NHS
Blood and Transplant

Board Meeting in Public

Tuesday, 03 February 2026

Title of Paper	Patient Story - Red Cell Exchange	**Agenda No.**	2.1
Nature of Paper	☒ Official	☐ Official Sensitive	
Author(s)	Sophie Seymour, Head of Office for Nursing; Claire Broere, Head Nurse TAS Middlesbrough; Patient Damiola; and patient Duke's mum Anthonia		
Lead Executive	Dee Thiruchelvam, Chief Nursing Officer		
Non-Executive Director Sponsor	N/A		
Presenter(s) at Meeting	Claire Broere, Head Nurse TAS Middlesbrough, Damiola and Anthonia		
Presented for	☐ Approval ☐ Assurance	☒ Information ☐ Update	
Is there a plan to communicate this to the organisation?	☐ Yes	☒ No	☐ Yet to be determined

Executive Summary

This patient story is about the red cell exchange programme in Middlesbrough and 2 patients who are benefitting from this treatment.

Previously Considered by

N/A

Recommendation

This paper is presented for information only

Risk(s) identified (Link to Board Assurance Framework Risks)

N/A

Strategic Objective(s) this paper relates to:

☐ Collaborate with partners	☐ Invest in people and culture	☒ Drive innovation
☐ Modernise our operations	☐ Grow and diversify our donor base	

Appendices:	

Introduction
Red cell exchange is a therapeutic apheresis treatment, most commonly used to treat patients with sickle cell anaemia. * The treatment separates and removes the problematic sickle shaped red blood cells and then replaces them with healthy red cells from donated blood. This usually done around every four - six weeks to keep the number of sickle cells in the patient's body to a minimum.

Therapeutic Apheresis Services (TAS)
NHSBT have been working with NHS England to meet the needs of local populations by expanding our TAS service across England to areas that didn't have one or taking them on where the NHS is struggling to provide them, meaning patients either didn't have access to red cell exchange or had to travel long distances to receive treatment.

We have started to build a new team in the East of England, starting in Luton, shortly followed by Basildon and with several other trusts in the pipeline. We know that in this area there are 95 patients who were regularly travelling to London to receive red cell exchange therapy and many more who weren't accessing treatment at all.

Earlier last year we took over the Red Cell Exchange programme in Middlesborough as they had limited access for patients and very long waiting lists, directly impacting patient care.

In the financial year 2021/22, NHSBT carried out 1852 red cell exchange treatments. In the 2024/5 financial year this had risen to 2845, a 53.6% increase. Our forecast for this year is 3435 treatments, a further 20.7% increase year on year. These figures demonstrate the impact TAS is having on increasing access to this life-changing therapy.

This board patient story shares the experience of Claire Broere, the lead nurse for TAS in Middlesborough and two patients who receive care at this unit, Damilola and Duke

Claire Broere – Lead Nurse, TAS, Middlesborough
After 21 years working as a haematology nurse at James Cook University Hospital in Middlesbrough, I was incredibly fortunate to have the opportunity to join NHSBT TAS in March 2025. As part of my previous role as a Transfusion Practitioner, I had been running an inhouse apheresis service, carrying out both red cell exchanges and plasma exchanges. Over time, demand for this service began to exceed the capacity of our small and fragile local team. Since joining TAS, we are now able to care for thirteen adult patients and five paediatric patients on our red cell exchange programme, with treatment intervals ranging from every four to every six weeks.

My transition from the Trust to TAS was extremely exciting. It quickly became clear that I was no longer part of a small local team—I had joined a large, nationwide service filled with people who shared my passion for improving outcomes for patients with sickle cell anaemia.

There were certainly many changes to adapt to as I learned to deal with documentation and change controls "the TAS way", but this never phased me. I felt fully supported throughout the entire process. I am currently the only TAS nurse based at James Cook, but as Middlesbrough's apheresis service sits within the TAS Leeds service, I am part of a wider team of highly skilled, committed nurses who provide both in-hours and out of hours cover.

Previously, there was no out of hours service at James Cook. This meant that if a patient required an emergency red cell exchange out of hours, they often had to wait until the next working day—or in some cases, even longer if the need arose over a weekend, which left them in unnecessary pain.
Since March 2025, we have successfully completed five emergency red cell exchanges at James Cook—three during normal hours and two out of hours.

Damilola – A red cell exchange patient from Middlesbrough

I was born in Nigeria in 1984. As a child I suffered with a lot of pain and would often wake up crying with it. My parents took me to see various doctors, but they just prescribed pain relief, so we never knew what was causing all this pain. When I was about 21, I had a really bad episode of pain and was taken to a specialist hospital where I was diagnosed with Sickle Cell disease, finally explaining all the crises that I'd had through my life. I was told that my life expectancy would only be about 40 years.

In 2021 I moved to the UK and went to see my GP who referred me to the James Cook hospital where they could offer me specialist advice and treatment for my sickle cell. Although I was now seeing a specialist team, I continued to suffer from very regular pain and was often hospitalised when I was having a bad sickle cell crisis.

In 2024 I was introduced to Claire, a specialist TAS nurse and she started to talk to me about red cell exchange. I was really scared and very sceptical, but Claire was incredibly reassuring and and promised me that we could just stop the treatment if it didn't work. I was eventually persuaded to start the treatment in January 2025 although I was still really frightened about it.

I had my first treatment and was booked in for my second. In the six weeks in between the first two treatments, I didn't have a single crisis and felt great, but I wasn't sure if this was just a coincidence as I didn't really believe that the treatment could make a difference. However, as I continued having the red cell exchange treatment, I was shocked and amazed to find that it really was working. It felt like a dream, I had never imagined there would be anything that would help me in this way. In the whole of 2025, I didn't have a single hospital admission. I have had my three-month check-ups reduced to every six months and am hardly ever having to take any pain medication. I'm also able to drive now, previously I used to have a lot of pain after even driving short distances. Claire has been amazing. She's so passionate and natural and really cares for every single patient. It has been a miracle for me. When I was diagnosed in Nigeria, I was told that I would be unlikely to live past 40, I'm now 42 and people wouldn't even believe that I had sickle cell as I look so healthy.

Anthonia – Mother of Duke, a red cell exchange patient from Middlesbrough

Duke is 11 years old; he's my second child and was born in Nigeria. We discovered Duke had sickle cell when he was two years old and had a very severe crisis. He complained of pain all over and he could not walk. He wouldn't let me touch him and just kept crying in pain.

We took him to the hospital, and several tests were done which showed that Duke had sickle cell. Duke was in hospital for three weeks. We returned home after the three weeks, but Duke was falling ill really frequently, he was admitted to hospital about once a month and sometimes was on oxygen for weeks. The hospital kept trying different antibiotics and I thought I was going to lose him several times. In 2020, Duke did not attend school at all because of his health, he had crisis after crisis, and we were in and out of the hospital constantly.

In June 2023, we moved to England, largely in the hope of getting better care for Duke. A few months after arriving, he started the red cell exchange treatment and his whole life changed. Since starting the treatment, he has had no more pain and no more crisis. Duke is so active now. He plays football which he was never able to do before and loves riding his bicycle. He can go to school and has excellent attendance. His eyes are bright; he doesn't look sick anymore but is a healthy child. As his mother, I used to suffer real emotional torment seeing him in so much pain. I would cry with him and try to pat his back to ease the pain but since starting the red cell treatment, I don't need to do this because he is pain free and enjoying life. Claire has commented that it's been an incredible transformation and that he is like a totally different child. When she first met Duke, he looked tired and unwell and sat quietly in his bed while he was undergoing treatment. Now, he is energetic, enthusiastic and happy and hates having to sit still for so long during his treatment, always asking when he can get up again to go and be active. I would like to say how much we appreciate the whole team and especially Claire, who ensures that the treatment is done for Duke every six weeks and looks after him wonderfully during the whole process.

*Sickle cell disease - NHS