

# Emergency Medical Retrieval & Transfer Service Cymru

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## Adult Critical Care Transfer Service Cymru

### Annual Report 24/25

1 April 2024 – 31 March 2025



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# Director's Foreword



This year marks a truly special milestone for EMRTS Cymru, our 10th anniversary. A decade ago, the clinicians and commissioners set out with a bold vision: to bring advanced critical care to patients across Wales, wherever and whenever they needed it. Today, that vision is not only a reality, but also a thriving, life-saving service that has touched thousands of lives.

Over the past ten years, EMRTS has grown from a pioneering concept into a cornerstone of emergency care in

Wales. With the Wales Air Ambulance Charity, we have developed a service which has overcome organisational and operational challenges to deliver hospital-level interventions at the scene 365 days a year with our colleagues from WAST and the other emergency services.

This year has seen us respond to more than an average of than 10 missions a day by air and rapid response vehicles. About half of our work is trauma and half emergency medical cases and we have delivered critical interventions such as emergency anaesthesia and transfusion on a daily basis. The service ensures safe high-quality care with a clinical governance package which is both comprehensive and based on excellent quality data.

Recent years have seen us concentrate on the following key areas to further improve service delivery:

- Expanded operational hours, improved equity of service delivery and increased mission volume
- Strengthened integration with NHS Wales and Health Boards
- Continued improvements in patient outcomes and clinical innovation
- Investment in education, training, research, and future workforce development

We are also delighted to have delivered the ACCTS service which works every day to transfer the sickest patients between hospitals in Wales and further afield. The regular requests for expansion of this service are an indication of how important it is in the emergency care system in Wales.

Behind the service statistics and governance framework are people. Our service is all about patients who needed and received care when they most needed it. It

is about the families who were supported in the darkest moments. And it is about the clinicians, pilots, dispatchers, and support staff who go beyond what we expect of them to make it all possible - day after day, year after year.

As we celebrate this 10-year journey, we also look forward. The next decade holds exciting possibilities: new technologies, increased availability and deeper collaboration. Our commitment remains unwavering—to deliver the best care, reduce inequalities, and serve the people of Wales with excellence and compassion.

Thank you for being part of our first 10 years.

**Professor David Lockety,  
National Director EMRTS Cymru**



# Message from ACCTS Cymru Clinical Lead



As we embark on our fifth year of service, ACCTS Cymru has become a deeply embedded part of Wales' intensive care community, supporting hospitals and, most importantly, patients at various stages of their critical care journey. Each referral we receive represents an opportunity for us as a service to deliver the highest possible level of care during some difficult

moments in a patient's journey. The number of patients we transfer grow year on year, not only in volume but in complexity, and we continue to build on the principle that if they require an intervention, they are "too sick to stay, not too sick" to transfer.

**The system is changing, and we are changing with it.** As healthcare becomes increasingly centralised, the adoption of hub-and-spoke models is accelerating. These models aim to maximise the operational efficiency of NHS infrastructure, increase access to therapies, improve patient outcomes, and reduce waiting lists. Remote sites now play a critical role in this landscape, making the timely transfer of critically ill patients more essential than ever. We are increasingly called upon to move patients at risk of deterioration or those requiring intensive care from settings far removed from specialist support. Looking ahead, we are actively collaborating with stakeholders to further embed our service within these emerging models of care, ensuring we are ready to support patients wherever they are.

One of the most transformative developments this year has been the launch of our Remote 360 Clinical Support System, a cornerstone of our "send and support" model. This cutting-edge platform places specialist clinicians virtually at the bedside, offering real-time guidance to practitioners and referrers. Developed in partnership with industry, the system enhances patient care, strengthens pre-deployment training, and supports the ongoing development of our advanced practitioners.

We also continue to advocate for patients who may otherwise be overlooked. Our

Critical Care Transfer Audit, built on the work of the Wales Critical Care Network (WCCN) Audit, has enabled us to better understand the care that needs to be delivered during transfer, identify areas of need, and improve resource allocation and best utilisation of our specialist teams. This data-driven approach reassures our stakeholders that patients consistently receive high-quality care throughout their journey.

The scope of therapies available to patients within intensive care continues to increase, our commitment to seamless, uninterrupted critical care, regardless of geography, remains at the heart of everything we do. Some examples of this culture of innovation include the implementation of inhaled sedation during patient transfers. This ensures that patients already established on this therapy can continue receiving it seamlessly throughout their journey. In addition, we are working closely with specialists to support the full range of cardiovascular therapies that may be required during transfer. This collaboration ensures our service remains at the vanguard of cardiovascular care, particularly when patients need to be moved with mechanical support.

As we approach the milestone of 2,000 patients served, we are leveraging clinical data to refine and expand our operational model. In addition to the operational and clinical care, our academic and staff development pathways continue to progress. The first cohort of Retrieval & Transfer Practitioners have successfully completed their first MSc year, now delivering enhanced care to patients further expanding our services potential to support more patients. Team members have also earned the Diploma in Retrieval & Transfer Medicine, reflecting our commitment to professionalising transfer medicine nationally. None of this progress would be possible without the trust and collaboration of the wider clinical community. EMRTS, emergency departments, intensive care units, and theatre teams across Wales have warmly welcomed our service, enabling us to integrate patient pathways both within Wales and into NHS England when specialist care is required beyond our borders.

We are proud of our collaborative ethos that has enabled the expansion of several seconded RAF nurses to ACCTS Cymru. This unique partnership allows military and civilian clinicians to work side by side, sharing expertise in the transfer of critically ill patients by land and air. It exemplifies the transferability of skills across sectors and enhances both services through joint training, shared learning, and operational collaboration. Together, we are building a more resilient workforce and shaping a responsive, integrated critical care system.

The service published the Redesigned for Life guidelines earlier this year, working in partnership with stakeholders from across Wales. This document aligned with the FICM transfer guidelines outlines the standards of care, equipment and training required to ensure that all transfers undertaken across Wales are delivered in the safest, most efficient and of the highest quality.

To our patients and their families, you inspire us every day. Your courage drives us to go further, to innovate, and to find new ways to bring care to the bedside, no matter the distance. We are deeply grateful to every member of our team, our partners, and all those who support us on this journey. You have helped make ACCTS Cymru what it is today.

This report offers a glimpse into the dedication of ACCTS Cymru, a service built by the people of Wales, for the people of Wales. We invite you to read on, and to journey with us into the next chapter.

**Dr Mike Slattery, ACCTS Cymru Clinical Lead**



# Governance Structure

EMRTS Cymru has developed a robust system of organisational and clinical governance. The service is hosted by Swansea Bay University Health Board (SBUHB) and is commissioned by the NHS Wales Joint Commissioning Committee (NWJCC).

The organisational governance structure consists of an EMRTS Commissioning Assurance Group (CAG) which sits as a subcommittee of NWJCC. The CAG is responsible for the delivery, direction and performance of the Service.

The EMRTS Cymru National Director is accountable to the CAG for the delivery and performance of the service and to the SBUHB Chief Executive for organisational and clinical governance.

Internal governance is led by the EMRTS Clinical and Operational Board which is attended by senior EMRTS personnel and support services and manages clinical and operational issues relating to the service.

The Board meets on a bi-monthly basis and is supported by the work of several specialist sub-groups.

There are several supporting documents underpinning the organisational governance of the service as follows:

- National Collaborative Commissioning Quality and Delivery Framework – namely CAREMORE.
- Terms of Reference for the EMRTS CAG.
- Collaboration Agreement between SBUHB, the Wales Air Ambulance Charitable Trust (WAACT) and the Welsh Ambulance Services University NHS Trust (WAST).
- Memorandum of Understanding between SBUHB and other Welsh Health Boards and Trusts.
- Service-level agreement between EMRTS and SBUHB for accessing support services.
- Terms of Reference for the EMRTS Clinical and Operational Board.

An External Clinical Advisory Group (ECAG) was established at the inception of the service in 2015. The ECAG provided benchmarking of clinical standard operating Procedures and independently reviewed significant adverse events, reporting their findings back to the Clinical and Operational Board.

A new External Clinical Advisory Panel (ECAP) has now been established in place of the ECAG. The new expert panel provides ad hoc advice on specialist issues when requested and input to Clinical Governance Days when relevant issues are being presented.



**NHS Wales Joint  
Commissioning  
Committee  
(NWJCC)**



**Director of  
Commissioning for  
Ambulance  
Services and 111**



**Commissioning  
Assurance Group  
(CAG)**



**EMRTS National Director**

**Chief Executive  
SBUHB**  
Organisational and  
Clinical Governance



**SBUHB Risk  
Management  
Group**

**SBUHB Quality  
and Safety  
Committee**



# The Emergency Medical Retrieval & Transfer Service Overview

## Our Mission

To provide advanced decision-making and Critical Care for life or limb-threatening emergencies that require transfer for time-critical treatment at an appropriate facility.



## Our vision

EMRTS Cymru has been developed to provide the following services to Wales:

EMRTS Cymru delivers improved equity of access to pre-hospital Critical Care for the people of Wales:

EMRTS Cymru delivers health gains through early interventions

(provided outside normal paramedic practice by EMRTS Cymru) and by direct transfer to specialist care centres. This aims to improve the functional outcomes of patients and increase the number of patients considered by national models to be 'unexpected survivors.'

EMRTS Cymru delivers downstream benefits to smaller and more rural hospitals across Wales. More patients are taken directly to the most appropriate centre which results in significantly fewer secondary transfers. These would previously have depleted hospitals of specialist personnel (such as anaesthetists) created an additional cost for the Welsh Ambulance Service, and pressures for the Welsh Ambulance Service and delayed time to definitive care in specialist centres.

EMRTS Cymru delivers clinical and skills sustainability in Wales. EMRTS supports consultant and Critical Care Practitioner recruitment into Wales by offering opportunities with the service as a part of the recruitment of related

NHS Wales hospital positions. EMRTS Cymru also supports educational activities across NHS Wales.

## Our Service

EMRTS offers a 24/7 medical operation across Wales. Services include:

- Pre-hospital Critical Care for all age groups (i.e. any intervention/decision that is carried outside standard paramedic practice).
- Undertaking time-critical, life or limb-threatening adult and paediatric transfers from peripheral centres (including Emergency Departments, Medical Assessment Units, Intensive Care Units, and Minor Injury Units) for patients requiring specialist intervention at the receiving hospital.

In addition, the service provides an enhancement of neonatal and maternal pre-hospital Critical Care, both for home deliveries and deliveries in free-standing midwifery-led units (MLUs), including transferring neonatal teams to distant time-critical cases by air.

The service provides a multitude of roles at major incident or mass-casualty events and a strategic medical advisor is available 24/7. This advisor is known as a Top Cover Consultant (TCC).

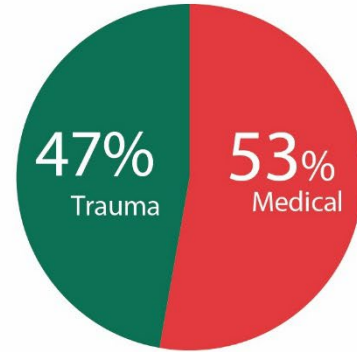
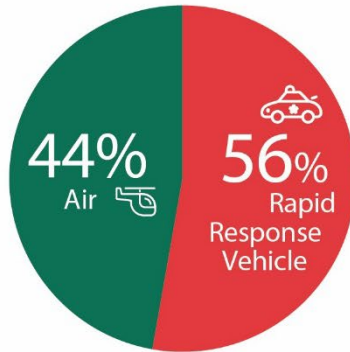
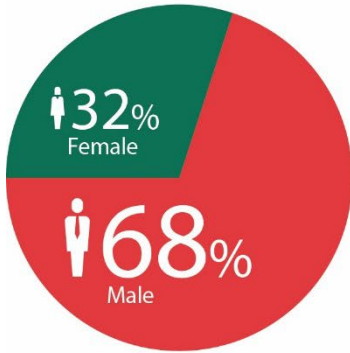
When the Wales Air Ambulance Charity helicopters are unable to fly due to poor weather conditions, EMRTS Cymru has access to a fleet of Rapid Response Vehicles (RRVs). They have been converted into state-of-the-art emergency response vehicles designed to enable the team to reach the scene of a medical emergency, by road, as fast as possible.

These vehicles are stationed at all our operating bases in Wales. Medical equipment has been designed to be interchangeable between the Charity's helicopters and the RRVs.

EMRTS Cymru is coordinated and tasked centrally via the Critical Care Hub (CCH) 24 hours a day. It is based within the Welsh Ambulance Service EMS Coordination centre in Cwmbran.

# Mission Data

Total number of calls - 3684



95% Primary missions (999 calls)

5% Secondary missions (inter-hospital transfers)

87% Adult

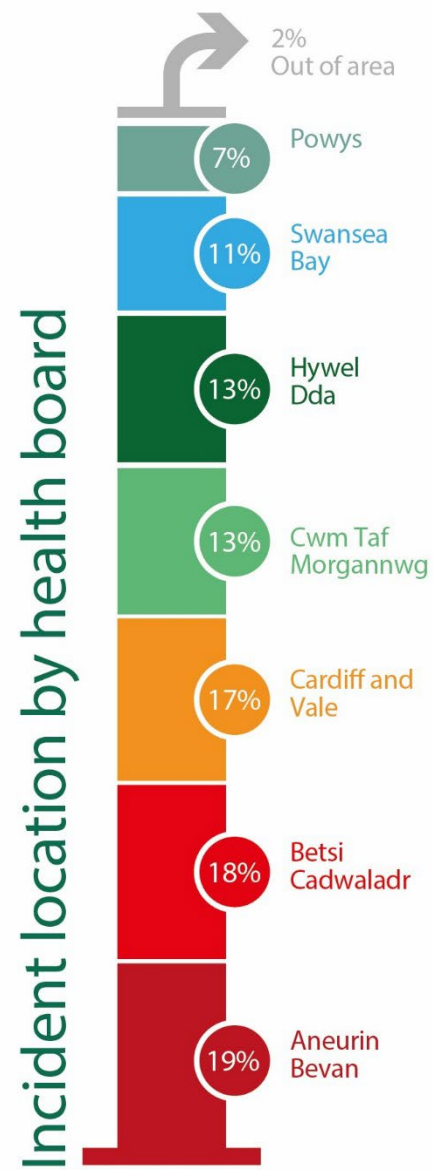
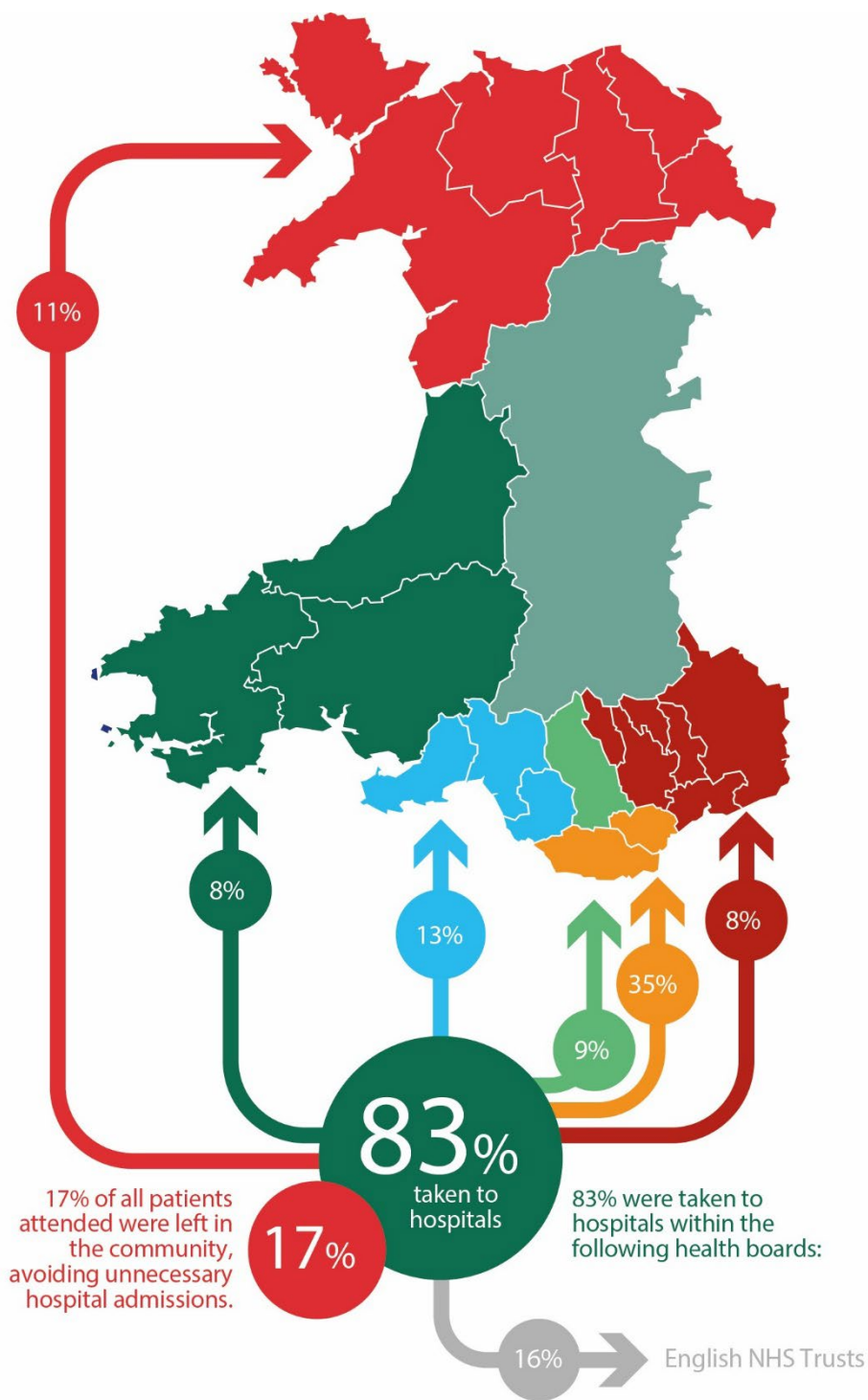
13% Paediatric

341 Emergency Anaesthetics

144 Sedations

130 Blood product transfusions

682 Intubations



# The Adult Critical Care Transfer Service Overview



**Adult Critical Care Transfer Service Cymru**  
**Gwasanaeth Trosglwyddo Gofal Critigol Oedolion Cymru**



## Our Mission

To ensure seamless, uninterrupted care for critically ill and injured patients in Wales through provision of a professional, high-quality, specialist adult transfer service.

## Our Vision

ACCTS Cymru's maxim is that Critical Care is a process and not a location. The service aims to ensure equity of access to Critical Care and specialist services for the people of Wales, irrespective of geographical distance or national borders. The service promotes cooperation across the Critical Care units of the health boards and can help to maintain optimal capacity throughout the Wales Critical

Care Network. Additionally, the service delivers benefit by reducing demand on anaesthetic &

Critical Care departments, Welsh Ambulance Services NHS Trust and EMRTS, by undertaking transfers that would otherwise impact these services.

## Our Service

The Adult Critical Care Transfer Service launched in August 2021 as a result of the Critical Care Working Group task and finish report. The report recognised the requirement for safe and high-quality inter-hospital transfer to be an essential part of Critical Care delivery in Wales. Prior to the services launch, Critical Care transfers were undertaken on an ad-hoc basis by medical and allied health care professionals from referring hospitals utilising front line ambulances. This ultimately resulted in increased pressures on the medical teams, both in hospital and prehospital, by depleting already stretched resources.

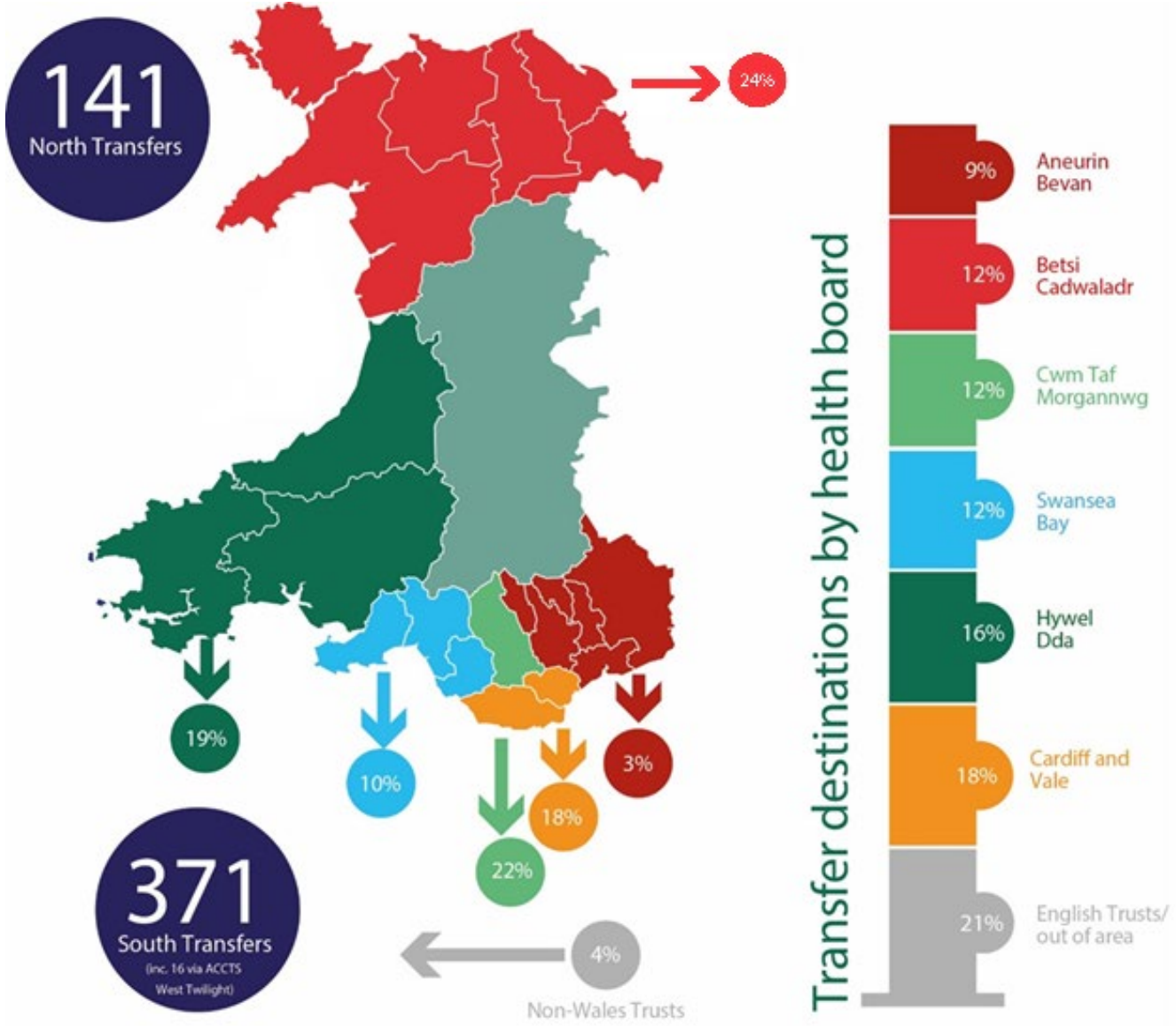
The service can provide varying levels of care from complex treatment and interventions to lower acuity Critical Care transfers between hospitals. It has three funded ambulances operated by two transfer duty crews covering the breadth of the Principality. ACCTS Cymru is able to provide this service by recruiting high calibre clinicians who have all undergone a robust selection process and have delivered critical and intensive care in previous roles. The predicted workload was initially estimated at 420 transfers each year. This number was exceeded within ten months of launching the service.

As a national service we have supported the movement of patients to specialist care as well as timely repatriation so that patients can receive the treatment they need near their loved ones. We work across all health boards in Wales as well as expediting access to quaternary care in NHS England for services not available within Wales.

For the period covered in this report, we completed a total of 512 transfers; the majority in the south of the country, 371, and 141 in the north.

Of those, 253 were level 3 transfers, 157 were level 2, and the remainder were level 1 or 0.

# Transfer Missions





Since inception, ACCTS has built a relationship with the Royal Air Force, as two expert organisations in transfer and retrieval medicine. This is based on shared values, mutual respect and a commitment to delivering world-class critical care.

At the heart of this relationship is the secondment of RAF nurses to gain a breadth experience in transfer of critically ill and injured patients from ACCTS. Looking to the future, both parties are committed to expanding the opportunities and shared learning



**6**

**RAF practitioner  
Placements**



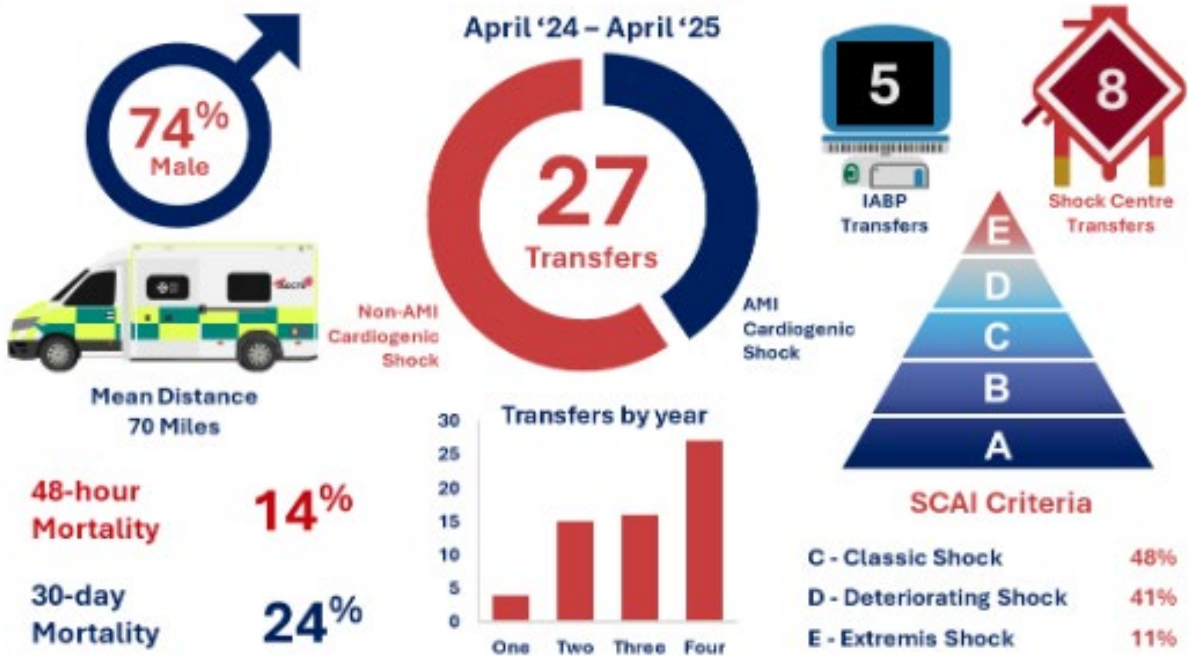
**2**

**Brize Norton  
Training Visits**

**3**

**Ongoing  
ACCTS contracts**

# Cardiogenic Shock



ACCTS continue to provide year-on-year increasing support for patients with cardiogenic shock requiring specialist intervention. The expertise of the service in this specialist cohort is reflected in the increased confidence of Welsh centres to refer patients for transfer in severe physiological state, and the requests direct to ACCTS from quaternary shock centres to facilitate transfers. With the service preparing a second advanced cardiovascular study day with colleagues from Geringe and faculty from the celebrated Mechanical Life Support course at Harefield/GSTT, ACCTS are ensuring that current and emerging methods of supporting cardiogenic shock patients will be continued in transfer. This will only be enhanced by integration of PICCO monitoring in the winter months

# The Wales Air Ambulance Charity

Our services are delivered via an important partnership with the Wales Air Ambulance Charity.

## What is the difference between EMRTS Cymru and the Wales Air Ambulance Charity?

Wales Air Ambulance is a charitable trust which relies entirely on the generosity and support of the Welsh public to help keep the helicopters in the air and Rapid Response Vehicles on the road.



The charity does not receive direct funding from the government.

EMRTS Cymru, a part of NHS Wales and supported by Welsh Government, supplies a highly trained NHS Critical Care team.

This exclusive and highly effective partnership between the NHS and the Wales Air Ambulance Charity demonstrates the benefits of cross-sector models and the important role charities can play in the provision of healthcare.

## What is the Wales Air Ambulance Charity?

Launched on St David's Day 2001, the Wales Air Ambulance Charity is the official air ambulance service for Wales. The Charity relies entirely on donations to raise £11.2 million each year. This funds four helicopters across Wales and the service's fleet of Rapid Response Vehicles. It is the largest air ambulance operation in the UK.

Income generation is supported by community fundraising, legacies and corporate support, a national retail and trading operation, and a Lifesaving Lottery.

The service has attended over 50,000 missions since its inception.

## **The Charity's Mission**

To deliver lifesaving, advanced medical care to people across Wales, whenever and wherever they need it.

## **The Charity's Vision**

To improve the lives of patients and their families by being a world leader in advanced, time-critical care.

For more information about the Wales Air Ambulance Charity, visit [www.walesairambulance.com](http://www.walesairambulance.com)

EMRTS Cymru would like to thank the charity for their support as we continue to work collaboratively for the people of Wales.

## **Financial Statement**

The Wales Air Ambulance Charity continues to provide significant revenue and capital financial support to EMRTS.

In 2024-25, EMRTS received £8.5m of revenue funding from the Joint Commissioning Committee (JCC) with a further £0.9m of Welsh Government funding and £0.1m of other funding. Actual expenditure was within £4,000 of the total allocation of £9.5m.

A £0.5m Welsh Government capital allocation was also made available to EMRTS in 2024-25. Actual expenditure was in line with this allocation.

# EMRTS Education and Training

The last twelve months have been exceptionally busy from an education and training perspective with multiple internal and external training events held by or attended by EMRTS and ACCTS staff.

This period has seen further success in both the Diploma and Fellowship of Immediate Care for our Consultants, CCPs, and trainees. This is something to be highly commended and the exams are seen to be exceptionally challenging National Formative Assessments for those undertaking PHEM training. Two of our senior CCP colleagues also attempted and were successful at the Diploma in Retrieval and Transfer Medicine in April 2024, becoming some of the very few paramedics within the UK to hold this award.

Our connection with the higher education providers in Wales has grown again this year, with the first MSc in Advanced Retrieval and Transfer Medicine running alongside the MSc in Advanced HEMS Practice at Bangor University. We wish all the ACCTS RTPs awaiting their results from the first year of this course, good luck! Colleagues in EMRTS are continuing to support undergraduate paramedic programmes in Swansea and Wrexham with simulation based training, and enhanced care workshops.



EMRTS continues to be the principle local education provider for National PHEM training in Wales. Our trainees rotate around the four bases in Wales benefitting from the

geographical and population-based diversity that Wales offers.

We continue to be one of the most popular and competitive national sub-speciality training providers. Wales PHEM trainees partake in a bimonthly regional teaching programme with other Southwest based Air Ambulance charities. The feedback we receive from our trainees is overwhelmingly positive and this is a direct result of the hard work, emphasis and dedication that all

members of the EMRTS teams give towards training this next generation of PHEM consultants.

There have been multiple internal courses this year for both EMRTS and ACCTS. The prehospital ultrasound course held at the National Imaging Centre in Bridgend continues to garner praise from those undertaking it, and ACCTS have held specialist study days for their staff in trauma, cardiology, and IABPs in transfer.

EMRTS is committed to working and training alongside other services to ensure that we are providing the best quality patient care to Wales. Collaboration with PROMPT Cymru has led to the creation of evidenced based prehospital critical care obstetric algorithms, with training days held in both the North and South bases to implement these changes and to improve the care of our obstetric patients within Wales. The reintroduction of umbilical venous catheters for our neonatal patients was followed by workshops in this skill delivered by members of the CHANTS team in the South, and NEWTS in the North. Highlighting the importance of multidisciplinary training. These sessions were very well received by the team, and we are grateful to PROMPT Cymru, CHANTS, and NEWTS for supporting the education of our staff.

Of particular note this year was the Norwegian training camp that both the education team and PHEM trainees were invited to attend in October of 2024. This was a four-day residential camp held in Torpomoen, a beautiful rural area a few hours Northwest of Oslo. The training camp was hosted by the Norwegian Air Ambulance and attended by EMRTS and a team from the London Air Ambulance. We each had the opportunity to run and take part in a number of scenarios that ranged from neonatal emergencies, major incident exercises and penetrating trauma management. The evenings saw an opportunity for 'hot-topic discussions' around the fireplace and a fantastic opportunity for shared learning and collaboration.

The biggest takeaway from members of all three teams was that although we face similar medical and practical challenges within our services, we are overwhelmingly united with a shared desire to strive for excellence and progression within our teams and for our patients.

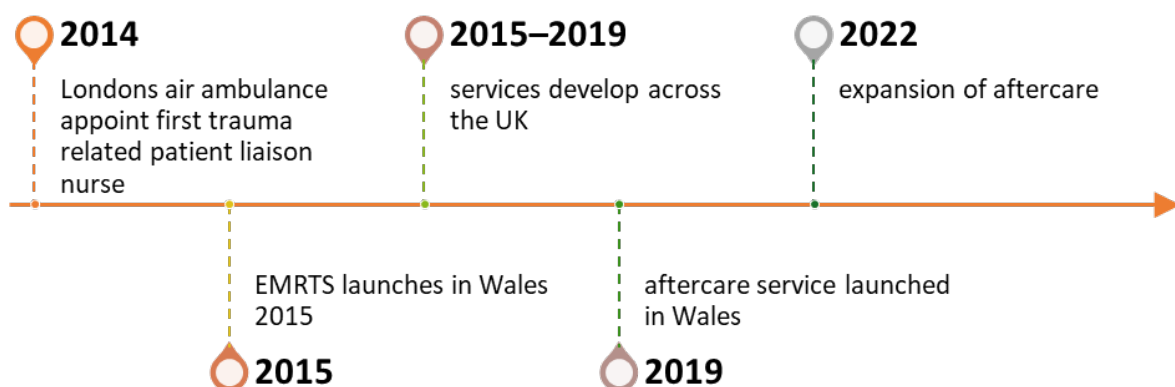
The education team within the service continues to grow to keep up with the ever-developing service advancements and changes, and there are many more exciting training opportunities coming to EMRTS and ACCTS in the new financial year. Watch this space!

**Kate Humphries, Critical Care Practitioner and Education and Training Lead for EMRTS, & Laura Owen, Consultant in Emergency and Pre-Hospital Medicine, and Programme Director for PHEM Training in Wales.**

# Aftercare



The Aftercare service was setup during the first wave of the pandemic and has been operating for over 5 years now. A recent evaluation of this work has been undertaken which we have included a summary of findings. The concept of Aftercare was first developed in 2014 in London, and EMRTS launched the Welsh service in 2019 as can be seen in the timeline below:



The Patient Liaison Nurses provide support to patients during their recovery and to bereaved relatives when our patients don't survive. Frequently patients and their family contact us to express their gratitude and find out more about what

happened. Many patients are so critically unwell that they do not remember the events of their prehospital treatment and family members are often unable to recall conversations with clinicians so the patient liaison nurses help to fill in these gaps and explain the medical treatment.

Day to day through charity visits, and engagements, it is increasingly evident that there is a huge benefit to all parties including the patient, family or carers, and indeed, to the staff who are able to see the long-term results of the original attendance.

## **Activity**

The aftercare team reviews over 290 cases per month, and directly contacts 70 relatives and patients, resulting in around 20 appointments per month. In addition, the team attend an average of 13 multidisciplinary hospital meetings per month, ensuring that those that may benefit most from the service are identified as early as possible. The also attend regular meetings with WAA colleagues to coordinate patient stories and contact, and facilitate cases where patients claim back the costs of their treatment through legal schemes. In addition, an average of 2 referrals per week are made to the charity fundraising team, and the team often forward ad-hoc donations from grateful patients and relatives.

The administrative role has been instrumental in freeing up nursing time to see patients and relatives and also driving forward various initiatives and being the first point of contact for patients and relatives.

## **Examples of work undertaken**

A recent review collated additional contextual daily activity by the team. Liaising with patients and relatives, this can include organising referrals and signposting to other services and arranging base visits where they have the opportunity to meet the crews which attended to them at the scene.

They also support staff through a series of measures, notably regular Wellbeing group meetings and support days, as well as bereavement workshops and coordinated support sessions.

Training and outreach include supporting the Major Trauma Networks, Clinical Psychology trainees and induction of new clinical staff across the service. Opportunities for shadowing also support staff development.

The team is also responsible for curating resources and materials for patients, relatives and staff. The team also work closely with coroners, police and supporting compliments and complaints.

Charity engagement is another role responsibility which they undertake. This involves volunteer presentations, patient story presentations at WAACT conferences, producing case study videos and patient stories, supporting the WAA charity with patient base visits and attending events such as the Royal Welsh Show and visiting schools.

As with the primary response, there are no real geographical boundaries of the aftercare service. In areas with lower absolute numbers there is also increased travel time to be factored in, making it challenging to offer a face-to-face service. Patients come from across the UK and beyond and are also taken to hospitals across the UK.

## Feedback

*“The support that I have had following my accident almost 12 months has been remarkable. We have had several follow up appointments where we have talked through what happened to me and the treatment I received at scene. The team continued to support me during my recovery helping to make links with hospitals and physiotherapists. My husband has also found the support really helpful to have someone to talk to about how traumatic it was for him also. We can’t thank you enough.”*

- Donna (Patient)

Following a Bereavement Telephone call with PLN:

*“Everyone was amazing, I know everything possible was done to help my sister and the baby and we are all so grateful for that. Being able to spend an extra week with her baby and saying goodbye to her in the hospital has really made a difference to us. I cannot thank you enough and I will be fundraising in her memory for WAAC.”*

## Conclusion

As a service, we recognise the importance of an ongoing relationship with patients and their families following their contact with our clinicians. The Aftercare team is delivering an exceptional service within a modest resource envelope, and through the existing setup, is currently maximising clinical time spent with patients and relatives by offering phone and video call appointments as well as

visits to the base. As with the wider service there is a significant unmet need, which will increase cumulatively with time and as the service responds to more incidents through the planned service changes. There is also a strong desire to expand the provision to ensure maximal equity for patients. Going forward this is hoped to be achieved through sourcing additional funding and using novel approaches to staffing such a large geographical areas, for instance through the use of “link nurses” in certain areas, or close partnership working with secondary care.



# Aviation Provider

Since joining the team with the Charity and EMRTS in December '23, operations have continued to pick-up at pace with the aircraft showing good availability through '24 and into '25. The team remains focused on the safe maintenance and operation of all the aircraft and working alongside EMRTS for mission readiness.

More broadly we are working with EMRTS and the Charity to support all stakeholders with the future Northern base location, particularly the operational aspects, and in the planning of next year's major milestone, the Charity's 25<sup>th</sup> anniversary.

It is a pleasure to work closely with EMRTS and the Charity, as all parties seek to evolve the service to better support the people and communities of Wales.

**Neil McPherson, Gama Aviation Customer Operations Manager**



# Case Study



In October 2024, Anthony Crothers had enjoyed a walk in Gower with his two friends when he suddenly collapsed and nearly lost his life.

Anthony stopped breathing after visiting Three Cliffs Bay, Gower. His friend Glyn Dewis, with the help of two other bystanders rushed to his aid. They called 999, started chest compressions and attached a community defibrillator, which delivered one shock.

By pure coincidence, off-duty doctors arrived at the scene and assisted with resuscitation, whilst they waited for the paramedics to arrive.

The doctors performed CPR and Anthony was given five shocks from the defibrillator. Thankfully, his heart restarted just before the paramedics arrived.

The paramedics carried out a rapid assessment, gave Anthony some oxygen, supported his airway and attached him to all their monitoring machines.

Due to his condition, the Wales Air Ambulance was called to give Anthony hospital-standard care in the car park. When the air ambulance crew arrived, Anthony was still unconscious and needed support with his breathing. Anthony's pulse was very slow and weak.

The EMRTS medics on board Wales Air Ambulance, Consultant Dr Iain Edgar and Critical Care Practitioners Derwyn Jones and Rhyan Curtin, stabilised him by inserting a breathing tube and attaching him to a ventilator. Taking over Anthony's breathing ensured enough oxygen was getting to his brain, preventing brain damage.

Whilst the Welsh Ambulance Service paramedics contacted Morriston Hospital to arrange for a direct transfer to the cardiac centre, the air ambulance crew gave Anthony adrenaline to keep his heart rate and blood pressure within normal limits.

Whilst under the constant supervision of the Wales Air Ambulance medics, Anthony was then airlifted to the Intensive Care unit at Morriston Hospital, where he required cardiac stents to be inserted.

After nine days on a ventilator and nearly four weeks in hospital, he was discharged home, where he went on to make a full recovery. Anthony now takes daily medication and is doing very well.

The 66-year-old father-of-three and grandfather-of-five, said: "I want to say a massive thanks for what EMRTS and WAA did for me and what they do on a daily basis. They are an incredible crew of people. I cannot express my gratitude enough. Without them, and the people who helped me, I wouldn't be here."

## Research Audit and Innovation

The service is developing a diverse portfolio of research, audit and innovation. This includes clinical topics such as novel use of Cold stored platelets, airway management techniques, and Stroke Care, through to the use of artificial intelligence, and drones supporting delivery of healthcare. Most notably a portfolio of research has been developed with Warwick University utilising applied linguistics to support policy and training as well as study decision making which is key to delivery of the services offered across EMRTS and ACCTS. A selection of publications are included below, and links to the various projects can be found on our website <https://emrts.nhs.wales/research/>

Clinical Audit plays a key role in the governance of the service with longitudinal audits relating to blood and anaesthesia continuing as well as contributing to or taking part in wider audits such as the National Major Trauma Registry (NMTR) and a national audit of open fractures.

Some of our key partners are Welsh Ambulance Service University NHS Trust, Welsh Blood Service, Warwick University, Bristol University, Cardiff University, South Wales Trauma Network and others. The service also has a unique collaborative partnership with industry working closely with Tactical Wireless Ltd on a range of telemedicine innovations.

### References:

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F. (2025). Dimensions of Human-Machine Combination: Prompting the  
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Contexts. *Computer Supported Cooperative Work (CSCW)*.

<https://doi.org/10.1007/s10606-025-09514-4>

**Thank you for taking the time to read about the critical care  
services we provide and if you have any further queries about  
EMRTS or ACCTS and the work we do you can contact us on:**

**W: [emrts.nhs.wales](https://emrts.nhs.wales)  
E: [EMRTS@Wales.nhs.uk](mailto:EMRTS@Wales.nhs.uk)  
T: 0300 3000 57**

