



Scottish Trauma Network ANNUAL REPORT 2019/20

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1. Executive Summary

2019 -20 was another significant and progressive year for the Scottish Trauma Network. There is much to champion, and more to come in what is shaping up to be an exciting 2020-21. That this has been achieved latterly against the backdrop of the Covid-19 pandemic, with the many necessary twists and turns in expectation, guidance, policy, redeployment and operational initiative across all our facets and collaborations within NHS Scotland, is yet further evidence of the energy, resilience and pragmatism shown by all members of our flourishing STN family.

By this time next year we expect to have delivered a fully operational STN, by opening our final Regional Major Trauma Centres at the Queen Elizabeth University Hospital in Glasgow, and at the Royal Infirmary in Edinburgh. This will complete the national picture alongside the MTCs at Aberdeen Royal Infirmary and Ninewells Hospital in Dundee, and support all the component services within our Regional Networks. To achieve this landmark against the turbulence of 2020 will indeed be cause for celebration.

The success of the Scottish Ambulance Service's Trauma Desk, and its Covid-prompted transformation into a national Critical Care Desk, as well as that of ScotSTAR North operating from its new base at Aberdeen Airport, allows us to look at further developments in Red Team prehospital Critical Care delivery across Scotland.

'The Trauma App' collaboration between STN, the emergency department representatives from across the STN, EMQUIRE, daysix, the Digital Health & Care Institute and Innovate UK, continues to attract international interest as that project enters final development and simulation phases.

Our new Research and Innovation Group has begun its work to tell the story of the STN via data. As well as the R&I Group's clinical research remit, there will be an assessment of the health and economic impact of the Scottish Government's major investment in the STN.

In a new and exciting development to help tell this story, Firecrest Films, a Glasgow-based independent television production company, has been commissioned by Channel 4 to produce a flagship 6-part primetime documentary series on the work, patients and staff of the Scottish Trauma Network. It is hoped that filming will start in 2021.

Finally, as testament to the way the STN has developed and at the Cabinet Secretary for Health and Sport's request, our model is being applied to support the development of several of the new Strategic Networks, where we are finding particular synergies with the Veterans and Health in Justice Networks.

Yet more interesting times ahead for the STN.

Martin McKechnie
National Clinical Lead
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2. Introduction

The Scottish Trauma Network (STN) was established in 2017 with the aim of “Saving Lives, Giving Life Back” (from the Chief Medical Officer report of the same name published in January 2017). The network mission statement describes the patient group and rationale for the network:

To improve and optimise the health and wellbeing of the seriously injured. Helping them, their families, each other and our nation.

Pioneering clinical excellence, health intelligence, innovation, education and research.

The network was set up to support the establishment of an integrated trauma care system across Scotland, with improved delivery of care from pre-hospital to rehabilitation. The network was also tasked with looking at prevention and planning for major incidents with mass casualties.

This is the third annual report for the network, it has been a challenging year, with vacancies in both the network Senior Programme Manager and Programme Support Officer at different points, and the start of the COVID-19 pandemic affected some key pieces of work, which were close to completion when resources were diverted to support the management of the pandemic. However, much has been achieved towards the implementation of a national trauma care system, with the West and South East regions moving towards opening their MTCs in March 2021, as well as the expansion of both red and yellow pre-hospital teams. This year has seen the Scottish Ambulance Service (SAS) launch of ScotSTAR North, as well as enhanced pre-hospital care teams being expanded in the South East region.

A key achievement of the network is the development of the Major Incident with Mass Casualties Plan for Scotland, developed in partnership with the Scottish Government Resilience Team, Integrated Joint Boards and NHS Scotland; it was published in May 2019 and launched at the STN Event in June 2019. An exercise to test the plan was delayed due to the COVID-19 pandemic.

This reporting year has seen the initiation of the Research and Innovation Group, which will seek to use data available through NHS Scotland and beyond to “Tell the Story” of the network. This work has been well established by the interim Senior Programme Manager, and will form a key piece of work as the network moves forward.

The network will be moving into a new phase following 2020/21, with all four MTCs open, the majority of funding allocated to bring services up to agreed levels, and the aforementioned research and innovation work well underway. It is now time for the network programme team to look at how they can support the ongoing work of the wider network, and continue to drive improvement across the trauma care pathway. This scoping work forms part of the workplan for 2020/21, and will help prepare the network for review in 2021/22 as part of the standard National Services Division (NSD) review cycle.

3. Report on Progress against Network Objectives in 2019/2020

National networks have agreed core objectives that reflect the Scottish Government's expectations for managed clinical networks, as described in CEL (2012) 29¹. The network's core objectives are:

- Enhance existing trauma services by co-producing and delivering an inclusive, equitable trauma network, which will save more lives and improve outcomes for injured people across Scotland;
- Have a focus on trauma from prevention through to rehabilitation to support the reduction of incidence of trauma in Scotland and improve the quality of life for those affected by trauma;
- Work within the context of the National Clinical Strategy i.e. Once for Scotland, through population based planning and delivery with services resourced appropriate to predicted activity;
- Recognise the specific specialist services required to deliver an effective paediatric trauma component across the network;
- Co-produce a fully co-ordinated, uniquely Scottish, pre hospital care solution that will make best use of resources and operate under a unified governance framework, to ensure trauma patients access the right level of care as quickly as possible;
- Be unique, affordable and fit for purpose. It will provide rapid access to complex treatment, delivered in the most appropriate setting(s) and provide definitive care for our most severely injured patients by ensuring that there are good readily available local, regional and national trauma services;
- Deliver the best care possible, through agreed and clearly defined clinical pathways, with appropriate quality assurance and improvement arrangements;
- Work across traditional boundaries to ensure clinicians and managers from across Scotland work together to achieve the best outcomes possible;
- Drive improvement in outcomes through the use of good data and create an excellent environment across Scotland for openness, learning, teaching, research and development
- Support the development of clinical major incident planning through the provision of an integrated trauma care system.

This report gives an overview of progress against these objectives in the year 2019/20.



3.1 Data and Audit

The Scottish Trauma Audit Group (STAG) gather data on patients with significant injuries in Scotland, via a bespoke electronic web based system, eSTAG. Inclusion criteria can be summarised as injured patients who require a minimum of three days in hospital, are admitted to critical care or die and exclusion criteria include isolated closed limb injuries, burns and fragility fractures. Local hospitals,

Regional Networks, the Scottish Trauma Network and Scottish Ambulance Service all have access to live reporting at site, regional network and national level, which includes compliance with KPIs and information from pre-hospital to rehabilitation, enabling targeted quality improvement. STAG Co-ordinators are employed across Scotland to enter data and highlight cases for review to the STAG Clinical Leads within the hospital. We are currently working on improving our understanding of the impact of frailty on outcome and the longer term effects of serious injury on those who survive to discharge.

STAG will publish the 2020 annual national report on 15th September 2020 at www.stag.scot.nhs.uk. This is delayed due to COVID-19 priorities in Public Health Scotland and Health Boards.

¹ Please see: https://www.sehd.scot.nhs.uk/mels/CEL2012_29.pdf



3.2 Education

Across the network, a number of Education opportunities have been undertaken, primarily within regional settings, including a series of educational webcasts organised by the team in the North of Scotland. These have been funded through allocated funds from Scottish Government to support improvements in care across Scotland.

The 2019 STN Event at the Edinburgh International Conference Centre, with the tagline “A Growing Network, A Platform for Change” was opened by Jeanne Freeman. The event was an opportunity to showcase and celebrate innovation and collaboration in the development of Scotland’s new trauma system, designed to deliver the highest quality of integrated, multi-speciality care for severely injured patients. It linked with the STAG, and two other managed clinical networks hosted by NSD, Care of Burns in Scotland (COBIS) and the Scottish Acquired Brain Injury Network (SABIN). Attended by over 350 delegates each day, there were 12 presentations, 17 workshops and over 50 posters were displayed. The 17 workshops covered all the facets in the patient pathway from Pre-hospital to Rehabilitation as well as Major Incident Planning. The workshops were facilitated by different stakeholders in the STN such as COBIS, SABIN, SAS, STAG and the STN regions. Overall feedback on the event was positive, and further details can be seen in the evaluation of the event.



Figure 1 - Trauma App Demonstration at the STN Event 2019

The STN Education Group continued to meet and progress the Education Strategy, developing and collating education requirements as well as sharing learning and opportunities. A sub-group was established to fast-track the developing National Trauma Competencies beginning with nursing. Once approved these will provide a ‘once for Scotland’ approach. This work was progressing well but paused in March to release staff for the Covid-19 response.



3.3 Research and Innovation

The Research and Innovation Group had its first meeting in February 2020 and shortly afterwards agreed to explore five themes including an economic assessment. Throughout the year a high level scoping exercise was carried out including collating data and information sources across the broader network. This included linking in with agencies external to the STN: Public Health Scotland (formally PHI); STAG; Healthcare Improvement Scotland; SAS and Health Economists. Together we prepared for an economic assessment, feasibility study for a data platform/ tool to develop analytical activities. Key outputs were the mind map (collating and connecting all data/information sources), the Deliverables Log and terms of reference for the Group. The five themes for the group are:

- 1) “Trauma Triage Tool”
- 2) “The creation of a high quality platform for the conduct of clinical research in all aspects of trauma care in Scotland with an emphasis on attracting and facilitating large scale, grant funded research and inward investment”
- 3) “NoS Psychology Project”
- 4) “Deaths on Scene”
- 5) “Economic Assessment”

The trauma app is an application being developed by Daysix and EmQuire (NHS GG&C) for major trauma, offering high speed data capture, decision support prompts, automated reporting and granular reporting. Between 1st April 2019 and 31st March 2020, excellent progress was been made with the design and build of the trauma app, thanks to a unique collaboration between clinicians, developers and the Scottish Trauma Network.



Early prototypes of the trauma app were used in trauma simulations at Aberdeen Royal Infirmary, Royal Infirmary of Edinburgh and Queen Elizabeth University Hospital of Glasgow, and feedback from those involved in the simulations informed the development and refinement of the app. (If you attended the Scottish Trauma Network conference in June 2019 you might remember the live demonstration of the app by Kevin Thomson and his team from QEUH.)

The content of the app's core screens is now clinically agreed, and the development team at Daysix are in the process of building out the various forms and interventions. It is anticipated that a feature complete version of the app will be ready for further testing in autumn.

A test version of a trauma report has been successfully pushed, which is a positive step towards integration in NHS Scotland. Good progress has also been made with regards to authentication of those who can use the trauma app thanks to a strategic partnership with NES.

The Innovate UK funded project has been extended by nine months to 30th June 2021 to account for Covid-19 related disruption and positive developments regarding medical device certification.

For more information on the trauma app, please see www.thetraumaapp.com or on Twitter at [@thetraumaapp](https://twitter.com/thetraumaapp).



3.4 Governance

The network governance is set up through the Core Group, made up of clinical and planning leads from each of the regions and SAS. The Core Group reports to the STN Steering Group. This structure was reviewed in 2019 and it was agreed to maintain the current structure until the two remaining Trauma Centres were opened, at which point the network governance would be reviewed.

A number of working groups are in place, and these produce recommendations and guidance which are agreed and ratified through the Core and Steering Groups.

The first STN Clinical Governance Day where regional representatives will have the opportunity to present case studies highlighting good practice and lessons that can be learned across the network was being planned for spring 2020 but planning was paused to allow for the COVID-19 response, and this is likely to be re-established for late 2020/early 2021.



3.5 Prevention and Public Health

The Scottish Public Health Network (ScotPHN) had an event scheduled in early March 2020 to launch the Injury Prevention Framework for Scotland which was cancelled due to COVID-19. In the meantime, ScotPHN has representatives on the Core Group and Research and Innovation Group.

Scoping for the prevention facet of the network will form a key part of the scoping work to be undertaken in 2020/21.



3.6 Pre-hospital

Through the Pre-hospital, Transfer and Retrieval Working Group, the STN continues to work with providers from across Scotland to facilitate a 'Once for Scotland' approach for pre-hospital care.

SAS has been working with the regions to create their repatriation policies and once for Scotland principles, this complex work has progressed well and is almost complete.

SAS are continuing to roll out Advanced Paramedics (APs) into the regions with a plan to increase recruitment to six in the WoS.

ScotSTAR North was officially launched in July 2019, ensuring that all of Scotland is covered by a "red" pre-hospital team. This facility supporting the critically-ill in the pre-hospital environment was opened by Jeane Freeman the Cabinet Secretary.

Ms Freeman commented: "This new centre complements the services of the Scottish Trauma Network, which will help trauma patients from pre-admission to rehabilitation. ScotSTAR North builds on the work being undertaken by our newly-opened major trauma centres in Aberdeen and Dundee, linking up the resources, expertise and infrastructure of NHS and the Scottish Ambulance Service. The new centre ensures that critical care across Scotland is of the highest standard. The consultant-led teams on site in Aberdeen will retrieve patients and provide a pre hospital critical care response."



Figure 2 - Jeane Freeman, Cabinet Secretary for Health and Sport opening ScotSTAR North.



3.7 Acute

The two MTCs, in the North of Scotland and East of Scotland are fully operational across the patient pathway delivering the service required from an MTC, and are performing well as they passed their first anniversary.

The MTCs for the West and South East were on track to open February / March 2021. It is hoped that this will not be delayed due to COVID-19, and discussions are ongoing with Scottish Government.

Further detail from each of the regions and SAS can be found in section 4 of this report.



3.8 Rehabilitation

After reviewing rehabilitation models across NHS Scotland to ensure alignment with [British Society of Rehabilitation Medicine](#) (BSRM) guidelines, a pilot rehabilitation plan was developed by the North and East regions to pilot as further discussions continue around how a national rehabilitation plan might look. These discussions include a planned workshop at the STN Event in June 2019, which received positive feedback, including the following comment from an attendee: “Excellent speaker and information thought provoking. Time left for useful discussion/questions.”

After a series of discussions, the Rehabilitation Group agreed the broad content of the national rehabilitation plan in May 2020, which will form the basis for national rehabilitation plans throughout Scotland. This work was due to be completed in March; however, the meeting was delayed due to the onset of the COVID-19 pandemic.



3.9 Major Incident with Mass Casualty Planning

The Major Incident with Mass Casualty Plan developed by a group of specialists from across Scotland chaired by Angiolina Foster, CEO NHS 24 was launched at the STN Event in June 2019. This plan ensures that the long term care of patients is in-built into MI/MC planning. Health and Social Care and rehabilitation representatives were engaged in the planning process, considering how patients currently in hospitals can be moved into different care settings at the time of any incident, and also longer term care strategies for survivors of the incident. The plan saw a first for Scotland, with representatives from all four regions, the Scottish Ambulance Service and the Integrated Joint Boards coming together to agree the plan.

An exercise to test the plan was delayed due to COVID-19.



3.10 Paediatrics

The Paediatric Working Group has progressed with developing national guidelines for the management of children and young people who have suffered serious injury (currently for imaging and major haemorrhage). The work plan for 2020/21 will include developing a platform for sharing these, as well as continuing to work on a suite of guidelines.

4. Regional Updates

Each of the regional networks has provided the following updates.



4.1 North of Scotland (NoS) Trauma Network

The Network, the MTC for adults and paediatrics at the Aberdeen Royal Infirmary and the Royal Aberdeen Children’s Hospital and the Trauma Unit at Raigmore Hospital celebrated their one year anniversary on 1st October 2019. At that point across the network 200 major trauma patients had been cared for with 247 rehabilitation plans developed which included complex moderate trauma patients.

The development of rehabilitation remained a priority for the Network with the appointment of key rehabilitation roles throughout the year including paediatric rehabilitation co-ordinators at the MTC and TU along with a community Occupational Therapist post in NHS Highland who also provides vocational rehabilitation. A vocational rehabilitation post was also appointed in NHS Grampian who additionally supports NHS Shetland and NHS Orkney patients. A consultation took place about the e-Rehabilitation Plan specification in the NoS Care Portal so that the rehabilitation plans are accessible electronically across the north of Scotland and can be updated wherever the patient is located. The use of NHS NearMe, utilising IT hardware previously provided in community teams, continued to enable the growth of more localised support for rehabilitation and psychology for patients who had left hospital.

The network implemented a full education programme which included providing training for groups of staff such as the European Trauma Course, Trauma Risk Management, Trauma Nursing Core Course, Secondary Transfer Training and Resuscitative Thoracotomy training as well as funding individuals to increase their specialist skills such as Paediatric Trauma Surgery, shadowing within the English trauma system, island imaging staff shadowing at the MTC and hand and thumb therapy. The Network’s monthly video conferencing educational sessions continued through the year with up to 12 sites joining together. To celebrate the one year anniversary the Network Annual Event

concentrated on the difference a year had made to trauma patient pathway with Jean Freeman, the Cabinet Secretary for Health and Sport, as the key note speaker.

In order to ensure the major trauma service provides patient centred care a number of patient feedback surveys were developed which are completed with patients as they are discharged from the MTC and specialist rehabilitation. Feedback received has led to improvement projects such as development of a video for the MTC and the neurological rehabilitation unit. Further surveys are in development for completion in the community, at discharge from the Trauma Unit and for children and their families. Patient leaflets were developed for the MTC and Trauma Unit and a paediatric patient passport is under development as well as videos of specialist rehabilitation settings for adults.

The Network, in partnership with the SAS, continued to test and implement in all the hospitals in the network a one call communication process to reach the MTC Single Point of Contact via a trauma transfer telephone number at the SAS Special Services Desk. This has made it easier for local hospital teams to contact the MTC and the SAS with one phone call to arrange the secondary transfer of the patient, coordinate the appropriate transfer arrangement and receive support and advice until the patient is transferred. During the year a feedback system, called the Trauma Post Box, was also implemented in the MTC Emergency Department for SAS crews who wanted to learn about patient outcomes and any lessons from trauma they had brought into the hospital. The Pre-Hospital Immediate Care and Trauma (PICT) Team based at the TU in Inverness also had the benefit of six new posts of Advanced Practitioners funded via the SAS to enhance the team and carry out a two year training programme.



4.2 East of Scotland (EoS) Trauma Network

Much has been achieved in the EoS in the last year and it is important for us to continue to evolve in a way that meets the needs of the major trauma patients and carers in the region. The EoS currently provides care for major trauma patients who are admitted under a variety of inpatient teams and a variety of wards.

Major trauma patients are admitted to our specialist major trauma ward either directly from the Emergency Department or as a step down from critical care. During the COVID-19 response, the East of Scotland Network was put under significant pressure in relation to infrastructure and staffing. MTC staffing were redeployed and our Major Trauma Ward was changed to a COVID positive HDU. Regardless of these pressures, maintaining the trauma network was identified as a priority and we were able to relocate 4 of our Major Trauma Ward beds within our Surgical High Dependency Unit at Ninewells Hospital.

Within our first year of opening, the East of Scotland has treated approximately 150 patients with a major trauma scoring and we have received excellent patient and relative feedback. The MDT Clinical Governance meets are well established with excellent attendance from all specialities including representation from Scottish Ambulance Service.

In 2019/2020, the EoS has focussed attention on learning and education including:

- Additional Emergency Department Consultants trained in pre-hospital critical care to support SAS red response.
- “Real time” major trauma / peri-mortem C-section scenario with multi-speciality attendance including Obstetrics and Neo-natal Team. This scenario was filmed and debrief circulated to all relevant stakeholders.
- Collaboration with Transfusion and Life Support in Trauma Group to test pre-thawed FFP availability in Resuscitation Room for code red patients.
- Approaching 75% of Emergency Department Consultants completed European Trauma Course.

A number of key roles have been appointed to within 2019/2020:

- STAG Co-ordinator
- Network Manager
- Project Support Officer
- Major Trauma Clinical Lead

Appointment process is also currently underway for a Clinical Psychologist to support the Major Trauma Service.

The EoS Major Trauma Centre Steering Group continues to work through developing our Governance Framework and Repatriation Policy.



4.3 South East of Scotland (SEoS) Trauma Network

During 2019/2020 much has been achieved to support the development of a Major Trauma Network for the population of the South East of Scotland. The Networks progress to date has been the result of effective collaboration between Health Boards to ensure that the whole population of this region will be able to access high-quality, multispecialty care when the Network goes live next year. This Network approach will save more lives and improve patient outcomes throughout the trauma pathway – from prevention to rehabilitation – *“Saving Lives and Giving Life Back”*.

Implementation of the Major Trauma Centre (MTC) at the Royal Infirmary of Edinburgh (RIE) and Royal Hospital for Children and Young People (RHCYP) will allow patients with Major Trauma to receive care from a specialist Major Trauma Service and early access to hyper acute rehabilitation.

At the MTC RIE, development of a 12 bedded Major Trauma Ward is due to be operational by March 2021. This will include 4 level one monitored beds; a dedicated gym space for the provision of acute rehab and will allow for key clinical adjacencies. The Department for Clinical Neurosciences (DCN) is also due to open at the RIE campus in summer 2020 and will provide capacity for closed head trauma patients.

Prior to the MTC going live next year, staff have been working to implement key improvements to trauma care at the RIE. This includes undertaking work to improve access to and reporting of CT; implementing changes to improve access to Regional Pain service and working to establish provision of a comprehensive musculoskeletal trauma service and facilities to support all definitive fracture care this includes a combined Orthoplastic theatre capability in line with BOAST open fractures; combined Orthothoracic theatre in line with NICE and BOAST Chest wall trauma/rib fixation and improved access to theatre for complex pelvic fractures.

A hub and spoke specialist rehab service will also be established across the South East Trauma Network which will help to ensure that high intensity rehab is provided and maintained across the pathway. Major Trauma co-ordinators have now been appointed at each Trauma Unit to support the coordination of care across the pathway. Their role will also include undertaking a review of current pathways to support the Network ensuring timely repatriation takes place and that patients receive access to the right services at the right time.

Within the last year a great deal of progress has been made in developing the South East Network's workforce. This has included recruitment to a number of key roles including Major Trauma Advanced Nurse Practitioners (for both Adults and Paediatrics); Major Trauma Nurse Educators; SAS Critical Care Practitioners; Rehab Coordinator; Major Trauma Consultants; Radiographers; and recruitment to a range of other key Acute and AHP positions. The Network has also worked to safeguard the wellbeing of its workforce. Key links have been developed with services such as the Rivers Centre who will work to provide additional Mental Health and Psychological support for staff working in Major Trauma and also undertake staff training in Psychological First Aid. The appointment of Consultant Psychiatrist; Neurophysiologist; Mental Health Trauma Nurse and Senior Specialist Nurse will have lead professional responsibility for the implementation of psychological interventions in the Major Trauma Centre, RIE.

The Network has also continued to invest in and support staff training and education. All sites within the Network now run regular in-house education and simulation sessions for staff. The MTC has also run a number of in-house training courses including a Rib Fixation Training Day and a Three Day Major Trauma Advanced Practice Course. Major Trauma Nurse Educators also continue to provide regular training in major trauma competencies across the region to support the upskilling of nursing staff. Alongside this, the Network has also supported staff to attend a range of externally run courses including European Trauma Training (ETC); the Definitive Surgical Trauma Skills (DSTS) course and Advanced Trauma Life Support (ATLS) training.

A robust Clinical Governance framework is now well established across the South East Trauma Network. Local and Regional Mortality and Morbidity meetings (M&M) regularly take place to review patient cases and to monitor the region's compliance with STN Key Performance Indicators (KPI's). The MTC has also established its own Quality

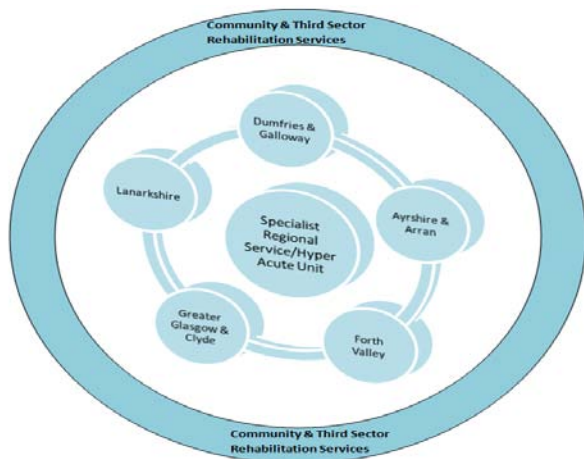
Improvement Newsletter to distribute key learning from these meetings to staff. In March 2020 a Trauma Management Guidelines booklet was also published to provide guidance to staff across the region on a variety of Trauma related topics including MTC Transfers, repatriation and management of various types of trauma.



4.4 West of Scotland (WoS) Trauma Network

The delivery of the major trauma network is an ideal opportunity of showcasing how regional and national working can deliver comprehensive care pathways that span geographical boundaries with the key aim of giving lives back and improving outcomes for patients who have suffered a major trauma and as part of the network the WoS are committed to the delivery of the model.

At the heart of the WoS regional network, is the Major Trauma Centre (MTC) which will be sited at the Queen Elizabeth University Hospital (QEUH) in Glasgow and will provide care for around 1100 critically and severely injured patients per annum. The MTC will be supported with six stand-alone Trauma Units, Local Emergency Hospitals and a range of remote and rural community hospitals. There will also be a MTC for Paediatrics located at the Royal Hospital for Children. Significant redesign of services is required across the WoS to deliver this network model.



Embedded within the MTC will be a specialist rehabilitation service. The focus of this model is on a hub and spoke provision of specialist rehabilitation ensuring complex rehabilitation needs are met for major trauma patients from Day 1. It concentrates specialist services to improve outcomes for patients and to support patients to move along the rehabilitation pathway seamlessly.

In 2019/20 much has progressed in establishing the network across the WoS and delivery of the workplan has been as a result of good collaborative working across the Boards within the region, and with our stakeholder colleagues, particularly Scottish Ambulance Service (SAS), and other Boards across Scotland. A range of groups with wide representation are now in place to help progress the workplan.

The MTC Steering Group oversees the development of the operational policy for the MTC and planning is now well underway to establish the 24 bed major trauma ward which will provide specialist care to major trauma patients and also provide early access to hyper acute rehabilitation. A number of pathways have been finalised for access to specialist services including: Ortho-plastics, Spinal, Cardiothoracic and Neurosurgery.

The MTC is due to open in March 2021. A recruitment plan is being progressed to recruit to the balance of the posts for the MTC - supporting this is a training and development plan, particularly for the major trauma ward and AHP staff who will require to rotate through a range of specialty wards as part of their induction. In the first phase of the planning a number of key new roles were appointed to including Critical Care and Ward Nurse Practitioners and these postholders have now completed their two year training courses. The Major Trauma Coordinators in the MTC for both adult and Paediatrics have now all been appointed to. These are pivotal posts within the MTC providing a co-ordination role for the patient across the pathway and system to ensure the right care is being provided at the right time.

In 2019/20 plans were developed for the redesign of services within the local Board areas to create the Trauma Unit model and these plans are now being implemented. In three Boards this requires significant redesign of trauma pathways. The funding to support new posts to deliver the Trauma Unit models has been made available to Boards in 2020/21 and recruitment to these roles is being progressed.

Training and Education continues to be supported across the Network. On 6th September 2019 the first West of Scotland Stakeholder event was held which provided the opportunity for 170 staff from across the Network to come along and learn from patient stories, hear from colleagues in England and other areas in Scotland, how they had established their networks; what was planned for West of Scotland both in terms of MTC, TUs and rehabilitation and through workshops to input to the further development of the Network. This was well received and provided a platform to engage the wider clinical group in the development of the major trauma service in West of Scotland. In November 2019, a Clinical Education Day was held in QEUH Teaching & Learning Centre for Nursing and AHPs – this was an event focussed on predominantly WoS Boards but was open to participants from other networks and was well attended with over 200 participants. Major Trauma Nurse Educators also continue to provide regular training in major trauma competencies across the region to support the upskilling of nursing staff. The Network has also supported staff to attend a range of externally run courses including European Trauma Training (ETC); the Definitive Surgical Trauma Skills (DSTS) course and Advanced Trauma Life Support (ATLS) training.

There is a robust clinical governance structure in place across the region. The Clinical Governance Advisory Group is now well established and is made up of representation from each of the Boards across the WoS and the SAS. The group have supported the development of patient pathways and protocols across the system including development of WoS regional repatriation and referral protocols. Another focus of work is on supporting improvement against the KPIs and jointly with SAS colleagues have now secured national agreement on standardising the pre-hospital administration of IV antibiotics for open long bone fractures. The Group are currently supporting the development of the West of Scotland Major Trauma Management Guidance booklet in advance of the opening of the MTC. Also well established, is the monthly Clinical Governance Forum – bi-monthly responsibility for delivery of these is provided by MTC and the alternative month by local Boards/ Paediatrics. These have been well attended/supported by all Board areas in the WoS and include cross boundary input from colleagues in other regions. Local M&M meetings also continue to take place in each of the local board hospitals which feed into the regional forum.

4.5 Scottish Ambulance Service SAS



SAS has responsibility for the co-ordination and governance of all pre-hospital components of the STN. The objective of this is to ensure that seriously injured patients receive timely evidence-based care on scene before being rapidly transported to the most appropriate hospital to deal with their injuries. 2019/20 was the third of the five year phased implementation and significant progress has been made.

The Trauma Desk in West Ambulance Control Centre (ACC) has continued to provide a centralised tasking, coordination and support function, using an experienced clinician to identify those incidents requiring a pre-hospital critical care team (PHCC) response as well as providing clinical and logistical advice and support to responding ambulance clinicians.

There are two teams of Advanced Practitioners in Pre-Hospital Critical Care (APCC) currently operating within SAS. Six have recently completed training in the South-East network and in the West, the two APCCs who have been working in the role as part of a pathfinder project were substantively appointed to the role in February 2020.

The APCC are trained to administer trauma care at a level between that provided by a SAS paramedic and that provided by a pre-hospital doctor, including access to an enhanced formulary to better manage pain and enhanced surgical skills to deal with immediately life threatening presentations.

The role of the APCC is also to deliver “on the ground” support to SAS frontline clinicians when dealing with challenging clinical scenarios, in the form of leadership, feedback, informal training and debrief, with the aim of enhancing the overall competence and capability of the SAS workforce.

A number of additional APCC roles have been appointed, including in the introduction of the Advanced Practitioners in Rural Pre-hospital Care August 2019. A team of six clinicians from a paramedic or nursing background were recruited and embedded within the Inverness Raigmore Pre-hospital Immediate Care and Trauma Team (PICT). Embodying the collaborative spirit of the Scottish Trauma Network, this role is a joint venture between PICT, NHS Highland, SAS and the network. Bespoke to the requirements of the North Trauma Region, the skill mix of the Rural Practitioner will be slightly different to that of the Advanced Practitioners in Pre-hospital Critical Care and tailored to allow them to respond to a broader range of medical and trauma emergencies.

SAS also has a central role in other functions of the network, notably the response to mass casualties and major incidents. The STN Major Incident Group released an update on the Scottish Mass Casualty Plan in May 2019 with extensive input from the SAS Trauma Team and the National Risk and Resilience Department (NRRD). This document has now formed part of the updated SAS Major Incident Plan and includes a number of developments related to the STN.

The ScotSTAR North service was officially launched in July 2019 by the Cabinet Secretary for Health and Sport, Jeanne Freeman.

A key role for the SAS Trauma Team has been to continue to gather feedback from network partners on real events in order to seek further opportunities for learning and improvement. Our governance structure incorporates existing internal incident reporting mechanisms but has also established opportunities for audit, debrief and feedback with Scottish Trauma Network colleagues around the country, through a series of regular meetings chaired by our clinical effectiveness lead for trauma.

5. Plans for the Year Ahead

Work plan objectives for 2019/20 were not quite completed, as meetings had to be cancelled and resources diverted across the network due to COVID-19, preventing the completion of work in progress. These objectives will be carried forward.

The network is now entering its fourth year, and much of the first three years have been spent planning funding requirements to allow for implementation, we are now looking forward to the next phase of the network. This will include the ongoing support of quality improvement across the network, as well as continuing to develop the trauma education framework and looking in more detail at the prevention facet of the network.

Work started in 2019/20 to initiate research and innovation projects, and this forms part of the work plan for 2020/21.

In 2019/20 the network was approached by Firecrest Films to discuss making a documentary on the implementation and work across the network. Initial discussions were held in 2019/20 and have restarted, following a period of furlough during the COVID-19 lockdown. Work will continue to negotiate with NHS Boards and agree filming protocols in 2020/21 to allow filming to start in early 2021, depending on how the pandemic progresses and resources are available across NHS Scotland.

6. Detailed Description of Progress in 2019/2020

Insert updated Annual Work Plan here, detailing their status as of 31 March of the reporting year. All network initiatives/projects mentioned in section 4 of the report must be listed in the Annual Work Plan.

Objective Number	Smart Objective	Linked Dimensions of Quality	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 01/04/2019	Anticipated Outcome	RAGB status
2017-03	Develop a trauma education strategy and solution for Scotland that will support local and regional training requirements being mindful of workforce implications	2,3,4,5,6	01/07/2017 to 31/03/2019 30/09/2019	Jean Sneddon	The Education Strategy was agreed at the Steering Group in December 2018. Work commenced on the development of an education matrix, however, it was agreed that this should be pushed back until training requirements were established. These are being established as part of objective 2018-07. This objective has been closed, with the development of a solution added to 2020/21 objectives.	Education for clinicians working in trauma care (from pre-hospital to rehab) will be planned on a national basis to ensure best access.	B
2018-05	Develop a rehabilitation plan that can be used to support recovery for seriously injured people across Scotland.	1,2,3,4,5,6	01/01/2018 to 31/03/2019 31/03/2020	Jean Sneddon/ Rehab Group Chair	Although this was not finalised in 2019/20, work was undertaken to review requirements and progress. It was completed before this report was published, and therefore is marked as complete, and not moved over to the new workplan.	Seriously injured people across Scotland will receive a standard rehabilitation plan to support their recovery.	B

Objective Number	Smart Objective	Linked Dimensions of Quality	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 01/04/2019	Anticipated Outcome	RAGB status
2018-07	Develop education standards that will support the delivery of education for staff working across the trauma care pathway.	1,2,3	01/04/2018 to 31/03/2019 31/03/2020	Jean Sneddon/ Education Group Chair	Significant work was undertaken to develop standards for nursing staff working across the trauma pathway. This was not completed/agreed before resources were diverted due to COVID-19, and will be carried forward into the 2020/21 workplan.	A national curriculum, which supports local delivery of education to meet the needs of clinicians around Scotland, will be available.	R
2019-01	Establish the Research and Innovation group, developing governance, including high level scoping and a deliverables log for research projects for the network.		01/08/2019 to 31/03/2020	Jean Sneddon	This group has been established, and a deliverables log drafted for agreement by the group.	A group and deliverables log will be established to support the network in telling its story.	B

7. Proposed Work Plan for 2020/21

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 30/06/2020	Anticipated Outcome	RAGB status
2018-07	Develop education standards that will support the delivery of education for nursing staff working across the trauma care pathway.	01/04/2018 to 31/03/2019 31/03/2021	Alison Gilhooly/ Chair of Education Group	This has been slightly amended from the original objective to specify trauma nursing. Further objectives for other staffing groups will be added as timescales are agreed.	A national curriculum, which supports local delivery of education to meet the needs of nurses around Scotland, will be available.	G
2020-01	Review focus of the network as it enters into post-implementation phase	01/04/2020 to 31/03/2021	Alison Gilhooly		The network will be ready for review, and to enter its next phase.	G
2020-02	Consider requirements for national guidelines in trauma care, and how these can be made available for clinicians throughout the country.	01/04/2020 to 31/03/2021	Alison Gilhooly and Martin McKechnie		A suite of national guidelines will have been described and a suitable platform developed to ensure accessibility.	G
2020-03	Work with Public Health Scotland and the Scottish Public Health Network (ScotPHN) to establish network priorities for Prevention facet.	01/04/2020 to 31/03/2021	Alison Gilhooly		The network will have clear objectives linked to the prevention facet.	G
2020-04	Support the work on a feasibility study of the establishment of a single "red" team in the East of Scotland.	01/04/2020 to 01/10/2020	Alison Gilhooly and Prehospital, Transfer and Retrieval		The network and Scottish Ambulance Service will be clear on the feasibility of establishing a single red prehospital team in	G

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 30/06/2020	Anticipated Outcome	RAGB status
			Group		the East of Scotland.	
2020-05	Create research and innovation study teams and themes and generate research questions to progress the projects described in the deliverables log. Progress the economic assessment, having established requirements and data resources.	01/04/2020 to 31/03/2021	Alison Gilhooly and R&I Group		The network will be well placed to start utilising the data available in Scotland to measure the benefits of the network. Information governance processes will be underway, and some outputs (e.g. posters/infographics) will have been published.	G
2020-06	Work with Firecrest production team to develop a plan for filming a documentary on the Scottish Trauma Network. Ensuring that appropriate agreements and protocols are in place with NHS Boards for accessing clinical spaces, and communication plans and filming plans will be agreed.	01/04/2020 to 31/03/2021	Alison Gilhooly and NSS Comms		The network and production company will be in a position to start filming with appropriate protocols and agreements in place, and stakeholders across the network and wider NHS Scotland will be aware of their role in delivering the documentary.	G

Appendix 1: Steering Group Membership

Members	Name	Title
Chair	Ms Caroline Lamb	Director of Digital Reform and Service Engagement (Scottish Government)
Network Clinical Lead	Dr Martin McKechnie	STN Clinical Lead
NSS Lead	Ms Kate Burley	Associate Programme Director
Network Programme Manager	Mrs Alison Gilhooly	Senior Programme Manager
Regional Clinical Leads:		
West	Mr Iain Wallace	WoS Trauma Network Clinical Lead
North	Mr James Anderson	NoS Trauma Network Clinical Lead
South East	Mr Edward Dunstan	SEoS Trauma Network Clinical Lead
East	Mr Michael Johnston (2019/20) – Dr Michael Donald (2020/21)	EoS Trauma Network Clinical Lead
Regional Planning Leads:		
West	Ms Sharon Adamson	Director of Regional Planning, WoS
	Ms Heather McVey	Trauma Network Planning Manager, WoS
North	Ms Anne- Marie Pitt	Network Manager, NoS
South East	Mr Colin Briggs	Lead for the South East Trauma Network
	Ms Wendy Parkinson	Project Manager, South East Trauma Network
East	Ms Lorna Wiggin	Chief Operating Officer, NHS Tayside
	Ms Michelle Kettles	Project Manager
ScotSTAR Lead	Dr Drew Inglis	Associate Medical Director, ScotSTAR
SAS	Dr Tim Parke	Associate Medical Director, Major Trauma
SG Finance	Mr Peter Lodge	Financial Performance Manager, SGHSCD
STAG/Data Lead	Mr Malcolm Gordon	STAG Chair
	Ms Angela Khan	STAG Clinical Co-ordinator

Workforce/Education Representative	Mr Adam Hill	Postgraduate Dean (Medicine)
Scottish Executive Nurse Directors (SEND)	Ms Sarah Dickie	SEND Representative
Public Health Representative	Mr Phil Mackie	Lead Consultant, Scottish Public Health Network
Rehab Representative (rotated)	Dr Heather Cameron (left April 2020) Ms Orla Prowse Dr Sukhomoy Das Dr Santanu Sarkar Ms Lesley Stables	Joint Chairs of the STN Rehab Group
IJB Lead Representative	Mr Colin McCormack	Head of Adult Services (Mental Health, Addictions and Learning Disability) – Glasgow City HSCP – NW
Paediatric Representative/ Chair of Paediatrics Working Group	Mr Carl Davis	Consultant Paediatric Surgeon
Resilience Representative	Mr Ray De Souza	Deputy Head of Health Resilience
Unscheduled Care Representative (only 1 to attend)	Mr Jacques Kerr Ms Helen Maitland	National Clinical Advisor, Unscheduled Care Unscheduled Care Director
Elective Care Representative	TBC	
Chief Medical Officer Representative/ Chair of Education & Workforce Working Group	Dr Dave Caesar	National Clinical Advisor
Lay Members / Public Partners	Ms Eileen Wallace Ms Susan Siegel	Public Partner Public Partner
Network Programme Support Officer	Ms Scarlett Curtis	Programme Support Officer
SG Policy Representative(s)	Ms Sarah Griffiths	National Planning Team Leader

Appendix 2: Finance

The STN core budget ran to budget this year.