Annual Report
2021/22

North East London & Essex
Trauma Network

April 2022

Contents

Foreword

As we progressed through 2021 as a Major Trauma Network, our teams continued to work with the restrictions of the Covid Pandemic, but as the year progressed, many staff returned to their normal roles after a period of redeployment and services regained their previous establishments.

The closing of many training courses essential for staff in learning how to manage major trauma patients has been a particular obstruction to the development of high-quality care within the Network. As time has gone on and courses are reopening Trusts have had to balance the need for consistent safe staffing in all wards and departments alongside the need for training and staff development. The Network is supporting in particular: Spinal Injuries training, Traumatic Brain Injury training, TCAR/PCAR and Level 2 nurse training in trauma.

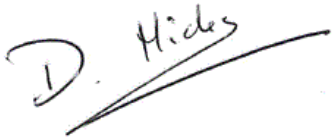
The trend towards high quality of TARN Data being submitted by all sites across the Network has continued. Our TARN data managers and Trauma Co-ordinators tirelessly collect and submit the required information on all eligible patients, which for the first time has allowed us to analyse fully our performance over time in targeted areas of trauma care. We currently have 3 projects looking at: Older Persons Trauma, Thoracic Wall Injuries & Location of CT-Scanners which are promising to yield data that will allow us to submit publications to peer reviewed journals in the near future.

The Network continued to review and develop Network pathways and guidelines. In particular the development of guidance for the management of potential arterial injury in fractures or dislocations across joints, which is now being implemented across the Network. This work involved all partners from Pre-hospital care to Trauma Unit teams alongside the specialist team at The Royal London Hospital, Major Trauma Centre (MTC). Other guidance has been reviewed and updated in the form of T.I.G.E.Rs to provide an enhanced package of clinical guidance for managing patients with specific injury patterns.

We were very proud that our Network Manager Hannah Kosuge was selected as a finalist for the Nursing Times : Nurse Leader of the Year Award. Her hard work and dedication in working with all the teams across the Network is valued and appreciated.

As we move into 2022 our focus will be shifting toward redeveloping our Governance processes, such that more of the cases will be reviewed in full within the Trauma Units and NELETN case discussions incorporated more into the existing clinical governance programme at The Royal London Hospital. It is anticipated that this will improve learning and feedback opportunities both for teams at Trauma Units and within the MTC. The Peer Review process will continue, which allows us the opportunity to showcase the excellent work being done and support the challenges of our Trauma Units. I would like to applaud the engagement of our ICS (Integrated Care Systems) Teams and the Trauma Unit executive teams in supporting our goals and allowing us the opportunity to serve our patients to the best of our abilities.

Derek Hicks, Network Director



Introduction

The North East London and Essex Trauma Network covers a very large and extremely diverse and vibrant demographic.

We are:

- 1 Major Trauma Centre
- 11 Trauma Units
- 1 Local Emergency Hospital
- 4 Pre-hospital Providers
- 3 NHS regions

We serve boroughs listed amongst the most affluent in London (Camden and Islington) and also the poorest and most deprived (Tower Hamlets and Hackney).

We cover the most central and busiest area (The City of London) and reach out to tiny countryside hamlets and coastal villages in East Essex.

We cover areas which include the most diverse populations in the UK, with more than two thirds of Tower Hamlets being made up of minority ethnic groups.

The Borough of Barnet alone has a population of 56,000 people over the age of 65, that's the highest population of older people in all of London's boroughs.

We provide world class, leading healthcare to a combined population of 4,300,899 and growing.

Our mission statement is to be an innovative, collaborative and accountable network of trauma expertise, with patient care and high-quality outcomes at the heart of all we do.

Network Team

Derek is the Network Director for NELETN. He is also an ED consultant at The Royal London Major Trauma Centre. Prior to this he has been a Trauma Unit Director in two of our Network Trauma Units.

Derek has extensive experience of pre-hospital emergency medicine and trauma care, having worked with EHAAT until 2018. Derek has over 19 years' experience which he brings to the network.

Hannah has been the Network Manager since August 2019 and is also a Registered Nurse with over 16 years' experience in Trauma Care.

Prior to taking on the Network Role, Hannah was the Ward Manager of The Major Trauma Unit at The Royal London Major Trauma Centre and has also worked within Trauma Units both within London and out in Essex. This experience has given Hannah a unique perspective of the challenges faced in different environments and settings.

Hannah is also the co-chair of the National Major Trauma Nursing Group.

Andrea is the Network Coordinator and has over 6 years of experience in trauma administration.

Andrea has great attention to detail and a keen interest in TARN and works as our TARN lead alongside the TARN data collectors across the network as well as supporting clinical colleagues with data projects. Andrea is also our repatriation lead and works tirelessly to contribute to flow throughout the network.

Since October 2020 Andrea has also been the administrator for the National Major Trauma Nursing Group.

Anna is our Network Lead Nurse and also continues to also work as a Senior Sister in Emergency Medicine and a Trauma Coordinator at the Whittington Hospital, one of our Trauma Unit's. Anna will imminently be leaving us for a year of maternity leave. She will be sorely missed!

Dr Karen Hoffman is the Network Rehabilitation lead. Karen also works in the Royal London MTC as an AHP rehabilitation consultant for the Trauma Service. Karen has a special interest in complex rehabilitation needs of multi-trauma patients that are often overlooked by condition specific rehabilitation services such as Neurorehabilitation. Karen is a keen researcher and holds a PhD. Karen also led on development of the AfterTrauma website and App which provides information and support for patients and families.
We welcomed Karen back to the network after an extended period of leave last year but have with sadness recently accepted Karen's resignation from her network role.

Alex is the network's deputy director. He also works as an ED consultant at University College London Hospitals (UCLH) and is the Trust's Trauma Unit Director there.

Alex completed his undergraduate medical training in Germany where he gained extensive experience in trauma and hyperbaric medicine in both the civilian and military setting. He completed his specialist training in Emergency Medicine in the North East of London region and as part of this gained valuable experience in trauma care at the Royal London Hospital, the network's MTC. He also gained broad experience in pre-hospital care as an air ambulance doctor with MAGPAS.

Alex brings senior leadership experience to the network which he attained as clinical lead and subsequently as divisional clinical director for emergency medicine at UCLH.

Anne is a Consultant in Emergency Medicine & Pre-hospital Care (Royal London and London's Air Ambulance) and was appointed as the MTC Director at the Royal London Hospital in 2016. In 2003-04, Anne worked in Sydney, Australia for adult and paediatric rescue and retrieval services. In 2004, she became the first female consultant in emergency medicine and pre-hospital care in the UK. She was Lead Clinician for London's Air Ambulance 2007-14 and was also a Trustee for London's Air Ambulance Charity 2007-14.

Anne has a particular interest in major haemorrhage and established the RLH Code Red protocol in 2008. She also led on the development of protocols for blood storage and safe blood transfusion in the pre-hospital environment, making this innovation available to any air ambulance, aspiring to deliver the same standards of care.

Meena is the Networks' Lead for Paediatric Trauma, and a Paediatric Emergency Consultant working at the Homerton Hospital, a TU in Hackney, East London.

She has been Paediatric EM Consultant since 2013 and Named Doctor for safeguarding since 2015. Meena has a keen interest in medical education and is a departmental lead for paediatric simulation, APLS instructor, RCPCH START assessor and MRCPCH clinical examiner. She has prior experience during her PEM grid training working at the Royal London MTC, PICU and Children's Acute Transport Retrieval (CATS).

Our Partners (in alphabetical order)

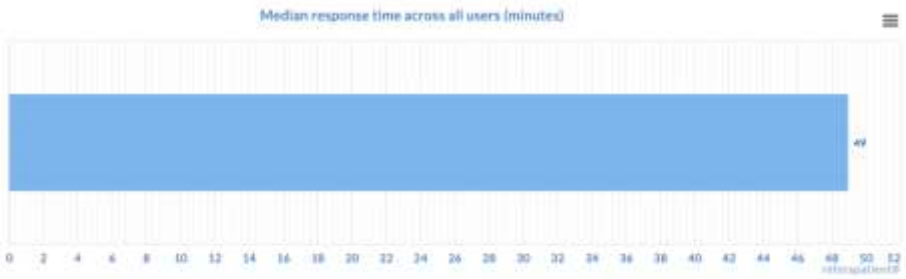
Over the last year the network team have managed to complete over 80 visits to our Trauma Units, both in person and virtually. This close contact has given us the opportunity to link with the wider teams in our units and we have excellent relationships across ED, Nursing, AHP, Gen Med, Medicine for the elderly, neurosurgical, anaesthetic and orthopaedic specialties. In addition to our Trauma Unit colleagues, we have enjoyed close liaison with our pre-hospital partners via Mark Faulkner for LAS, Tony Stone for EHAAT, and Frank Chege for LAA.

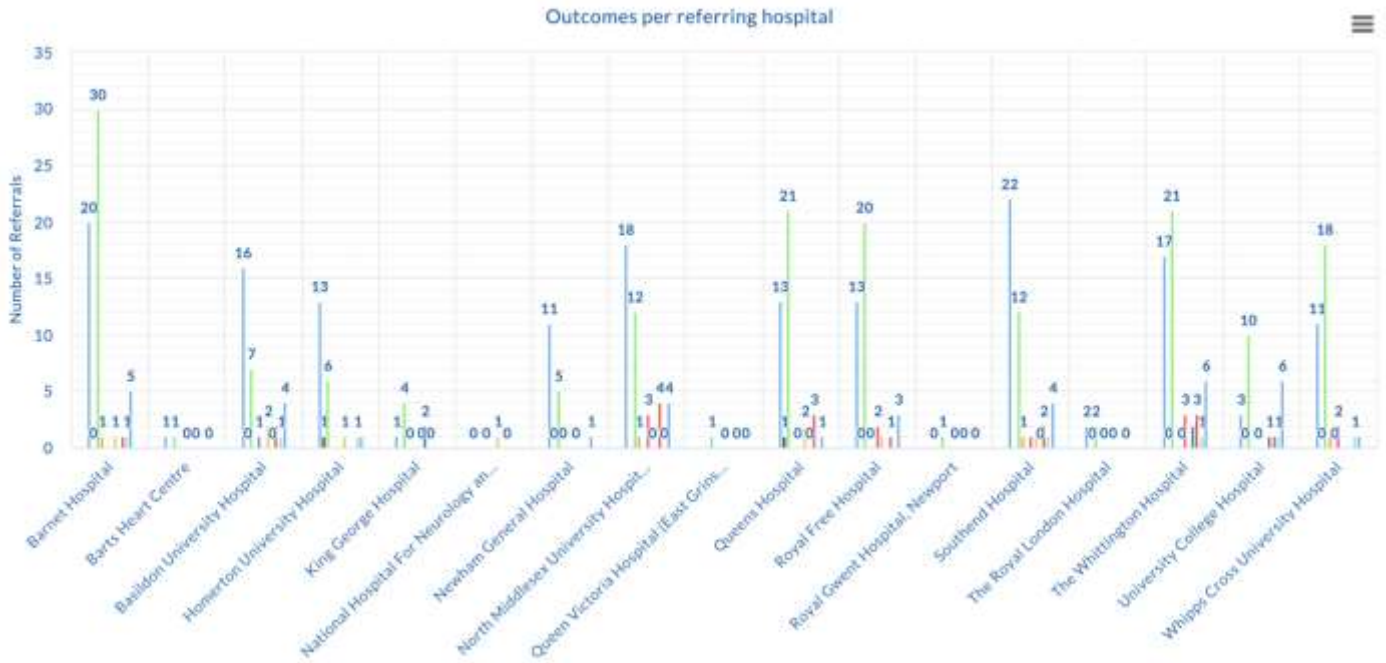
The relationship between the network and the three regions we serve is also much stronger and we are supported by Eileen Fiori from North Central London, Archna Mathur from North East London and Ronan Fenton from Mid-South Essex. All of our peer reviews this year had attendance from our ICS partners and added weight to an already robust process.

Our Trauma Units have well embedded pathways and processes to care for trauma patients that present locally and as can be seen below are seeing huge numbers of patient with elevated ISS scores.

For those that do require onward transfer the network utilises *referapatient* to optimise this process. The use of referapatient also provides an excellent governance resource for case reviews. We are currently exploring a new feature within referapatient to have the clinical documents it creates automatically uploaded to the hospitals own electronic health record.

We are also able to take advantage of the analytical tools on *referapatient* to monitor outcome and response times. Where hospitals have a high rate of referrals resulting in 'advice only' we are working with those teams to identity training and education needs.





Barnet Trauma Unit

Barnet Trauma Unit is led by Dr Marta Sowa. Marta commenced in post as TUD in May 2020 and works in partnership with Trauma Unit Manager Josh Mavrides. Marta writes…..

It's been yet another year full of surprising and unexpected turns of events for the NHS. Just as we thought that COVID-19 was becoming a thing of the past and working patterns were slowly coming back to normal, the novel variant Omicron made an entrance and once again our Emergency Services were put on high alert. We, as with other acute Trust's, have had to deal with unprecedented number of staff sickness across clinical, nursing, AHP, and administrative colleagues. While the first year of the pandemic and the national lockdowns saw a significant decrease in the number of trauma patients attending our Emergency Department, the last year has seen this short reduction shoot back up to pre-pandemic levels.

The feedback from the Peer review 2021 was very positive and recognised all of the hard work key stakeholders have been doing over the past year in this post-COVID era. The review allowed us to identify our areas of excellence and celebrate those achievements, but also identify areas where improvement is necessary and essential. Thanks to the amazing job done by Kate Rock and her team over the past year we have managed to make great progress with our repatriation times reducing the mean time for repatriation from 4.36 days to 2.86 days. Following peer review feedback, we are currently in the process of submitting a workforce paper, which once approved, will allow us to employ into a Trauma Coordinator Nurse and Rehab Coordinator roles – vital for further progress in our Trauma Unit. In autumn 2021 Dan Harrold, the Trauma Manager has left the Royal Free Trust, closing what had been a challenging yet fun period in the life of the Barnet Trauma Unit team. He will be missed and I wish him all the best in his new role in King's College Hospital. His role was taken over by Josh Mavrides.

Despite significant Covid-related pressures and staff turnover, 2021 has seen a great boost to our nursing numbers with a lot of passionate and energetic new starters joining our ED team.

Expansion of the nursing staff numbers brought however new challenges and training needs on top of already existing issues with number of nurses trained in trauma level 1 and level 2. Together with our practice development nurses – Charlie, Kat and Carina – we are working on setting up an in-house level 1 training that will hopefully allow us to significantly improve our compliance within the network's requirements.

From a teaching and training perspective last year saw us undertake a few exciting projects. We have set up a dedicated training programme for fascia iliaca blocks for Emergency Medicine doctors, with streamlined checklists and electronic proforma to ensure clarity and uniformity of documentation. Working in a multidisciplinary team we wrote up and introduced a new rib fracture pathway as per sector guidelines. We have also established dedicated teaching sessions and SIM sessions concentrating on older person trauma, to ensure we can provide the residents of Barnet with the highest quality of care. This is critically important in order to serve our local population in the most appropriate fashion with our average age of admission well over the age of 60 years.

The end of 2021 has also seen the launch of the Barnet Hospital Trauma Newsletter, following in the footsteps of our esteemed colleagues from Newham Hospital. In collaboration with some of our Emergency Medicine trainees, we decided to share some interesting trauma cases with the wider world, with focus on key learning outcomes and trauma updates. Our first newsletter was very well received and edition two is already in the pipeline.

In the early summer of 2021, we were delighted to finally open our two new resus cubicles, with a dedicated paediatric resuscitation room, bringing the total number of resus spaces to eight – a fantastic resource to support our critically unwell patients, most notably trauma patients. In the winter of 2021/22 our ED CT scanner underwent a much needed refurbishment and is now back in action. We hope this, with pathway developments for a variety of trauma presentations, will go towards improving times to CT for our cohorts.

We are certainly looking forward to see what challenges 2022 will throw at us and are dedicated to continued improvement of our Trauma Unit.

Basildon Trauma Unit

Basildon Trauma Unit is led by Dr Saad Abdullah, with fantastic support from Trauma Unit Manager Sheena Nicholson. Saad writes…..

The Trauma Unit Director at Basildon Hospital is Saad Abdulla, a Consultant in Emergency Medicine with specialist interest in trauma, with a military backward as a trauma surgeon for around 5 years, an ATLS Instructor and Course Director since 1999. Following the lockdown and disruption of the normal ED work being over-shadowed by the Covid 19 crisis, things started to go back to business as usual with significant increase in major trauma patients; however the trauma management team also increased its activities and strength on several fronts.

We have a very robust team structure at Basildon with a core team mainly based at Basildon Emergency department comprising Saad Abdulla, ED Consultant and TU Director, Sheena Nicholson, deputy ED general Manager and TU Manager, Claire Lambert and Christian Alejandrino, both senior nurses and trauma coordinators supported by Matron Sue Linnet, Sandra Mustafa, TARN coordinator and Sam Nesbit as governance Coordinator.

The overall trauma management is represented Trust-wide by Trauma Board, which in addition to the core team has in its Membership Fiona Ryan, director of operation and executive representative, Rehabilitation Lead Caroline Leonard, Luke Hounsom Consultant in Elderly care, Maimuna Mushabe, Paediatric Consultant, Sarah Barton, Senior Paediatric Sister, Ilias Seferiades, T&O Consultant, Smita Singh and Lalith Jayasekera, Consultant anaesthetists, Samer Ul-Haque, Consultant surgeon, Andrew Hails, Consultant Radiologist, Tariq Menhas, Consultant Cardiothoracic Surgeon.

Such a wide and varied representation has a significant impact on the effectiveness of various activities of the unit

During 2021 and early 2022 there were several positive achievements

- Finalising and effectively implementing Adult and Paediatric Major Trauma Activation Pathways
- Finalising and implementing Trauma for Elderly People pathway
- Through representation of Dr Luke Hounsom and working with the network, a pathway for inpatient trauma management pathway was designed, approved by the network and implemented
- Increased engagement with surgical specialities through several training sessions for junior surgical trainees
- Established Basildon as an accredited TNCC centre (Trauma Nurse Core Course), a nationally accredited level 2 nurses trauma training course with the first course scheduled for the 14th and 15th of May
- Our TARN data quality continues to improve and was commended by the network

- Our Peer review was appropriate in most domains with room for improvement in few domains on which the team is working to achieve
- Reaching to our sister sites within the trust (Southend and Broomfield Hospitals), to establish common working grounds in field of training, exchange of pathways and initiative and pooling of outcomes and performances in certain domains
- Some capital investment in equipment like specialised scoops (with built in C.Spine support), a new Trauma Surgical Equipment Trolley and more advanced thoracotomy sets

The team is highly motivated and more initiatives are in progress:

- Approval was granted for full time inpatient trauma coordinator to ensure continuity of care for trauma patients
- Discussion with Education and Simulation leads within the hospital to ensure continuous and consistent trauma training for junior and senior doctors from surgical specialities
- Multiple rib fractures pathway which includes a possible surgical intervention is being developed by joint work of anaesthesia and CTC and will be presented to the network for consideration and approval.
- Adapt our TILLS course for accreditation and create a paediatric version of the TILS course directed at our paediatric nurses

In conclusion I feel positive that working together with my team and with our NELETN colleagues we can only move forward and improve trauma care to our patients

East of England Ambulance Service

Our liaison within East of England Ambulance service is Paramedic Rob Riches. Rob has provided support on a number of occasions over the last year and has inputted into the Networks Major Incident Plan. We look forward to creating stronger ties with EEAST over the coming year and building on those relationships further.

Essex and Herts Air Ambulance

NELETN has benefitted from great support from our prehospital provider colleagues at EHAAT. Our liaison within the team is Tony Stone. Tony writes….

2021 remained another busy year for Essex & Herts Air Ambulance (EHAAT), not only in terms of patient numbers, but also with the sustained system-wide pressures from the ongoing coronavirus pandemic.

EHAAT saw 1,776 patients throughout 2021, up 9% on 2020. July 2021 was our busiest month of all time as we attended 186 patients. 60% of the patients attended in 2021 were as a result of traumatic injury, 394 of these were conveyed to a hospital within the NELETN; 195 of these were direct to the Royal London Hospital Major Trauma Centre – our most frequently attended hospital.

2021 also saw EHAAT move into our new, purpose-built airbase at North Weald and the inception of our Centre for Excellence which will focus on pre-hospital research, innovation and education. We're immensely excited by the opportunities this will bring to our staff, extended allied HCPs (including our NELETN colleagues), community, and most importantly, our patients.

EHAAT would like to thank the NELETN for the excellent support we continue to receive despite the sustained pressures faced by all on a daily basis. We look forward to building on this positive and productive relationship throughout 2022 and beyond.

Homerton Trauma Unit

Homerton Trauma Unit is led by Mr David Boardman. David is an orthopaedic consultant and benefits from support and guidance from ED consultant Claire Charley, and Paeds ED consultant Meena Patel. David writes….

The Homerton TU dealt with the third peak of the coronavirus pandemic whilst the Trust returned to more normal elective and planned care of patients without the need for widespread redeployment of staff as was needed during the previous year.

Our ITU capacity was sufficient during the third wave to support both ongoing elective care for planned procedures and non-COVID emergency medical and surgical patients without the need for widespread redeployment of staff.

Trauma numbers continue to increase to at least the levels seen prior to the pandemic, Homerton continues to see whatever arrived at the front doors and maintained strong links with the MTC.

The trauma and orthopaedic department has continued to support ED Through the ongoing development of the virtual fracture clinic which has continued to allow minor trauma patients, which have been discharged home direct from ED, to be reviewed by a consultant orthopaedic surgeon and senior physiotherapist virtually within a day or two of ED attendance. Both reducing the number of visits to the hospital for the patients and directing them onto the optimal pathway for rapid ongoing treatment and rehabilitation.The Peer Review data collection continued to work well through the perfect ward / tenable app. Our TARN accreditation and ascertainment figures remain satisfactory, with no serious concerns or immediate risks identified for Homerton.

Ms Hamdi Hussein Awil has settled into her role as the Trauma Coordinator during 2022. Hamdi will be co-ordinating the inpatient nurse training within the Trust alongside our Practice Development Nurses throughout the next year. Homerton is recruiting a permanent TARN Co-ordinator to continue TARN data entry in 2022 as to carry on the work that Muhammed Numan has previously done so well.

Our Trauma Unit SOPs are being review during 2022 to update them to include updates from the Trauma Network and local learning following the coronavirus pandemic

The Homerton Datix system has been updated by the Homerton Datix Project Manager, Suleiman Banian, to allow us to more easily capture incidents relating to Major Trauma. We will be reviewing learning from these incidents out our regular Trauma Operational Group meetings and plan to share this learning at Trauma Network Meetings.

London's Air Ambulance

Our liaison within London's Air Ambulance is via Dr Anna Dobbie (Lead Clinician) and Frank Chege (Patient Liaison Nurse). Tom Hurst is the Medical Director. Anna and Tom write…

As with all services COVID has proved to be a challenging time, however despite this we have continued to deliver a 24 hour a day, 7 days a week service to the people of London throughout the pandemic. During 2021 we attended 1714 patients which is approximately 5 patients a day. We performed 288 RSIs and have continually strived to improve our care continually with robust governance systems and pioneering medical treatment.

Throughout 2021, we able to perform Zone 1 REBOA and Zone 3 REBOA with a thorough review process for each patient. We introduced Prehospital Point of Care Ultrasound with a bespoke induction process and an on-going evaluation and governance programme. All images are stored and reviewed by a team of ultrasound accredited reviewers; a quarterly review of their reviews and the governance process is conducted by an external expert.

The most significant change was the introduction of a second team from 2pm -12am on six days of the week known as Medic 3. We hope this will allow us to reach patients that we would otherwise have missed and we will be evaluating the additional benefit after a yearlong trial period.

We also appointed two additional substantive consultants and now have a paramedic governance role which has enabled us to integrate further into the Barts Health governance system. We also now produce a monthly data summary which is fed into RLH and performance review.

There has been close and extensive joint working with LAS on Major Incident response and the entire team has been able to participate in joint training exercises. These have been hugely valuable for all involved, and we thank LAS for their engagement. The HEMS consultants will act as the on-scene Medical Advisors at any major incident, and will exercise this role alongside LAS commanders.

Recently, we have been fortunate to recruit an 8b paramedic to lead the paramedic team and

further develop the paramedic role, as well as new leads for research and clinical effectiveness. Finally, after the success of our patient liaison nurse we have appointed an additional post which consists of a 50/50 role with London's Air Ambulance and King's College Hospital.

There are lots of projects on the horizon, we are in the middle of an extensive anaesthetic review and we are developing a new PHEM training programme year based exclusively in London which will commence in August 2022. Work is almost complete on our new helipad facility, which will provide much needed training and rest facilities, as well as a new operations pod closer to the actual helipad, with co-located facilities for our duty team of 2 firecrew, 2 pilots and 3 clinicians. We are grateful to London's Air Ambulance Charity, The HELP appeal, Bart's Health and the DHSC for financing this.

We are also excited about the progress being made with our digital transformation work. All of our checklists and equipment management processes have been converted to a paperless system using iPads. Good progress is also being made towards us using the new cleric electronic patient care record. This is again in large part due to close collaboration between the LAS, Bart's Health and the LAA charity.

There is lots of exciting progress as a result of the hard work and determination of the whole team but the thing that I think we are most looking forward to over the next year is hopefully welcoming back patients and their families to the helipad as it remains a privilege to be able to meet some of the patients after they have undergone months or even years of ongoing care from the network.

London Ambulance Service

Our liaison within LAS is Paramedic and Clinical Practice Development Manager -Mark Faulkner. Mark has provided exceptional support to NELETN over the past year which has included:

- Assistance with network governance
- Input into TU specific issues
- Review of network policies and procedures
- Support for our TARN coordinators during the implementation of E-PCR

We look forward to further working with LAS and Mark over the coming 12 months.

Newham Trauma Unit

Newham Trauma Unit is led by new Trauma Unit Director Dr Sarah Perkin, with support from experienced TU Manager Tom Heffernan. Sarah and Tom write….

Emerging from the pandemic has brought both challenges and successes for Newham, and we write this report with pride when we consider our position compared with the previous year.

Our 2021 peer review performance showed significant progress, with particularly notable improvements in the TU Management and Governance and TARN categories. M&M runs monthly with good attendance and has generated our trauma

governance newsletter, which has received excellent local and regional feedback. Our steering group is also well attended and is developing into an open, dynamic forum for enacting positive change and good interdepartmental relationships. Our TARN coordinator, Amira Elmhassani, won Newham Hospital Star of the Month for November 2021 for diligently going about the task of improving our TARN compliance, and is always supportive and engaged with any additional trauma work required. Thanks to her hard work, we now have one of the strongest compliance levels within the network. We were also proud to highlight our excellent St Giles (violence reduction) team and the service they offer. They have the right level of expertise and capacity for our site and provide a responsive, well-led service for our community.

We are still working towards producing and implementing effective chest wall and spinal injury pathways, although it was noted there have been significant improvements in this domain compared to the preceding year.

With regard to care of the older trauma patient, plans are in place to formalise some of our care pathways. This is a new domain for trauma peer review, but both the surgical and COE teams are engaged and keen to improve care for this cohort of patients.

We recognise the work that needs to be undertaken for both the Rehabilitation and Return of Care domains. Without the benefit of a trauma/rehabilitation coordination at Newham, these areas are significantly impacted. Our team of therapists continue to perform brilliantly given these challenges and their high workload. We are actively looking with our divisional management at how we can draft a successful business case to add a coordinator to our small but busy team.
Our repatriation times are presently suboptimal due to Covid recovery, ongoing fire-safety works, and increasingly high numbers of acute admissions across the board impacting on our bed state.

Overall, it feels as though trauma care is improving with an improved recognition of which patients require a multi-speciality response and improved engagement from the wider hospital team. We are proud of the education being delivered across the site in the form of M&M, shared learning, in-situ simulation, lectures, and live drills, and feel it is making a positive impact on patient care.

North Middlesex Trauma Unit

North Middlesex Trauma Unit is led by Interim TUD Dr Cath Pearce with fantastic support from Trauma Unit Manager Jennifer Walker. NMUH also benefits from fantastic nursing support from one of our most experienced Trauma Coordinators, Karen Wheeler. Cath writes…..

The changes in the nature of Covid and to the policies regarding treatment and isolation means there has been an

upsurge in patient numbers, and consequently an increase in trauma attendances in the last year. North Middlesex continues to manage trauma patients of all ages to a high standard. It has however been a challenging year with high bed occupancy levels and high numbers of additional beds open. This has created some challenges around timely repatriation although our average remains at just over 3 days.

The Team have worked really hard to improve the rehabilitation prescriptions which were below the required standard. There has been excellent engagement and support from the Therapies team over the last year and our rates have now improved to the required level. Our thanks to the Therapy team for their support and engagement in delivering this change.

During the last year we have managed to maintain our TARN data collection and maintain our level of case ascertainment (100+), due to the hard work of our new TARN co-ordinator, Karina Holder. Our accreditation rate is at 93.2% just below the 95% standard and the team has a plan to correct the missing data to deliver 95%. Karina replaced Daniel Rubin who moved roles within the network.

The Trauma Director, Dr Clara Oliver has stepped down and Mr Venkat Boorgula was appointed and saw the team through the recent Trauma Peer Review process. Mr Boorgula has now stepped down from the post. We are grateful to him for the work that he did during this period during a very challenging year. Dr Catherine Pearce is now acting as interim trauma director. She continues to be supported by Karen Wheeler – trauma nurse co-ordinator, Karina Holder – our new TARN co-ordinator and Jennifer Walker – ED, Acute Medicine and COE General Manager (Trauma Unit Manager).

Our thanks to Karen and Karina in particular for their hard work and support to the team during these changes.

As a team although we provide a very good level of care to our trauma patients, our recent peer review identified a number of areas where we could make further improvements. We have therefore been focusing as a team on delivering changes to these areas via a small clinically led group reporting into our steering group. In brief, our areas of focus have been:

- Improving time to CT
- Reviewing and updating our policies for the management of rib fracture and older people's trauma
- Ensuring strong governance and engagement across the multi-disciplinary team
- Improving our referral rates for younger people who have been victims of violence and aggression

Our thanks to the network team for their support and time as we work through these improvements.

Queens Trauma Unit

Queens Trauma Unit is led by Dr Salim Ghantous with support from a whole host of trauma colleagues. Salim writes…..

This has been a very busy year (2021) and we have seen 16,536 trauma related cases in the Emergency Dept. BHRUT at BHRUT (Queens and King George Hospital) this includes falls <2 meters to RCT whole spectrum in between. More than 50% increase from last year (around 10,000 the previous year). Out of those there were 428 trauma calls (10% increase in trauma calls from 2020).
We have seen 11.752 trauma related CT scan in 2021, massive surge from the previous year
32 transfers out cases to MTC and 572 TARN eligible cases. I do believe that we are the busiest trauma unit in the Network

As usual our trauma committee included all specialties involved in delivery of care for trauma patients.

RLH continue to be our MTC referral centre and support us with complex traumatic injuries including orthopaedic and thoracic. Fortunately, our neurosurgical department at Queen's is a great asset to our trust giving support in adult traumatic head and while spinal injuries
The decision has been made in 2020 by the Network that all isolated head injuries will go directly to RLH, has been revoked and in 2021 we are seeing again all isolated head injuries managing them as per the Network guidelines, giving tranexamic acid when appropriate and liaising with our local nonsurgical team for input and advice when deemed necessary by the ED consultant in charge of the department. We have a big improvement in the capacity of neuro-ITU beds as the COVID-pandemic has eased off.

On a similar ground, the problem we were facing on general medical and surgical ward which is the constant lack of non-COVID beds due to the reconfiguration of our trust bed capacity that shifted the bulk of our bed capacity towards covid-19, has eased off in the second half of 20221 due to the improve in vaccination program in the country and the decrease of severity of COVID-related presentations to our ED
During this year we also re-emphasised and introduced the importance of the use of tranexamic acid in head trauma to all doctors working in ED.

Fortunately, most of trauma related training courses have been restarted this year, we have delivered an APLS course, and we are delivering an ATLS course coming May
Regarding TILS, few of our nurses started attending TILS courses, 3 of them already passed the course which I consider an achievement compared to last year.

As from Paediatric perspective, we all still dealing with all paediatric trauma calls in our dedicated paediatric ED and most of our paediatric ED doctors are APLS trained. Our paediatric resuscitation room that is fully equipped to deal with all paediatric trauma calls in a spacious and child friendly environment.

Luckily enough after the Network has supplied us with a new paediatric spinal pathway with clear instructions and proper designated referral to MTC RLH, the referral pathway for paediatric spinal injuries became smoother

As other surrounding trauma units, we manage an extensive number of elderly patients presenting with a fall at home that does not fit the criteria of a trauma call, i.e., falling from standing or slid off the bed/chair which has led to some missed limb / Head and neck injuries among this age group

Our Older Patients trauma pathway has fully been implemented in conjunction with a Rib fracture pathway which has been working perfect for the last 12 months with no issues from any specialties. 2/3 of our trauma cases continue to be elderly cases and most of them presents with a fall of less than 2 meters and fits the criteria of the old age trauma a pathways

Even though the old age trauma pathway is working perfectly, we had few incidents where it has not been followed properly and those incidents have been fully discussed as incidents in our trauma governance for learning purposes.

In 2021 we held 10 trauma governance meetings where we have discussed incidents related to trauma cases, we have also discussed pathways and guidelines where we successfully managed to approve the old age trauma pathway and Rib fracture pathway

In 2021 we organised 4 trauma training days to improve awareness about traumatic injuries and the best way of dealing with them, those 4 days have covered the old age trauma pathway, Rib fractures pathway, Thoracic trauma, abdominal trauma in children, Abdominal trauma in adults, Radiology and ultrasounds in trauma in addition to spinal injuries and its pitfalls

Dr Salim Ghantous
MD, MScPEM, MRCSEd,
FRCEMintern & Akbar Hussain

We are currently on a good projection to meet our TARN targets, with the overall Trauma numbers dropping compared to 2020 a HES validation will adjust the denominator and the Ascertainment is expected to be 100% thanks to the hard work and dedication of our Trauma Data manager - Akbar Hussain who is a great asset to our team.

We unfortunately lost 2 of our 3 trauma coordinators, Charlotte and Nick, both went on secondment, Charlotte is on a 6-month secondment for the transformation team at NELFT and Nick is on a 12-month secondment as the Resuscitation Matron at BHRUT.

Our 3 trauma coordinators, Charlotte, Prina and Nick worked together to ensure that all trauma patients at Queen's receive outstanding care and support the wards with the extremely complex patient group. They also supply data to our governance meetings which is useful to assess the effectiveness as a team.

They also contributed greatly to a robust and effective governance partnership between Queens and the Network as affected by an embedded Trauma Coordination Team. They have demonstrated in a recent re-audit that the average length of stay has decreased by 3 days in 2021 compared to 2020 and they are the first to have produced some analysis on LOS

Peer review has been conducted and we were satisfied with the final report we have received from the Network.

We are working on the issues that need improvement which is mainly Repatriation of trauma patients and geriatric and orthopaedic representative in our trauma governance and trauma committee meetings with the issue currently being resolved

Looking forward for year 2022, hopefully the pandemic will have completely disappeared, and we will be able to breath more fresh air
We will also endeavour to keep up to the standards of our trauma governance set up in our trust

Royal Free Trauma Unit

Royal Free Trauma Unit is led by ED consultant, Dr Nish Amin. Nish writes…..

Resumption to normality has been very much the theme of the RFH trauma Unit and the challenges at RFH are probably no different to other trusts in the area. Staff sickness impacting with infection protection and control measures which have been necessary to protect patients have reduced patient flow compared to pre-pandemic levels. We hope in the next year we will start to see this change as rules have changed.

Over the last year, the trauma unit continued business in line with Network agreements. The return of paediatric services was a great joy to staff. We restarted training which we believe is an important facet of trauma care provision. Previously, only a year ago such training was near impossible unless done virtually. Trauma skills are of a practical nature and need 1:1 instruction and guidance.

The trust successfully delivered a TILS course and has dates set for further training in TILS and Older Peoples Trauma Training for the year. Simulation training within the ED has continued throughout the pandemic period to retain skills and memory.

The trust embarked on a massive project to move to digital patient records which has been successfully implemented. The impact of this ensures critical documentation, handover and transfer of information between teams is efficient and readily identifiable. Image transfer systems will be updated this year resulting in faster access for clinicians to request and send images between partner trusts in manging trauma patients.

Over the coming year we are investing in converting patient management forms to electronic versions which will accompany trauma documentation. This is an exciting era for the trust when information is handy and patient care accessed by teams remotely involved in their care.

The trust participated in network audit and governance activity, through this we developed a focus to improve CT performance for trauma patients and trauma call activation. Since the loss of clinical Rapid assessment areas due to Covid we experienced longer waiting times for CT.

TARN participation remains full on our part. A drop in the TARN performance compared to last year is accounted for due to implementation of EPR in October 2021. we have seen this trajectory improve over the last nine months steadily. We are hopeful, committed and poised this will continue to improve.

Notable strengths this year in our work plan have been;
Education and training

- Trauma bytes – locally orientated small packages of information and practical tips to help staff enhance trauma care for patients. This was created in digital and printed form.
- Nurse led brace and collar fitting training within the ED and AAU
- Upcoming older people with trauma simulation
- TILS- Trauma Intermediate Life Support Courses scheduled for the year.
- Spinal training throughout the trust for staff managing patients with spinal trauma
- Adult nursing competencies for Level 1 at 63% and Level 2 at 70% completion.
- Ring fenced funding for Level 2 trauma training for nurses

Tools

- Older people with Trauma Tool- created to staff use to identify at risk patients
- Trauma call criteria updated to enable easier decision making for Trauma Team activation.

Communications and professional networking for patient care

- Improved the communication between RLH and RF through refer a patient with communication with the complex spinal nurse specialists and trauma coordinator
- TARN data accreditation and ascertainment improvement over the last 9 months after a fall following introduction of a digital platform (EPR).
- Trauma coordinator position filled to facilitate better care for trauma patients with complex needs and those needing individualised care plans. Especially benefitting patients for MDT liaison between specialities in the trust and community teams.
- Trauma Team Activation training and communication with specialty teams in the hospital to improve trauma call attendance has resulted in improved MDT working with acute trauma.

Governance and Network participation

- An excellent Peer Review process to enable improvements to patient care and meeting standards of care.
- Trauma governance committee meetings re-enabled with Trust-wide MDT

participation

- Shared learning from incidents across the Network and within the trust to update pathways.

Digital platforming

- Freenet trauma page to find updated policies and pathways 24/7 for trauma
- Digital patient care records

The Trust faces more challenges ahead as hospital systems across the network deal with increased patient activity from attendances, increasing congestion in emergency departments and long ambulance offload times. We are already engaged with stakeholders and decision makers across the trust to meet these challenges which we know could impact on trauma care provision.

Royal London MTC

The Royal London MTC is led by Dr Anne Weaver. Anne has support from multiple teams across many specialties and manages the After Trauma Team. Lindsey Ramsey is the MTC's Service Manager and has instigated and overseen several successful projects and improvements over the previous 12 months. Anne writes…

1: Overview

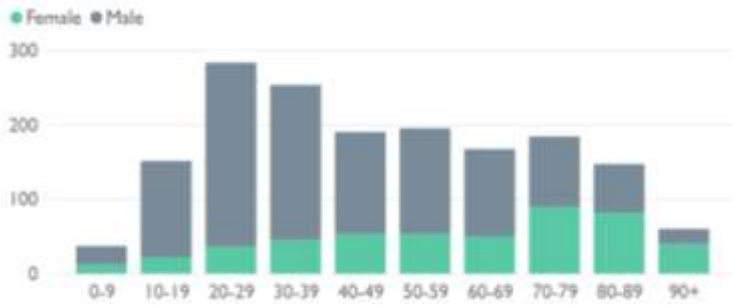
The Major Trauma Centre at the Royal London Hospital has continued to provide high level care for Major Trauma patients within a system which continues to manage the impact of COVID-19. Our workload has continued to increase over the past two years and is approaching pre-COVID levels once again.

Key metrics Jan-Dec 2021:

Trauma calls	**2630**
TARN patients dispatched	**1722**

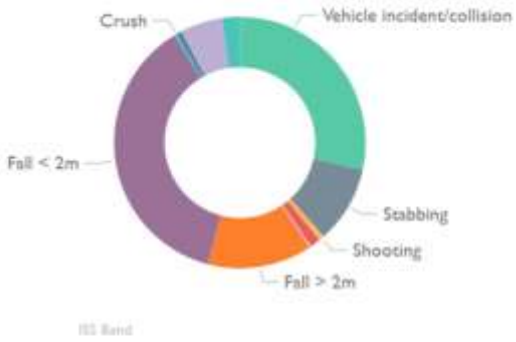
Monthly average patient numbers	
Adult trauma calls (ED)	219
Adult admissions to MTC from ED	158
Code Red calls	14
Code Black calls	7
Paediatric trauma (0-15yrs)	21

Gender / Age breakdown



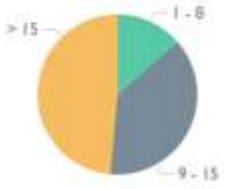
Mechanism

Mechanism	%
Fall < 2m	37 %
Vehicle incident	28 %
Fall > 2m	13.5 %
Stabbing	10 %
Blows without weapon	6 %
Blows with weapon	2.25 %
Shooting	1 %
Other	1 %
Crush	0.6 %
Burn	0.4 %
NAI	0.25 %



Severity / Acuity of Injury

ISS	%
1-8	13 %
9-15	38%
>15	49%



2: Improvement in clinical performance (TARN metrics)

- Improved survival metrics across all probability of survival bands
- Positive Ws score with narrow confidence interval – indicating additional survivors per 100 patients
- BOAST 4
- Frailty assessment
- Compliance with BPT metrics
- Rehabilitation Prescription compliance

3: Highlights from the last 12 months

- Successful bid for Barts and the London Charity large programme grant to improve care for bleeding patients. £3 million awarded for clinical and research development.
- Reinstatement post COVID of Trauma Clinical Board and Trauma Elderly Board.
- Adolescent Trauma Steering Group established; first meeting held in February 2022.
- Appointment of Mr. Chris Aylwin, Trauma Surgery Consultant and Co-Director for MSc in Trauma Science (QMUL).
- Appointment of Trauma Practice Development Nurse (start date TBC) to support learning and development for nursing staff.
- Dedicated Paediatric After Trauma Team support established with the appointment of 0.5WTE Paediatric After Trauma Nurse Coordinator.
- Appointment of full time Trauma Programme Manager to support BtLC Transforming Trauma project.
- Supported organisation & provided NE London faculty for LMTS Major Incident study day, January 2022. Delivered educational content to over 600 remote delegates.
- Ongoing collaboration with our Trauma Legal Panel to ensure patients have access to legal advice as requested.

- Development of LMTS animations to support management of chest injury, TBI and vascular limb injury.
- Police Trauma Team embedded on Ward 12D as a pilot - opportunities to gain intelligence and gather evidence as well as supporting patients and staff
- Restructure and relaunch of novel trauma governance programme with focus on thematic analysis and implementation of Safety-2 culture
- Novel trauma governance programme fully embedded within the MTC including fortnightly Trauma Case Review meetings, multidisciplinary M&M meetings and appointment of Trauma Associates (middle grade staff).
- Bespoke funding received from NHSE for spinal equipment to enhance facilities for spinal injury patients.
- Headway charity has returned to RLH to provide peer support for TBI patients and families via weekly clinic.
- Ongoing collaboration with US Military to host placements for senior military surgeons.

4: TARN team performance
The data team have adjusted working practices to deliver consistent improvement across key areas of TARN including data accreditation.

5: Education and training / Research
Education and training initiatives have been developed and delivered over the past 12 months. The research team continue to thrive and publish in a range of international journals. Highlights include:

- ATLS course administration function adopted by the Trauma Service. New course successfully delivered in November 2021.
- Trauma Team multi-specialty in-situ simulation days delivered for adult and paediatric teams in 2021 and 2022 to enhance TTL skills & team performance.
- Significant ongoing contribution by MTC Consultants from all specialties to support development and delivery of courses, at local, regional, national and international level.
- Mass casualty technologies research bid submitted.
- Cryostat-2 recruitment completed. Largest collaborative UK MTC research to date.
- REWIRE study ongoing.
- C4TS research fellow team have resumed 24/7 rota following reduction in availability post COVID.

After Trauma Team
The After Trauma Team continues to deliver vital work with patients & families following admission. This service has been maintained throughout the pandemic, despite redeployment of staff to critical care areas. After Trauma continue to support the Trauma Clinic and have introduced a new telephone follow up clinic.

7: Awards and external visits

The team have received a number of awards recently in recognition of the great work being done in the MTC. These include:

- Special Recognition Award in Informatics for Ward 12D
- Paediatric Trauma Therapy Team were nominated for the Child Brain Injury Trust Diamond Award for 'Hospital Team'

The team have also hosted a number of external visits including:

- St Georges MTC visit, October 2021
- US Army - Colonel Contino, November 2021
- Commander Alex Murray - Violence Reduction Lead for MPS, November 2021
- Hosted UK MTC Research day, November 2021
- NHSE Chief People Officer visit, December 2021

8: Future plans
An exciting programme of work and events are planned for 2022/23:

- Further work with commissioners to establish a Hyper Acute Trauma Rehabilitation Unit providing intensive rehab and support services for patients.
- Recruitment of additional Clinical Health Psychologists to the trauma service.
- Collation of Trauma SOPs and guidelines into an accessible location to improve access and visibility to a wider audience.
- Expansion of trauma governance programme to include thematic review of DATIX and complaints. Governance day planned for June 2022.
- Pan London MTC oversight visit, April 2022.
- Damage Control Surgery training to be delivered by Trauma Surgery consultants to colleagues at Basildon Hospital.

The MTC team would like to thank the Trauma Units and the NELETN team for their support over the past year.

Southend Trauma Unit

Southend Trauma Unit is led by Mr Ravi Kuppuswamy. Ravi is one of our two orthopaedic consultant Trauma Unit Directors and is well supported by ED consultant Antoine Azzi and Trauma Unit Manager Sam James. Ravi writes…..

The last 12 months have been the most challenging time for our Trauma unit. The Coronavirus Pandemic continues to affect our hospital capacity and Patient flow through our Emergency Department which in turn has had a huge impact on our Trauma service.

We would like to begin by taking the opportunity to use this Platform to express our appreciation and gratitude for the hardworking individuals past and present, that come together to work collectively as a Team to make the Trauma service the success that it is. To mention a few: Trish Bertrum our outgoing Trauma Coordinator, the late Sam James (MHSRIP) and my predecessor Dr Ravi. We are very grateful to Dr Ravi for his hard work

and leadership over the last few years and his continued support. We would like to welcome Sharon Turner, who has joined the Team as our Trauma coordinator and is already doing a great job.

Over the past year, the Trauma leadership has been passed on from the Orthopaedic to the Emergency Department at Southend Hospital. As a new Team, we are making steady and incremental progress in developing and building on the work that was made by our Colleagues before us.
Some successes over the last year include:

- The appointment of two FRCEM EM Consultants, who are both very enthusiastic and making a valuable contribution to our Trauma service.
- Closer Collaborative working with the Radiology Department to improve time to CT for Trauma Patients. The most recent achievement was the ordering of a CT Brain for a Patient that had Traumatic Head injury without the need for a Prior discussion with a Radiologist. In addition, one of our Trainees is working on a QIP – the objective of which is to get Patients a Trauma CT without vetting thereby impacting/improving the time to a trauma CT.

Of utmost importance for the Service in the coming Year and to follow is to provide care of the highest standard for our Patients.
In order to achieve this, the key Priorities for the trauma team are:

- TARN : We are grateful for the Trauma Network's continuous support. Over the next year we endeavour to foster a closer working relationship with the Network and to meet the TARN submission targets consistently.
- Workforce: - In order to deliver the Service that we aspire to, we need to ensure we build on the current Team by employing into the key positions for the Trauma Team. We also need to look at achieving equitability and consistency across the 3 MSE Sites, of note is the Trauma Nurse coordinator position.
- Training and Development: In May 2022, Southend Hospital will be hosting the TALONs training which is delivered by the Trauma Network. We are determined to continue our Trauma Level 1 Trauma Training days and support our Nurses to attend Level 2 Trauma Training. The aim and ideal, would be the offer of more Training and development opportunities for all Levels of Staff. We recognise that this is an area that was greatly affected during the Pandemic. Reinvigorating training will provide ample opportunities for Staff development, equip Staff to provide quality care and facilitate the retention of Staff.
- Collaborative Working: We look forward to even closer collaborative working with other Services and Departments at Southend to deliver a quality Trauma Service from end to end i.e. Radiology, Orthopaedics, Education & Training, Stroke Services and AHP, just to name a few.
- Our therapy leads are also working to improve our rehabilitation prescriptions compliance. We would like to explore more collaboratively working across the MSE to support each other in training and governance including the mortality review

We are determined and look forward to keep improving and succeeding as a Team. Again I want to end by expressing my heartfelt gratitude to the Trauma Network and everyone that has supported us over this past year. Your contribution and support has been invaluable and we look forward to even greater working relationships and strengthening those ties for the good our Patients.

UCLH Trauma Unit

UCLH Trauma Unit is led by Dr Alex Schueler. Alex is also the networks deputy director. Alex writes……

Whilst 2020/21 was very much dominated by the Trust's response to the first waves of the

Covid-19 pandemic, last year was very much dedicated to getting services up and running again – including trauma – whilst remaining responsive to the ongoing challenges related to the covid pandemic. The number of trauma related attendances to UCLH is now back to pre-pandemic levels.

We were very pleased to regain our paediatric services in April 2021, which were temporarily centralised across North Central London at the Whittington Hospital. A dedicated group of paediatric fellows have shown a special interest in trauma care and are now working to establish specific trauma pathways at UCLH.

Whilst UCLH sees a significant number of older trauma patients, younger trauma patients are on the increase again and we took this as an opportunity to re-examine our multidisciplinary pathways of care. We already finalised our updated care of older trauma, spinal and pelvic pathways with chest trauma, head injury and open fracture pathways to follow. We expect this extensive piece of work to be completed in the next few months.

We are delighted to have recruited Ruby Begum as the first trauma coordinator here at UCLH. Ruby brings a wealth of trauma related experience to UCLH. In the short time Ruby has spent in her new role, she has already made significant positive changes to trauma care across the organisation. In particular, Ruby supports the multidisciplinary teams on the wards; provides expert clinical support for patients, staff and families; identifies patients who are in need of a rehabilitation prescription early; coordinates nurse trauma training and contributes to the well-established trauma governance structures at UCLH and across the network.

Thanks to the hard work and dedication of our TARN coordinator Karen Langworthy, TARN submissions continue to be exemplar. Karen was nominated for TARN's Woodford Award 2021.

Based on this excellent data, the annual TARN report continues to reflect a realistic picture of trauma care here at UCLH. Mentionable highlights are:

- UCLH treats around 350 TARN eligible patients per year
- Exemplar data both on quantity of case submissions (ascertainment ~100%) and their quality (accreditation > 95%)
- Continued trend of excess survival rate of around two unexpected survivors per 100 trauma patients
- Average length of stay is 6 days, which is 2 days less than the national average
- Low transfer rate to the regional MTC (8.2%)

The national trauma systems peer review 2021, like in 2020, was conducted via a new app which really transformed the way that we collected and demonstrated activity and outcomes at UCLH. We were again delighted with our final report issued by the NELETN network's executive team which highlighted a number of sustained improvements we have made over recent years. Comments we were particularly proud of include:

- Governance processes at UCLH are very strong and there is clear emphasis on patient safety
- Return of care - Although the current average of 2.25 days sits outside of the of the 2-day target, UCLH is the top performing TU within the network in this domain
- CT imaging - Time from arrival to report is one of the fastest across the network
- This was a truly excellent submission across all 11 domains of the peer review

Looking forward to the year ahead, there will be a clear focus on nurse education – both in the ED and on the wards. We already made significant progress in providing eligible patients with a rehabilitation prescription following the peer review.

We continue to provide a host of trauma courses including a combined ATLS and ATNC advanced trauma care course. UCLH is proud to be part of a small and select number of centres across the country to teach this course. It is planned to open this course to applicants from across the network by 2023.

.

Whittington Trauma Unit

Whittington Trauma Unit is led by Dr Nora Brennan. Nora is supported by a number of trauma-interested colleagues across the hospital. This includes Anna Sweeney, who also works as our Network Lead Nurse. Nora writes…..

2021-2022 has been tough. The ongoing pandemic has brought with it immense difficulties managing demand for emergency care, and especially in maintaining safe levels of staffing. Across the UK, Emergency Departments have seen unprecedented delays in offloading ambulances, and huge increases in crowding. Our teams are all exhausted but continue to put in 100% to providing safe and timely care for trauma patients. Here at the Whittington, there are many success stories from the last year. However, for me the biggest highlight is working in a team with such inspirational and dedicated colleagues.

<u>Other highlights:</u>

<u>TARN:</u>

- our case ascertainment and data accreditation has improved over the last quarter for TARN as we have more robust processes for identifying patients and ensuring data such as rehab prescriptions are easily accessible. We have submitted 150% of the patients HES expects us to receive at the Whittington for Q3 of 2021. Our current

standing is:

Pathways:
Ongoing work improving pathways for:
Elderly trauma and spinal fractures pathway, resulting in**:**

- Radiographer approval for NICE compliant CT neck
- Spinal transfer board to optimise care for immobilised patients
- MRI now available extended hours including weekends
- Agreed admission teams for all spinal injury patients

Code red response

- Automatic delivery of blood to resus as standard for all code red calls.

Training:

- Ongoing in situ simulation program for the ED and inpatient teams.
- Spinal training on the wards for nurses and AHP's commenced at the end of 2021. However due to COVID and staffing issues this wasn't well attended. We are relaunching it in March to take place twice a week.

Violence reduction:

- St Giles provide youth support work for at risk young people via funding from MOPAC. They participated in the network pilot audit this year and provided excellent quality evidence of their valuable work.
- Our ED nurse lead on domestic violence has worked tirelessly to improve our referral rate to our Independent Domestic Violence Advocate (IVDA) from 18 in 2019 to 180 referrals in 2021

Audit and research:

- High quality CT audit which highlights our need to improve rapid assessment for elderly trauma patients
- Ongoing audit on reversal of DOACs in trauma
- Ongoing recruitment to CRASH 4

Peer review 2021

- Streamlined process with excellent engagement from the Whittington Executive team, leading to a very positive report from the NELETN team.

Focuses for improvement in coming year

- Further work to embed the elderly trauma and spinal trauma pathways
- Developing an ED ap to ensure all ED staff have easy access to hospital trauma pathways and protocols
- Resuming training for trauma, and specifically spinal care, for nurses and AHPs
- Contributing to regional working group on End of Life Care for trauma patients

Whipps Cross Trauma Unit

Whipps Cross Trauma Unit is led by Dr Goran Ali. Goran writes…….

Whipps Cross University Hospital and in particular the Emergency Department similar to all the hospitals in the UK had to overcome lots of challenges to go through during Covid pandemic. Understandably there were pros and cons to this at different clinical aspect and trauma was not an exception from these.

At a structural level we had to reconfigure the department to enable better access for reception, differentiation, triage, and disposition of patients to dedicated areas within the ED based upon presence or absence of Covid symptoms. The caveat of this process added the unnecessary theoretical risk that it could impact on the quality of care delivered. However, with the mitigations we implemented in place around the shift work pattern, redesigning a specific rota for seniors and junior doctors as well as increasing the frequency of daily debrief for staff, we have successfully overcome this risk. In addition to those we converted our cubicles in particular the resuscitation suits into negative pressures with facilities to enable us to have cubicles with closed doors for AGP patients and can accommodate a better protocoled reception for trauma patients.

Our TARN data was for many years on the red alert at network level if not on a national one

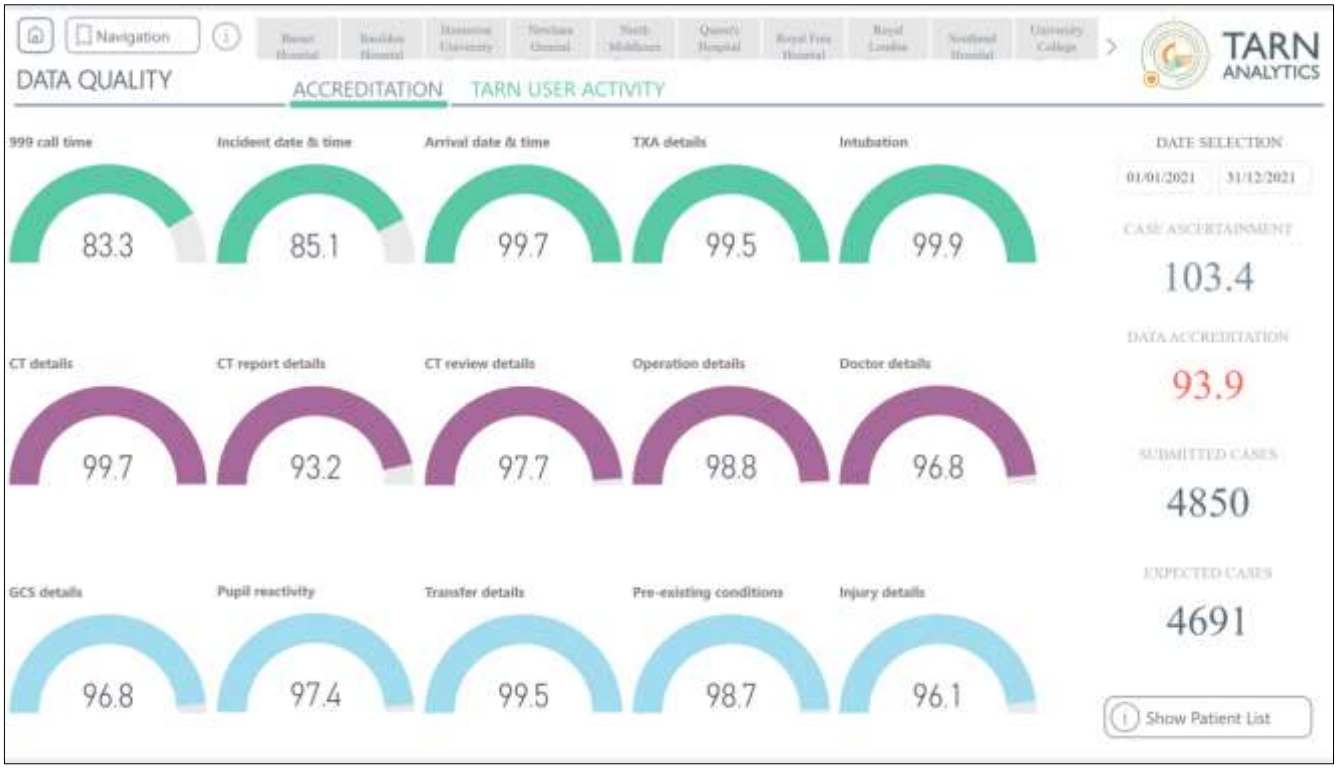
too. The causes were multifactorial starting from absence of a dedicated self-motivated administrator person to identify and upload the necessary accurate information on to TARN. Then the presence of historical backlog for outstanding data which compounded the progress, furthermore, the unrealistic expectation and discrepancy between the actual number of TARN eligible patients and historical HAS data from NHS. We successfully and proudly enough managed to turn this round within one peer review calendar year. We recruited and appointed a successful candidate. We provided weekly support through meetings with the trauma lead, general manager, and divisional director.

Our success story is not limited to TARN data only. We have successfully managed to create a job description and person specification and advertise the job for Whipps Cross site Trauma Co-ordinator. This role was missing for many years and despite recognising this as a necessity. We have successfully managed to cross the funding obstacles and overcame that too.

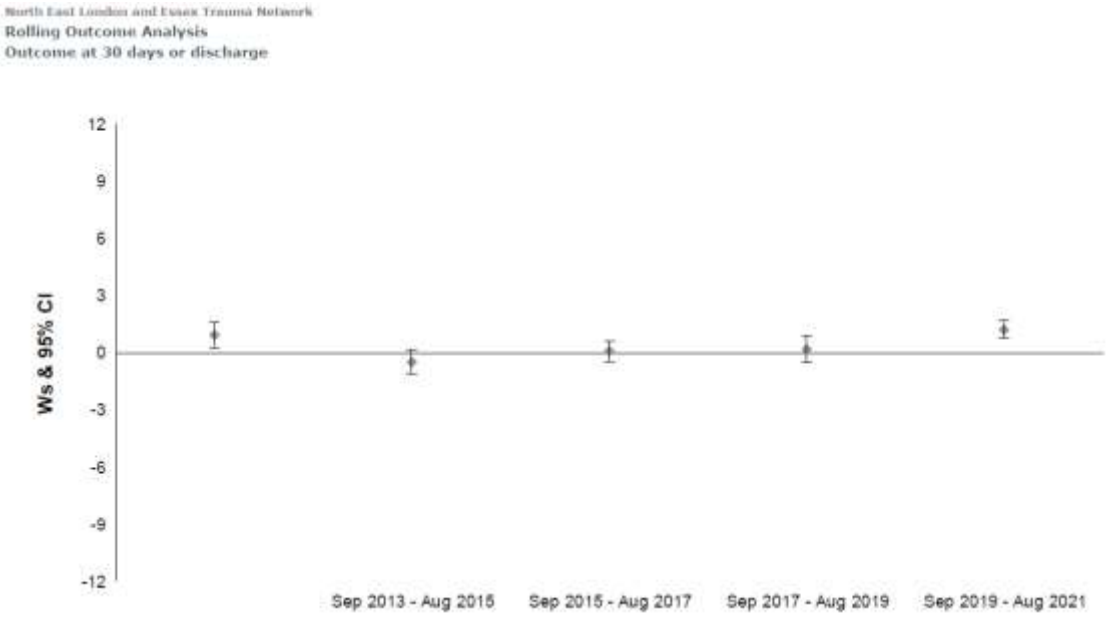
Our aspiration is to improve on Trauma CT timelines. Maximise training for nursing colleagues to level up the gap we endured due to Covid pandemic and staff who left the hospital. We are also negotiating with the CD for the radiology department to establish a protocol driven CT Cervical spine approval by radiographers as opposed to radiologist vetting only.

TARN

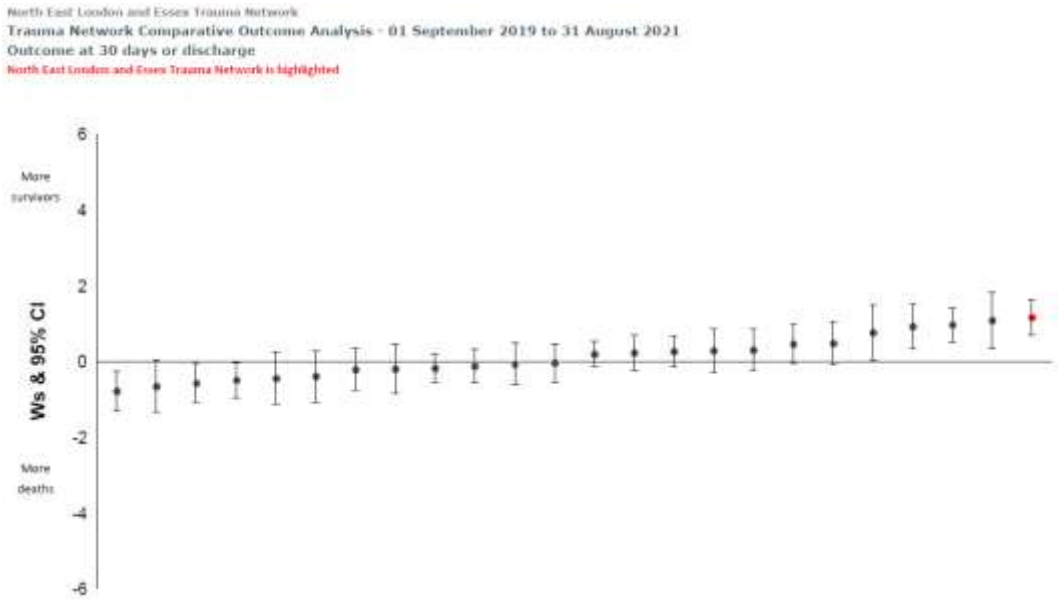
We continued on an upward trend through 2021 with 4850 cases submitted, 261 more cases than the previous year, with a subsequent increase in case ascertainment from 89.7% to 103.4%. The accreditation score also increased, though by a smaller margin to 93.9%.



As seen from the breakdown above the majority of data quality points are above 95% with the lowest performing markers being 999 call time and incident date & time. This information often comes via our prehospital providers and we have liaised with them directly as well as discussed through our network TARN group ways in which we can improve access to and recording of these details in TARN submissions.



NELETN has also maintained its national position as the top network in England and Wales for outcomes at 30 days. This is something that we are proud of as it not only demonstrates the hard work of our TARN coordinators but also the clinical excellence of our trauma teams.



We have also seen the confidence interval in our data closing and demonstrating the reliability of the data we are submitting. This data quality supports our Network TARN Lead, Andrea, in undertaking multiple audits in conjunction with clinical colleagues throughout the network.

In October 2021 we presented an abstract paper "Management of Older Major Trauma Patients: The impact on mortality since implementation of dedicated guidelines" at the Royal College of Emergency Medicine Conference. Andrea is also leading or supporting on audits and reviews of patient outcomes in trauma units with collocated CT scanners; open fracture pathways; patient outcomes for thoracic wall injured patients.

Repatriation

We have continued to take an innovative approach to repatriation in an effort to improve the pathway for referring and receiving units across NELETN while keeping the patient experience at the centre of the process. Across the network we have reflected the national picture of periods of increased pressure during the various Covid waves on a background of increasing trauma presentations and this is evident in the peaks and troughs of average repatriation wait times.

Through 2021 we undertook an audit of repatriation referral letters in order to ascertain the quality of the clinical information being provided and to identify any possible areas for improvement. Oversight from senior clinicians as well as an appreciation for the relevant and essential details were identified as having scope for improvement. We engaged with specialty leads and service coordinators to raise awareness and increase support for the process. we also provided examples of "gold standard" letters and offered educational sessions.

Following review of the process and feedback from our MTC colleagues in early 2022 we drafted an addendum to the repatriation policy to incorporate "patient swaps". It was found that in order to accommodate trauma patients awaiting non-urgent tertiary referral acceptance and transfer from TU to MTC that the MTC was going to great lengths to reorganise their bed base. However, when patients were then ready for repatriation patients were not only waiting for a bed to become available in the receiving TU but for a bed that was an 'exact match', i.e. same gender multi occupancy area or specialty.

The purpose of the addendum is to provide improve equity of access and parity in regards to bed allocation processes. The addendum reads as follows:

Tertiary Patient swaps:
In order to support the principles of automatic acceptance and return of care, where the MTC has a patient awaiting repatriation and there is patient within the TU awaiting transfer to the MTC it is <u>expected</u> that a "swap" will occur.

In these instances the TU and MTC should exhaust all options in order to identify an appropriate bed where the patient's needs and/or demographics do not match those of repatriated or incoming patient.

This includes reviewing existing bed base and rearranging or moving patients between side rooms, bays or wards/specialties in order to accommodate the major trauma patient.

Patients awaiting non-emergency transfer to the MTC will be only considered as part of a 'swap' once formally accepted and, where applicable, there is a specific plan in place for surgical management.

During 2021 there were almost 300 trauma patients referred for repatriation from the Royal London Hospital to trauma units within NELETN with over 200 of these patients being successfully transferred to their local unit.

At the end of 2020 we saw the worst repatriation delays of the year as we entered combined winter and Covid pressures however we saw this reduce and stabilise early in 2021. In January the average (mean) wait was 4.69 days and in comparison to 2020, December 2021 saw average waits of 3.81 days. Though is work still to be done on optimising this pathway t is important that we acknowledge the progress made through the efforts and hard work of all the bed and site teams and Trauma Coordinators across the network.

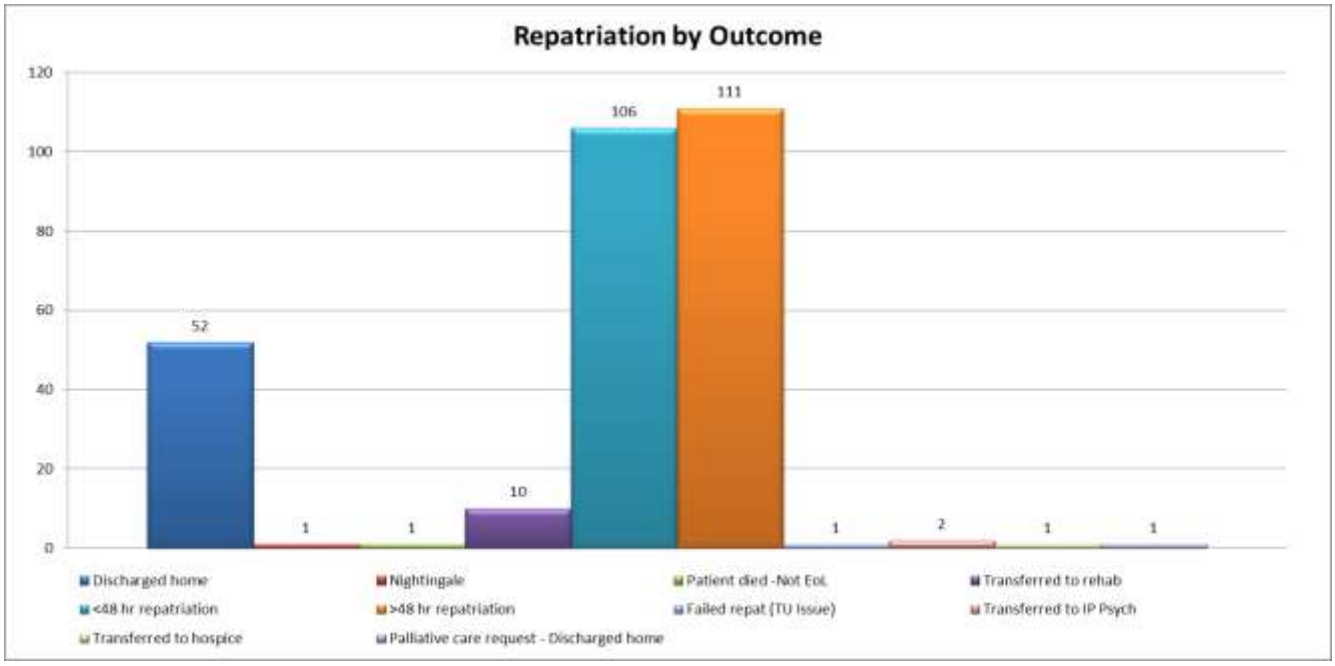


Fig 1. Trauma repatriation outcomes for those referred between 1st January 2021 and 31st December 2021.

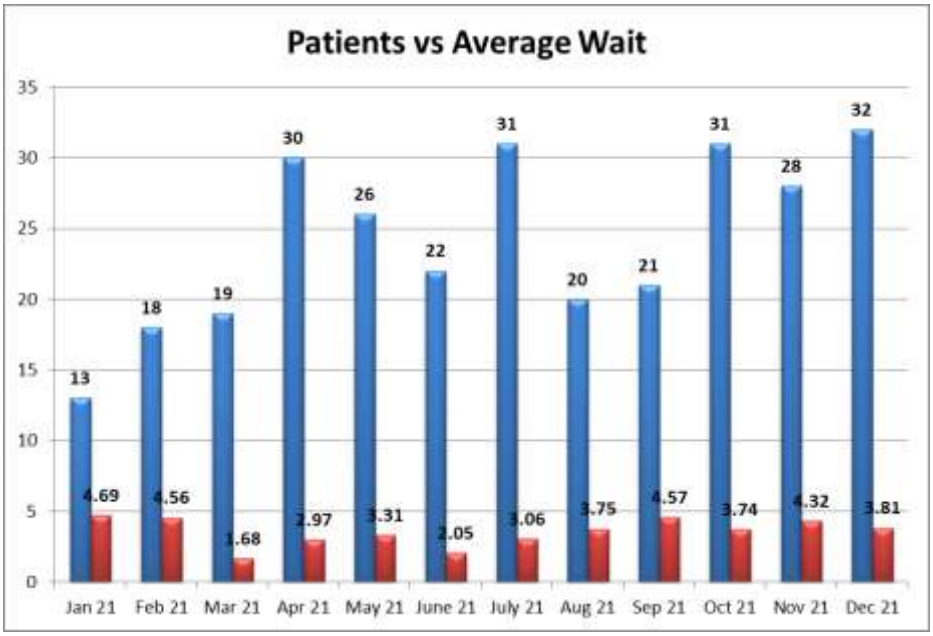


Fig 2. The average (mean) wait in days by month through 2021, for trauma patients referred to sites within NELETN

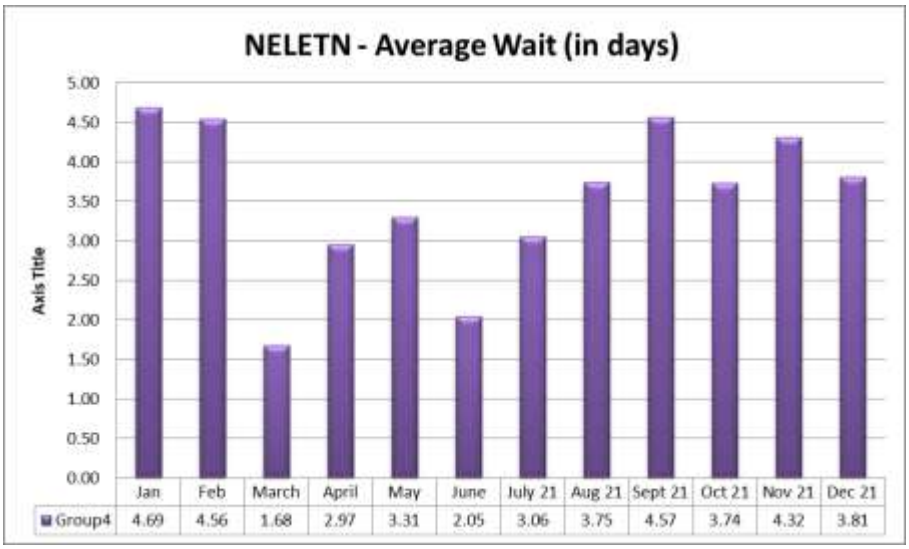


Fig 3. Number of patients referred versus the average (mean)

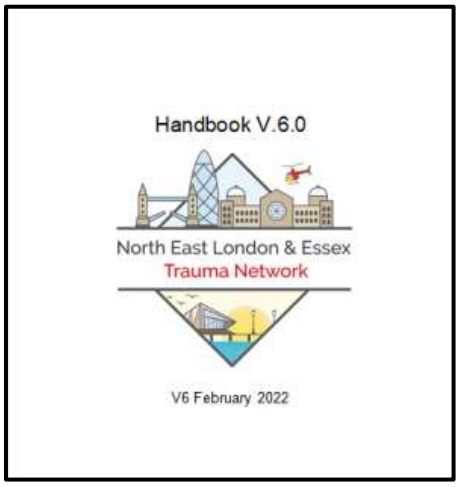
Activity

We continue to make positive progress towards our agile workplan which is updated on a monthly basis. We have managed to complete several key projects this year and have an exciting plan for the year ahead with a real focus on education and training.

Handbook and Core Documents

Commencing August 2019, the network team set about drawing up several key core documents and making these readily accessible by inclusion in a new 'Network Handbook'. The handbook has developed further and now in its sixth edition includes:

- Network directory
- New memorandum of understanding, signed by all partners
- Terms of Reference for the Network
- Referapatient Guide
- Communication strategy
- Education strategy
- Network website overview
- Peer review manual
- TARN guide
- Data sharing agreement signed by all partners



- Updated automatic acceptance policy
- Updated repatriation policy
- New Network map
- Clinical documents
    - London Major Trauma Triage Decision Tool
    - QR Codes - Clinician Resources
    - Who to Contact
    - Tranexamic acid in trauma guidance
    - Rib fracture guidelines
    - Network open fracture pathway
    - Adult lower limb complex periarticular fracture pathway
    - Adult spinal pathway
    - Paediatric spinal pathway
    - Rehabilitation prescription

The network handbook has been shared across the region, including with our ICS partners, with excellent feedback from all.

Governance

Our governance process allows us to record, monitor and manage network incidents in an open and transparent manner. Working with our host organisation, we set up a network datix account and associated pathways for our Trauma Units to raise and respond to incidents. Through this reporting and oversight, we have been able to identify themes and develop new pathways when needed. For example, the Ischaemic Limb Injury pathway and training package has been developed in conjunction with colleagues at the MTC in response to several patient related incidents. Following the move to fully online network steering meetings we have also reviewed the governance portion of the steering agenda. A slide deck template has been created for each TU to present the key governance themes as well as to share any good practice and learning, each trauma unit Director is expected to present once every six months. We include our governance report below.

Trauma Intervention Guidance for Emergency Reference

Our Network Clinical Director, Derek Hicks, has undertaken to review and update the clinical guides available from the network to our Emergency Medicine colleagues on a range of topics. The previously available guides (TACTICs) were drafted in 2015 and were drafted for the Major Trauma Centre and though they have been reviewed over the years the need for something more suitable and relevant to the Trauma Units became apparent.

The Trauma Intervention Guidance for Emergency Reference (TIGERs) are designed to be quick reference clinical guides for use in the Emergency Department. They are designed in such a way as to be eye catching. They have been written in conjunction with relevant specialty colleagues and referencing the up to date national and royal college guidance. Each TIGER is released only after a consultation period when all Trauma Unit teams are given the opportunity to review and feedback on the contents. TIGERs released so far include:

- Compartment Syndrome
- Emergency Intubation in Trauma
- Surgical Airway
- Emergency Thoracotomy

Other Clinical Guides

While the TIGERs are designed for Emergency Medicine colleagues we also wished to improve and increase the clinical guides made available to our inpatient specialty colleagues. The aim of the guides is to help define clear patient pathways and standards of care to improve patient outcomes across a range of traumatic injury presentations. As with the TIGERs, all clinical guides have been drafted by taking into account up to date national and royal college guidance and released only after a consultation period for Trauma Unit teams to review and comment.

Clinical guides released so far include:

- Rib fracture pathway
- Think Ischemia – Extremity vascular injury
- Inpatient trauma call guidance
- Open fracture pathway
- Complex lower limb peri-articular fractures
- Paediatric spinal pathway
- Adult spinal trauma pathway

TALONS

TALONS is a trauma care series produced by the London Trauma School which provides major trauma surgery education to medical staff. In 2022 TALONS faculty members from the Royal London Hospital agreed to work with NELETN on delivering some face to face teaching sessions. The first two sessions were hosted at Basildon Hospital and Southend Hospital respectively and delivered by Trauma Surgery consultants. These two sites were chosen as they are both busy trauma units at the edge of our geographical boundaries, receiving patients from East of England Ambulance Service Trust whose triage tool trigger for MTC positive care caries a higher Injury burden than that of LAS while also having the longest secondary transfer times into the Royal London Hospital. the sessions were well attended by surgical, emergency department, and intensive care colleagues.

Through 2022 and into 2023 NELETN aims to run further sessions across the network, potentially offering to trauma units by regional grouping; North Central London, East London and Mid & South Essex.

Peer review

The peer review audit app was developed with *Perfectward* now *tendable* and implemented throughout the network for our 2020 peer review. We further reviewed and refined this process for the 2021 peer review, adjusting the timescale for trauma units to start their draft submissions and producing the final executive reports via the *tendable* app. Feedback about the app has continued to be overwhelmingly positive.

For the 2021 peer review meetings we were pleased to be able to have a patient representative and an external representative present at all meetings. The external representatives were Trauma Network Managers from London and other regions across the UK and having their insight and input was invaluable. Our patient representative has a background in quality surveillance in the financial sector which lent itself well to the peer review process. They are also able to advocate from a patient experience perspective as a close relative of theirs has been a patient within the trauma system. We grouped the reviews by region - North Central London, North East London, Mid & South Essex - to allow for attendance and engagement from our commissioning partners in each region. This was a benefit for all involved as it not only provided an additional level of accountability for the Trauma Units and Network Executive but also support for our Trauma Unit teams.

As a result of our successful reviews in 2021 Hannah Kosuge was invited by the Trauma Network Managers group to write a National Peer Review Guide and is currently in its final stages of review and sign off.

Network Website

In July 2020 the network team began working on the new NELETN website. The website, which features an nhs.uk URL, was designed in full by the network team and was a very large and complex project. neletn.nhs.uk was published online in February 2021 and has already proved its worth, having been accessed over 466 times by 349 unique visitors in its first month of release. It continues to be a popular online resource of network information, clinical pathways, meeting minutes and education that can be accesses by everyone (meeting minutes are password protected for network colleagues only). We have been working to build the template repository including job descriptions for key roles across the network, training logs, competency assessment guidance, audit collection tools, and mortality & morbidity templates.

Paediatric Education

In early 2021 Anna Sweeney organised a virtual Paediatric Road Show predominantly for Whittington Hospital ED staff as they were at that time the North Central Paediatric ED hub as part of Covid resilience plans. The road show was a great success but also highlighted a gap in provision of Paediatric education across all of the Trauma Units within NELETN and a longer-term solution was sought. Hannah Kosuge worked with Meena Patel to develop the NELETN Paediatric Education mornings which run as a 3 hour session on a quarterly basis.

The agenda aims to be a mix of teaching sessions and case discussions with speakers from MTC and TU settings both within NELETN and externally as well as pre-hospital partner. Topics covered so far have included paediatric radiology in trauma, management of paediatric deaths, safeguarding following trauma, paediatric spinal management, violence reduction, paediatric code red (haemorrhage). Attendance is encouraged at the sessions by nursing, medical and AHP staff of all grades.

In addition to the quarterly NELETN meetings in May 2022 the usual morning session was replaced with a joint agenda in partnership with the North Thames Paediatric Network with talks delivered by Emergency Medicine, Trauma Surgery and Spinal consultants.

Paediatric Cranial Neurotrauma Governance & M&M

The evolution of Trauma Networks resulted in two MTC's in North London, St Mary's in Paddington and The Royal London in Whitechapel. Both were initially designated as adult MTCs; GOSH was the only formal paediatric neurosurgery department in North London and the 2009 national guidelines supported paediatric cranial neurotrauma patients continue to be transferred to GOSH. GOSH has remained in this formal position however both St Mary's and The Royal London have since been designated as paediatric MTC's as well as providing adult trauma care and a robust governance process was needed to support the treatment of paediatric neurotrauma patients outside of the formal paediatric neurosurgery department. GOSH does not have an emergency department to receive patients directly from a pre-hospital setting and there are recognised benefit of paediatric polytrauma cases being treated locally in their MTC as well as it not always being immediately evident that a child has an isolated head injury. Therefore NELETN, working in partnership with our MTC colleagues at The Royal London Hospital and St Mary's and Neurosurgery colleagues at GOSH, have established bimonthly meetings to provide a framework for Paediatric Cranial Neurotrauma Governance & M&M.

The first meeting was held in August 2021 and have continued to be attended by multidisciplinary colleagues from all three institutions as well as NELETN and NWLTN representatives. Audit, case discussion and morbidity & mortality review is facilitated, and an action log is updated and maintained after each meeting.

E-Learning Package

In her former role as the Education group Chair for National Major Trauma Nursing Group (NMTNG) and now the co-Chair of the NMTNG, Hannah Kosuge has been leading on a new educational package. This e-learning package will be built on the NHS Education hub so it will be free to access, available 24/7 and accessible from work or personal devices.

The package will cover the key pillars of theoretical knowledge required for the NMTNG competencies. Compliance with the competencies is a national standard for TU's and this will become an essential learning resource for not only our network nurses but those working in trauma nationally. The current expected time from is 12-18 months for completion for all modules:

- Trauma networks & organisational aspects
- Major haemorrhage
- Traumatic brain Injury
- Spinal column & spinal cord injury
- Thoracic trauma
- Abdominal trauma
- Musculoskeletal trauma
- Max fax, cranial & ocular trauma
- Special considerations:
    - Drugs, alcohol & trauma
    - Self-harm & suicide
    - Psychological aspects
    - Older trauma
    - Trauma in pregnancy
    - Bariatric trauma
- Self-care

TCAR and PCAR

In August 2017, a team led by Hannah Kosuge travelled to the US to review a trauma course which was specifically for nurses caring for trauma patients in an inpatient setting. Since that time, we managed to redesign the course for UK audiences and run this twice within London to great acclaim. We were the first to bring this training opportunity to British nurses and we went on to set up a UK steering group (which includes Hannah Kosuge, Anna Sweeney, Elaine Cole, and RLH trauma coordinator Anita West). Further courses were planned, but when Covid hit we quickly had to adapt our approach to ensure that this important training could continue. In October 2020 we were able to run our first TCAR Live Online training via a virtual platform. This pilot saw over 150 nurses across the country login and complete the adult course, and a further 180 paediatric nurses receive specialist paediatric trauma nurse training also.

We have further built on the success of this and have now organised continuing bi-monthly TCAR courses running live online.

Network Governance

Since setting up a Datix governance account we have been better able to track and manage network related incidents and risks.

During the period included in this annual report we have had a total of 57 reported incidents. This compares to 45 incidents in the previous period. This increase is likely a result of greater awareness across the network that we have a network Datix account.

Of note 2 of those incidents were as a result of delayed recognition/treatment of ischaemic limbs that has led us to the work we doing on this topic.

13 incidents are related to repatriation. As a result of this we have instigated a repatriation QUIP as described above. We are in the process of auditing a large number of referrals to assess for quality and accuracy and hope to be able to produce a report soon.

Our top 3 risks that are on our risk register are:

- Failure of MTC infrastructure on multiple occasions which has resulted in TU's unable to contact the MTC for extended periods of time.
- Lack of available level 2 courses for ED nurses (locally and nationally)
- Concerns over the identification, assessment and treatment time of patients presenting with ischaemic limbs.

Incidents that occur within the network that can benefit from wider sharing for educational purposes are presented at the Networks steering group and governance meeting (minutes available on request).

Meetings are held bimonthly and all involved in trauma care across the network are invited. As can be seen in the network handbook, a terms of reference document supports the meeting and provides a structural framework.

Appendix 1: Network Workplan

Our network workplan is live on One Drive and can be accessed via a link available by request.

Appendix 2: Network Maturity Matrix