



**Scottish
Ambulance
Service**
Taking Care to the Patient



NOT PROTECTIVELY MARKED

PUBLIC BOARD MEETING

30 November 2022

Item No 15

THIS PAPER IS FOR NOTING

SCOTSTAR & AIR AMBULANCE ACTIVITY REVIEW – PERIOD SEPTEMBER 2021 TO SEPTEMBER 2022

Lead Director Author	Stephen Massetti, Director of National Operations Kenneth Mitchell, General Manager ScotSTAR
Action required	The Board is invited to note the attached ScotSTAR and air ambulance activity update.
Key points	This report provides an update on ScotSTAR activity during period 1 September 2021 and 30 September 2022.
Timing	The Board will be provided with bi-annual update on ScotSTAR activity.
Associated Corporate Risk Identification	Risk ID4638 – Wider system changes and pressures
Link to Corporate Ambitions	We will <ul style="list-style-type: none">• innovate to continually improve our care and enhance the resilience and sustainability of our services• provide the people of Scotland with compassionate, safe and effective care where and when they need it•
Link to NHS Scotland's Quality Ambition	Efficient and effective use of resources is important to SCOTSTAR to enable it to inform change in service delivery to meet the aspirations of the 2020 vision.

Benefit to Patients	Data within is used to measure performance, demand and activity which is used to better inform efficient and efficient use of resources and improve future patient services
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SCOTTISH AMBULANCE SERVICE BOARD

SCOTSTAR ACTIVITY REVIEW – PERIOD SEPTEMBER 2021 TO SEPT 2022

**STEPHEN MASSETTI, DIRECTOR OF NATIONAL OPERATIONS
KENNETH MITCHELL, GENERAL MANAGER, SCOTSTAR**

1. INTRODUCTION

This report outlines ScotSTAR activity between 1st September 2021 and 30th September 2022. This report provides details on challenges that each of our four individual services (Air Ambulance, Neonatal Transport, Paediatric Retrieval and the Emergency Medical Retrieval Service (EMRS)) are facing as well as how we are responding to those challenges.

2. SCOTSTAR TEAMS

The following section summaries the activity of the teams during this period and highlights a number of areas where work has been progressed

2.1 Emergency Medical Retrieval Service (EMRS)

Currently, EMRS are experiencing some staffing challenges within their Advanced Retrieval Practitioner workforce with some staff members moving on from their posts and the situation has been compounded by periods of medium-term sickness absence. Through various contingencies, operational cover has been maintained and recruitment is underway to fill vacant posts. The situation has illustrated some of the challenges around having a relatively small, specialised workforce.

Trauma Desk Review

The Trauma Desk has been a key component of the Service's role within the STN, aiming to ensure that incidents of potential major trauma are identified and appropriate enhanced resources are tasked in a timely fashion. Following an extensive review the Trauma Desk

has recently transitioned to the Critical Care Desk, undertaking a wider remit and becoming an Advanced Practice function. EMRS continues to support the Critical Care Desk with Advanced Retrieval Practitioners part of the staff group covering the desk and the provision of 'top-cover' clinical support from EMRS consultants.

2.2 Neonatal

The focus of the Neonatal Service during this period has been the review of the service.

Neonatal Service Review

The Neonatal Service Review Project commenced November 2020 and was established to address recommendation 59 of the national strategy, 'The Best Start: A Five-Year Forward Plan for Maternity and Neonatal Care in Scotland' (20th January 2017).

The aim is to achieve an adaptive ethos that provides specialised transport needs of maternity and neonatal units across the country with a high quality, safe, effective, fit-for-purpose and future proof service. This is to ensure babies transfer to the most appropriate care setting as efficiently as possible, to be achieved with minimal impact on service delivery.

The review has concluded, and recommendations have been made with regards to defining the structure of the teams, the location of the teams and the cover provided by the service nationally. The recommendations are being developed into an implementation plan, which will be shared with the Project Steering Group for approval.

2.3 Paediatric

The Paediatric Team have been facing a number of staffing challenges during this period. Moving forward, activity and demand is increasing and progressing in to the winter months there is an expectation that there will be a significant increase in activity for the team. The challenges the team have been facing include: -

- Clinician rota shortages with a fixed locum consultant job coming to an end and two permanent staff members leaving.
- There have been a number of shifts when the paediatric team has been unable to have a full team due to shortage of clinicians, thus clinicians have provided 'remote on-call' where they can give advice but do not go out.
- Increased stress and anxiety on retrieval nurses working with increased numbers of locum consultants.

To address these issues the following measures have been put in place: -

- Appointment of Clinical Fellow from March 2022 to September 2022.

- Establishment of an Advanced Nurse Practitioner role with a 50% split with the Paediatric Intensive Care Unit (PICU) in Glasgow Royal Hospital for Sick Children (RHCG).
- Successful recruitment into and commencement of an Advanced Nurse Practitioner training programme. Commenced in September 2022 and recruited jointly with the PICU in the RHCG.
- Support from neonatal teams and EMRS if a child requires transfer from remote and rural sites.
- Additional locum appointments with recruitment and appointment of a Clinical Fellow from February 2023 to August 2023. Also planned recruitment of a Clinical Fellow from August 2023 to February 2024.
- We also have a number of Senior Anaesthetic Trainees who complete training with ScotSTAR between December 2022 and February 2023.
- Robust induction programme for locum consultants including shadow shifts with permanent consultants.
- Robust support and communication processes in place to provide consistency amongst the team members.

There has been collaboration between Scottish Trauma Network and ScotSTAR Paediatric Team to establishment a national Senior Point of Contact (SPoC) for paediatric trauma patients who require secondary transfer to a paediatric major trauma centre (PMTc). The pathway was established with the involvement of SSD and this has been operational since June 2021 across all regions in Scotland. This pathway is a significant improvement to ensure that all paediatric trauma patients in Scotland who require PMTC input have a consistent and safe mechanism to safeguard the transfer of these patients. It will also ensure that appropriate triage decisions are made for these patients, which reflects that some paediatric trauma patients will require definitive care at a hospital that is in a different region.

This has proved to be very successful and has led to the pathway being adopted and implemented for the Paediatric National Burns Centre from December 2022.

3. AIR AMBULANCE

In our last Board update we reported a post pandemic increase in air ambulance activity that has continued in 2022. While there has been a general increase in usage across all air platforms, this has been most pronounced at our Northern fixed wing and rotary bases.

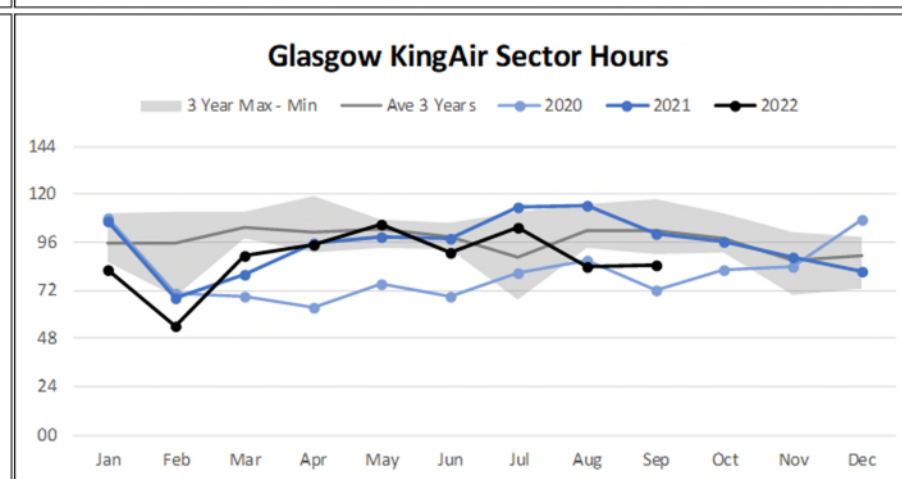
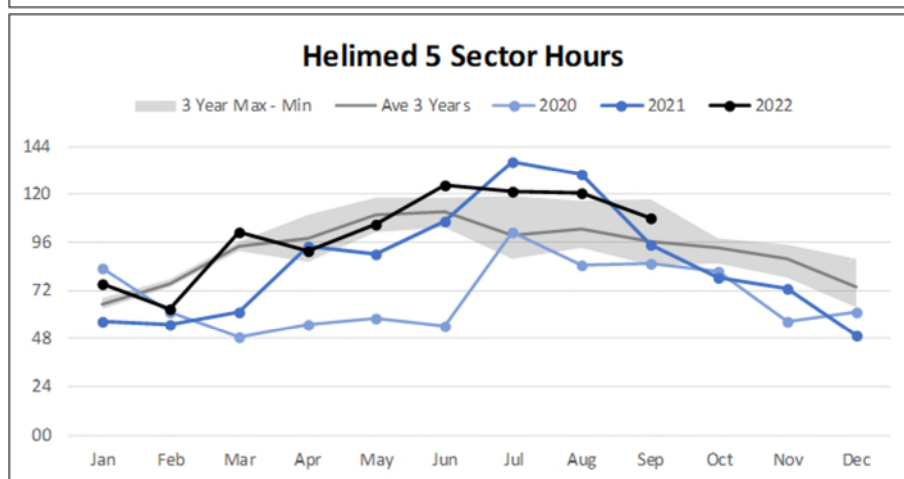
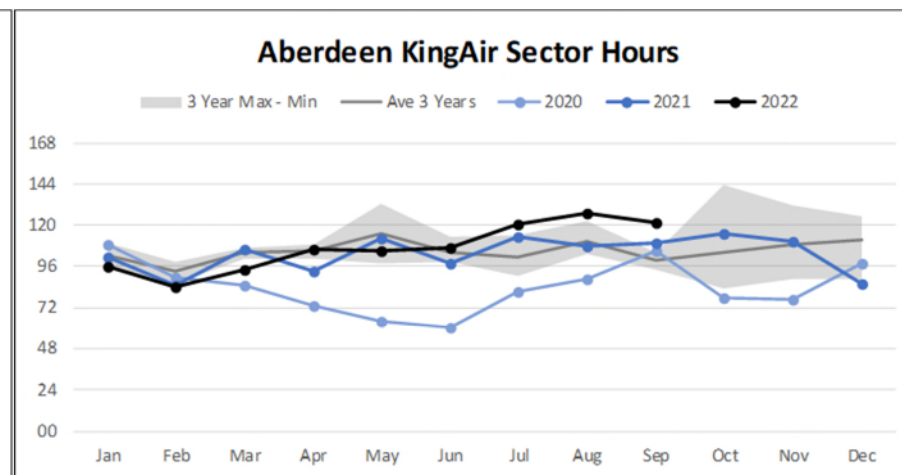
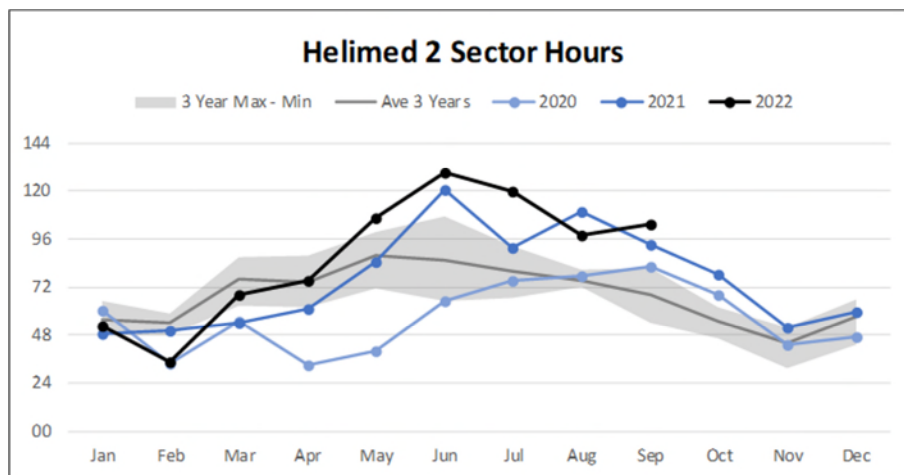
Our Aberdeen King Air saw an increase that amounts to an additional 3 hours 25 minutes a month whereas our Glasgow based fixed wing aircraft had the least active

6 months in the last 5 years if 2020 is excluded. For both fixed wing resources, if 2020 is excluded, then the most recent 6 months is the third most active period after 2018 and 2021.

Our rotary resources have also recorded higher than average flying hours in the most recent 6 months. Our Northern helicopter, Helimed 2, has been particularly busy.

Despite thorough review of available data, it has proven difficult to attribute the increase in activity to a discrete cause. There are thought to be many factors at work;










- The general increase in demand placed on the wider ambulance service and the associated recent challenges with road ambulance availability due to hospital turnaround and shift coverage has resulted in increased requests for air ambulance transfer.
- Recent changes to the HEMS tasking criteria employed by the Specialist Services Desk. The changes were agreed in partnership with staff who have fed back that tasking has improved. A HEMS Tasking Governance Group has been established to monitor HEMS tasking data and review issues highlighted through incident reporting.
- Loss of the EGNOS (European Geostationary Navigation Overlay Service) post BREXIT has impacted on our ability to safely navigate to airports on Islay, Campbeltown and Tiree in inclement weather, resulting in an increase in Coastguard requests.
- Staffing challenges in remote and rural healthcare locations resulting in increased requests for air ambulance transfer to central locations.



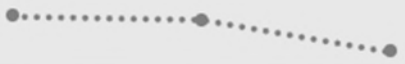



4. ACTIVITY & PERFORMANCE

The summary data was extracted from the new EMRS Application, the BadgerNet system for Neonatal and Paediatrics data and the SAS Data Warehouse for Air Ambulance data. Period covers from April to September 2022.





4.1 Adult Retrieval Activity

Department	Operational Data	Apr 20 to Sep 20	Apr 21 to Sep 21	Apr 22 to Sep 22	% Diff year most recent	
EMRS	Primary Missions Completed	289	493	553	12.2%	
	Secondary Transfers Completed	135	175	159	-9.1%	
	Advice Calls	247	349	352	0.9%	
	North Primary Missions Completed	75	90	125	38.9%	
	North Secondary Transfers Completed	48	73	55	-24.7%	
	North Advice Calls	41	75	63	-16.0%	
	West Primary Missions Completed	213	402	426	6.0%	
	West Secondary Transfers Completed	85	102	103	1.0%	
	West Advice Calls	206	274	289	5.5%	










4.2 Neonatal Activity

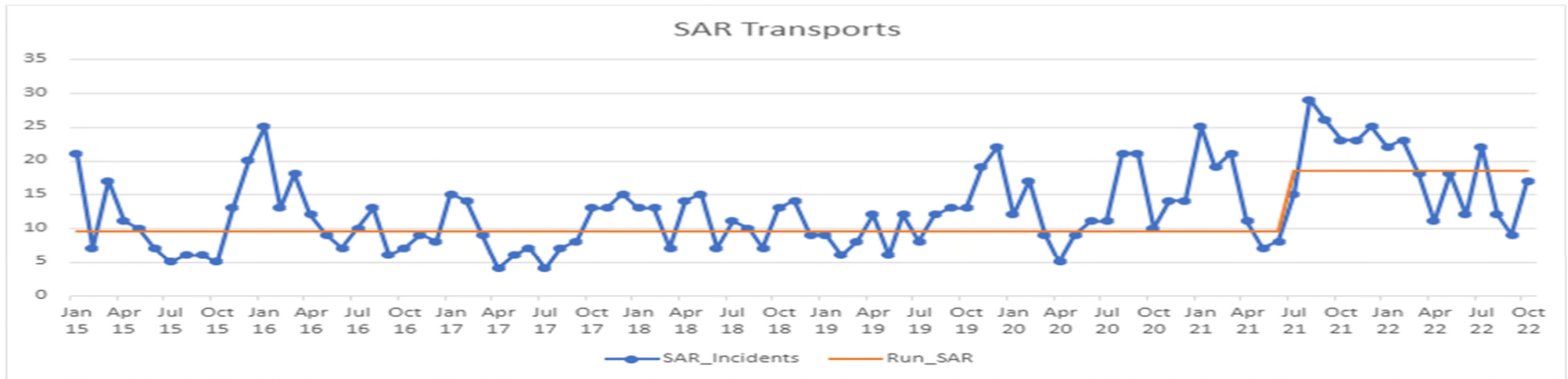
Department	Operational Data	Apr 20 to Sep 20	Apr 21 to Sep 21	Apr 22 to Sep 22	% Diff year most recent	
Neonatal	North Team Transfers Completed	91	90	82	-8.9%	
	South East Transfers Completed	183	160	173	8.1%	
	West Team Transfers Completed	253	296	257	-13.2%	
	Total Transfers Completed	528	546	513	-6.0%	

4.3 Paediatric Activity

Department	Operational Data	Apr 20 to Sep 20	Apr 21 to Sep 21	Apr 22 to Sep 22	% Diff year most recent	
Paediatric	Road Transfers Completed	52	90	107	18.9%	
	Air Transfers Completed	28	42	39	-7.1%	
	Total Transfers Completed	80	132	146	10.6%	
	Advice Calls	#N/A	195	240	23.1%	

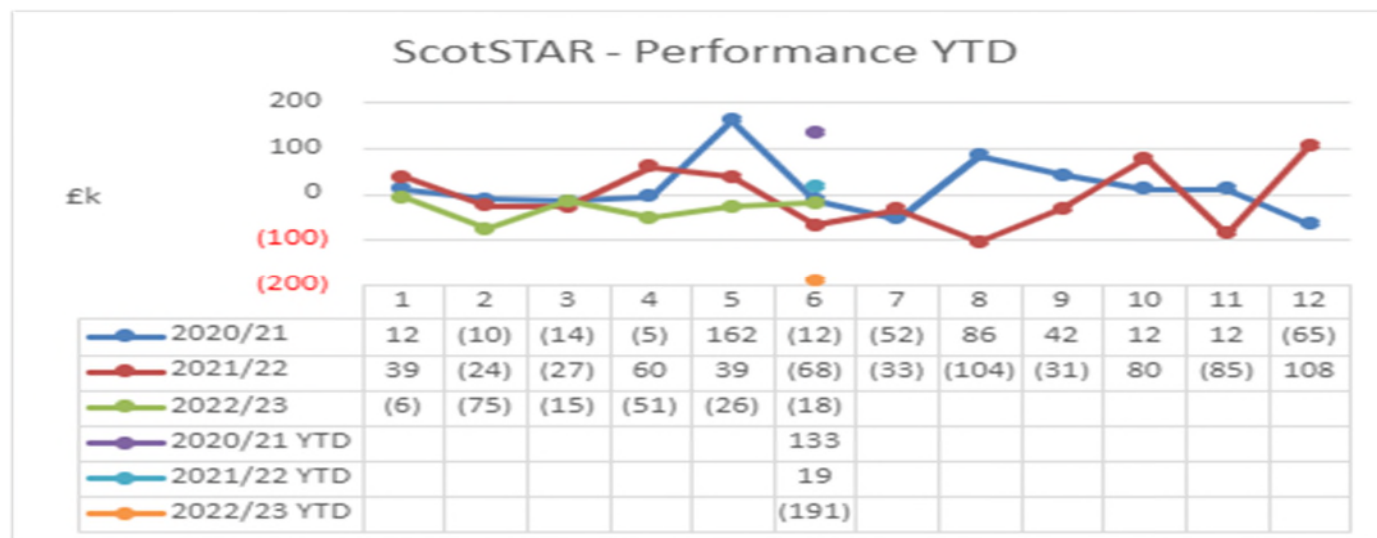
4.4 Air Ambulance Activity

Department	Operational Data	Apr 20 to Sep 20	Apr 21 to Sep 21	Apr 22 to Sep 22	% Diff year most recent	
Air Ambulance	Helimed 2 Missions	230	344	474	37.8%	
	Helimed 5 Missions	370	554	590	6.5%	
	Helimed 76 Missions	152	227	253	11.5%	
	Helimed 76 Missions - Road	26	47	53	12.8%	
	Helimed 79 Missions	#N/A	168	200	19.0%	
	King Air Aberdeen Missions	340	460	435	-5.4%	
	King Air Glasgow Missions	335	437	394	-9.8%	
	Coast Guard - HEMS	53	80	104	30.0%	
	Coast Guard - Other Missions	78	99	88	-11.1%	

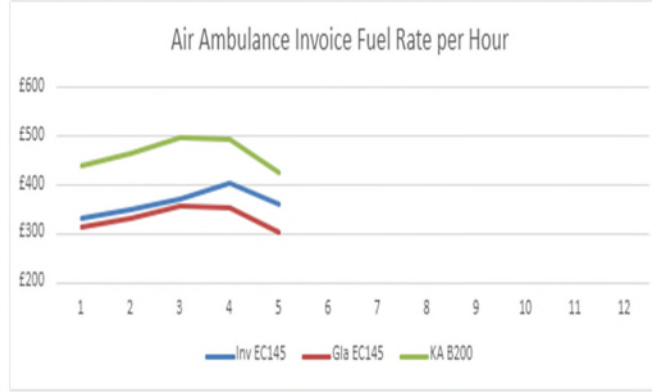
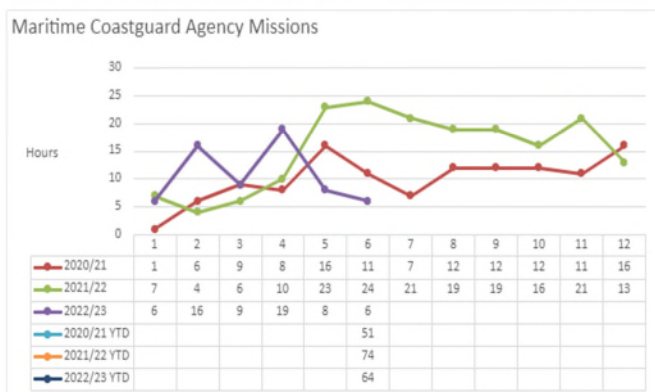
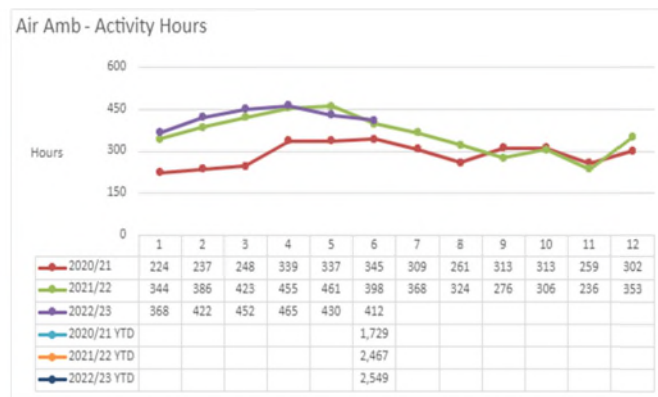
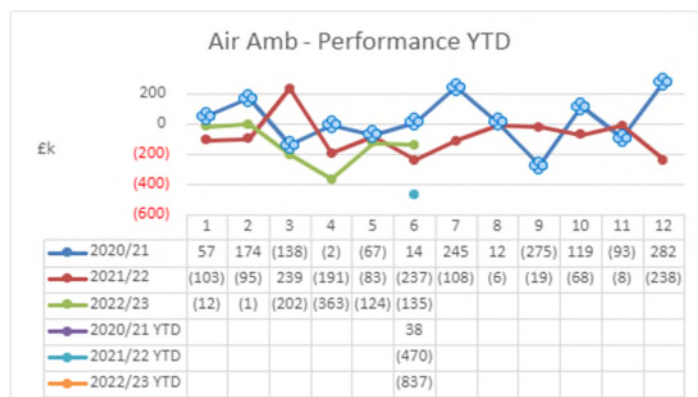


5. FINANCIAL POSITION

ScotSTAR currently shows an Overspend of £191,000 which is broken down into pay £29,000 overspend, non-pay £65,000 overspent with a savings target YTD of (£97,000).



Air Ambulance has a different challenge with ongoing cost pressures within the air ambulance budget, partially due to unavoidable increased annual costs within the Gama Contract. We are also dealing with increased demand on our Air Ambulance Services with activity up 3.3% on last year and aviation fuel price increased 2% since April. Work is underway to look at the full detail behind this activity, and how we can deliver savings and manage cost pressures as we go into the end of this financial year.



6. SCOTSTAR BEST VALUE REVIEW

At the request of the Director of Finance and General Manager for ScotSTAR, a high-level review of the key financial governance controls and processes in place within the Air Ambulance & ScotSTAR division was performed.

A findings report has been prepared with a number of actions and recommendations to be progressed and implemented. To provide assurance on the delivery of the actions, they will be reported and managed through the following governance routes: -

- Local implementation Group
- ScotSTAR Senior Leadership Meetings
- National Operations Directorate Senior Leadership Meetings

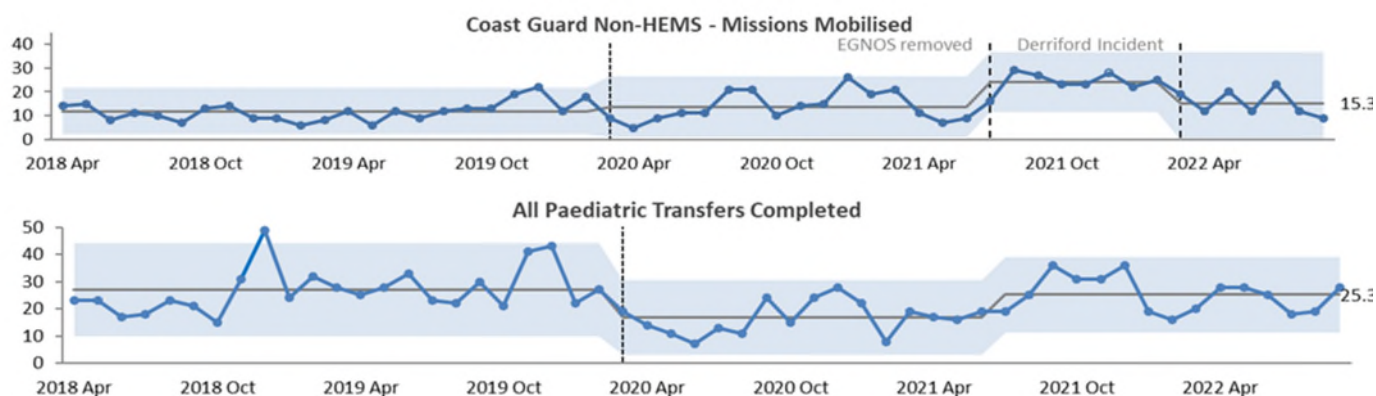
Overall progress will also be reported through the highlight reports to:

- the Best Value Steering Group reporting to the Performance and Planning Steering Group.
- the 2030 portfolio board as part of the best value update and;
- through the best value report to the Audit Committee.

7. WINTER PLANNING & PREPARATION

In preparation for winter, our winter plan has been developed for ScotSTAR & Air Ambulance to support surges in demand, adverse weather, and other barriers to routine activity during the winter period. Modelling work from previous years clearly shows the expected changes in activity through the winter months, this data is used to pre-plan winter requirements. Increased paediatric transfers and an uplift in Coastguard Search & Rescue (SAR) Helicopter support being the main two drivers.

Our previous analysis shows a slight decrease in Adult Retrieval primary and secondary taskings during the winter period but weather-related challenges in relation to aircraft availability inevitably increase.



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Areas we are focusing on include: -

a) Service Coverage

Full operational cover will be maintained during the winter period in all parts of the service. A number of mechanisms are in place to increase resilience and capacity depending on circumstances.

Our aviation operator, Gama Aviation has corporate winter plans which support business continuity and are designed to maintain support to all parts of the service. Weather can prove to be a significant challenge during the winter period and systems are in place with our air providers to plan for periods of weather disruption.

b) COVID-19

The experience gained over the last year and our improved understanding of the nature of the pathogen, have allowed us to develop processes with the Service's Infection Prevention and Control team (IPC) and our aircraft operators, that maximise our patient carrying capacity, while still ensuring the safety of our staff.

c) Vaccinations

Eligible staff are encouraged to participate in the seasonal influenza vaccination programme as well as the COVID-19 booster vaccination programme.

d) Health Board Liaison

ScotSTAR and Air Ambulance have a number of liaison mechanisms with territorial health boards, which are utilised during the winter period, this includes the remote and rural Ambulance Liaison Groups and various local liaison mechanisms.

e) Action Plan

Winter preparation activities will include: -

- Partnership working and information sharing with the wider Service and other NHS boards.
- Close management of team rota's.
- Review of resilience plan.
- Close working with estate providers in relation to snow clearance / gritting.
- Paediatric retrieval – seasonal variation with a peak in the winter months –winter planning measures in place.
- Concerns about RSV surge, with various predicted models suggesting that this could cause considerable pressure on paediatric services, including paediatric critical care and transport and serious concerns about capacity.

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8. OUR EXPECTATIONS FOR 2022/23 AND FUTURE DEVELOPMENTS

The ScotSTAR Team will

1. continue to support the work of the Scottish Trauma Network (STN), with a particular focus on the continued development of an STN Trauma App and contributing to the development of a Business case to establish an EMRS East Team.
2. progress the implementation of recommendations from Neonatal review, which will ensure that the service is able to effectively and efficient support the outcomes of Best Start. It will focus on workforce sustainability including future proofing the structure and locations of teams.
3. continue to develop a sustainable Advanced Nursing model for neonatal and paediatrics through the continued development of split posts with territorial health boards. In addition, the Competency Framework to support practice will be fully implemented for advance practice roles.
4. continue to support and contribute to the Air Ambulance Re-procurement process.
5. continue to contribute and support the development of burns, thrombectomy and interventional radiology services

9. OPPORTUNITIES FOR IMPROVEMENT

1. Opportunity for further integration between all of the ScotSTAR services.
2. Opportunity through Best Value activities to enhance air ambulance tasking and retrieval Team Triaging, leading service improvements and efficiency.
3. Opportunity for ScotSTAR to be involved in scoping work around areas of potential developments such as: -
 - Inter - ICU transfers in the West of Scotland
 - Modified primary missions in relation to network transfers of Major Trauma patients
4. By agreeing and developing KPIs we can identify, monitor and feedback progress to strengthen the Service strategy.
5. We will continue to participate in transport-based research either nationally or internationally to develop a culture in which research is actively encouraged with the aim of continuously improving patient care.
6. Development of staff should be core to the ScotSTAR ethos and investing in this will only benefit the Service.

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