







Introduction to Therapeutic Apheresis Services

The NHS Blood and Transplant (NHSBT) Therapeutic Apheresis Services (TAS) teams provide adults and children with access to a portfolio of apheresis therapies across a range of clinical specialities. Based within NHS Trusts in eight geographical regions, the medical and nursing teams deliver a range of therapeutic apheresis treatments using specialist machines that exchange, remove, or collect certain components within the blood.

The multidisciplinary teams provide patients with access to high quality apheresis services, 24 hours a day, 365 days a year.

Our values

Our three core principles are critical to our service, guiding everything we do and inspiring

Caring – we care about our patients, doners, their families and our colleagues

Expert – we are expert at meeting the needs of those who use our service and those who operate it

Quality – we provide high quality products, services and experiences for patients, donors, and colleagues

Foreword

2020/21 has been a significantly challenging year. Like our colleagues across the NHS, our frontline teams in TAS have worked incredibly hard to overcome the challenges presented by the COVID-19 pandemic to maintain the safe and effective delivery of treatment for patients. TAS teams demonstrated their strength, sense of duty and generosity in supporting not only one another, but also our NHS colleagues and most importantly the patients we treat.

During the pandemic, NHSBT are very proud to have treated patients not only in hospitals where we routinely provide services, but also for over 150 patients from hospitals across England who struggled to maintain access to their own apheresis services.

Some of our key achievements in response to the COVID-19 pandemic were:

 Regional teams working nationally to ensure appropriate levels of staffing in each unit to meet patient demand were most needed

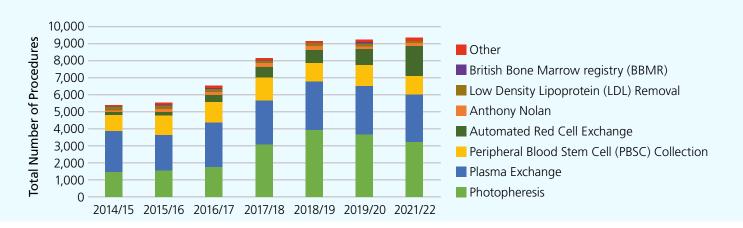
- The relocation of two of our TAS units (one unit on three separate occasions) to accommodate the reconfiguration of Trust services in their efforts to meet changing patient flows demanded by COVID
- The introduction of flexible working hours and service delivery to provide extended working days and weekend working to achieve COVID-19 secure units
- Introduction of satellite services to ensure patients had more localised access to treatment – for example, the introduction of an extracorporeal photopheresis service in Cardiff and the provision of a stem cell collection centre service for donors from the Anthony Nolan Registry in Oxford

"I am incredibly proud of every member of the team and their response to the pandemic. Every member of staff has gone above and beyond to ensure that patients continued to access treatment despite all the challenges posed. I have been proud to lead the team during this time."

Catherine Howell OBE
Chief Nurse Diagnostic and Therapeutic
Apheresis Service

TAS activity summary

Patient referrals in 2020/21 were very unpredictable due to national and regional lockdowns, shielding of certain patient groups and for certain clinical conditions fewer patients than normal presented into hospital e.g. Thrombotic Thrombocytopenia Purpura. Despite this, demand for TAS services was greater than the previous year, with TAS teams supporting over 1,930 patients and donors with the provision of 9,390 apheresis procedures.



Caring – we care about our patients, donors, their families, and our colleagues

Clatterbridge Cancer Centre TAS spoke unit

In September 2020, we opened a 2-bed unit in the new Clatterbridge Cancer Centre (CCC). The state of the art CCC enables patients to receive all their cancer treatments under one roof, including peripheral blood stem cell (PBSC) and extracorporeal photopheresis (ECP) services provided by TAS.

One of the first patients to be treated at the unit, Paul, attended for a Stem Cell Procedure. Paul explained: "Having everything in one place means once I have had my stem cell transplant, I can come back to the unit and see the same people as before, who have been helping me to get through this awful time since day one."

Expansion of London services

Demand for Therapeutic Apheresis Services within London continues to grow primarily due to an increasing demand for automated red cell exchange for the treatment of patients with sickle cell disease. The TAS team in London have provided more than 1,320 procedures last year which is a 39% increase in demand when compared to 2019/20.

Cardiff extracorporeal photopheresis service

In June 2020, TAS, working in close collaboration with the Cardiff & Vale University Health Board, established a new service for the delivery of ECP in Cardiff. This service supports patients from across South Wales providing local access to treatment.



Expansion of Anthony Nolan Registry services into Oxford:

In the height of the first wave of the pandemic TAS were asked to expand collection centre services for donors in the South of England from our unit in Oxford. TAS responded rapidly to this request and introduced a new collection centre service within a few months. This new service will help improve the provision of stem cells for transplant patients.



Ffion, our first Anthony Nolan Registry Donation in TAS Oxford Unit.

Patient feedback opportunity

Caring for our patients, donors and their families is at the heart of our service. In November and December of 2020 TAS surveyed patients and donors about their experience of our service. We are pleased to report that 97% of patients who provided feedback, rated their overall experience of TAS as either 9/10 or 10/10. This reflects a 5% increase from the previous year. Feedback from our patients was extremely positive and included:

"The team discussed everything, every step of the way, keeping myself and my daughter fully informed."

"The nurses are always professional and friendly, a credit to the organisation."

Making TAS a great place to work

TAS employs approximately 80 nurses across the country and is committed to offering the best training, development, and support. In November 2020 a comprehensive review of the nursing workforce was commissioned. We listened too and sought feedback from our teams to find out what it is takes to make TAS an incredible service and what we can do to invest in and support the development of our nursing workforce for the future. The recommendations from the workforce review will be published in early 2021 and rolled out across the function. One of the key outputs included further investment in our education team infrastructure.

Improving information resources

TAS has focused on development of educational resources and has launched three training videos funded by Health Education England. These include:

- a guide to white cell depletion
- consent
- a short guide to custom priming the Terumo Spectra Optia

These are available on our website here.

TAS are working to develop more innovative information resources using animation software. These new resources will be available for patients and service users in 2021/22.





Expert – we are expert at meeting the needs of those who use our service and operate it

Feedback from referring clinical teams

An online survey of referring clinicians conducted between December 2020 and February 2021 reported that 89% of respondents scored their satisfaction with our services as 9/10 or 10/10.

Some of the core themes of feedback and our responses were:

"A single phone call/on-line communication would be good, but overall, very satisfied with the service"

A national on-call number (0300 020 0496) is now in place for any referral, anytime. Plans are progressing for an online electronic referral for introduction later in 2021.

"Ensure details are documented fully in the local patient record"

TAS are working with our Trust IT colleagues to seek access to electronic patient records

"It could only be bettered by having better vascular access availability" and "I wonder whether video assessment of veins would give more confidence to the referrer and referee?"

TAS are in the process of rolling out the use of ultrasound guided cannulation. We anticipate that this will reduce the need for referring teams to support peripheral cannulation and the need for central venous lines.

Research and development

Throughout 2020, TAS teams were committed to continue to support Trusts with access to apheresis services in support of pioneering and lifesaving clinical research trials.

Whilst many research trials were stopped due to the pandemic, some did manage to continue, and we supported 17 patients with 32 apheresis procedures relating to clinical trial research.

We are also proud to support the pioneering and life-saving development of CAR T therapy, commissioned by NHS England and in 2020/21 collected cells for 48 eligible patients.



Quality always – we provide quality products, services and experiences for patients, donors, and colleagues

Regulation, accreditation and governance

All TAS units that provide cell collection therapies are fully JACIE and HTA-accredited and are working hard to ensure readiness and compliance with regulatory inspections due in 2021/22.

TAS participated in the first NHSBT Virtual Regulatory Assessment of NHSBT Liverpool by the HTA in December 2020, which identified no shortfalls for TAS.

TAS were pleased to introduce the Perfect Ward Clinical Audit App which enables our staff to undertake and transparently share audit findings in real time. This system enables TAS to identify issues straight away and immediately address them. It is our ongoing ambition to drive forward quality improvement and ensure that we always maintain a safe, responsive, and effective service for patients, donors, and staff.









Looking forward to 2021/22

The focus for TAS during 2021/22 is restoration and recovery of our service, working in close collaboration with our colleagues across the NHS, we need to understand their changing needs for our services.

Whilst restoration and recovery will take time, TAS is committed to the continued improvement of its services for patients across the NHS. In 2021/22 we will:

- 1: Support our NHS colleagues in identifying inequalities of access for patients from across all clinical specialities
- 2: Continue to develop the TAS offering in support of NHS and commercial organisations developing advanced therapeutic medicinal products (ATMP) in both pre-clinical and clinical phase trial development
- 3: Collaborate and engage with NHS Commissioners & relevant key stakeholders to horizon-scan and understand the impact of emerging treatments on the demand for apheresis services
- 4: Improve TAS services and deliver efficiencies by reviewing our referral pathway and providing increased routine access to weekend services
- 5: Meet the highest standards of patient care, safety, service quality and regulatory compliance
- 6: Ensure TAS is a great place to work for everyone

For more information on the TAS function please visit our webpages: https://hospital.blood.co.uk/patient-services/







NHS Blood and Transplant (NHSBT) saves and improves lives by providing a safe, reliable and efficient supply of blood and associated services to the NHS in England. We are the organ donor organisation for the UK and are responsible for matching and allocating donated organs. We rely on thousands of members of the public who voluntarily donate their blood, organs, tissues and stem cells.

For more information Visit: nhsbt.nhs.uk

Email: enquiries@nhsbt.nhs.uk

Call: 0300 123 23 23