs(CC) when working on an RRV requires further consideration. Individually they would autonomously be able to provide enhanced care. Whilst Specialist

Paramedics (Critical Care) would provide consistent contracted enhanced care provision, this would be supported by the contribution of BASICS Doctors. The nearest BASICS Doctor would therefore continue to be dispatched to incidents, where available.

5.3.4 For the relatively small number of patients who require RSI, the proposal is that through better joint working, the role be performed interchangeably between Doctors linked directly to air ambulances, and those acting on behalf of BASICS. A common skill set, assessment, supervision and clinical guidelines would be required to achieve this aspiration. Where individuals achieve the skill set and clinical exposure required by the Trust, this would lead to the development of a number of BASICS Doctors able to provide an RSI when part of an appropriately trained team.

5.3.5 In the case of an incident potentially requiring an RSI, the proposal would see the nearest Specialist Paramedics (Critical Care) dispatched to an incident, together with the nearest available BASICS Doctor with RSI skills- this may be the nearest Doctor, or in addition to the dispatch of the nearest Doctor. In isolation, either clinician would deliver high quality enhanced care, working with ambulance clinicians. Upon arrival of both members, certain skills such as RSI which require the presence of a trained team, could be delivered where required. The nearest BASICS Doctor would continue to be dispatched to such incidents. In addition to the RSI BASICS Doctors, all BASICS Doctors would become RSI assistants.

5.3.6 Where required, RSI could be performed with any of the following combinations of clinician:

Air Ambulance Critical Care Doctor
or
BASICS Doctor (with ability to deliver RSI)

AND

Specialist Paramedic (Critical Care)
or
Air Ambulance Critical Care Doctor
or
BASICS Doctor

5.3.7 The cost of providing nighttime SPs(CC) would vary depending on the model chosen, and are detailed in Table 4. Funding has yet to be identified for this development.

5.3.8 Table 4 - Nighttime Specialist Paramedic (Critical Care) Costings

Proposal	**Cost (£)**
Option 1 - 3x Additional SP(CC) RRVs	£515,986
Option 2 - 6x Additional SP(CC) RRVs	£1,031,972
Option 3 - 3x Existing RRVs converted to SP(CC) RRVs	£83,579
Option 3 - 6x Existing RRVs converted to SP(CC) RRVs	£167,157

5.4 Senior Medical Cover

5.4.1 The increasing provision of Specialist Paramedics (Critical Care) and trainee Doctors brings with it the need for a more robust 24/7 provision of telephone senior medical advice. It is the Trusts aspiration that a paid 24/7 rota of suitably qualified Senior Doctors be introduced. The rota would include Doctors who meet a stringent set of requirements, which will be confirmed shortly, following discussion with all interested parties.

5.4.1 The rota would commence in year one with 8 Doctors paid a 3% salary enhancement to cover 24/7 telephone advice. There would be no contractual requirement to respond to an incident. With an increasing number of Specialist Paramedics (Critical Care), it is the five year aspiration that the rota would increase to 16, providing two parallel 24/7 rotas (North/South) to ensure that advice is always available. The costings are detailed in Table 5. A single phone number will be provided for each rota, to simplify the process of obtaining advice. The advice may also prove a valuable asset for BASICS Doctors. There is also the potential for this cadre to undertake the role of HART Medical Advisor.

5.4.2 The costings for the development of the rota are detailed in Table 5, with funding being agreed through SWAST HART.

5.4.4 Table 5 - Senior Cover Rota Costings

Proposal	Cost (£)
Single rota 1:8 (Equivalent of 3% of typical £80,000 NHS Consultant salary enhancement x6)	19,200
Dual rota 1:8 (Equivalent of 3% of typical £80,000 NHS Consultant salary enhancement x12)	38,400

6 Line Management of Air Ambulances

6.1 The line management of air ambulances is an operational matter, and is discussed in detail in Appendix A.

7. Development of Specialist Paramedics

7.1 Over the past 5 years, there has been an increasing focus on the development of Paramedics to deliver a wider set of skills. The role was first introduced within the South West by the Great Western Air Ambulance. A dedicated group of Critical Care Doctors supported the academic and clinical development of Critical Care Paramedics (CCPs) since renamed Specialist Paramedics (Critical Care). A rota of Doctors continues to support this work, working alongside Specialist Paramedics on a daily basis.

7.2 The Great Western Air Ambulance model is based on Doctors mentoring Paramedics to develop a wider scope of practice. This is in order to ensure that both team members, regardless of professional title, are fully interchangeable within the roles of that team. This is based on the belief that the sum of experience and skill sets of the Specialist Paramedics (Critical Care)/Doctor is greater than either one as an individual. In contrast to many other UK schemes, when they reach Specialist Paramedics (Critical Care) level the Paramedics practice many of the skills autonomously.

7.3 For more complex decision making, discussion via telephone with the 'Top Cover' Consultant is required. The Trust is particularly keen to promote a model where Paramedics work alongside Doctors to deliver high quality enhanced care as a team, with Specialist Paramedics (Critical Care) becoming more autonomous over the next five years. The future opportunities for autonomous SPs(CC) are significant, and include RRV based responses and inter-hospital transfers.

7.4 A decision was previously made that each airbase would be supported to follow a different model of education to become Specialist Paramedics (Critical Care), in order to enable research into each approach. Unfortunately the research was not progressed. This led to a situation where the Trust had Paramedics either progressing to become, or practicing as SPs(CC), without a Trust agreed definition of what a Specialist Paramedics (Critical Care) actually was.

7.5 During 2013-14 the Air Ambulance Clinical Sub-group led on the development of the Specialist Paramedics (Critical Care) skills passport. The document clearly identifies the scope of practice, together with the practical and academic requirements of each skill. The aim was that Paramedics could develop to become SPs(CC) though any manner of routes. The Trust would recognise anyone who fulfils the requirements of the skills passport as a SP(CC). Specialist Paramedics (Critical Care) require extensive practical clinical experience in order to fulfil the requirements of the skills passport. Up until the point of becoming recognised as such, the clinician would be known as a 'Paramedic with Enhanced Skills'. At present Specialist Paramedics (Critical Care) only operate on Air Ambulance helicopters/RRV. It is therefore currently essential that the individual also fulfils the requirements of the HEMs Paramedic role.

7.6 The role of Specialist Paramedics (Critical Care) is considered as academic level 7 on the College of Paramedic's career framework. It is vital that SPs(CC) therefore develop a firm academic grounding to support their enhanced scope of practice. It is therefore proposed that from the 1st April 2015, all practicing SPs(CC) would be required to hold at least a Post-graduate Certificate in a subject relevant to Critical Care/Specialist Practice.

7.7 Staff who are already practicing at Specialist Paramedics (Critical Care) level but do not meet the required academic standard will have a period of two years to achieve the required qualification. Anyone not employed by the Trust as a SPCC on or after the 1st April 2015 would, upon commencing SPCC development, be required to meet the standard before they would be recognised as a Specialist Paramedics (Critical Care). A College of Paramedics/RCGP examination in Critical Care is likely be available during 2015, and will provide a further opportunity for Specialist Paramedics (Critical Care) to demonstrate their level of practice and may later become a mandatory requirement.

7.8 In line with the College of Paramedics aim to align specialist Paramedic job titles across the UK and in preparation for paramedic prescribing, the Trust is set to rename the ECP role 'Specialist Paramedic - Urgent and Emergency Care' during 2015. The Trust has agreed to replace the current title of 'Critical Care Paramedic' with 'Specialist Paramedic - Critical Care' during early 2015-16. The new title has therefore been used throughout this document.

7.9 The current position regarding Specialist Paramedics (Critical Care) development is detailed in Table 6 and 7.

7.10 Table 6 - Current Specialist Paramedics (Critical Care) Position:

Base	Position
Newquay	• All clinicians are Paramedics with enhanced skills. • Staff have worked to gain a BSc (Hons) in emergency care in order to gain the academic level qualification required for further SP(CC) development. Three members have fully completed the course, with a further one due during 2014. • All staff remain current with New Born Life Support, ATLS/PHTLS, APLS and ALS courses. • No clinicians currently recognised as a SP(CC).
Eaglescott	• All clinicians are Paramedics with enhanced skills. • Three Paramedics have achieved a degree. • No clinicians currently recognised as a SP(CC).
Exeter	• All clinicians are Paramedics with enhanced skills. • No clinicians currently recognised as a SP(CC).
Henstridge	• Five Paramedics have completed a Charity funded PGC in Advanced Paramedic Practice (Critical Care), with four working towards an MSc. • All clinicians are currently appointed as Paramedics with enhanced skills. However, five Paramedics currently meet the academic and practical requirements to be acknowledged as SPs(CC).
Base	**Position**
Filton	• All clinicians are recognised as SPs(CC). • Some Paramedics will require further academic development in order to meet the proposed SPCC educational requirements.
Devizes	• All clinicians are Paramedics with enhanced skills. • 6 clinicians have completed the charity funded Cambridge critical care course and have been supported to work towards achieving recognition as SPs(CC). • 4 Clinicians have completed the SWAST Skills Passport and are recognised as SPs(CC).

7.11 Table 7 - Current Status at Each Airbase:

Base	Enhanced Skilled HEMS Paramedic	SPCC (Band 5)	SPCC (Band 6)
Newquay	6	0	0
Eaglescott	5	0	0
Exeter	6	0	0
Henstridge	1	5	5
Filton	0	0	7
Devizes	3	6	0

7.12 It is therefore proposed that the career structure detailed in Table 8 will be implemented at all air bases.

7.13 Table 8 - Proposed Airbase Career Structure:

Role	Description	A4C Band
HEMS Paramedic (Technical Crew Member)	Paramedic qualified to work on an air ambulance, within the standard frontline Paramedic scope of practice.	5
HEM Paramedic with Enhanced Skills	HEMS Paramedics who have a wider scope of practice. This may vary from 2-3 isolated skills (surgical airway, finger thoracostomy) to clinicians who are completing a SP(CC) programme, but have not yet been recognised by the Trust as SPs(CC).	5
Specialist Paramedic (Critical Care)	HEMS Paramedics who have met the Trust requirements for the role of Specialist Paramedic - Critical Care (formerly CCPs), as detailed within the skills passport. With the exception of agreed 'Grandfather' rights, this includes the requirement to achieve a minimum academic level 7 qualification.	6
Operations Officer	Minimum of HEMS Paramedic level, with responsibility for the operational management of an airbase.	6

7.14 Specialist Paramedics (Critical Care) at Filton are currently paid as A4C band 6, whilst those at Henstridge and Devizes are paid at band 5. Before Paramedics who are developing to become SPs(CC) at other bases become recognised as CPPs, there was a need to address the band 6 issue. In May 2015, the HEMS Technical Crew Member role was confirmed as Band 5, and the Specialist Paramedic (Critical Care) role as Band 6 through the SWAST job evaluation process. The number of staff likely to reach Specialist Paramedic (Critical Care) level will increase over time. The financial implications of moving all air ambulance Paramedics from band 5 to 6 over the next 5 years are detailed in Table 9. Costings have been based on the assumption that all HEMS Paramedics are currently at the top spine point of band 5, include yearly incremental drift, but exclude any national pay award.

7.15 Table 9 - Financial Implications:

	2015-16		2016-17		2017-18		2018-19		2019-20	
Base	**SP(CC)**	**£**	**SP(CC)**	**£**	**SP(CC)**	**£**	**SP(CC)**	**£**	**SP(CC)**	**£**
Newquay	0	0	3	4,039	6	17,558	6	27,053	6	36,533
Eaglescott	0	0	5	6,731	5	14,631	5	22,544	5	30,444
Exeter	0	0	9	12,116	9	26,336	9	40,579	9	54,799
Henstridge	6	8,078	6	17,558	6	27,053	6	36,533	6	47,205
Filton	6	0	6	0	6	0	6	0	6	0
Devizes	4	5,385	6	17,558	6	27,053	6	36,533	6	47,205
Total	16	13,463	35	58,001	38	112,630	38	163,240	38	216,185

7.16 In order to provide a consistent approach to education, a Specialist Paramedic (Critical Care) LDO will help facilitate a unified approach to Critical Care between SWASFT HEMS teams that reflect best evidenced-based practice and adheres to emerging national standards. In addition, it will ensure cohesive and timely delivery of revalidation of skills and clinical updates, support Specialist Paramedic CSOs with datix investigations and advise on restriction of practice cases. The post holder would be able to increase the rate of delivery of practices requiring supervision in the practice setting such as ketamine sedation training.

7.17 The SP(CC) will have the knowledge and skills to support the education delivery whilst working within the Learning and Development department with an understanding of how to access wider funding streams for future development. The post holder will also be able to develop and co-ordinate an approach to level 7 study in support of SPa(CC) and the achievement of the national SP(CC) exam which is currently being developed in conjunction with South East Coast Ambulance Service, SWASFT and the College of Paramedics. The LDO would also ensure a standardised approach to Trust Learning and Development documentation and the updating of Trust systems including the Electronic Staff Record in order to demonstrate a robust audit trail of education delivery.

7.18 The cost of implementing the LDO role based on the top spine point of Band 7 is detailed in Table 10; funding is yet to be identified.

7.19 Table 10 - Financial Implications:

Proposal	**Cost (£)**
Introduction of dedicated LDO time (1WTE Band 7)	50,212
	50,212

8 Clinical and Corporate Governance

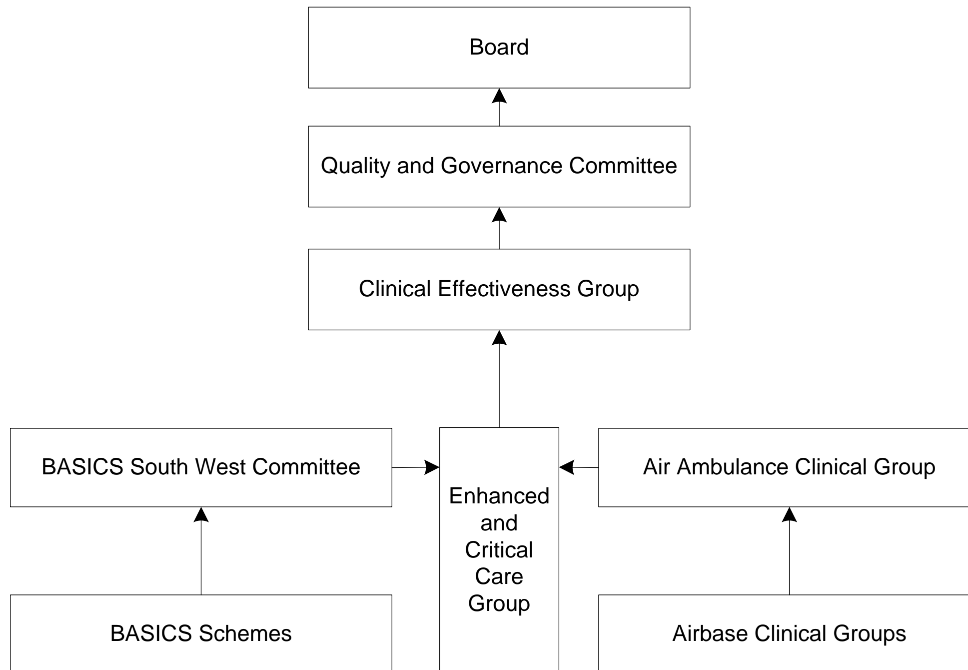
8.1 All bases already comply with current Trust clinical governance requirements for standard ambulance stations. However, with the increasing level of clinical practice delivered by air ambulance clinicians, there is a corresponding need to implement additional governance processes. The level of clinical governance above the core requirements undertaken at each base currently varies, with no formal reporting process.

8.2 A number of bases already complete a range of clinical governance processes to monitor the use of skills and clinically review a range of cases. Whilst significant audit data is generated and discussed locally, there is a need to formalise reporting into the wider Trust, particularly as more bases gain Specialist Paramedics (Critical Care).

8.3 There is a need to ensure that robust governance processes are in place for enhanced and critical care providers, to review incidents and the use of enhanced and critical care skills. It is proposed that a new Enhanced and Critical Care Group is formed as a partnership between SWASFT, BASICS South West schemes and Air Ambulances in the region. The group would lead on the oversight of Enhanced and Critical Care issues and the development of common working practices and guidelines. The main emphasis will be on clinicians delivering care according to appropriate competencies, not the organisation they represent whilst responding.

8.4 The structure of the proposed Enhanced and Critical Care Group is to be determined by further discussion but would include balanced representation from the three key groups. An overview is provided in Figure 2.

8.5 Figure 2 - Clinical Governance Structure:



8.6 In order to achieve the level of clinical governance required, it is important that all air ambulance clinicians are supported to attend the monthly Airbase Clinical Group meetings. As any capacity within the airbase rota is currently used to fill frontline ambulance shifts, this would require the funded release of staff for 1 shift each month to undertake the meeting and further education. In addition, the base Operations Officer would require release for an additional 1 shift per month to support auditing and education. The release would be independent of REAP levels. The financial implications based on the current staff banding profile are detailed in Table 11, although they would increase should the Specialist Paramedic (Critical Care) band 6 proposal detailed in para 7.13 be accepted. The funding has yet to be identified.

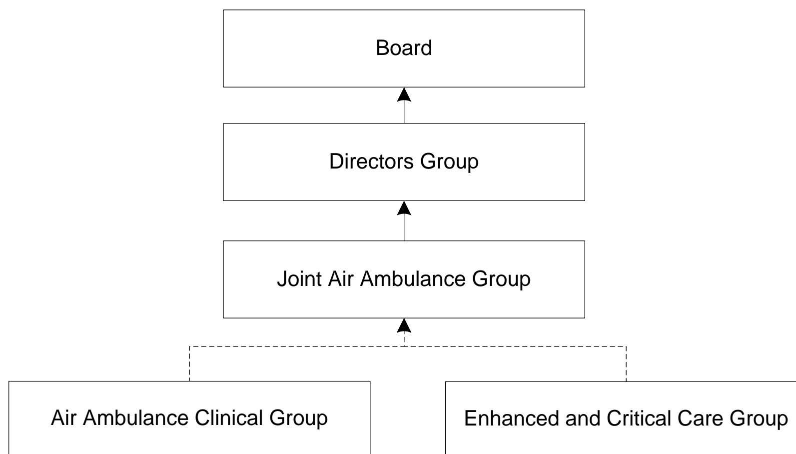
8.7 There is also a need to formalise the release of Paramedics for clinical placements and education. The Filton rota for example, currently includes 3 such shifts every six weeks.

8.8 Table 11 - Monthly Funded Release:

	2015-16	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	£	**£**	**£**	**£**	**£**
1 Shift clinical governance release for current HEMS Paramedic/SPs(CC)	113,250	117,303	121,363	125,416	125,416
1 OO shift release for clinical governance	17,882	18,522	19,163	19,803	19,803
Total	131,131	135,824	140,525	145,219	145,219

8.9 In addition to clinical governance, there is also a need to clarify the corporate governance structure between the Trust and the air ambulance charities. In addition to the SLA between SWAST and each charity, the Chief Executives meet with the Trust every two months at the Joint Air Ambulance Group (JAAG). The JAAG provides a forum to discuss strategic and corporate issue, and to encourage collaboration between all parties. The corporate governance structure is detailed in Figure 3.

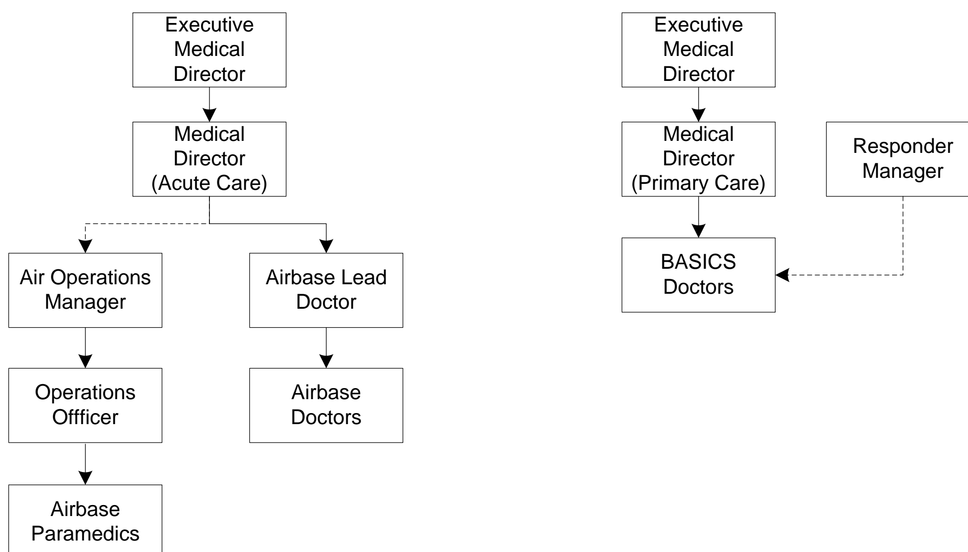
8.10 *Figure 3 - Corporate Governance Structure:*



9 Clinical Supervision

9.1 In addition to the operational management structure detailed in Figures 4 and 5, it is proposed that the clinical support structure detailed in Figure 6 be implemented, to ensure clear lines of clinical accountability. The Doctors at each Airbase would report clinically to the Lead Base Doctor, who would be responsible for clinical management and appraisals. The current clinical accountability arrangements for BASICS are also indicated in Figure 4.

9.2 *Figure 4 - Clinical Accountability:*



10 HEMS Dispatch

10.1 The HEMS Dispatch team provide a dedicated dispatch and control function of the specialist HEMS aircraft and clinicians. Any further development of enhanced care, critical care or the extension of operational hours of air ambulances or RRV's to support these, must be matched by a corresponding level of cover to ensure the HEMS Dispatch team are on duty supporting the clinical teams during each hour they are delivering their service. The Trust is committed to working with the air ambulance charities to develop both the capacity and capability of the HEMS Desk function.

11 Conclusion

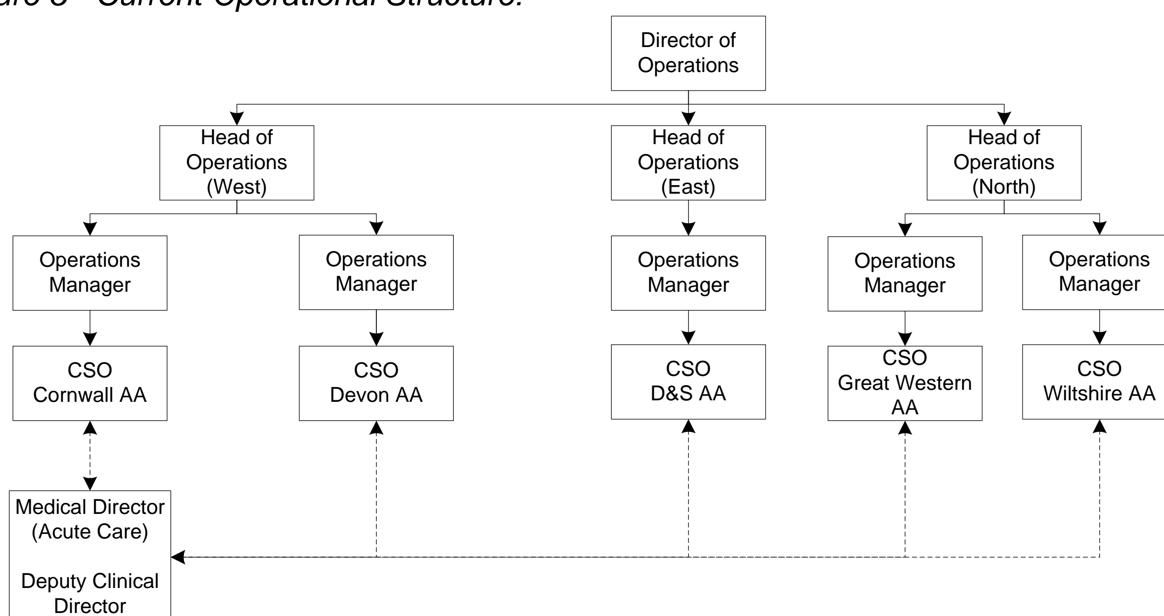
11.1 The development of the provision of enhanced and critical care utilising air ambulances and BASICS across the South West over the next five years presents a range of exciting opportunities. It is important that all organisations work closely together, to implement the model which our patients deserve, and one which we can all be proud to ultimately deliver.

Appendix A - Line Management of Air Ambulances

Under the current operational structure, each airbase is managed in the same way as any other ambulance station. The line of accountability runs from the Director of Operations through the area's Head of Operations and local Operations Manager before reaching the airbase CSO. As each airbase (with the exception of Devon's) is within a different operational area, five Operations Managers have responsibility for managing the airbases. The management of air assets is increasingly becoming a specialised area, with a wealth of aviation regulation and legislation requirements to consider in addition to normal Trust policies and procedures. The degree of involvement between the Operations Manager and each airbase varies significantly.

Each CSO also has a dotted line to the Medical Director - Acute Care and Deputy Clinical Director for clinical issues. The current structure is detailed in Figure 5.

Figure 5 - Current Operational Structure:



The increasingly complex and specialist knowledge required to effectively manage air operations, means that including this responsibility alongside normal operations often proves challenging. Five Operations Managers holding responsibility for the airbases, with no single person responsible under Director of Operations level, causes further difficulties in ensuring a consistent approach. This has resulted in differences in the management of bases, and has made it extremely difficult to harmonise operational practice.

The structure and establishment at each airbase varies from 6 to 9 Paramedics, with the current position detailed in Table 12.

Table 12 - Current Base Establishment:

Base	CSO	Lead Paramedic	HEMS Paramedic
Newquay	1	0	5
Eaglescott	1[A]	1	4
Exeter	1[B]	1	7
Henstridge	1	0	5
Filton	1	0	6
Devizes	1	1	4

A - Joint Base CSO, B - DAAT Secondment

With the exception of the Operations Manager (West Cornwall), no other OMs have regularly attended the Air Ambulance Clinical Group or Joint Air Ambulance Committee. It should be noted that some OMs have not attended either meeting since at least 2013.

In order to address these issues, a revised operational structure is proposed. It is anticipated that the change will result in an increased level of support and greater consistency of practice across the South West.

Under the proposed model, one dedicated Air Operations Manager would be responsible for the management of all air bases, reporting directly to the Head of EPRR through to the Director of Operations, as detailed in Figure 5 and costed at the top of the pay band in Table 13. This has the advantage of one accountable individual. SWASFT funding for the structure change has been identified.

Figure 5 - Proposed Operational Structure:

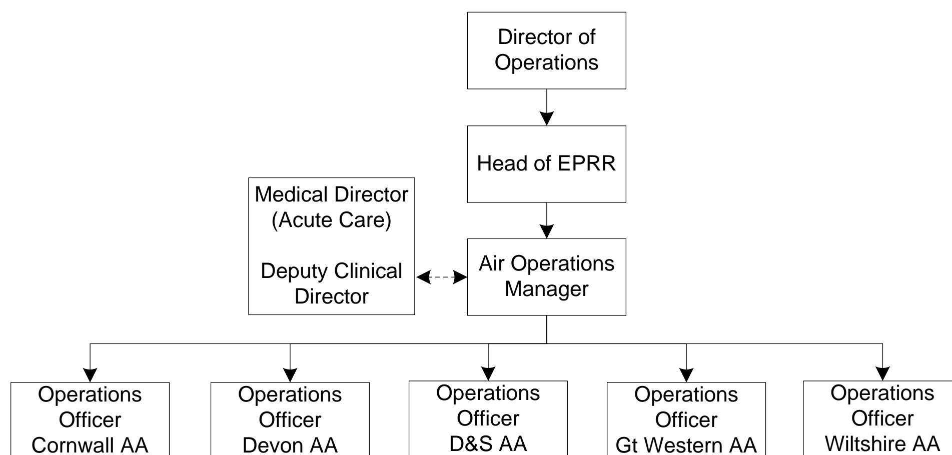


Table 13 - Financial Implications:

Proposal	**Cost (£)**
Introduction of Air Operations Manager role (1WTE Band 8A)	58,660
	58,660